The Role of Firms in China's Green Marketing

Helen Song-Turner
University of Ballarat, Australia
h.song-turner@ballarat.edu.au
0061-3-53-279-409

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Abstract:

In recent years, the Chinese Government has paid increasingly close attention to the issue of environmental management and one of the subsets of this issue is the concept of green marketing. Is it possible for Chinese companies to start to make use of green marketing concepts, principles and practices to produce a range of products and services, which can embody the concept of green marketing, within a rubric and context of sustained economic development and fast growth?

A review of academically based literature indicates that most of the published research on green marketing has been done in developed countries. Green marketing issues in developing countries, especially in emerging developing countries like China, are far less common than in developed countries. The role firms can and will increasingly be required to assist China to develop a cleaner environment is not to be underestimated. It is one of the key issues that will face China in the next ten years. Yet, a review of the literature indicates that research on firms' decisions and behaviour towards green marketing in China is seriously lacking.

Given that green marketing is arguably where economic development and environmental matters tend to interact and intersect within a market economy, the aim of this paper is to explore how Chinese firms deal with this complex and important issue. Opportunities and challenges for Chinese firms are analysed using an environmental marketing model developed from the literature. These challenges are set against the current economic crisis and in relation to China's specific political and socio-cultural dynamics.

1. Introduction

China's rapid development in the past three decades has significantly improved hundreds of millions of people's living standard. This unprecedented pace and scale of industrial growth has also caused significant environmental risks for public and ecological health at the local, regional, and global levels (SEI and UNDP, 2002; World Bank, 2001). Chinese firms in general have a vested interest in encouraging consumers to buy more goods and services, and thus indirectly responsible for the rampant consumerism in all the places around the world associated with Chinese made products and services. As a direct consequence of Chinese production, natural capital (or the stock of the ecosystem) in China is being depleted at a rate that is bringing its economic consequences into sharp relief (Xie, 2001). Meanwhile, the economic 'miracle' of China has greatly increased consumption patterns in Chinese regions with the highest population densities. Although many industries have been able to modernize along the way, others-especially those dominated by state-owned enterprises-continue to operate with seriously outdated and polluting technologies to meet this demand (Vermeer, 1998; Liu, 2000). China's accession to the World Trade Organization (WTO) in 2001 has accelerated integration into the global economic system, making China increasingly susceptible to international rules, norms and practices in the economic, social and even environmental arenas (Shi & Zhang, 2006).

The issue of green marketing is a crucial one not just in an academic sense, but also within China and in regards to how the country can continue to develop its economic and social agenda. China's economic base, since 1978, has been centred on manufacturing (for domestic and particularly foreign markets). This has created real issues and tensions in regard to environmental performance given that manufacturing industry, as the major force in Chinese production, is the most polluting sector in China. The question that then arises is whether firms in China, and the government, can somehow strike an appropriate, viable and sustainable balance between economic growth, manufacturing and an export-driven orientation on the one hand, and environmental issues (including green marketing in its widest sense) on the other. This is an issue of considerable debate and concern in China.

Empirical evidence shows large variations in the environmental performance of firms in developing countries, even if those firms are subject to the same environmental regulations (Hettige, et al., 1996; Dasgupta, Hettige, & Wheeler, 2000). This evidence strongly suggests that regulation is not the main determinant of firm's environmental performance in developing countries.

Critics of China's environmental regulations claim that enforcement is arbitrary (Qu, 1991) because of the importance of personal ties between regulators and plant managers and other forms of favouritism. In addition, local regulators have considerable discretion in judging both compliance and appropriate penalties for non-compliance (Dasgupta, Hug, & Wheeller, 1997) and enforcement differs across provinces (Wang & wheeler, 1996). This suggests that China's regulatory systems for environmental protection do not work effectively. The role firms can and will increasingly be required to assist China to develop a cleaner environment is not to be underestimated. It is one of the key issues that will face China in the next ten years

Wong, Turner, and Stoneman (1996) define firms' role in influencing the extent and rate of consumer adoption of green products as: (i) supplier of green products in the market, (ii) executor of implementing green marketing activities, and (iii) educator of public consumer environmental awareness. Indeed, to some extent firms' green initiatives embody the sustainability of one nation's green economy.

The increasing interest of Chinese firms in environmental management and marketing is evident in the sharp increase of "green-based" ISO140001 certified companies in the country. China had 18,797 ISO14001 certified companies in the country compared to the 1999 figure of 81 (ISO World, 2007). Although Fryxell et al.(2004) suggest that ISO14001 as currently being implemented in mainland China may only have modestly useful role to move the Chinese economy toward more sustainable practices. Nevertheless, it is a positive sign that increasing number of firms in China show interests in green marketing.

Green marketing is considered as one of the major trends in modern business (Kassaye, 2001; Pujari and Wright, 1996). Ottman (1993) finds that green marketing practices may help firms to gain more profits as well as increased market share, and

offer personal rewards to people, such as integrating their values into the work place. Additional benefits of green marketing as suggested by (Kuhre, 1995) include environmental improvement, accurate information, reduction of trade barriers, standardization, fewer health and safety impacts, improved community and employee relations and so on.

The current state of research on green marketing as reviewed by Chamorro, Rubio, and Miranda (2007) indicates that most of the published research on green marketing has been done in developed countries. This is perhaps not surprising as green marketing as a concept is a relatively new dimension of marketing and business. Green marketing issue in developing countries, especially in emerging developing countries like China, are far less common than in developed countries (Chamorro et al., 2007).

In light of the above, this paper attempts to draw from the insights of existing literature and analyse the role of firms in China's green/environmental marketing. The purpose of this paper is to review and integrate literature on the role played by diverse characteristics of firms and their social and economic environment in proactive environmental strategies and practices to provide a preliminary scheme that defines the profile of potential firms that are environmental proactive in China. Then, proposing an environmental marketing model for its effective application in different business circumstances, with the ultimate goal of identifying areas and directions for firms and government in China to respond to the challenges and opportunities offered by the green economy.

The structure of this paper is made of three sections. (1) A brief review of Chinese green marketing followed by a literature review of the key variables that should be taken into account when assessing firms' green initiatives and their relevance and application in the Chinese context. A research model that is derived from the above review of literature is developed to evaluate the motivating factors perceived by firms and how firms translate this into green marketing strategies and practices. (2) A review the difficulties and barrier perceived by firms engaging in green marketing initiatives as well as identifying attributes and opportunities that should be developed, based on the research model, to foster and promote a green marketing strategy

towards sustainable green environment where all actors (government, firms and consumers) are involved. (3) A discussion and conclusions that aim to set a path for future research into the role of firms in green marketing in China and recommendations for the direction of government's actions are also presented.

2. Literature Review

Green marketing in China

A review of the research literature (see for example, Chan, 2001) suggests that as China's increased orientation towards the outside world and the increased environmental consciousness has evolved over time, associated concepts or issues of green marketing have also emerged. One popularly accepted definition of green marketing among Chinese academics is situated within the concept of sustainable development, where the firms concerned are required to adopt a long-term view of their commercial activities by taking account of issues of social responsibility, protecting the environment and efficiently utilizing natural resources as they design, produce, market and provide after sales service products and services to meet consumers' needs and demands as part of achieving a sustainable balance between consumption, production and societal development (Si, 2002). There is now an emerging – but small – literature on green marketing in China (Li, 2007). This tends to focus on connotations and significance of green marketing, as part of an analysis of its theoretical bases and hurdles to its development in China. As well, this new research area focuses on the required counter-measures and detailed procedures for green marketing, as a non-tariff hurdle for entry into international markets. Nevertheless, it has to be admitted that in some ways at this time the literature is rather restricted and lacking in detailed focus.

The survey results of Chan (2001) indicate that Chinese consumers would like to see both the Chinese Government and firms assume more responsibility for protecting the environment. This is the important consumer orientation to the issue of green marketing in China and this is not an uncommon focus for it derives from core consumer behaviour theory and orientation (Polonsky & Rosenberger, 2001).

He and Yu (2004) compared the driving forces of green marketing between developed countries and China and argued that the driving forces in China for green marketing

should be what they refer to as "dark green" enterprises, rather than consumers. He and Yu proposed the term dark green enterprise from Mintel (1991)'s classification of green consumerism as dark green consumers (people who claim to seek out green goods actively) and defined dark green enterprises as being those possessing a more ecologically sound awareness than other firms which engage in such issues. Dark green enterprises tend actively to promote ecological responses, as well as being willing to pay the price of environmental protection and associated courses of actions. In China, dark green enterprises mainly consist of firms in the environment industry and firms that exhibit genuine concern for the environment.

Factors influencing firm level environmental behaviours

Gonzalez-Benito and Gonzalez-Beito (2006) reviewed and summarized the factors or variables that have stood out as determinants of companies' environmental proactivity in the literature and provided a list of basic variables that emerged from these studies. Note that environmental proactivity is the voluntary implementation of practices and initiatives aimed at improving environmental performance. Thus, the aim of the factor determinants in environmental proactivity was to explain and contextualize environmental strategies, including green marketing strategies. These factors can be broadly classified into three categories: Company features; external factors and stakeholder pressures. Under the category of company features, five factors can be considered. They are company size; internationalization; position in the value chain; managerial attitude and motivations; and strategic attitude. Other variables relating to the general environmental surrounding the firm can be put under the category of "external factors". Two factors were considered- industry sector and geographical locations in the external factors. The third category is stakeholder pressure, a fundamental and central one that impacts on all the others.

Although some other factors have been also studied as relevant factors in the literature, the five categories above have received the main attention and are considered in a strong body of papers as determinants of firms' environmental proactivity. A brief review of each five categories and their relevance in China and green marketing follows.

Category 1 - Company features

(i) Firm size and resource availability

Firm size, measured by the number of employees or turnover, is one of the structural variables that most seems to influence the implementation of environment practices (Gonzalez-Benito & Gonzalez-Beito, 2006). Firm size was found in previous studies to have positive effects on environmental performance (e.g. Melnyk et al. 2003; King & Lenox, 2001; Arora & Cason, 1996). The arguments that support this relationship include; (1) large firms have more resources available to invest and dedicated to environmental management, (2) large firms normally are exposed to more social and economic pressures and tend to be the primary targets of government and non-government organizations' policies and actions, (3) large firms' environmental efforts tend to have a large impact on consumer awareness and education.

The empirical evidence in China supports these arguments. Child and Tsai (2005)'s investigation into firms' environmental strategies in the chemical industry in China and Taiwan have indicated firm size influences firms' environmental behaviour. They pointed out small and medium firms often did not have the funds to devote to environmental measures and tended to view safety, health and environmental (SHE) protection efforts as a necessary evil, while the Multi-National Enterprises (MNE) tended to use their superior resources to gain powerful bargaining power from the local authority governments to gain additional competition advantages.

Due to economies of scale in pollution control equipment, domestic firms in many developing countries do not have the financial resources to acquire environmental technologies especially when faced with new entrants and foreign competition (Christmann & Talor, 2001). These obstacles might prohibit domestic firms, especially small to medium firms in China, to enter the environmental mainstream without help from outside of the firms. Meanwhile, this fact leads us to think that MNEs in China could potentially be channelled by the government to extend their environmental capacity to join the 'dark green' firms as identified by He and Yu (2004) so that they can be part of the driving force in China's green marketing.

(ii) Internationalization

The literature suggests that companies that are internationalized in some way are more likely to implement environmental strategies due to the effects of economies of scale,

marketing experience in markets where green differentiation is possible and the possible transfer of environmental knowledge among affiliates (Christman & Taylor, 2000; Ayuso, 2006)

In their study of firm level self-regulation in China, Christman and Taylor (2001) found that multinational ownership creates a positive affect on environmental compliance. Their findings suggest that FDI has secondary benefits for environment protection and indicate that increased trade linkages between China and developed countries contribute to environmental self-regulation of Chinese industry. They also point out that firms serving different customer groups differ in their propensity to comply with environmental regulation. Non export-oriented firms in China including MNEs tend to less likely follow global standards. Along the same lines, Rugman and Verbeke (1998) pointed out that for export-oriented firms in developing countries, the regulatory and market requirements of major export markets overshadow the regulatory influence of the home market. However, when firms produce for the domestic market, the scrutiny might be less in the domestic market because of less social and economic pressure. These findings lead to the conclusion that firms with export-orientation in China could potentially be part of the mainstream of 'dark green' firms, by leading the drive of green forces to environmental sustainability.

(iii) Position in the value chain

Literature shows the position of firms in the value chain can be an important factor influencing the environmental behaviour (Wilson, 2000). This depends on where the firm is positioned, the more proximity to the final consumer within the supply chain, the higher consumer pressure. Although there is no empirical evidence in China yet, one could speculate that large green firms producing final products could pass those pressures to the upper level suppliers, like raw material, intermediate components suppliers, thus using their bargaining power to require suppliers to be green based.

(iv) Managerial attitude and motivations

The support and commitment of top management is considered an essential factor for firms' green initiatives (Hunt & Auster, 1990; Berry & Rondinelli, 1998). The main arguments rest on; (1) required resources for green implementation can be easily available if the responsible managers endorse the plan, (2) the implementation process - including various environmental coordination and collaboration strategies required -

would be easier if the decision come from the top. Bansal and Roth (2002) analysed the motivations of firms to "go green" and identified three types: (1) competitiveness, which aims to improve returns and competitive position through environmental management; (2) legitimization, which involves the implementation of environmental practices to adapt the company to the prevailing social and economic pressures (i.e. stakeholder pressures and ethical responsibilities) which managers think is the right thing to do for the firm and the environment. Depending on different prevailing motivations, firm tend to adapt to different sets of environmental strategies.

Fryxell, Lo and Chung (2004) examined the motivations of mainland Chinese facilities seeking ISO14001 certification and reported the main drivers for certification: to ensure regulatory compliance, to enhance firms' reputation and to improve environmental performance, in that order. Those results seems to conform to the motivations for seeking certification found in studies elsewhere (e.g. Florida and Davidson, 2001; Morrow and Rondinelli, 2002). However, it is interesting to note that achieving cost reductions was among the least important motivations in the context of environmental commitment.

Gonzalez-Benito & Gonzalez-Beito(2006) established a functional classification for the environmental proactivity which includes; (1) planning and organization practices, (2) operational practices, and (3) communication practices. They pointed out that operational practices which include changes in the production and operation systems play an essential role in environmental issues, which leads to high impact on the natural environment. The other two categories - planning and organization practices, and communication practices - have high effect on social and economic environment due to their significant impact on public opinion. This clarification provides a useful tool to assess and evaluate firm's sincerity of environmental initiatives.

According to Gonzalez-Benito & Gonzalez-Beito(2006)'s clarification, the less the importance of cost reduction in firm decisions, the less likely firm work towards sincere environmental performance (Fryxell et. al.; 2004). Further from the findings of Fryxell et al (2004)'s study, it appears firms seeking environmental initiatives because of external pressures, such as customers requests, pressures from other

stakeholders, or more generally, to enhance their reputation, do not appear to go much beyond the minimum requirement of the certification.

On the other hand, Raines et al. (2002) reported from their study of 19 certified firms near Tianjin that Chinese firms seek certification in order to demonstrate environmental leadership and less concern to the requirements of trading partners and in seeking regulatory relief. This finding supports Chan and Li's (2001) study on the motivation of Hong Kong firms to certify ISO14001, which was to increase market share and to demonstrate 'goodwill', while responding to the direct pressure from the public, customers, or employees appeared to be relatively unimportant. In this sense, He and Yu (2004)'s finding that there is an increase number of managers and entrepreneurs who are aware the importance of environmental management and social responsibility; for example, the increasing membership of Society Entrepreneur Ecology (SEE), an NGO organization initiated by well-known "Entrepreneurs in China". Such managers are convinced of the competitive opportunities associated with green initiatives, which they refer to as 'dark green' enterprises, and are the driving force for green action in China. With respect to the finding discrepancy of firm's motivation seeking ISO 14001 between Raines et al. (2002) and Frexell et al.(2004) - it could be a result of the rapidly increase number of ISO14001 certification, where some later 'comers' motivation might be different to the earlier movers and increased government regulation. Nevertheless, it seems apparent from the existing research that environmental attitude, expectations and motivation of managers in China constitute an important factor for explaining firm's green strategies, particularly, to the effect of environmental performance effect.

(v) Strategic attitude

Strategic attitude has been identified as another important factor which is closely related to the previous factor in influencing firms' green strategies. Azzone et al. (1997) define this attitude as the way in which the company reacts to or supports market stimuli. Aragon-Correa (1998) found a strong positive relationship between the company's tendencies to initiate changes in its strategic policies before they are demanded with environmental proactivities. Bansal and Roth (2000) identified that competitiveness is an important motivation for firms to "go green". Firms perceive green marketing to be an opportunity that can be used to achieve their economic

objectives (Lawrence, 1992). Institutional researchers have argued that firms are more likely to mimic the environmentally responsive behaviour of their competitors that are successful (DiMaggio & Powell, 1983; Gugler & Shi, 2008). Although empirical evidence is scarce in China on this aspect, the existing literature on firm's motivation suggests it may be a reasonable prediction that by identifying and fostering some active green firms across industry and sectors, it will create an imitation effect. Naturally, it would be expected that some reactive or passive firms may fail to see the competitive values of green marketing, which makes it necessary for the government to directly and seriously push the issue.

Category 2 - External factors

(i) Industrial factor

The literature (e.g. Porter & Van der Linde, 1995; Banerjee, 2001) suggests that each industry has different polluting potential and is subject to different controls and scrutiny from institutions, social groups and consumers; consequently they will exhibit different motivation and actions in relation to environmental marketing. Firms in high polluting industries, such as steel, cement, oil, power generation, chemicals, and transport are heavy polluters in a range of ways they tend to devote more resources to mitigate environmental pollution. While firms in low polluting industries, such as service and financial industry, may place less emphasis on the environmental strategy, although some will use environmental policy to differentiate themselves with a purpose to improve relationship with stakeholders or improve public relationships.

On the journey of industrialization with export-oriented growth dominated for the last three decades, the manufacturing industry in China is the major contributor to the degradation of environment (Ma & Ortolano, 2000); as a result, the manufacturing industries plus other high polluting industries like steel, chemical, cement, coal mining, and power generation sectors would attract the heaviest regulation from government. Firms in those industries sectors would be expected to incorporate the environmental issues into their strategies. Furthermore, because the propensity to export and competition pressures differ across industries, one could expect firms in industries with heavy export and fierce competition would also concentrate proactive green firms. Chen (2001)'s finding that the majority of ISO14001 certifications in

China are for consumer electronics facilities seems support this statement given the large export volume in this sector.

(ii) Geographical Location

Vastag et al. (1996) pointed out the environmental strategies of a company not only respond to the endogenous environmental risk (polluting potential) but also to the exogenous environmental risks, which depend on the likelihood of reactions from the socioeconomic environment. According to these authors, the higher the exogenous environmental risks of companies, the greater their commitment to environmental preservation. A number of researchers (Becher and Henderson, 2000; Kellor and Levinson, 2002) provide support that the location of production facilities as important factor insofar as it relates to two other variables; (1) environmental regulation and (2) social pressure.

The enforcement of federal environmental regulations in China differs across regions (Wang & Wheeler, 1996) and provinces have the authority to enact environmental regulations that go beyond federal regulations. As the literature identified the relationship between location and social pressure fundamentally affects the selection of a specific location for firms. Thus, it is expected in the most regulated regions or with high social pressure that there is a concentration of the most proactive firms. For those firms which already settled in those regions, the tighter environmental regulation might force them to adapt new technologies or manufacturing practices to become more competitive. As Porter and Van der Linde (1995) pointed out environmental regulations are a major impetus for the development of environmental capabilities in firms. On the other side, there could be a scenario that firms move from those restrictive areas to less restrictive, in other words, the less regulated areas and areas where exogenous risk is lower are less likely to have a concentration of proactive firms. As mentioned earlier, local regulators in China have considerable discretion in judging both compliance and appropriate penalties for non-compliance (Dasgupta, Hug, and Wheeller, 1997) and enforcement differs across provinces (Wang & Wheeler, 1996). We could expect the proactive environmental firms would be located in places where national and local environment regulations have direct impact with forceful implementation and where public awareness of environmental issues is high such as the metropolitan cities like Shanghai, Beijing etc.

Category 3 - Stakeholder Pressure

Perspective from the literature in relation to stakeholder pressure indicates that companies tend to act on the basis of pressure applied by their various stakeholders (Freeman, 1984). However, stakeholders tend to vary in terms of who they are and what role they might have vis as vis a company. Clarkson (1995) distinguishes between primary stakeholders, without whose participation and support the organization cannot generally survive (e.g. customers, suppliers, regulations), and secondary stakeholders, who interact with the company in less direct way-such as media, non-governmental organizations, social groups and other stakeholders who can be termed 'indirect'. In a way this is a variation on the micro and macro theme in marketing.

Direct stakeholders might have more impact, power and involvement with companies and on that basis may have stronger say on issues associated with green marketing but even this is not so clear in China. On the other hand, second level stakeholders might have a less direct and immediate impact on companies but may in some cases, such as the media and government policy, set the framework under which companies might respond to green marketing pressures. For example, if the Chinese government issued a new regulation about the environment, this might impact on how companies react to, and deal with, issues of green marketing. Simplicity if an article appeared on Chinese television about green marketing issues, this might also have an impact on companies, albeit indirectly.

The link between direct and indirect stakeholders might also be somewhat elusive, as well. For example if the environment changed in China (that is via government policy, media influence and other indirect influences), direct stakeholders might also change their view about how companies should react (in a positive, negative or perhaps just neutral manner) and this would affect company performance in terms of their green marketing initiatives. Indeed, the role of direct and indirect stakeholders in terms of company performance in a green marketing context remains elusive to say the least.

Also considering the novel nature of green marketing in developing countries, some stakeholders such as consumers, employees and social groups and so on around the firms may not be fully aware or possess the knowledge associated with environmental problems, thus, unable to advocate or exert as much social and economic pressures to firms as their counterparts do in developed countries. That could explain the finding of some studies (Chan & Li, 2001; Fryxell et al, 2004) which show weaker relationship of firms' green response to customer, employees, public request. Marten (2006) observed that it is hard for Chinese NGOs to be as important a driving force in the area of environmental protection compared to developed country. To obtain a central role in like their western counterparts, China's environmental reforms need to create awareness and provide environmental education to a firm's key stakeholder is of prime importance.

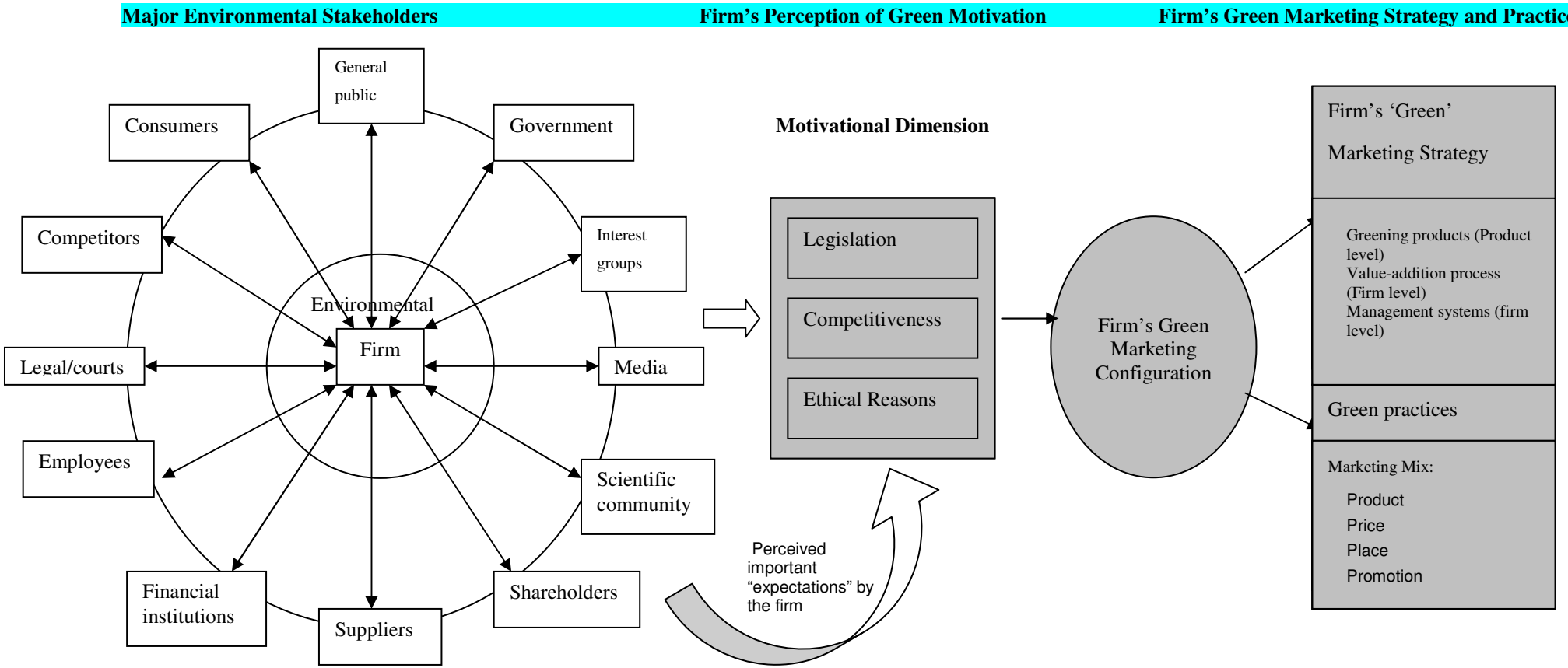
In addition to the aforementioned factors as summarized by (Gonzalez-Benito and Gonzalez-Beito (2006), in the Chinese context setting, it is also important to mention the ownership of firms in China. Chinese management practices cannot be explained solely in terms of individual firm conduct, but must also include the role of the nation-state. There are three types of Chinese firms based on the mode through which transactions are coordinated and property rights are embodied (Li, 2004). They are: State-owned enterprises (SOEs); collectively owned enterprises (COEs); and privately owned enterprises (POEs). Under POEs, they include privately owned companies, foreign-investment firms, joint ventures between domestic firms, limited liability companies, and joint stock companies.

Each of these types of companies may have different responses to green marketing- it is actually not clear from the literature. One might assume, however, that State-owned and Collectively-owned companies would respond more to government initiatives and perspectives vis a vis private companies which would respond more directly to private investors and –perhaps- customer needs. Furthermore, the different ownership structure combined with different locations, industries, position in the value chain and firms' size make the characteristics or features of green firms in China even more complicated.

An environmental marketing model is proposed for its effective application in different Chinese business circumstances. Three basic motivational drivers as identified by Bansal and Roth (2000) suggest that firms may be ecologically responsive to comply with legislation, to improve long-term profitability to maintain competitiveness, or for ethical reasons. Although this motivational dimension framework provides an important starting place, it has no guarantee that these three factors would adequately explain why firms in China 'go green' given the diversity of issues identified in the literature review. To understand Chinese firms' ecological initiatives, the author draws on the stakeholders theory from the firms' perspective by focusing on the 12 stakeholders as identified by Polonsky (1995) in the green marketing strategy design to assess broadly to whom the firm is supposedly to be responsible or accountable and which stakeholders are the driving forces behind firms' green initiatives in China. From this the author attempts to identify what conceptual categories of ecological motivation are perceived by the managers and how these motivations are transformed into actual greening marketing approaches and practices. To understand the marketing transformation process, the author adopts Kotler's (1995) model of three levels of green marketing approaches, i.e. greening products, value-addition process, and green management systems to examine firms' green marketing strategies and use the traditional 4Ps marketing mix framework to investigate the current marketing practices of these firms under examination in China.

In summary, the proposed model in Figure 1 includes three components. The first is 'Major Environmental Stakeholders', the second is 'Firm's Perception of Green Motivation', and the third is the 'Firm's Green Marketing Configuration' which includes two subcomponents: firm's green marketing strategy and firm's green practices. The first component helps to evaluate various motivating forces in relation to how they impact on the different types of firms. The 'Firm's Perception of Green Motivation' is to evaluate how these factors, that is, the motivating factors and how they are perceived by managers, transfer into actual marketing outcomes-the third component 'Firm's Green Marketing Configuration'. To undertake such as research in China is of particular value because it is here that, arguably, the tension between basic product orientation and larger environmental factors (including green marketing) tends to be taking a position of some prominence.

Figure 1 A Model of Firms' Motivation to Go Green and Marketing Practices in China[1]



[1] Green marketing in China. © Helen Song-Turner 2008

3. Difficulties and Barriers Perceived by Firms

The second objective of this paper is to review the difficulties and barrier perceived by firms engaging in environmental/green proactivity. A brief review of literature on the difficulties and barriers encountered by firms is a good starting point to look into possible difficulties for firms in China (especially in the area of marketing), and the way the research model in Figure 1 can be used as a proactive template for addressing such barriers.

Product development and process

Peattie and Crane (2005) questioned the underachievement of green marketing and pointed out that most of the underachievement is due to the 'green marketing' having neither effective marketing nor committed environment protection. In the later paper, Ottman et al. (2006) pointed out that a green product should achieve at least two main goals. These are 'improved environmental quality' and 'customer satisfaction'. Ottman et al. emphasized that misjudging either one or giving importance to one at the expense of the other will create a situation which they referred to as 'green marketing myopia'. Many green projects failed because of this green marketing myopia. Ottman et al. have concluded that excellent application of good marketing principles is all the more needed to make green products desirable to consumers, and this obviously forms the backbone of an effective green marketing practice.

Wong et al. (1996)'s empirical analysis of firms' marketing strategies and their influence on consumer demand for green products confirmed that in the absence of clarity of green products' environmental benefits, product performance and other attributes, remain the main determinants of product preference and choice. Firms see the costs of generating and promoting desirable green technologies as barriers to diffusion in the immediate future. Firms in China face even more challenging issues than in the West with regard to the green product design due to lack of required resources, talents and financial support compared with firms in developed countries.

Furthermore, genuine green marketing and sustainability thinking share a holistic view. To understand green marketing firms must consider the whole range of activities in which the company is involved, i.e. planning, new product development, changes to the production process, logistics, packaging, pricing, distribution,

promotion and advertising. In other words, it should include the whole production process not just the end marketing of the product (Chamorro & Banegil, 2006; Polonsky & Rosenberger, 2001; Ottman, 1993; Peattie, 1999; Welford, 1995). This vision is essential to guide firms to achieve the genuine environmental performance. This is the key characteristics that the practices of firms in China in general lack, even though there are some green firms that do carry forward such environmental vision, e.g. companies such as Hair Company, BROAD Corp, BYD Corp. etc.

Available resources

As indicated earlier, firm size is one of the structural variables that most seems to influence the implementation of environment practices (Gonzalez-Benito & Gonzalez-Beito, 2006). Large firms have more resources available to invest and dedicated to the environmental management.

Many developing countries lack environmental measurement equipment and trained enforcement personnel and suffer from corrupt inspectors (Dasgupta, Huq, and wheeler, 1997). Under these conditions, firms might expect their costs associated with discovery of violations and payments of penalties to be smaller than compliance costs. This results in low compliance rates with formal regulations (Hettige et al., 1996). The empirical evidence in China support these findings (Wang, Dasgupta, Maming, & Laplonte, 2002)

In societies such as China that are in the process of rapid economic and political changes, domestic firms are facing competition from various levels: locally, provincially, nationally and internationally. Because of this aforementioned fact, Chinese regulation is much decentralized and enforcement varies at different levels. Compared with MNEs and some large SOEs, the majority of Chinese domestic private firms, particularly SMEs are in a disadvantaged position. When business survival becomes the core issues for those SMEs, they have to compete intensively for a market share, and of course, the environment would not be the selling point. (Ottman, 1993; Dief & Font, 2010)

Furthermore, literature also suggests the financial and banking industry often is criticized for being unsympathetic to needs of SMEs in general and not limited to

'green' firms (Smith, 2001). This syndrome is not uncommon in China either. Since in aggregate, SMEs in China have a greater impact on the environment; SMEs have little interest in pursuing environmental strategies due to economic cost or fail to see the value of green marketing. Government may consider grants or subsidies or tax breaks for suppliers to encourage consumer activities as suggested by Smith (2001).

Awareness and public education

Literature suggests increased publicity and market efforts are needed to communicate the advantages of a 'green' image to consumers (Ottman, 1993; Peattie, 1995; Smith, 2001). Due to the novel nature of green marketing in developing countries, the assumption that consumers and other stakeholders are aware of the environmental problems and issues that affect them is not viable. Chan (2001) observed that Chinese consumers lack full understanding of green product; Wu (2009) indicated that in China due to the high price of green products plus the low environmental consciousness of consumers resulted in green products not being on the top choices for consumers. Moreover, many firms have incomplete and incorrect understanding of environmental cost for their production. All this evidence points to a significant barrier, and thus the need for creating awareness and providing environmental education to a firm's key stakeholder is of prime importance (Nair & Menon, 2007)

Communication and advertising

Communicating the benefits of environment/green initiatives to potential customers and public is a necessity for green firms. Communication programs are the links between firms with the social and economic environment. Unfortunately, not all firms that claim to be environmentally friendly are genuinely green (Dief & Font, 2010; Polonsky & Rosenberger, 2001). The communication and advertising claims can be easily be used for complacent and propagandistic objectives (Gonzalez-Benito and Gonzalez-Beito; 2006). One of the most difficult problems that has been identified in Tang & Wan (2003)'s study of the Chinese Green Food industry is the false advertising and fake production. The recent Three Deer baby formula accident in China, which caused many Chinese babies' deaths, further reveals the significant problems associated with false advertising and fake products in China. Unless government institutes stringent regulation and audit system for the marketing

advertising, which is enforced thoroughly in China, this problem is not going to be effectively restrained.

According to the observations above, it makes sense to think that firms might exploit the idea to gain great market share, jumping on the green bandwagon without making any substantive change in their environmental actions and performance (Polonsky & Rosenberger, 2001). Thus, the measure of a sincere environmental proactivity should not only be based on the external and more perceivable environmental practices (e.g. environmental certifications or environmental reports), but also on an analysis of the environmental transformations accomplished in the operations and production systems (Gonzalez-Benito and Gonzalez-Beito 2006).

3. Discussion

Although more empirical studies are needed to further identify the features of environmental proactive firms in China, this literature review has allowed us to broadly outline the general profile of environmentally proactive firms in China. Generally, they are usually large manufacturers of finished products with international presence, or firms whose managers are aware of the importance of environmental management and who are willing to take the social responsibility, also those firms which are active in industrial sectors with high ecological impact and risk. Another profile feature of green firms includes those firms with production facilities in regions with relatively restrictive environmental regulations and a high level of public awareness of environmental issues, normally in big metropolitan cities and natural reserve areas like Beijing, Shanghai, Hong Zhou etc..

As aforementioned in the beginning of this paper, the uneasy relationship between the priority of economic development and environmental sacrifice has finally aroused increased attention from the Chinese government. However, a society's ability to identify and resolve environmental problems does not merely rest on the government and legal framework (Weidner, 2002). The empirical studies (Chan, 2000, He & Yu, 2004) have concluded that to realize the full potential of green marketing in China, joint efforts among governments, business firms and consumers are indispensable. In view of China's economy continuing to grow strongly and the pace of urbanization

accelerating, the dilemma of growth and the environment must ensure that China has sufficient and secure energy resources but also mitigate the impact such growth on the environment. From this point of view, an understanding of the various features of 'green' firms and motivating factors which might impact on Chinese firms' green marketing attitudes, perceptions and behaviour is central for management and policy makers understand better how green marketing strategies and practices can be part of a total plan to implement more effective environmental policies. As such a research model of firm's motivation to go green and marketing practices in China is introduced in this paper. The research model is constructed using the insights gained from the existing literature in the area of green marketing. It has the potential to provide guidance for future empirical investigation and analysis of the key factors of firms' green marketing motivation and will serve to generate understandings of firms' green marketing motivation and marketing practices in China. Subsequently this model could then be adapted for researching other developing countries' green marketing issues.

It is clear that unless firms in China rise to the challenge there will be calls for tougher environmental regulation. It is also equally clear that in order to address the challenges and make the necessary changes businesses need help and advice from outside the firm. In the context of China, where regulatory systems for environmental protection do not work effectively (Qu, 1991; Wang & Wheeler, 1996), identifying and fostering growth of active 'green' firms, and their voluntary 'greening' their operation and management practices has significant implication for the green economy transformation in China. This proposition is supported by Bansal and Roth (2000)'s analysis on the motivations of firms to go green that individual firms respond to global norms to the extent they are pressured to legitimize themselves by adhering to those norms even in the absence of specific government sanctions. In this sense, we can speculate that those 'late movers' would follow those active green firms' initiatives although empirical study could be done to explore how effective the causal relationship would be. Nevertheless, there is a positive sign that gaps in environmental orientations and behaviours among proactive and reactive companies tend to diminish with proper environmental training and education (Dief & Font, 2010)

Conclusion & Recommendation

Subsequent to identifying the environmental proactive firms, government, and policy makers will have to make a significant effort to rigorously enforce policies and provide incentives for investments across all sectors. In particular, sectors in renewable energy, energy efficiency, waste management practices and innovation in product and process design, are the core part of environment performance which can be improved. Many firms tend to pursue commercial objectives and try to establish cordial relationships with the variety of stakeholders around the company to appear to be adhering to strict self-regulation regimes to which they are only superficially committed. On the other hand, it is essential for 'green' firms to take the leading role by restructuring and updating their product design and manufacturing process to complement government's policies in transforming the economy into dark green. The research model developed in this paper aims to assist in providing a 'roadmap' for such firms towards dark green transformation. The recent Global Financial Crisis has dampened the development of traditional industries, thus, new energy and green businesses are considered one of the ways for future global economic revival, and both the government and firms have the incentives to invest in these areas.

To ensure firms in China are best placed to take advantage of the opportunities offered by the green economy nationally and globally, governments and policy makers in China clearly need to actively address the key green marketing barriers as perceived by firms aforementioned to the growth of the green economy. In parallel with all the above efforts, another important area for government is to facilitate firms' green revolution. This will require incentives for training and development, as this not seen as a priority area by many firms, in particular SMEs. Through such joint efforts, the Chinese economy can begin to take advantage of the growth opportunities available as a result of the recent Global Financial Crisis (2007-2009) and then implement green initiatives in the nascent economic upturn that has followed.

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