Walmart and Carrefour experiences in China: resolving the structural paradox

Ming-Ling Chuang
Management Department, Ancell School of Business, Western Connecticut State University, Danbury, Connecticut, USA

James J. Donegan and Michele W. Ganon
Accounting Department, Ancell School of Business, Western Connecticut State University, Danbury, Connecticut, USA, and

Kan Wei
School of Business, Hong Kong Baptist University, Kowloon, Hong Kong

Abstract

Purpose – The purpose of this paper is to combine secondary sources and interviews with Chinese suppliers to explore the structural paradox faced by retail multinational firms in China as they balance the competing demands of standardization and localization. The authors describe the challenges faced by two retail giants, Walmart and Carrefour, as they attempt to replicate in China their lean retailing successes elsewhere in the world.

Design/methodology/approach – This is a comparative study of Walmart's and Carrefour's ventures into the Chinese market, largely based on publicly available secondary sources, but also incorporating interviews with three Chinese nationals engaged in supplying these firms.

Findings – Walmart and Carrefour have so far failed to extend their oligopolistic dominance to the Chinese market. Walmart has stressed its well-known standardization of operations, whereas Carrefour has better adapted to the Chinese economic culture. Issues identified are: the formation of partnership alliances and their impact on store location choice; the effect of under-developed infrastructure on distribution and logistics; the unique Chinese business culture – guanxi (using social capital to build business relationships) and its influence on supplier relationships; the variety of consumer behavior and its effect on procurement and sourcing; and an immature information technology environment which impedes information sharing between supply chain partners. While both firms have had some degree of success, neither has been able to match the combined growth of their larger Chinese competitors.

Research limitations/implications – The authors are cautious in drawing normative conclusions or making predictions about the future. Both firms face significant obstacles as they challenge China's largest domestic retailers.

Originality/value – Many multinational corporations are aware of the topology of the Chinese market, what they lack is an in-depth understanding and the skills needed for effective operations. This paper discusses the effectiveness of the strategies adopted by two leading global retailers as they attempt to resolve the paradox presented by the competing demands for standardization and localization and includes information provided by three of Walmart's and Carrefour's local Chinese suppliers.

Keywords China, Multinational companies, Globalization, Retailing, Standardization, Localization, Chinese business culture, Structural paradox, Retail multinational corporations, Oligopoly

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Introduction

China's hosting of the 2008 Olympics in Beijing was a celebratory demonstration of the progress made by the People's Republic over the last three decades. Moving from a stagnant, under-sized, centrally planned economy to the most vibrant in the world, China today is both a gargantuan exporter of manufactured goods and the fifth largest consumer market. Since Deng Xiaoping began reforms in 1979, China's economy has continued to grow at a rapid and steady pace. The average growth rate of 10 per cent per year since 1990 is the highest in the world and China was able to maintain growth of 8.7 per cent in 2009 even when the USA and other global economies were in a deep recession.

Since the 1990s, China has gradually opened its consumer market, now over 1.3 billion people to the global market. Multinational corporations (MNCs) who want to benefit from low operating costs view China as a manufacturing base, and at the same time, have come to view the country as an attractive retail market, as evidenced by the more than 460 *Fortune* 500 firms currently operating there (Hexter and Woetzel, 2007). Consumer product and retail firms such as Procter & Gamble, Unilever, Metro, Tesco, Walmart, and Carrefour are among those tapping into this vast opportunity. According to a 2009 annual business climate survey (American Chamber of Commerce in the People's Republic of China (AmCham-China), 2010), 71 per cent of the member firms reported that their businesses were profitable and one-third had profit margins equal to the global mean (Hexter and Woetzel, 2007). A recent report (A.T. Kearney, 2010) lists China as the most desirable developing retail market in the world and includes a prediction that it will also be the largest world market for luxury goods by 2015.

In this article, we use Aoyama's (2007) structural paradox perspective to provide a framework to explore the difficulties confronting the world's two largest retail MNCs, Walmart and Carrefour, in the Chinese market. We consider the importance of maintaining global standardization in the front-end (retail formats) and back-end (distribution, information technology) operations, as well as achieving the appropriate degree of localization. Threats to standardization are also considered. We find support for Aoyama's (2007, p. 472) finding that, "a structural paradox works to prevent retail [MNCs] from accomplishing both vertical and horizontal oligopoly simultaneously."

Literature review and framework

An interdisciplinary research agenda has arisen in the past two decades to study the role of retail MNCs as part of the process of globalization. The emergence of retail MNCs as a global force has been extensively analyzed in the management literature particularly within the retail management area (Alexander, 1997; Alexander and Quinn, 2002; Bianchi and Arnold, 2004; Goldman, 2001; Tseng and Foster, 2006; Palmer, 2005; Cao and Dupuis, 2009). The issues studied in that literature include incentives for internationalization, modes of market-entry, retail format transferability, organizational learning and strategic failure and divestment. Scholars in economic geography have also contributed to this literature stream (Aoyama, 2007; Christopherson, 2007; Wrigley *et al.*, 2005; Reardon *et al.*, 2007). Topics include the impact of the host economy on market entry, the impact of the institutional environments of the home and host markets and reasons for divestment. Researchers in agricultural and developmental economics have studied the supermarket revolution in emerging markets (Reardon and Hopkins, 2006; Hu *et al.*, 2004; and Humphrey, 2007). Researchers across the board have argued that the simultaneous process of internationalization and concentration of retail MNCs is leading to global oligopoly. According to Aoyama (2007), the achievement of global oligopoly by retail MNCs involves a structural paradox:

> The structural paradox in retail (MNCs) lies in the balance between their objective in enforcing standardization (at the supra-national level) and the need to conduct localization (at the sub-national level) to ensure customer acquisition. From the operational perspective, standardization, or a direct transfer of retail (MNCs') strategic assets – formats, commodities, various retail practices and know-how (e.g. shelving and display, sales events, distribution practices), is an important and cost effective means to achieve scale economies (Aoyama, 2007, p. 473).

Walmart and Carrefour owe much of their success to lean retailing, a practice synonymous with standardization. Successful lean retailing requires cost-effective relationships with suppliers as well as the minimization of distribution and selling labor costs. Emphasis is often on the use of logistics technology to coordinate sales with inventory levels, this allows firms to reduce product cost, time-to-market and inventory storage costs. Successful lean retailing allows for quick and flexible responses to changes in market conditions and ensures a cost leadership position which when effective captures a substantial market share and positions the firm to exercise network domination.

The prospering of retail MNCs in emerging markets has been asserted to depend on localization. According to Currah and Wrigley (2004) the "distribution-based" nature of retail MNCs requires them to become embedded in the market and rapidly comprehend the nuances of the local consumer culture to an extent not needed for "production-based" firms. Walmart as a retailer in China faces challenges not encountered by Walmart as a purchaser of Chinese goods. Wrigley *et al.* (2005) used three types of embeddedness (societal, network, territorial) developed by Hess (2004) as relevant for retail MNCs.

There are costs associated with implementation of localization; the MNCs must identify areas in which the local culture must be accommodated and adapt their operations to satisfy their target customers. Localization often defeats economies of scale and may subvert corporate identity. There can be conflict within an MNC when new localized strategies are viewed as undermining institutionalized corporate identity. Retail MNCs are particularly susceptible to this problem, as their identity in their major markets often rests on a "trade-mark" retail format that is implemented through standardized store-front and back-end operations. Under-localized retail MNCs may fail to gain customer acceptance but over-localized retail MNCs may lose their very identity and not find a niche because they are inadequately differentiated from domestic competitors.

Firm strategies are intended to make effective use of strengths in responding to the opportunities and threats existing in their environments. For Walmart and Carrefour, their ability to standardize business practices and employ the factory-direct model have been critical factors in obtaining oligopolistic power in their home markets, and are key aspects of their corporate identity. As yet, neither has been able to replicate their home market standardization in China; without standardization they cannot obtain oligopolistic power, and without oligopolistic power they cannot enforce standardization in the still chaotic Chinese markets. According to Aoyama (2007), the replication of oligopoly is more readily achieved in countries that neighbor the home markets of retail MNCs. Walmart's international expansion began in Canada and Mexico while Carrefour entered the European market from its base in France.

Why are the leading global retail MNCs still struggling for a leadership position in China? Retailers exist in an environment in which various social forces shape and constrain strategy and its operationalization. Standardization, which may have been a critical success factor elsewhere, may fail because of host country regulations and laws and perhaps even more important cross cultural characteristics, such as *Guanxi* (using social capital to build business relationships) in China (Tseng and Foster, 2006). Our study of Walmart and Carrefour shows that while initial expectations for these firms to achieve oligopolistic control was high, the structural paradox of retail MNCs may prevent them from transforming China's retail/distribution sector in the near future.

China's economic reforms

China has just celebrated the thirtieth anniversary of its economic reforms. As Deng Xiaoping proclaimed in 1985, "[The Chinese reform] is a great experiment, something that is not described in books". Since 1979, China has evolved from a command to a market economy and from an agrarian society to one increasingly focused on manufacturing and services.

The initial phase of reform which lasted from 1979 to 1984 focused on agriculture and on foreign economic relationships. Restrictions on trade fairs were relaxed. Preferential policies in four special economic zones (SEZs) were implemented to stimulate foreign investment and technology, and to promote export. These SEZs (all located in southeastern China) were Shenzhen (near Hong Kong), Zhuhai (near Macao), Shantou, and Xiamen (across from Taiwan). Within these zones, companies could make their own investment, production and marketing decisions (International Monetary Fund, 1993). To further entice foreign capital and technology additional major cities were opened to foreign firms in the period from 1984 to 1988. China then turned its attention to urban industries dominated by monolithic and inefficient state-owned enterprises (SOEs). According to the Official Reply to Utilizing Foreign Investment in Commercial Retail, issued by the State Council in 1992, the reforms instituted allowed foreign investors already established in the four SEZs, along with six major cities – Beijing, Shanghai, Tianjin, Guangzhou, Dalian and Qingdao – to form joint ventures with local partners. These efforts stimulated domestic demand faster than production which resulted in double digit inflation. Burgeoning investment continued to fuel inflation as well as leading to social anxiety. In response, the Chinese government announced postponement of further economic reform for two years (Earle, 1991).

In the 1990s China turned its attention to creating a "socialist market economy" after Deng Xiaoping called for acceleration of growth, reform, and opening up. The country's economy has continued to grow at a rapid and steady pace since then. According to the World Bank Data Group, gross domestic product (GDP) grew at an average rate of 10.2 per cent per year from 1988 to 2008, the highest in the world. The World Bank also estimates that China's GDP from 2010 to 2012 will remain at 8.4 per cent. Perhaps as a consequence of its economic success and the resulting confidence in the competitiveness of its domestic retailers, China concluded 15 years of negotiations and became a full member of the World Trade Organization in December 2001. Since then China has been actively allowing foreign firms access to its consumer market. When China, in December 2004, finally freed foreign retailers and consumer product companies from forced partnerships and limited zones a new wave of foreign investment commenced.

Overview of the retail sector

Prior to the 1990s the Chinese food industry supported a variety of retail formats (Hu *et al.*, 2004). There were two types of medium/large SOEs that were "foodstuff stores" or department stores which included on their shelves some food items. There were three types of greengrocers; SOEs, collectives that were not state subsidized and wetmarkets (*nongmaoshichang*), which sold fresh fish and meat as well as other fresh products. Also important were small retail stores and street vendors. Reardon and Hopkins (2006) report that the Chinese government instituted regulations to counter wetmarkets, which were considered problematic because of tax compliance problems and because they were considered to be unhygienic. A government policy initiated in 2003 called "nonggaichao" was aimed at converting wetmarkets into supermarkets. As a result, the wetmarkets were auctioned to supermarket chains.

When Walmart and Carrefour entered China in the late 1990s, the government still did not allow foreign-owned businesses, so these corporations needed to establish Chinese/foreign joint ventures, with the Chinese partner holding a majority share, often 51 per cent. Initially the government only allowed foreign investors to operate retail joint ventures in its first-tier cities such as Beijing, Shanghai, Guangzhou, and Shenzhen, cities with the highest incomes, largest populations and largest GDPs. In addition to restricting location, the government controlled the amount of capital invested and the number of stores opened in order to protect its local retailers. After restrictions on MNCs were finally ended in December 2004 foreign retailers have no longer been constrained to specified regions or forced into joint ventures. Since then numerous MNCs have established footholds along the eastern coast and in the major metropolitan cities.

To date the retail market in China has not resulted in oligopoly. In 2004 the top 20 retailers in China had a 4.9 per cent market share which had increased to just 8.6 per cent by 2009 (A.T. Kearney, 2010). Most Chinese stores are tiny, family-owned firms and organized retailing remains relatively new, but a number of huge non-government affiliated entities exist. The major players in China's retail industry are listed in Table I. It is clear that Carrefour (7th) and Walmart (9th) are still relatively small compared to the top five whose sales are two to three times that of either firm. However, according to the ranking of chain stores in Table I, Carrefour and Walmart are 3rd and 4th among foreign retailers.

Walmart with $408 billion in revenue and Carrefour with $120 billion reported in their most recent fiscal years are the largest and second largest retailers world-wide. Their experiences, positive or negative, in the Chinese market are likely to be emblematic of those faced by other MNCs. As the largest retailer in the USA, Canada and Mexico, the second largest in UK, and the third largest in Brazil, Walmart has over 7,000 stores on four continents. The Carrefour group, headquartered in France, has over 15,000 company-operated or franchised stores in 30 countries. The group currently operates in three major markets: Europe, Latin America and Asia. As shown in Table I, Carrefour with sales of CNY¥16,241m and Walmart with sales of CNY¥7,635m were ranked 5th and 20th among all chain stores in China in 2004. By 2009 Carrefour with CNY¥36,600m in sales and Walmart with CNY¥34,000m were ranked 7th and 9th. Sales increased 125 per cent for Carrefour and 345 per cent for Walmart over five years. These increases can be compared to that of the five largest retailers whose sales increased on average 245 per cent during the same period. Suning Home Appliances (CNY¥117,002m) and Gome (CNY¥106,810m) dwarf Carrefour and Walmart. The average sales per store of CNY¥194m for Walmart

2009 rank	Company	Ownership form	2009 sales (CNY $million)	Number of stores	Sales growth from 2004 (%)	2004 rank	2004 sales (CNY $million)	Number of stores
1	Suning Home Appliance	Private	117,002	941	429	4	22,108	193
2	Gome Home Appliance Group	Private	106,810	1,170	347	2	23,879	227
3	Brilliance Group Co., Ltd (Sub: Lianhua Supermarket Holdings Co., Ltd)	State-owned	97,915	160	45	1	67,627	5,493
4	Dashang Group	State-owned	70,535	941	206	3	23,085	120
5	CR Vanguard (Sub: SUGUO Supermarket)	Foreign-invested	68,000	1,852	390	8	13,880	1,345
6	RT Mart Shanghai	Foreign-invested	40,431	121	x	na	x	x
7	Carrefour	Foreign-invested	36,600	156	125	5	16,241	62
8	Anhui Huishang Group Co., Ltd	State-owned	34,378	2,884	x	na	x	x
9	Walmart	Foreign-invested	34,000	175	345	20	7,635	43
10	Wumart Stores Group	Private	32,700	2,333	146	10	13,277	608

Source: China Chain Store and Franchise Association (2010), available at: www.chinaretail.org/shownews.asp?id=1294

Table I.
Top 10 chain stores at the end of 2009 and 2004

and CNY¥235m for Carrefour provide some insight into how their strategies compare with the top five Chinese retailers. Other than the Brilliance Group (CNY¥612m per store), the remainder are between CNY¥37m and CNY¥124m per store. Operating larger stores is consistent with Walmart's strategy since its inception and Carrefour's current strategy.

China's emerging middle class and the geographic segmentation of consumers

We precede our analysis of Walmart and Carrefour with a brief discussion of socio-economic data which highlights key aspects of the Chinese market relevant to retail MNCs. A McKinsey Global Institute research paper (Woetzel *et al.*, 2009) highlights the coming impact of the urban middle class on the Chinese market. Woetzel *et al.* (2009) estimate that by 2011 the lower middle class, which they define as CNY¥25,000-CNY¥40,000, will reach 290 million people, and with 44 per cent of the urban population will be the largest urban group with a total annual spending power of CNY¥4.8 trillion.

These numbers present the somewhat misleading image that Chinese consumers have considerable disposable income. With economic growth of 10 per cent every year, there is no doubt about the increase in consumer purchasing power. But despite the tripling of average household income from 2000 to 2009 (Table II), 2009 average household income of US$3,744 was still only 8 per cent of a USA household (US$45,989) (The World Bank Data & Statistics, 2010). Furthermore, China's ratio of disposable income to spending of 39 per cent is about half of the USA and is the lowest in the world (Woetzel *et al.*, 2009). Also, the type of expenditures made by consumers who are just progressing from subsistence is very different than those made by the middle-classes. Foreign retailers are more interested in selling consumer goods than staples. Varying perspectives exist on the effect of growing household income in China; some believe the opportunity is across the entire country, others think the market can be divided into two worlds; Beijing, Shanghai, Guangzhou, and Shenzhen, and everywhere else (McEwen *et al.*, 2006).

Owing to the rising economy, during the past decade, the consumer goods competition is now shifting from the Beijing, Shanghai, Guangzhou, Shenzhen (Tier 1 cities) to Tier 2 and 3 cities. According to the *China Statistical Year Book 2009*, China has a total of 815 cities, 200 of which have a population over one million. The city level classification is based on three variables: population, per capita income, and administrative status. Tier 1 cities are Beijing, Shanghai, Guangzhou, and Shenzhen. Tier 2 cities are provincial capitals. Tier 3 cities are prefecture level cities and Tier 4 cities are county level cities. A recent study by Roche *et al.* (2010) reports on how China's consumer economy is responding to the economic down-turn and recovery. Using a more stringent definition of middle-class than Woetzel *et al.* (2009) they segment the population into Tier 1 and 2 city middle-class residents with incomes > CNY¥60,000, Tier 1 and 2 residents with income < CNY¥60,000, and the middle-class in small cities with income > CNY¥60,000. They report the Tier 1 and 2 middle-classes to be cautious about the future, the middle-class in smaller cities to be optimistic and the large city working class to be under considerable pressure. These findings may be an artifact of using the same income level to define middle-class across all cities. The cost of living in a Tier 1 city may be double that of a small interior city, thus the difference in outlook, although real may simply reflect a dramatic difference in real standard of living.

The Chinese market is an aggregation of local markets at widely different stages of development. Generally markets decrease in sophistication as the cities get smaller and further from the coast. They also vary according to consumer preference. Local markets generally evolve through three stages of development: nascent, emerging, maturing (Bellens *et al.*, 2009). The Xinjing province (Northwest China) is considered a nascent market with its cities classified as Tier 3 and Tier 4. Emerging markets such as those in Jiangsu and Sichun provinces (Central China) have mostly Tier 2 cities. Maturing markets are the Tier 1 cities such as Beijing and Shanghai. Generally speaking, the further west the location, the higher demand for basic, functional, low cost products (Penhirin, 2004). All four Tier 1 cities are on China's east coast and are inhabited by about 50 million people with the highest incomes and the largest GDPs. Many MNCs consider

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
949.18	1,041.64	1,135.45	1,273.64	1,490.38	1,731.13	2,069.34	2,651.26	3,413.59	3,744.36

Source: World Development Indicators, 2010

Table II. China GDP per capita 2000-2009 (current US$)

the huge market diversity and the vast scale of China as the biggest challenges when expanding into this market. Fong *et al.* (2006, p. B.1) report on the difficulty of selling to the diverse Chinese consumer:

> Consumers in northern China like [milk powder] sweet, but southern Chinese prefer low-fat varieties. Soybean oil and sunflower oil sell well in Shanghai, but not in Beijing, according to suppliers. Tsingtao may be China's best-known beer globally, but Yanjing beer is far more popular in Beijing...Local tastes – in a country with over half a dozen major dialect groups and climates ranging from tropical to subarctic – are extremely diverse, making it hard to stock shelves in large quantities. In the northeastern province of Shandong, for example, the top carbonated soft drink isn't Coke or Pepsi. It's a local brand called Laoshan.

Walmart and Carrefour have adopted somewhat different strategies in attempting to successfully segment the Chinese market. Carrefour, since it typically decentralizes procurement, has little problem adapting to this diversity. Its store managers do their own procurement and naturally are sensitive to local consumer behavior. On the other hand, Walmart's procurement strategy shows low adaptability in terms of understanding its marketing mix (Moreau, 2008).

Carrefour's strategy according to Rigby (2007, p. 10) is to analyze:

> [...] a city with potential, looks for suitable suppliers and researches whether income levels are high enough and population numbers big enough to sustain a network of stores. If a location passes these tests, it makes a move. The strategy has taken it to outposts such as Urumqi, in the far north-west corner of China, near Mongolia and Harbin in the north-east and Kumming in the south.

Tacconelli and Wrigley (2009) report that prior to opening its first store Carrefour recognized the importance of understanding the marketing of fresh fish in China. The company studied the preferences of customers regarding the type of fish, presentation of fish and other aspects of their purchasing patterns in wetmarkets. They then adapted the familiar wetmarket display techniques to their hypermarkets to capture fish sales. When Carrefour expanded into Western China they presented frozen fish rather than fresh because they knew that due to the absence of nearby seacoast these consumers were not used to fresh fish.

The structural paradox: Walmart and Carrefour

Walmart and Carrefour have similar business strategies; their main differences are perhaps explained by their points of origin, the USA and the European Union (EU). Of the two, Walmart is the world's largest retailer, but Carrefour has flourished in an area remarkably hostile to the encroachment of big box stores on local economies. We consider it important to determine which choices appear to be attempts to extend previously successful strategies to China, and which choices are accommodations to local conditions. Aoyoma's (2007) "structural paradox" appears to accurately describe the experiences of Walmart and Carrefour in the Chinese market.

Both firms have adopted a "low price" strategy, just as they have done in their home markets and elsewhere in the developed and developing world, allowing them to call upon their familiarity with business practices and IT systems that have already worked for them successfully. Whereas Walmart mainly operates hyperstores, Carrefour, in addition to its hyperstores, owns or franchises thousands of convenience stores and deep discount stores in the EU. It is these stores that give it world-wide leadership in number of retail locations. Walmart has highly centralized operations with virtually all procurement done through Global Procurement Centers. It should be noted that the two centers located in China account for about 70 per cent of Walmart's world-wide purchases (Gereffi and Ong, 2007). Carrefour does not attempt to centralize distribution, either in its home base in the EU or elsewhere, instead each manager handles procurement.

Walmart has insisted on its strategy of seeking operational efficiency through standardization and offering customers low prices, but has struggled with the implementation of localization and in some ways eroded customer appeal. Walmart's initial entry into the market forced them to locate their stores in areas that did not fit their market niche. Carrefour promoted standardization, but their corporate culture encouraged more autonomy by store managers and they were also better prepared to deal with localization issues because of their choice to enter the market with local joint owned partnerships. We first focus on the major aspects of front-end operations, examining how both companies approach the implementation of operational efficiency through business partnership, localization and marketing on low prices. We review the similarities and differences between these two companies to explain their varying success in resolving the paradox.

Front-end operations

Business partnership, localization and marketing on low prices.

Walmart. Walmart entered China in 1995 by partnering with a state-owned company, Shenzhen International Trust & Investment Co (SZITIC). After signing a "Joint Investment Contract" with SZITIC and establishing "Shenzhen Walmart Pearl River Co., Ltd" Walmart opened its first store in Shenzhen in 1996 (SZITIC.com, 2011). SZITIC is known for developing high quality commercial construction projects in the most commercially developed and wealthiest cities in China. When SZITIC develops a new property, the company usually includes a Walmart, as this increases the visibility of the site. Furthermore, partnering with the state-run business allows Walmart to take advantage of the prime locations that characterize a typical SZITIC project. With this arrangement, Walmart entered into long-term leases with SZITIC, and seemingly gained an advantage by learning how to accommodate to a *guanxi* culture (using social capital to build business relationships). This should have allowed Walmart to function smoothly with central, provincial and local government officials. However, the drawbacks of the partnership soon became apparent. With all financing operations centralized in Shenzhen and coupled to SZITC's operations, Walmart was unable to develop social capital with local governments and businesses in other regions. Thus, it is not surprising that Walmart's joint venture partnership initially led to a relatively slow expansion.

Walmart's strategy has always been to offer a wide choice of inexpensive merchandise to consumers through its trademark "every-day-low-prices." The firm has had great success for decades, primarily in suburban or exurban areas and in the smaller cities of the USA, areas that were typically limited in retail choices. Walmart not only was cheap and reliable, it offered a far greater range of consumer products than had been previously available. More recently, and with some resistance, Walmart has entered large urban markets. Walmart's value proposition is well known, it competes on price and the quality of its fulfillment, offering a large choice of items from bread to flat screen TVs:

> If we work together, we'll lower the cost of living for everyone[. . .] we'll give the world an opportunity to see what it's like to save and have a better life (Sam Walton, walmartstores.com, 2010).

In the target USA markets that made Walmart a success, consumers agreed with Sam Walton's vision. To duplicate its USA strategy in China, Walmart would have had to begin market penetration in Tier 3 and 4 cities and small towns. In these markets Walmart would have encountered both a lack of purchasing power and a near absence of infrastructure. Walmart would also have needed to undertake the process of educating consumers to prefer their staples in name-brand packages as compared to the bulk bins weighed and priced by local merchants. This process is not part of the Walmart USA success story, that task having been successfully undertaken by Sears, Woolworth and A&P a century ago. Walmart's initial locations in China were the exact opposite, located in the most commercially developed and wealthiest districts. Walmart's first Chinese supercenter was opened in Shenzhen, a SEZs located in a highly populated, affluent city with keen retail competition. Its partnership with SZITIC forced Walmart to deviate from its proven strategy and locate in Shenzhen because its joint venture partner was headquartered there.

Walmart now has seven stores in Beijing and some are situated in the most expensive and commercially developed districts in the city. The Walmart Supercenter Jianguo Road Branch is in an area which now boasts high status domestic and foreign stores including Tiffanys, Louis Vuitton, Montblanc, Harry Winston and Dior. Affluent Beijing consumers know the difference between luxury and discount and Walmart's brand identity has little appeal for them.

In recent years Walmart has closed the gap with Carrefour both in sales and stores and also in diversity with respect to city size. Table III shows the number and types of cities Walmart and Carrefour entered in China, and the numbers of stores in these cities as of May 2009. By the end of 2009 Walmart had increased to 175 stores.

Walmart has recently shown some sensitivity to local consumer demographic differences. The company sells a diverse menu of take-out food in its Beijing, Chaoyang store, to accommodate its young professional customers. In contrast it focuses on fresh produce in its Haidian district store because the customers are older and used to preparing home cooked meals.

Carrefour. Carrefour's global strategy is somewhat different from Walmart's in that selling cheaply to as many people as possible is constrained by a commitment to fairness and sustainability:

	Number of cities		Number of stores	
City	Walmart	Carrefour	Walmart	Carrefour
Tier 1 city (4)	3	4	22	50
Capital city (34)	19	19	53	65
Tier 2 & 3 city (622)	40	17	71	35
Total	62	40	146	150

Note: The capital cities of provinces do not including Hong Kong, Macau, and Taiwan
Source: Web sites of Walmart & Carrefour

Table III. Distribution of Walmart and Carrefour stores by city type-May 2009

> Carrefour is totally focused on meeting the expectations of its customers. Our mission is to be the benchmark in modern retailing in each of our markets. As a global retailer, Carrefour is committed to enabling as many people as possible to purchase consumer goods, in accordance with the principles of fair trade and sustainable development (Csrglobe, 2010).

Unlike Walmart's joint venture partnership with a state-owned company, Carrefour used local joint venture partnerships, and this is a critical element in Carrefour's early success in China. For example, Carrefour's local partner in Shanghai is Lianhua Supermarket; in Guangzhou, it is the GuangBai Department Store. The major shareholders of these two companies, both local, are the Shanghai and Guangzhou city governments. Consequently, Carrefour's joint venture strategy was more flexible in dealing with local protectionism issues and could expand its territory quite effectively.

Carrefour entered the Chinese market in Shanghai and Beijing in 1995. Its Shanghai store was in a residential area of mostly professional and government workers. Its first Beijing store was in the International Exhibition Center where many conventions and conferences are held. Tseng and Foster (2006) call Carrefour's entry strategy (tou bu) flexible and short-cut. They point to the fact that Carrefour entered the market by circumventing national regulations but it did generally follow provincial and city level regulations. According to Tseng and Foster (2006), Carrefour attempted to appear technically compliant with company ownership regulations when in fact it was not. Carrefour and a Chinese venture capital firm entered into a joint venture called Jia Chuang. Jia is the first Chinese word for Carrefour (Jia Le Fu) and Chuang is the second word of the venture capital firm, Zhong Chuang. Regulations prohibited a firm like Jia Chuang from operating a retail business so it formed a shell company, Chuang Yi Jia. Chuang Yia then hired Jia Chuang, the Carrefour joint venture company to manage the new store. In a very public display Carrefour then placed a sign bearing its name outside the store which prompted a government investigation after which the sign was removed. Carrefour continued to maintain signs inside the store and to distribute shopping bags with its name on them. Complaints were received about Carrefour's entry strategies by the State Economic and Trade Commission (SETC), a cabinet level body, in 2001 causing Carrefour to temporarily suspend expansion plans. Carrefour's CEO made a prompt public apology and an agreement was worked out with the SETC that allowed Carrefour to re-register its existing stores and move ahead with its expansion plans.

Although the first stores were in Tier 1 cities, most of Carrefour's sites developed in the early years of its expansion were located in the less commercially developed districts in the provincial capitals or large cities and were usually close to residential areas. In addition, Carrefour's local joint venture relationship allowed them to take advantage of economies of scale by opening multiple stores in one city. Walmart's state-joint venture relationship initially crippled its expansion because local protectionist practices prohibited the chain from having more than one or two stores per city. Table IV compares the number of stores for Walmart and Carrefour from 2001 to 2009.

Back-end operations: transferring the strategic asset without oligopoly

An ongoing and pervasive issue faced by retail MNCs in China is the implementation of their preferred lean retail model, which includes an integrated supply chain including procurement and distribution practices. Distances are great and the highway system is nascent. Failing to obtain control over distribution, retailers are unable to exert pressure on manufacturers/suppliers prices, which has been a critical success factor

Table IV.
Number of Walmart and Carrefour stores by year

	Number of stores	
Year	Walmart	Carrefour
2001	11	24
2002	19	32
2003	26	40
2004	34	56
2005	43	70
2006	56	90
2007	73	112
2008	101	139
2009	172	175

Source: Walmart Web site (2010) and Carrefour Web site (2010)

in their home markets. Both Walmart and Carrefour have been unable to convince manufacturers to implement lean retailing. The failure to successfully utilize their tried and true distribution strategies in China has put them at a disadvantage since they have insufficient understanding of Chinese business culture to efficiently localize. In the subsequent section, we examine organizational characteristics of Walmart's and Carrefour's procurement and distribution and logistics systems. We then discuss supplier relations and *guanxi* and conclude with comments about information technology. In order to better understand the Chinese market, we interviewed three operations managers of local suppliers who do business with Walmart and Carrefour. These suppliers provide bulk food-stuff, home use containers, and health products to both companies.

Procurement, distribution and logistics strategy.

Walmart.

> If you can centralise distribution, instead of 200 deliveries a day (to stores), you can make two (deliveries) and the goods go straight to shelves (instead of sitting in the store room) (Mr Lee [Wal-Mart China's supply chain director] cited by Rigby, 2007, p. 10).

Walmart uses the same centralized procurement concept in China that it does in the USA. After establishing a Walmart Global Procurement Center (WMGP) in Shenzhen in 2002, purchase orders for all products manufactured in China moved from the USA headquarters to the WMGP, which sources and negotiates for new products and sets prices with manufacturers. Centralization has been very effective and Walmart's global purchasing strength is unsurpassed. Researchers in economics have identified Walmart as an oligopsonistic retailer and explain that "oligopsony, i.e. oligopoly of the demand side, has detrimental consequences on the bargaining power of manufacturers and food suppliers" (Aoyama, 2007, p. 472).

But this rigid, centralized purchasing system gives Walmart very little flexibility to respond quickly to fluctuations in the variable Chinese market. Walmart has begun to modify its procurement system by establishing five regional purchasing centers. Two of these centers focus entirely on domestic procurement, and report to the Shenzhen headquarters directly; one is situated in the south and the other in the north. All product selections, price negotiations, display, and promotion events in China are controlled by the purchasing centers. Each provincial capital that has outlets has a purchasing office as well. Figure 1 shows Walmart's new procurement structure.

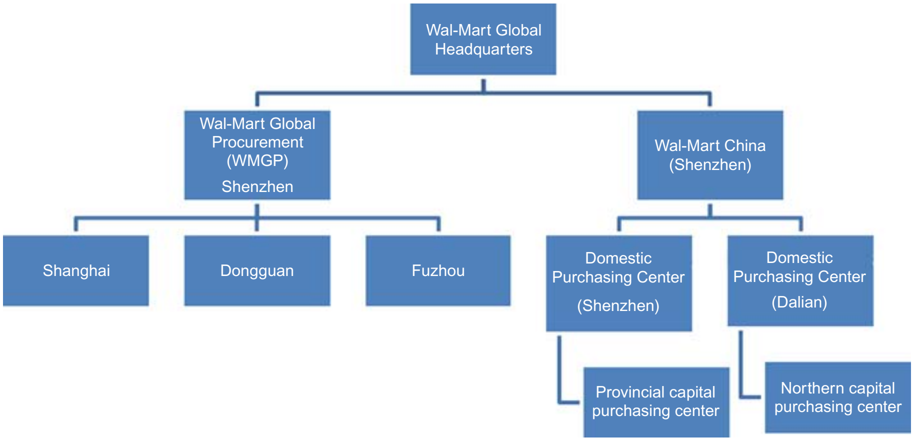

Figure 1.
Wal-Mart procurement structure in China

Walmart's competitive advantage is to sell the same products for less than its rivals. By utilizing a state-of-the-art distribution and logistics system the chain is able to lower inventory and supply chain costs. The flexibility and efficiency of its centralized distribution and cross-docking systems contribute heavily to Walmart's success in its home market. With over 130 distribution centers (DCs) in the USA, and an established interstate network of well-maintained roads, Walmart can get goods from a distribution center to any outlet in less than a day.

Some of the Chinese outlets are over 1,000 miles away from their nearest distribution center. Coupled with an underdeveloped highway system, this makes the USA one-day strategy impossible in China. The national highway system is fairly new, before 1997 China rarely had expressways that covered long distances. China and the USA are of comparable sizes, but by the end of 2004 China's 20,572 miles of expressways were less than half of the 46,000 miles found in the USA. While China's interstate system is expected to overtake the USA by 2020 (MacLeod, 2006), its road system is clearly an obstacle to efficient procurement and distribution. In addition to these physical limitations, local protectionism practices and regionalism, inter-provincial customs, clearances and laws make a speedy delivery system impossible.

With the vast number of stores in the USA Walmart also enjoys economies of scale not yet possible in China. Each DC serves about 120 stores within a one-day driving distance. In China however, cities have restricted the number of market entries. From only 43 stores in 2004, the number of locations increased to 172 (Table IV) by the end of 2009, but is still very low compared to the more than 4,000 in the USA. The inefficient use of Walmart's DCs in China makes its logistics cost relatively higher than its Chinese competitors.

Owing to the underdeveloped infrastructure in China, Walmart encourages, but does not force, its local suppliers to deliver merchandise to the DCs. As it does not have its own truck fleet, it contracts for the transportation of goods from the DCs to the outlets. One of the suppliers we interviewed in China hired a third party to manage all the logistics of getting merchandise to Walmart's outlets directly, instead of to the DCs, as a cost-saving measure. The supplier's firm is one of the biggest commodity manufacturing companies in China owned by the government. Clearly, the transportation-and-delivery system that

Walmart employs in China is less efficient than its USA operation, where its fleet of trucks, the largest in the world, not only picks up goods from manufacturers, but also delivers them to the outlets.

Carrefour.

> In China, you don't have a logistics system, it is dislocated, so we adapt to working to the local economy (Jean-Luc Chereau [Former CEO of Carrefour China] cited by Rigby, 2007, p. 10).

According to Tacconelli and Wrigley (2009, p. 63):

> Unlike Wal-Mart, Carrefour believes that in the highly fragmented Chinese retail and consumer market, the benefits of what could be termed the economics of dispersion outweigh the economics of concentration – that is, the ability to identify and respond more efficiently to the different needs of consumers across China and the capacity to monitor the rapidly changing Chinese consumers and satisfy them with the introduction of new and appropriate products (interview with the vice president of food, Carrefour China, 30 August 2007). In other words, while Wal-Mart focuses on the logistics part of the supply chain, Carrefour focuses on the purchasing function of the supply chain.

Carrefour is now attempting to centralize procurement gradually and has established City Commission Units (CCUs) as the bridge between individual stores and major purchasing centers because of problems with corruption. The procurement system now has three levels: headquarters, four purchasing centers and 20 CCUs. The purpose of the four major purchasing centers is to find low-cost suppliers for the outlets. Figure 2 shows Carrefour's procurement structure.

Carrefour, unlike Walmart, has no centralized distribution and logistics system in China, nor do they plan to build any DCs in the near future. Carrefour requires suppliers to deliver products directly to the outlets and, to avoid having to store a large inventory, demands that only small amounts are left at the outlets. Suppliers have full responsibility to replenish stock as needed. By switching the entire logistics and delivery responsibility to its suppliers, Carrefour's cost is relatively low compared to Walmart's. However, this has caused some resentment from Carrefour suppliers, as this system passes the cost of delivery logistics onto them. According to our interviewees, some suppliers have stopped doing business with Carrefour, especially at those outlets located in second and third tier cities.

Chinese guanxi culture and supplier relationships.

Walmart. Low prices are the key to Walmart's marketing efforts. Consequently, Walmart pressures its suppliers to find all possible ways to cut costs. However, doing

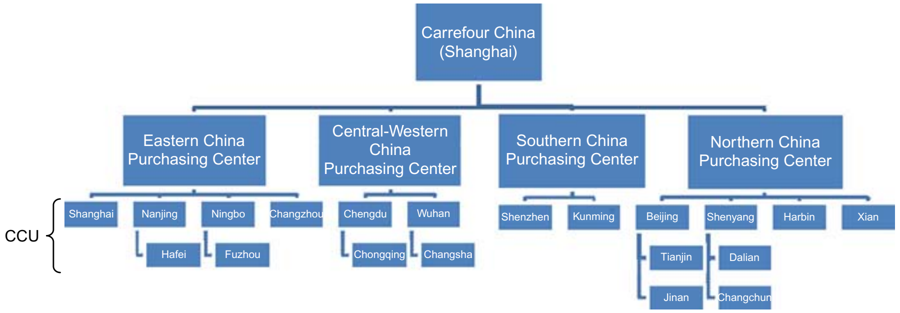

Figure 2.
Carrefour procurement structure in China

so has led to deteriorating relations with many of the better quality manufacturers. Some factories are starting to negotiate higher prices or to subcontract the low-priced orders to less reputable manufacturers, leading to decreased accountability and worker safety. According to Walmartwatch (2007), China's largest hosiery manufacturer, Yiwu's Langsha Group, announced in July 2007 that it would no longer fill Walmart's low priced orders. Langsha had filled more than $5 million worth of Walmart orders in two of the prior three years. In order to continue the relationship, Walmart began paying the higher prices that Langsha demanded, and their business arrangement continued. (Walmartwatch, 2007).

Unlike purchasing products from suppliers directly in the USA, Walmart negotiates price and supply in China with intermediary trading companies. In November 2007, hoping to get better deals, Walmart attempted to implement a direct purchasing model. However, according to our interviewees' comments, due to the risks and cost concerns of working with the chain directly, suppliers rejected the plan.

To date Walmart has been unable to gain the strong bargaining power it enjoys in the USA due to its small size relative to the Chinese market. Its revenues are still low when compared to its major competitors, the top five retailers have between double and triple Walmart's sales. However, more and more local suppliers have begun appreciating the supply chain management knowledge and practices that Walmart shares with them. Walmart claims to treat its vendors as partners, helping them improve the efficiency and effectiveness of their supply chain management, and the local suppliers we interviewed all confirmed this to be true. They agreed that the "Walmart way" improved how they managed their inventory. Walmart also implements a strict standard and procedure on procurement, prohibiting its employees from accepting gifts or dinners from its suppliers. Because of this, there is little corruption in the process.

Walmart has developed strong relationships with the central government, but due to local protectionist practices, the company's representatives still have a way to go to fully understand the Chinese market. *Guanxi*, or an association facilitated by the exchange of mutual favors freely and often given, is an important part of doing business in China, and a better understanding of the social relationships between partners would greatly benefit Walmart executives in developing long-term, mutually successful dealings with local governments and suppliers. Walmart's success in the USA began by expanding into small communities first in the southern USA and then in other regions that eagerly accepted the firm's value proposition based on price and completeness of its retail offerings. Its model has been to build the same store with the same products run by the same employees, everywhere. Objections to the elimination of local entrepreneurs have always been trumped by Walmart's customer value proposition. Once zoning approval was granted, Walmart did not need to worry about social relationships with the local community beyond sponsoring events and avoiding scandal; they achieved immediate oligopoly. Not having embraced the Chinese version of *guanxi*, it is not surprising that Walmart has continued to mishandle local relationships in China.

Carrefour. According to three suppliers we interviewed, they have a love-hate relationship with Carrefour. They love to do business with Carrefour because of the large orders, but hate the seemingly erratic retail pricing for various goods. In most industries, profits generate from the mark-up prices for a product sold at retail. But Carrefour in China sets below-cost prices on several basic staples, such as cooking oils, rice, and flour; Carrefour knows these products are likely to be on the shopping list when customers come to their stores. Carrefour sells these products at prices that are 10-20 per cent lower than the purchasing cost, and not surprisingly, this brings in considerable sales, but not profits for the suppliers. Suppliers and competitors complain that Carrefour's low-price strategy has had a negative influence on the market for these staples and significantly reduced their overall profits (Tao, 2007). Part of Carrefour's profits come from the fees they charge their suppliers, instead of mark-up profit on goods. The interviewees discussed the additional fees and mentioned anecdotal statistics showing that nearly 80 per cent of Carrefour's profit comes from these vendor fees. Fees are levied for: entrance, display, shelf space, promotion, advertisement insertion, TV commercials, newspaper advertising, tasting, cleaning, bank-service charges and communication fees for using computer networks. Moreover, suppliers are required to contribute sizeable amounts to the cost of opening new stores, remodeling and reopening, allowances for inventory loss from stolen or damage goods (Dawson *et al.*, 2003). In addition to these fees, Carrefour aggressively bargains for the best price from suppliers, again lowering their profits.

In spite of this, Carrefour has been a fast learner on the concept of *guanxi* compared to Walmart. Early on, Carrefour established good relationships with the local governments, and promised extra tax monies and jobs for towns in return for the local government's permissions to open its stores without waiting for the central government's approval. Carrefour effectively dedicated itself to sell products the Chinese way.

Information systems

Walmart. Walmart has enjoyed a world-wide competitive advantage with its state-of-the-art information system. It owns a private satellite system and its information technology center is the second largest in the USA. The use of electronic data interchange (EDI) and point of sale systems has allowed Walmart to share its daily sales information with its suppliers. By implementing cross-docking warehouse strategy at its DCs, the merchandise remains there no longer than 15 hours before it is distributed to the outlets. With the largest truck fleet in the USA, each Walmart outlet has its stock replenished twice a week.

However, the information technology (IT) environment in China is still at a nascent stage and most suppliers do business by fax and telephone. From the onset, Walmart has attempted to educate and train Chinese suppliers to adopt "Retail Link," the system that efficiently manages inventory replenishment in the USA. Most suppliers initially refused to install an EDI system due to the high cost. Recently, Walmart's efforts have become much more successful. According to our interviewees, all suppliers in China now are either fully or partially integrated with Walmart's Retail Link system to fulfill orders. But getting suppliers to use the EDI is only the starting point. Another challenge is the integration of the distribution and logistics between suppliers and the DCs and then from the DCs to the outlets. Only a small number of suppliers, as noted earlier, deliver merchandise to Walmart's DCs. At the same time, Walmart's advanced IT system can only be fully utilized if the Chinese Government continues to successfully invest in their transportation and IT infrastructure.

Carrefour. Carrefour does not have an information system such as Walmart is attempting to implement, nor does it share demand data across its supply chain network. According to our interviewees, Carrefour uses Hyperion Financial Management software to manage its financial data with its suppliers, and operates the old-fashioned way, fax machines are the main way orders are placed. As noted above, suppliers then arrange delivery to the outlet directly. All logistical issues are the responsibility of suppliers.

Conclusion, limitations and directions for future research

The experiences of Walmart and Carrefour illustrate the challenges retail MNCs face as they attempt to successfully solve the structural paradox (Aoyama, 2007) that arises as they attempt to transfer their cost leadership customer value propositions to China. Cost leadership requires lean retailing practices that have proven difficult to achieve because of various host country conditions. In each case, these retail MNCs entered the Chinese market with a value proposition based solely on price, but have been unable to replicate their success elsewhere without their usual efficient supply chain. The competing demands of localization and differentiation have so far proven intractable. This study also shows the importance of integration of front- and back-end operations as retail MNCs enter new markets. There are substantial impediments to the transference of oligopolistic and oligopsonistic power across markets. We conclude that Walmart and Carrefour continue to face considerable challenges in effectively deploying their strategic assets in China.

The lifting of restrictions for foreign retail business in December 2004 created the opportunity for retail MNCs to extend their operations throughout China. The record, to date, for the world's two largest MNC retailers has been unimpressive. Our analysis applies Aoyama's (2007) structural paradox model which focuses on the tension between standardization and localization as retail giants attempt to extend their success in new markets by establishing oligopolies and oligopsonies. Their strategies are based on a cost leadership customer value proposition which fosters lean retailing practices. Although some progress has been made, lean retailing in China remains a vision rather than a reality for both firms.

Walmart and Carrefour have had a variety of development, procurement and distribution problems which have negatively affected standardization. This study supports Aoyama's (2007) assertion that the integration of front- and back-end strategies presents a paradox for MNCs attempting to extend their hegemony to new markets. Walmart and Carrefour have struggled to deliver on their almost legendary lean retailing abilities. In the case of Walmart, the major challenge was to achieve standardization without their world-leading distribution and logistics system. The attempts at successful standardization have so far been thwarted due to an underdeveloped infrastructure. Walmart's market entry was also flawed because its choice of a Chinese partner limited its geographic penetration. Walmart's strategy was risk-averse and it carefully followed China's laws and regulations only to face protectionist practices by local governments. Furthermore, Walmart may have been over-confident in its power over local suppliers. They seemed to have believed that their market share elsewhere would have an effect even though they were a small player in China. The examination of Carrefour suggests that localization was better achieved because of a greater understanding of *guanxi* and local government relations, but that problems have arisen within its distribution and logistics systems. Suppliers report a love-hate relationship with Carrefour and the company has had problems with corruption. Localization sacrificed operational efficiency, which in turn has led Carrefour to accept cost practices not associated with lean retailing. World-wide, Carrefour has relied less on standardization and more on an ability to nimbly adapt to local conditions, but in China this has led to a somewhat chaotic back-end operation.

Our study has identified key standardization and localization issues faced by the two leading global retail MNCs in China: partnership alliances, under-developed infrastructure; an immature technology environment, market segmentation, *guanxi* culture, protectionism and local competitors. Without a doubt, MNCs encounter stiff competition from regional and national domestic rivals. The Chinese retailers thoroughly understand local customs and consumers and have long-established relationships with suppliers and local governments based on *guanxi*. From their foreign rivals they are learning and implementing new front- and back-end techniques. Since the Chinese market became relatively free for foreign retailers in late 2004, the record of Walmart and Carrefour has been unimpressive, the average growth for their five largest competitors has exceeded that of either firm.

This research suffers from two main limitations. First, we relied primarily on secondary sources for information. Although we did conduct interviews with several of Walmart's and Carrefour's suppliers, the information obtained was not sufficiently comprehensive to stand on its own. Second, the information obtained is of limited reliability. Unlike the EU or the USA with their history of a free press, academic freedom, and required disclosures for a broad segment of the economy, China remains relatively secretive about its markets and a free press and independent academy is just beginning to emerge.

Several issues need to be considered for future research. First, this paper focuses on qualitative analysis of the current retailing situation; future research may explore the potential market opportunities by using quantitative methods. Second, much needs to be done to understand the economies of the smaller cities which have been little studied. Evidence suggests that these cities may present the next opportunity for expansion of MNCs. Finally, because neither Walmart nor Carrefour has found the right mix of standardization and localization in China, research at the granular level which reports specific instances of success and failure is needed. The experiences of Walmart and Carrefour, as well as our interviewees' inputs, should help those wishing to explore the uniqueness of the Chinese market and the challenges that will be encountered when expanding their businesses in China.

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Further reading

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About the authors

Dr Ming-Ling Chuang is an Associate Professor of in the Management Department, Ancell School of Business at Western Connecticut State University. Her research interests include operations management, supply chain management, and total quality management. She is currently teaching Operations Management and Supply Chain Management at Western Connecticut State University.

Dr James J. Donegan earned his PhD at the University of Arizona and is a Professor of Accounting at Western Connecticut State University. He is a Certified Management Accountant and a Certified Financial Manager.

Dr Michele W. Ganon earned her PhD at the University of Arizona and is an Associate Professor of Accounting at Western Connecticut State University where she teaches Strategic Cost Management at the graduate level.

Kan Wei was a MBA student at the School of Business of Hong Kong Baptist University. He worked for four years at TCL Company as a Manager of Marketing and currently is working at Fontal Corporation in China as a General Manager. He received his MBA degree in December 2009.