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Causes and Consequences of Food Retailing Innovation in Developing Countries: Supermarkets in Vietnam

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Abstract: I examine the modernization of food retailing in developing economies, focusing on the early stages of retail modernization in Vietnam. This modernization represents innovation that is sought by the host country and that depends on knowledge transfer. Retail modernization has profound effects on the host country and its food system. Innovation at the consumption (retail) end of the food supply chain warrants attention similar to that devoted to knowledge transfer at the production (farming) end of the chain.

Keywords: Economic Development, Food Retailing, Innovation, Vietnam

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Introduction

From the 1920s to the 1970s, food retailing underwent a profound evolution in the United States. Through industrialization and urbanization, consumers increasingly depended on markets for their food needs and increasingly bought packaged foods. A new type of food retailer (supermarkets - large full-line, self-serve stores) gained considerable market share at the expense of traditional, small, limited-line clerk-service stores. These supermarkets used economies of scale and market power, along with inventory and merchandising technologies to compete for business through price, assortment, advertising, reliability and customer service. Regarding this evolution as the modernization of food retailing, we see modernization having occurred in other advanced economies, and from the 1980s to the present, we have seen many examples of rapid modernization of food retailing in a number of developing countries.

This paper examines the modernization of food retailing in developing countries as a matter of technological and institutional innovation. As an example of developing countries, I focus on Vietnam, which began a modernization trend in the mid 1990s. Specifically, we ask where the innovation came from and what its effect on the country's economy has been.

The paper proceeds with a description of the modernization of food retailing where it initially took place, in the US. Next is a literature review of retail innovation in developing countries and the effect of this innovation on development. We then focus on the early-stage evolution of retailing in Vietnam, examining the innovation process and the effect of this innovation on suppliers to the retail sector. We conclude that retail modernization has a significant influence on other sectors of the economy, and we suggest further research to identify linkages between public policy, retail innovation and the affect on the food chain.

The Modernization of Food Retailing in the United States

While there are contemporaneously many types of food retail formats in the US and other economically advanced economies, in this paper we consider a broad distinction between "traditional" and "modern" formats, with the latter characterized by the self-service sale of food and other daily household consumable goods, many of which are packaged and branded. The development of this modern format first occurred primarily in the United States, and that development is the focus of this section.

Food retailing in the US can be regarded as having begun its modernization in the early 20th century, with modern grocery stores (self-serve with shopping carts and multiple cashier stands) appearing around the country in the 1920s. The evolution of US retailing is described by Peak and Peak (1977) as the transition from a food section in a corner of a trading post (up to the year 1700) to general stores (1700-1860) to specialty food stores (1860-1918) to chain specialty stores (1918-1932). Chain stores, loosely defined as at least eleven stores under common ownership, accounted for 36% of US grocery sales by 1936. A&P was the biggest chain, with 14,000 of their "one-man" limited assortment stores in the mid 1920s (Leed and German, 1979). Full line (dry goods and perishables) stores, called "combination" food stores developed from about 1920 to the late 1930s, though most of these stores were still "traditional" in terms of offering such features as credit, home delivery, and clerk-service. Also, importantly, the combination stores were generally under 1,000 square feet.

The modern supermarket (combination store with self-serve and emphasis on high volume, low price) began to appear in the 1920s and began to grow in popularity in the 1930s, when the depression made consumers price sensitive. Key to self-service is the existence of prepackaged goods that would not be damaged by customer handling. Each store would have several cashiers at the front (a common definition of supermarkets requires a minimum of three cashier lines). The proliferation of automobiles made it possible for large, high-volume stores to serve a wider market area, so by 1936 there were an estimated 1,200 supermarkets in the US, mostly independently owned.

During the era of labor shortage and war-time food rationing in the 1940s, family operated independent stores had an advantage over chain stores, and the shortage of food led to the stocking of more general merchandise and of higher margin nationally branded products. When labor and resources again became available after the war, there was a surge of supermarket development by both independent operators and chain stores, especially in the newly developed suburban communities. Supermarkets increased their food retail market share from about 10% in 1940 to about 30% in 1949 and nearly 70% by 1959 (Peak and Peak). Meats and produce sections of stores had often remained clerk-service, but by the end of the 1950s, they, too, were self-serve.

New technologies such as glass-doored, defrosting, freezer cases, automatic conveyor belts at the check-out stand, adjustable shelving, automatic doors and air conditioning, were all introduced to add to customer comfort or reduce cost. The average supermarket then was well lighted, and air conditioned, about 20,000 square feet, and with multiple cashier lines. They carried packaged and perishable foods along with some cleaning and other household supplies. With ownership of refrigerators and cars becoming common, consumers could buy greater quantities of merchandise per store visit. Also, married women (the primary food shoppers) were increasingly employed outside the home, so that fewer shopping trips and greater use of prepared foods became more desirable.

As economies of scale and market power gave chains lower operating costs (in part by sourcing directly from producers), independent retailers formed cooperative associations for their procurement needs or joined with wholesalers in voluntary associations for the same purpose. While, for our purposes, US food retailing was largely modernized by 1960, there continued to be evolutionary trends with a diversity of retail formats, including "supercenter" or "hypermart" stores - large discount stores combining food and general merchandise, "convenience" stores – limited assortment shops with ready-to-consume foods, and "club" or "cash & carry" stores that are essentially wholesale stores that require a membership card for access.

While the supermarket is regarded as having been invented in the US, similar modernization has occurred in other economically advanced countries. Because of differences in laws, customs, and economic cycles, there are differences in retailing from one country to another. The United Kingdom, for example has emphasized packaged goods with retailer, rather than manufacturer, brands. Japan (due in large part to regulations limiting large stores) has developed a strong convenience store sector, and distribution varies somewhat by country (with more or less emphasis on multiple layers of distributors and/or direct store distribution).

The Role of Retail Modernization In Economic Development

The above section presents the modernization of food retailing as having coincided with and responded to US economic development of the 20th century. In this section, we consider the role of food retail modernization in countries undergoing more recent economic development. While this topic is of interest to economically advanced countries wishing to sell to new markets (Samiee, 1993), our focus on the perspective of the developing countries. In particular we see the perspective of retail modernization as a driver of economic development.

Arguing against conventional wisdom that manufacturing was key to developing economies, Peter Drucker proclaimed that *marketing*, was the "most effective engine of economic development" (1958, p. 252). He credited it with developing entrepreneurs and managers, setting product and service standards, and generally impacting the customers, the suppliers, the economy and even society. As part of market, food retailing was specifically highlighted as important to economic development, if for no other reason than to reduce the high cost of food (Galbraith and Holton, 1955). Others (Rostow, 1964, and Riley et al, 1971) called for a revolution in marketing as a device to induce more rapid growth in developing countries. Effective marketing was seen to stimulate both production and consumption. "It guides farmers to new production opportunities and encourages greater production in response to demand." (FAO, 1970). Enabling consumers to spend more on non-food items would trigger enhanced production such that the modernization of food retailing could be an "entry point" to economic development (Riley, 1971).

Despite early efforts to highlight marketing as important to economic development (Goldman, 1974), its currency in the development literature was surprisingly small (McKee, 1989). This view about the importance of marketing conflicted with the dominant view from classical economic literature that services were "unproductive" (Bhagwati (1989c, p. 5). One concern was that improving labor productivity in the service sector would simply convert underemployment to unemployment. Galbraith (1955. p. 2) countered that addressing unemployment by encouraging inefficient food distribution paid for by an inflated food bill of a poor country is a very poor (regressive) form of unemployment relief.

Local governments have both encouraged and impeded the modernization of food retailing. Chile was one country that appeared to embrace the growth of supermarkets as a device to improve market efficiency (Bennett, 1966). The government participated in a loan to three nascent supermarket chains in Santiago, promoting what Bennett called a "peaceful revolution" in food retailing. As measures of efficiency, he referred to sales per employee and sales per square foot, both of which were higher in the modern stores than in the traditional markets. At the same time regulations to protect the business interests of existing traditional retailers in Chile impeded the development of supermarkets. Puerto Rico's retail modernization from 1950 to 1965 has been well documented (Galbraith, 1955, Riley et al., 1960), as the governing authorities there made concerted efforts to introduce modern retailing.

The Innovation Process of Retail Modernization in Developing Countries

The modernization of food retailing can be regarded as technical change that is based on innovations that are both technological and institutional in nature. Examples of the former are scanning cash registers, packaging technology, inventory management software, and market research. Institutional innovations include self-service, assortment of products, number of items stocked, use of retailer (rather than manufacturer) labeling, demand development, and development of distribution centers. Because the two classes of innovation are inter-related (e.g., the institution of self-service would not be possible without packaging technology), we refer to them in combination as *retail innovation*.

Food retailing, along with other components of the service sector, has received relatively little attention in the literature on technical change for economic growth (in comparison to goods-producing industries), despite the service sector accounting for an estimated 60-70% of economic activity in advanced economies (Ruttan, 2001, p. xv). One reason for retail trade being long overlooked was perhaps that it had been considered "small, unskilled, and dispersed," per a 1989 UN report. Since, though, "it has come to be dominated by large retail chain operations which require sophisticated computer, communications, product control, credit and cash-management systems in order to be competitive. Technological progress has created service industries of a scale, sophistication, complexity and value-added potential that match those of any manufacturing industry." (UN, 1989, p. 13).

Innovation (in the present case, retail modernization) can be expected to arise endogenously from demand conditions, as a demand-pull phenomenon (Vernon, 1966). To the extent that modernization enhances convenience, but with cost increases, it is not surprising that the innovation occurs first in markets catering to affluent customers. Interestingly, in the case of retail innovation, the very innovations create further demand, which, according to Vernon, would be expected to lead to yet further innovation. Convenience is not the only positive outcome of retail innovation. Customers of all income groups appreciate self-serve in that it enables holding and inspecting the merchandise. (Sternquist, 1998, p. 185). Also, many innovations (e.g., mass merchandising, inventory control technology, self-service) decrease costs, and, as Galbraith (1955) argued, those savings can benefit lower income consumers in developing economies. Considering that lower cost is presumably always desirable, the question arises of why cost-saving innovations have not occurred sooner, or why has demand not been sufficient to trigger innovation. Three answers are (1) that the innovations do not truly reduce cost in certain markets, (2) demand for lower cost goods is not salient in markets where accumulation has not become desirable through marketing, or (3) there are obstacles to innovation.

Choosing to focus on Galbraithian-type innovations (those that do reduce cost), and assuming, at least for this paper, that demand for low cost goods does exist, we focus on obstacles. As noted above, governments may block innovation by protecting the existing food distribution structure. Also, it is apparent that atomistic competition in a highly fragmented marketplace, as typifies food distribution in traditional markets, frequently needs outside stimulation to trigger innovation. (Riley, et al, 1970, Collins and Holton, 1964). That is the vendors and small shops making up the retail community do not envision any possible gain from innovation.

There is further support for the view that outside stimulation is important. Considering that, since modernization occurs temporally later in developing countries than in advanced economies, it is reasonable to expect that at least some of the technological and institutional knowledge embedded in modernization is transferred from markets that had earlier modernized. Indeed, the distinction between knowledge creation and diffusion is not always clear, and technology assimilation in less developed countries can be viewed as comparable to technology creation in developed countries (Grossman and Helpman, 1991, p. 12).

Accordingly, we consider that food retail modernization can be characterized in significant part as a phenomenon of knowledge transfer. Goldman called the introduction of the supermarket into less developed countries one of the "most important examples of a systematic effort to transfer a successful marketing technology from one environment to another" (1981, p.5). Knowledge transfer may occur (1) *externally*, with training offered and/or financed by government, non-governmental organizations, trade associations or suppliers, or (2) *internally*, through foreign direct investors, licensors, or other alliance partners.

When the Chinese government initiated programs supporting the diffusion of supermarkets in the early 1980s, the retail technology was regarded as "an imported type of overseas advanced technology" (Lo, Yau, and Li, 1986). The authors note that these efforts, which favored development of Chinese retailers to the entry of foreign retailers, were slow in achieving success as a general shortage of goods for sale left little incentive for existing retailers to change, a phenomenon observed in multiple markets by Sternquist (1998, p. 92).

Transnational corporations are "a principal channel for the transfer of technology to enterprises in developing countries." (UN, 1987, p.v). Foreign direct investment, specifically, has been regarded as a primary means of service technology transfer (Shelp, Stephenson, Truitt, and Wasow, 1984). Truitt (1984) studied activities by the US retailer Sears in Latin America. The company employed four types of retail technology transfer: (1) formal, (2) on the job, (3) ongoing and (4) learning visits and exchanges (Truitt, 1984). Such transfer is not only from Sears headquarters to Sears stores. Inadvertent transfer to competing retailers results from spillover. Again, referring to Sears, Drucker argued that the presence of that retailer in seven Latin American countries, "forced other retailers to adopt modern methods of pricing, of inventory control, of training, of window display, etc" (Drucker, 1958, p. 259). In some cases the retailer may even be dependent on spillover to competitors. Truitt (1979) noted that Sears needed its Latin American suppliers to manufacture for multiple retailers in order to achieve sufficient economy of scale that Sears could sell the products (appliances, in Truitt's example) affordably.

There are different modes by which transfer of knowledge to local retailers may occur. Cavusgil and Yavas (1984) note the importance of formal training programs. Grosse (1996) says that in the service sector (hotels in particular), technology was also transferred from parents to affiliates through the transfer of experts from the parent company to the affiliates.

In the last ten years there has been a dramatic change in the institution of food retailing in many developing countries. This has been particularly true in the Southeast Asian countries that underwent rapid economic expansion in the ten years prior to 1997. Retail food sales in Thailand in 1999 were estimated at $14.8 billion US, of which only 50% was accounted for by traditional retailers (mom and pop stores and wet markets). (Gain Report, 2000a). With additional store openings since then, and the general inability of traditional retailers to be price competitive, modern format stores likely now account for over 50% of current food sales in Thailand. In the following section, we turn to Vietnam, where we can observe the very beginning stages of retail modernization, and thus better understand the dynamics by which it is occurring.

Retail Modernization in Vietnam

Country Background (taken primarily from CIA, 2001)

Vietnam has an estimated population of about 80 million, of which 32% are under the age of 15. It is 94% literate. It became independent from France in 1945 and was unified under communism in 1975. In 1986 the government launched a program of economic renovation called Doi Moi, relaxing some of the constraints of the communist command economy model. The country's economic opening is often regarded as having occurred somewhat later, in 1989-90. After that time, economic growth quickly accelerated, averaging about 9% per year from 1993 until the Asian economic crisis of 1997.

While the country's GDP per capita in terms of purchasing power parity was approximately $1,950 in 2000, some estimates are that there were over one million (urban) people in households with income over $500 per month by 2001, a number sufficient to motivate the development of retail formats offering greater convenience and reliability. Demand was increasing for quality packaged goods, which were difficult to obtain. The country had become a "dumping ground" for dated canned goods, unlabelled products of uneven quality, and counterfeit alcoholic beverages. (Hong Kong Trade Development Council, 2002).

Ho Chi Minh City (HCMC) in the south of Vietnam is the largest urban/commercial area in the country, followed by the capital, Hanoi, in the north, and Danang, in Central Vietnam. HCMC, named Saigon, before the country was unified under the existing communist regime in 1975, is the commercial center of the country, and it has led the early stages of food retail modernization in Vietnam.

The First Decade of Retail Modernization in Vietnam

The following approximation of an inventory of food retail establishments in Vietnam is based on a tour by the author of most modern Vietnamese food retail establishments in 1998, Vietnamese press accounts (Saigon Daily Times), other secondary sources, (Cohen, 2002; US Embassy, 1997), and recent personal and e-mail communication with Vietnamese food industry executives. Because of delayed store openings and closings of stores, as well as changes of store formats, and contradictions among information sources, any enumeration of retail facilities must be regarded as only an approximation.

As of May, 2002, there were an estimated 346 traditional markets in HCMC, with the government declaring a plan to reduce the number to 250 and to build more modern supermarkets. (Saigon Times Daily, May 7, 2002). The traditional markets are centers for many very small vendors to sell their products, including food and other consumer goods. Some of these are large two or three -story buildings housing hundreds of stall vendors, and some date back nearly 100 years when Vietnam was a French colony. Ben Thanh Market (HCMC) is the most prominent, carrying many fresh products and other consumer goods. Some markets are more specialized with Chanh Hung Market focused on sea products and Soai Kinh Lam Market on fabrics.

In addition to these fixed market facilities, other traditional food retailing occurs in temporary street markets (estimated at 2,000 in number) with another 6,000 very small mom and pop stores (Gain Report, 2000b). The vast majority of the traditional markets lack cold storage. Total goods sold annually (including food) in HCMC as of January, 2001 were estimated by the Vietnam News Agency at $907 million. (Saigon Daily Times, Feb 6, 2002).

Modern food retailing began only in the mid 1990s in the HCMC area, and, as of summer, 2002, there are approximately ten locally owned supermarkets, ten branches of a consumer cooperative, about 35 mini-marts, three branches of French hypermarts, and one German cash and carry wholesale store. These outlets carry fresh, processed, and frozen food items, and they often include a baked goods section as well as general merchandise. Initially, the modern stores catered primarily to expatriates and Viet Kieu (foreign nationals of Vietnamese origin), and food at these stores has fixed prices that are often viewed as about 10% higher than prices at traditional markets, but they also have frequent promotions which can eliminate or reverse the price differential.(Saigon Times Daily, Feb. 6, 2002). The stores generally have evening hours, and some are experimenting with 24 hours, and a few have recently announced plans to be open during the 2003 lunar new year (Tet) Holiday week, when most retail operations are closed.

The current proportion of Vietnamese food sales accounted for by modern formats is certainly less than 2.5%. As of the year 1999, estimates for 2000 were that modern formats would account for $23 million sales of total Vietnamese retail food sales of $5 billion, for a ratio of 0.5%. (GAIN, 2000b. p.4). From 1999 to 2002, store openings have included two new Cora hypermarts, five new Co-op Marts, 1 new Maxi-mart, and approximately 20 new supermarkets and hypermarts. This represents more than a doubling of modern retail sales area with current modern format sales likely exceeding $50 million or 1% of total retail food sales. If already announced new store openings occur (particularly Cora, which may expand from 3 hypermarts to five), modern format sales could easily account of 2% of total retail food sales by 2004.

Current Modern Retailers:

Saigon Co-op Mart: This chain of ten supermarkets, owned and operated by the Saigon Union of Trading Cooperatives, accounts for an estimated 50% of modern food retailing in HCMC. (Issaksson, 2001). There are approximately 21 member cooperatives comprising the union, and some of them engage separately in various business ventures, including import and export. In the early 1990s, Saigon Co-op was essentially an obsolete operation operated as an arm of the state. (Issaksson, 2001). As it found new life in the mid 1990s, the Co-op began modernizing and opening new stores, which range in size from about 1,100 square meters to 4,600 square meters for the newest supermarket under construction in early 2002 in the south of HCMC. The number of different items (stock-keeping units, or SKUs) in an average store is reported to be about 20,000, with at least a quarter of the retail space allocated to non-food items (e.g., clothing and appliances).

Maximark Supermarkets: This privately-owned chain of four supermarkets was developed in the mid-1990s. Its most recent store (2002 opening at Cong Hoa) is a 19,000 square meter building. The 8,000 square meter ground floor consists of a lobby, fast food restaurants, electronics and appliance departments and a 3,000 square meter supermarket. The basement (3,000 square meters) contains a children's amusement center and games arcade, warehouse and office space. The first (top) floor is an 8,000 square meter department store. The supermarket carries about 15,000 SKUs. Its other stores are generally smaller and include kiosk vendors for eye care, books, and other products, as well as electronics sales and arcade games.

Cora Hypermart: The French company Bourbon Group is the operator and minority owner of three Cora hypermart in and near HCMC. The first, Cora Dong Nai (at Bien Hoa) opened in 1998 about 20 kilometers northeast of central HCMC in a growing industrial area. It opened with 6,000 square meters of floor space and 37 cashier lines. The Bourbon Group had sugar and other industrial business interests in Vietnam as well as hypermarts in other countries prior to opening the HCMC hypermart. Cora opened its second outlet (Cora An Lac, with an estimated 30,000 SKUs) on the other side of HCMC in March, 2000. A third joint venture retail facility, Cora Mieng Dong, opened in HCMC mid 2001 with 25,000 skus in a retail space of about 2,500 square meters.

Other Supermarkets: The first modern retail/entertainment complex was the **Superbowl Vietnam**, opened in 1996 near the HCMC airport. In 2001, this company announced plans to build a second bowling center at the Cora Dong Nai shopping center in Bien Hoa City. **Mieng Dong** is a large privately owned supermarket also near the airport. While built in the mid 1990s (by an owner related to the owner of Maximark), it underwent an expansion from 4,500 square meters to 8,000 square meters in late 2000. Mieng Dong Investment company reportedly also had an interest in the development of Cora Mieng Dong. A small number of other of supermarkets have opened (and sometimes closed) over the past five years. They include: **Megamart, Gia Dinh, Van Chack Den** (all closed shortly after opening in 1997), **Pacific, Tu Do, and Cau Kinh, Vinmart, and Donamart, and Gogomart**. The Vietnam Meats Products Processing Co (**Vissan**) has been opening several stores a year, and as of October, 2001, had nine stores, primarily carrying its own canned merchandise along with cakes and oil. The stores are about 100 square meters and carry about 150 skus.

VND 10,000 stores: These small stores, mostly carrying sundries, are derive their name from "Vietnam Dong 10,000" because no item costs more than 10,000 Vietnamese dong (Ten thousand VND exchanges for about $0.70 US). It appears that dozens of these stores opened (and some closed) in the 1990s offering the image of new modern markets but with low prices and a focus on non-food items. The merchandise is primarily of Vietnamese origin and of low quality.

Mini-Marts: These convenience stores, at first catering to an expatriate community, were among the first modern format markets (noted for air conditioned space, fixed and marked prices, and self-service). The owner of an early and leading one, Citimart, with six branches, is related to the owners, respectively of Maximark and Mieng Dong. As larger supermarkets developed, they were often (and sometimes still are) called mini-marts, drawing from the style rather than the size of the format. There were an estimated 40 of these stores in 2000. The merchandise in these stores is weighted more toward convenience items, and about 30% of the clientele is expatriate. The size is typically under 300 square meters.

Metro Cash & Carry: This wholesale facility opened in 2002 on the outskirts of HCMC as the first Vietnamese operation of Metro AG, a German company operating over 300 cash & carry wholesale outlets. The year before entry, Metro had procured about $75 million of merchandise from Vietnam for its existing (non-Vietnamese) stores. With hopes of introducing more products to Metro's global market, the Vietnamese government welcomed Metro with tax breaks and expedited customs clearance of store equipment. (Anonymous, 2001a). Metro plans two open two more stores in 2002 and 5 more stores in the following year(s). The store, carrying about 14,000 (mostly food) items, is on a 9,000 square meter site. Entry to the store is for members only, with membership requiring a business registration number. Unlike supermarkets which include entertainment areas to attract entire families, Metro does not permit children in the store. Metro's customer base is hotels, restaurants, and retailers, including stall vendors in traditional markets. Its prices are about 10% lower than traditional suppliers and accordingly lower than prices in supermarkets or traditional markets. Metro employs about 300 and claims to have about 600 regular suppliers, with about 75,000 members having signed up before its opening.

Outside of HCMC: Hanoi is the second major center of retail development, with 10-20 super and mini-marts already in place. Fivi Mart and Hanoi Supermarket are among the larger supermarkets. At least one mini-mart was established by the owner of HCMC's Citimart. Cora has plans to open multiple outlets in the near future, and a Japanese retailer Seiyu (in which Wal-Mart recently purchased a potentially controlling interest) opened a demonstration market in 2000. With 800 meters of selling space and about 4,000 SKUs, Seiyu had estimated annual sales of $2.5 million in 2001. Uniquely, it has a sophisticated web-based system for home shopping.

Dong Thap Food and Agricultural Material Import and Export Company announced the opening of a 5,500 meter supermarket, carrying 25,000 SKUs in the Mekong Delta provincial area.

Danang Service of Trade Company announced construction of its 7,000 meter supermarket in Danang in the summer of 2000. In January, 2002, the Fai Tho Danang Company announced the re-opening of this center after it had earlier suffered poor organization and failed.

Source of Retail Innovation in Vietnam

The modernization of food retailing in Vietnam began less than ten years ago, and now we are witnessing a rapid expansion of the modern retail sector. The new format stores represent dramatic innovations in promotion, shelving, human resources, security, safety, assortment, shelving, and pricing, and these innovations occurred only after regulatory control of food retailing was relaxed in the 1990s. Also, key to the establishment of new or expanded retail outlets was regulatory policy that made it possible to secure land use rights and other permissions to establish new or expanded retail outlets.

Because the innovations had already become established in more economically advanced markets, their occurrence in Vietnam can be viewed as a case of knowledge transfer. When HCMC opened up to foreign investment in 1984 a flow of expatriates came into the country, and industrial expansion resulted in a small but growing middle class. Both the expatriates and those middle class Vietnamese began to demand a wider range of goods than traditionally available, higher and consistent quality of merchandise, and greater shopping and convenience. The pace of this trend accelerated in 1995 when the US normalized trade relations in Vietnam.

The high frequency of smuggling, adulteration, and counterfeiting of branded goods in Vietnam, contributed to consumer support of a modern retail system that would be more likely to legitimate, quality goods. When Vietnamese emigrants returned as visitors to Vietnam, and Vietnamese citizens had opportunity for foreign travel, knowledge of retailing innovations filtered into the country. For example, members of the family that began Maximark traveled to the Philippines (where one family member attended school) and to the US, observing modern retail formats informally.

Knowledge Transfer from Suppliers: Suppliers played a key role in promoting modern retailing formats. Suppliers from the US (e.g., the California Table Grape Commission) saw potential in Vietnam's large, untapped, and expanding market, and thus sponsored training programs for product use by restaurants and hotels, and even small traditional vendors. Branded goods manufacturers (e.g., Coca Cola and Colgate) placed ads at even very small markets and began to teach distribution and promotion of their products, sponsoring prize drawings in conjunction with the new supermarkets. Many of the stores sell on consignment. That is, a manufacturer such as Colgate may be allocated a specified shelf space that a Colgate representative maintains and restocks. Employees of the retailer observe these manufacturer inventory and display practices.

Knowledge Transfer from Governmental and Non-Governmental Organizations and Associations: Institutional training has taken several forms. From 1997 through 2001, approximately 40 Vietnamese food industry managers participated in a supermarket management training program sponsored by the US Department of Agriculture (USDA Cochran Program) and conducted in Ithaca, New York by Cornell

University. Faculty affiliated with Cornell's Food Industry Management Program (including the author of this paper) taught classes on such topics as food safety, merchandising, human resource management, promotion, procurement, and customer loyalty. The motivation of this USDA funded program was (and remains) primarily to enhance retail conditions in middle income countries in order to increase the demand for, and sale of, US food products in those countries. Participants are selected by US consular officials, and each is expected to pay a portion of his or her expense.

Cochran participants from Vietnam consisted mostly of retailers, but also included a few food brokers. Maximark and Saigon Co-op were among those most represented. In addition to classroom training, the participants received tours of US food processing, distribution, and retail operations, and they attended an annual trade show in Chicago (at which tens of thousands participants observe the latest in food products and retail technologies). The USDA evaluated the program in 2001 by interviewing former participants and visiting their stores (Porter, 2001). The retail improvements most attributed to this training program included:

1. Improved store layout and product display (e.g., placing high profit items at eye level), display of price information

2. Development of fresh produce sections with attention to: location in store, removal of unappealing produce, color coordination, and assortment maintenance..

3. Development of "prepared food corners" offering ready to eat dishes, prepared on-site.

3. Promotion, including: TV and print advertising, discounting, raffles, and improved sign placement.

4. Reduced loss through better inventory records and security.

5. Loyalty programs to reward frequent and high volume customers.

6. Improved customer service by systematically obtaining customer feedback and store layout.

The Swedish Union of Consumer Co-operatives is a non-governmental organization that has also provided training to Saigon Co-op in HCMC since 1998. Training has included such topics as display design, administration, and customer relations. In addition, the Independent Grocers Association (based in Chicago) administers the IGA University (IGAU), a training program that is a joint venture with Coca Cola and more recently with Philip Morris. IGA is a network of over 3000 retailers who, by licensing agreement, share the IGA banner on their stores, procure product through IGA wholesalers, and receive training. While IGA does not currently have licensees in Vietnam, it has targeted Vietnam as a "development zone" and has trained at least one Vietnamese retailer at its facility in Singapore. The Australian Center for Retail Studies (affiliated with Monash University) was established in 1990 and targets Southeast Asia in its service area, though there is no indication that it has yet trained retailers in Vietnam.

The Food Marketing Institute (FMI - based in Washington DC) sponsors seminars and other training programs. Its first "Asia Mart Trade Forum," held in Hong Kong in

1995, attracted 500 retailers from the region. At that time, most attention given to food system modernization was directed toward South Korea, Taiwan, the Philippines, Thailand and Indonesia and Malaysia. The FMI did hold a seminar on retail food in HCMC in May, 2000. For a $10 fee, retailers could attend seminars on food safety, client loyalty, and consumer confidence.

Knowledge Transfer through Foreign Direct Investment (FDI): Vietnam opened its economy in 1986, and its first incoming FDI reportedly occurred in 1988. In 1996, the government affirmed its desire for more incoming FDI, and the Ministry of Trade recommended that the government allow (for the first time) foreign joint ventures for supermarkets. The stated benefit of the joint ventures was developing management expertise, upgrading trade practices, and reducing the extent of counterfeit and inferior quality in production (US Embassy, 1996). The Singapore Company SUTL, participated in the development of the first modern shopping center in Vietnam, Saigon Superbowl. This 5,000 meter building near the airport contains two bars, multiple small shops, a 32 lane bowling alley, video arcade and a supermarket. The company's initial business was tobacco trading, and it had entered Vietnam as a specialist in duty free (including tobacco) distribution in 1992. The company later became a joint venture owner of two Kentucky Fried Chicken outlets in 1997, and it announced the opening of two more bowling centers in 2001. A leading HCMC retailer (owner of Mieng Dong supermarket and a relative of the owners, respectively of Maximark and Citimart) also had early experience as a joint venture partner with a multinational duty free store operator.

The next major investor in Vietnamese retail, the Bourbon Group of France, opened the first Vietnamese branch of its chain of hypermarts under the name Cora in 1998. Like SUTL, Bourbon Group had had previous business interests in Vietnam – including sugar refining. Cora was launched with a management team sent from the parent company's French headquarters. Two more Cora hypermarts have since opened. Essentially every new technology or procedure employed is a matter of technology transfer, including the design of the facility, procurement, merchandising, and human resource practices. Other retailers could visit the facility and observe many technologies. Indeed, with the prospect of Cora expanding, it would become increasingly necessary for other retailers to compete with the store in assortment, pricing, and customer service.

Seiyu, which opened in 2000 as a joint venture including the Japanese retailer Seiyu and Mitsubishi, brought in a Japanese manager, Ken Arakawa. The store targets expatriates and affluent Vietnamese, and it emphasizes customer service, with policies of greeting customers with a smile and helping them take bags to their cars. Arakawa notes that other retailers are copying the service and display standards of Seiyu, but he does not expect them to be able to effectively prepare dishes such as sushi. (Anonymous, 2001b).

While cash & carry stores are sometimes used as retail outlets by several families jointly buying a case or product, in the case of the Vietnamese Metro operations (German joint venture, opening 2002), the business appears to be truly operating at the wholesale level. Nevertheless, the outlet introduced new refrigeration display cases to Vietnam, and shortly after opening, the Coop-mart announced intention to locate and install similarly modern equipment.

Potential Impact of Retail Innovation on Other Sectors of Economy

In Vietnam as well as in all other markets that have undergone retail modernization, innovations at the retail stage of the food supply chain trigger innovations upstream in the supply chain, reaching manufacturers and food producers. We have seen above, the example of upstream spillover of innovation in the case of Sears in Latin

America. Vietnam has only just begun to undergo retail innovation and to thereby realize the impact of retailer FDI. The Vietnamese government, however, has already embraced foreign direct investment in retailing, and even in the related area of advertising, and it has specifically called for increasing the number and size of supermarkets and for eliminating some of the traditional markets (from 346 to 250). This is expected to result in lower prices for most food, enabling more income to be spent on value-added foods or other manufactured products, with the effect of boosting employment. To the extent that consumers do not decrease individual spending on food, but they shift to more value-added food products, we again see implications for employment. To illustrate where cost savings may be found, Metro claims advantages over its more traditional Vietnemase competitors to include an "extended customer base, as well as know-how in packaging, labeling, product specifications, and logistics infrastructure" (Saigon Times Daily, April, 2002). The net effect is superior marketing and reduced loss (especially due to spoilage).

Modern branded retail outlets with fixed locations and substantial investments need large quantities of safe food at the lowest possible prices. This requires standard procedures of employment (regular hours, productive employment, courtesy) which is training that can be productively taken by the trainee to other industries. It also requires changes in the upstream supply chain. These changes have the potential of greatly increasing the quality and value of the countries agricultural products, facilitating access to international markets.

Metro launched an effort with the German Non-governmental organization, Deutsche Entwicklungs Gesellschaft, to invest 400,000 Euros to provide local suppliers with skills and techniques in agricultural and fisheries farming. One of its stated objectives was to build nine modern hygienic slaughterhouses. The company has announced programs of assistance and consulting to 4,000 farmers, suppliers, and producers in such areas as upgrading the quality, marketability, and competitiveness of their products" (Saigon Times Daily, April, 2002). This training program is intended to support the existing as well as seven future Metro stores in Vietnam.

While Vietnam's retail sector is at the very earliest stages of changing its supply structure, a nearby example with more experience is Thailand. Thailand's modernization has been earlier and far more complete than Vietnam's to date. An illustration of potential upstream impact, is an initiative launched by one of Thailand's major food retailers, TOPS, which is owned by Royal Ahold, based in the Netherlands. TOPS initiated a major extension project to enhance the efficiency and safety of its produce supply chain. The project, in which other participants include the Thai government, both a Dutch and a Thai university, sponsors agri-supply chain training for any interested party in Thailand. Related to this effort, TOPS built a new fresh products distribution center and established certification standards for its produce suppliers (Anonymous, 2001c).

Discussion and Conclusion

From the 1950s to the year 2002, we have seen governments of developing economies embrace the introduction of modern retail technologies, albeit, sometimes at conflict with efforts to protect the interests of existing traditional retailers. Retail modernization entails technological and institutional innovation, both of which draw heavily on knowledge transfer. While this transfer process may involve local or foreign governments, trade associations, or non-governmental organizations, it appears to particularly occur within the private sector, where it is initiated and financed by foreign direct investors.

The benefits of modern retailing may accrue to both consumers and to producers. The attractions to consumers are several, including standards for customer service, quality assurance, store ambiance and hours, as well as the convenience of self service. It appears that self-serve may be appreciated by customers at all income levels as an opportunity to hold and inspect the merchandise. When retail modernization achieves cost savings through economies of scale and improved logistics management, the resulting lower costs are embraced by lower income customers.

The impact of retail modernization on a country's broader economy is that quality standards are imposed on upstream producers, processors, and distributors. Business management practices (e.g. human resource and accounting practices) introduced at a given retail operation may spill over to other retailers and to other parts of the service sector, as well as to the supply sector. Enhanced quality and efficiency by producers facilitates the marketing of product internationally.

Vietnam is far behind its neighbors such as Thailand in the modernization of its retail sector, but it would seem likely that it will proceed in the same direction, subject, of course to regulatory policies. Innovations in the retail sector have profound effects on the economy in freeing up disposable income for manufactured goods, raising consumer expectations, and forcing upstream innovations, and facilitating regulation and tax collection by the government. While this paper has highlighted food system efficiencies, it is likely that retail modernization will also have negative consequences for some traditional retailers, producers, and distributors. As modernization serves to concentrate a fragmented food system, it is also conceivable that eventually a concentrated food sector could result in higher food costs and less choice In addition, the modernization could affect consumers' diets either positively or negatively. In any event, it appears that consumer demand is the primary driver of the current modernization trend underway in Vietnam, and, as it continues, it will have major consequences for the country's economy.

Regardless of its long term direct and indirect effects, we have seen in the example of Vietnam, that retail modernization may occur with minimal government or NGO support, and its consequences may be very great, triggering innovations through much of the food supply chain. This suggests that further attention be directed to technology transfer at the consumption end of the food supply chain, and to the consequences of that transfer.

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