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# Food Retail-Price Comparison In Thailand

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Rapid growth of the Thai economy in the 1990s led to dramatic changes in food retailing. The traditional food-distribution system—hundreds of thousands of fresh markets that sell fruits, vegetables, meat, and fish, along with small mom-and-pop food stores that distribute dry goods—is giving way to modern supermarkets, hypermarkets, and convenience stores, all being developed at an incredible pace. This paper examines the changing Thai food-retailing sector and reports the findings of a consumermarket-basket price comparison by type of retail outlet in various regions of the country.

# Thailand's Food-Retailing Sector

The retail food market in Thailand can be divided into four major sub-sectors: supermarkets, hypermarkets, convenience store chains, and traditional or fresh markets.

Despite the rapid growth of non-traditional retail formats during the 1996–2000 period, as Table 1 shows (this growth occurred during a time of economic downturn and upheaval), traditional markets still accounted for over 80% of food retail trade in 2000. For this reason, retail chains are optimistic about the prospects for future growth by attracting more people into store formats other than the traditional markets. It is estimated that hypermarkets and convenience store numbers will grow by 400 percent during the 2000-2010 period, while supermarkets will increase by 200 percent (Jitpleecheep 2000).

# **Supermarkets**

In Thailand, supermarkets for the most part have developed in department stores (multi-level shopping

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centers), the primary retail-distribution channel for the growing middle class. There are approximately 100 supermarkets in department stores, and with various department-store groups, ownership is divided. However, the Dutch retailing giant Ahold is a major player, operating over 40 supermarkets in shopping centers under the TOPS name.

Along with TOPS, the other supermarket chain of significant size is Food Lion. While the standalone supermarket independent from department stores has been slow in developing, Belgium-based Delhaize, which owns the Food Lion brand, has been aggressively expanding with stand-alone units that are generally 1,000 to 2,000 square meters and offer 6,000 to 10,000 product items. Delhaize currently operates 36 stores in Thailand (Rungfaraisarn 2004).

## Hypermarkets

In the mid-to-late 1990s, the development of the superstore or hypermarket changed the industry. A hypermarket is typically 15-20,000 square meters and provides all the basic needs of the consumer under one roof and at very competitive prices. Unlike most supermarkets, which tend to target the middle and upper-middle classes, the hypermarket is aimed at the masses. Until the economic downturn in the late 1990s, hypermarkets were owned either locally or through joint ventures with foreign retailers. During this time ownership changed significantly, resulting in new competitors—all foreign-owned and with massive financial resources at their disposal.

Today the Thai hypermarket sector is dominated by Tesco/Lotus (British), which operates 48 units and in recent years has accounted for more than 5 percent of foreign direct investment in Thailand (*Market Asia Pacific* 2003). Other major players are Big C (French) with 37 stores, Carrefour (French) with 22 stores, and Makro (German, Interspar AG) with 22 stores.

Competition from the hypermarkets is resulting in a shrinking independent retailer sector—it is estimated that independent shops are shrinking by 20% a year in total floor space while "modern

Table 1. Retail Food Sales by Major Segment, 1996-2000.

	Baht, billions (1996)	Share (%)	Baht, billions (2000)	Share (%)
Supermarkets	8.4	1.3	13.1	2.2
Hypermarkets	43.1	6.5	69.4	11.3
Convenience Stores	18.5	2.7	30.2	4.9
Traditional Markets	603.5	89.5	501.3	81.6
Total	673.5		614.0	

Source: Euromonitor.

trade space" is growing by 10% (Mertens 2001). In 2002, lobbying by local shopkeepers led to proposals to limit the operating practices of foreign hypermarkets, including operating hours and pricing. The Thai government later backed down from implementing the proposals (Crispin 2002).

#### **Convenience Stores**

While convenience stores are relatively new to Thailand—the first chain, 7-11, began operations in 1989—they have found a solid niche in Thailand's food-retailing scene, with more than 6000 stores. The clear market leader in the convenience store sector is 7-11; with 2300 stores already, it is expanding at a rapid rate, adding more than 300 stores a year. It is forecast that the convenience-store business in Thailand could see total outlets reach 20,000 (Jitpleecheep 2003). Thai-based Charoen Pokphand Group (CP), one of Southeast Asia's largest agribusiness firms, owns the 7-11 operation. CP combines poultry, pork, and aquaculture operations with other food-processing and food-service ventures.

#### **Fresh Markets**

There are an estimated 270,000 small "mom-and-pop" stores in Thailand selling rice and dry grocery products and some 564,000 "wet market" vendors selling mainly fruits and vegetables, meat, and fish. As the Thai economy continues to develop, there will be a significant shift in consumer buying habits from the traditional markets to the new supermarkets and hypermarkets (USDA-FAS 2002).

# Methodology

#### Thai Food Basket

The goal of this research is to conduct a comparative price analysis of food-retailing alternatives in Thailand. Items that Thais would buy at least once a month—primarily food items but also regularly consumed non-food items—were chosen for a 29-item market basket. Data was collected from three main Thai regions: Chiang Mai in the north; Nong Khai in the Issan (northeastern) region; and Bangkok, the country's capital and a sprawling metropolis of more than 9 million people. Prices were collected from three types of markets: traditional or fresh markets, supermarkets (TOPS), and hypermarkets (Tesco/Lotus and Big C). Prices were collected from April 1 through May 30, 2004. The items that were included in the market basket are:

Fruit: pineapple, yellow mango, watermelon. Vegetables: Chinese long beans, green onion, cauliflower, red onion, garlic.

Rice: glutinous, jasmine.

Other: soy milk, fish sauce, chili paste, white sugar, ketchup, white bread, condensed milk, peanuts, candy, carbonated sodas, vegetable (palm) oil.

Meat: eggs, pork sausage, river fish.

Non-food items: toothpaste, toothbrush, shampoo, toilet paper, bar soap, laundry detergent.

# Recording Prices

At each store, the price of an item was noted (brand, price, and weight). Difficulties in recording accu-

rate prices and product descriptions included the language barrier and inconsistent packaging and weights. It should also be recognized that the price data was collected over an approximately 6-week span starting in Chiang Mai and ending in Bangkok, during which time seasonal variations may have occurred. Another difficulty was obtaining a regular price in hypermarkets and supermarkets, where many of the items in the market basket were on sale. Since special sale prices only exist for a few days, they were not calculated in the market basket; rather list (shelf) prices were used.

# Quantity/Price Relationship

Thai people in general purchase fewer items than do Americans on each trip to the grocery store or fresh market, but they make more trips each week. Typically they will not buy food in great bulk, but rather in small or individual helpings. River fish, for example, are most commonly purchased two or three at a time. Buying the fish in these smaller portions makes the per-unit price higher than if the fish were bought in a larger amounts.

The fresh markets presented more food items in small portions than did the supermarkets and hypermarkets. It was sometimes impossible to find a one-kilo bag of jasmine rice in the chain stores, requiring using a five-kilo bag and then dividing the price by five to develop a proxy price for one kilo. As a result, the hypermarket and supermarket prices can become skewed low relative to fresh-market prices. If the quantity offered by the hypermarket was too large to be considered as a viable alternative to fresh-market purchases, an average of low- and mid-range prices for large-quantity items found in the hypermarkets was used.

# **Analysis**

## Inter-Region Price Relationships

The average price for the market basket for all regions and all markets was 605 Baht (Table 2). Interestingly, the regional variation from this average is 7 Baht or about one percent—rather inconsequential given the fact that both Chiang Mai and Nong Khai are a substantial distance (450-600 miles) from Bangkok, the processing and distribution hub for the country. It also could have been hypothesized that prices might be higher in Nong Khai, where the only competitor to the traditional markets was one Tesco/Lotus store; this was proven not to be the case.

Tesco/Lotus, found in many of the large cities (provincial capitals) throughout Thailand, served as an indicator of price differences between the regions. Hypermarkets in general provide unbiased "one-price-for-all" data because Thais and foreigners are charged the same for each item. Hypermarkets also have a reliable, regularly restocked inventory of the same products week after week.

Using Tesco/Lotus as a benchmark for comparing prices between regions, prices among the three regions are very similar with the exception of fresh produce. Condensed milk, toothpaste, candy, and soft drinks all share similar, if not identical, prices across the regions. Prices for produce and other fresh food at Tesco/Lotus proved to be region-sensitive. One would pay 40-percent more for mangos in Nong Khai than in Chiang Mai or Bangkok. Likewise, a pineapple purchased at Tesco/Lotus in Bangkok costs 44-percent more than one purchased at the chain's Chiang Mai store. The discrepancies in produce and fresh-food prices among the regions are the result of a number of factors. Seasonality and transportation costs have varying degrees of influence on these items' prices. Pinpointing the cause of a higher or lower price for any one item would be mere speculation.

Despite regional variations in prices for produce and other fresh food, the total cost of the market basket at Tesco/Lotus does not vary significantly from region to region, as Table 2 shows. The Tesco/ Lotus market-basket price cost 570, 611, and 596 Baht (40 Baht = US\$1) for Chiang Mai, Nong Khai, and Bangkok respectively. The maximum 41 Baht difference is about 7 percent on the 29-item, 605-Baht average market-basketcost. As expected, the hypermarket (Tesco/Lotus) was priced substantially below supermarket (TOPS) prices (13 percent). This is in line with other published estimates that Thai hypermarkets generally offer products at prices 15–20 percent lower than supermarkets (Canadian Embassy 2000).

It is interesting that the lowest price alternative in all market areas is the traditional markets. However, this comes with costs, such as lack of hygiene standards and reduced shopper comfort, that are not quantifiable. It could be argued that the product offering of traditional markets is not comparable in many cases to that of the hyper or supermarkets.

	Chiang Mai	Nong Khai	Bangkok	Average by retailer
Traditional	555	595	563	571
Tesco/Lotus	570	611	596	592
TOPS	700	*	641	671
Big C	624	*	**	624
Average by market area	612	603	600	605

Table 2. Market-Basket Cost by Retailer and Location, April-May 2004.

## Intra-Region Price Relationships

In all three geographical areas, the fresh market offered the lowest price for the market basket, Tesco/Lotus was only slightly higher, and TOPS ranked most expensive. In Chiang Mai, the market-basket price observed at TOPS is more than 130 Baht higher than what one would pay for the same items at Tesco/Lotus. In the Bangkok market area the TOPS price is 641 Baht, 7.5 percent higher than the Tesco/Lotus market-basket price at 596 Baht. The same market basket fetches 563 Baht at a Bangkok fresh market.

In Chiang Mai, TOPS ranked most expensive, costing 130 Baht more to purchase the market basket than at the fresh market. It should be noted that the TOPS market is located in an upscale department-store complex and that its hypermarket competitors are located several kilometers away along Chiang Mai's "Ring Road." In Nong Khai, there was practically no difference in total market-basket price between the fresh market and Tesco/Lotus, the only supermarket/hypermarket in the region. However, the fresh-market price might have proven less expensive if the "Thai price" could have been negotiated. Chiang Mai was the only region where a Big C was visited. The Big C proved to be more costly than Tesco/Lotus but less expensive than TOPS.

In reality, it is doubtful that Thai consumers would purchase their entire market basket at one location. It is most logical to purchase some things at a fresh market and others at a hypermarket, taking advantage of what a fresh market can offer while avoiding its higher prices for manufactured food items.

#### Conclusion

One of the more interesting findings of the study is how similar a large chain's (Tesco/Lotus) prices are at each location regardless of distance from Bangkok, the country's manufacturing/shipping center, or of lack of local hypermarket competitors. Also not expected is the fact that the market basket can be purchased less expensively in the traditional markets. However, the non-monetary costs of buying at the traditional markets include added consumer search time to visit multiple markets and a lack of hygiene and food-safety standards. For example, TOPS' marketing messages stress their commitment to HACCP and other food-safety efforts.

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<sup>\*</sup> No stores in Nong Khai.

<sup>\*\*</sup>Data not collected.

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