

Agribiz

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Supermarketisation in Asia

- The long-term drivers of increasing food demand in Asia, and other emerging markets, remain firmly in place.
- Supply chains have evolved with rapid supermarketisation across many emerging markets.
- Modernised supermarket procurement processes in emerging markets bring opportunities and challenges to New Zealand's producers and exporters.

Demand for food to rise

The medium term prospects for economic growth in Asia remain bright. Increased demand for food is expected to follow from strong economic performance. In particular, the key drivers of future food demand in Asia are expected to be:

- Population growth: the basis for all food demand. Rapid population growth within Asia is expected over coming decades, with a corresponding increase in the demand for food.
- Income growth: Asian incomes are expected to rise briskly over coming decades, starting now. For example,

China is expected to post 9% or higher income growth over the next two years, while East Asian incomes (excluding China) are forecast to grow by close to 5%. Higher incomes will drive more food demand and in particular greater demand for higher quality product.

- Urbanisation: UN projections show between China and India alone, some 500 million people are expected to urbanise over the next 20 years. This, and the associated higher incomes, will increase food demand.
- Westernisation of diets: Diets in Asia are expected to continue changing as influence from the West grows. These changes are anticipated over and above the income and urbanisation effects above.

The strong economic outlook for Asia is part of a wider view that emerging markets are likely to grow faster than the developed nations. Growth in food demand is also expected to be concentrated in the emerging markets, as the developed world markets mature. Of course, there are still growth opportunities in the developed markets

especially regarding niche and quality products. But the fundamental forces above are highly likely to provide for faster outright growth in food demand in the emerging markets.

Countries in Asia are particularly important for New Zealand given their proximity and our bilateral trade deals, but similar trends are likely in other emerging markets like Brazil, Argentina, South Africa, Russia and Eastern Europe.

The demand side for food (and other primary products) look to have the ingredients for strong growth over the decades to come. This is good news for New Zealand and New Zealand primary producers in particular. But how do we tap this potential?

Reardon (2005a) notes that emerging markets tend to be 'traditional, fragmented - difficult - markets'. However, this is changing rapidly. Across all the hoopla of the demand side and all its drivers, Reardon suggests a revolution has been taking place on the supply side - the supermarketisation of Asia. Actually it extends across many emerging markets, not just in Asia. More broadly,

the rapid expansion of supermarkets in Asia (and elsewhere) has been part of a major shake up of supply chains for food and other products globally over the past couple of decades.

Here we take a look at the rapid rise of supermarkets in developing economies with a focus on Asia and consider some implications of this development. We draw heavily on work done by Thomas Reardon¹ and associates over recent years.

A brief history of supermarkets

Supermarkets² are less than one hundred years old. Prior to the supermarket era, the world had grocers, butchers and greengrocers as individual stores only. These were counter service stores. The self-serving concept is widely attributed to Clarence Saunders' Piggly Wiggly stores in the US that began in 1916. But size came later. Self-serving became more common in the 1920s as did chain stores, although individual stores were still small. According to the Smithsonian Institution, and others, the first true supermarket in the US was opened in 1930.

By 1940, supermarkets' share of food retailing had hit 20% in the US, a figure that France reached 20 years later. Supermarkets spread throughout the US and Canada after World War II. Japan's first supermarket opened in the mid-1950s. Tesco opened England's first supermarket in 1956, although the company was founded well before that (in 1919). The first supermarket in New Zealand was the Foodtown 'all-convenience' store that opened in Otahuhu, Auckland in June 1958.

¹ Thomas Reardon is a professor at the Department of Agricultural Economics, Michigan State University.

² Like in much of Reardon's work, we use the term 'supermarket' to mean all modern retail, which includes chain stores of various formats such as supermarkets, hypermarkets, and convenience and neighbourhood stores.

From the early days of supermarkets in the developed world, supermarkets' share of food retailing has been steadily increasing. In the US, from 20% in 1940, supermarkets' share of food retail hit 80% in the mid-2000s. More generally across the developed world, supermarkets account for around 60% to 80% of food retailing. New Zealand appears to sit within this range at about 65%, although the official retail sales and spending data does not allow for a precise estimate.

Supermarketisation in Asia (and other developing economies)

Supermarkets are relatively new in developing economies. The past two decades have been a 'take-off' period with extremely fast growth, although the expansion has not been uniform across markets. Reardon (2008) describes three waves of supermarket diffusion across various emerging markets, summarised in Table 1.

The spread of supermarkets throughout East Asia (excluding China) began in the early 1990s. The second wave through much of Southeast Asia occurred from the mid-to-late 1990s, followed by China, India and Vietnam in the third wave from the late 1990s and early 2000s. A stunning feature of the first two waves is the speed of supermarket penetration - with around half the market captured from previously modest shares within a decade or so. The third wave is following the same trend. Euromonitor International data shows that companies from Asia-Pacific and Latin America appear prominently in the top 10 list of fastest growing grocery retailers. Clearly, supermarkets in many emerging markets have now gone well beyond the initial upper- and middle-class clientele and are now reaching out to the mass market. A fourth wave is just barely emerging in the poorest areas, such as Bangladesh, Cambodia, and West Africa, and it may take another decade or two before supermarket penetration is appreciable in these areas.

Table 1: Three waves of supermarket diffusion

Period	Countries/regions	Growth in supermarkets' average share in retail sales
First wave started in early 1990s	Much of South America, East Asia (outside China), and South Africa	From about 10 percent around 1990 to about 50-60 percent by the mid-2000s
Second wave started in mid- to late 1990s	Mexico, Central America, and much of Southeast Asia	From 5-10 percent in 1990 to 30-50 percent by the mid-2000s
Third wave started in late 1990s and early 2000s	China, India, and Vietnam	Reached about 2-20 percent by mid-2000s; supermarket sales growing at 30-50 percent a year

Source: The supermarket revolution in developing countries, Thomas Reardon and Ashok Gulati, June 2008

Why have supermarkets spread so quickly in Asia?

The spread of supermarkets in Asia has been supported by population growth, rising incomes and urbanisation - the usual demand side factors. Reardon (2007) notes that 'at the same time additional demand-side factors, such as the diffusion of refrigerators and cheap motorized vehicles (often on the heels of import liberalisation and domestic manufactures growth) and better road and bus infrastructure, have increased access of wider circles of consumers to supermarkets.'

Reardon (2005b) suggests that these demand-side factors are necessary, but not sufficient, to explain the very rapid spread of supermarkets in the 1990s and 2000s in these countries, most of which had at least a very small supermarket sector before 1990. That is, supply-side factors were also of extreme importance. Two crucial supply-side factors behind the big 'takeoff' in the mid-1990s were:

- Liberalisation of retail foreign direct investment (FDI) followed by a huge inflow of funds.
- Procurement system technology improvement that drove down retail costs.

In addition, in the past decade, the regulatory balance appears to have promoted the spread of supermarkets in developing countries. Domestic policies within the emerging markets have also often included tax incentives for supermarkets and hygiene and location regulations for wet-markets.

Altogether, these factors have catapulted supermarkets in Asia ahead far quicker than elsewhere. For example USDA (2005) notes that Latin American countries registered very fast supermarket diffusion, recording in one decade the level of growth that took the United States five decades to experience. The supermarket sector in Asia is growing even faster, although its take off period lagged that of Latin America by 5-7 years.

The speed of supermarketisation in Asia (and in other emerging markets) has defied earlier expectations that there was not going to be a fundamental and widespread retail transformation in developing economies. Reardon (2007) argues that this is because the previous predictions took the demand and market institutional and organisational conditions as exogenous, whereas modern food retailers instead have treated local conditions as substantially endogenous. Effectively, they have devised strategies to facilitate a better environment for entry and growth. These proactive strategies focus on improving conditions via (i) procurement system modernisation and (ii) local supply chain development. One important strategy retailers have used to facilitate (i) and (ii) is to form relationships with modern wholesale, logistics and processing firms.

Procurement changes

The liberalisation of FDI brought a strong multinational flavour to the supermarket sector in many emerging markets. This has accelerated the spread of supermarket chains through knowledge transfer, including procurement systems, as well as a source of capital.

Reardon (2005b) details four pillars of change in supermarket procurement systems in emerging markets from the 1990s, although the pace of change is unequal across types of products with relatively early adoption of the procurement-system changes in the case of processed products and late adoption for fresh products. The first three procurement changes are organisational changes, while the fourth relates to product standards.

1. **Centralisation of procurement and distribution centers.** A shift away from store-by-store procurement that had prevailed before 1990 and during most of the 1990s. Centralisation increases efficiency of procurement by reducing coordination and other transaction costs, although it may increase transport costs through extra movement of the actual products. The net savings can be substantial. The main global retailers (Wal-Mart, Carrefour, Ahold, Metro, Tesco) operating in the emerging market countries have moved quickly in the decade since their entry toward centralisation and use of distribution centers in each country. However, it is common for large food processors and manufacturers that have their own distribution centers to deliver to the individual stores of a chain.
2. **Use of specialised wholesalers and logistics firms.** The supermarkets are increasingly working with specialised wholesalers, dedicated to and capable of meeting their specific needs. Specialised wholesalers cut transaction and search costs and enforce private standards and contracts on behalf of the supermarkets. On the logistics side, there is a trend toward logistics improvements to accompany procurement consolidation. To defray some of the added transport costs that arise with centralisation, supermarket chains have adopted (and require that suppliers adopt)

best practice logistical technology. This requires that supermarket suppliers adopt practices and make physical investments that allow almost frictionless logistical interface with the chain's warehouses.

3. **Preferred suppliers.** Many supermarket chains are establishing contracts with their suppliers – in particular via their dedicated, specialised wholesalers' managing a preferred supplier system for them. Contracts serve as incentives to the suppliers to stay with the buyer and, over time, make investments in assets (such as learning and equipment) specific to the retailer specifications regarding the products. The retailers are assured of delivery of products with desired quality attributes and on-time.
4. **The rise of private standards.** Supermarkets are implementing private standards as a substitute for inadequate public standards. The rise of private standards for quality and safety of food products, and the increasing importance of the enforcement of otherwise-virtually-not-enforced public standards, is a crucial aspect of the imposition of product requirements in the procurement systems. These standards help differentiate products from other chains, aid competition against the informal market and coordinate the supply chain via standardising product quality.

Some implications of supermarketisation in Asia (and other emerging markets)

Reardon (2008) discusses the impacts of the supermarket revolution on various participants in emerging markets. There are opportunities for some and challenges for others. 'On the one hand, it can lower food prices for consumers and create opportunities for farmers and processors to gain access to quality-

differentiated food markets and raise incomes. On the other hand, it can create challenges for small retailers, farmers, and processors who are not equipped to meet the new competition and requirements from supermarkets.'

There are effects throughout the food system in these countries and down through the supply chains from traditional retailers, wholesalers, processors and the farm sectors. Supermarket procurement modernisation is rapidly changing the dynamics of local markets and trade. As detailed in the section above, when supermarkets modernise their procurement systems they require more from suppliers with respect to volume, consistency, quality, and commercial practices. Supermarkets' impact on suppliers is biggest and earliest for food-processing and food-manufacturing enterprises, given that some 80 percent of what supermarkets sell consists of processed, staple, or semi-processed food products. Any changes have flow-on effects. Demands that supermarkets place on processors tend to indirectly affect farmers, as new requirements are passed on.

A number of developing countries have policies that encourage the development of supermarkets and regulate wet-markets in order to modernize commerce, lower food prices and congestion, and increase public hygiene and economic competitiveness. Even so, as the supermarket sector becomes concentrated it is important for governments to enforce competition policies. On this note, the definition of the market is important given the observation from USDA (2005) that 'although significant concentration may exist in certain individual product markets at the local level, at the global level, even the largest food company accounts for less than 3 percent of

total world food sales. The diversity of consumer demand creates opportunities for smaller firms to successfully compete in the marketplace.'

Opportunities/challenges in NZ

For New Zealand exporters to the emerging markets, supermarketisation brings opportunities and challenges. The bringing together of the previous fragmented market is a massive opportunity. In fact, Reardon (2005b) suggests that 'this integrating force is perhaps at least as powerful as policy determinants of trade and regional integration.'

Certainly, a more consolidated market makes for an easier target for suppliers (including New Zealand exporters). And being used to the quality and quantity requirements of selling to larger markets, developed economy exporters can get a first mover advantage over local suppliers in emerging markets. More closely knit markets are also bound to reduce transaction costs for major suppliers.

The challenge for New Zealand producers and industries is to take advantage of these more coordinated markets. This means tapping into the evolving structures at the retail end of the supply chain within the emerging markets. Clearly, scale is important (also as a counterpoint to the bargaining power of the supermarkets). The trick will be in building relationships with the supermarkets to become a preferred supplier, negotiate long-term supply contracts or indeed become part of the supply chain via joint ventures or by building other similar alliances. The opportunities and challenges are likely to only become bigger as the supermarketisation process occurs in the sub-regions of the Pacific Rim. This is likely to bring more coordinated

procurement processes across countries, not just within countries, thereby generating trade.

Looking ahead, the drivers of rising demand for food in emerging Asian markets are firmly in place: population and economic growth, urbanisation and westernisation of diets. The potential opportunities are enormous for New Zealand producers and industry to tap into the fastest growing markets in the world.

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