Surprised by supermarkets: Diffusion of modern food retail in India

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Surprised by supermarkets: diffusion of modern food retail in India

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Abstract

Purpose – The purpose of this paper is to analyze the patterns and dynamics of the diffusion of modern food retail in India.

Design/methodology/approach – The paper is based on detailed sales data from retail chains in India, short case studies of retail chains, and review of literature.

Findings – The article presents three surprises concerning modern food retail diffusion in India. First, modern retail has developed in three "waves", with the first wave, government retail chains, starting in the 1960s/1970s, cooperative retail chains starting in the 1970s/1980s, and private retail chains in the 1990s/2000s. All three were substantial, and internationally uniquely, all three coexist in the 2000s as segments of modern retail. Second, the rise of modern private retail in India in the past six years has been among the fastest in the world, growing at 49 percent a year on average over that period, and bouncing back to growth after a dip from the recent recession. The great majority of modern private retail has arisen in 2007-2010. Third, beside the uniqueness of the coexistence of three types of retail noted above, Indian private retail chain development has unique or rare characteristics: driven by domestic capital investment, "early" (in terms of usual international patterns) diversification into small formats, "early" penetration of small cities and even rural towns, of the food markets of the poor and lower-middle class, and of fresh produce retail. These unique factors have helped to propel it quickly.

Originality/value – For the first time in the literature, the paper presents an analysis of: the three waves in Indian retail; detailed sales data for all leading chains; and its uniqueness.

Keywords India, Retailing, Supermarkets, Food products, Food retail chains

Paper type Research paper

1. Introduction

Starting from a common "traditional food retailing system" of small shops, wetmarkets, and hawkers (in fact, a similar traditional system as was common in the USA, Western Europe, and Japan), a "supermarket revolution" took off in the early/mid-1990s in developing and transition countries (Reardon *et al.*, 2003, 2009). The spread of supermarkets has taken place — and continues to take place — in three waves. The "first-wave" countries experienced supermarket-sector "takeoff" in the early to mid-1990s. These include much of South America and East Asia outside China (and Japan), Northern-Central Europe and the Baltics, and South Africa. These first wave countries saw supermarket diffusion in a single decade that took some five decades in the USA. The second-wave countries include Mexico and much of Southeast Asia, Central America, and Southern-Central Europe. The third-wave countries are where the supermarket revolution take-off started only in the late 1990s or early 2000s

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(growing very quickly, often at three-four times the rate of their rapidly growing GDPs/capita). These areas include parts of eastern/southern Africa, some countries in Central and South America, "transition East Asia" (China and Vietnam), Russia – and India.

India is an interesting case because, while its traditional retail system is similar to that of other developing countries, there are unique aspects to the emergence of modern retail in India, compared with the patterns common in other developing countries in the past two decades. This paper focuses on India, and makes three sets of points concerning what we consider surprising phenomena. The consideration of these is meant to contribute to the (heated) debate in India itself, and add a new angle on the international debate on retail and development. The three sets of points are as follows; we set them forth here and then use them to structure the rest of the paper.

The first surprise we explore is that India has in fact had three waves of retail transformation marking the rise of modern retail: the extensive spread of government retail chains starting from the 1960s/1970s, the diffusion of cooperative retail chains starting from the 1970s/1980s, and finally at first slow then extremely rapid spread of private retail chains in the 1990s but mainly the 2000s, and even especially in the past five years. The Indian, as well as the international debate, have neglected the state and coop modern retail waves in the emerging literature on the "supermarket revolution." Partly the neglect seems because it was not recognized that state and coop chains had and have the basic characteristics that meet the definition of "modern retail." Partly the neglect seems because retail and development researchers have been fascinated by and focussed on how globalization and market liberalization and reform have touched off an explosion of private (*per se*) retail investment, even multinationalization. That focus eclipsed the point that state and coops had often already led (as a first phase) transformation of the retail, processing, and wholesale sectors from fragmented, small scale, uncoordinated traditional sectors, to partially consolidated sectors with large- and medium-scale firms (Reardon *et al.*, 2009). That the mainstream literature, supporting reform and structural adjustment, swung to center on a critique of the state and coop sectors added to obscuring the fact that the initial (even if imperfect) modernization of the food sector had been started by these initiatives. Finally, part of the neglect seems to be from the observed "withering away" of the state and coop food retail (and processing) segments in various countries where modern private retail has been studied (such as in transition countries in Central and Eastern Europe and China and Vietnam, and in other countries that had state-led food system modernization efforts, such as Zambia and Brazil). The integrated story of these three waves has not been analyzed in the Indian retail literature, and we aim to address that gap.

Why does it matter that the literature in India and internationally has neglected the first two waves (state and coop) and mainly focussed on the third wave (private) in analyzing retail transformation? There are two reasons it matters. First, the state and coop retail chains were often extensive in the transition countries, and in India were extensive – and still are. There is thus a temporal overlap of the waves in India that is less extant in other developing countries. Second, the overlap of the waves means that there is interaction that has been neglected in analysis: we show that state, and more-so coop, and private chains consciously compete in today's India, influencing the behavior of each; it is not for nothing that the leading Indian private chain has a chain of small format hard-discount shops it calls "KB Fair Price Shops" in competition with but reference to the government Fair Price Shops (FPS) – using the idea of small cheap formats in dense cities and even small towns to appeal to and penetrate the market of Indian poor consumers, just as the government had done. But we can also ask whether in India, and perhaps in China, Vietnam, and Eastern Europe, by extension, the state and coop chains "prepared the way" for private chains, both in getting the consumers used to shopping in chain stores rather than the traditional shops and wetmarkets, and first created expectations and later, unmet needs and desires that private chains stepped in to fill?

The second surprise is the speed of the third wave of retail transformation in India. After the gradual build-up in mid-ocean of the first two waves and even the first phase of the third wave, suddenly a tidal wave of modern private retail mounted very fast – with the fastest or among the fastest modern retail growth in the world – from about 2006 to now. We estimate that the average yearly growth rate of sales of modern-private retail (plus wholesale cash & carry chains) was 49 percent for 2002/2003 to 2009/2010 and that modern-private retail grew around five times faster than GDP. The suddenness and size of that rise has not been fully documented (earlier work on India retail, such as the ICRIER report in 2008; Joseph *et al.*, 2008) or Srivastava (2008) caught the phenomenon at its start (their data went through 2006/2007), so that it is time for an assessment after what has been in fact its great majority of growth (from 2007 through 2010) and explained in the Indian retail literature, and we aim to address that gap.

Why matter the size and speed and suddenness of the third wave in Indian food retail transformation? Part of the reason for the interest of this will be explained in the third surprise concerning the nature of the transformation. Here suffice it to say that it is surprising that such a rapid take-off has occurred spurred nearly only by domestic capital – not by FDI, as "multi-brand" retail FDI has not been liberalized. Part of the reason is also that the rapidity of the rise seems itself linked to the nature of the transformation – the strategies of market penetration. Finally, part of the interest of the suddenness and size of the take-off is the policy/political reaction – surprise and fear as well as sudden hope, depending on the quarter – that the rise has evoked. The political reaction is itself not unique (in fact Reardon and Hopkins, 2006 show that such reactions were in fact much stronger in the USA in the early decades of supermarkets than anything one observes in developing countries – including India – today). Nor is it surprising that supermarkets have taken-off quickly in the "traditional retail setting" of India; we observe that Indians tend to somehow see their traditional retail setting as unique (relative to other developing countries perhaps, and to the USA or Europe), when in fact it is similar, as is the context, to much of Asia (such as dense cities, many small farmers, etc.) that has had a supermarket revolution, and the traditional retail system and local consumption habits themselves similar to those around the world, before supermarkets.

The third surprise is the nature – in several ways unique – that the Indian retail transformation has taken in these early stages. One we already mentioned: the overlap of the modern-private retail take-off with the coexistence of substantial state and coop chains. But several others stand out, in two sets. The first set is the largest, and are ways in which Indian modern retail has done things that other developing country retailers have done – but done them much earlier or in a different sequence than others have done: early expansion into tertiary cities and poor consumers; early penetration of fresh fruits and vegetables retail; early expansion into rural areas; early format diversification into small and even mobile formats to penetrate dense urban areas.

They have done other things on the procurement side that we will propose to the literature after this paper. The second set includes ways in which Indian modern retail has done simply unique things; the most evident is the rural supermarket called rural business hubs (RBH), which combine fast-moving consumer goods (FMCG, including processed foods and staples) and white goods and clothing retail, with retail of agri-inputs cum extension, equipment, crop procurement, and joint-venture retailing of insurance, credit, and health services, all in one location. This "multi-sectoral" retail is unique, and offers rural consumer market penetration linked with agri-service retail.

Why does the unique nature of Indian retail matter? We argue that the early or unique nature of India's retail transformation has been important to the speed and spread of its rise. While it has been highly experimental – with many trials and many errors in a short time – it appears to be creatively adapting to the challenges of the Indian setting. Those challenges are in fact similar to that faced by many developing countries that are already well along in their "supermarket revolutions," but India seems to differ in just doing it faster, combining lessons from others, creating new solutions. The lessons from its actions may help to predict where and how modern retail will continue to develop in third and even fourth wave countries, using the categories of international diffusion noted at the start of this section.

With the surprise of the surge of modern food retail in India, it is no surprise that a heated policy debate has already formed around it. The debate has turned around several issues[1] (e.g. see Department of Industrial Policy and Promotion, Government of India, 2010): First, hat are the patterns and dynamics of its wdiffusion: How fast has modern retail grown, how important is it now, how important could it be in the future? Second, what are its impacts "downstream" in the food supply chain: Has it and will it push out traditional retailers? Has it and will it help or hurt consumers? Third, what are the patterns and dynamics of retail's procurement system transformation, and what are its impacts "upstream" in the agri-food supply chain: has it and will it help or hurt midstream actors (in processing, and wholesale/logistics)? And upstream (farmers)? The stakes in the policy debate range over whether retail FDI will be liberalized, whether supply chain deregulation will be accelerated, whether and how farmers should be equipped to deal with the transformation.

The "three surprises" outlined above are the focus of the current paper, and correspond to the first policy issues noted above, concerning the pattern and dynamics of modern retail diffusion. Because of space limitations, we address issues two and three (on the impacts of modern retail on traditional retailers, processors, wholesalers, and farmers) in research that we will soon propose to the literature.

To inform our discussion of the three surprises, our three perspectives on the first policy issue, we marshal Indian evidence and data of various types, amassed over our fieldwork period of 2007-2010. Keep in mind that over those four years about 80 percent of India's current modern retail was formed, so we were studying a "moving target" and incipient process:

(1) We undertook 70 field visits/case studies over 2007-2010 of modern retailers and midstream and upstream actors.

(2) We undertook detailed surveys in Delhi, Hyderabad area, Bangalore area, Uttarakhand, and reviewed the 25 or so extant field studies. A systematic survey of this information has not been presented to date.

(3) We reviewed hundreds of press papers, and selected 220 for use in the research.

(4) There are no official statistics based on exhaustive inventory of sales of modern retailers, nor of traditional retailers.

For data, we instead consulted one of the leading retail data services in the world, PlanetRetail (www.planetretail.net), for proprietorial detailed data on sales of modern retail chains in India. These unique data have not been presented yet in the published literature. Overall, we used all of the above to "triangulate" information and derive a general image of the phenomena. Often the information sources and our field observations corroborated. The nature of the information is in general "small sample" and thus more in the realm of business case study research, simply because modern retail is an emerging phenomenon in India.

This paper proceeds as follows, structured along the "three surprises" of Indian retail transformation. Section 2 focuses on the three waves, state, coop, and private. Section 3 focuses on the speed and overall patterns of modern private-retail sales in the 2000s. Section 4 explores the unique nature of the retail transformation. Section 5 discusses implications.

2. First surprise: three waves of retail transformation in India

In this section we will paint a picture of the rise of modern food retail in India in three waves, first government retail chains, then cooperative retail chains, and then modern-private retail.

Note that as the retail literature does not have "hard and fast" rules as to the definition of "modern retail," we assemble from the literature a broad definition that includes the following:

(1) use of "self-service";

(2) a certain scale of operation: this can either be of the store itself (such as a hypermarket or supermarket) or the size of the chain (which could be of small outlets such as convenience stores or neighborhood stores), or both (such as a chain of large stores);

(3) the assortment of products can be narrow (such as a focus on dairy) or wide;

(4) the procurement system can be traditional or modern;

(5) the retail environment can be fancy and air-conditioned, or "bare-bones" and austere;

(6) the outlet or chain can be a mix of retail and wholesale (such as most cash & carry stores); and

(7) the owner can be any entity – foreign or domestic, state, coop, or private.

2.1 Government food retail chains – the first wave of modern retail in India

The essence of post-independence India's history of government food retail chains is the following. First, national, state, and municipal governments have put in place nearly all the types of government retail chains found in other developing countries; they did so mainly in the 1950s to 1980s while other developing country governments also used state intervention in the food sectors. Second, governments were aiming to bring down food costs for the poor by achieving economies of scale in retail and efficiencies in retail procurement systems, and to administer in coordinated and central fashion the dispensing of food subsidies. Keep in mind that their motivating assumption is that traditional markets are fragmented and inefficient and thus not capable of assuring a consistent and affordable supply of food to the poor. Third, the uniqueness of India in this domain resides in its having kept in place the bulk of its government retail chains even two decades after the start of its general liberalization reforms.

The main categories of government retail chains in India are as follows.

2.1.1 FPS. By far the earliest and most visible – and heatedly debated – form of government modern retail intervention has been in setting up a large number of FPS. These are the retail end of the Public Distribution System (PDS), sourcing, and distributing grain since the 1950s. India is unique in Asia in the size and persistence of its public grain procurement system (Rashid *et al.*, 2007). Poverty and recurrent famine have placed government market intervention (and later cooperative sector intervention) in a privileged position in Indian policy – both during the colonial period before 1947, and after Independence. Governments have long perceived limitations of traditional markets to distribute food adequately. However, there has been much heated debate over the PDS (citing inefficiency and extreme corruption) (Bhalla, 2007).

The upshot is that the PDS sources grain via the marketing parastatal Food Corporation of India and retails rice, wheat, and a few other essentials (like sugar and kerosene) via FPS. From their start by the British in 1939, they reached 51,000 in 1961. The FPSs were transformed into an arm of "targeted PDS" in 1997, with subsidies targeted at users who are below the poverty line (and get ration cards), with other users not getting that subsidy (Tritah, 2003).

The number of FPS was estimated at 476,000 in rural and urban India in 2004 (Rashid *et al.*, 2007). In the 2000s, the FPS's channel roughly 15 percent of the main food grains (rice and wheat) to the overall market. Roughly 21 percent, or 100,000, are in urban areas. Using the GOI's Planning Commission figure of total turnover of sales of the FPS system of six billion dollars per year, and (roughly) applying the 21 percent figure for the urban share, one gets a very rough approximation of some 630 million USD of sales by the urban FPS chain. That makes the FPS chain a leading retail chain in India.

2.1.2 State- and municipal-level government-run retail chains. State-level and municipal governments have undertaken food retail programs and also run food retail chains. The programs have mostly consisted of "farmers markets" programs like those found in other countries – where farmers can market directly (paying little or no fee to the APMC, the government market regulation system). An example is the Rythu Bazaar in Andhra Pradesh, set up in 1999 with about 100 such markets by the early 2000s. They are managed by the AP government (Singh, 2003).

The retail chains set up by states and cities are various (from our inventory undertaken for this paper), although to our knowledge there is no research providing a full inventory or market assessment. To provide an idea of these chains, we give the example of "Supply Co" (The Kerala State Civil Supplies Corporation) started by the Kerala state government in 1974. The Supplyco web site by 2010 reports having 1,200 retail outlets (908 Maveli Stores, eight mobile Maveli, three mini mobile, 268 supermarkets, 11 petrol pumps, three LPG outlets, 89 medical stores in its chains, with 11 sub-depots around the state). For all its operations (a subset, although probably the majority, of which is the retailing, as they also have mills, wholesaling, and children's lunch program), the sales turnover was reported at 47 million dollars in 1994/1995, and 372 million dollars in 2008/2009, thus showing rapid growth (www.supplycokerala.com). Again, these sales figures would put it among medium-level private retail chains in India by 2010.

2.2 Cooperative food retail chains – the second wave of modern retail in India

The essence of the history of Indian cooperative retail chains is as follows. First, as happened internationally, India developed both general retail consumer cooperatives and produce-specific producer-based cooperative retail chains. Second, these arose in the 1960s/1970s parallel with and often interlaced with government retail initiatives. Third, again, as with India's government retail chains, cooperative retail grew quickly before private retail chains flourished, and have lasted during the recent rapid rise of private chains. However, as shown below, while the sales of these national and state chains are large, the trend is mixed: some (like the dairy chains) are persisting, while the general retail coops in India, as they have internationally, appear to be in decline. Fourth while there are signs of some similar development to what occurred in other countries (with dairy chains starting to diversify products, or some coop chains bought by private retailers), one also sees coop-based retail chains such as Amul Parlours and Mother Dairy work to modernize their chains to compete with each other and with modern-private retail, and to be among the larger modern retail chains in India.

The main categories of cooperative retail chains in India are as follows.

2.2.1 General retail cooperative chains at the national and state level. These mainly come under the National Consumer Cooperative Federation (NCCF). The NCCF was formed in 1965 by law. Under it are 34 "state consumer cooperative federations," under which are wholesale/central stores at the district and sub-district levels, in turn under which are primary stores at the block level. A sum of 78 percent of the capital is contributed by the Indian government; the rest is from members' shares.

The NCCF had a chain of 25,759 stores in 2003 (of which 13,000 were in loss or in process of liquidation) with ten million persons with "membership." In 2002/2003 the sales of the main chain, the "primary stores" of the consumer cooperative stores, in controlled (food) products (mainly basic grains, with some tea and oil and salt) were 152 million USD (out of 323 million USD of overall sales). This would put it then (early 2000s) as a leading chain. But five years later, the Ministry of Consumer Affairs, Food, and Public Distribution (MCA/FPD, 2009), reported only 100 million dollars of sales of all products (a third of that reported in 2002/2003).

Case information brings more sharply into focus the decline of this form of cooperative retail in India. An example of a failed cooperative retail chain is Super Bazar. The "Super Bazar," affiliated with the NCCF, was set up in 1972 in Delhi. It had a membership of 40,000 and was profitable through 1995. Then it declined to losses after a path of stops and restarts (Ministry of Consumer Affairs, Food, and Public Distribution MCA/FPD, 2005; *The Hindu*, 2009).

India is following international trends in the ways that private retail chains are acquiring ailing cooperative retail chains. The private chains want the valuable retail real estate the coop stores occupy or want to acquire and upgrade them to get their customer base/target strata. For example, the private chain Spinach (Wadhawan Retail Holding) entered into a joint venture with Mumbai's Maratha (cooperative society). Stores, founded 70 years ago, with 15 stores in prime locations in Mumbai, and ten added by Spinach. Spinach stores target "A" and "B" (top- and second-level income) consumers, while Maratha stores (which also run some FPS/PDS shops) focus on lower income segments (Business Standard, 2008; PlanetRetail, 2007b). By Spinach's assuring management and procurement, it thus essentially acquires a cooperative retail chain focussed on lower income consumer segments and has loyalty and strategic (hard to access) real estate in a Tier 1 city.

However, not all the general cooperative-retail chains are in decline. For example, the Kendriya Bhandar cooperative chain operates 114 stores in Delhi, Mumbai, Chennai, Hyderabad, Bangalore, and 13 Tier 2 cities in north and south India. It was set up in 1963 as a cooperative for Central Government employees and other consumers. There are a number of developing countries, like Mexico with its ISSSTE chain set up in 1959 (www.superissste.gob.mx), that have similar retail chains for government employees, run by social security or labor ministries. The Kendriya Bhandar from its inception has similarly been operated by the Ministry of Personnel, and has been part of the Multi State Consumer Cooperative Society since 2000. It retails groceries and other FMCG and medicines. It is the largest consumer cooperative society in India. Its sales in 2004/2005 were 70 million dollars (www.kendriyabhandar.in).

Some state-level coop cum private-franchise retail chains are flourishing. An example is Margin Free Market chain, based in Kerala. Like Apna Bazaar in Andhra, it:

(1) is focussed on the south of India;

(2) was formed in 1994;

(3) was also formed by a non-profit charitable organization, as a cooperative venture of the "Consumer Protection and Guidance Society";

(4) has a discount "no frills" model, and has own and franchise stores in the "neighborhood stores" small format;

(5) emphasizes a procurement system of direct purchase from manufacturers and farmers, thus cutting margins;

(6) aims at being "15 percent" cheaper than rival supermarkets;

(7) has substantial distribution centers (DCs) (each of 2,000 square meters) used to supply own and franchisee stores; and

(8) had sales of 42 million USD from 104 stores in 1999 and 161 million USD in 2010 from 373 stores (www.planetretail.net; www.mfreem.com; Table I here).

2.2.2 Product-specific "producer coop" retail chains – case of Mother Dairy. This chain and others like it (e.g. Amul Parlours) have taken on substantial importance in India. Mother Dairy/Safal comprises dairy and produce retail chains operated by the National Dairy Development Board (NDDB). The NDDB was set up under Operation Flood in 1970, and operated under the aegis of the government until 1987 when it was granted autonomous status. Mother Dairy overall has been growing fast over the 2000s. By 2003/2004, MDFVL had 266 million USD in sales (Business Line, 2004; www.motherdairy.com). By 2006/2007 the overall operation reported 340 million USD, and by 2008/2009, 660 million USD (The Financial Express, 2009). As will be seen below, while the own-retail operation has been growing, it has not been growing nearly as fast as overall company sales figures.

Mother Dairy (dairy) and Safal (produce) chains operate on a similar model: first, farm cooperatives in various states use local collection center networks to supply milk and fruit and vegetables to Safal in Mumbai and Delhi and Mother Dairy in Delhi, and via joint ventures other states' cooperatives' processing plants to produce Mother

Table I.
Growth of modern-private retail in India, 2003-2009, in millions of dollars, with year-on-year growth rates in parentheses ($t/(t-1)-100$)

Company, main brand, and nationality of capital if not India	2010	2009	2008	2007	2006	2005	2004	2003	Earliest banner sales if before 2003	Percent Food 2010	Food sales 2010
Banner sales and (% growth)											
1. Future group (Big Bazaar, Food Bazaar, KB Fair Price, FoodRite)	1,717 (33%)	1,290 (5%)	1,223 (27%)	967 (89%)	513 (87%)	275 (62%)	170 (98%)	86	10 (2001)	25	428
2. Reliance	682 (28%)	533 (−2%)	545 (63%)	335 (458%)	60	–	–	–	na	81	549
4. Vishal (Megamart)	400 (9%)	367 (13%)	326 (33%)	245 (69%)	145 (126%)	64 (82%)	35 (66%)	21	3 (2001)	4	17
5. Aditya Birla (More); Trinethra before 2007	380 (55%)	245 (−12%)	277 (116%)	128 (146%)	52 (44%)	36 (100%)	18 (38%)	13	5 (1999)	61	230
3. RPG (Spencer's)	213 (8%)	197 (−18%)	240 (25%)	192 (85%)	104 (116%)	48 (118%)	22 (69%)	13	4 (2001)	34	73
12. REI Agro Ltd, 6Ten	204 (55%)	141 (143%)	58 (29%)	45	–	–	–	–	na	86	175
Margin Free Markets	161 (10%)	147 (7%)	137 (5%)	130 (19%)	109 (8%)	101 (14%)	89 (16%)	77	42 (1999)	19	31
10. Jubilant (Total)	134 (56%)	86 (16%)	74 (95%)	38 na	1	1	1	1	1 (2000)	45	61
9. K Raheja (HyperCITY)	131 (93%)	68 (33%)	51 (38%)	37 (28%)	29	–	–	–	na	46	60
20. Tata –Trent (India) and Tesco (UK) (Star Bazaar), only retail	103 (75%)	59 (110%)	28 (87%)	15 (150%)	6 (20%)	5 (0%)	5	–	na	46	47
16. Bharti and Wal-mart (USA) (retail only)	97 (259%)	27 (350%)	6	–	–	–	–	–	na	51	49
8. Nilgiris	81 (29%)	63 (−9%)	69 (60%)	43 (59%)	27 (8%)	25 (19%)	21 (17%)	18	9 (1999)	86	70
7. Landmark (Spar) (Bahrain)	73 (247%)	21 (61%)	13	–	–	–	–	–	na	39	33

(*continued*)

Company, main brand, and nationality of capital if not India	2010	2009	2008	2007	2006	2005	2004	2003	Earliest banner sales if before 2003	Percent Food 2010	Food sales 2010
11. Fu-com (Le Marché) (UAE subsidiary of French Géant)	67 (10%)	61 (65%)	37 (362%)	8	–	–	–	–	na	61	41
17. Heritage (fresh@)	55 (20%)	46 (39%)	33 (22%)	27 (575%)	4	–	–	–	na	86	47
15. Dairy Farm Int'l (Hong Kong) & Arko Ltd.; FoodWorld	47 (21%)	39 (−7%)	42 (−9%)	47 (24%)	38 (27%)	30 (−27%)	47 (9%)	43	12/99	81	38
18. Wadhawan (Spinach and Sabka Bazaar)	37 (23%)	30 (19%)	26 (37%)	19 (171%)	7	–	–	–	na	86	31
21. Big Apple	23 (15%)	20 (−20%)	25 (14%)	22 (450%)	4	–	–	–	na	87	30
23. ITC (Choupal Fresh)	20 (82%)	11 (57%)	7 (600%)	1	–	–	–	–	na	90	18
24. Nature's Basket	5 (25%)	4 (−25%)	5 (67%)	3 (200%)	1	–	–	–	na	80	4
25. GNC (US)	8 (33%)	6 (100%)	3 (50%)	2	–	–	–	–	na	13	1
14. Shoprite (South Africa)	–	57 (50%)	38 (31%)	29 (45%)	20 (18%)	17 (na)	1	–	na	70	40
13. Adani (Reliance after 2006)	–	–	–	–	66 (69%)	39 (179%)	14 (75%)	8 (167%)	3 (2002)	94	
22. Indiabulls (Pyramid before 2008)	–	14 (−58%)	33 (−34%)	50 (35%)	37 (54%)	24 (100%)	12 (33%)	9	3 (1999)	78	11
26. Radhakrishna (Foodland Fresh)	–	1 (shut March)	1	17	1	–	–	–	na	95	1
6. Subhiksha	–	Stopped	320 (−43%)	557 (211%)	179 (139%)	75 (25%)	60 (20%)	50	5 (99)	95	
Sub-total retail of modern-private	4638 (23%)	3719 (−1%)	3739 (22%)	3058 (109%)	1462 (87%)	780 (47%)	531 (47%)	362		47	2083

(*continued*)

Table I.

Company, main brand, and nationality of capital if not India	2010	2009	2008	2007	2006	2005	2004	2003	Earliest banner sales if before 2003	Percent Food 2010	Food sales 2010
1. Metro cash & carry (Germany)	281 (32%)	213 (15%)	186 (22%)	152 (69%)	90 (18%)	76 (49%)	51 (537%	8	na	55	154
2. Wal-mart (USA) /Bharti cash & carry	116 (427%)	22	–							54	63
3. Booker cash & carry (UK)	5 (0%)	5	–							80	4
5. Future Group: Big Bazaar Wholesale Club	5 (66%)	3 (−25%)	4 (100%)	2 (100%)	1					40	2
Carrefour cash & carry	1									100	1
6. Reliance: Rangers Farm	–	Stopped	20	24							–
Subtotal of chains only cash & carry (wholesale)	408 (68%)	243 (16%)	210 (18%)	178 (69%)	91 (18%)	76 (49%)	51 (537%)	8	na	55	224
Grand total private modern retail + cash & carry wholesale	4973 (25%)	3962 (0%)	3949 (22%)	3236 (108%)	1553 (81%)	856 (47%)	582 (57%)	370	na	47	2357

Table I.

Dairy products; second, Mother Dairy receives milk in its DC plant and de-bulks to on-ship to retail units fresh milk in bulk or bags, and processes milk into various products, and, as with Safal, retails those directly via its small shops (Mother Dairy Booths in Delhi) and via other retailers (traditional and modern-private) as well as exports (www.motherdairy.com, www.safalindia.com, Minten *et al.*, 2009, and our interviews with Safal and Mother Dairy in 2007 and 2008).

The Mother Dairy retail chain (of dairy products) is composed of kiosks or booths. In 1974 they started with four booths; in their current web site figures they report in 2008/2009 selling 2.3 million liters of milk daily via 845 kiosks/booths in 2009 and 14,000 other retailers; in 2007 they noted to us that they had 720 milk booths, so there has been some increase. The total turnover of the Mother Dairy overall operation was about 340 million USD in 2006/2007; some 20 percent of that, per the web site, is for the produce operation. That leaves 270 million USD for the dairy operation in that year. Approximately 80 percent of the milk moved through Delhi, so we can figure roughly a turnover of 216 million USD in Delhi; given that nearly half the milk went to their own retail chain, perhaps roughly 100 million USD via about 700 booths in 2007. The reader can see how small the booths are by noting that one sells only 140,000 dollars a year (only 383 dollars a day of gross sales); compare this with a 6Ten (chain) store, a convenience store; one sells 418,000 dollars a year on average. Mother Dairy noted (in our 2007 interview) that the booths however are not growing fast in numbers, and are not cost effective (and they are on limited available, and subsidized (free) land allocation from the government).

2.3 Private food retail chains – the third wave of modern retail in India

By far the main private retail chain development occurred in the second half of the 1990s and the 2000s. We observe a first and a second phase of the emergence of modern-private retail in India. The first phase is roughly from the mid 1990s to the early 2000s, and the second early/mid 2000s to present. These phases are discussed below.

2.3.1 The first phase of India's private retail chain revolution: mid 1990s to early 2000s. We briefly examine this first phase (as this has been much discussed elsewhere such as Srivastava, 2008 and Joseph *et al.*, 2008). The first phase was southern-India focussed, middle-class centered, and domestic-foreign joint ventured. It featured the initiative mainly of the RPG conglomerate (and its Asian joint venture partner) and several regional chains in the south. As we show below, the initial growth of modern-private retail in the 1990s and first few years of the 2000s was far less than what occurred in the second phase, starting around 2003/2004.

Most observers date the start of the rise of modern-private retail chains in India in 1996 when the RPG Group launched the FoodWorld supermarket chain in Chennai. This grew from the remnants of the old Spencer's Chain (that had been acquired by RPG in 1989) and remained until 1999 part of the Spencer's division within RPG. The RPG Group is one of the largest conglomerates in India, with yearly turnover in 2008 of three billion USD, with business operations in power, automotive parts, IT, retail, entertainment, and carbon black. RPG started in 1979, growing out of the activities of banking, plantations, and manufactures of a Calcutta family (www.rpggroup.com).

Kumar and Wylie (1996) and Center for Management Research (CMR) (2003) show the strategic choices of RPG's building of FoodWorld. First, RPG made the decision in the late 1980s to enter several new lines among those it saw as "rising stars" for the 1990s, including telecommunications, financial services, and retail. Second, RPG made a decision between attempting to start pan-India (too costly and diverse to start), or start in the west or north (Mumbai and Delhi had extremely high rental rates), and the south. RPG decided to launch in and focus on the south because the old Spencer's stores were already in several southern cities; because in the 1990s rents were much lower in the southern cities than in Mumbai or Delhi, and because incomes were rapidly growing in the south (fueled by the rise of IT and other service sectors).

To gain retailing and procurement logistics expertise (as retail was not RPG's core competence), it went into a joint venture in 1999 with Dairy Farm International (a multinational retail chain based in Hong Kong). Dairy Farm International is a regional multinational chain based in Hong Kong (www.dairyfarmgroup.com). FDI regulations in the 1990s permitted this joint venture (they had not yet been tightened in 2000), so that Dairy Farm took a 49 percent and RPG a 51 percent stake. They built FoodWorld to 94 supermarkets in Bangalore, Chennai, Hyderabad, and their foray into the west, in Pune by 2004, on the eve of the dissolution of the joint venture. In 2005, RPG and Dairy Farm International separated and split the stores between them.

Moreover, in the first phase, there were various regional chain startups. Most of these in the 1990s were in the south, the "incubator" for the modern-private retail sector in India. An example is Nilgiris, one of the best known regional chains. The second example is Subhiksha, that rose early and quickly and then in the past few years collapsed.

2.3.2 The second phase of India's modern-private retail diffusion: mid 2000s on. Starting ca. 2002/2003, there was a "take-off" in the growth in number of modern-private chains and the size of chains, as well as their spread spatially and over socioeconomic groups. This has taken place with surprising speed (as we discuss in Section 3). In this subsection we focus on what seems to have caused the sudden take-off, the second phase.

Reardon *et al.* (2003) lay out a conceptual model of the diffusion of modern retail, focussed on demand side factors (income increase, and urbanization leading to increase of women's opportunity cost of time) and supply side factors (investment from FDI and/or domestic conglomerates or government, and procurement system modernization leading to reduced prices by modern retail competing with traditional retail). These factors were all seen to play in India a key role – in crescendo – by the mid 2000s. These trends are well known (see Ablett *et al.*, 2007) so we note them briefly:

(1) Incomes grew quickly and the middle class emergence accelerated in the 2000s.
(2) Urbanization continued but there was an especially fast growth of a subset of the Tier 2 and Tier 3 cities and the towns.
(3) Public investment in infrastructure (especially roads and airports) increased in the 2000s, in urban and rural areas.
(4) Interest rates fell and conglomerates (such as Reliance) rose, fueling investment funds, and remittances increased, fueling demand.

Moreover, in the second half of the 2000s, there was demonstrably a public feeling (in the press and policy discussions) that multi-brand retail FDI liberalization was possible and perhaps imminent. This feeling arose partly from simply extrapolating from the ongoing trend of liberalization policies afoot: FDI liberalization was undertaken in logistics, wholesale, agribusiness, food service like fast food, and single-brand retail. We hypothesize that that belief pervaded the retail industry and was an inducement for domestic chains to invest vigorously. That could be to establish scale and thus competitive defences (as was done in Chile to the point of delaying FDI for some years), or appear to be a good partner for an MNC. To that inducement was added of course the intense competition among chains to jockey for position in the retail real estate market, to get first-mover advantages.

Unlike what occurred in Southeast Asia in the 1990s, many of the leading India retail chains pronounced forcefully in favor of retail FDI liberalization and sought partners to add to their operations the set of distribution FDI activities that were already permitted (by mid 2000s). The press and retail meetings and actions and pronouncements of retailers summed up to Indian retailers actively seeking MNC partners, preparing for the day that FDI is liberalized and the "race gates open." The eventual entry in the past several years of Metro, Wal-mart, Tesco, Booker, and recently Carrefour, as wholesalers, including as partners of domestic chains (such as Wal-mart with Bharti) further fueled the speculation that retailers were jostling to position for the liberalization, as well as use the FDI relations allowed to maximize their partnering with MNCs. The MNCs presence may have also increased overall expertise in the sector, if only with the frequent moves of executives from one firm to another.

Despite the rapid growth of retail we show in Section 3, and the strong drivers noted above, several constraints were present. First, most constantly noted was difficulty in getting access to real estate, and the rise in its cost over much of the 2000s. Second, the recession in 2008/2009 both reduced (temporarily, as we show in Table I that they bounced back in 2010) sales, forced some "shakeouts" of weaker chains, but also dampened real estate prices and spurred some increase in stores of some chains (A.T. Kearney, 2009). Stronger chains (like Future Venture, with Food Bazaar) took advantage of that reduction by acquiring both locations and other chains. (Consolidation is usually encouraged by economic downturn.) Third, there has been some social resistance against modern-private chains as well as cooperative retail chains in various parts of India. Echoing (although more feebly) the initial reaction against retail chains in the USA in the 1920s-1940s (Reardon and Hopkins, 2006), in several states, such as Uttar Pradesh, Kerala, and West Bengal, the reaction to some chains and some formats (such as those selling fresh in small formats at local level) has been sufficient to constrain diffusion in those places to present, and might have induced more rapid investment in states perceived to be "friendly" or non-resistant to modern retail.

But the above constraints were not sufficient to stop or reverse a boom in private retail, as we show next.

3. Second surprise: the speed of private chain growth

This section is based on Table I which presents proprietarial detailed data found in www.planetretail.net. The latter tracks sales, formats, store numbers, and various business operations of retail companies in a number of countries; PlanetRetail is a leading global firm providing retail sales data. We selected and processed the data. The data show "banner sales" (of all products) and "food sales" of the chains, for 2003-2010, plus the founding year of the chain if it was before 2003.

Table I reports sales figures in millions of dollars and nominal terms for modern-private retail as well as wholesale chains (cash and carries). In the first column are given the names of the companies and the national origin of the capital. Under the sales figures is the yearly growth (t divided by $t-1$ less 1, as a percentage). That growth reflects a combination of per-store changes in sales plus changes in the number of stores. A dash indicates the chain had not started selling in that year.

The set of companies are all the companies followed by PlanetRetail for India. To our knowledge, all the major national and regional chains are represented; there are doubtless some local private chains and independent supermarkets that are not tracked, but we estimate these to be a minor share of the segment. In the table, even when a company has had no sales for 2010, we included it if it has been followed by PlanetRetail in the past and is archived (such as Subhiksha and Radhakrishna), and show chains that were followed in their earlier independent or pre-acquired form, such as Adani (later acquired by Reliance), Pyramid (by Indiabulls), Trinethra (by Aditya Birla), with each melding into the new brand. All companies followed are modern-private chains (with Margin Free market, a cooperative cum private-franchise retail chain). PlanetRetail follows 30 companies in India that retail and/or wholesale (as cash & carry) food; it follows about 20 more in the restaurant, pharmacy, and non-food-only chains. Finally, for a given company, we presented data only from the sub-chains that sell some or mostly food; we did not include sales from sub-chains (or chains) with very little or no food sales.

The main findings from this table are as follows.

First, modern-private retail sales are growing very quickly in India, with the take-off roughly in 2002/2003. Table I shows that they grew 13.5 times over eight years inclusive (2010 vs 2003), and 11 times over the six years inclusive of 2003-2008; we can compare the latter with 2002/2003 to 2008/2009 of GDP, which rose 2.17 times. Thus, modern-private retail grew around five times faster than GDP. Our table shows the average yearly growth rate of sales of modern-private retail (we include cash & carry stores in this) was 49 percent in nominal terms, for 2002/2003 to 2009/2010. This rate is faster than estimates proffered by others, such as the "40 percent yearly" growth rate provided by Joseph *et al.* (2008). The empirical justification was not provided for that in their text. Some others suggest the rate is "20-30 percent," again, without the details of the calculations. It could be that these figures persisted from the discussion in the start and mid 2000s, when the rates were lower. In any case, the PlanetRetail figures are based on sales data and ours here represents the first presentation in the literature of those raw data analyzed and presented explicitly.

Note that there was a somewhat slow early period and then a sharp and fast take-off in mid 2000s. A slackening in growth was experienced during the financial crisis in 2008-2009 for most firms. Then the data demonstrate a clear rebound in the 2010s, of course varied over firms as some gained and others were part of the (usual, internationally) "shake out" that downturns cause.

The specifics are as follows. For the aggregate as well as for most of the main firms that had been established circa 1999-2002, sales stayed at a relatively low level from 1999 to 2002 and for most, into 2003 and 2004, and then around 2003/2004 into 2005, and especially into 2006 and 2007 and into 2008, there was a steep surge, with yearly growth rates moving from the 50s in 2004 and 2005 into the low 100s in 2006 and 2007. Then in 2008 and 2009 a sharp slackening was experienced with the industry press attributing it mainly to the recession, some "shake-out" that had been expected for several years as companies like Subhiksha expanded perhaps too fast for their capita base and the underlying weaknesses in some companies was "shocked" by the recession. The overall sector, and particularly the leading chains, rebounded with growth in 2010.

Moreover, there were three paths seen in the data: first, the Reliance pattern, which is to a certain extent echoed in Aditya Birla's "More" chain, where the chain started (Reliance) or had been a local chain thence acquired (Trinethra only in the south, acquired by Aditya Birla) in 2006/2007, and then injected with heavy doses of capital (by the two conglomerates operating the chains) and both became part of the top 5; second, the first pattern was echoed at a smaller scale in local chains that emerged in the middle/late 2000s (Jubilant, REI Agro (6Ten), Heritage, Bharti (probably destined to become pan-Indian), Big Apple, Nature's Basket, ITC's Choupal Fresh); third, the pattern taken in an extreme form by Subhiksha, and in lesser forms by Shoprite, Dairy Farm (FoodWorld) and Adani, where a regional chain rose "early" and then declined in the mid/late 2000s (perhaps with insufficient capital or competitive strategy to sustain the rise, and part of the anticipated "shake out").

It is striking how large a share of the total growth has occurred mainly in the past four years. For example, for retail, the 2006 figure is only 31 percent of the 2010 figure. The great majority of modern retail has arisen in 2007-2010! This aggregate point tracks with our primary survey of retail in Delhi (Minten *et al.*, 2010) showing that four-fifths of the supermarkets in our representative survey areas emerged only in the two years before our survey in early 2009.

Third, based on a simple measure such as the C3 (share in the industry of the top 3 firms), the modern-private retail segment has not become more concentrated comparing 2004 and 2009 – the C3 is 62 percent in 2003, and 61 percent in 2009 (of course with a difference that Subhiksha and Dairy Farm were in the top 3 in 2003). However, there are some important differences. First, the size of the first, second, and third ranked chains in 2003 would only warrant a ranking of 10th, 15th, and 16th in 2009: that is, top ranked chains in 2003 were then, and are now, local regional chains, not national chains. Second, there were 11 private chains of "standing" in 2003, and 26, plus multinational cash and carries, by 2009. Interestingly, the C5 is 78 percent in both 2003 and 2009. Thus, there were six smaller chains in 2003 and 21 smaller chains in 2009 that occupy the remaining 22 percent. Part of this "proliferation" of smaller chains is based on format diversification (with a number specializing in small format and a number in hypermarkets) and product category specialization (with several focussing on fresh and gourmet).

A preliminary hypothesis is that there is a bifurcation with a half dozen large firms dominating the field and in intense competition (driving down costs, spreading, diversifying formats), with another dozen that are focussed on local markets and niches and intend to use those bases to grow, and another handful that are neither getting big nor specializing, but are in the middle, in slow growth mode. This emerging picture is similar, we posit, to the retail scene in other developing countries, where one sees these three sets. Fourth, at present the cash & carry segment (wholesale chains) only has 8 percent of the total modern-private distribution channel – but looks slated to rise. Given that in other developing countries cash & carry is usually, with department stores and small supermarkets, a key element of the "early phases" of supermarket spread, and that this has been somewhat limited to present makes India an outlier in the general pattern. This might be because of the kinds of constraints and transaction costs with which APMC confronted Metro since its "early" startup in 2003. This may, in the medium run, not significantly constraint the cash & carry segment development, including by multinationals, as one sees that Wal-mart (with Bharti) and Tesco (with Tata) entered the segment in 2009 and Carrefour in 2010, with strong domestic partners. The Wal-mart operation grew 500 percent in two years.

Fifth, the average share of food in total sales is 47 percent – still somewhat below the "two-thirds" rule of thumb, that food sales tend to occupy in modern retail chains in developing countries (Reardon and Berdegué, 2007). Given the importance of food in the budget of the Indian, which is about 40 percent (Ablett *et al.*, 2007), the supermarkets and neighborhood stores of the modern formats are somewhat more food-oriented than overall spending patterns. Of course this in itself does not matter, as there is no "business reason" a retailer would want or need to match proportions in spending patterns of consumers with their inventory category shares. Recall that Table I presents only results for the formats (sub-chains) that sell food; when one looks at the totality of sales by the bigger chains, one sees that the overall share of food is lower than in the food-selling sub-chains.

Finally, we do some (necessarily very rough) calculations of the share of modern-private retail in total retail in urban India (as the set of sub-chains shown in the table are operating in urban India; below we turn to rural India). Data from the National Sample Surveys (NSSs) show that annual urban food expenditures were valued at about 45 billion USD in total in 2006. The NSSs also show that urban food consumption over the past ten years is growing at 3.4 percent per year (Minten *et al.*, 2010). Using the latter, we can thus update the 45 billion figure to 46.5 in 2007, 48.1 in 2008, and 49.8 billion USD in 2009. We then use the figure from the table of 2.64 billion USD for 2009 (excluding the Subhiksha sales of 2008) for modern-private retail (not cash & carry as they on-sell to traditional retail, mainly), and the approximate share of modern-private retail in urban food retail is 5.7 percent. Note that this tracks roughly with the results of our Delhi survey (Minten *et al.*, 2010). This is the first time in the literature that there has been a detailed, inclusive, explicit calculation presented of modern-private retail trends over the 2000s in urban food-selling chains retail in India. Note that that 5-6 percent estimate is lower than the share of all modern retail – which includes also the government and cooperative chains, which might make the share half or more again as much.

4. Third surprise: private-retail revolution with unique Indian characteristics

Various characteristics, especially of the second phase of the third wave – the private retail chain boom – are surprising, both to India, and about India compared with the past two decades of developing country modern retail diffusion. The essence of the differences is twofold. First, India has done what few other developing countries have done: started a supermarket revolution with domestic capital without relying at first on the push from retail FDI. Second, India has done what most other developing countries have done – but done them "earlier" (in the evolution of modern retail in the country), more simultaneously, more experimentally, more variously. We lay out the surprising differences below.

4.1 Primarily domestic investment

It is common for domestic (family company) capital to be important in the earliest stages of supermarket development in developing countries, but for the "take-off" some sector well-endowed with capital steps in and drives the investment. Sometimes that sector leads and then other sectors compete in investment and thus the aggregate investment grows. Those sectors can be: first, the government itself (the impetus for the initial expansion of the Chinese supermarket sector in the first half of the 1990s, followed then by vigorous FDI, with the two capital sources propelling the sector and leading to competitive investments by domestic private companies); second, foreign capital (important in the early stages of "take off" in much of Latin America, Southeast Asia, and Eastern Europe); third, much less common, domestic capital drawing from retained earnings in retail (such as large department store chains then starting supermarket chains), from investable funds retained from a broader conglomerate (such as one sees in Russia), or borrowing from banks (such as one saw in Chile).

We will show that India has taken the Russian path in the private-chain boom. Phase 1 of Indian modern-private retail development fit mainly into the foreign capital-driven and the conglomerate and department store capital driven categories. Table I shows that Phase 2 is characterized mainly by a combination of the domestic sources. Several points are salient.

First, as expected given that India has not liberalized multi-brand retail FDI, the rate of multinationalization is low and its impact in this second phase on Indian retail modest, and cash & carry, large, so far. In 2010, about 7 percent of total only-retail sales (like Latin America in the early 1990s) and 99 percent of major cash and carries (like Latin America now), i.e. in India 0.75 billion USD of sales was done by FDI firms (sole or joint venture), hence 15 percent of the total of modern-private retail and wholesale chain sales.

Second, domestic modern-retail capital is from a mix of sources, according to the investing company's characteristics. Of a total of banner sales by the food-selling sub-chains of the above companies in 2009, 3,919 million USD, the department store/apparel capital as the origin (like Pantaloons) composed 45 percent, the broad-conglomerate capital (like Reliance) 44 percent, agribusiness/food processing capital (like Nilgiris) 6 percent, equity and real estate firms (like RK Raheja), 5 percent, and food retail firms (like Big Apple), <1 percent.

Compare that composition to that in 2003, when the department store/apparel capital-based chains had 37 percent of banner sales, the conglomerates', only 18 percent, the food retail capital's chains, 39 percent, and the agribusiness/food processors' firm, 6 percent. There was thus mainly an extreme reversal of the importance of the conglomerates and the food retail firms over the decade as "drivers."

4.2 "Early" diversification of formats

For many years in the retail and development literature, there was a prediction that modern food retail could never "take off" in developing countries (Goldman, 1974). The literature pitted the image of a large supermarket, selling luxury products to rich consumers with cars and fridges in large cities, against the generalized reality and habits of the mass of consumers (living in dense cities or small rural towns, without cars, with low incomes, shopping daily for milk and vegetables, and weekly or monthly for staples). The problem was that a "big box store" could not enter the "small hole" of the dense neighborhood and small daily purchases of consumers. Yet in the 1990s and 2000s, take-off indeed took place. Part of the reason modern retail could indeed take-off was that over the past two decades chains gradually developed a wide variety of formats and "environments" to penetrate inner city, small town, and suburb, and poor and middle and rich areas. By the late 2000s, for example in Southeast and East Asia, formats were diversified and coexisting, from small to large stores, from austere to luxurious (Coca-Cola Retail Research Council Asia, 2007).

Indian retail has taken the same path of format diversification – but telescoped the process into a half decade for private retail, and having moved into small formats among state and coop chains well before that.

Table II shows this format diversity and diversification for private retail. It has the same column totals (from 2003 to 2009) as Table I. Table II shows the composition of sales per year (again from PlanetRetail data) for each company by "format" or sub-chain, such as for Pantaloon, its Big Bazaar (hypermarket or discount superstore), Food Bazaar (supermarket), and KB Fairprice sub-chain. The categories (formats) are based on size – hypermarkets, department stores, supermarkets, neighborhood stores, and convenience stores. The table shows several patterns. First, rapid differentiation of formats coincides with the sharp upturn in private retail chains in second half of the 2000s, as various formats are experimented with by the many entering chains, as they diffuse over areas and consumer strata. Second, the largest chains did the most differentiation – perhaps their size making them less risk averse and having more capacity to invest in experimentation. Also, the differentiation allows them to expand. Third, interestingly, the hypermarket segment in total private-retail (food and non-food) increased from 33 to 52 percent of all sales over the decade; department stores dropped from 15 to 12 percent, and the share of small formats decreased from 51 to 37 percent. Within small formats, the small supermarket share (the more traditional) fell, and the share of neighborhood stores went up sharply. Neighborhood stores even had already 29 percent in 2003, and 37 percent in 2008 – an early adoption of a dense-city penetration format usually adopted later in supermarket sector development. Some leading chains used this small format as their leading edge, such as Reliance and Aditya Birla, in particular due to tight real estate markets, to need to enter smaller cities and towns, and the need to be close to urban consumers.

In India, just as there is a confluence of government, cooperative, and modern-private retail coexisting – so there is a confluence of many formats. The data show that in India, a bimodal structure has already developed (as it eventually had internationally) where hypermarkets grow up in suburbs or outside segments of cities, and small format chains such as neighborhood stores and convenience stores spread in inner cities and small towns. Both format sets have "discount" versions. There is a ferment of differentiation, experimentation, and adaptation to diverse settings and target clientele.

4.3 "Early" penetration of produce retail

Modern retail has tended, in both developed and developing countries, to first penetrate processed and staple food markets, then semi-processed categories like dairy and meat, and final, and in developing countries recently (in the USA had taken some 40 years), to penetrate fresh produce markets. In India, retailers have dispensed with waiting and moved quickly to selling fresh produce. While local analysts emphasize how slow the penetration is, seen from the international perspective, Indian private and coop retail's entry into selling fresh produce is very early and surprising. The chains told us this is because of the importance placed on these categories by a consumer population of which some 25-30 percent are vegetarian, and perhaps another quarter that is mainly vegetarian. Moreover, Indian consumers expect to be able to source daily fresh produce and dairy products.

Already in the modern retail stores such as Reliance Fresh and Spencer's, the fresh (produce) and semi-fresh (dairy) products sections are large. For example, a quarter of the square footage of a Reliance Fresh store is in produce, and were a quarter of a Subhiksha store. Fresh fruit and vegetable sales constituted 12 percent of sales of the Spencer's outlets in Gujarat in 2008 (Singh, 2009) and 15 percent of the store sales space in Reliance Fresh in Gujarat, with a ton per day per store in 2009, and

Table II. Formats of modern-private retail in India, 2003-2009

Food-selling chains and their formats (sub-chains), with square meters of sales area per format	2009 Format shares (%)	2008 Format shares (%)	2007 Format shares (%)	2006 Format shares (%)	2005 Format shares (%)	2004 format shares (%)	2003 Format shares (%)
1. Future Venture (Pantaloons)	Hyper: 93; Super: 5; Neighb: 2	Hyper: 93; Super: 5; Neighb: 2	Hyper: 93; Super: 6; Neighb: 1	Hyper: 89; Super: 11	Hyper: 88; Super: 12;	Hyper: 90; Super: 3	Hyper: 87; Super: 13
2. Reliance	Hyper: 17; Super: 4; Neighb: 67;	Hyper: 16; Super: 5; Neighb: 64;	Hyper: 15, 5; Super: 2; Neighb: 87;	Neighb: 100	–	–	–
3. RPG (Spencer's)	Hyper: 48; Super: 8; Neighb: 44	Hyper: 43; Super: 6; Neighb: 45; Conv: 6	Hyper: 39; Super: 5; Neighb: 74; Conv: 5	Hyper: 39; Neighb: 60; Conv: 1	Hyper: 50; Neighb: 50	Hyper: 100	Hyper: 100
4. Vishal	Dept: 100	Dept: 100	Dept: 100	Dept: 100	Dept: 100	Dept: 100	Dept: 100
5. Aditya Birla	Hyper: 34; Neighb: 66	Hyper: 19; Neighb: 81	Hyper: 4; Neighb: 96	Neighb: 100	Neighb: 100	Neighb: 100	Neighb: 100
6. Subhiksha	Suspended	Neighb: 100	Neighb: 100	Neighb: 100	Neighb: 100	Neighb: 100	Neighb: 100
7. Landmark H (Spar),	Hyper: 100	Hyper: 100	Hyper: 100				
8. Nilgiris	Neighb: 100	Neighb: 99; Conv: 1	Neighb: 100	Neighb: 100	Neighb: 100	Neighb: 100	Neighb: 100
9. K Raheja	Hyper: 100	Hyper: 94; Super: 5; Neighb: 2	Hyper: 97; Neighb: 3	Hyper: 100	–	–	–
10. Jubilant	Hyper: 99; Neighb: 1	Hyper: 99; Neighb: 1	Hyper: 99; Neighb: 1	Neighb: 100	Neighb: 100	Neighb: 100	Neighb: 100
11. Fu-com	Hyper: 100	Hyper: 100	Hyper: 100	–	–	–	–
12. REI Agro Ltd.6Ten	Neighb: 100	Neighb: 100	Neighb: 100	–	–	–	–
13. Adani	Reliance	Reliance	Reliance	Super: 100	Super: 100	Super: 100	Super: 100
14. Shoprite	Hyper: 100	Hyper: 100	Hyper: 100	Hyper: 100	Hyper: 100	Hyper: 100	–

(*continued*)

Table II.

Food-selling chains and their formats (sub-chains), with square meters of sales area per format	2009 Format shares (%)	2008 Format shares (%)	2007 Format shares (%)	2006 Format shares (%)	2005 Format shares (%)	2004 format shares (%)	2003 Format shares (%)
15. Dairy Farm International (FoodWorld)	Super/ Neighb: 100	Super/Neighb: 42, 100	Super/ Neighb: 100	Super/ Neighb: 100	Super/ Neighb: 100	Super/ Neighb: 100	Super/ Neighb: 100
16. Bharti/Wal-mart:	Hyper: 58; Neighb: 42	Neighb: 100	–	–	–	–	–
17. Heritage Foods	Neighb: 100	Neighb: 100	Neighb: 100	Neighb: 100	–	–	–
18. Wadhawan Retail(Spinach)	Neighb-Super: 100	Neighb-Super: 100	Neighb-Super: 100	Neighb-Super: 100	–	–	–
20. Tata – Trent/Tesco(Star Bazaar)	Hyper: 100	Hyper: 100	Hyper: 100	Hyper: 100	Hyper: 100	Hyper: 100	–
21. Big Apple	Neighb: 100	Neighb: 100	Neighb: 100	Neighb: 100	–	–	–
22. Indiabulls (Megastore, Mart; was Pyramid 2007 and before)	Hyper: 29; Super/ Neighb: 71	Hyper: 70; Super/Neighb: 30	Hyper: 68; Super/ Neighb: 32	Hyper: 76, Super/ Neighb: 24	Hyper: 75; Super/ Neighb: 25	Hyper: 83; Super/ Neighb: 17	Hyper: 89; Super/ Neighb: 11
23. ITC (ChoupalFresh)	Neighb: 100	Neighb: 100	Neighb: 100	–	–	–	–
24. Natures Basket (was Godrej)	Neighb: 100	Neighb:100	Neighb: 100	Neighb: 100	–	–	–
25. GNC	Neighb: 100	Neighb: 100	Neighb: 100	–	–	–	–
26. Radhakrishna: (Foodland Fresh) shut down March 2009	Neighb: 100	Neighb: 100	Neighb: 100	Neighb: 100			
Total retail of modern-private chains that sell food	Hyper: 52; Dept: 12; Super: 4; Neighb: 32; Total 100	Hyper: 46; Dept: 11; Super: 4; Neighb: 37 Conv: 1 Total 100	Hyper: 40; Dept: 11; Super: 5; Neighb: 43; Conv: 1; Total 100	Hyper: 43; Dept: 15; Super: 13; Neighb: 29; Conv: <1; Total 100	Hyper: 45; DS,15; Super: 16, Neighb: 24; Total 100	Hyper: 43; DS,16; Super: 18; Neighb: 23; Total 100	H,33; DS,15; Super: 22; Neighb: 29; Total 100

Notes: Hyper, hypermarket; Super, supermarket; Dept, department store; Neighb, neighborhood store; Conv, convenience store
Source: PlanetRetail

half a ton a day the year before (Singh and Singla, 2009). Our detailed data on different categories of food sales from PlanetRetail shed further light on this; here are some examples, showing the share of fruit and vegetable sales in total food sales in 2010:

(1) Reliance Fresh, 20 percent;
(2) Spencer's, 20 percent;
(3) Wal-mart cash & carry and Metro cash & carry, 18 percent;
(4) Food Bazaar, 21 percent;
(5) More, 24 percent;
(6) Nilgiris, 20 percent;
(7) 6Ten, 20 percent;
(8) Easy Day (Bharti), 18 percent;
(9) Heritage, 19 percent;
(10) Big Apple, 20 percent;
(11) Spinach, 18 percent; and
(12) Margin Free Market, 42 percent.

Contrast the above figures with the share of produce in supermarket food sales in Mexico that was as recently as 2000, around 1 percent (rising to 10-15 percent by 2006, after a produce "take off" in Mexican modern retail chains in the 2000s) (Reardon *et al.*, 2007). This is a relevant comparison because the share of fresh produce in food expenditures at the national level is about the same in Mexico as in India; it is also interesting to show India retail's "precocity," because Mexico is in the second wave of supermarket diffusion while India is only staring in the third wave.

4.4 "Early" penetration of second and third tier cities

In general, the patterns of spatial diffusion in India are similar to those found in other developing countries, such as shown in Latin America by Reardon and Berdegué (2002). But, again, there is precocity or telescoping of the stages and paths observed elsewhere, in India.

Modern-private retail in India has tended, as a broad generalization, to move from the region in which a chain starts, to other regions – in other words, there is a trend to "pan-India" diffusion.

On the one hand, in the first half of the 2000s as the regional chains grew (that later were partly or wholly acquired by the large chains), there were waves of spatial diffusion over cities within each region by the spreading of local and regional chains. This was partly driven by the fact that those small format, no-frills local stores, were accessible physically, culturally, and economically by the local consumers; their catchment areas were small, so they could function in smaller cities. Moreover, some of the chains, like Margin Free Market and Nilgiris, grew by franchising to local retailers in the smaller cities and towns. Also, own stores and franchise stores are needed in sufficient "critical mass" to make economical the regional DC that these chains built. For example, Bharti in the Punjab is spreading its small format stores into the Tier 2 and Tier 3 cities, and using its regional DC in Amritsar (perhaps benefitting in supply chain terms from its longer term agribusiness presence in the Punjab) to supply those stores.

On the other hand, the large chains have tended to move from large to smaller cities, quickly. They do this partly by greenfield investments, and partly by acquisitions of the small and medium chains that had already done the same but in their own regions, spreading over Tier 1 and Tier 2 and Tier 3 cities and sometimes towns in a given state or region. Acquisitions of local chains, however, make it easier for the large chains to get scarce real estate in prime locations (just as the medium and small chains had done in their acquisitions) and to take advantage of local knowledge and contacts with suppliers and customer bases. For example, Aditya Birla (with 642 "More" supermarkets in 101 cities in 2009) acquired regional chains like Trinethra after the latter's own spread over southern states, with many small-format stores peppered over tier 1-3 cities and even into towns (PlanetRetail, 2009).

4.5 "Early" penetration of food markets of lower middle class and working poor

Modern-private retail in India has tended, as a broad generalization to diffuse across neighborhoods, over consumer income classes; Minten *et al.* (2010) for example observed this via a survey in Delhi. While this happened eventually in other developing countries over the past two decades, it appears that the process is starting earlier and perhaps moving faster in India – that modern retailers in India have "early" spread beyond the upper income and the middle-middle income consumer groups into the lower middle and the working poor only within a few years of "take-off" in the mid 2000s.

There are some possible explanations for this. First, government and coop retail chains in the prior waves had accustomed the working poor to shop at chain stores. Moreover, private retail chains have acquired some coop and state chains (such as Spinach's purchase of a Mumbai cooperative chain with small stores in poor areas). Second, unlike in most of Latin America and east Asia, in India private retail chains have targeted from the start poorer urban consumers. This has been abetted by their early rollout of small-format discount stores. For example, Subhiksha started in 1999 with "no frills, discount" neighborhood stores, consciously located each 2 km to allow consumers without vehicles to walk daily to the stores. Later, Pantaloon (now called Future Group) rolled out the KB FPS, essentially a "hard discount" chain. Third, private retail chains in India have moved quickly to set up credit cards and loan services for clients, like Pantaloon's "Future Card" (PlanetRetail, 2007a). This appeals to lower income clients. Fourth, as we show in Minten *et al.* (2010) for Delhi, at least some of Indian modern retail is already charging lower prices than traditional retail for a number of key staple foods. Minten and Reardon (2008) show this is a common situation in other developing countries. It is surprising that this price advantage has already formed in India a few years after the main boom began.

4.6 "Early" spread into rural areas

Modern retail has eventually (mainly well after spreading over the various tiers of cities) spread into towns, even in rural areas, in various developing countries, such as in Latin America (Reardon and Berdegué, 2007), Central and eastern Europe (Dries *et al.*, 2004), South Africa (D'Haese and Van Huylenbroeck, 2005), Indonesia (Natawidjaja *et al.*, 2007), and others. They typically focus on staple and processed foods and commodity vegetables like carrots and cabbage; they tend to use small-format "hard discount" type chains.

India has a unique variant on this trend: it is the emergence of "RBHs". These are modern-private retail chains that combine retailing of non-food FMCG and food items (mainly processed foods and staples) to rural and small town consumers, with retailing of farm inputs (chemicals, seeds, fertilizers, equipment), and provision of various services, depending on the chain and outlet type (procurement of crops and milk, provision of farming technical assistance, selling of credit and insurance, and selling health services and medicines).

Chemical and agribusiness companies like Murugappa and Tata and DSCL Shriram have opened such chains, as have food-processing companies like ITC (Bell *et al.*, 2007; Narang and Singh, 2008; Farhoomand, 2008; PlanetRetail, 2007c; Chakravarty *et al.*, 2007). These chains opened mainly in the early 2000s (DSCL opened its first pilots in 2002/2003 selling inputs to sugar cane farmers supplying its mills) to mid 2000s (when ITC sold inputs to and bought wheat and soy from farmers to process into its leading flour brand).

Some of these chains spread quickly in the past several years: for example, by 2010, DSCL's Hariyali Kisaan Bazaar had 300 outlets with 85 centers and 215 smaller stores. Centers are large formats spread over two to three acres of land, including store, warehouse, and petrol pumps. The retail space is large relative to the rural context: about 7,000-10,000 square feet (the size of a small-medium supermarket). The stores are small formats with only a retail space of about 2,000-3,000 square feet (the size of a large convenience store or neighborhood store). The geographic spread of HKB is mostly in northern India, but is spreading into Andhra Pradesh. HKB outlets are spread over Uttar Pradesh (96), Punjab (32), Haryana (22), Rajasthan (28), Maharashtra (14), Uttar Pradesh (28), and Andhra Pradesh (5).

5. Conclusions

In this paper, we emphasized three surprises in the rise of modern food retail in India: first, that it has occurred since the 1960s with waves of government, coop, and then private retail; second, that the private retail wave has been extremely fast in particular in its second phase, in the past six years, when it grew at 49 percent per year on average, some five times faster than the fast growth being experienced in the GDP; third, that the rise of private retail chains has been unique or rare in its drivers (in its great majority by domestic capital, not foreign investment), and "early" (compared with the prior experience in other developing countries) in its penetration of the food markets of the poor, of small cities and even rural areas, of fresh product markets, and its use of diverse formats to help toward the above ends.

Recall that in the introduction we noted that there are three sets of policy issues related to Indian retail transformation hotly debated in India and with implications for international debate on retail and development. The first issue is what path is the diffusion taking, and at what speed, and with what unique characteristics that might imply that it will continue. That is the issue on which we focus in the present paper. The other two issues on which we have researched, but will only propose our findings to the literature in the near future, are what impacts modern retail diffusion is having "downstream" on consumers and traditional retail, and midstream and upstream on processors, wholesalers/logistics, and farmers.

Our findings on the first issue imply for the policy debate at the very least that modern retail has spread fast and looks slated to continue, as it varies in growth rates but trends upward, including "bouncing back" after recession. It is time even to predict that India will continue to experience a "supermarket revolution" similar to that of other developing countries, over the next several decades. It seems probable that modern retail will continue to spread into the food markets of the poor; if the Delhi survey results are found by research to be common in other cities, that could mean food security for the poor consumers due to cheaper food. Cheaper food could in turn help, as David Ricardo noted in the 1800s in Britain, to make non-food goods and services more competitive.

Moreover, the most heated debate related to retail at this very moment (mid 2011) is whether multi-brand retail FDI should be liberalized. We do not take a side in this debate. We simply note what our findings suggest: whether or not retail FDI is liberalized, modern retail diffusion looks on the path to continue, even at its rapid pace of several times GDP growth, for some time. The "drivers" on the demand and investment supply side do not look to diminish. FDI liberalization may accelerate it, would probably (by definition) multinationalize it, may increase the overall level of retail "development" by bringing more international experience and technologies to bear; it would probably (as it has in China and elsewhere) create more "procurement doors" for two way flows of imports of products, and exports of Indian agricultural goods.

Researchers focussed on food industry, agricultural economics, and agribusiness have a rich agenda before them to explore empirically, with rigorous surveys, the impacts on supply chains, and their actors of the emerging supermarket revolution in India.

Note

1. These issues have echoes in earlier debates in developing countries as well as the USA and western Europe. See Reardon and Hopkins (2006) for a review of these debates and the policy history, recent and longer.

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