

**Corporate Retail Outlets are Blessings in Disguise
for Unorganized Retail Outlets:
An Empirical Analysis in the Indian Context***

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Abstract

The objective of the present study is to answer the question whether the corporate organized retail outlets (ORO) have exerted any harmful effects on the small unorganized retail outlets (URO) in India. Answer to this question will facilitate us to gauge the impact of corporate FDI in retail on the survival of the small unorganized retail outlets, which is currently debated rigorously in India. Based on the primary survey data collected from the National Capital Region and Chennai between November 2008 and March 2010, the analysis in this study shows that the emergence of ORO did displace some URO, but increased employment in urban areas. The displaced URO, which opened businesses away from ORO have increased their profits. This indeed is a blessing in disguise for the small unorganized retail outlets. Thus, the total effects produced net social benefit in terms of income and employment generation in the concerned region.

Key words: Big shopping Malls, corporate organized retail outlets, small unorganized retail outlets, India.

JEL Classifications: L8, J2, and O5.

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Introduction

A strong economy, rising wealth levels, and the rapidly changing life styles and consumer aspirations of an ever-growing middle class are some major reasons for the organized retail boom in India. Retailing accounts for 14 to 15 percent of its GDP and the growth of real consumption in India has been robust, at about six per cent per annum during the last two decades. The Indian retail market is estimated to be about \$450 billion and one of the top five retail markets in the world by economic value (Mckinsey, 2010). Given these developments in the retail sector, the corporate organized retailers see great opportunity for growth in the retail sector, which has thus far been dominated by the unorganized operators.¹ There are studies in India and abroad examining the impact of the growth of corporate retailers, whether domestic or foreign, on unorganized small businesses. For example, in the case of India, the Navadanya Research Foundation for Science Technology and Ecology (NRFSTE) in Delhi through its study has argued that the entry of the corporate retails has a cascading impact on unorganized small retailers. The study has shown that small and petty shop owners, as well as fruit and vegetable vendors in the vicinity of big corporate retailers had suffered from a major fall in their income, and those unable to face the competition were forced to withdraw from the profession by closing down their shops (NRFSTE, 2008). On the other hand, a survey based research study conducted by the Indian Council on International Economic research (ICRIER) at the behest of the Government of India indicates price benefits to farmers, lower prices to consumers and almost no effect on the traditional retailers (Joseph et al., 2008).

Again a recently submitted Parliamentary Standing Committee report recommended, among other measures: “a blanket ban on domestic corporate heavyweights and foreign retailers from entering into retail trade in grocery, fruits and vegetables” (Government of India, 2008). Another equally important recommendation to the Government of India was to restrict domestic corporate heavyweights and foreign retailers from opening big shopping Malls for selling other consumer products. On the other hand, Kohli and Bhagwati (2011) have argued that corporate retailing would benefit small retailers and consumers and both small and large retailers can coexist in India without harming any groups. Recently in January 2013, Stiglitz in his lecture on ‘Redefining Capitalism,’ organized by the Asian Development Research

¹ The unorganized retail outlets refer to businesses run by a single owner with his family members and with few hired workers mainly known to the owner’s family.

Institute in Patna argued “India has a very large supply of entrepreneurs. It is exporting entrepreneurs to America and countries all over the world. Within the country too there is strong entrepreneurship. Moreover, retail technology was widely available. And one of the successes of India’s entrepreneurs is they know how to apply our technology” (The Hindu, 15 January, 2013). He also raised doubts that FDI in retailing can deliver any benefits to small businesses in India. Global studies on large scale retailing also have contradictory views (see for example, Dube, Eidlin and Lester, 2005; Aoyama, 2007; and Anon Higon and Vasilakos, 2008).

Nevertheless, on 7 December 2012, with the approval of the Parliament, the Government of India announced that India welcomes 51% foreign direct investment (FDI) in multi-brand retail sector and 100% FDI in single brand, subject to approvals by individual states. As a way of guaranteeing the benefits to small and medium businesses, the government has imposed two significant riders on foreign retailers. First, they will have to compulsorily source one-third of the products they sell from small and medium enterprises whose investments do not exceed \$1 million in total. Second, they will have to invest at least \$100 million, half of which has to go into backend infrastructure over three years. In the wake of these different arguments, more intensive studies using primary data are required for taking better policy decisions concerning both corporate organized and small unorganized retailers.

The central question in this paper is: whether corporate retailing, mainly from domestic sources, in India that started in 1995 has had any negative effects in terms of reduced sales, reduced profit, and employment loss on small unorganized retailing. Answers to these questions will be useful to gauge the impact of corporate FDI in retail on unorganized retail outlets, which is the on-going debate in India. It is in this context, that a pilot study as Phase I involving a primary survey and interviews were undertaken with the financial support from the Foundation for Advanced Studies on International Development (FASID) in Tokyo and logistics support by the Centre for Global Development Research (CGDR) in Noida from November 2008 to July 2009 in five cities in India--Delhi, Gurgaon, Noida, Bangalore, and Chennai (see Figure 1 for survey locations).

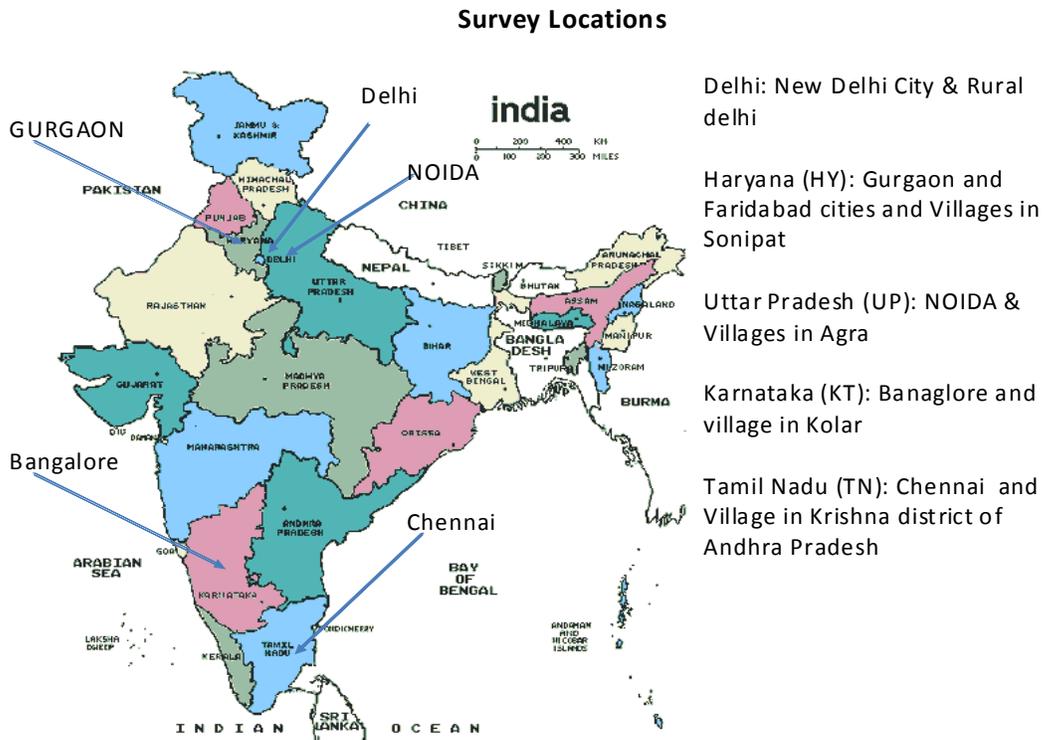


Figure 1: Locations of the Survey areas of the FASID-CGR study

The primary survey involved collecting data through questionnaires from the managers of big shopping Malls, corporate retailers, consumers, and those unorganized retailers who were in the vicinity of the corporate retailers. The analyses in the Phase I study showed that consumers gained in terms of low pricing when they shopped with corporate retailers.² Thus, from the consumers' perspective, expansion of organized retailing is preferred as different Malls and corporate retailers compete with each other and stabilize prices. Therefore, it can be safely argued that government must not interfere with the expansion of organized market and in fact promote it so that more Malls and corporate retail outlets are there to compete with each other. Corporate retailing and big shopping Malls did generate significant employment in urban areas. These results support the findings of the ICRIER study. On the contrary, small and unorganized retailers expressed a significant amount of dissatisfaction towards the growth of corporate retailing and the emergence of big shopping Malls, which in their views are contributing negatively to their survival due to the decline of customers and profits. The survey results clearly indicate that a number of small unorganized businesses had

² Results of the Phase I study were presented in a seminar at the Asian Development Bank Institute in Tokyo in August 2009, and in the Asian Economic Panel meeting held at the Keio University in Tokyo in October 2009. The revised version was published in Kalirajan, Drysdale and Singh (2010).

to close down their shops due to the arrival of big shopping Malls and organized retailers in their vicinity.

The objective of this paper is to answer the following questions that have emanated from the Phase I study:

- (a) How intensive was the effect of organized retailing as the reason for the displacement of small unorganized businesses?
- (b) What is their present source of income and how much is the difference from the previous source?
- (c) How many other persons were affected due to the closure of the establishment and what are they doing after the closure?

The following section details the Phase II study that was undertaken from August 2009 to March 2010 with the financial support from FASID and logistic support by CGDR to answer the above questions. Theoretical model, survey methodology and survey instruments are discussed. The next section through the evidence based approach identifies the characteristics of the surviving small businesses and the small businesses that were displaced due to the arrival of the organized retailing. The following section through the econometric analysis concentrates on the conditions of the closed-down URO. Here a three-step analysis is presented namely the condition of the URO before the arrival of the organized retailers and Malls; characteristics of the URO contributing to the closure of business; and condition of the closed-down URO after the displacement. A final section brings out the overall conclusions of this Phase II study.

Theoretical Model, Methodology and Instruments

The emergence of the big Malls and domestic and foreign corporate ORO, which are capital intensive, can be viewed as an economic situation of a country enjoying an exogenous increase in capital stock. Hence, drawing on the Rybczynski's theorem of international trade, the impact of the emergence of big Malls and corporate ORO on the output supply of small URO can easily be understood.

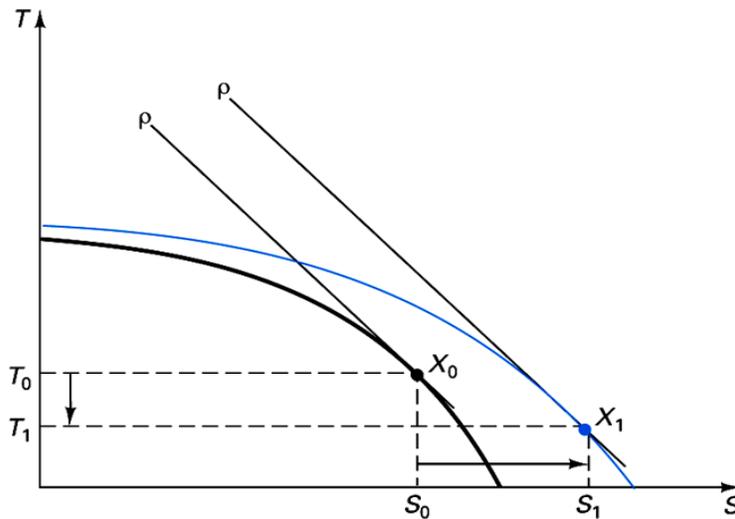


Figure 1. The impact of ORO on sales of URO

In the above diagram, S refers to the output of big Malls and corporate ORO, which is capital intensive and T refers to output of small URO. With the initial existing capital and labour, the economy produces at X_0 , which is the point of tangency of the production possibility frontier and the price line. The endowment of capital is increased due to the emergence of the corporate ORO. When the country gets an increase in capital with no change in labour, the country would move towards a new production possibility frontier with capital biased growth. What are the effects of this movement on product prices, and output levels across ORO and URO? Initially relative output prices are fixed and therefore, factor prices are fixed too. The new production point is X_1 , which is the point of tangency of the new production possibility frontier and the price line drawn parallel to the earlier prices line to show that there are no changes in prices. This without doubt indicates that the output S should increase and output T should decrease.

Now, to examine the impact of the growth in S on output prices, it is assumed that both goods supplied by ORO and URO are not inferior goods. With the shift in the production possibility frontier, it is rational to argue that national income would increase. This means demand for goods of both ORO and URO must increase. That is, the new equilibrium on the new production possibility frontier will not be at X_1 , but should lie in between the area on the new production possibility frontier created by the right angle triangle drawn at the point X_0 of the initial endowment production possibility frontier. The slope of this segment on the new

production possibility frontier is not as steep as the slope of the price line at X_0 . This implies that the relative price of goods of URO will be higher in the new equilibrium situation. Thus, theoretically one would expect that the growth of big Malls and corporate ORO would decrease the demand for outputs of small URO and that consumers would enjoy cheaper prices for goods of ORO.

Drawing on the location theory, it is rational to argue that Malls and ORO generally aim for locations in and around the more affluent suburbs of cities and towns. Those strategies would create an important 'locational' gap in the sense that less affluent suburban and rural areas would be left out as unprofitable for Malls and ORO operations (Wrigley and Coorah, 2003). Thus, the reduction in URO outputs and profit due to the emergence of ORO can be arrested by changing the location of the operation of the URO. This is feasible with the increasing trend of urbanization in many countries as shown in Figure 2 and India is no exception. In India, as in any other developing country, the cities are growing and urbanization is accelerating. Thus, the increasing population at the city boundaries provides ample opportunity to closed-down URO to increase their sales and income.

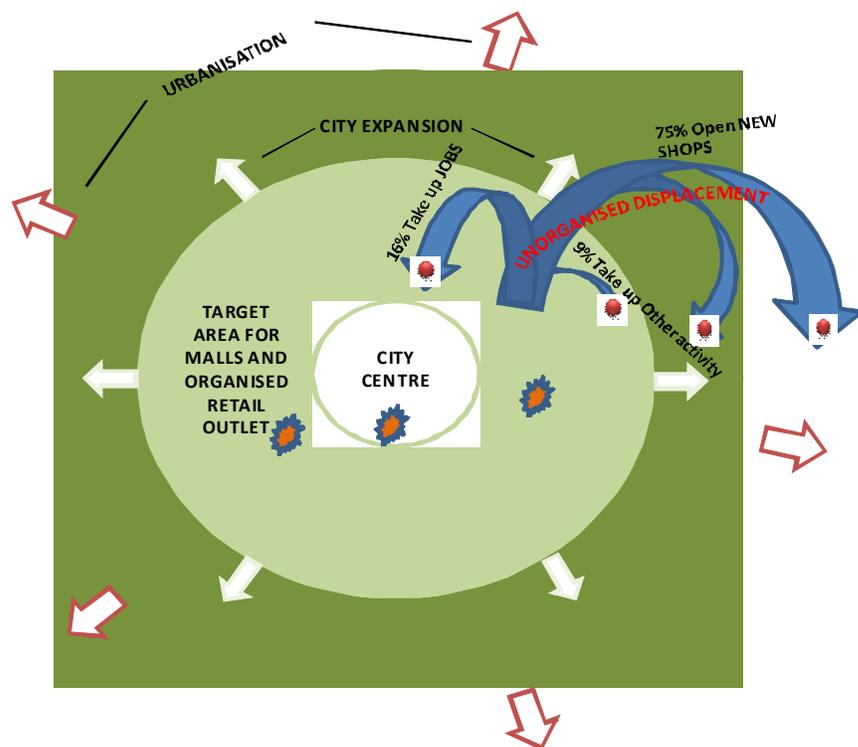


Figure 2. A model of feasible survival of unorganized retail outlets

The above location theory diagram can be summarized as follows:

City geography/demography can be divided into three categories: (1) Core city in and around city centre and its suburbs; (2) city expansion and creation of new suburbs; and (3) urbanization of rural population around core city and expanded plan. The residential population grows faster in the second and third sectors of the city due to lower rental, while rental in the core city accelerates faster due to the increasing occupation of office space and business centers. Malls and ORO look for localities, where high percentage of population is affluent and receptive to modern life style and at the same time is convenient to reach out. With the emergence of Malls and ORO, the URO lose customers and their margins go down. If such UOR are functioning through rented space, and are low in scale of operation, they are more adversely affected. Devoid of profits, these UOR close their businesses and move out of the market place. Nevertheless, the closed-down shops can reopen in areas far away from the influence of Malls and ORO and earn more profits. Such areas are typically the newly expanding areas of the city or nearby urban development. The Malls and ORO provide additional employment, which increases the city income and city expands further albeit with the help of other activities and such a business cycle repeats. This process would continue till equilibrium is reached and full employment is created.

The present study, which follows an evidence-based approach, will test the above theoretical predictions. Specifically, the approach followed in this study is to examine the validity of the current debate that the emergence of the ORO would displace URO. Thus, there are two sets of questions. The first set of questions is: whether the presence of ORO displaced URO from the location in which the latter was operating for many years? If so, how did these displaced URO differ in characteristics from the URO that continued operation in the same location even after the arrival of the ORO? Such identification can help the policymakers to minimize the harmful effects of ORO on URO through appropriate policy measures. The second set of questions is: whether all the displaced URO totally closed down their businesses as argued by the NRFSTE? If not, what did they do for living after the displacement? Answers to the above questions are primarily based on data obtained from surveys conducted in the locations where the ORO have recently opened business. However, secondary sources such as relevant web sites, and published reports including census 2001 have also been used to complement the survey results.

Thus, the objectives are to gauge the effect on income, employment and displacement due to the emergence of the ORO and to examine the current economic status of the displaced URO. It is a bench mark study for setting up the premise for an all India study at a later stage. Accordingly the study was confined to the NCR (Delhi, Noida, Gurgaon and Faridabad), and Chennai in south India.³

To complement the evidence-based approach, a simple econometric decision model with limited dependent variable is estimated with the survey data. Here, there are two types of decision problems for the URO: first whether to close the business in its initial location, where it operated for many years, and secondly, which alternative source of income the closed-down URO will choose from among the discrete alternatives, such as reopening the same business in another location, reopening in another location with different type of business, and taking-up employment in another business. The first decision problem is solved by estimating a bivariate probit model, while the second problem is solved by estimating a multivariate probit model.

Let the decision model of a small URO i at time t be given by:

$$I_{it}^* = Z_{it}\delta + w_{it} \quad (1)$$

where I_{it}^* is a variable that reflects an individual URO's preference, Z is a vector of determinants of business operation, δ is the corresponding vector of coefficients, and w is a normal random variable with mean zero and a unit variance. Variable I_{it}^* is unobservable, but a dummy variable I_{it} is observed and defined by:

$$I_{it} = 1 \text{ if } I_{it}^* \geq 0 \quad (\text{closed-down business}) \quad (2)$$

$$I_{it} = 0 \quad \text{otherwise} \quad (\text{survival without closing-down})$$

Equations (1) and (2) facilitate the working out of the probability of closing-down the URO:

$$\text{Prob}(I_{it} = 1) = \text{Prob}(w_{it} \geq -Z_{it}\delta) = \text{Prob}(w_{it} \leq Z_{it}\delta) \quad (3)$$

³ It may be mentioned that locating the displaced traders/ shopkeepers is not an easy task to perform. First of all personal visits had to be made to the shops operating in the area close to the ORO. Information is collected about the closed businesses and their owners and then, personal visits were made to interview such affected persons.

The probability of survival without closing-down the business is equal to $[1 - \text{Prob}(w_{it} \leq Z_{it}\delta)]$. Equations (1) and (2) constitute a simple probit model. Thus, the decision probability can be represented as a linear function of the determinants of business operation, which can be estimated using STATA 12.

With respect to the second decision problem, let there be n displaced URO. Let there be m options of alternative sources of income ($R_i, i=1,2,..m$) for the displaced URO. Let G_1, G_2, \dots, G_k refer to URO characteristics and other control variables. The m -linear probability equations are as follows:

$$R_{ij} = \alpha_i + \sum_{q=1}^k \beta_{ijq} G_{iq} + u_{ij} \quad i = 1,2,\dots,m \text{ and } j = 1,2,\dots,n \quad (4)$$

The variance-covariance matrix of u_{ij} is symmetric and the covariances are assumed to be non-zero with the restriction that $\text{var}(u_{1i}) = \dots = \text{var}(u_{mi}) = 1$ for the identification purposes. Under the assumption of joint normality of the error terms a 'm' variables multivariate probit model is estimated. The dependent variables in above equations indicate, whether the displaced URO chose a particular type of income source after closing-down the URO in the previous location. Thus, the dependent variable is represented by a dummy variable suggesting whether a particular displaced URO chose a particular type of income earning source.

In order to estimate the parameters under this setting, a log likelihood function is employed, which depends on the multivariate standard normal distribution function. The empirical framework involves estimating multivariate binary - dependent variable models. Drawing on Cappellari and Jenkins (2003), the multivariate probit model can be estimated using the method of simulated maximum likelihood, which is known as the Geweke- Hajivassiliou-Keane (GHK) estimator. The GHK estimator expresses the multivariate normal distribution function as the product of sequentially conditional univariate normal distribution functions that can be easily and accurately evaluated. In the case of multivariate normal limited dependent variable models, the simulated probabilities of the GHK simulator are unbiased and are bound within the (0,1) interval and is more efficient in terms of variance of the estimator of probabilities than other simulators like 'acceptance-rejection' or 'stern simulator'. It is consistent as the number of draws and the number of observations tends to infinity and thus satisfies the asymptotic property of maximum likelihood estimators (Cappellari and Jenkins, 2003).

Characteristics of the Surviving and Displaced URO before and after the arrival of ORO: Evidence based approach

Table 1 presents the number of businesses listed, number of reported closed shops and the number of respondents interviewed from closed businesses in the national capital region (NCR) and Chennai. In NCR (Delhi, Gurgaon, Noida and Ghaziabad) 2, 859 shops were listed in 51 localities. As per the information received from these shops, 973 shops were closed down in the area. Out of these, 198 (20.35 percent) traders were traced for interviews. In Chennai, 555 shops were listed in 26 localities and 70 (12.61 percent) were reported to be closed down. Out of 70 closed businesses, 50 addresses were located for interviews (Table 1).

Table 1: Number of shops listed, Number of shops reported to have closed and Number of respondents interviewed from the closed shops

Sl. No	State	Zone	Number of localities visited	Listing (No)	Closed shops			
					Number Reported	Number Interviewed	% Reported of total listed shops	% interviewed
1	Delhi	North	8	353	144	27	40.79	18.75
		South	10	484	111	44	22.93	39.64
		East	10	591	229	24	38.75	10.48
		West	12	661	223	46	33.89	20.63
		Center	2	90	24	4	26.67	16.67
		Total	42	2179	731	145	33.55	19.84
2	GURGAON	Total	3	108	116	8	107.41	6.9
3	FARIDABAD	Total	2	135	40	17	29.63	42.5
4	GHAZIABAD	Total	2	95	26	8	27.37	30.77
5	NOIDA	Total	2	345	60	20	17.39	33.33
6	NCR	Total	51	2859	973	198	34.03	20.35
7	CHENNAI	North	5	95	9	2	9.47	22.22
		South	9	208	23	21	11.06	91.3
		East	7	152	33	22	21.71	66.67
		West	4	70	5	5	7.14	100
		Center	1	30	0	0	0	0
		Total	26	555	70	50	12.61	71.43
8	All	Total	77	3417	1043	248	30.52	23.78

Two sets of questionnaires were structured and canvassed in order to obtain feedback from the surviving unorganized retail outlets and closed outlets. The first schedule is in the form of detailed listing covering surviving businesses, while the second schedule is used as the main instrument to interview the closed businesses. The main schedule is designed to cover three

types of information about the business of the closed retailers. This provides information to understand the reasons for the closure in more details rather than just confining only to the entry of the organized retail outlets (ORO) because the impact of the emergence of the ORO on URO should be channeled through various factors either directly or indirectly. To identify those factors inducing displacement, we have used both the “with and without” and also the “before and after” methodology for comparison of their education status; experience; and their business profiles for both displaced and surviving category of retailers. Such analysis will highlight the differences in business characteristics between the surviving and the displaced URO, which bear policy implications.

Education and Business experience

Table 2 shows that there is hardly any difference in educational status and business experience between the two groups of owners of small businesses. The average number of years of education is similar for both survivors and the displaced with a caveat that for Chennai it is marginally higher for the closed-down businesses. Concerning the business experience, it is equal in aggregate terms at 8 yrs, but there are some variations. The relationship between business experience and displacement can be both ways. Retailers with greater experience are likely to stay on in unfavorable circumstances as compared to relatively new entrants. This is noticed in Chennai, Gurgaon and Ghaziabad. On the contrary, in Noida and Faridabad the closing-down businesses had more experience than those who stayed on. This could be attributed to the fact that the movers had relatively greater business hope to anticipate in different locations.

Table 2: Education and Experience Profile of Unorganized Retailers: Survivors and Closed

Retailer Status	Education (yrs)		Business Experience (yrs)	
	Survivors	Closed	Survivors	Closed
Delhi	10	10	8	8
Gurgaon	9	9	9	6
Faridabad	9	9	7	13
Ghaziabad	10	11	7	6
Noida	10	9	6	10
Chennai	11	12	9	7
All	10	10	8	8

Floor area and Ownership Status of the unorganized retail outlets (URO)

Table 3 presents city-wise average floor area and ownership status and average rent of the tenants for both survivors and closed businesses⁴. The average floor area across six cities for the survivors is recorded at 136 square ft and for closed URO almost half its size at 78 sq. ft. The comparison of average floor area reveals that displaced retailers had shop area, which constituted only 57 percent as compared to that of survivors in aggregate terms and more so in Delhi where it is less than 50 percent. This is due to the fact that about 40 percent of the displaced is vendors with about 15 sq. ft floor area. In Chennai, however, the floor area for both survivors and closed URO is comparable of about 100 sq. ft. as there are no vendors in the sample due to different market structure. This reflects that impact on displaced is relatively high on the vendors and petty shops. Thus, size of operation is likely to be a factor in competing with the ORO.

**Table 3: City-wise Average Floor Area, Ownership Status and Average Rent (RS.):
Surviving and Closed URO**

Status	Floor Area(sq Ft)		Ownership status of Survivors (%)			Ownership status of Closed (%)			Average Rent of the tenants(Rs)	
	Survivors	Closed	Owners	Tenants	All	Owners	Tenants	All	Survivors	Closed
Delhi	147	69	89	11	100	23	77	100	637	2608
Gurgaon	103	58	91	9	100	25	75	100	486	2344
Faridabad	138	51	92	8	100	18	82	100	656	2700
Ghaziabad	116	87	97	3	100	25	75	100	316	2225
Noida	125	87	94	6	100	20	80	100	423	3218
Chennai	105	109	24	76	100	2	98	100	1553	2146
All	136	78	79	21	100	18	82	100	751	2549

Regarding the ownership status of the shops, it was found that 79 percent of the surviving URO were owners of the shops, whereas in the case of closed-down URO, 82 percent were tenants. In NCR cities, more than 90 percent of the survivors were owners of their retail outlets. In Chennai due to the well developed rental market 76 and 98 percent of survivors and displaced respectively were tenants. Clearly, with increasing rental such shops are always under the threat of closure. Their profits are likely to be thinner, which makes it difficult to survive the competition from the ORO. Even among the tenants, the average rent per month paid by the closed-down URO were much higher at Rs. 2, 549/- per month as against only Rs.751/- per month paid by the surviving URO. The rental differential for survivors and

⁴ The typical Indian retail shops are very small. Over 14 million outlets operate in the country and only 4% of them being larger than 500 sq ft (46 m²) in size. India has about 11 shop outlets for every 1000 people.

displaced was substantially more in NCR towns. However, this differential was relatively less in Chennai, where the average rent paid by survivors was Rs. 1, 553 and that by displaced was Rs. 2, 146. These figures reflect that rental was one of the key factors for the survival of URO. Thus, shops existing in relatively cheaper premises could survive without much hardship.

From the above discussion, it becomes evident that the closed-down URO were in a much disadvantageous position with respect to floor area, ownership status and rent paid by the tenants than the surviving URO. All these factors made difficult for the closed-down URO to survive mainly due to the decline in total sales and thereby in profits after the entry of the ORO. In other words, the closed-down URO could not sustain their profits that they earned before the entry of ORO due to the above reasons. How much change did take place in the average daily sales, and average monthly profits after the entry of the ORO?

Average daily sales of URO before and after the arrival of ORO

Table 4 presents average daily sales, average monthly profit and average monthly wages concerning the surviving and closed-down URO before the arrival of ORO.

Table 4: Average Daily Sales, Profit and Wages Before the Arrival of ORO and Percentage Difference from Survivors

Retailer Status	Average daily sales before the arrival of ORO and Percentage difference from Survivors			Average monthly profit before the arrival of ORO (RS.) and Percentage difference from Survivors			Average monthly wages before the arrival of ORO (RS.) and Percentage difference from Survivors		
	Survivors	Closed	Difference	Survivors	Closed	Difference	Survivors	Closed	Difference
State	8649	6512	33	14088	10386	36	3155	3154	0
Delhi	8649	6512	33	14088	10386	36	3155	3154	0
Gurgaon	5089	5904	-14	10325	12125	-15	3070	3500	-12
Faridabad	9349	7769	20	12930	10647	21	2885	2500	15
Ghaziabad	7218	5411	33	13668	8625	58	2425	2500	-3
Noida	7830	3461	126	14630	7800	88	2857	3250	-12
Chennai	24577	5242	369	15769	12100	30	2531	2029	25
All	11029	6041	83	14239	10540	35	2909	2725	7

Analysis of the average daily sales data show that the sales of the displaced URO prior to the entry of ORO were about 55 percent of the surviving URO. This is mainly due to the fact that in Chennai, there is about five times difference in sales of survivors compared to those of the displaced. Among the displaced, the daily sales of Rs 7,769 were reported to be the highest in Faridabad and the lowest recorded were in Noida that of Rs 3,461. On the other hand, among the survivors, the highest sales of Rs 24,577 were recorded in Chennai and the lowest sales of Rs 5,089 were reported in Gurgaon.

Table 5: Average Percentage Change in Daily Sales, Profit and Wages Concerning the Surviving and Closed Down but Relocated URO after the Arrival of ORO

Retailer Status	Average daily sales		Average monthly profit		Average monthly wages	
	Survivors	Closed and Relocated	Survivors	Closed and Relocated	Survivors	Closed and Relocated
Delhi	-14	2	-14	26	18	14
Gurgaon	-15	-61	-12	-32	7	3
Faridabad	-19	-29	-14	-14	31	20
Ghaziabad	-14	24	-8	97	30	4
Noida	-15	112	-13	52	7	2
Chennai	-23	45	-23	-5	12	39
All	-18	11	-15	16	21	19

After the entry of the ORO, on average, there has been a drop of 18 percent in the average sales of the survivors, whereas there has been an increase of 11 percent in sales of the closed-down but relocated UOR. Citywise analysis indicates that the survivors as expected have witnessed a drop in their sales in all the cities, as they are now competing with the larger ORO in their respective locations, whereas the displaced have recorded increased sales in Delhi, Ghaziabad, Noida and Chennai after their relocation at the new business sites with the exception of Gurgaon and Faridabad. This could be attributed to the fact that the displaced in the latter two cities had relocated themselves in adjoining rural areas, to survive the ORO's competition by lowering their operating costs; but in the process recorded lower sales due to firstly, agrarian nature of the commodities they sold, which were relatively abundantly available in the rural households and secondly, these regions had low monthly per capita expenditure (MPCE) as compared to their earlier locations.

Average monthly profits of URO before and after the arrival of ORO

Analysis of the average monthly profits show that on average the sales of the closed-down prior to the entry of ORO were 74 percent of the surviving URO. Among the displaced, the monthly profit of Rs 12, 125 was reported to be the highest in Faridabad and the lowest recorded was in Noida that of Rs 7, 800. On the other hand, among the survivors, the highest profit of Rs 15, 769 was recorded in Chennai and the lowest profit of Rs 10, 325 was reported in Gurgaon.

After the entry of the ORO, on average, there has been a drop of 15 percent in monthly profit for the survivors, whereas there has been an increase of 16 percent in the profit of the closed-down, but relocated URO (Table 5). Citywise analysis indicates that the survivors as expected have witnessed a drop in their profit in all the cities, as they are now competing with

the larger ORO in their respective locations, whereas the displaced have recorded increased profit in Delhi, Ghaziabad, Noida and Chennai after their relocation at new business sites. This result is in conformity with the argument of Kohli and Bhagwati (2011) that unorganized retailers may gain a larger share in a growing market, while at the same time this may not necessarily imply that organized retailers are not faring well.

Average monthly wages of URO before and after the arrival of ORO

To assess the impact of ORO on wages, we compare the average wages paid by the two categories of the URO to their employees. The figures suggest that the payout was about Rs. 100 per day by these URO before the entry of ORO. After the entry of the ORO, among both the categories of survivors and closed-down but relocated URO, the hike in wages had been about 20 percent across the sample cities.

Employment Loss

The assessment of employment loss among the surviving URO indicates that overall 75 persons had lost their jobs due to the entry of ORO. In Chennai, 136 persons have lost employment, whereas in other cities there was increase in employment. There is contrast in terms of the survival strategy adopted by the URO in NCR and Chennai to compete with the ORO. The stress is on cost reduction in Chennai, whereas in NCR it is on improving their service deliveries. In Chennai, the trend noticed was in terms of reduction in manpower, which had lead to the reduction in operating cost. But, the NCR region has witnessed increase in manpower; there was a reversal of the strategy adopted by the URO employing hired manpower. These outlets by hiring 61 additional workers have introduced home delivery services and also improved their counter services. In the displaced but relocated category, however, there is a clear trend of job loss. Overall, 14 people have lost jobs in the sample relocated URO. These outlets when displaced to the margins had to reduce their operating cost and hence resorted to reduced manpower in Chennai, Delhi and Noida. Sample relocated outlets in Gurgaon, Faridabad and Ghaziabad had earlier hired 1, 1, and 3 persons respectively, which remained unchanged in their new locations.

Thus, overall, the total number of workers hired by the sample surviving URO was 700 before the opening of ORO, which came down to 625, that is, declined by 10.71 percent. With respect to the closed but relocated URO, the total number of persons employed before the opening of ORO was 114, which came down to 100 in the new location, that is, a decline of 12.2 percent.

Table 6: City-wise status of lost employment

Retailer Status	Number of workers hired by the Surviving UOR			Number of workers hired by the closed but relocated UOR		
	Before	Current	Employment lost (numbers)	Before	Current Relocated	Employment lost (numbers)
Delhi	385	440	55	54	45	-9
Gurgaon	10	12	2	1	1	0
Faridabad	27	30	3	1	1	0
Ghaziabad	16	17	1	3	3	0
Noida	35	35	0	10	8	-2
Chennai	227	91	-136	45	42	-3
All	700	625	-75	114	100	-14

In summary, the above evidence based analysis shows that the output supply of UOR has reduced and the remuneration to labour (wages) has increased with the arrival of ORO, though with slight reduction in labour employment, which are in conformity with the theoretical predictions.

Characteristics of the Displaced URO before and after the arrival of ORO: Econometric approach

In order to strengthen the above findings that were based on the evidence based research, econometric analysis using the same survey data has been done in the following pages. At the outset, drawing on the above information, it is interesting to know how strong the influence of the emergence of the ORO on the closing-down of some URO. The survey results show that when the closed-down URO were asked how much they agreed to the statement - “you closed the previous shop due to the opening of outlets of Big companies.” The answers were bounded by fixing the degree of agreements as 100 percent, 75 percent, 50 percent and zero percent. Overall, 52 percent of the closed-down URO believed with 75% confidence that among the reasons for the closure of their previous shops, the emergence of ORO was the main reason and 48 percent responded with 50 % confidence (Table7).

Nevertheless, summarizing the information arranged in Tables 3 to 6, it can be argued that there are different channels through which the negative influence of the entry of the ORO was transmitted to the operation of the URO. This can be examined by estimating a bivariate probit model with and without the distinctions of cities. The results are presented in Table 8 and all the coefficients were statistically significant at least at the 5 percent level except in the case of age, which is significant at the 8 percent level. The magnitude of the Pseudo R² confirms that the selected model is reasonably appropriate to answer the research question

with the given data set. The statistically significant coefficients imply that the probability of closure was higher for URO having rented premises, larger number of employees and low level of daily sales. All these factors reduced the profitability more when new competition came in the form of ORO. In combination of these three main reasons, the probability of relocating the businesses increases with better education and longer experience. Further across cities, the chances of the closure in Faridabad, Ghaziabad, Noida, Delhi, and Gurgaon, are higher than in Chennai in the same order. Thus, it appears that besides the emergence of ORO, there were several other factors influencing the closure of URO.

Table 7: Distribution of the Displaced URO by agreement on the closing-down of the previous business location due to the opening of the ORO

Sl. No.	City	Number of displaced URO with 50% and 75% agreement that ORO are the reason		Percentage distribution		
		50%	75%	50%	75%	
				(%)	(%)	
1	Delhi	88	57	61	39	100
2	Gurgaon	6	2	75	25	100
3	Faridabad	16	1	94	6	100
4	Ghaziabad	1	7	13	88	100
5	Noida	5	15	25	75	100
6	Chennai	4	46	8	92	100
	All	120	128	48	52	100

Table 8: Probit Regression for explaining the closure of URO

URO_state (1= closed)	Model: Probit 1				Model: Probit 2			
	Coef.	Std. Err	t	P> t	Coef.	Std. Err	t	P> t
Monthly_rent	0.0002	0.0000	5.7200	0.0000	9.23E-05	4.16E-05	2.22	0.026
Age	0.0185	0.0105	1.7700	0.0770	0.0228	0.0108	2.1200	0.0340
edu_yrs	0.1483	0.0248	5.9700	0.0000	0.1679	0.0261	6.4300	0.0000
busi_exp_yrs	0.0339	0.0152	2.2300	0.0260	0.0327	0.0152	2.1500	0.0320
Rented (dummy)	1.5624	0.1514	10.3200	0.0000	1.9774	0.1716	11.5200	0.0000
num_emp_before	0.8519	0.1548	5.5000	0.0000	1.0367	0.1650	6.2800	0.0000
avg_dly_sales_before	-0.0002	0.0000	-13.4500	0.0000	-0.0001	0.0000	-10.3000	0.0000
Constant	-3.2342	0.3912	-8.2700	0.0000	-4.9100	0.5245	-9.3600	0.0000
Delhi					1.2215	0.2263	5.4000	0.0000
Gurgaon					1.1351	0.3578	3.1700	0.0020
Faridabad					1.7685	0.3305	5.3500	0.0000
Ghaziabad					1.4793	0.4093	3.6100	0.0000
Noida					1.4845	0.3371	4.4000	0.0000
Chennai					(omitted)			
Log Likelihood	-296.443				277.746			
LR chi2(7)	594.92				632.31			
Prob > chi2 (7) =	0				Prob > chi2(12)	0		
Log likelihood								
Pseudo R2 =	0.5009				0.5323			
Correctly Classified	89.88				90.86			

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Note: All the coefficients are statistically significant at least at the 5% level except in the case of the variable 'age', which is significant at the 8 percent level in Probit Model 1.

As the declining profitability was one of the important concerns of the closed-down URO, the interesting question is: whether the profitability of the closed-down URO improved in the new location. Based on the information collected in the survey, the variables influencing profitability were used as independent variables to explain the difference between profits before and after the relocation of URO due to the emergence of ORO. The heteroscedasticity corrected regression results are presented in Table 9 and all the coefficients are significant except the variable that shows ORO as the main reason (75% and above) for the closure. The results of Table 9 can be summarized (with the concerned variables in square brackets) as follows:

1. Profit was restored or increased for the displaced URO having owners with higher education levels. [OWN_EDU (Owners' education)].
2. Shops in rented premise are likely to reduce profits [RENTED (Whether new premise is rented (=1) or owned (=0))].
3. Higher rent means better location and this increases profitability [MON_RENT_NWSHP (monthly rent of rented shop)].
4. A larger shop carries more items and better choice for the consumers and therefore helps in increasing profits [SHP_ARA_OCC_NWSHP (Area occupied by the shop)].
5. URO, who answered with 75% confidence that ORO was the main reason for the closure of their businesses in the old location, did achieve significant difference in their profits before and after the relocation [SHP_CLS_RES_75 (Those reporting ORO as the main reason (75 per cent and above) for displacement)].

Table 9: Explaining the percentage change in profit at the new location with respect to profit in the old location before the arrival of ORO

	White heteroskedasticity-consistent OLS			
Number of observations	186			
Dependent Variable	DIFF_PROFIT			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	23.580	9.376	2.515	0.013
OWN_EDU	4.478	1.191	3.759	0.000
RENTED	-33.386	6.978	-4.784	0.000
MON_RENT_NWSHP	0.005	0.002	3.188	0.002
SHP_ARA_OCC_NWSHP	0.146	0.053	2.768	0.006
AVG_MON_PRFT_BEF	-0.006	0.001	-7.413	0.000
SHP_CLS_RES_75	7.693	4.352	1.768	0.079
R-squared	0.435165			
F-statistic	22.98441			
Prob(F-statistic)	0			

Note: 1. No adjustment was done for inflation.

2. All the coefficients are significant at the 1 percent level except the coefficient of SHP_CLS_RES_75, which is significant at the 8 percent level.

Combining the results of Tables 8 and 9, it may be argued that the emergence of ORO influenced the closure of some URO by reducing their profits. The results also show that the increase in profit enjoyed by the displaced URO in the new location seems to be location-specific in terms of shop space, varieties of products, and rent. It has been a blessing in disguise for those who had to shift to other localities due to the decline in sales and profits after the arrival of ORO. They were forced to explore new areas for opening their shops and have ultimately benefitted. It means the closed-down shop keepers have made their presence, where there was a demand for such shops and filled the gap, which can be inferred from the survey results. It is worth noting that these new locations are not entirely new, as they were there when the displaced URO were operating in their old locations. Further, during the survey period, there was no new infrastructure development in those areas, which would attract new businesses.

The survey revealed that not all the closed-down URO reopened the same business in different locations. The options chosen by the closed-down URO as an alternative source of their income may be classified into the following four categories: (a) continued the same business; (b) took up just agency; (c) joined the workforce (mainly blue-collar jobs); and (d) other low paid jobs such as rickshaw pulling. Table 10 shows the distribution of the closed-down URO in these above four categories of sources of income.

Table 10: Distribution of Movers by current activity status (numbers)

	City	Opened another shop in other locality (same business)	Taken up an agency	Joined workforce	Other low paid jobs	All
1	Delhi	99	2	29	15	145
2	Gurgaon	4		3	1	8
3	Faridabad	14		2	1	17
4	Ghaziabad	5		2	1	8
5	Noida	15		3	2	20
6	Chennai	50				50
	All	187	2	39	20	248
% distribution						
1	Delhi	68	1	20	10	100
2	Gurgaon	50		38	13	100
3	Faridabad	82		12	6	100
4	Ghaziabad	63		25	13	100
5	Noida	75		15	10	100
6	Chennai	100				100

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City	Opened another shop in other locality (same business)	Taken up an agency	Joined workforce	Other low paid jobs	All
All	75	1	16	8	100

Overall, 75 percent of the URO opened another shop with the same business in other localities, mostly in newer areas of the city or upcoming urbanized localities. In NCR region the percentage of displaced URO opening up new shop varied between 50% and 99% and 100% in Chennai. It is also found that in NCR 38 percent URO owners in Gurgaon, 25 percent in Ghaziabad, 20 percent in Delhi, 15 percent in Noida and 12 percent in Faridabad joined the workforce. In other words, they were totally displaced from retail business.

Table 11: Multivariate Probit for Explaining the Choice of Livelihood after the Closure of the existing business

Multivariate	probit			
Number of Observations	248			
Wald (chi2(15))	66.01			
Prob > chi2 (7) =	0			
Log Likelihood	-127.831			Prob
Current_status	Coef.	Std. Err	t	P> t
1: Base Outcome (Same business)				
2: Agency				
edu_yrs (years of education)	0.329	0.266	1.240	0.216
busi_exp_yrs (years of experiancen)	0.043	0.077	0.560	0.577
flr_ara_ro (Floor area of Shop)	-0.007	0.016	-0.460	0.649
avg_dly_sales_before (Average daily sales)	0.000	0.000	-0.050	0.958
num_emp_before (number of employees before)	0.460	1.080	0.430	0.670
_cons	-7.260	3.756	-1.930	0.053
3: Joining the Workforce				
edu_yrs	0.230	0.072	3.210	0.001
busi_exp_yrs	-0.022	0.032	-0.670	0.506
flr_ara_ro	-0.015	0.006	-2.620	0.009
avg_dly_sales_before	0.000	0.000	-1.540	0.125
num_emp_bef	-1.561	0.445	-3.510	0.000
_cons	-1.627	0.684	-2.380	0.017
4: Other				
edu_yrs	-0.162	0.094	-1.730	0.084
busi_exp_yrs	-0.128	0.051	-2.520	0.012
flr_ara_ro	0.001	0.007	0.130	0.897
avg_dly_sales_before	0.000	0.000	-1.460	0.144
num_emp_bef	-0.876	0.708	-1.240	0.215
_cons	1.517	0.814	1.860	0.062

In order to identify the reasons for taking up these different sources of income by the closed-down URO, a multivariate probit model was estimated using the survey data. The results are presented in Table 11 and diagnosis results indicate that the selected model is reasonably suitable to examine the research question. The results can be summarized as follows: (i) Joining the workforce to earn more or less regular income was preferred over continuing the same business in a different location by some, if they had higher education and were having smaller business with fewer employees and smaller area of floor earlier; and (ii) Other profession such as rickshaw pulling or other types of manual labour was taken up by those having lesser business experience and poor education level.

Conclusions and policy Recommendations

The central question examined in this study is: whether corporate organized retail outlets have exerted any harmful effects on the small unorganized retail outlets in India. Answers to the question will be useful to gauge the impact of corporate FDI in retail on the survival of the small unorganized retail outlets, which is the current debate in momentum in India. Primary data were collected from the managers of big shopping Malls, corporate retailers, consumers, and those unorganized retailers who were in the vicinity of the corporate retailers between November 2008 and March 2010 in NCR and Chennai. The foregoing survey results clearly indicate that the possibility of an adverse effect on the unorganized retailing due to the emergence of Malls and organized retail outlets in the form of reduced sales of URO can not be ruled out. The data indicates that closure is of the order of 30 percent. A sample of about 24 percent of such closed shops indicated that 75 percent of the closed shops reopened in areas away from the operation of the ORO and earned more profits. They earned more profit, which is on an average about 16 percent higher than they used to earn before the emergence of Malls and ORO in their old location. The increase in profit is as much as 104 percent over the profit being earned at the time of the closure. Therefore, closing-down and reopening in a suitable location away from the influence of ORO turned out to be beneficial to the concerned URO. Further, the emergence of Malls and ORO generated a significant number of employments in urban areas. Thus, the emergence of ORO and the moving of URO away from the operation of the ORO have produced net social benefit in terms of income and employment generation in the concerned region. This indeed is a blessing in disguise for the small unorganized retail outlets.

However, a McKinsey study (*Retail India*) argues that retail productivity in India is very low compared to international standards. When compared with the retail labour productivity in the United States, the labor productivity in Indian retail was only 6% of the United States productivity in 2010. When compared with Brazil, which is one of the BRICS countries, India's labour productivity in food retailing is only about one third of that of Brazil. The report further argues that a complete expansion of the Indian retail sector to levels and productivity similar to other emerging economies and developed economies would create over 50 million jobs in India. In order to achieve that result, both the Central and State governments along with the private sector needs to take steps to provide training and development of labour and management for higher retail productivity. Further, drawing on the 'production network' theme of international trade, through a proper economic policy framework, that creates and strengthens the link between ORO and URO, the survival of small and unorganized retailers may not be affected adversely. For example, certain activities such as packaging and delivery of goods to consumers in far away locations from the location of ORO can be subcontracted to URO. One of the conditions imposed by the Indian Government on the 51% FDI share in retail that the multinationals will have to compulsorily source one-third of the products they sell from small and medium enterprises whose investments do not exceed \$1 million in total is in line with the above argument. However, the contract between ORO and small and medium businesses should be completed before the ORO enters the retail market in India; if not, such conditions may not be effectively implemented.

References

- Anon Higon, D. and N.V. Vasilakos (2008). 'Productivity, Multinationals and knowledge Spillovers: Evidence from the UK retail sector', *MPRA Paper No.7181*; posted on 16 February.
- Aoyama, Y. (2007). "Oligopoly and the Structural Paradox of Retail TNCs: An Assessment of Carrefour and Wal-Mart in Japan." *Journal of Economic Geography*, 7 (July): 471-490.
- Birkin, M., G. Clarke, and M.P. Clarke (2002). *Retail Geography and Intelligent Network Planning*, Sydney: Wiley.
- Cappellari, L. and S.P. Jenkins (2003). "Multivariate Probit Regression using Simulated Maximum Likelihood", *Stata Journal*, 3(3): 278-294.
- Dube, A., B. Eidlin and B. Lester (2005). 'Impact of Wal-Mart Growth on Earnings throughout the Retail Sector in Urban and Rural Counties', *Institute of Industrial Relations Working Paper Series*, University of California, Berkeley.
- Joseph, M., N.Soundararajan, M. Gupta and S. Sahu (2008): "Impact of Organized Retailing on the Unorganized Sector", Indian Council for Research on International Economic Relations, New Delhi Working Papers 222, Indian Council for Research on International Economic Relations, New Delhi.
- Kalirajan, K., P. Drysdale and K. Singh (2010). "Impact of Big Shopping Malls and Retailers on Employment and Consumer Prices in India". *Journal of International Economics*, 1(2): 41-56.
- Kohli, R. and J. Bhagwati (2011). 'Organized Retailing in India: Issues and Outlook'. Columbia Program on Indian Economic Policies Working Paper No. 2011-1, School of International and Public Affairs, Columbia University.
- McKinsey Global Institute (2010), 'India's urban awakening: building inclusive cities, sustaining economic growth', April.
- NRFSTE (2008): *Corporate Hijack of Retail: Retail Dictatorship Vs Retail Democracy*, Navadanya Research Foundation for Science, Technology and Ecology, New Delhi, pp.1-53.
- Parliamentary Standing Committee on Commerce (2009). 'Foreign and domestic investment in retail sector', 90th Report, presented to Lok Sabha and the Rajya Sabha, June 8.
- Wrigley, N. and M. Lowe (2002). *Reading Retail: A Geographical Perspective on Retailing and Consumption Spaces*. London: Arnold.
- Wrigley, N. and A. Currah (2003). The stresses of retail internationalization: lessons from Royal Ahold's experience in Latin America, *International Review of Retail, Distribution and Consumer Research*, 13, pp. 221-243.