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Informal Street Trading Activity by Gujarati Migrants in Kolkata: Applicability of the Hotelling Rule and Reilly's Law

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Abstract:

The present study is an effort to explore the female dominated informal business of street trading activity by Gujarati migrants in West Bengal. In this, a two-fold transaction is observed in which exchanges of used clothes against new utensils with middle-class housewives is a barter activity while the re-selling of the used clothes to consumers of low-income group and petty traders is purely a monetary transaction. In other cases of re-selling or re-cycling activities which are commonly observed such as old newspapers or old furniture - buying and selling involve purely monetary transaction with two dispersed sets of individuals. However, the second-hand garments market dominated by the Gujarati migrants in West Bengal inherits both barter and monetary transactions in the two sides. The success of this female-dominated trading activity has explored their inherent business idea and skill successfully which has entitled them decision-making ability within the family. The present paper is a mere attempt to investigate whether the Harold Hotelling's "Principle of Minimum Differentiation" and William J. Reilly's "Law of Retail Gravitation" are able to explain the spatial clustering of the informal sales outlets of this particular street-trading activity in Kolkata. The micro-level field surveys, sampling design and data analysis of the study conducted are based upon the standard model approach to avoid spatial homogeneity.

Keywords: Informal sector, Cluster, Location, Mobility.

JEL Classification: E26, F02, R10, R12.

1. Introduction

Harold Hotelling's seminal paper "Stability in Competition", published in The Economic Journal in 1929, primarily addressed the locational problem faced by ice-cream vendors that contrive to cluster together in the center of a beach. The Central Place Theory, the bid rent theory¹, and the law of retail gravitation² are perhaps the most familiar theoretical contributions to the field of retail location, but equally important is Harold Hotelling's "Principle of Minimum Differentiation" which is a simple and easily remembered illustration of the agglomerative bent of similar retailing outlets. The department stores of Boulevard Haussmann in Paris, the outfitters of London's Oxford Street, the electrical retailers of Akihabara in Tokyo, and the theaters and cinemas of Broadway are some of the known examples of the phenomenon. However, the clustering of similar outlets is a truly universal trait, ranging from the hamburger alleys and automobile rows of American cities to the clusters of goldsmiths or banana sellers or embroidery workers or food stalls in the periodic markets of the developing nations. The present paper is an attempt to capture the applicability of Harold Hotelling's Rule and William J. Reilly's Law in case of a less explored area of a service cluster of Gujarati street-traders in Central Kolkata³.

2. Methodology of Analysis

The logical argumentation of the study is based upon literature support, case studies conducted and primary survey results. The survey process is exhaustive. The survey is based on qualitative purposive sampling with semi-structured questionnaire and indirect interview method. The micro-level field studies, sampling design and data analysis procedure are based upon the standard model approach. The implication is that the selection of any sampling window does not depend on data availability (or non-availability) and avoids spatial homogeneity. However, the spatial distribution of sample units is cross-sectional, given and known. Sometimes an ethnographic study has been approached due to data non-availability and data non-responses in the sample survey area under the purview of the study.

3. The Informal Street Trading Activity

The present paper is an effort to capture a specific informal business of Gujarati migrant women which is a unique mode of informal business who rely much upon their employment opportunities open in the market despite the fact that their employment opportunities

are non-covered with any form of formal social security arrangements. Though such exchange entitlement appears to be insufficient without any regular site of trading in one part of the business and in the other absence of well-defined terms and conditions of business, comprehensive social security and social protection measures, proper arrangements of abiding protective laws, and lack of government support to provide easy loans or any other business support.

This street-trading activity in second-hand garments is actually a recycling activity of a particular consumer items necessary in everyday life. This particular unique mode of street-trading activity in second-hand garments was initiated by the female migrants from Gujarat to West Bengal long before. By promotion of the buying spree of middle-class housewives, the Gujarati women have made successful exploration of their business skills by providing the middle-class housewives to get rid of rejected items and to obtain domestic utensils without much effort and monetary trading. The under-privileged low-income economically and socially deprived landless Gujarati female '*Banzara*' community migrated from the interior regions adjacent to Ahmedabad, Bhavnagar, Dwarka, Dhandhuka, Junagarh, Surendranagar and others in Gujarat to Bengal long years back (roughly 50-60 years ago) along with their families. At that time, Gujarat was not much developed. The community, being unable to arrange a mere sustenance of their life in their State of origin, migrated for a space of living and arrangements of sources of living in Bengal which was an advanced and industrially developed state at that time. The male members of these families started to collect honey from Sundarban areas of South 24 Paraganas in Bengal – they were called '*Madhukars*' or the honey collectors. After a time, the female members of the community started this unique street-trading activity which incorporated a new business idea in the city and became popularized among the middle-class income group. With successful exploration of street-trading businesses by the female folk, these male *Madhukars* left their occupation and started to assist their female family members in their businesses. With successful exploration of the business idea, the community started to initiate a regular and steady flow of "system" migration appearing from Gujarat to West Bengal by following a successful "network". The people from Gujarat who were unable to run their families from agricultural income and were ready to leave the low income generating stone cutting occupation due to hardship of toil at work formed the successful "network" of "system" migration.

To elaborate the functioning of the business, it is to refer that the recycling of used clothes from the one who has no further need to the other who cannot afford to buy high-priced new clothes remains the crux of the trading activity. The collection of second-hand garments, of the type of almost new, usable but not in a good condition, and somewhat worn-out but regularly usable, is usually carried out by small groups of Gujarati women, usually of 3-4 members in each group, in different parts of the State. They often carry out the task of collection of used clothes from the households along with their young children (including male) of their families in the group. The female traders collect garments during the day time, usually between 11 am to 4 pm, mostly in the afternoon, when women of middle-class households of the city and adjacent towns take their rest, hence may be approached to make conversations and bargaining by the traders. The collection of used second-hand clothes from the households appears in exchange of steel, plastic and metallic utensils, which are required in everyday domestic uses hence are attractive to the middle-class housewives, is mostly a barter exchange. The middle-class housewives prefer such a non-market transaction since it gives them the opportunity to trade their rejected garments of their family members to collect everyday useful utensils through a barter exchange without any cash or market transaction irrespective of much profit-loss calculations - the middle-class housewives are often not much efficient in such profit-loss calculations involved in market transactions. This task of collection is thus based upon the building up and maintenance of a long-term mutual familiarity and acquaintance between the two counter-parties appearing in a non-market inter-class barter transaction of used clothes versus fresh utensils without any fixed site of transaction.

Now what happens with these collected second-hand garments by the female Gujarati traders? The collected old clothes get an apparently new-look after processing through the treatment of washing-cleaning-ironing. The male members provide active assistance in this washing-cleaning-ironing activity. The Gujarati women bring the processed new-look clothes to the second-hand garments market for selling purposes. The male members of their families assist them in the task of transportation of the clothes to the market and also in market-selling. The major part of processed new-look clothes, therefore, appears in the second-hand garments market for further selling. Mostly the cotton garments which are not torn and can be retrieved for re-use are sold in the market. The buyers of the market are low-income individual consumers and petty traders of different parts of the State. The petty informal traders purchase second-hand garments from this market and sell them in different parts in West Bengal. They purchase bulk of clothes at a rate much cheaper than the individual consumers due to their already established contacts in the market.

The obsolete rotten clothes, which are not in a condition to sale, are supplied to industries of different locations, even to the industries of metropolitan cities of other States like Ghaziabad in Delhi, for the purpose of cleaning machines. Here, a formal-informal linkage appears there where informal trading market is supplying rotten clothes to the formal sector in the form of 'dusters' to clean its valuable raw materials. The expensive zari (mostly from *saris*) is collected by the Muslim zari workers of Chata, Nungi, Chetla and others in South Kolkata to use them as raw materials in Zari and Embroidery industry. Here, parts of the products sold in the informal second-hand garments market is entering into the informal production of Zari and Embroidery which is ready for sale as finished products in the formal market of Zari and Embroidery industry, incorporating a formal sale – informal production – informal sale linkage. A small part of fresh-looking processed clothes of the market sometimes is approached in the formal market for direct selling to the formal sector buyers. Here, another form of formal-informal market linkage is appearing in which informal trading market supplies consumer goods to the formal sector buyers.

The informal trading market of second-hand garments is scattered in different spaces throughout West Bengal. A significant market operates near the Girish Park metro railway station before Liberty cinema hall. This particular market operates at the off-hours,

between 2 am at the midnight to 7-9 am in the morning after which the road is to be cleared out for vehicles. About 1,800-2,000 sellers squat every day in this particular market at the open road of Central Avenue and the adjacent Adwaiyta Mallick Lane and display their products of processed second-hand garments for selling. The market also includes a few number of formal sector plastic and metallic utensils shops, mostly owned by big businessmen from the Marwari community, who sell the utensils to the second-hand garments traders of the market. The sell and purchase of utensils inherits another form of formal-informal linkage in which pre-dominance is occupied by the informal sector trading – it is about 95 per cent of the trading in the market which is occupied by the informal sector. However, the Girish Park second-hand garments market in Kolkata has gained in volume, recognition and connectivity in the past 3-4 decades. The market has led to the emergence of the smaller satellite markets of similar nature developed in small towns of Siliguri (North Bengal), Asansol (Bardhaman), Titagarh-Barackpore (North 24 Paraganas), Berhampore (Murshidabad) and many other places in West Bengal. Due to this, migrants from Rajasthan, Bihar, U.P. and Bangladesh and also the slum-dwellers of Kolkata, Howrah, Hooghly, Nadia, North and South 24 Paraganas and Murshidabad are joining the occupation. With a mere Rs. 500-1,000 and a social capital network, they are joining the trading activity. The high growth of this particular trading activity is making it a lucrative self-employment generating occupation to the younger age-group of the city slum-dwellers without much initial investment but sufficient to generate a mere basic sustenance of their life.

4. Compatibility of the Hotelling Rule and the Reilly's Law

In his classic paper, Hotelling was not directly concerned with any retail location. Indeed, he was trying to show how price stability is possible in case of two-firm competition with opposite reaction from its rival firms, and the Stackelbergian, where a dominant competitor acts as a price-leader and the others follow suits⁴. In case of this informal street-trading business in the above-mentioned location, the Stackelbergian two-firm competition does not appear – rather several retail outlets operate in a single location. The chance of any dominant competitor to appear as a price-leader does not appear. What happens here is that if an informal businessman in the competitive informal market makes any price-cut – others immediately follow suit, hence no price leadership appears there in the long-run.

Some related contributions appeared with Mills (1969, 1970), Muth (1969), and Evans (1973) who have attempted to cast the von Thunen framework (1826) to a broader aspect in which land and non-land production factor relationships are fixed⁵. The “law of retail gravitation” opines that consumers may be willing to travel long distances to reach large retail centers as long as they are large enough – which is true for the second-hand garment consumers of the Girish Park market. The law also assumes that consumers are indifferent between the actual cities which are also true in our case. In analogy with Newton's law of gravitation, the point of indifference in the William J. Reilly's (1931) “law of retail gravitation” is the point at which the attractiveness of the two retail centers, postulated to be proportional to their size and inversely proportional to the square of the distance between the two, becomes equal (Gaitan, Tol, Yetkiner; 2006). This particular postulation does not match with the case of informal street trading activity of Girish Park in this particular sense in which large size of the retail market with several outlets and little distance between any two outlets make the market attractive to the customers of second-hand garments.

The recent researches and debates in this area surround the short-term and long-term ramifications of these price conjectures or a combination of them. Then the intractable question appears: whether spatial pricing in competitive structure gives rise to higher or lower prices than under monopoly circumstances (Capozza & Van Order, 1977, 1978; Treble, 1980; Norman, 1981; Spulber, 1984; Watson, 1985; Anderson, 1987; Fik, 1988). In case of informal street trading activity of second-hand garments, spatial pricing in competitive structure actually lowers prices than under monopoly circumstances. The third and perhaps the most significant development of the principle in this regard involve the location of economic activities in spaces. However, Chamberlin (1933) challenged Hotelling's suggestion that a third seller would locate next to the first two in the center of the market. This Chamberlin's version works well for second-hand garments business in which the third seller attempts to locate to the first two. Rather, the postulation may be extended in which the fourth seller attempts to locate to the first three, the fifth seller attempts to locate to the first four, and so on. Now, the competitive environment of the market attempts to locate the business leaders in the center of the market and thrive others to the interiors. To do so, however, it actually deprives the centrally located supplier of its hinterland in the Chamberlin's sense by extracting the central location of the market from it and therefore initiates an unstable leap-frogging⁶ process in which each competitor would attempt to capture the prime exterior sites (Lerner & Singer, 1937; Eaton & Lipsey, 1975; Shaked, 1975, 1982; Okabe & Suzuki, 1987)⁷.

5. Conclusion

It is striking to refer that the exchanges of clothes against utensils is a barter activity while their re-selling is purely a monetary transaction. In other cases of re-selling or recycling activities such as old newspapers or furniture buying and selling involve two dispersed sets of individuals. However, the second-hand garments market dominated by the Gujarati migrants in West Bengal inherits barter and monetary transactions in the two sides. The success of the female dominated trading activity has explored their inherent business idea and skill successfully. The present paper is an attempt to make an exploration of the second-hand garments market in Kolkata in the light of Harold Hotelling's “Principle of Minimum Differentiation” and William J. Reilly's (1931) “law of retail gravitation” of the Location literature to explain this particular informal activity. The paper finds its own manifestation regarding the two in case of Gujarati migrants dominated informal street trading activity in the Kolkata market.

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7. End Notes

1. The Bid-Rent Model is associated primarily with Alonso (1964).
2. William J. Reilly's (1931) "law of retail gravitation" presumes that the geography of the area is flat without any rivers or mountains to alter a consumer's decision of where to travel to buy goods.
3. Related publication: Entitlement Facilitation by Gujarati Migrant Women Informal Street Traders in West Bengal, *Mahila Pratishtha: International Multidisciplinary Journal on Women and Gender Studies*, Vol. 1 Issue 2, Oct-Dec 2015, pp. 67-74.
4. Ref: Von Stackelberg, 1952; Losch, 1954; Greenhut & Ohta, 1975.
5. In the Bid-Rent Model, however, land and non-land production factors are assumed to be mutually substitutable inputs.
6. The concept of leap-frogging was originally used in the context of economic growth theories and industrial organization innovation studies with specific focus on competition among firms. It is based on Joseph Schumpeter's notion of "gales of creative destruction". The hypothesis proposes that companies holding monopolies based on incumbent technologies have less incentive to innovate than potential rivals, and therefore they eventually lose their technological leadership role when new radical technological innovations are adopted by new firms which are ready to take the risks. When the radical innovations eventually become the new technological paradigm, the newcomer companies start to leap-frog ahead of the former leading firms. The leap-frogging phenomenon in location economics literature conveys four stages. First, there is an initial phase in which all regions are roughly equal in size. Second, the process of agglomeration starts. Third, the further reduction in the transportation costs causes a long gradual decline. Fourth, when transport costs are virtually absent, manufacturing activity in all the regions becomes approximately of the same size.
7. Related publication: Whether Firms Are Leap-frogging: In the Bengal Zari & Embroidery Industry, *International Journal of Current Research*, Vol. 7 Issue 09 September 2015, pp. 20920-20295.

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