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- A study of social networks of informal sector workers in Udupi

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'The Links of Escape from Poverty?' - A study of social networks of informal sector workers in Udupi

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The Links of Escape from Poverty?

A study of social networks of informal sector workers in Udupi

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Abstract

This paper reports findings from the first phase of the study on social networks of road side food stalls in the town of Udupi-Manipal. Seeking the means to study urban poverty from a mechanism-based approach, the paper using economic sociology perspective, argues that entrepreneurs in the small town create heterogeneous firms to avoid conflict. Their economic actions are embedded in the social ties with family, friends, caste as well as relations established in the context of economic transactions over time. These networks show how the market is structured, and enables us to see economic prospects that entrepreneurs of these shop owners could gain within these structures.

Key words: Economic sociology, informal sector, social networks, urban poverty

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Introduction

It was an evening about 10.30 pm in Manipal town. First day of the fieldwork began with an informal gathering in one of the gudangadi.¹ Shop owner (Suresh Naik)² was happy to have a good 'catch' at the same time worried since he did not have seating facility for all of us (nine students who were engaged in fieldwork). As we were about to leave the shop realising his difficulty, Suresh Naik pacified us. He rushed to another gudangadi in close vicinity and brought additional chairs to seat all of us. As we were relishing the locally flavoured food, our academic discussions became intense. When it was about 11.30 pm, Suresh Naik politely said to the group leader (Bino Paul, second author of the paper) that usually he closed the shop at that time. As he was saying this, two customers came there demanding to serve them. Suresh Naik said it was time for him to close the shop for the day. His customers said amongst themselves that they were going to his rival gudangadi immediately if he was not serving them. This comment made Suresh Naik to change his mind, and to serve food for his late customers. As we observed these events in a single-man managed food-stall, we became increasingly convinced that social exchanges were important determinants of how economic outcome is determined. Exploring this embeddedness of social exchange with economic outcome is the key purpose of this paper.

Often, the performance of firms, or policy question on poverty are discussed in a dichotomous framework of treating 'economic' and 'social' as abstract dualities (Elson, 2004). Paradoxically, in non-western countries where poverty is often very dense, the economic actions are "carried out through relationships that have been conventionally cast as 'non-economic'" (Kabeer, 2004:1). This paper addresses this paradox to great extent. We set out to do this by examining multiple embeddedness (structural, cultural,

¹ Gudangadi is a kannada word. It means Petty Shop. This study is about gudangadis selling food.

² All the names of the food stalls and shop owners used in this paper are fictitious.

cognitive and political [Zukin and DiMaggio, 1990]) of some of the survival strategies. More particularly, we intend to examine how the independent businesses (one of the key survival mechanism by poor people in urban areas) may survive or die out. For this purpose, we adopt a mechanism-based understanding of poverty and social exchange.

The paper is structured in two sections. A theoretical exposition of the paper is carried out in the first section. Here, an attempt is made to understand a typology of poverty studies. Through this review of various poverty studies, the reason for adopting a mechanism-based approach of poverty research is argued. The section also provides a review of informal sector research, the subject matter of this paper. The section ends with the methodology adopted for the empirical investigation. Second section of the paper presents initial empirical findings from nine *gudangadis*. The findings provide insights in to the embedded relations existing in the sector.

Section I

Towards a Mechanism-based approach to poverty

Explaining why there were little sociological inquiries on poverty in India, Andre Beteille (2003) correctly pointed out that economists dominated poverty research in India, since development planning (where economists took the lead role) was the most intersecting scenario of academics and policy makers in the sphere of poverty. Though this statement is true, a review of literature on poverty studies show diversity of approaches. We will review these approaches to argue why a mechanism-based approach to poverty is urgently required to understand the complexity of poverty. While reviewing existing studies on poverty, we have brought these studies under five categories.

1) A good number of poverty studies are concerned about measurement. Earliest poverty studies in England began with this sort of inquiries at the end of 19th century by Joseph Rowntree and Charles Booth. Though a century has passed, apart from the agreement on the conceptual distinction on 'absolute' and 'relative' poverty (Townsend, 1979), there has not been much fruits for social theory from this tradition. These measurements can be classified generally into two: 1) calorie based approach depending on how much nutrition (and thus money required to buy this nutrition) an individual

requires to sustain, and 2) living standard scale (by considering other expenses required such as housing, education, clothes) to estimate how much is required for a person to live decent. Obviously, there is no consensus on what should be the economic threshold to consider an absolute or relative poverty. For example, Government of India estimates there about 30% of Indian people are poor (considering an individual needs Rs.360 per month for survival), while independent estimates point out that including non-calorie requirements would put this estimate to be Rs.840 and thus about 69% of Indians to be poor (Guruswami and Abraham, 2006). Though these studies have been extremely useful for policy makers and implementers, its theoretical basis has been rightly questioned (Sen, 1976).

2) Another approach goes beyond simple measurement of poverty, and tries to estimate pockets where poor people are living. The key argument behind this sort of inquiry can be summarised in Ravallion and Wodon's (1997) argument that poor areas rather than poor people should be targeted for poverty reduction. To identify these poor areas, geographers have worked along side social scientists to make use of the mixing mapping techniques with poverty measurement. Some of the mappings are unidimensional (e.g. see various studies done by World Food Programme to understand which geographical areas lack food and nutrition). Some other studies have gone beyond single dimension. For example, World Bank developed an approach of poverty mapping called 'small area estimation method' (Ghosh and Rao, 1994; Lanjouw, 2003, Elbers et al, 2003) whereby census data is combined with household survey data making use of the strength of each other. These studies map the areas where multiple deprivations exist (see recent study by Bangladesh Bureau of Statistics [2004]). Sometimes, administrative data (rate of crime, literacy, morality rate etc) is used for such mapping. This has been found to be more useful in countries where administrative data is accurate or closer to reality. In some sense, it is an extension of earlier approach of measuring poverty. But, obviously, they are taking cues from Townsend's approach of distinction of absolute and relative poverty and create an index for measuring poverty. "Multiple deprivation'.... is simply a combination of more specific forms of deprivation, which themselves can be more or less directly measurable" (Noble et al, 2004: 11). This approach has been useful to understand excluded areas from development, and thus helping policy makers and government for increased attention to vulnerable areas. Weakness of this approach is its inability to account for the processes of poverty.

A third type of approach, dissatisfied with impersonalising the stark reality of poverty, argues for purely qualitative approach, which could appreciate subjective experience of poverty. One good example is the *Voices of the poor study* by World Bank. These approaches make use of participatory techniques, in-depth interviews and sometimes observation to descriptively report the experiences of the poverty.

A fourth approach is mostly by the students of political science and sociology. Sociologists have been keen on 'inequality' rather than poverty, and have extensively used the theory of social stratification to study this (Beteille, 2003). Some studies in this direction included a political analysis. Often, they adopt a political economy perspective and employs rigorous interpretative methods as their chief analytical tool. Along with interpretative tradition, measurement has also been important in this genre of studies.

A fifth set of poverty research has focussed on causal modelling of various aspects associated with poverty. Causal theories linking economic growth, education, health, labour market participation, access to public provisions, mobility and various other aspects has been linked to poverty. The overarching argument behind this sort of causal modelling is that a phenomenon should be (or can be) explained using various environmental and individual determinants (Coleman, 1986). But, this 'isomorphism between statistical and theoretical models' (Hedstrom and Swedberg, 1998: 17) have negatively influenced the understanding of poverty, and left social scientists with little (or no) insights.³ Besides, *social* nature of data itself is often down played in most of the

³ This approach of linking statistical and theoretical tools has plagued all the disciplines of social sciences. It is worth quoting Mirowski (1991) reflecting on the limitation of the quantification in the economics (p 155): "Quantification is itself not an invariant in human history, even within the more limited subset of market organized structures. Prices in modern markets obviously conform to specific algebraic structures. Prices in modern markets obviously conform to specific algebraic structures. Prices in modern markets of of completeness, reflexivity, transitivity, and so on upon preference structures); rather, they are provisional invariances imposed upon the motley variety of human perception by various conventions and social structures... If this be the case, then the argument becomes stronger that the mathematization of economic discourse should not be traced to natural quantification of commodities, but rather should be explained empirically by changing social perceptions of

casual modelling. Though various studies have shown (e.g. Hirway, 2003) measurement of poverty to be a political activity, figures arrived through these political processes are often treated as sacred relics. Fergusson (1994: 41) has rightly criticised such tendency as follows: "In "development" discourse, the fact that there are no statistics available is no excuse for not presenting statistics, and even made-up numbers are better than none at all".

Review of these five types of studies reveals the gross neglect towards the processes or mechanisms that create or reduce poverty. This neglect, as noticed in the introduction, is due to dichotomy of 'economy' and 'social'. Where there have been attempts to bring together these artificial dichotomy, through qualitative research, often they are descriptive. This study, trying to understand various processes of poverty, takes the position that that one needs to go beyond pure description (or merely interpretation of this descriptive data). At the same time, social science needs to be humble enough to accept that overarching theories about poverty can not be established. This middle-way between description and causal modelling is the hallmark of mechanism-based approach to poverty. But, are we losing something by not engaging into causal modelling? Or, what is the advantage of mechanism-based approach over causal modelling approach? Jon Elster (1989) has argued the advantage of mechanism very clearly: "the laws, even if genuinely causal, might be pre-empted by other mechanisms" (pp.6-7). In another context he elaborates the advantage of mechanism-based approach as:

"Understanding the details of the causal story reduces the risk of spurious explanations....the move from theory to mechanism is from "If A, then always B" to "If A, then sometimes B". In this perspective, mechanisms are good only because they enable us to explain when generalizations break down" (1998: p. 49).

Elster's key point, as the title of his seminal book – *Nuts and Bolts of Social Sciences* - indicates, is moving towards detailed observation and gaining fine-grained knowledge of the processes.⁴ This fine-graining does not take place in causal modelling. So, what are these mechanisms?

the symmetries and invariances read into market activities through the instrumentality of social institutions."

⁴ See Jeffery Sach's (2005) suggestion on clinical approach to deal with poverty and economy (Chapter 4, *The End of Poverty*). One of the key points of Sachs is to have differential diagnosis while studying a

Mechanisms can be defined as "frequently occurring and easily recognizable causal patterns that are triggered under generally unknown conditions or with indeterminate consequences" (Elster, 1998: 45). In a different context, Elster unbundled this definition in a different way: "A causal mechanism has a finite number of links. Each link will have to be described by a general law, and in that sense by a 'black box' about whose internal gears and wheels we remain ignorant" (1989: 7).

Hedstrom and Swedberg (1998) has created a typology of mechanisms by reviewing various studies. 1) Situational mechanism, where individual actor responds to a macro situation (macro level), 2) action-formation mechanism, where by individual interiorises a particular strategy (micro level) and 3) transformational mechanism, whereby one individual's action and interaction generates (transforms) the macro level scenario. Nuances of this theory of action could be found across disciplinary backgrounds. In, sociological tradition theoretical proponents of Habermas [*communicative action*], Bourdieu [*theory of practice*], Giddens [*structuration theory*] are very close to mechanism-based approach.⁵ What is common for all these theorists is their movement away from grand theories to middle-range theories. In economic discipline, Evolutionary economics approach of modeling the complexity is also close to mechanism-based understanding (Hodgson, 1992). It is not that, in neo-classical or positivist tradition there are no formulations of mechanism-based inquiry. We will examine this in the next section, where the informal sector economy is analysed in detail.

Informal sector and social exchanges

The question of what is informal economy is beyond the scope of this paper.⁶ But, already booming number of research on this sector has shown almost with certainty that about 87% of Indian labour force works in informal economy, and contributes about 60 per cent of GDP (Sinha, 2005). NSS 55th round, which focussed on non-agricultural types

particular issue. This exactly is the point of second quote from Elster (1998) above. However, Sach's arguments are not based on theoretical foundations, rather his life-long experience and dissatisfaction with use of econometric approaches in development intervention.

⁵ See van den Berg (1998) for a comparative appraisal of the key concepts of these theorists.

⁶ See Harriss-White (2003) for detailed discussion on what constitutes informal economy.

of informal sector, have enabled to estimate the extent of the issue at national level (see Table 1).

Insert Table 1 (Appendix I)

Sastry's (2005) study based on NSS data has shown that informal sector employment is clearly associated with poverty.⁷ One of the characteristics that make this poverty connection is that by the very definition of 'informal' employment they are excluded from social protection or other formal risk management strategies (Kannan, 2004). As a result, they require various networks to achieve these requirements. Apart from this, the nature of firm itself is based on various social exchanges. This requires a detailed examination of existing literature.

While exploring what explain the existence of a firm, Coase (1937) says firm arises out of the need of substituting many a short-term contracts by a few long-term contracts. Quiet importantly, by saying that Coase questions dual nature of co-ordination found in neo-classical economic models. In fact, the received view of neo-classical economics has two mechanisms, which co-ordinate transaction. First, the price mechanism; second, the entrepreneur. However, according to Coase, dual role is not sufficient to explain existence of firm and its size. And he shows that there are costs involved in using price mechanism, search cost (finding suitable prices) and negotiation cost. "A firm therefore consists of relationships which comes into existence when direction of resources is dependent on entrepreneur" (Coase, 1937:391). Supposing an entrepreneur by organising different factors of production is able to produce at lesser cost than what it would have been done by using price mechanism, as observed by Coase, firm with all its hierarchies and power is a better arrangement than price-mechanism. Although power and hierarchies are implicit in co-ordination of an economic system, Coase and his lineage gave inadequate attention to complexities that arises from characteristics such as embeddedness.

⁷ In the sector of hotels and restaurant (which is the focus of the case study of this paper), all the non-public sector units are considered informal sector.

It is important to note that evolutionary economists, Nelson and Winter (1982), Teece et al (2000), Nonaka and Takeuchi (1995) and Levinthal (2000) by highlighting the role of organisational routine, strategic management and knowledge management have explored different characteristics of a complex firm. More over, a complex firm is very distinct from formal model of representative firm articulated by Marshall (1890) and refined variant modelled by Coase. A common thread that ties evolutionary economic literature is the agreement/consensus that the link between networks in economy and degree of complexity.

Another deviation that questions basic neo-classical growth model is quite reflected in recent literature on the recognition that knowledge is not just public or quasipublic good. But it is rather a process consisting of characteristics such as codification, tacitness and embeddedness (Cowan et al, 2001; Langlois, 2001). However, withstanding these contemporary thoughts neo-classical literature as it appears has not taken many insights from evolutionary economics. Perhaps any integration approach towards the consciousness of complexity is viewed as sacrifice of rigour. It is here we need an interdisciplinary approach. Sociological tradition has developed rigorous methods to appreciate complexity. It is important to understand how the concept of 'exchange' is differently understood when a purely 'economic' approach is adopted and when an 'economic sociology' approach is taken.

Uzzi (1997) has clarified this. In neo-classical economics, he says, "In the idealtype atomistic market, exchange partners are linked by arm's-length ties. Self-interest motivates action, and actors regularly switch to new buyers and sellers to take advantage of new entrants or avoid dependence. The exchange itself is limited to price data, which supposedly distil all the information needed to make efficient decision..." (p. 36). On the other hand, basic difference in economic sociology approach is that "embeddedness creates economic opportunities that are difficult to replicate via markets, contracts, or vertical integration" (p.37). Taking cues from this distinction, Uzzi developed a methodology to distinguish arms length and embedded relations. We bring his distinction (Table 2) in a table below here.

Insert Table 2 (Appendix I)

Thus, from the perspective of the discipline of economic sociology we could say that every economic action is a social action (Swedberg, 2003). However, the view that economic action is embedded in social structure has two contrasting sides. On the one side, it holds that social structure positively impacts economic outcome, and on the other hand it can be pointed out that social structure are sources of inefficiencies that affect the transaction (Roy, 2005). As shown by empirical studies trust and personal ties have significant impact on transactions since these factors reduce uncertainty and monitoring cost. Moreover, these ties are quiet helpful in shaping entrepreneurial heuristics. In many instances entrepreneurs instead of maximizing the profit rather aims to adapt to the condition, environment. One of the key questions that we were interested in this study was how the interactions were structured in heterogeneous society like that of urban India?

Methodology

Udupi is a small town is coastal Karnataka. Its population is 1.13 lakh. City is spread in a continuum of approximately five kilometres between Udupi city and Manipal education institutions. In the city *gudangadis* are clustered in 15 locations. Each cluster has 2-5 shops. In the first phase of this multi-phase research, we have covered at least one shop from important clusters. Table 3 presents the nature of the shops we have collected information so far. These shops have a turn over of Rs.500-3000 per day. The size of the shops also varies (sitting capacity of 5-30 customers). This paper is based on data collected till the end of the first phase. The study is in progress and a year long fieldwork is anticipated before completing the study. We are also interested to make this study a longitudinal one to understand the mortality of the firm, and how 'constructive destruction' (Schumpeter, 1942) takes place. Second author of this paper and Ramesh V. (research assistant) are the field investigators in this project. In each shop we collect information about various networks by which the firm comes to exist. In this paper we are reporting the findings of the information based on observation and open ended

questions conducted with shop-owners. This initial database reveals important embedded relations, and complexity of the firm, implying how social exchanges may determine economic outcome.

Insert Table 3 (Appendix I)

The study is in progress. In the next stage, semi-structured interview with shopowners, customers, suppliers, political organisations that support *gudangadis* etc. are planned to understand reciprocity, trust and various other components of how embedded ties work in the network. The study intends to cover all the *gudangadis* and associated nodes in Udupi town if the financial support sustains. At this stage only ethnographic information is collected to understand the emergent concepts after the grounded theory model. A survey covering all the shops and nodes are anticipated.

Section II The ties that move an enterprise

Based on our fieldwork, we have identified nine nodes which constitute the *gudangadi* economy. These nodes include Customers, Family, Friends, Grocery Shop, *Gudangadi Vyparasthra Sangha*⁸ (Food Shop Association, henceforth called FSA), Other Suppliers, Municipality, Commercial/Cooperative Bank and Money Lender. Figure 1 illustrates the *gudangadi* economy and its transaction system. The tie between *gudangadi* and these nodes vary in strength. In figure 1, darkness of the tie implies strength of the link between *gudangadi* and the node.

⁸ Vyparasthra Sangha is a kannada word. It means merchant association.

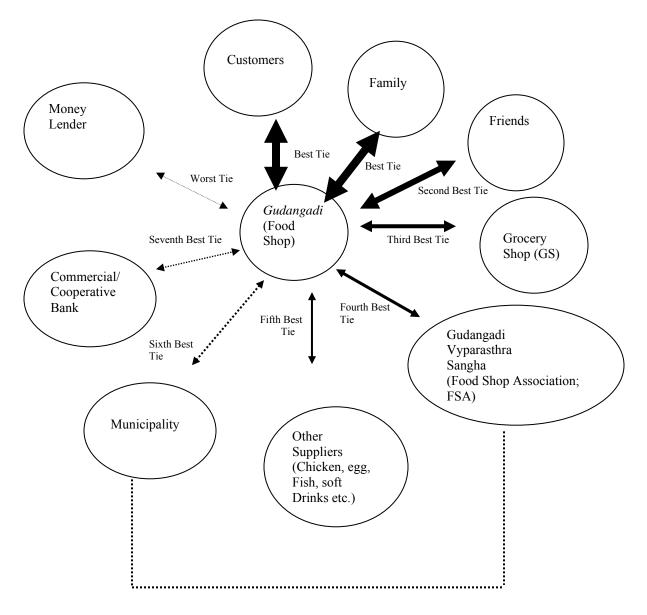


Figure 1: Gudangadi Economy and System of Exchanges

Best Ties

Tie between Gudangadi & Customers

Each gudangadi has distinct mix of customers. Quite interestingly, neighbouring shops, though similar in the scale of operation and product, cater to different segments of market. While university students account for more than two third

of customers for shop X, shop Y in the neighbourhood has major proportion customers from non student population. Shop Y in our case is three years old while X is just three months old.

What explains this arrangement? When we had put this question to shop owners, an answer that repeatedly came was "Let others also survive". What emerges here is that entrepreneur (shop owner) is not paranoid of neighbour's existence nor is unduly concerned about the new entrant. While exploring further about the phenomenon of 'distinct market segments in the neighbourhood', we found all of the shops give importance to customer relation. Barring rare events of cheating 100 or 1000 rupees, across the shops relationship is quite stable and sustain throughout the stay of customer in the region.

Another integrating feature is shops, barring one case, ignore opportunity cost of time if the customers spend long time just chatting. In fact, shops often act as a place of information exchange between customers (Table 4). One noteworthy instance is one migrant worker, called '*Bijapuri cooli*'⁹, spends one hour every day in the shop and also spends one eighth of his earning. He earns maximum rupees 3000 per month. The same customer revealed that he met most of the other Bijapuri coolis in the particular *gudangadi*. From Table 4, we can also see that product mix of the shop was tailored to meet the taste of the particular social group.¹⁰

Insert Table 4 (Appendix I)

⁹ Migrant workers from northern Karnataka districts bordering Another Pradesh is known as '*Bijapuri coolies*" in Udupi and Manipal.

¹⁰ This social nearness, rather than geographical nearness experienced by various nodes in the network has been succinctly put by Granovetter (1978) as follows: "Suppose you are in an unfamiliar town and enter an unknown restaurant on Saturday evening at seven o'clock. Whether or not you decide to take a meal there will depen on part on how many others have also decided to do so. If the place is nearly empty, it is probably a bad sign –without some minimal number of diners, one would probably try another place" (pp 1438-9).

Instead of correlating this relationship with consumer sovereignty, it is more appropriate to trace the nature of reciprocity in the tie between shop and customer. There are instances of tolerance and cooperation between two parties. In one shop, the price of noon meal varies with the price of fish.¹¹ Interestingly, shop keeper has kept a margin of two rupees to absorb the shock due to supply fluctuations in the market (Table 5). In this shop, the price of lunch varies from 15-18 Rupees depending upon the price of fish in Udupi fish market (shop 3). According to him, customers tolerate 'shock absorption'. He has been practicing this since shop's inception.

Insert Table 5 (Appendix I)

On the other hand, there are also instances of customers resisting price rise citing 'Why you charge more... No fan... No better facilities... we will seek another shop'. However, the minor resistance gives way to cooperation when customers understand the change in price is due to exogenous factors such as fuel price, inflation and so on. The type of phenomenon we have described is a temporary one while the cooperation seems to be the general trend. During our field visit, we noticed some of the shops although there is no practice of customizing products to individual needs provide new products on prior request. This clearly shows how flexible a reciprocal tie is.

Tie between Gudangadi and Family

Family is the backbone of *gugangadis*. Often, the sustenance of family greatly relies on the income from *gudangadi*, and therefore, and we observed tie between shop and family works in a variety of ways. It can add value to shop by providing inputs such as land, labour, organization, capital and knowledge. But, the family can affect its operation too. In one shop while interacting with the shop owner he said "If family needs my presence, I will do it even at the cost of my business. In such circumstances, I prefer to close my shop for a day or two." But this is not a general phenomenon. In this particular case, shop owner does not have any other male adult person in the family, and

¹¹ The shop provides rice and fish. Fish is of two types viz. sardine and mackerel.

he has the dual role of running both the shop and household. However, there are shops run with strong family support. In one shop, apart from the owner, his brother and relative also work. For this shop, a family emergency has no immediate impact on shop's operations. We noticed that one shop is run by husband, wife and children.¹² It appears that wife enjoys nearly equal right to decision making.

Often these shops provide opportunities for exchange of knowledge within the family. For instance, a shop owner, who has 18 years experience in Mumbai in different roles such as cleaner, waiter, cook, street vendor, is using his younger brother as an aid, and he provides tips of the trade. Another interesting case is about how mother and wife, by preparing fish masala¹³ for daily, add value.

Recent enforcement of child labour abolition has made family's role quite indispensable in running the shop profitably. It is important to note that child labour was a source of cheap labour to these shops. We came across a shop owner lamenting "I do one man show. No one to help me... No labour... This is my big botheration." This shop owner has no family support in running the shop since his wife has to take care of school going children.

It is in this context how social controls over labour could be easily exercised when relatives and family members are employed, compared with waged labourers. A waged labourer may learn the skills and start a shop of his own, thus discontinuing the manpower.

Second Best Tie

Tie between Gudangadi & Friends

All gudangadi with whom we interacted rely on friends when they are in need of money (Table 5, Appendix I). According to them, raising money through friends is an attractive option since money from friends carries no interest. It appears that the transaction carrying zero interest is a part of the reciprocal relations between friends. We have no further information about the intensity of reciprocation existing between friends since we have not met any shop owners' friends. Although an important benefit from

¹² After their school hours, children help their parents.

¹³ Mix of ingredients such as chilly, turmeric, and other spices.

such a tie is quite apparent we are uncertain about the costs stemming from such a tie. As far as these enterprises are concerned, the next best alternative to this arrangement is borrowing money from formal sources such as commercial/cooperative banks. There is a consensual view that money lender is the worst option for generating financial resources. The cost of not having sources such as friends and commercial/cooperative banks is very high. During our filed study we found one instance of friends aiding *gudangadi* to decide price in accordance with changes in market. In fact, it seems friends even impact strategies of *gudangadi*.

Third Best Tie

Tie between Gudangadi & Grocery Shop

Grocery items form a large proportion of raw material required by *gudnagadis*. During interviews, we found shop owners place grocery as the most critical input to their production process. Of the grocery shops supplying material to shops, one shop clearly stands out in terms of visibility and history. This grocery shop has more than a quarter century's existence compared to relatively younger *gudangadis*. None of the food shops we approached has even a decade's existence. Moreover, this grocery shop is the biggest in the area in terms of volume of transactions.

Although the exchange between grocery shop and *gudangadis* resembles an arms length tie, the exchange is more complex. Business to Business transactions form three fourth of grocery shop's sales. This pie does not include food shops while it consists of restaurants, hotels, canteen and hostel mess. Interestingly, food shops accounts for nearly one eighth of grocery shop's total sales. It is obvious that a pie of one eighth has significant impact on grocery shop's profit.

However, during the interview with grocery shop owner (henceforth GS) we got no cues about customized transaction arrangements given to *gudangadis*. GS has strong preference for spot payment. Instead of granting the option of deferred payment or credit facility, GS, by giving rebates, encourages *gudangadis* to pay on the spot. Upon further query, we found credit facility is given only to customers with whom he has tie for a long period. It seems relatively younger *gudangadis* are yet to pass GS's 'litmus test of trust'. Though no clear cue for trust in the tie between *gudangadis* and GS, GS is conscious of the impact *gudangadis* has on his profit. He is quite content with the current state of the tie, and the same is with *gudangadis* as well. Moreover, so far no issue of cheating came up. A question remains: Will this tie evolve to new forms of exchange over a period of time? Taking cues from our observation on the co-movement of time and trust, it is quite likely the tie may evolve to new forms. Such a prediction leads to second question: How long the *gudangadis* sustain? We asked this question to *gudangadis*. Barring one who is uncertain about it, others shared their estimation. Estimated life varies from 5-10 years.

The above tie and trust's role in that has a message. It appears from this case that trust gets embedded in the exchange when both the parties have similar levels of uncertainty. Here, *gudangadis*, compared to GS, obviously faces higher degree of uncertainty, and survival remains an active issue while GS is relatively more stable. But GS also shared his concerns. He thinks big retail chains can thwart his existence in the long run.

Another major distinction between GS and *gudangadis* is the former is far more reputed than the letter. GS maintains long ties with the elites in the region. The building he operates belongs to an affluent and aristocratic family. In fact, he was inducted from a humble background to this business by this family. He had won best customer award of a public sector bank. He is also a member of the chamber of commerce, which is a national body whereas his *gudangadi* customers have no comparable tie with the local elites.

Following figure (Figure 2) locates *gudangadis* and GS in terms of reputation and uncertainty.

Reputation	Uncertainty				
	High Low				
High		GS			
Low	Gudangadi				

Figure 2: Uncertainty, Reputation and Exchange

As shown in this figure, *gudangadi* and GS are in two different cells. Taking cues from our observation, exchange between these two cells does not have a flexible form. Quite interestingly, we found one instance of flexible exchange. This *gudangadi* generates relatively low value compared to other *gudangadis*. In this case, the GS belongs to same caste and knows *gudangadi* since childhood. *Gudangadi* often avails 'zero interest deferred payment' facility. This arrangement has been going on since *gudangadi*'s inception.

Fourth Best Tie

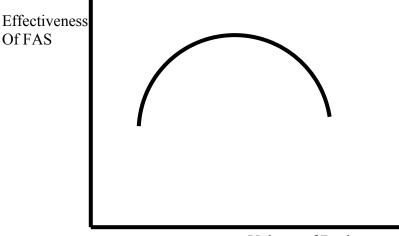
Tie between Gudangadi & Gudangadi Vyparasthra Sangha

'Gudangadi Vyparasthra Sangha', in kannada, means gudangadi merchant association (henceforth FSA). We got information about FSA while querying about gudangadi's dealing with the Municipality. FSA is a structured body. Office bearers are elected through an electoral process. In issues for which collective representation is crucial, FSA pursues the issue on behalf of its members, in particular matters related to municipality. As the Table 6 shows, except two members all were members of FSA. Some times, on issues such as licence required for running the shop, gaining loan for bank etc, FSA plays crucial role. The functioning of FSA is to be studied in more detail in the next phase of our research.

There are contrasting views about the significance of *Gudangadi Vyparasthra Sangha*. One *gudangadi*, who has largest volume among these shops and employ four persons, said "I don't take *Gudangadi Vyparasthra Sangha*'s help. I know how to solve things. I have my own people in Municipality" Although he is a member FSA, he depends upon own heuristics to deal with the Municipality. Quite interestingly, his heuristics includes persuasion, threat, and, if required, force. He is quite content with his heuristics.

Insert Table 6 (Appendix I)

However, there are instances of *gudangadi* viewing FAS as a source of relief if threats like demolition arise. They peg a lot hope with FAS. Why this contrast? To answer we need more information about the link between the progress of business and FSA. But, taking cues from the best performing *gudangadi*, we have a few questions: To what extent FAS is a source of hope? Why the best performing *gudangadi* is sceptic of the relevance of FAS? To provide sound reasoning, data is our handicap. Our hunch is as volume of business increases complexity also raises. May be the design of FAS is not compatible with the complexities associated with the higher volume of business (Figure 3).



Volume of Business

Figure 3: Gudangadi Vyparasthra Sangha and Volume of Business

Fifth Best Tie

Tie between Gudangadi & Other Suppliers

Although this tie is relatively weaker compared to previous ties, it is quite similar to the tie between *gudangadi* & Grocery Shop. Exchange is predominantly arms

length wherein relation has no major role. Moreover, exchange is not flexible enough to accommodate deferred payment, particularly the supply of chicken and egg. Similar to grocery, the supplier of chicken & egg has reputation and strong ties with local aristocracy. However, compared to grocery, *gudangadi* is relatively lesser relevant to chicken & egg supplier. It appears that there is very little scope for exchange becomes flexible over a period of time.

Sixth Best to Worst Tie

We aggregate sixth to worst ties into a set consisting less intense ties. The set includes municipality, commercial/cooperative bank and money lender. This aggregation is a tentative arrangement. It is primarily due to lack of information about these nodes. Taking cues from our filed experience, we say these nodes are not as important as previous ones.

Conclusion

Measurement of social networks as a tool to study poverty is truly multidimensional since various forms of capital (economic, social, cultural and symbolic) are associated with it (Bourdieu, 2001). These networks are structurally positioned between the institutions of market (based on competition) and hierarchy (authoritarian) (Granovetter, 1985). This argument has gained force in the context of the realisation of imperfect competition in the markets¹⁴ and the role of the identity of the individuals in the markets. The individual identities of the actors are "both cause and consequences of group affiliation, social networks, and the moral codes associated with groups and networks. Identities may co-evolve in ways that make it difficult - and perhaps misleading - to separate individual and social level phenomena" (Barrett, 2005: 4). An analysis of network enables us to dissect this complex issue into manageable pieces.

Though the empirical findings of this study is limited, it clearly points to few important conclusions: First, aggregating various enterprises in the informal sector for

¹⁴ See the study of Geertz (1978) on peasant marketing, beside now innumerable number of studies critiquing neo-liberalism.

reaching manageable policy conclusions is extremely limited since it fails to capture the ecosystem of exchanges within it. When the exchanges (networks) are closely observed, as we have shown, a hierarchy of ties exist. Understanding this hierarchy as well as structure of networks is more crucial for policy suggestions. Second, existing policy making tools function within restrictive binary classifications of Marxian Labour-Capitalist, Poor-non-poor. A mechanism-based understanding shows how these binaries are less important, and more dynamic view of the complex systems emerge. The organisations, such as *gudangadi sangha* are acting as catalysts of dynamism bringing political embeddedness to the survival strategies of the poor people. Third, informal sector employs numerous social control mechanisms in the pursuit to gain labour. This brings the question of how the state could control the moral unit of family to ensure decent working environment. Fourth, in developing societies people choose entrepreneurship not just for growth, but also to shield themselves from poverty. This aspect has important policy implications in terms how facilitative environment has to be created for the informal sector.

References

- Bangladesh Bureau of Statistics (2004) *Local Estimation of Poverty and Malnutrition*. Dhaka: Bangladesh Bureau of Statistics.
- Barrett, C., B. (2005). On the relevance of identities, communities, groups and networks to the economics of poverty alleviation. In C. Barrett, B. (Ed.), *The social economics of poverty*. London: Routledge. pp. 1-11.
- Beteille, A. (2003). Poverty and inequality. Economic and Political Weekly. 18-10-2003
- Bourdieu, P. (2001). Forms of capital. In M. Granovetter and R. Swedberg (Eds.), *The sociology of economic life*. Cambridge: Westview Press. 96-111.
- Coase, R. (1937). The nature of the firm. *Economica*. 4, pp.386-405.
- Cowan, R., Paul, A. D., and Foray, D. (2000), The Explicit Economics of Knowledge Codification and Tacitness, *Industrial and Corporate Change*, Vol 9, 2 pp. 211-253
- Coleman, J. S. (1986). Social theory, social research, and a theory of action. *American Journal of Sociology*, *91*(6), 1309-1335.
- Elbers, C, J.O. Lanjouw, P. Lanjouw (2003) "Macro level estimation of poverty and inequality". *Econometrica* 71 (January) pp. 355-64.
- Elson, D. (2004). Social policy and macroeconomic performance: Integrating "the economic" and "the social". In T. Mkandawire (Ed.), *Social policy in a development context*. London: Palgrave.
- Elster, J. (1989). *Nuts and bolts for the social sciences*. Cambridge: Cambridge University Press.
- Elster, J. (1998). A plea for mechanisms. In P. Hedström & R. Swedberg (Eds.), Social mechanisms (pp. 45-73). Cambridge: Cambridge University Press.
- Ferguson, J. (1994). *The anti-politics machine*. Minnesota: University of Minnesota Press.
- Geertz, C. (1978) The Bazaar economy: information and search in peasant marketing. In *American Economic Review* 68(2) pp. 28-32.
- Ghosh, M. and J.K.N. Rao (1994) "Small area estimation: an appraisal" *Statistical Science*, 9 (1) pp. 55-93.

- Granovetter, M. (1978). Threshold models of collective behaviour. *American Journal of Sociology*, *83*, 1420-1443.
- Granovetter, M. (1985) Economic action and social structure: The problem of embeddeness. In *American Journal of Sociology* 91 (3). pp.481-510.
- Guruswami, M., & Abraham, R. J. (2006). Redefining poverty. *Economic and Political Weekly*, 2534-2541.
- Harriss-White, B. (2003). *India working: Essays on society and economy*. Cambridge: Cambridge University Press.
- Hedström, P., & Swedberg, R. (1998). Social mechanisms: An analytical approach to social theory. Cambridge: Cambridge University Press.
- Hirway, I. (2003). Identification of BPL households for poverty alleviation programmes. *Economic and Political Weekly*, 38(45).
- Hodgson, Geoffrey M. (1992). 'The Reconstruction of Economics: Is There Still a Place for Neoclassical Theory?', *Journal of Economic Issues*, vol. 26, pp. 749-767.
- Kabeer, N. (2004). Re-visioning "the social": Towards a citizen-centred social policy for the poor in poor countries. Brighton: Institute of Development Studies IDS Working Paper No. 191.
- Kannan, K. P. (2004). Social security, poverty reduction and development: Arguments for enlarging the concept and coverage of social security in a globalizing world: ESS Paper No. 21 of International Labour Office, Geneva.
- Kolli, R., & Hazra, S. (2005). The estimation of informal sector contribution in the net domestic product: Indian experience. Paper no. 4 of Expert group on informal sector statistics during the workshop of Nadi, Fiji Islands (25-31 March).
- Langlois, Richard N. (2001). 'Knowledge, Consumption, and Endogenous Growth,' *Journal of Evolutionary Economics*, vol.11: 1, pp. 77-93.
- Lanjouw, P. (2003) *Estimating geographically disaggregated welfare levels and changes.* Washington: The World Bank.
- Levinthal D (2000), Organizational capabilities in complex worlds In Giovanni D, Richard R N, Sydney G. W (Eds.), *The nature and dynamics of organizational capabilities* (pp 363-379), Oxford University Press
- Marshall, Alfred (1890). Principles of Economics, London: Macmillan.

- Mirowski, Philip (1991). 'The When, the How and the why of Mathematical Expression in the History of Economic Analysis', *Journal of Economic Perspectives*, vol. 5:1, pp. 145-157.
- Nelson, Richard R. and Sidney Winter (1982). An Evolutionary Theory of Economic Change, Cambridge MA: Harvard University Press.
- Noble et al, (2004) The English indices of deprivation. London: Office of the Deputy Prime Minister.
- Nonaka, I., Takeuchi, H. (1995). *The Knowledge-Creating Company*. Oxford University Press, Oxford.
- Ravallion, M., & Wodon, Q. (1997). Poor areas or only poor people? World Bank Policy Research Working Paper 1798.
- Raveendran, G., & Khopkar, P. H. (2005). Estimating employment in informal economy through labour force surveys, an Indian attempt. *Expert group on informal sector statistics 21-31 March*, 2005.
- Roy, T. (2005) *Rethinking economic change in India: labour and livelihood.* London: Routledge.
- Sachs, J. (2005). The end of poverty. London: Penguin Books.
- Sastry N. S. (2005). Links among employment in informal sector, poverty and gender. Paper no. 3 of Expert group on informal sector statistics during the workshop of Nadi, Fiji Islands (29-31 March).
- Schumpeter, J. A. (1942). *Capitalism, Socialism and Democracy*. New York: Harper, , pp. 82-85
- Sen, A. K. (1976). Poverty: An ordinal approach to measurement. *Econometrica*, 44, 219-231.
- Sinha, A. (2005). Impact of reforms on the informal sector: Poverty analysis through CGE approach. Paper no. 2 of Expert group on informal sector statistics during the workshop of Nadi, Fiji Islands (29-31 March).
- Swedberg, R. (2003) *Principles of economic sociology*. Princeton: Princeton University Press.

Teece D. J., Gary P., Amy S. (2000), Dynamic Capabilities and Strategic Management In Giovanni D, Richard R N, Sydney G. W (Eds.), *The nature and dynamics of* organizational capabilities (pp 334-362), Oxford University Press

Townsend, P. (1979). Poverty in the United Kingdom. Penguin Books: Harmondsworth.

- Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative science quarterly*, *42*(1), 35-67.
- van den Berg, A. (1998). Is sociological theory too grand for social mechanisms? In P.
 Hedström & R. Swedberg (Eds.), *Social mechanisms* (pp. 204-237). Cambridge: Cambridge University Press.
- Zukin, S., & DiMaggio, P. J. (1990). *Structures of capital: The social organization of the economy*. New York: Cambridge University Press.

Appendix I

	e	1 5	
No. of Workers	Rural	Urban	Combined
1	61.5	51.4	57.1
2	29.3	27.5	28.5
3	5.4	9.8	7.3
4	1.8	4.4	2.9
5	0.7	2.6	1.5
6-9	0.9	3.2	1.9
≥10	0.4	1.1	0.8
Total	100.0	100.0	100.0
Estimated Enterprises	2,50,68,000	1,93,44,000	4,44,12,000
Estimated Workers	3,98,08,000	3,99,75,000	7,97,83,000

Table 1: Percentage distribution of estimated enterprises by no. of workers

Source: Kolli and Hazra (2005) based on NSS 55th round on Informal sector

Table	2: Distinguishing arms length	and embedded relations in exc	hange
	Arms length relation	Embedded relation	

Arms length relation	Embedded relation				
Distinct feature					
1. Written contract	1. Trust is major aspect of				
	relation				
2. Use exit to solve	2. Thick information				
problem	sharing				
1	3. Promote shared				
	investment				
Share	d features				
Shared Feature	Shared Feature				
(more visible in	(more visible in embedded				
arms length relations)	relations)				
1. Small number	1. Personal relationship				
bargaining is risky	with partner matters				
	2. Reputation of partner				
2. Push for lowest price	matters				
-	3. Reciprocity				
3. Source of novel idea	4. Joint problem solving				
	5. Concentrated exchange				
4. Monitors partner's	with partner matters				
opportunism	6. Shortend response time				
	to market				
	7. Promotes innovation				
	8. Strong incentives to				
	quality				
	9. Increases fit with market				
	demand				

Source: Developed from Uzzi, 1997 (p.42)

	Ownership	Labour sourced from Family	Labour sourced from Outside	Househol d productio n or not	Expected life of shop (in Years) Estimate by shop owner	Shop's Age (in Years)	No. of workers			
1	Proprietorship	No	No	No	10	3	1			
2	Proprietorship	Yes	No	No	10	2 months	2			
3	Proprietorship	Yes	Yes	Yes	15	3	2			
4	Proprietorship	Yes	No	Yes	Uncertain	5	2			
5	Proprietorship	Yes	No	Yes	Uncertain	6 months	1			
6	Proprietorship	No	Yes	No	5	5	1			
7	Proprietorship	Yes	Yes	No	Uncertain	10	5			
8	Proprietorship	Yes	No	Yes	Uncertain	7	2			
9	Partnership	Yes	No	No	Uncertain	3 months	5			
Se	See compatibility of these firms with NSS data in the appendix II.									

Table 3: Basic Profile of *Gudangadi* from where information was collected

	Product mix	Customer mix (Approximately)	Can customers spend longtime in the shop	New Products
1	Chinese fast food	80% Local Residents 20% University Student	yes	No
2	Chinese fast food, North Indian fast food	20% Local Residents 80% University Student 1	Yes	Yes
3	Rice & Fish	More than 90 % <i>Bijapuri coolies</i>	No	Earlier Chinese food; changed to fish rice
4	Udupi native food	90% local students 10% Local Residents	Yes	No
5	Rice & Fish, Toddy	More than 90 % <i>Bijapuri coolies</i>	Yes	Since 18 years toady, now, in addition rice and fish
6	Udupi native food	95% <i>Bijapuri coolies</i> 5% Local Residents	No	No new products
7	Chinese fast food, North Indian fast food	95% University students 5% Local Residents	Yes	No
8	Udupi native food	85% bus conductors, 10% <i>Bijapuri coolies</i> 3% Students 2% Others	Yes	No
9	North Indian fast food, pani poori	80% university students 20% Local Residents	Yes	Yes

Table 4: Product and Customers

Sl. No	In case of excess supply of products (some items remain uneaten)	Price decision	Finance
1	Throw away	Neighbouring shops consulted	Interest Free Loan from friends, Own Saving, Shop owner paid Rs. 100 as daily interest for Rs1000 to a money lender
2	Throw away	In consultation with other people, look at others menu, depends upon neighbour hood price	Interest Free Loan from friends,
3	Take away to home	Change according to price e of fish	Loan from bank and co-operatives. Once paid Rs. 30 as daily interest for Rs100 to a money lender
4	Rarely happens	According to gas price, municipality taxes	Interest Free Loan from friends, Own Saving
5	Never it happened	Cant do in the short run due to resistance from <i>Bijapuri</i> <i>Coolies</i>	Interest Free Loan from friends
6	Throw away	I don't discuss with friends	Loan from commercial bank, Own Saving
7	Throw away	If supplier increased, I also change; then pass onto customers	Interest Free Loan from friends, Own Saving, Loan from commercial bank
8	Never it happened	No information	Loan from cooperative bank with the help of friends
9	Throw away	No change in the short run	Loan from commercial bank

Table 5: Decision Making

	Membership in Gudangadi Vyparasthra Sangha or similar association	Supplier relationship	Relation with buyers	Nature of Previous experience
1	Yes	Good relation, Arms length Exchange, No deferred payment	Good Relation	Cook for University students
2	Yes	Good relation, Arms length Exchange, No deferred payment	Good Relation, Freedom to buyers, No credit given to customers	18 years experience in Mumbai in different roles such as waiter, cleaner, street food seller
3	No	Good Relation Gets credit from supplier		10 years fast food selling in same location
4	Yes	Good relation, Arms length Exchange, No deferred payment	Good Relation	Previously running another shop
5	Yes (<i>Kemmanu</i> <i>Kallangadi</i> ¹⁵)	Good relation, Arms length Exchange, No deferred payment	Good Relation	Previously selling toddy
6	Yes	Good relation, Arms length Exchange, No deferred payment	Good Relation	As cleaner in a hotel, 10 years in university canteen
7	Yes	Good relation, Gets credit from supplier Once new supplier cheated	Good relation, but once cheated by a customer	5 years in Bombay in uncle's shop
8	Yes	Good Relation Gets credit from supplier	Good relation, but once cheated by a customer	Worked as waiter in a Mangalore hotel
9	No	Good relation, Arms length Exchange, No deferred payment	Good Relation	Previously worked 12 years in Mangalore and Varanasi

Table 6: Ties and Shop Owners Experience

¹⁵ *Kemmanu Kallangadi* is the toddy shop owners association.

	Shop Numbers								
Enterprises									
Characteristics	1	2	3	4	5	6	7	8	9
Enterprise type	1	1	1	1	1	1	1	1	1
Number of									
Worker	0	1	1	1	1	1	1	1	1
Use of Electricity									
for									
for production	2	2	2	2	2	2	1	2	2
Status of									
Employment	12	12	12	12	12	12	12	12	12
Location of Work									
place	15	15	15	15	15	15	15	15	15
Type of job									
contract	1	1	1	1	1	1	1	1	1
Social Security									
Benefits	8	8	8	8	8	8	8	8	8
Methods of									
Payment	5	5	5	5	5	5	5	5	5
Mode of Payment	1	2	2	2	5	2	2	2	2
Member of Union									
or not	1	1	2	1	1	1	1	1	2
Nature of									
Employment	1	2	2	2	2	1	1	2	2

Appendix II: Compatibility of fieldwork data with NSS survey data

See Raveendran and Khopkar (2005) for the NSS codes.