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**Importance of Trust in the Subsector Approach:
An example from the footwear industry in Agra, India**

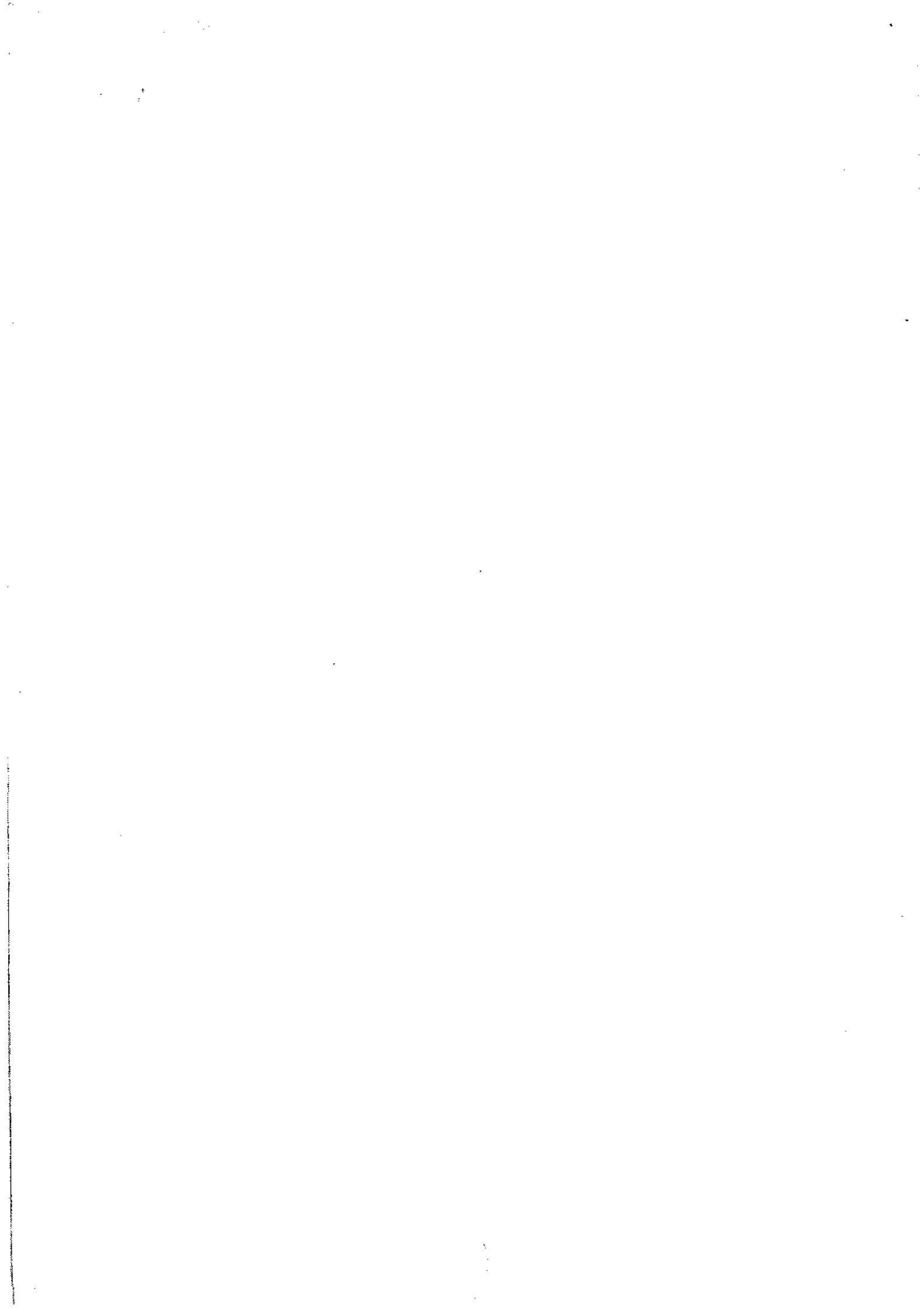
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IMPORTANCE OF TRUST IN THE SUBSECTOR APPROACH:

An example from the footwear industry in Agra, India.

Peter Knorringa *

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Summary

This paper attempts to incorporate the concept of trust in the subsector approach. The case study focuses on transactions between small enterprises and market agents in the footwear subsector of Agra, India. Such vertical linkages are characterised by a mix of three principles of coordination: market, hierarchy and cooperation, in which opportunistic behaviour is restrained respectively through prices, authority and trust. It is argued that the importance of trust increases in transactions for higher market segments. Moreover, the socio-cultural chasm between 'makers' and 'sellers' of footwear in Agra frustrates the development of trust based on personal characteristics.

1. Introduction

The subsector approach to small enterprise research is clearly spelled out in a recent publication in *World Development* (Boomgard *et al.* 1992). In their concluding remarks Boomgard *et al.* (1992) mention that variables such as the importance of trust and the need to minimize opportunistic behaviour, are very difficult to evaluate and that our understanding of these variables within the subsector approach is still in its infancy.

In this paper an attempt is made to take the argument one step further, and to incorporate the concept of trust in the subsector approach. This is illustrated with an example of the footwear industry in Agra, India. In Section two the concept of trust is incorporated into one of the main foundations of the subsector approach, the New Institutional Economics. Section three deals with the case study of footwear in Agra, India, and shows how the importance of trust varies by market channel. Section four contains some concluding remarks.

2. Trust in vertical linkages

The subsector approach focuses on product flows. It analyses small enterprises as part of larger marketing and production chains (Boomgard *et al.* 1992). Small producers procure inputs from a variety of suppliers, transform these materials into finished or intermediate products and market this output again to a variety of buyers. The marketing and production chains aggregated for a specific set of products form a subsector system, which can be visualized as a flow chart. Within such a subsector map one can often discern certain bottlenecks or nodes. Such system nodes are defined as: "... points at which large volumes of product pass through a few hands or restricted geographical space." (Boomgard *et al.* 1992: 201). One of the main innovations of the subsector approach is its focus on these system nodes. Such nodes can be wholesale markets for finished products, but they can just as well be big buyers of final or intermediate products. In this paper firms that can be identified as system nodes, are referred to as leading firms.

A leading firm, whether a 'pure' trading company or a firm involved in both trade and production, can control an entire chain by setting the boundary conditions for production and marketing of the final product. Through superior access to information and resources, leading firms can determine product specifications and set price ranges in accordance with the selected market segments. Leading firms decide whether and when to use distinct categories of small enterprises. They exert control over small enterprises by fixing standards for inputs and outputs, they might provide materials and equipment, and sometimes offer advance payments for production. In such cases leading firms can make small enterprises entirely dependent. Thus, leading firms can reap the gains of low cost production by small enterprises, while keeping control over the entire production process. Market agents are the direct link between small enterprises and leading firms. In the context of this study, market agents are seen as 'representing' such leading firms. Market agents bargain with the various types of small enterprises on forward conditions related to specific orders. The actual forward conditions are a reflection of the bargaining position of distinct small enterprises.

In analyzing vertical linkages two basic points are often overlooked. The first is that

vertical linkages within a marketing and production chain are not purely antagonistic. It is not like a game of chess in which the loss of white is the gain of black. Due to interdependencies within the marketing and production chain the success of a small enterprise lies not in overcoming market agents, but in eliciting their cooperation (Axelrod 1984: 190). The second point is that power differences between small enterprises and market agents do influence the linkage in the sense that the powerful pushes the powerless, as far as norms and values of reciprocity allow.

The interaction between market agents and small enterprises can be analyzed within the framework of the New Institutional Economics, of which the transaction cost approach (Williamson 1975; 1985) is one of the main strands. Williamson has set a research agenda by presenting the market versus hierarchy dichotomy. The leading question in his framework is how to keep opportunistic behaviour of transaction partners in check; in case of 'pure' markets this is achieved through prices, while 'pure' hierarchies are governed solely by authority. From this starting point many authors have assumed a continuum between markets and hierarchies (for developing countries, see Mead 1984). Nevertheless, the mainstream transaction costs approach claims that, in the final analysis, all forms of economic organization can be reduced to either market or hierarchy.

However, several recent contributions to economic literature conclude that within the dichotomy it is not possible to deal satisfactorily with cooperation among firms in networks in which repeated transactions, in some cases leading to trust relations, take place.¹ It has been argued that such long-term voluntary patterns of cooperation, both among and within firms, do not fit well in the dichotomy, nor can they be placed on the continuum (Knorringa & Kox 1992). Such cooperation is first of all characterised by the recognition of interdependency by both transaction partners. This recognition, and the behaviour it instigates, leads to an essentially

¹ In their book on the New Institutional Economics, Zukin & DiMaggio suggest that given the inability of the concepts of market and hierarchy to capture the (frequent) occurrence of ongoing relationships of trust and mutual dependency, there is "... a need for a third ideal-type decision structure, based on informal social relations, parallel to markets and firms" (Zukin & DiMaggio 1990: 9). Best (1990) and Powell (1989) argue that the dichotomy cannot capture the complexities of competition and institutional dynamics in real life economic exchange. Several articles collected in Thompson et al. (1991) come to the same conclusion.

distinct way of restraining opportunism, namely a degree of trust based on a thorough knowledge of each others situation. To be clear, this is not the type of trust based on idealism or naivety, but a trust based on the realisation by specialists that they need each other in such a way, that they will also have to trust each other to some extent. In the transaction cost approach the critical issue is not that all actors are assumed to behave opportunistically, but that it is very costly to find out who will and who will not behave opportunistically (Williamson & Ouchi 1981). It is the presence of mutual familiarity and trust that enables a transaction partner to consciously take uninsured risks.² Thus, trust lowers the transaction costs as it increases the predictability of the others' behaviour.

The issue of trust becomes relevant only in case of memorized infinite repeated transactions. According to Zucker (1986) there are three central modes of trust production: (1) process based trust (trust in the behaviour of the transaction partner based on past or expected similar transactions, in short his business reputation), (2) characteristic based trust (trust is tied to the transaction partners characteristics such as family background or ethnicity), and (3) institutionally based trust (e.g. certification as an accountant or registered as a doctor). In the present framework especially the analytical separation of process and characteristic based trust is important.³ It draws out into the open a hidden difference in approaching the issue of trust by economists and sociologists. In literature dealing with trust most economists implicitly deal with process based trust (Dasgupta 1988, Mertens 1989). In turn, sociologists usually focus on characteristic based trust (Luhmann 1988).

In general, trust enables voluntary cooperation. In this type of cooperation transaction partners have a real choice, as they consciously choose to work together while they also have alternative options. In real life cooperation is often enforced and asymmetrical. Such asymmetrical interaction is not seen as a form of cooperation but as hierarchical coordination.

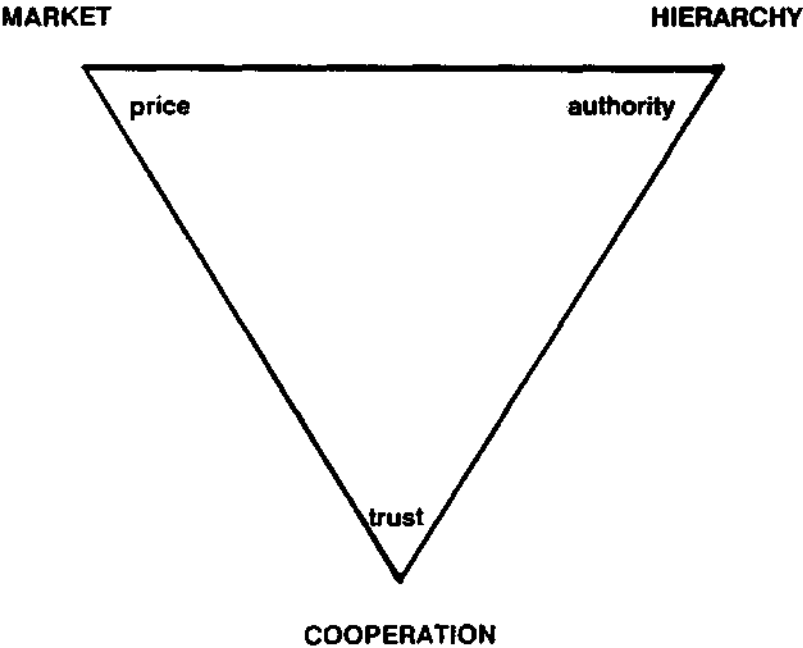
In short, in transaction patterns based on voluntary cooperation, opportunistic behaviour is restrained in a way which is essentially different from 'pure' market or

² One of the few comprehensive treatments on the concept of trust can be found in Gambetta (1988).

³ Although in actual fieldwork they are difficult to entangle.

hierarchical coordination. Therefore, one might perceive of three principles of coordination: market, hierarchy and cooperation, controlled respectively through prices, authority and trust (See also: Bradach & Eccles 1989; Powell 1989). The resulting triangle is shown in Figure 1. This triangle essentially means that any relation between specific actors is not characterised by either hierarchy, market or cooperation, but by a mix of these three.

Figure 1. Principles of Coordination



3. The footwear subsector in Agra

(a) Overview

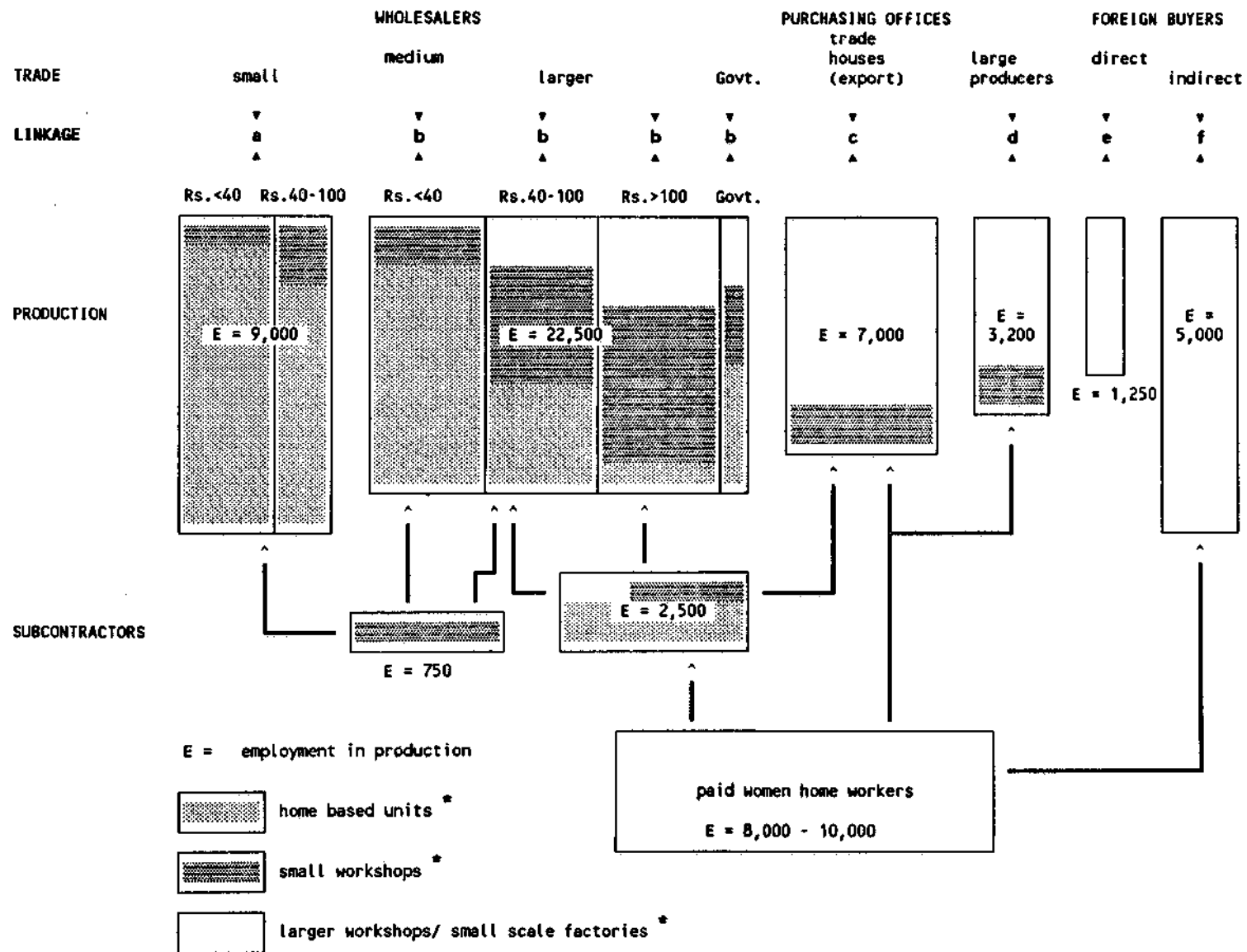
The main land mark of Agra is the world famous Taj Mahal, which attracts a lot of tourists and makes the tourism industry the second major employer in Agra. Less obvious for the casual visitor is the footwear industry, the main source of livelihood in Agra. Agra, a city in India of 1.5 million inhabitants, is characterised by a strong geographical concentration of footwear manufacturers and their relevant linkage units, and is a very suitable location for a subsector study. The many varieties of footwear are produced in all sorts of enterprises: modern small-scale factories with conveyer belts, or traditional workshops with one or two hand-operated machines, or in homes with women workers, and mostly by a combination of the various types of producers.⁴ The subsector holds all kinds of specialisations, and inter-firm division of labour has started to develop. The approximately 5000 production units are linked to each other through various types of subcontracting arrangements. Middlemen arrange for the smooth functioning of the system, paid on commission either by larger producers or traders.

Agra has some evident system nodes. Most of the traders, of both raw materials and final products, are concentrated in one market area in Central Agra, Hing ki Mandi. Apart from this daily market there is a much cheaper place to buy materials and sell intermediary products, Chakipat market, which is held two mornings a week. Apart from these markets there are some 10 purchasing offices of large firms, either trading houses oriented to cheap exports or large domestic producers catering to the emerging middle class in India. Overall, Agra is known for its hand-made, labour-intensive, medium and low priced, leather-upper full shoes. Its competitiveness depends completely on its very cheap, abundantly available and highly skilled labour force, working predominantly with traditional technology.

⁴ The following working classification is used:

- Larger workshops are units with only wage labour, employing more than 10 workers and using a mix of modern and traditional technology.
- Small workshops are units with primarily wage labour, employing less than 10 persons and using mainly traditional technology.
- Home based units, with a work place in or around the home, use primarily or only family labour and mainly traditional technology. This group includes the cottage industries.
- Women home workers undertake labour intensive hand operations on piece rates in their homes.

Figure 2. Main market channels in Agra's footwear sector



* See note 3 for the used classification

Source: Own survey, interviews with key persons, Government statistics (See also Knorringa 1991).

The size of the shaded areas in Figure 2 are proportional to the employment in the various segments of the subsector. According to this subsector map around 60,000 people are directly involved in the actual making of footwear, on an average working day outside the rainy season.⁵ As irregularity is the main characteristic of footwear production in Agra, it must be stressed that Figure 2 gives only an indication of the relative importance of the various segments in the subsector. Irregularities in orders received and consequently in employment generated, from season to season, but also from week to week. Due to this irregularity, production units can be open one week and closed the next. Another important irregularity is that persons involved in footwear production change roles frequently. They can be entrepreneurs of their family-based unit one week, unemployed the next week and working as hired labourer the following week.

(b) Specific linkages between small final producers and market agents

The case study presented in this paper focuses on transactions between small-scale final producers and the market agents that buy their products.⁶ The hypothesis is that the mix of market, hierarchy and cooperation is influenced by the market segment, in such a way that production for a higher market segment results in a mix that is more dominated by cooperation.

Each letter in Figure 3 depicts an exchange relation between a small-scale final producer and its direct market agent. The placement of the specific linkages within the triangle is tentative and qualitative.

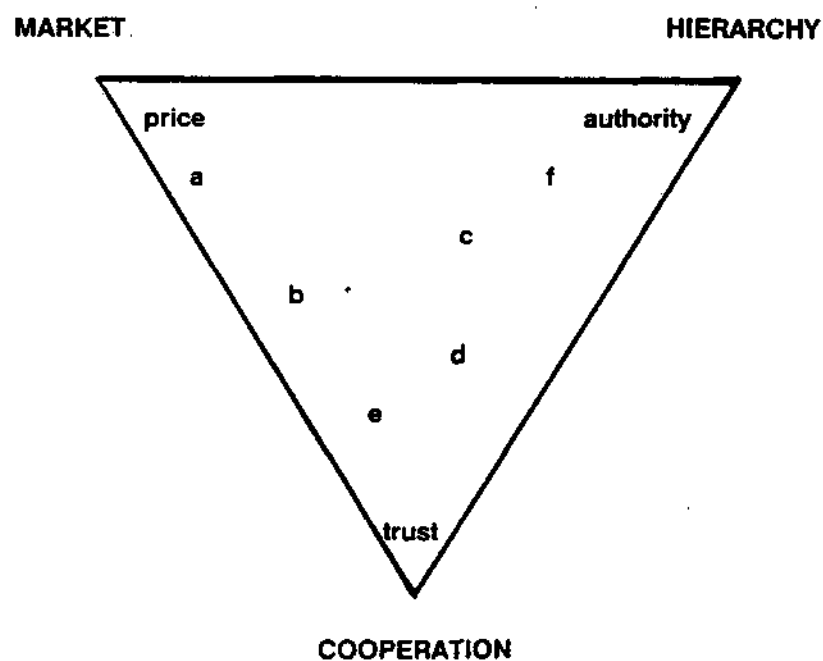
Linkage **a** is between the smallest household units and local wholesalers. These household units, based on family labour and primitive technology, produce basic cheap shoes with traditional designs. The head of the household goes to the market two or three times a week where he tries to sell to local wholesalers. Most wholesalers need some of those basic shoes now and then, but there are always a

⁵ The total employment generated by the footwear industry in Agra is much larger (Knorringa 1991).

⁶ That is not to say that other linkages, e.g. among small producers, or between small producers and (government) institutions, are not important (See Knorringa 1991).

lot of suppliers in this segment. The household units must sell, to be able to buy new inputs. Therefore, margins are pushed to the minimum, producers remain anonymous and their products are rather homogeneous. Bargaining is actually only on the price, as production has already been carried out.

Figure 3. The Triangle of Coordination



Linkage **b** is between somewhat more specialised household units and small workshops (5 to 10 wage labourers), on the one hand, and local wholesalers, on the other hand. Entrepreneurs in this segment try to get orders from those local wholesalers. In this segment there is no longer anonymity of producers, nor homogeneity of products. Product specifications are discussed in advance, samples are made, quality of the product is higher, quantities are larger, and payments are no longer in cash. In short, both actors invest in their mutual linkage. A certain

degree of trust develops over time, but as there are still a large number of technically competitive suppliers, the price mechanism remains dominant in most cases.

Linkages of the types **a** and **b** exist already for decades in Agra (Lynch 1969, Leest 1984). More recently developed linkages are those of type **c** and **d**. These deal with linkages between larger workshops (10 to 50 wage labourers) and purchasing offices of large companies. Although officially these larger workshops remain independent firms, authority and hierarchy play an important role. Managers of such purchasing offices regard their suppliers as subordinates and the entrepreneurs of these workshops comply to that expectation. Producers are often pushed into exclusivity arrangements. The managers of such purchasing offices are, in turn, subordinated to their head office in Bombay, Delhi or Calcutta. There are two types of large companies with purchasing offices in Agra.

In linkage **c** the market agent is the purchasing office of one of the large trading houses in India, that focus on cheap exports without any specific know-how in the field of leather and footwear. This refers to footwear of \$15 to 20 in a European retail shop. Linkage **c** is dominated by hierarchy, within the context of exports based on low quality, cheap imitations.

In linkage **d** the market agent is the purchasing office(r) of one of the large Indian footwear companies (Bata, Corona, Liberty). These companies hardly produce any of their cheaper varieties themselves any more. An important difference with linkage **c** is that these companies do have a lot of footwear know-how, and that they have large distribution networks and brand-name goodwill in India. Within the Agra context you are among the elite if you can say that you are already a steady supplier of Bata for 10 years or so. That proves you are a reliable partner that delivers a constant high quality. Moreover, through your Bata contacts you are aware of the latest technological and marketing developments. In the case of **d**, much more than with **c**, the hierarchy gives way to a linkage in which trust has become more important.

The next linkage shown in Figure 3 is that of type **e**. This linkage deals with the modern small direct exporters (25 to 100 wage labourers). Entrepreneurs of such enterprises themselves go to international leather fairs with their latest designs and

try to establish contacts with buyers for retail chains. The shoes are priced between \$ 75 and 100 in the shop. Entrepreneurs maintain direct telephone and fax contact with Frankfurt and Paris. In the eyes of the European and American buyers the most crucial characteristic of an Indian supplier in this market segment is his reliability; that he supplies what he promised. And not, as often happens in linkage **c**, using inferior materials or shaky stitching work on the second or third delivery. In short, linkage **e** evolves around trust. Of course, price plays a role and the linkage is not free from authority feelings, but the dominant factor is the realisation of the need for mutual trust.

The last type of linkage shown in Figure 3, type **f**, deals with small-scale units that are independent only on paper.⁷ Each of the five large production firms in Agra is composed of 8 to 10 small-scale production units, sometimes located in one or two buildings. While ownership is centralised, each production unit can be seen as a separate production line. Therefore, linkage type **f** is a text-book example of hierarchy. These large firms produce both for export (medium market segment) and for the domestic market (high market segment).

At this point it is important to note that by far most producers face linkages without a significant degree of trust. Only some 25 small-scale units (0.5% of all small production units) transact with market agents in the way depicted by linkage type **e**. Approximately 2% of all small production units work for one of the large Indian footwear companies (linkage type **d**), where trust also plays an important role. The large majority of the small producers in the Agra cluster face linkages dominated by the market mechanism: linkage type **a** (35%), or **b** (55%). The remaining 7.5% of the small production units in Agra face linkages dominated by hierarchy (type **c** and **f**).

Voluntary cooperation is usually found only in the higher market segments. In Agra, however, only a few small production units are oriented towards these higher market segments. By far most small production units face linkages dominated either by price or authority considerations, and cannot benefit from trust.

⁷ For tax and subsidy purposes.

(c) The socio-cultural chasm that frustrates characteristic based trust

Apart from the varying degrees of trust in specific linkages there is also a more general dividing line especially on the issue of characteristic based trust. The two main socio-cultural groups involved in the industry, traditionally skilled artisans and commercially trained entrepreneurs, do not communicate unless they must. This frustrates the development of characteristic based trust between 'makers' and 'sellers'.

In India, the people involved in trade and production of footwear are from a different caste background. Trade and management is dominated by Hindus from forward castes while the actual making of footwear is a sub-caste specific occupation in the sense that only those born as Chamars "can occupy the status of shoe maker without breaking caste rules." (Lynch 1969: 15). In the traditional caste system, Chamars are close to the bottom of the hierarchy because they work with a polluting object, leather, and because they are reputed to eat beef, the most polluting of foods according to orthodox Hinduism (Khare 1984, Sharma 1986). In Agra footwear workers are predominantly Jatavs, a subgroup of the Chamars. Jatavs are treated roughly and with disdain by forward caste Hindus and contacts are kept to an absolute minimum. There are no linkages between Jatavs and forward caste Hindus in which characteristic based trust plays a role.

This poses an important constraint on the options of development of characteristic based trust relations between traders and entrepreneurs of production units. Linkage type **a**, between household units and local traders, represents the classical case of the (Jatav) master artisan dealing with the forward caste trader. Entrepreneurs of production units that face linkage type **b** are from various backgrounds. They are, firstly, the more successful artisans, often more 'separated' from involvement in direct production, who run small and some larger workshops, and, secondly, trader-entrepreneurs, originating from footwear trading communities. Entrepreneurs of production units that market their products to the purchasing offices of export trading houses (linkage type **c**), are predominantly young educated middle class males, without any significant experience in footwear trade or production. Most of them have a degree in Commerce and they have entered the

industry with the expectation of the heaps of gold to be earned from exporting cheap leather-upper footwear. This background is similar to most of the staff members at those trading-house purchasing offices. Next are the entrepreneurs of production units that market their produce to the purchasing offices of the large Indian footwear companies (linkage type **d**). They have either a commercial or an engineering background and are well-established and experienced in the industry, as are their counterparts, the staff members of these Bata, Corona or Liberty purchasing offices. Linkage type **e**, the only linkage where the entrepreneur of the small production unit deals directly with foreign buyers, requires trust to get started in the first place. Thus, the people involved in this linkage already knew and trusted each other, and that enabled the linkage to emerge.

So, characteristic based trust is likely to be present in linkage type **c**, **d** and **e**. It can sometimes be found in linkage type **b**, but it is always absent in linkage type **a**.

4. Concluding Remarks

The subsector approach to small enterprise promotion and research is a good analytical device. In this paper an attempt has been made to incorporate trust within this approach. Trust is only a means to an end, and not an end in itself. Trust strengthens voluntary cooperation which, in turn, fosters innovations of all kinds. In small enterprise promotion and research we are always on the look out for ways to stimulate *innovative behaviour in small enterprises*. In this regard the development of trust in vertical linkages within the subsector is crucial. The case study shows that a) trust becomes more important in linkages oriented to higher market segments, and b) a social-cultural chasm can frustrate the development of characteristic based trust, which might block further innovations.

References

- Axelrod, R. (1984) *The evolution of cooperation*. New York: Basic Books.
- Best, M.H. (1990), *The New Competition. Institutions of Industrial Restructuring*. Cambridge: Polity Press.
- Boomgard, J.J., S.P. Davies, S.J. Haggblade and D.C. Mead (1992) A Subsector Approach to Small Enterprise Promotion and Research. *World Development*, Vol.20/2, pp. 199-212.
- Bradach, J.L. & R.G. Eccles (1989) Price, authority and trust: from ideal types to plural forms. In: *Annual Review of Sociology*, vol.15, pp. 97-118. ✓
- Dasgupta, P. (1988) Trust as a Commodity. In: *D. Gambetta (ed.) - Trust. Making and breaking cooperative relations*. New York: Basil Blackwell. ✓
- Gambetta, D. (ed.) (1988) *Trust. Making and breaking cooperative relations*. New York: Basil Blackwell. ✓
- Khare, R.S. (1984), *The Untouchable as Himself. Ideology, Identity, and Pragmatism among the Lucknow Chamars*. New York: Oxford University Press.
- Knorringa, P. (1991), *Small Enterprises in the Indian Footwear Industry. A Case Study of the Agra Cluster*. Amsterdam: University of Amsterdam (Report to the Ministry of Development Cooperation).
- Knorringa, P. and H. Kox. (1992), *Transaction Regimes: An Instrument for Research in Industrial Organization*. Research Memorandum 1992-34. Amsterdam: Faculty of Economics and Econometrics, Free University.
- Leest, G.A. (1984), *The Trade-, (Sub)contracting-, and Employment Relations in the Small Scale Footwear Industry of Agra, India*. Rotterdam: Erasmus University (Mimeographed).
- Luhmann, N. (1988) Familiarity, Confidence, Trust: Problems and Alternatives. In: *D. Gambetta (ed.) - Trust. Making and breaking cooperative relations*. New York: Basil Blackwell.
- Lynch, Owen M. (1969), *The Politics of Untouchability*. New York: Columbia University Press.
- Mead, D.C. (1984), Of contracts and subcontracts: Small firms in vertically dis-integrated production/distribution systems in LDCs. *World Development*, Vol. 12, Nr. 11/12, pp. 1095-1106.
- Mertens, J.F. (1989) 'Repeated games' and 'Supergames'. In: *J.Eatwell, M.Milgate & P.Newman (eds), Game theory, The New Patgrave*. London: MacMillan.
- Misra, Shubhalalaxmi (1980), *Living and working conditions of labourers in Leather Industry in Agra*. Institute of Social Studies, PhD on file, Agra University, unpublished.
- Powell, W.W. (1989) Neither market nor hierarchy: network forms of organization. In: *Research in Organizational Behaviour*, vol.12, pp. 295-336.

- Sharma, Satish Kumar (1986), *The Chamar Artisans. Industrialisation, Skills and Social Mobility*. New Delhi: B.R. Publishing Corporation.
- Thompson, G., J. Frances, R. Levacic & J. Mitchell (eds.) (1991) *Markets, hierarchies & networks*, London: Sage Publications.
- Williamson, O.E. (1975), *Markets and Hierarchies*. New York: The Free Press.
- Williamson, O.E. (1985), *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*. New York: The Free Press.
- Williamson, O.E. & W.G. Ouchi (1981) The markets and hierarchies program of research: origins, implications, prospects. In: *A.H. van de Ven and W.F. Joyce (eds.) - Perspectives on Organization Design and Behavior*, pp. 347-370. New York: John Wiley and sons.
- Zucker, L.G. (1986) Production of Trust: Institutional Sources of Economic Structure, 1840-1920. *Research in Organizational Behaviour*, vol.8, pp. 53-111.
- Zukin, S. & P. DiMaggio (1990) Introduction. *Zukin, S. & P. DiMaggio (eds.) - Structures of Capital. The Social Organization of the Economy*, pp. 1-36. Cambridge: Cambridge University Press.

Acknowledgments

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