

Network mechanisms and social ties in markets for low- and unskilled jobs: (Theory and) evidence from North-India

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Starting point

Social networks are important for labour market entry in South-Asia (e.g. about 70 % of un- and low-skilled jobs in Mumbai found through 'referrals' (Munshi and Rosenzweig 2006)).

Chain migration has a long and distinguished history in the sub-continent (Zachariah 1964; Banerjee 1983).

Social clusters in Indian industries and workplaces common: our paper contributes to explain why such clusters form and employers may benefit from social connections among members of the workforce.

Theoretical backdrop

- Job search and information dispersion foci (Carrington et al. 1996; Ioannides and Loury's 2004 extensive review (JEL); Wahba and Zenou 2005) have dominated the economic literature on labour market networks. 'Trivial' policy implications.
- Less attention paid to how social connections among members of the workforce may remedy the information (screening) and enforcement (moral hazard) problems confronting (urban) employers.
- Munshi's (2003) research on recurrent US Mexico migration suggested, indirectly, that migrants with longer tenure in the destination labour market provide job referrals for new arrivals.

Employee referral: theory

Most existing work has an adverse selection angle (skipped here)

- Kugler (2003): workplace referees can reduce monitoring costs by exerting social pressure on new recruits.
- Karlan (2009) focus on behavioural risks (social collateral) only in the employer-intermediary relation, not in the intermediary-recruit relation.
- We adjust Karlan et al (2009) for this anomaly: Dhillon and Iversen (2011) develop these arguments further

Theoretical model

- Expected *gross* surplus from hiring a worker in the market: $R = pO_H + (1-p)O_L$
- Employer is certain that recruiting through an employee will deliver a high quality recruit: the surplus from employee referral is thus:
 - $R^* = O_H - R$
 - The new recruit receives $w + \alpha R^*$, $0 < \alpha < 1$ is the recruit's bargaining power vis-à-vis the employer

- For the in-house referee, the relationship to the employer is at stake: let T be the value of this relationship
- A low quality worker has an incentive to bribe (B) the in-house referee: the max he is willing to pay is αR^*
- The employer can now trust the in-house referee if and only if $T > \alpha R^*$

- Suppose that the new recruit can earn a rent R^* from shirking (underperforming, misbehaving) and will perform only if facing an expected punishment of a similar order.
- Let q : risk of being caught, ε : direct cost of shirking, ρ : the weight the recruit places on referee welfare,
- C : cost imposed on the recruit by the referee. We assume that C and ρ are increasing in s : the strength of the social tie between referee and recruit.

Three predictions:

- (1) 'Workplace' referral should be widespread
- (2) Employers should select in-house referees with high T – high stakes (vis-à-vis the employer)
- (3) Referees should recruit individuals who care sufficiently about referee welfare (strong social ties)

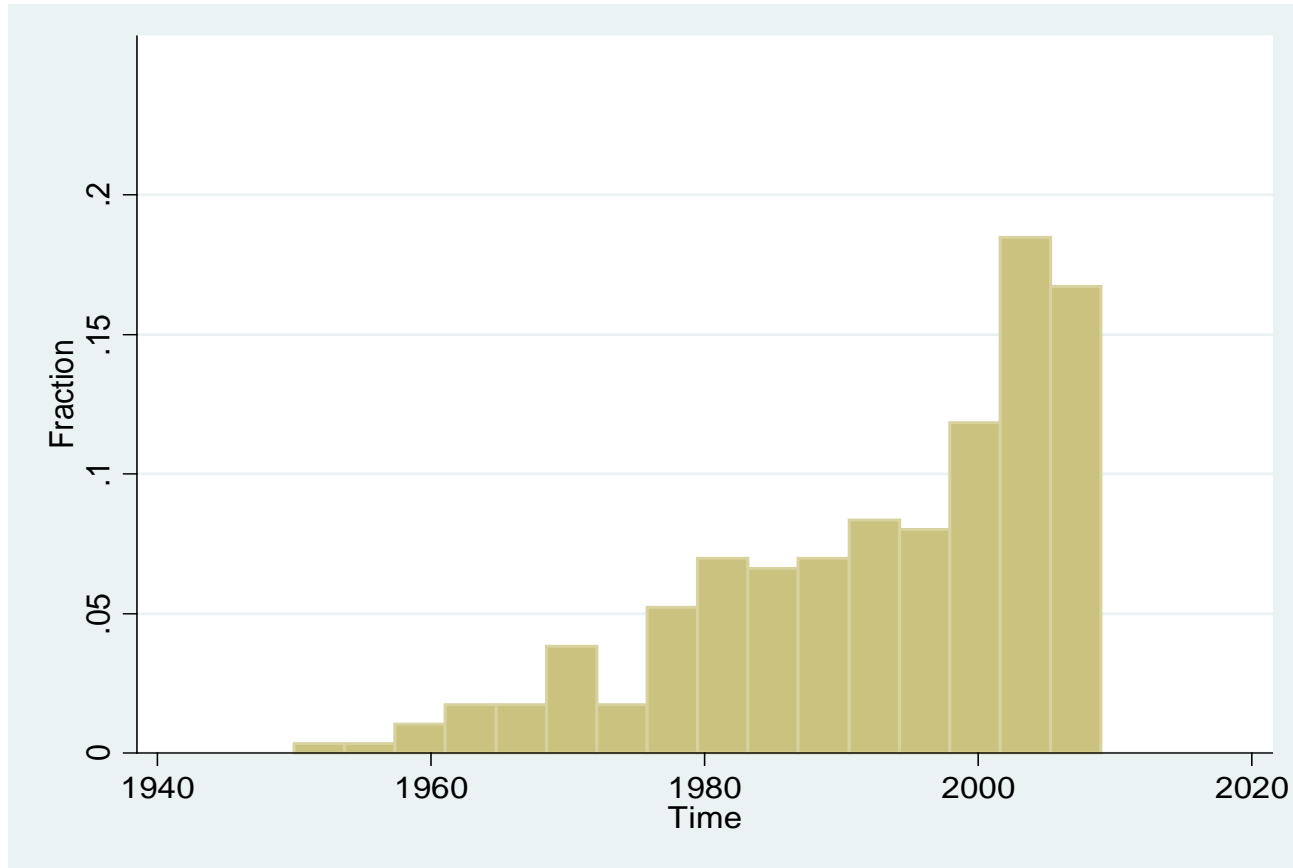
Comparisons with Karlan et al (2009):

- They focus on social stakes: we include workplace stature (e.g. workplace intermediary has an important job/position within the firm).
- We focus on recruit performance (moral hazard), not exogenous traits. Makes the social tie between intermediary and recruit important.
- Prediction (3) orthogonal to Karlan et al's prediction of weak tie entry into low and unskilled jobs.

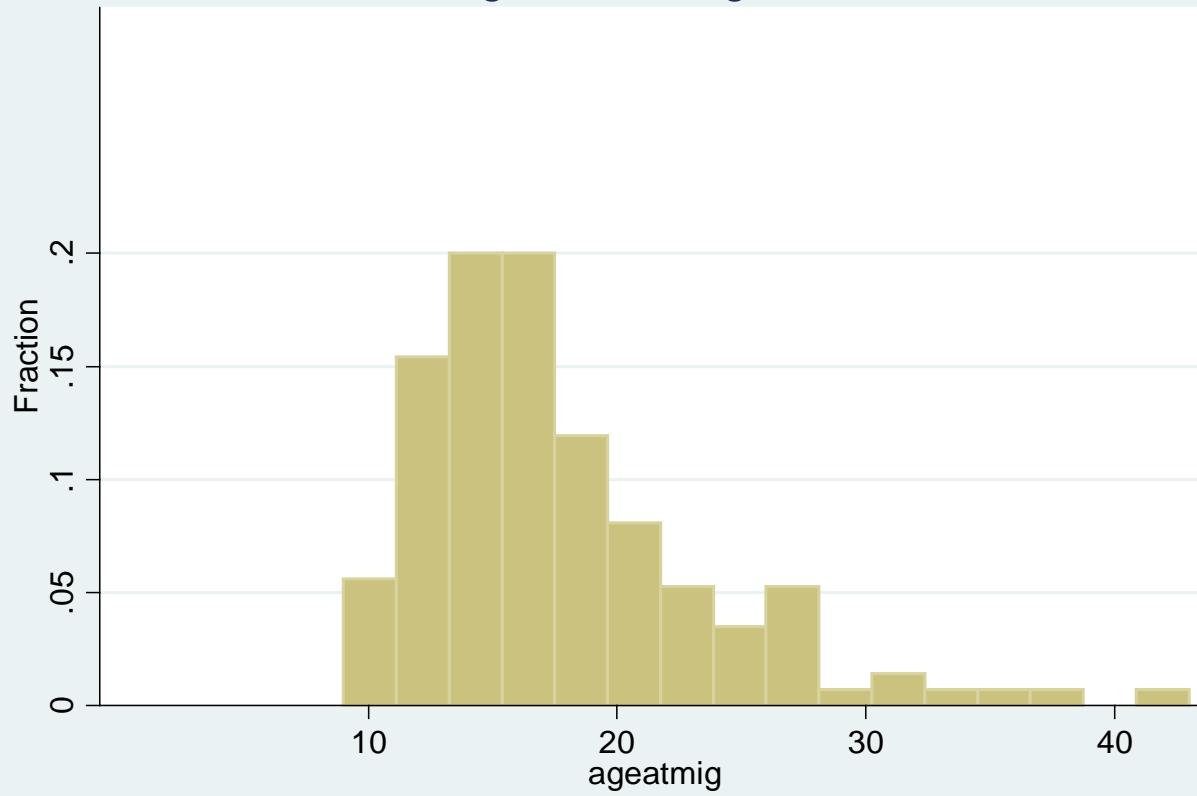
Sampling and methods of data collection


- Two villages purposively selected.
- Random selection of households based on own census in each village (deficient voter and house lists from GP offices): altogether 236 HHs (1 in 3). Interviews conducted at household and in unusual depth at individual migrant level.
- 287 individuals with labour migration experience (at least one month away on work): 'complete' education and labour market histories for each individual. 90.8 % of all identified migrants tracked and interviewed.

First migrant job, by time of migration



Age at first migration



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- 31.6 % of migrants 14 years and below. Bakeries absorb 66.7 % of these youngest migrants.
 - Complete male dominance.

| | Ansaris | Chamars | Others |
|---|---|--------------------------------------|--|
| Percentage of migrant sample | 48.4 % (139) | 34.1 % (98) | 17.4 % (50) |
| Mean age at time of first migration | 16.0 (4.39) | 19.3 (6.01) | 19.5 (6.85) |
| Mean yrs of completed schooling at first migration | 3.4 (4.04) | 5.8 (3.64) | 7.4 (4.75) |
| Dominant first employment sector | Bakery (82.0 %) | Construction and agriculture (31.6%) | ‘Skilled’ private sector (40.0%) |
| Dominant first migration destination | Delhi (23.7 %) | Delhi (13.3 %) | Delhi (18.0 %) |
| Dominant destination state for first migration (other than UP) | Maharashtra (36.7%) | Uttarakhand (30.6 %) | Uttarakhand (26.0%) |
| % of first migrations within UP | 2.9 % | 33.7 % | 24 % |
| Percentage of first migrations to large cities | 69.0 % | 25.5 % | 38.0 % |
| Other destination states | Uttarakhand Jharkand West Bengal Orissa Gujarat Punjab Himachal Pradesh | Punjab Himachal Pradesh | Maharashtra Jharkhand Punjab Himachal Pradesh |

Our three theoretical predictions: descriptives

- P1: High prevalence of workplace referrals
- P3: Referees will recruit individuals they have strong social connections to (strong social ties)

Modes of labour market entry

| | | |
|---|---------------|--------|
| Pre-arranged | 88.8% | |
| <i>Informal:</i> | | |
| Workplace referral | 167 | 58.2 % |
| Indirect | 53 | 18.5 % |
| Labour contractor | 27 | 9.4 % |
| <i>Formal:</i> | | |
| Other | 8 | 2.8 % |
| | | |
| Not pre-arranged | 11.2 % | |
| <i>Informal:</i> | | |
| Workplace referral | 9 | 3.1 % |
| Indirect | 5 | 1.7 % |
| Destination asking around | 8 | 2.8 % |
| By directly approaching known spot market | 10 | 3.5 % |

- 61.3 % of labour market entry into first migrant job through workplace insider.
- Add 'indirect' entry and the prevalence of network based labour market entry jumps above 80 %.
- Labour contractors contribute 9.4 %;
- The total of destination asking around and directly approaching a known spot market account for a small percentage.

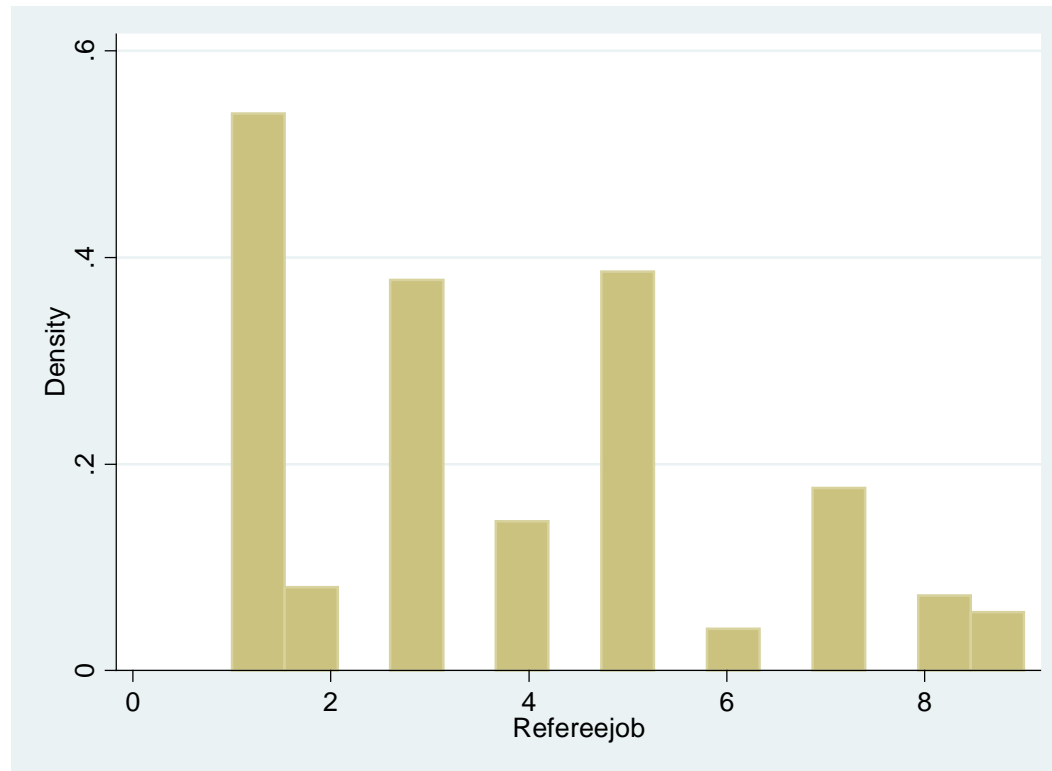
Social ties between referee and recruit: workplace referral


| Relation to referee | N | Percentage | Cumulative |
|------------------------------|----------|-------------------|-------------------|
| Member of the same household | 52 | 29.55 % | 29.55 % |
| Other relative | 87 | 49.43 % | 78.98 % |
| Village friend | 6 | 3.41 % | 82.39 % |
| Village acquaintance | 21 | 11.93 % | 94.32 % |
| Friend from elsewhere | 2 | 1.14 % | 95.45 % |
| Acquaintance from elsewhere | 6 | 3.41 % | 98.86 % |
| Other | 2 | 1.14 % | 100.00 % |

- Other relative: The largest categories of 'other relative' are cousins (32), uncles (30) and brother-in-laws (17). While the term 'uncle' is used generously in the Indian context, we carefully distinguish between genuine and fictive kin.
- P3: employers will invite employees with high stakes (T) to recruit on their behalf
- How do we capture high stakes?

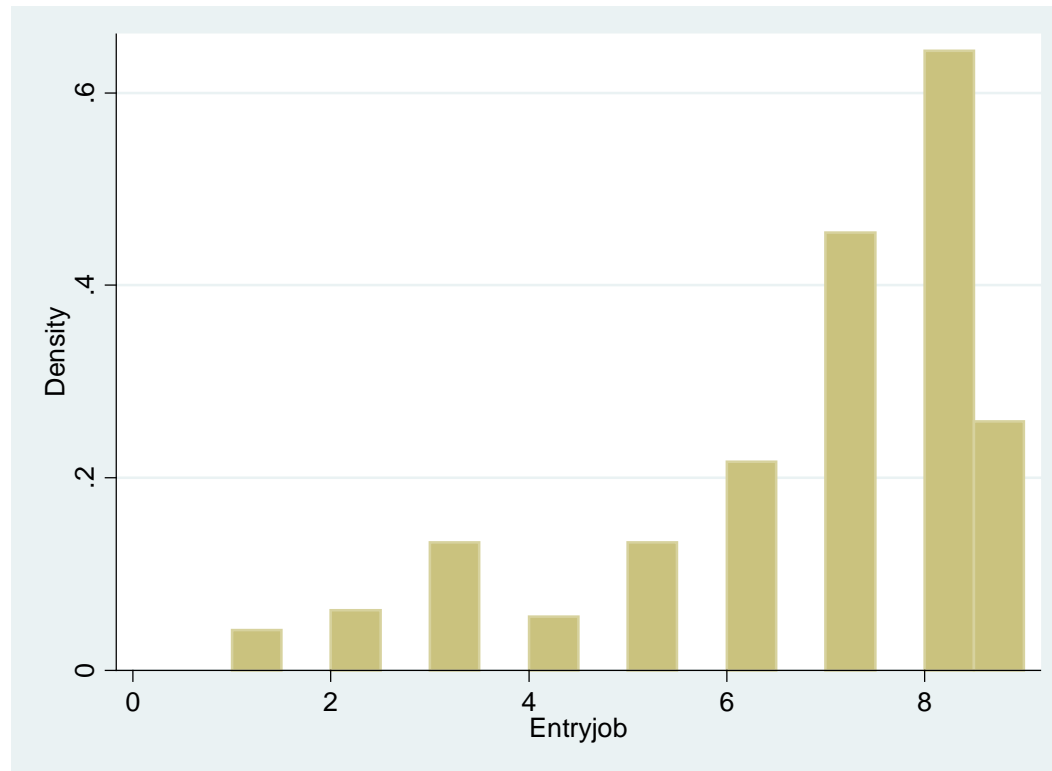
| | Rank | Type of jobs |
|---|---|---|
| 1 | <i>Enterprise owner</i> | |
| 2 | <i>Other prestigious jobs/positions</i> | <u>Politician</u> , <u>University student</u> , <u>medical doctor</u> , asst supervisor, <u>supervisor</u> , accountant (bakery), accountant clerk, sales clerk, sales manager (bakery), tailor master, <u>forest department supervisor</u> , block coordinator (UNICEF), <u>district project coordinator (UNICEF)</u> , Assistant Agricultural Inspector, Territory manager (Pharmaceutical company), Toll clerk, <u>Assistant general manager</u> , School teacher (private school), Religious teacher (mosque), College teacher, Newspaper correspondent |
| 3 | <i>Skilled</i> | <u>Builder</u> , electrician, carpenter, pottery maker, welder, tailor (machine operator), weaver (embroidery worker), mason (construction), <i>mistry</i> (bakery), cook (restaurant), barber, office peon, iron smith, motorbike mechanic, moulder, radio/tape/television repairer, engine mechanic (pumps, generators), iron moulder, <u>powerloom mechanic</u> , <u>shopkeeper</u> (petty), assistant storekeeper |
| 4 | <i>Other (less) Skilled</i> | driver, domestic cook, rickshaw driver, furniture polisher, shop salesman, <i>mattee</i> (bakery product) maker, brush maker, beautician, sweets maker, house painter, <i>nulki</i> (bakery product) <i>mistry</i> , <i>bhattee mistry</i> (in charge of bakery oven), realer, battery mechanic, bicycle repairer, sewing machine operator (simple tasks), electric meter worker, scaler (forest department), waiter, housekeeper (hotel), <u>farmer</u> |
| 5 | <i>Vendor</i> | bakery vendor, fruitseller, juiceseller, cobbler; snacks vendor, vegetable vendor, tent stall vendor, scrap vendor |
| 6 | <i>Apprentice /Trainee</i> | barber, tractor repairs, mason, welder, beautician, carpenter, electrician, machine operator, toy artist, tailor, battery mechanic, motor mechanic, iron smith, weaver |
| 7 | <i>Unskilled (upper)</i> | shop assistant (sales counter helper), helper, packer, ‘soler’ (of shoes), counter of shoes (factory), table worker (bakery), cutter helper (factory), maintenance helper, ironing (dhobi), framechecker (factory), ‘roller’ (bakery), <i>bhattee</i> (oven) worker (bakery), <i>gulli</i> or <i>nulki</i> maker (bakery), <i>jaggory</i> maker, driver helper, bus conductor, <i>chaprasi</i> (messenger) |
| 8 | <i>Unskilled (lower: manual)</i> | sweeper, utensil cleaner, cleaner, rickshaw puller, machine cleaner (factory), unskilled factory worker, other domestic worker |
| 9 | <i>Unskilled (lower: manual)</i> | manual labour, agriculture, construction, white washing, tent worker, loader, wood cutter |

Referee (or main contact) jobs



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- On owner's recruitment: about 31 % recruited a household member, another 43 % a relative.
 - Notice that on social ties to recruits, the employee referees act very similarly to the owners of the firm.

First migrant jobs




Distinguishing referral as a worker disciplining device from plausible rival explanations

- *Insiders have privileged access to vacancy information:* Given that recruitment is into 'unskilled' jobs, workers at this level should know and be able to inform others. However, it is clearly not contacts at the entry level (same levels as the new recruits) that matter.
- Higher prevalence of referral among younger migrants: 74.4% for those below 14, 54.3 % for those above. Suggests 'insurance' dimension to referral, sheltering young migrants.

- *Referral itself could be a screening device:* are those recruited through ‘referral’ different? (we controlled for education, literacy and several individual unobservables). Few of these coefficients were significant.
- *Preferences for working together:* we were able to control for such preferences at the social group (‘jati’) and the village level (key coefficients were proximately unaffected).

Conclusions

- The 'results' support our three theoretical predictions giving credence to the moral hazard account of workplace referral.
- Not only are connections to workplace insiders necessary: insiders need to have stature within the recruiting firm.
- Social obligations among members of the workforce may compensate for incomplete contracts in work relations in markets for low and unskilled jobs.
- Ensuing and persistent barriers to rural-urban transitions is overlooked in much of the existing literature



First migrant jobs for those from a rural source area with widespread poverty are typically pre-arranged and partly reflects that migration, being path dependent, often is to small destinations where independent job search is less likely to succeed (and costly).

- Child labour migrants from the study area appear to be ‘insured’ through the high prevalence of entry with a workplace insider.