

# How social networks shape local labour markets

## Evidence from Ethiopia



### In brief

- In Addis Ababa, a large proportion of young people find temporary and informal jobs with the help of their social contacts – people who often live in the same neighbourhood as them.
- This study examines how the social networks in urban neighbourhoods shape the structure of the local labour markets and what the implications for productivity are, with the help of a field experiment.
- The findings of this study suggest that young people who are more central in their social networks are more likely to find jobs, whereas individuals with few network connections also remain excluded from work opportunities. However, more central individuals are not more productive on the job.
- Job referrals in local labour markets are driven by a strong norm of reciprocity, which disadvantages individuals without many social ties. This norm has negative implications for productivity on the job.
- These factors put socially peripheral individuals at a disadvantage. However, when these people are given a job referral opportunity in the context of the experiment, they strategically make new and permanent connections to other individuals.

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## Overview of the research

Social networks are an important component of everyday life and a determinant of socioeconomic outcomes, both in developed and developing countries, including in Ethiopia and Addis Ababa. Among other things, social networks are known to influence physical and mental health, educational achievements, and labour market outcomes. This study focusses on the latter and investigates the relationship between network centrality, social exclusion, and labour market outcomes through a field experiment. In our setting, we look at neighbourhood networks in Addis Ababa, Ethiopia, since urban neighbourhoods are important places for the exchange of job information and referrals; at the same time, social networks in urban areas, particularly in developing countries, are relatively understudied due to complexities of data collection and measurement.

- We create casual labour markets (“day jobs”) for young individuals without permanent employment in a range of 16 urban neighbourhoods in Addis Ababa.
- After completing the job, some of the workers are randomly given the opportunity to invite their social contacts to the same job. Importantly, job referrals take place within existing social networks clustered within densely populated urban neighbourhoods.
- The conditions of this job referral process are varied randomly along several dimensions: in-person vs anonymised referrals; incentivised vs un-incentivised referrals; and ‘human’ vs computer referrals.
- This job referral experiment is then repeated for several rounds, which enables us to look at repeated interaction effects, such as reciprocal referring, as well as whether there is persistence in an individual’s network position.

We collected data on almost 750 young individuals without permanent employment or education, who work and live in 16 different urban neighbourhoods in Addis Ababa. The data collected are census-like and allow us to draw complete social network maps for every neighbourhood in the sample. The individuals then participate in our labour market field experiment, working in our experimentally-provided jobs and referring other individuals from their neighbourhoods to the same jobs.

Our analysis allows us to characterise how an individual’s position in the neighbourhood network influences their labour market outcomes, as well as what implications this has for productivity and the exclusion of certain groups.

## Policy motivation for research

The job referral experiment is situated in real-life social networks of young urban dwellers. Evidence shows that social networks influence labour market outcomes worldwide – peers help each other find employment, and individuals are more likely to be employed if their friends are. Across many different contexts, a large fraction of jobs are found through direct referral networks between individuals. A central theme emerging from this literature is that an individual’s connection within social networks is important for various employment-related outcomes.

However, real-life social networks often display substantial heterogeneity in the number of social connections (or ‘links’) individuals have. At the one extreme, complete exclusion from information and referral networks is a disadvantage for labour market participants and raises equity concerns among policymakers. At the other end of the spectrum, network centrality (often measured as the degree, i.e., the number of links a person has) strongly and positively correlates with favourable labour market outcomes, but is hard to disentangle from other correlated individual characteristics, such as sociability, attractiveness, or ability.

This research project intends to provide information on the functioning of local labour markets and how social networks shape them. The findings of this study can inform policymakers about how individuals that are permanently excluded even from informal work opportunities can be integrated.

Key research questions	Summary of the key findings
By looking at local job referral networks, what can we learn about persistent differences in labour market outcomes and productivity?	The social networks that we find in urban neighbourhoods in Addis Ababa shape the labour market outcomes of the young people living there. Young people frequently exchange job referrals and information about jobs. When re-creating the local labour market in an experimental setting, we can characterise how network centrality and dynamic interactions lead to different labour market outcomes for individuals.
Are central individuals in local networks more likely to get job offers in local labour markets?	Centrality in social networks positively predicts the likelihood of getting jobs. This is not because central workers are more productive on the job. Other workers from the same neighbourhood are good at predicting who is central in their network.
How can socially excluded, long-term unemployed individuals get access to job referral networks?	When given a one-off work and job referral opportunity, socially excluded individuals try to establish new connections with other workers from their neighbourhood. These connections get reciprocated by the other worker, who re-invites the peripheral worker to jobs in the future.

## Policy recommendations

*“Individuals can permanently overcome exclusion once given an opportunity — this finding has implications for how policymakers could think about alleviating youth unemployment, e.g., through the provision of temporary job opportunities or community centres where young workers and job seekers can develop necessary social capital.”*

- **Local neighbourhood networks shape local labour markets.** While policy interventions often focus on formal firms and hiring processes, many workers (especially young ones) are hired informally and locally through neighbourhood networks. Ignoring this informal sector means ignoring a large part of the working population. Policies should pay more attention towards this type of micro-level analysis, in particular when it comes to local job provision or housing policies.
- **One-off job referrals can be a powerful tool to integrate excluded individuals into the labour market.** Peripheral individuals who are randomly given referral opportunities manage to use these as devices to connect to larger parts of the social and job referral networks, by establishing links with previously unknown individuals. These links are usually confirmed by the other individual through reciprocal provision of jobs, and hence remain in place after more than one work session. Individuals can permanently overcome exclusion once given an opportunity — this finding has implications for how policymakers could think about alleviating youth unemployment, e.g., through the provision of temporary job opportunities or community centres where young workers and job seekers can develop necessary social capital.
- **In terms of local effects, the gains are uneven across districts.** The research uncovers a U-shaped relationship between yield gains and changes in transport costs, implying that the biggest winners are not necessarily the ones that have the largest drop in the level of their transport costs. There are other factors that matter such as the relative transport costs across crops and a district’s comparative advantage in terms of productivity. Interestingly, the U-shaped relationship found is similar to the one observed across districts in the data.