



Risk sharing within firms: evidence from urban labour markets in Uganda

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- This brief reports findings from a study of small urban firms in Kampala (Uganda), examining how risk is shared between firms and workers and how these arrangements shape wage employment, firm growth, and self-employment transitions.
- Workers at small urban firms bear a disproportionate amount of firm-level risk. Their earnings fall sharply when demand drops, while firms capture the gains when demand rises.
- Credit and contracting frictions give firms bargaining power to shift risk onto workers, who must build firm-specific trust to accumulate capital for self-employment.
- Workers transition from wage to self-employment once enough initial capital is accumulated, resulting in high turnover and early exits that limit firm growth and create a “missing middle” of medium-sized firms.
- Bundled policies are the path forward in moving away from this low-growth equilibrium. Combining firm liquidity support with formal contracts that share gains with workers can retain talent, align incentives, and foster firm growth.

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Motivation

Urban labour markets in developing countries are marked by high volatility and employment instability (Breza and Kaur 2025). Missing insurance markets (Udry 1995), binding credit constraints (Banerjee 2003), and weak contract enforcement (Greif 1997; Fafchamps 2003; Macchiavello 2022), characterise the typical experience of urban wage employment, exposing the modal worker in such settings to substantial income risk. These frictions contribute to the prominence of informal networks as an avenue for risk sharing and insurance against economic shocks. While there is robust evidence on informal risk-sharing in rural villages (Townsend 1994), there is scant evidence on how risk is allocated within urban workplaces.

Recent evidence on wage contracts, earnings volatility, and wage delays (Alfonsi et al. 2020; McKenzie 2024; Kaur 2019; Dreze et al. 1986; Cefala et al. 2024) suggests that workers may absorb a substantial share of firm-level risk in these settings. These channels of risk pass-through subvert the traditional theory of the firm where the firm as a risk-neutral entity insures the risk-averse worker through stable wages and long-term contracts.

Documenting how risk is passed through to the worker in small firms across lower and middle income countries is important not only for worker welfare, but also for explaining barriers to firm growth, most notably the persistence of the “missing middle.” If workers are forced to absorb firm-level risk, the employment relationship may cease to function as a vehicle for long-term human capital accumulation and instead become a temporary, extractive arrangement. In such environments, workers may prioritise short-run income smoothing or capital accumulation for exit into self-employment, while firms rely on labour to buffer volatility rather than investing in expansion.

Understanding how risk is passed through to workers in small firms across low- and middle-income countries is therefore essential for understanding why so many firms survive – yet fail to grow.

Project background

To address this gap, we study the internal organisation of small manufacturing firms in Kampala, Uganda. Through detailed worker and firm surveys, this project documents:

- the extent of risk pass through within firms;
- how relational contracting within the firm sustains the equilibrium of high wage volatility; and

- the implications of this arrangement on the worker job ladder and firm growth.

Between July and September 2025, we collected data from 854 manufacturing firms and 820 workers across carpentry, welding, and tailoring sectors. For 818 firms, we are able to match the owner and worker surveys and generate a matched employer-employee dataset. This matched dataset is the basis for our findings.

Firms were sampled from our initial census of 2,304 firms, which we conducted between September and November 2024. To ensure representativeness across small manufacturing firms¹ in Kampala, we used a density-based spatial clustering algorithm (DBSCAN) to create sector-specific strata of firm density, and randomly sampled firms from each stratum. Furthermore, interviewed workers were selected randomly from all individuals permanently employed at the firm, with the selection stratified by worker's position.²

The data combines an in-depth survey of firms and their workers with a lab-in-the-field experiment. The survey data provide information on:

1. observable characteristics (demographics, cognitive ability, non-cognitive ability, socio-emotional skills) and preferences (risk, altruism, and trust) of workers and owners; and
2. The structure of wage contracts, income and consumption details, which allow us to draw insights into the extent of risk pass-through within the firm.

In the lab-in-the-field experiment, we asked participants to choose real stakes contracts to perform a sector-specific, real-effort task. This exercise complements the survey data by:

1. Eliciting contract preferences and expectations about effort and retention; and
2. Measuring norms and risk pass through by providing workers an opportunity to return earned wages under business-related and idiosyncratic shocks to firm owners.

Combined, this novel data sheds light on the contracting environment, how this shapes the risk pass-through arrangements within the firm, and the consequences for workers' career trajectories, firm growth, and aggregate firm-size distributions.

¹ Small manufacturing firms in carpentry, welding, and tailoring.

² Skilled, unskilled or managerial

Key findings

Our research suggests that workers insure the firm against demand volatility risk, which in turns result in low levels of wage employment, excessive firm entry, and overall limited firm growth.

Workers face an asymmetric pass-through of firm risk. 88% of workers in our representative sample are paid piece-rates for their work. Contractually, such arrangements imply that workers' earnings should co-vary symmetrically with demand for firms' products: higher demand should translate into higher earnings, and lower demand into lower earnings.

Our results, however, reveal a stark asymmetry. Workers' earnings are more sensitive to negative deviations in firm sales – a proxy for demand – than to positive ones. In contrast, business profits display the opposite pattern: increasing substantially in response to positive demand shocks while remaining largely insulated during periods of weak demand. Taken together, these findings point to an asymmetric risk-pass-through arrangement, in which downside demand risk is disproportionately borne by workers and the upside gains absorbed by firms.

Figure 1: Demand risk passed through asymmetrically to workers

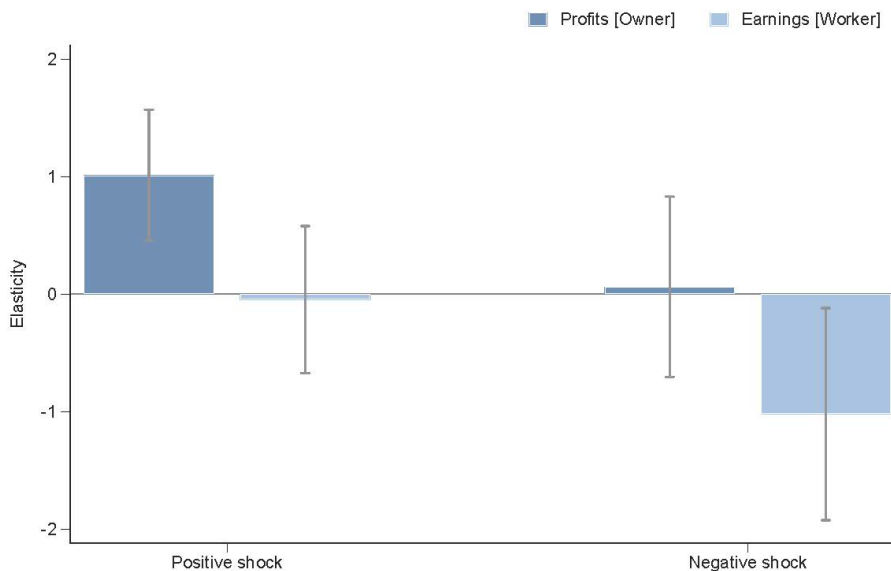


Figure 1 plots workers earnings and firm profit sensitivity to positive and negative demand shocks. Sensitivity is quantified by an elasticity measure where a value of +1 implies a 1% increase in earnings or profits due to a 1% increase in demand.

This arrangement is sustained by temporary bargaining power the firm derives from contractual frictions. For credit-constrained workers, saving the earnings from wage employment is largely the only viable path to capital accumulation for self-employment. Hence, workers invest in building trust with their employer to secure long-term capital accumulation. Through a lab-in-the-

field vignette where workers have the opportunity to return a share of their fixed wages, we find that inexperienced workers return a larger share of their incomes if the firm owner faces a personal or firm-related adverse event. Investing in such relational capital has high returns: not only directly through the income from the employment relationship but also experienced workers are more likely to borrow from their owner but have the autonomy to negotiate and deal with the customer directly.

Figure 2: Lab-in-the-field: % of wages returned, by worker tenure

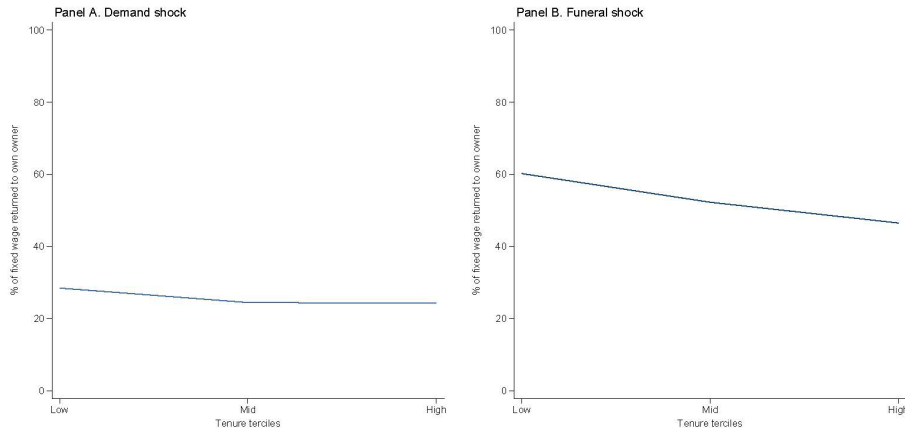


Figure 2 summarises the results from the lab-in-the-field vignettes by worker tenure bins. Workers were endowed with a fixed amount of wages and asked what share of their wages they would return to their owner under a demand shock and a personal shock (funeral expense).

Figure 3: Worker autonomy & bargaining power, by worker tenure

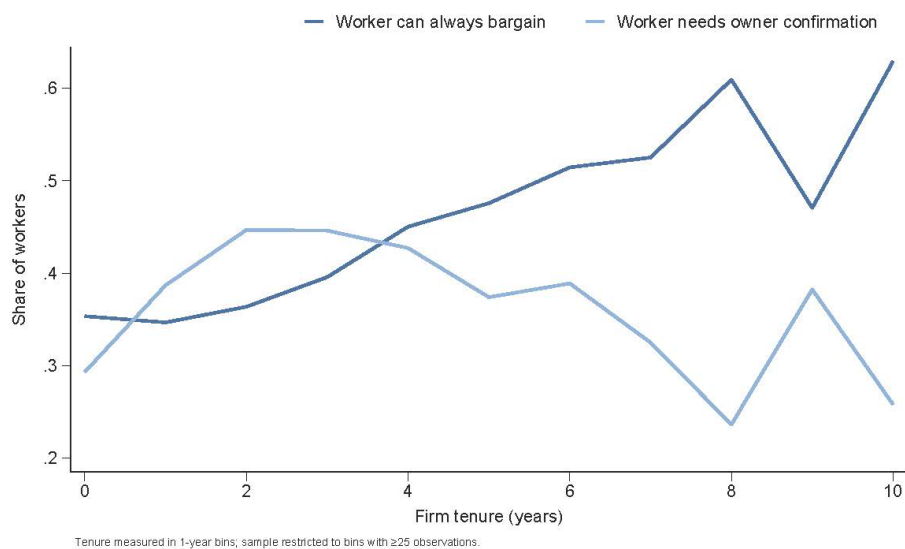


Figure 3 plots the results from our survey module on worker autonomy. The share of workers who can directly deal and bargain with customers increases with workers' tenure at the firm.

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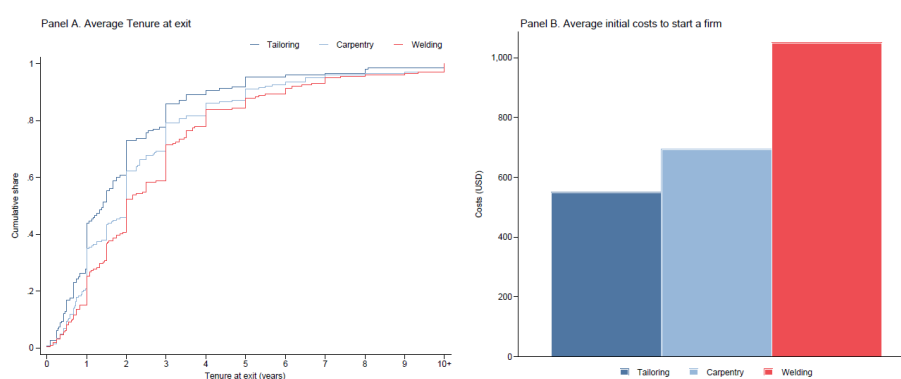
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However, this investment in trust is firm-specific and cannot be transferred to a new employer, locking in the worker to the same firm, at least in the short-run until their accumulated savings reach the threshold required for self-employment entry. This specificity of the relational investment restricts the workers' outside options, cedes bargaining power to the owner, and inhibits wage employment transitions.

Asymmetric risk pass-through leaves workers exposed to downside risk while limiting their participation in upside demand shocks, weakening incentives to remain in wage employment. This equilibrium induces workers to treat employment as a transitional phase rather than a career path: they prefer self-employment, actively pursue it while employed, and exit once sufficient initial capital is accumulated. We find that much of the workers' wage employment spell is spent preparing and accumulating resources for a move to self-employment:

- 68% of workers report working for their own customers;
- 63% report saving for the initial investment amount required; and
- 50% buy machines while being employed for wages.

Moreover, quits appear to be determined by the amount required to set up one's own business: workers in sectors with higher initial capital requirements transition from wage employment at a later stage in their tenure.



Panel A depicts the sectoral cumulative density function (cdf) of worker tenure at the time they exited the firm. Panel B charts the self-reported initial costs (in USD) to start one's own firm. Workers in sectors with higher start-up costs tend to have longer wage employment spells.

Therefore, with relationship-specific investments and credit constraints, the typical job ladder in such settings collapses into a single step: a transition from wage labour to self-employment, with only 33% of owners having had multiple

previous wage employment spells, and 46% of skilled workers having had no prior work experience.

Policy implications

The current low-growth equilibrium is a rational response to dual market failures: in the credit as well as the contracting markets. Because it reflects a stable equilibrium – where firms and workers respond rationally to existing constraints – isolated, one-off interventions are likely to be insufficient in resolving this bind, which requires a co-ordinated, systematic approach.

In fact, policies that target only a single friction in isolation, such as mandating insurance or providing certification, risk worsening outcomes. For example, enforcing worker insurance without improving firms' access to credit may lead firms to stop training workers altogether. Likewise, extending credit only to workers may accelerate exits into self-employment, increasing fragmentation and weakening the already limited base of medium-sized firms. **These risks underscore the importance of coordinated policy packages that address multiple constraints simultaneously, rather than piecemeal reforms.**

Shifting the equilibrium therefore requires bundled, simultaneous interventions. Liquidity support to firms should be tied to the adoption of formal, longer-term labour contracts that allow workers to share in upside gains. By discouraging premature exit and incentivising worker retention, such policies can better align the time horizons of firms and workers, strengthening firms' incentives to invest in training and transforming them from short-term stepping stones into durable engines of shared growth and prosperity.

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