

# Social Security Reform and Labor Market Outcomes in Ethiopia

**Admasu Shiferaw** (The College of William and Mary)

**Arjun Bedi** (Erasmus University Rotterdam)

**Måns Söderbom** (University of Gothenburg)

**Getnet Alemu** (Addis Ababa University)

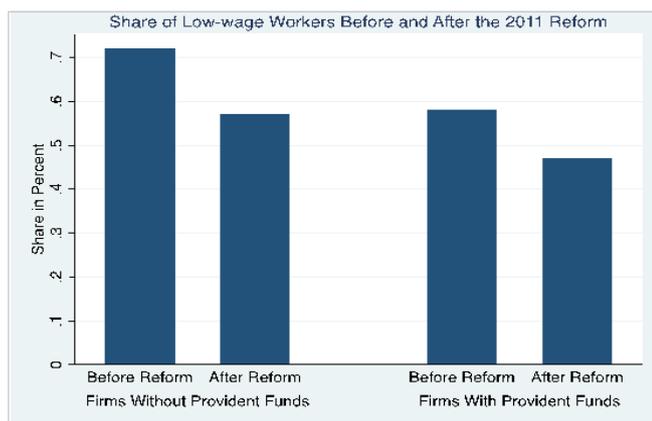


*Ethiopia's pension reform helped people save for later life but also led to fewer jobs for unskilled workers !*

Follow us on Twitter! Find @glmlic

## Topic at a Glance

In June 2011, the Ethiopian government introduced a social security reform mandating employer provided pension and disability benefits to permanent employees in the private sector. Before this reform, such benefits were available only to government employees. This project examined the labor market implications of this reform. To identify the reform's effects, the authors relied on the existence of firms that voluntarily arranged contributions through "Provident Funds". In the pre-reform period, firms with Provident Funds (PFs) provided lump sum payouts to workers at the time of separation. The government allowed PFs to continue after the reform. Hence firms with pre-reform PFs serve as a control groups while firms without PFs serve as a treatment groups as they are forced to make social security contributions for the first time after 2011. The project examined whether employers shifted the cost of social insurance to workers in terms of reduced wages, and the reform's effect on firm-level employment. The analysis was carried out using firm-level data collected by the Central Statistical Agency of Ethiopia as well as worker-level data.



## New Insights

The existing literature on the labor market implications of social insurance in developing countries mainly focuses on the experiences of middle-income Latin American countries with a larger coverage rate and longer experience with social protection. There is very little evidence on this topic in the African context, where wages and per capita income remain low and social insurance is relatively new with coverage rates typically below 10% of the labor force. This project fills this gap by providing evidence on one of the largest and fastest growing economies in Africa. Moreover, our identification strategy differs from current practice where researchers use either cross-firm variation in the actual employer contribution rate, which often differs from the statutory contribution rate, or variation across administrative units in the employer contribution rate. We use rather the existence of two parallel systems of social insurance for private sector employees which differ with respect to benefit structure and enforcement mechanisms. One of them involves a pre-reform voluntary scheme referred to as "Provident Funds" (PFs) that are allowed to continue after the 2011 reform while the second one is a mandatory scheme that applies to firms without PFs. We expect that the reform will have had a greater impact on firms without PFs, since these firms were forced to make employer contribution after 2011. The project also examined the potential effects of social insurance on wage inequality – a topic that is not addressed by the relevant literature which focuses mainly on wage and employment growth.

The first paper uses firm-level data to estimate the wage and employment effects of the reform. We find that firm-level average wage increased significantly after the reform and this growth was higher among firms without PFs. We also find no major change in other nonwage benefits to workers and in the production cost structure of firms after the reform. This suggests that firms were not able to offset the rise in nonwage labor costs after the reform by reducing other expenditure items. In fact we find a significant increase in unit labor cost after the reform, particularly among firms without PFs. Consistent with this observation, firm-level employment declined significantly after the reform and this decline was larger among firms in the treatment group (firms without

PFs). The post-reform reduction in firm-level employment came entirely from a reduction of low-wage workers, although there was no difference between treatment and control group firms in this respect. Small firms also experienced employment contraction after the reform, relative to large firms. There is some evidence that the reform increased capital intensity and productivity.

For the worker-level analysis, the team conducted a field survey in 2016 capturing 300 firms and 3000 workers. Retrospective questions were used to capture trends in wages and social security contributions. We control for worker education and experience in addition to the firm's PF status which helps us identify the impact of the reform. The main finding from this analysis is that post-reform wage growth was significantly lower among firms without PFs only for workers with little or no education (maximum of secondary education). Therefore, employers have been able to partially shift the cost of social insurance to less educated workers. We didn't find such an effect for workers with more than secondary education. Sample splits between production and non-production workers reveal that the reduction in wage growth for less educated workers in firms without PFs is evident only for production workers. Similarly, the partial shifting was evident in low-wage industries as compared with high-wage industries. Finally, we find that the heterogeneous wage effects of the reform across workers have contributed to rising wage inequality.

## Policy Recommendations

The project finds some unintended consequences of the 2011 social security reform. We document a significant reduction in firm-level employment as a consequence of the reform, which seems to have affected low-wage workers in particular. There was further reduction in employment after the reform among small firms relative to large firms. Moreover, the worker-level analysis shows that less educated workers employed by firms without PFs are more likely to experience slower wage growth after the reform. Similar to the employment effects, post-reform wage growth was faster among large firms relative to small firms. We argue that policy makers who are considering implementing social security reforms that raise labor costs for firms should take into account the likely negative effects on firm growth and job creation. It should be noted that our results indicate that the adverse effects may be particularly pronounced for unskilled workers with little or no education. Our results also suggest that policy makers may want to revisit the proportionality of the employer and employee contribution rates which apply regardless of firm size and wage levels.

## Limitations

The basis for the pension reform was a new law that applied to all firms in the formal sector. Our identification strategy relies on the existence of pre-reform provident funds that some firms offered to their employees on voluntary basis. The idea is that for firms with pre-existing provident funds, compliance with the new pension law would involve little to no change in nonwage labor costs as compared to firms that were forced to introduce a pension system. For the latter, the mandated contribution rate introduces a substantial spike in nonwage labor costs that may affect wages and/or labor demand. One limitation of the research is that the pre-reform distinction between provident and non-provident firms may not be exogenous, in which case the treatment-control comparison may not be a rigorous basis for estimation of the causal effect of the reform. The results should therefore be interpreted with some caution.

Read more → [glm-lic.iza.org/projects/ta3/330/](http://glm-lic.iza.org/projects/ta3/330/)

*GLM|LIC is a joint program by IZA and the UK Government Department for International Development (DFID) – improving worldwide knowledge on labor market issues in low-income countries (LICs) and providing a solid basis for capacity building and development of future labor market policies.*