



Understanding employment and shocks in Ethiopia: 1999-2021

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- This policy brief explores the impacts of two major shocks – rainfall and conflict – on employment in Ethiopia. It uses non-parametric analysis to study the association between these variables.
- Employment tends to fall in years that are either very dry or very wet, mostly driven by a reduction in agricultural employment.
- Years with intense conflict are associated with falls in employment in manufacturing and services, whilst agricultural employment rises.
- These shocks are likely to become more frequent and intense, climate and conflict shocks may occur simultaneously, and the economy's capacity to respond to conflict shocks is also likely to be imperfect.
- Various policies that boost the economy's ability to preserve employment in the face of shocks, facilitate workers' post-conflict return to productive activities, and ensure strong social protection should be considered.
- Data-driven policymaking can guide targeted interventions and evidence-based labour market solutions.

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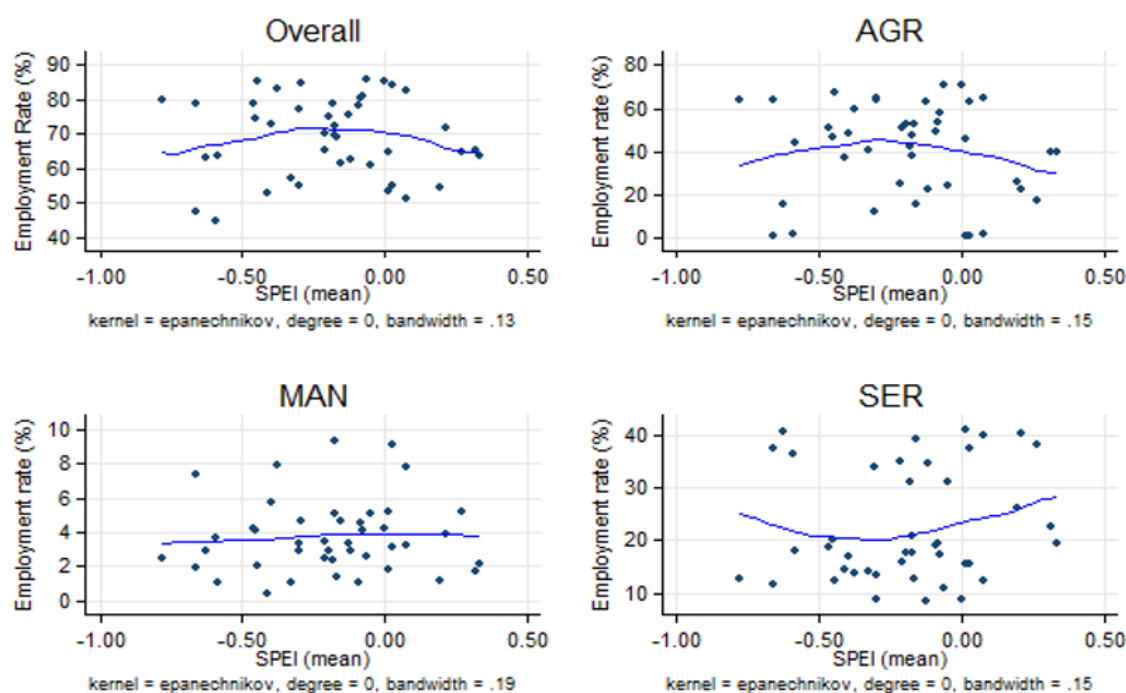


Research overview and findings

The Ethiopian economy is vulnerable to several shocks. Examining previous shocks can inform policy discussions on building resilience in Ethiopia's labour market to mitigate the impact of future shocks. In this policy brief, we explore the impacts of two major shocks – rainfall and conflict – on employment. We use non-parametric analysis to study the association between these variables. The evidence, therefore, is only suggestive and should be supported by further research.

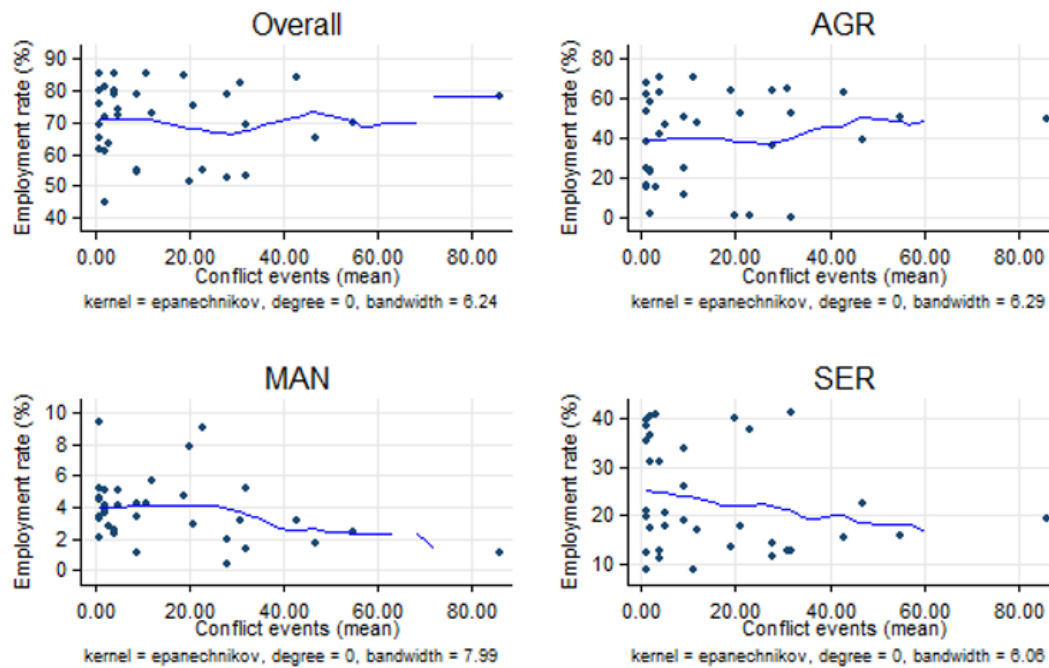
We find that employment tends to fall in years that are either very dry or very wet. This fall is mostly driven by a reduction in Agricultural (AGR) employment. Manufacturing (MAN) employment remains relatively stable. On the other hand, service (SER) employment rises in very dry years but by an insufficient amount, preventing an overall contraction in employment (see Figure 1).

Figure 1: Impact of weather shocks on employment dynamics in Ethiopia



For conflict, we find that years with intense conflict are associated with falls in employment in manufacturing and services. At the same time, agricultural employment rises. Impacts on overall employment are less clear (Figure 2).

Figure 2: The link between conflicts and employment dynamics in Ethiopia



Extreme values outside 3 times the interquartile Range (IQR) are considered outliers

Policy implications

There are three important initial policy implications:

- These shocks are likely to become more frequent and intense in the future. Policymakers should thus consider experimenting with different effective ways of boosting the economy's ability to preserve employment in the face of shocks. This may include policies that strengthen agricultural resilience, policies that boost the service sector's ability to provide jobs in years with bad agricultural output, and safety nets.
- The economy's capacity to respond to conflict shocks is also likely to be imperfect (since the agricultural jobs that people fall back on in times of conflict are likely to be less productive than the service sector and manufacturing jobs that are lost). Policies that facilitate workers' return to more productive activities once hostilities are over should be considered.
- Climate and conflict shocks may occur simultaneously. Ethiopia is particularly vulnerable to this combination of shocks since all sectors would be affected contemporaneously, and hence, employment falls are likely to be very large. When a combination of shocks occurs, strong social protection responses may be needed to complement labour market policies.

Finally, data-driven policymaking will be essential in navigating the dual challenges. This analysis on jobs and shocks has been limited by the absence of sufficiently disaggregated data, both by employment sub-sectors and location. Tools such as the Standardized Precipitation-Evapotranspiration Index (SPEI) and the Armed Conflict Location and Event Data (ACLED) database can not only help identify vulnerable regions and target interventions effectively but also better understand coping mechanisms and job responses that can be strengthened. Integrating tools such as the emerging Labor Market Information System (LMIS) focused on young people into a comprehensive labour market information system would provide valuable insights for policymakers, enabling them to design and implement evidence-based solutions.