

Subjective expectations and occupational choices among university students in Mozambique



In brief

- The transition from school to the labour market is receiving growing attention among economists and policymakers, especially in developing countries.
- This study examines the role of subjective expectations about employment and earnings in influencing occupational choices in three different sectors (public, private, and self-employment) among university students in Mozambique.
- We use a combination of tailored survey data collected under different scenarios and a randomised information treatment administered to over 800 students from different college majors in two leading universities in Maputo.
- Results suggest that students update beliefs after the information treatment in the way we expect and sort into occupation according to average expected earnings. Expected riskiness of occupations also plays a role: students tend to avoid occupations with disparities in high earnings and low probability of finding a job. Furthermore, disregarding uncertainty might lead to an overestimation of the importance of expected average earnings.
- The findings of the study suggest that students tend to underestimate returns to higher education in the self-employment sector, while over-estimating them in the public sector, highlighting one potential and fundamental cause of the skills mismatch in the Mozambican labour market.

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Overview of the research

Mozambique has been growing steadily during the last decade and the same holds for rates of returns to higher education, which have also been rising. Yet the youth unemployment rate has remained high over the period, especially for tertiary educated youngsters, while the demand for skilled workers has been growing more rapidly than supply. There is no evidence nor consensus on the main drivers of the high rates of university drop-out and skill mismatch in labour market outcomes in Mozambique.

The study examines the role of subjective expectations about education and labour market returns in shaping individuals' future occupational choices among university students in Maputo. A recent and growing body of studies is outlining the significant role played by perceived expected earnings in influencing forward-looking investment decisions, such as educational achievement and labour market outcomes. Expectations are important for people's sorting in specific economic outcomes (e.g., occupation). This is a particularly relevant issue in developing contexts where uncertainty on ex-ante economic returns may be a significant driver of high-stake lifetime decisions, such as education or occupation, due to market imperfections and risky environments.

Standard economic theory points to career motivations and own future labour earnings as main determinants of human capital investment and occupational choices. Even though there is a large literature estimating labour market returns with observed earnings data, it has been emphasised that it is the returns perceived by students (and/or their parents) that will influence actual decisions.

The study examines the nature and problems of two major lifetime investment decisions, i.e., higher education achievement and occupational choices. In particular, we ask the following interrelated questions:

- Are Mozambican youngsters informed about the actual labour market opportunities?
- Do young people have correct expectations (information) about returns to higher education?
- To what extent does expected income uncertainty affect youngsters' education and occupational choices?
- To what extent do over- or under-estimated expectations play a role in the skill-mismatch in the labour market?

The project's aim includes tackling methodological issues while assessing the causal impact of individual earning expectations on key investment decision problems. To do so, we collect data on expectations for a number of possible alternatives (i.e., about the future chosen alternative as well as all counterfactuals) and combine them with an information treatment about actual wages, by skill and sector, in the Mozambican labour market.

This allows us to construct for each student the individual-specific expected ‘return’ (in terms of own earnings) to choosing one option (e.g., one particular type of human capital or occupation) vs another one. Since we collect occupational choices conditional on graduation vs drop-out, before and after the information treatment, we can directly assess how changes in expectations about future earnings affect changes in occupational choices.

The analysis allows conclusions to be drawn on the underlying causes of important socio-economic issues such as high university drop out, youth unemployment, and skills mismatch in the Mozambican labour market.

Policy motivation for research

This research examines the role of subjective expectations about employment and earnings perspectives in influencing a successful transition between university and the labour market of young high-skilled Mozambicans, who have a strategic and significant impact on the country’s economic path to growth and development. The policy-related goal is to provide insight into how information asymmetries or risk perception (about earnings and unemployment) influence college attendance and drop-out, the transition from college to work, and the potential mismatch between the supply of and demand for graduate skills in the Mozambican labour market. Hence, the project findings will have important policy implications in the broad areas of higher education investment (e.g., strategic subjects plan, university placement programmes etc.), human capital formation (vs brain drain), and labour market development and growth.

The return to obtaining a college degree is high in Mozambique, but the choice of different university degrees and occupations may materialise in substantial heterogeneity in earnings in the labour market. Yet there is little evidence on the underlying drivers of students’ selection into different university career paths and occupations in this context.

In particular, knowing youths’ expectations and how they act upon them provides direct evidence on the relevance and severity of imperfections in determining actual investment behavior. Our results suggest that lack of information – and anything that hinders access to it — may be driving choices that result in mismatch in the actual labour market.

Policy impact

The research project intends to get a more in-depth understanding of educational and labour market decisions and suggests a way to shed further light on these important economic choices by making use of data on individual perceptions of future earnings and employment uncertainty. We expect that the findings of the study would result in the formulation of appropriate policies to solve the problems of high university drop-out and youth unemployment.

Key findings

Key research questions	Summary of the key findings
Are Mozambican youngsters well informed about the actual labour market opportunities?	Students make substantial errors about labour market earnings and subjective expectations are systematically overestimated. The largest overestimations occur when students estimate earnings for the public sector in the graduation scenario and for the self-employment sector in the drop-out case.
Do young people have correct expectations (information) about returns to higher education?	Students underestimate the return to higher education for self-employment and overestimate it in the case of private sector employment, and even more so for public sector employment.
To what extent does expected income uncertainty affect youngsters' education and occupational choices?	Subjective expectations about labour market returns significantly affect education and occupational choices. Uncertainty in expected wages significantly decreases occupational choices in sectors perceived as 'more risky', especially for males. For females, uncertainty does not turn out to be significant.
To what extent do over- or under-estimated expectations play a role in the skill-mismatch in the labour market?	Students' under-estimation of returns to education in the self-employment sector highlights one potential and fundamental cause of the skill-mismatch in the local labour market. Demand for skills and returns to higher education in Mozambique are high, but university students under-estimate the return to college education for being self-employed, which indeed reflects the lack of skills for entrepreneurship in Mozambique. On the other hand, students seem to slightly over-estimate returns to education in the public sector, and this is also consistent with an excess of supply in this sector, which also suffers from skill-mismatch.

Policy recommendations

By collecting novel and tailored data from university students in Maputo, this study contributes to a better understanding of the underlying causes of important issues such as college attendance and drop-out, the transition from college to work, and the mismatch between the supply of and demand for graduate skills in the Mozambican labour market. Indeed, the returns to obtaining a college degree may be high in Mozambique, but the choice of different university degrees and occupations may result in substantial differences in labour market earnings.

The project findings point towards the important role of information constraints in lifetime decisions, such as higher-education attainment and occupational choices. In particular, we present evidence that there is a significant degree of misperception in the return to higher education in the self-employment sector. However, the latter, which includes entrepreneurship and business activities, is a key and strategic engine of the process of

structural change and growth in a developing country such as Mozambique, especially when considering self-employment activities of those who went to university.

We find that higher skills are instrumental in obtaining a large earnings premium in the self-employment and entrepreneurship sector. Programmes and policies aimed at increasing a knowledge-based entrepreneurship in Mozambique may be strategic in order to decrease the skill-mismatch in the labour market and, at the same time, boost development and growth. There is ample evidence that inadequacy of skills among managers and the self-employed can be a constraining factor to productivity and competitiveness in developing countries. Increasing information and creating incentives to acquire such skills can be a proper and viable way to improve productivity and labour market outcomes.