Report

Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique

Inquérito Base à Transição Ensino-Emprego dos Finalistas Universitários

Copenhagen and Maputo
June 2018

Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique

Sam Jones, Felix Mambo, Edson Mazive, Yonesse Paris, Ricardo Santos, Gimelgo Xirinda

Preface

This report documents the main conclusions of the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique. The research was planned and implemented by researchers of the University of Copenhagen's Development Economics Research Group (DERG), the United Nations University World Institute for Development Economics Research (UNU-WIDER) and the Centre of Economics and Management Studies (*Centro de Estudos de Economia e Gestão* – CEEG) of the Eduardo Mondlane University in Maputo. The research and subsequent analysis were implemented under the responsibility of the Directorate of Economic and Financial Studies (*Direcção de Estudos Económicos e Financeiros* – DEEF), CEEG, UNU-WIDER and the University of Copenhagen, in the scope of the Inclusive Growth in Mozambique – Scaling-up Research and Capacity programme, financially supported by the Ministry of Foreign Affairs of Denmark (DANIDA), the Ministry of Foreign Affairs of Finland (MFA) and the Ministry of Foreign Affairs of Norway.

Table of Contents

List of Tables

List of Figures

1   Introduction

The survey on the School-to-Work Transitions of University Graduates in Mozambique aims to respond to the concerns of the Government of Mozambique and development partners with respect to youth employment in the country. The focus is on the transition of young people from education to the labour market. When studying this transition, two significant target populations are distinguished: the population reaching working age, and those reaching the highest levels of education and graduating from their degree courses. In this study, our focus is on the second group.

Mozambique faces a serious shortage of qualified human resources, with only 1.2% of its population having received higher education (INE 2015). This underlines the importance of following the process of the transition from education to work, particularly of this better-educated population cohort, as the experience of the most-qualified youth in their transition to the labour market provides a window into the overall functioning of the formal labour market. In this respect, this survey aims to analyse the determining factors of the employability of young women and men, who, being undergraduates in their university courses in 2017, are expected to transit to the labour market as early as 2018.

This report summarizes the results of a baseline survey conducted between March and November 2017 in six universities in the cities of Maputo and Beira. It is expected that there will be six rounds of follow-up of the initial sample through telephone surveys, which will be carried out quarterly between March 2018 and August 2019. The final survey report will be produced after completion of the six rounds.

2   Methodology

2.1   Target population

As indicated in the Introduction, the target population of the survey comprises final year university undergraduates in 2017. In Figure 1, we observe that the population of university graduates in Mozambique increased significantly from 2003, when there were reportedly 678 graduates, to 2016, when the number of graduates had already increased to 18,244 (DCES and DPEC 2005; OESCT 2005; DCES 2007, 2008, 2009, 2011a, 2011b, 2012a, 2012b, 2012c, 2016a, 2016b, 2017).[1]

In designing our sample, and on the basis of the statistics referred to in the previous paragraph, we estimated the total population through a second order polynomial approximation, the equation of which is presented in the graph of Figure 1. For the purposes of the calculations, we assumed a number of 17,977 graduates in 2017 and that all undergraduate students in 2017 would have graduated. This last hypothesis obviously errs by excess, leading to a measurement bias in terms of oversampling, which, while decreasing the efficiency of the survey, in no way prejudices the statistical power of the estimates.

Figure 1: Number of university graduates in Mozambique, per year

$$y = 21.392x^2 + 833.18x + 666.57$$
$$R^2 = 0.9631$$
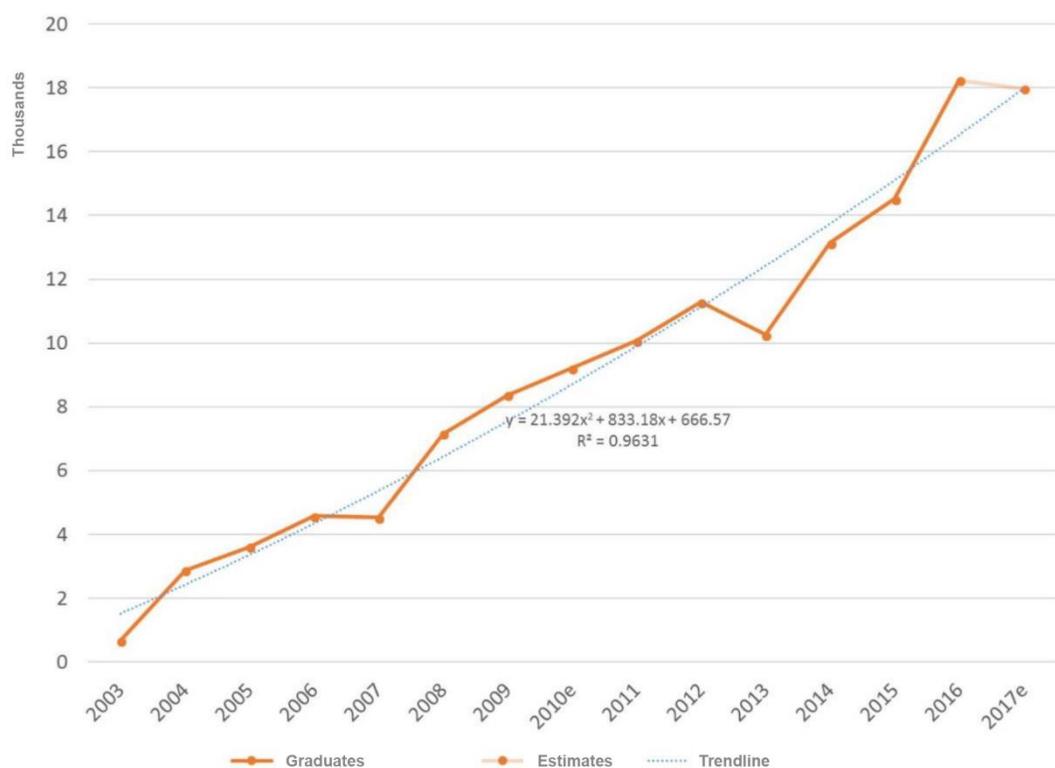
Source: Authors' calculations based on data from DCES and DPEC (2005), OESCT (2005) and DCES (2007, 2008, 2009, 2011a, 2011b, 2012a, 2012b, 2012c, 2016a, 2016b, 2017).

---

[1] The 2010 figure was replaced by a linear interpolation, since the statistical value reported for that year, 13,402, is an apparent outlier, taking into account the numbers reported for 2009 (8,368) and for 2011 (10,070).

On the basis of this estimate of the population of university graduates, the implementation of the survey had to obey some logistical constraints, limiting the target population to the undergraduate students of the Maputo campuses of the Pedagogical University (*Universidade Pedagógica* (UP)), the *Universidade Eduardo Mondlane* (UEM), the *Universidade São Tomás de Moçambique* (USTM) and the Polytechnic University (*A Politécnica*) and of the Beira campuses of the Catholic University of Mozambique (*Universidade Católica de Moçambique* (UCM)) and the Zambeze University (UniZambeze). Financial limitations impeded full coverage of the universities, i.e. the application of the survey to more locations than Maputo and Beira. These six universities were selected because, together, they provide higher education to approximately three-quarters of the total university population. Although it cannot be stated that the survey design guarantees that the results are strictly representative of all universities, it is not expected that this limitation will generate significant distortions.

Following the selection of the universities, we designed the sample with the objective of producing representative statistics of the population of their graduates, stratified by gender and study area (type of course). To this end, it was decided to estimate the subpopulations (segments) defined by study area and gender, through the distribution of students enrolled in 2015, as indicated in Table 1.

Table 1: Proportion of students graduated, by study area and gender

Training Area	W	M	WM
Education	14.6%	16.2%	30.8%
Arts and Humanities	0.7%	0.9%	1.6%
Social Sciences, Management and Law	20.9%	23.6%	44.5%
Natural Sciences	1.4%	2.6%	4.0%
Engineering, Industry and Construction	2.5%	5.4%	7.9%
Agriculture	0.9%	1.2%	2.1%
Health and Well-Being	2.7%	3.1%	5.7%
Services	0.7%	2.7%	3.4%
Total	44.3%	55.7%	100.0%

Source: Authors' calculations based on DCES (2017).

2.2 Sampling strategy

We followed Cochran (1977) for the determination of the dimension of the sample. As proposed by Cochran (1977), a sample of dimension n of a population N that allows inference with respect to a key issue, which in our case is the estimate p of the proportion P of recent university graduates who are employed, with a margin of error d and a confidence interval of $1 - \alpha$, is:[2]

$$n = \frac{n_0}{1 + (n_0 - 1)/N} \tag{1}$$

where

$$n_0 = \frac{t^2 p(1-p)}{d^2} \tag{2}$$

---

[2] This value corresponds to the following equation: $\Pr(|p - P| \geq d) = \alpha$.

and t is the abscissa of the standard normal distribution curve, which excludes a total proportion area α of the two tails. By calculation, it is easily established that the proportion p equal to 50% generates the largest required samples for each combination of the remaining parameters. This is a *standard* practice and is adopted herein.

In a first iteration, we can make a calculation on the basis of a population N of 17,977 individuals, a 7.5% margin of error and a 95% confidence interval. This generates a sample with 169 persons to be surveyed. It should be noted that, though this sample enables us to infer the proportion of new university graduates who have obtained employment, it does not allow statistically representative inferences at the level of population segments (e.g. by gender). In particular, the intention of this study is that the estimates are statistically representative at the gender and study area levels. This enables us, for example, to infer the probability of a female graduate of a Natural Sciences course achieving employment in the period of the survey, with the statistical confidence that we will be able to compare this probability with, for example, that of a male graduate in Education.

There are, however, logistical and financial limitations which, if no commitments had been made at the level of the margin of error and the level of confidence, would have led to us exceeding the survey's budget. Given these limitations, the adopted objective of this survey was to produce representative estimates at the level of the study area/gender segments, with a 7.5% margin of error and a 90% confidence interval. This decision follows the practice of several previous surveys.

Thus, two segments are considered: study area and gender. As recommended by Cochran (1977: 82), subsamples were calculated for each gender, in each study area. Table 2 presents the theoretical dimensions of the subsamples and of the total sample that we seek to study.

Table 2: Dimensions of the theoretical subsamples and total sample

Training Area	W	M	WM
Education	115	116	231
Arts and Humanities	60	70	130
Social Sciences, Management and Law	117	117	234
Natural Sciences	82	96	178
Engineering, Industry and Construction	95	107	202
Agriculture	70	78	148
Health and Well-Being	96	99	195
Services	63	96	159
Total	698	779	1,477

Source: Authors' calculations.

2.3   Implementation and final sample

The preparatory work for this survey was carried out in 2016 and involved the definition of the sampling strategy, a review of the basic literature, meetings with stakeholders including the Ministry of Labour, Employment and Social Security (*Ministério do Trabalho, Emprego e Segurança Social* (MITESS)) and the preparation of the follow-up telephone survey. In November 2016, a pre-pilot was carried out to test the sampling strategy and the equipment. With the institutional support of the Ministry of Science and Technology, Higher and Technical-Professional Education (*Ministério da Ciência e Tecnologia, Ensino Superior e Técnico Profissional* (MCTESTP)), the participating universities were contacted and they all made available the necessary support for conducting the survey.

In 2017 and close to the implementation dates, contacts were re-established to plan the implementation of the survey in each faculty of each university. Where necessary, the course directors were contacted to schedule the respective sessions. These contacts occurred in a systematic way in the weeks immediately prior to the survey sessions. In many faculties, the survey team was supported by local administrative staff. The surveys were conducted in the undergraduate classes in several courses of several faculties on the Maputo and Beira campuses of the participating universities.

The survey sessions lasted between an hour and an hour and a half, and mostly occurred instead of a normal lesson. This meant that the lost lessons had to be rescheduled, and the survey team is extremely grateful to the teachers and students for their availability and cooperation with this. After a short presentation of the survey and the reading and signing of a consent form, the students received a tablet with a questionnaire produced in the Kobo Collect application. The completed questionnaires were uploaded online at the end of the day, allowing the automatic entry of data. We attempted to interview at least six students in each class. However, in almost all classes we were able to interview all the students that were present, far exceeding the sample design minimum. On several occasions, the number of students interested in participating in the survey exceeded our logistical capacity. In these cases, lots were drawn to randomly select the students to be interviewed. The drawing of lots was carried out in two distinct ways:

- Pieces of paper with a number (between 1 and the number of students present in the room) were put in a box. Each of the students drew a number. If, for example, we had 50 tablets available, the students who drew numbers 1 to 50 were selected to participate in the survey. The students who drew numbers above 50 were not selected. However, this was time consuming. Since the time we had available was limited and we did not want the students to lose lessons or to affect the timetables of the teachers, we opted for a second way of drawing lots.

- The numbers 1 to 5 were written on the back of the consent sheets to be given to the students. These were shuffled to order them randomly before they were handed over to the students. Next, a number between 1 and 5 was chosen. The students were told to turn over the consent sheet and if they had the number written on the sheet, they were not selected to respond to the survey. This process was repeated until the number of students corresponded to the logistical capacity (namely, the number of tablets available), safeguarding the minimum number of respondents per class.

The implementation timetable was as follows: (1) the training and the pilot were carried out in Maputo in April 2017; (2) the fieldwork was undertaken from April to November 2017 at the

UEM, USTM, APolitécica and the UP in Maputo, and the UCM and UNIZAMBEZE in Beira; and (3) the preliminary analysis of the data was carried out from November 2017 to April 2018.

In short, the survey was conducted in a total of 27 faculties in six universities, with students of 106 different courses being interviewed in a total of 87 sessions. A total of 2,175 undergraduates, of whom 1,024 were women and 1,151 were men, were interviewed. A total of 2,100 students agreed to continue in the follow-up telephone phases, corresponding to a significant oversampling with respect to the entire set. However, the success rate was variable, as can be seen from Table 3. We present the margins of error together for each subsample, for a p of 50% and a 95% confidence interval.

Table 3: Dimensions of the actual subsamples and margins of error with a 95% confidence interval

Training Area	Subsamples			Margins of error		
	M	W	MW	M	W	MW
Education	228	226	454	5.2%	5.3%	3.7%
Arts and Humanities	57	49	106	7.9%	9.9%	6.3%
Social Sciences, Management and Law	347	463	810	4.2%	3.6%	2.7%
Natural Sciences	244	81	325	1.3%	8.3%	3.4%
Engineering, Industry and Construction	158	37	195	5.3%	13.3%	5.5%
Agriculture	54	37	91	9.2%	12.3%	7.5%
Health and Well-Being	47	105	152	11.4%	7.2%	6.2%
Services	15	26	41	20.0%	15.7%	12.4%
Total	1,150	1,024	2,174	2.2%	2.4%	1.7%

Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

3 Main results

In this section we present the main results of the baseline survey, starting with a profile of the characteristics of the undergraduates. It should be noted that in the presentation of the results, post-stratification weights are applied to align the sample reached with the profile of the target population (indicated in Table 2).

3.1 Personal characteristics and family context

Table 4 presents the data with respect to the distribution of the students per province where they undertook their primary education. The data show that the largest number of students, of both sexes, attended primary school in Maputo City (43% of the total number of students), followed by Maputo Province and Sofala Province (about 20% and 13%, respectively). The remaining 26% are distributed over the other provinces and only 1% of the students undertook their primary education abroad. Thus, it is noteworthy that students from the two most populous provinces of the country (namely, Nampula and Zambézia) represent less than 7% of the undergraduates surveyed.

The data in the bottom panel of Table 4 show that most of the undergraduates attend a university near their place of residence. About 32% of the students had to move in order to attend university. It should also be noted that proximity to residence appears to be more important for women than for men. In particular, the proportions of women from Maputo City and Maputo Province in the sample are distinctly higher than those of men. Considering only the remaining provinces, the proportion of women from Sofala (35% of the remaining women) again exceeds the proportion of men (29% of the remaining men).

Table 4: Province of origin

	Women	Men	Total	N
	%	%	%	
Province of Primary School				
Cabo Delgado	0.6	2.3	1.6	30
Gaza	3.9	6.2	5.2	106
Inhambane	4.8	9.2	7.2	146
Manica	2.4	3.7	3.1	70
Maputo Cidade	46.5	35.4	40.3	907
Maputo Província	21.1	18.6	19.7	414
Nampula	1.7	1.8	1.8	43
Niassa	0.8	1.0	0.9	19
Abroad / Other	1.4	1.0	1.2	23
Sofala	11.6	13.2	12.5	276
Tete	1.6	1.7	1.6	38
Zambézia	3.6	5.9	4.9	103
Total	100.0	100.0	100.0	2,175
Moved from home to university				
No	76.4	60.8	67.7	1,489
Yes	23.6	39.2	32.3	686
Total	100.0	100.0	100.0	2,175

Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Figure 2 presents the distribution of the students by study area. It shows that in all study areas there are more men than women. These differences are larger for Services, Engineering and Natural Science students, areas in which about 79%, 69% and 64% respectively are men. Some study areas are closer to parity, notably Education, with 1.1 men per woman, Social Sciences, with 1.3 men per woman, and Health, with 1.2 men per woman.

Figure 2: Segmentation by gender in the study areas
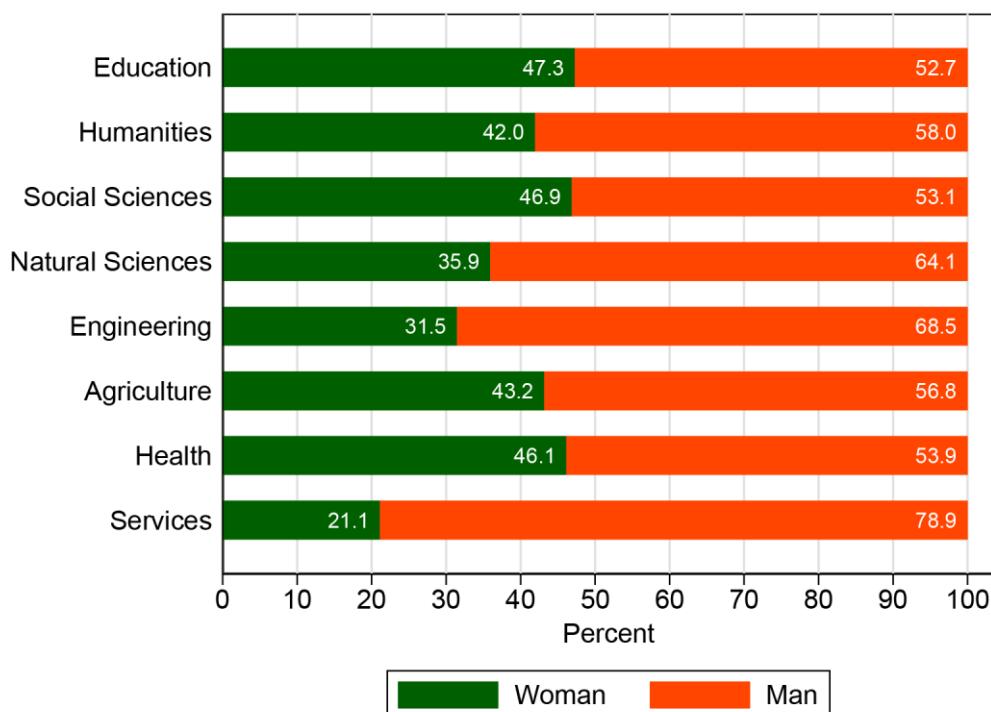
Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Table 5 shows that the average age of the final year undergraduates sampled is 26 years. However, it is noted that in some study areas, namely Education and Health, the average age of the sampled students is almost five years older than the average age in other areas, particularly Natural Sciences and Engineering. This age difference can be partially attributed to the different course durations (notably, the medical course of the Health study area has a six-year duration, which is two more than most other courses). The average ages of the students sampled do not appear to have significant gender differences, except, possibly, in the Arts and Humanities and Health study areas where the average ages of the male students are two years older than those of the women students.

Table 5: Average age, by study areas and gender

Study Area	Women	Men	Total
Education	28.6	29.1	28.9
Arts and Humanities	24.8	26.9	26.0
Social Sciences	24.4	24.9	24.7
Natural Sciences	23.1	23.8	23.5
Engineering	23.2	24.7	24.2
Agriculture	23.8	24.9	24.4
Health	26.1	28.0	27.1
Services	24.4	23.2	23.5
Total	25.8	26.2	26.0
N	1,024	1,151	2,175

Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Table 6 summarizes the family situation of the undergraduate students. The data show that about 14% of the students stated they were married, and 30% of all students have children. A comparison between men and women also shows the existence of relatively larger proportions of married women and of women with children than those of men.

Table 6: Family situation

	Women	Men	Total	N
	%	%	%	
Married				
No	84.2	87.1	85.8	1,898
Yes	15.8	12.9	14.2	277
Total	100.0	100.0	100.0	2,175
Has child(ren)				
No	67.5	70.8	69.3	1,574
Yes	32.5	29.2	30.7	601
Total	100.0	100.0	100.0	2,175

Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Table 7: Family context and course chosen

	Study Area								
	Education	Arts and Huma-nities	Social Sciences	Natural Sciences	Engi-neering	Agri-culture	Health	Services	Total
	%	%	%	%	%	%	%	%	%
Highest education level in the family									
Without formal education	4.5	4.1	2.3	0.3	0.9	3.2	5.5	6.1	3.1
Primary	21.4	15.8	9.7	9.4	10.4	8.5	12.1	13.8	13.7
Secondary	30.1	29.7	23.2	26.6	19.9	22.4	15.1	30.0	25.1
Technical and Professional	23.5	19.9	24.0	25.9	28.1	28.6	37.2	20.7	24.9
University	19.6	28.5	40.3	37.1	40.4	34.2	28.1	23.5	32.2
Other/Doesn't know	0.9	2.0	0.5	0.7	0.4	3.1	2.0	6.1	1.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Most frequent employment									
Civil Servant	38.0	47.9	44.6	46.0	40.5	44.9	53.7	40.5	42.7
Contracted by a company	21.4	28.3	28.2	24.9	29.4	15.5	19.6	29.2	25.3
Owner of a non-agriculture company	1.3	1.0	1.7	2.5	4.7	5.6	0.0	0.8	1.8
Self-employed – Agriculture	17.1	5.9	8.3	5.8	5.2	11.8	10.5	11.3	10.9
Self-employed – Non-Agriculture	17.4	13.1	14.4	16.0	15.1	18.1	9.7	11.3	15.1
Doesn't know	4.7	3.7	2.8	4.9	5.2	4.1	6.5	6.9	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Table 7 shows that the large majority of the students (about 96%) come from families with some formal education. Specifically, 39% of the students come from families in which at least one member attended primary or secondary school, and the remaining 57% come from families in which one member attended technical-professional or higher education. Notably, the most widely represented group is that of students whose families have at least one member who attends or attended higher education. In this sense, there is a clear indication that possibility of gaining access to higher education is related to family situation.

The data regarding the most frequent type of work in the students' family of origin show that about 43% and 25% of the students come from families whose members most frequently work as civil servants and in private companies, respectively. The data also show that 25% of the students come from families in which the majority of their members are self-employed (in and outside agriculture).

Equally significant are indications that there is a higher prevalence of work in the public sector in the families of Health students, of self-employed work in the families of the Agriculture and Education students, and of work in the private sector in the families of the Engineering and Services students. Thus, and once again, it appears that family situation has a substantial impact on the choices and interests of the undergraduates surveyed.

3.2   University experience

As shown in Table 8, the average duration of courses in the various study areas is four years, with the exception of Engineering, which has a five-year duration. However, there is no difference between public and private universities in the duration of university courses, which both have an average duration of about 4 years.

Table 8 also summarizes the monthly costs of attending higher education borne by the students (or their families). The cost of fees and the total cost of the education (including fees) are presented separately. Regarding financial support, it is noted that one in every five of the students sampled receives some form of grant, but their prevalence is lower for private universities (12%). The percentage of students on a grant is higher in the Health, Agriculture and Education study areas, which are considered of national interest, with 29.6%, 26.1% and 25.6%, respectively, of the students receiving some grant.

In the sample of students interviewed, the costs of education borne by those in private universities are, on average, more than three times higher than the costs borne by the students in the public universities. This is mainly due to tuition fees, which are 14 times higher in private universities. In addition, in public universities, fees represent less than 20% of the monthly costs incurred. In the private universities, fees represents more than 65% of the monthly costs borne by the students.

Table 8: University experience

	Duration (Years)	Monthly fees (MT)	Monthly cost (MT)	Scholarships (%)
Study Area				
Education	4	328.40	2,890.68	25.6
Arts and Humanities	4	521.43	2,703.89	13.2
Social Sciences	4	2,186.47	4,733.85	16.0
Natural Sciences	4	1,653.81	3,678.13	20.6
Engineering	5	1,570.47	3,721.87	21.0
Agriculture	4	1,428.59	3,212.85	26.1
Health	4	4,216.21	6,721.13	29.6
Services	4	529.47	2,408.69	19.5
Total	4	1,660.45	4,032.42	20.5
Type of University				
Private	4	6,050.82	9,037.01	11.9
Public	4	424.78	2,622.75	22.9
Total	4	1,661.22	4,032.42	20.5
N	2,175			

Note: 'Monthly cost' is the total of fees and the cost of educational material and transport.
Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

As shown in Figure 3, in the private universities, the Engineering, Natural Sciences and Social Sciences study areas have the highest educational costs, while in the public universities the Education, Arts and Humanities and Social Sciences study areas have the highest costs. Looking in more detail, there is much less variation in reported average costs between the various courses in the public universities. Agriculture is the area with the lowest cost, at about 2,200 MT, and Education is the area with the highest cost, at almost 2,900 MT. However, in the private universities there is a marked difference between the average educational costs of the various study areas, with Engineering having the highest cost, at about 12,000 MT, and Health having the lowest cost, at about 7,500 MT.

Figure 3: Average monthly cost of the course, by study area and type of university
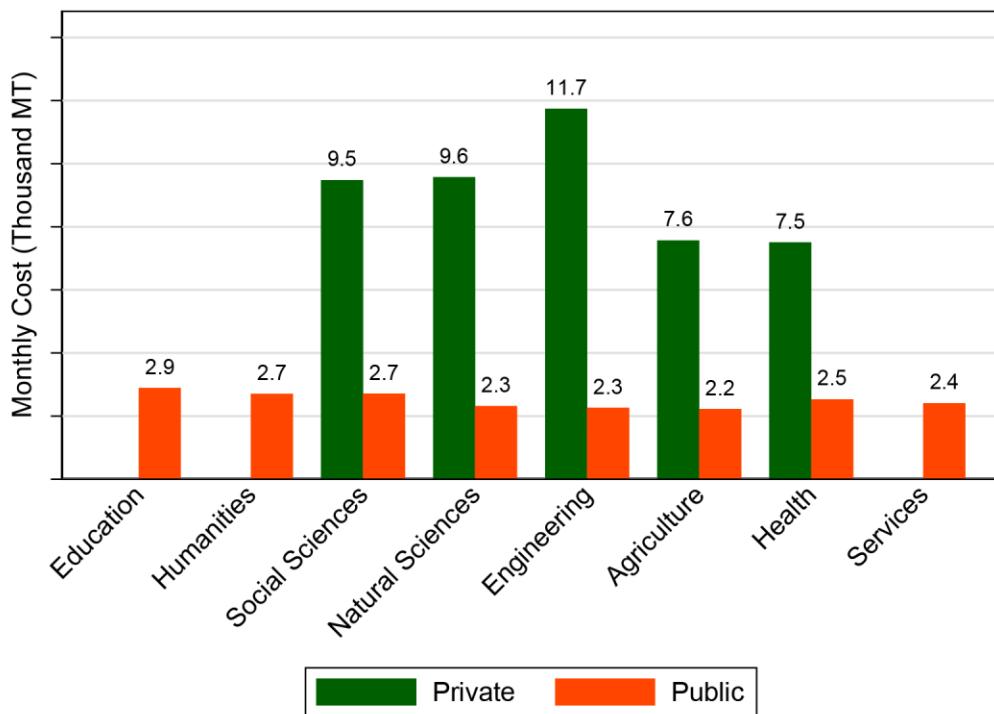
Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

The survey investigated the undergraduates' levels of satisfaction with their university and course choices. As can be observed in Figure 4, the proportion of students who are satisfied with their choice of university is 77.5% in the public universities, which is higher than the proportion found in the private universities (52%). In addition, in the private universities, less than half of the students are satisfied with their choice of study area, with the exception of Health courses.

Although in the public universities Agriculture is one of the study areas with a higher percentage of students satisfied with their choice of university, in the case of the private universities it has the lowest percentage of students who are satisfied with their university.

Figure 4: Proportion of students who would choose the same university (where currently studying), by study area and type of university
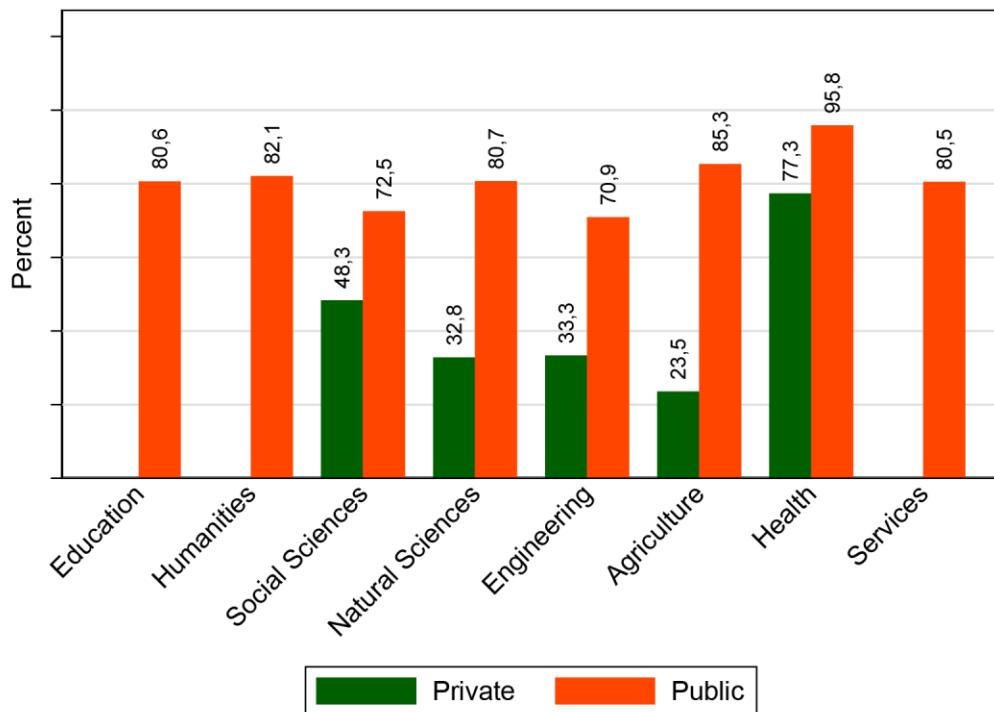

Note: Unweighted data.
Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

As shown in Figure 5, the percentage of students satisfied with their choice of course is higher in the private universities than in public universities. Engineering is the study area with which students are most satisfied, in general, followed by Health and Agriculture. However, only almost half of the Arts and Humanities students are satisfied with their choice of course.

Figure 5: Proportion of students who would choose the same course (currently taking), by study area and type of university
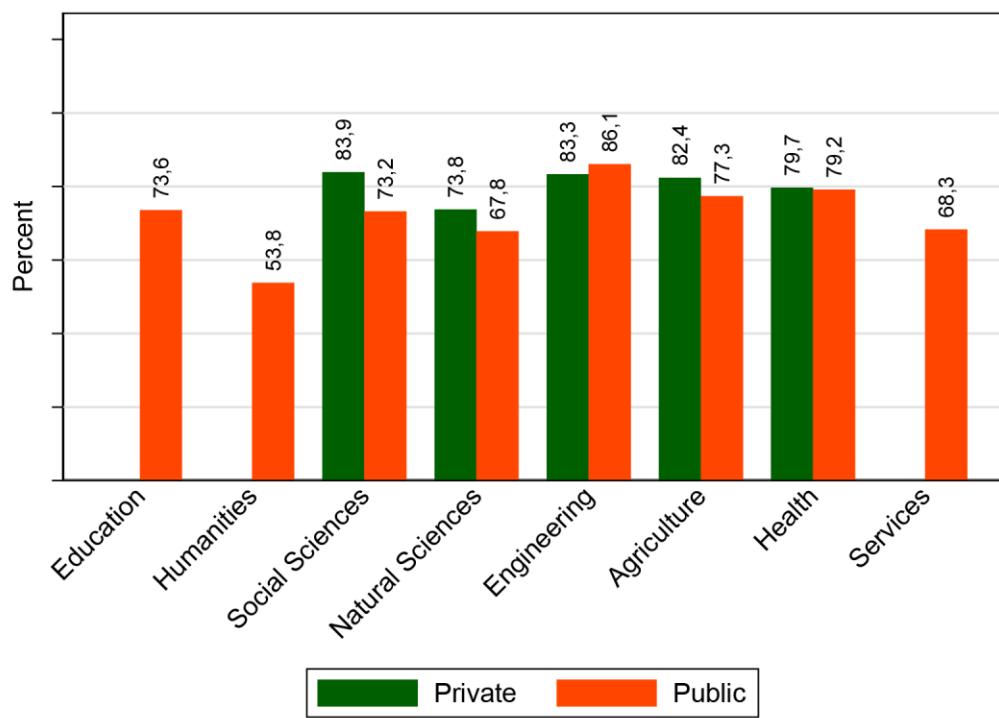

Note: Unweighted data.
Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

3.3 Work experience

Table 9 shows that more than half of the final year undergraduate university students in Mozambique (about 60%) already have at least some previous work experience. Among these, the proportion of men with previous professional experience is greater than that of women. In fact, slightly less than half of female students have professional experience. The Education study area has the greatest proportion of undergraduates who have already been in employment (almost 70%), followed by the Arts and Humanities (66%). Agriculture has the lowest percentage (46%) of undergraduates with previous work experience.

Table 9: Previous work experience or work placement

	Proportion	
	Already had employment (%)	Already had a work placement (%)
Gender		
Women	47.4	47.3
Men	67.6	47.4
Total	58.1	47.3
Study Area		
Education	70.3	79.7
Arts and Humanities	64.2	37.7
Social Sciences	52.3	33.8
Natural Sciences	59.7	33.2
Engineering	61.0	41.5
Agriculture	46.7	25.0
Health	48.7	90.8
Services	53.7	7.3
Total	58.1	47.3
N	2,176	

Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Table 9 also shows that, with large similarities at the level of gender, half of the undergraduates had already undertaken at least one work placement. In relative terms, the majority of these are in Health and Education. Less represented are Services students, with only 7% of the total number of students in this area stating that they already had a prior work placement. It should be noted that some courses have work placements in their curriculum, which may explain, at least partially, the differences between the study areas.

3.4 Employment expectations

As can be observed in Table 10, the majority of undergraduate students in Mozambique (about 63%) intend seeking employment after the completion of their course. At the level of study areas, this intention is greater among those in the Services study area. The intentions of other final year undergraduates that stand out are those to continue studying and to be self-employed. One in every four of the students sampled in Mozambique is considering starting a self-employment activity, suggesting a penchant for entrepreneurship. The Engineering study area has the highest percentage of undergraduates with these intentions (33.6%), closely followed by undergraduates in Social Sciences and Natural Sciences (almost 30%).

Table 10: Intentions after graduation

	Obtain employment	Stay at home	Self-employment	Seek employment	Agricultural work	Study	Professional training	Family agriculture	Without plans
Study Area									
Education	10.8	0.9	19.0	51.1	2.2	52.2	21.1	1.6	1.1
Arts and Humanities	8.7	0.0	26.7	60.8	0.9	55.0	13.1	0.0	1.9
Social Sciences	14.9	0.7	29.2	67.2	2.4	41.5	16.2	0.4	0.7
Natural Sciences	12.0	0.8	29.9	72.5	3.7	46.1	18.0	0.3	1.3
Engineering	11.2	0.4	33.6	76.3	3.0	41.4	22.5	0.4	1.7
Agriculture	2.3	0.0	25.1	76.3	12.8	46.8	13.1	6.3	1.0
Health	11.1	0.0	16.7	59.4	4.0	48.8	13.8	0.4	0.4
Services	5.3	0.8	14.6	80.2	6.9	50.2	19.8	5.3	0.0
Total	12.3	0.7	25.1	63.2	2.9	46.0	18.1	1.0	0.9
Gender									
Women	11.6	0.6	22.2	65.8	2.8	41.7	15.6	0.8	0.8
Men	12.9	0.8	27.4	61.1	3.0	49.4	20.1	1.2	1.0
Total	12.3	0.7	25.1	63.2	2.9	46.0	18.1	1.0	0.9
N	2,175								

Notes: Multiple choices were allowed. Thus, each column represents the proportion of students indicating that this option was possible.
Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Table 11 shows that about 17% of the undergraduates stated that they have employment arranged. This proportion is higher for Education undergraduates. Only 37% of the students stated that they are sufficiently informed about how to seek employment. A lower percentage (29%) have sufficient information about employment opportunities. When comparing different study areas, the situation is more critical for Agriculture students. In relative terms, more men than women reported that they have sufficient information about employment opportunities and how to find employment.

Table 11: Knowledge of the labour market

	Is already expecting employment	Has sufficient information about opportunities	Has sufficient information about how to find employment
Study Area			
Education	29.1	30.0	34.6
Arts and Humanities	14.8	33.6	38.4
Social Sciences	10.7	26.8	38.5
Natural Sciences	5.4	22.6	28.5
Engineering	10.2	29.7	37.6
Agriculture	6.2	19.6	26.6
Health	19.9	42.5	46.2
Services	3.3	32.9	32.9
Total	17.2	28.7	36.7
Gender			
Women	17.1	24.0	30.6
Men	17.3	32.9	42.1
Total	17.2	28.7	36.7
N	2,175		

Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

As Table 12 shows, when asked about the most relevant aspects for employability, academic skills and professional experience are the most frequently mentioned. Aspects such as personal appearance, non-academic skills and family references occupy, in terms of relevance for the same issue, different positions for different study areas. Whereas personal appearance is the third most important factor for employability for the Health, Social Sciences and Education students, the Natural Sciences, Engineering and Agriculture students place non-academic skills in this position.

Table 12: Key characteristics for employability

	Academic skills %	Personal appearance %	Previous professional experience %	Non-academic skills %	References from family and friends %	Doesn't know %	Total %
Study Area							
Education	66.3	2.8	25.9	2.1	0.9	2.0	100.0
Arts and Humanities	66.5	2.1	28.2	2.1	1.1	0.0	100.0
Social Sciences	63.0	5.4	24.0	4.5	1.5	1.4	100.0
Natural Sciences	63.1	2.5	24.7	5.8	2.5	1.4	100.0
Engineering	54.7	6.9	29.1	7.4	1.5	0.5	100.0
Agriculture	66.9	2.5	20.8	3.8	2.3	3.8	100.0
Health	68.8	1.4	28.1	0.5	0.0	1.2	100.0
Services	64.2	11.2	23.7	0.9	0.0	0.0	100.0
Total	64.0	4.4	25.3	3.6	1.2	1.5	100.0
Gender							
Women	64.2	3.2	27.5	3.3	0.9	0.9	100.0
Men	63.8	5.5	23.5	3.8	1.5	2.0	100.0
Total	64.0	4.4	25.3	3.6	1.2	1.5	100.0
N	1,267	79	512	79	27	28	1,992

Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Figure 6 shows the type of future employment (or employer) preferred by the final year undergraduates. Those studying Education, Arts and Humanities and Health prefer the public sector. The second (average) preference is employment in the private sector, and entrepreneurship comes only in third place. For Social Sciences, Natural Sciences and Services students, their preferred first employer, on average, is the private sector, followed by the public sector, and, once again, being self-employed or managing or setting up a company appears as the third option. In fact, the option to create their own employment is never the first option. However, for Engineering and Agriculture students, this option comes immediately after a first preference for employment in the private sector, so that in these cases the public sector appears as the third option. There is no notable gender difference in terms of the preferred type of employer.

Figure 6: Type of preferred employment, by study area
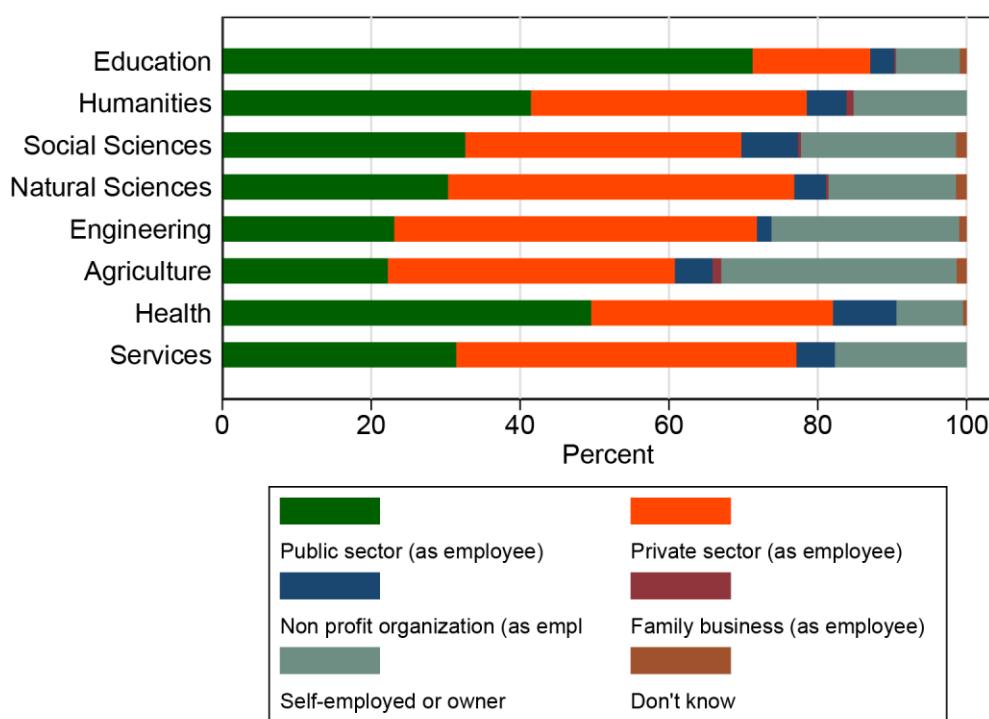
Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Figure 7 shows that the the education sector is the preferred sector of activity for the Education, Arts and Humanities and Services students. The preferred sectors for Agriculture and Health students, correspond directly to their study areas – Agriculture and Fisheries and Health, respectively. The preferred sectors of activity for Social Sciences, Natural Sciences and Engineering students are, respectively, Financial Activities (followed by Public Administration), Technology and Communications (strongly dominating) and Construction (followed by the Manufacturing Industry and Technology and Communications).

Figure 7: Preferred sector of activity
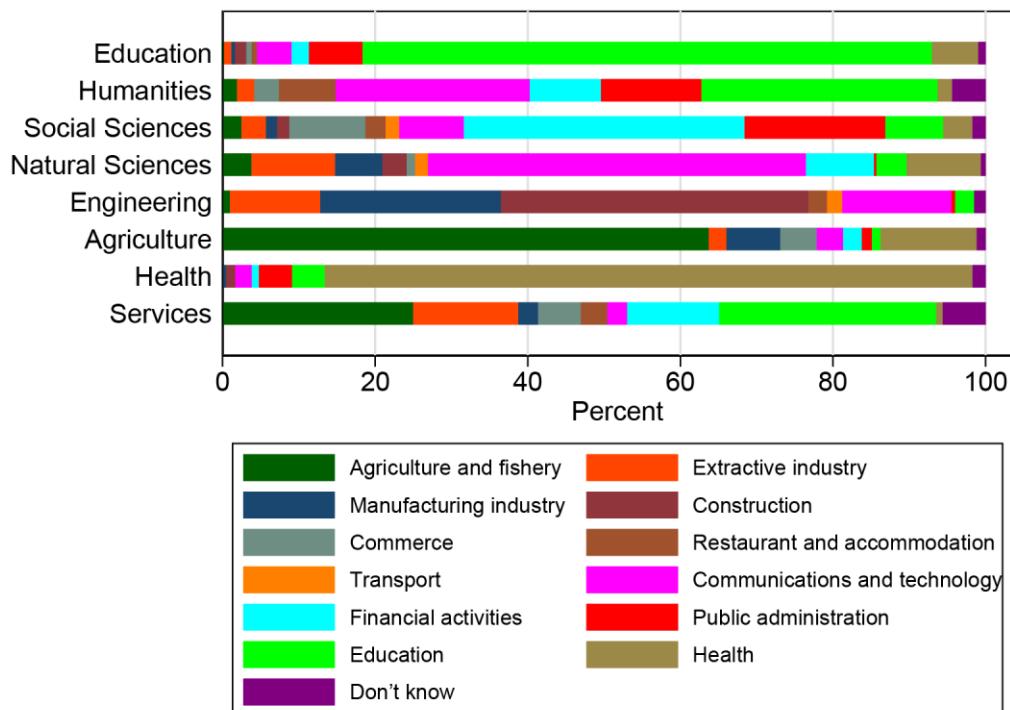
Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Table 13 shows that half of the undergraduates, in almost all study areas, expect to obtain employment within six months. This means that a high proportion of undergraduates have concrete expectations of obtaining employment immediately after their studies. However, a high proportion of students are also unable to estimate the time it will take to find employment, which is a sign of significant uncertainty. Education students anticipate employment within a shorter timeframe.

Table 13 also shows that in other cases, such as among final year Agriculture and Services students, while almost half anticipate finding employment within six months, there is a substantial number of other students who do not expect to find employment in the first nine months after graduating. The statistics suggest that women appear to be more optimistic than men with regard to the expected time it will take to obtain employment, as 42% of the women, against 32% of the men, believe that they will obtain employment within three months.

**Table 13: Expected time until obtaining employment**

	Within 3 months %	4 to 6 months %	7 to 9 months %	9 to 12 months %	More than 12 months %	Doesn't know %	Total %
Study Area							
Education	40.1	16.0	3.8	4.8	1.5	33.7	100.0
Arts and Humanities	32.6	30.9	2.6	7.4	0.0	26.5	100.0
Social Sciences	36.2	26.4	4.0	7.0	1.6	24.7	100.0
Natural Sciences	28.1	31.6	5.9	4.3	1.6	28.4	100.0
Engineering	32.6	24.7	4.0	6.7	1.3	30.7	100.0
Agriculture	24.0	21.0	3.4	13.3	4.8	33.5	100.0
Health	31.0	38.4	3.2	6.5	3.8	17.1	100.0
Services	42.9	19.3	0.0	25.2	0.0	12.6	100.0
Total	36.5	23.5	3.9	6.8	1.7	27.7	100.0
Gender							
Women	42.2	22.4	3.2	4.8	0.6	26.8	100.0
Men	31.5	24.4	4.5	8.6	2.6	28.4	100.0
Total	36.5	23.5	3.9	6.8	1.7	27.7	100.0
N	463	325	53	85	22	363	1,311

Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Figure 8 summarizes the average salary expected by final year undergraduates in their first month of work. It shows that male Health students have the highest anticipated average salary (38,400 MT), followed by male Engineering students (33,400 MT) and next by female Engineering students (32,500 MT).

Figure 8 also shows that the female Arts and Humanities students appear to expect, on average, the lowest salary, i.e. 22,000 MT. It can be seen very clearly that in all study areas male students have much higher salary expectations upon entering the labour market than women. It is only in Engineering that this difference may be statistically zero. Specifically, women expect to obtain a 13% lower salary in the first month of employment (equal to more than 3,700 MT) than men. The biggest difference between the genders with respect to salary expectations, i.e. approximately 7,400 MT, is in the Arts and Humanities and Health areas.

Figure 8: Expected salary in the first month, by study area and gender
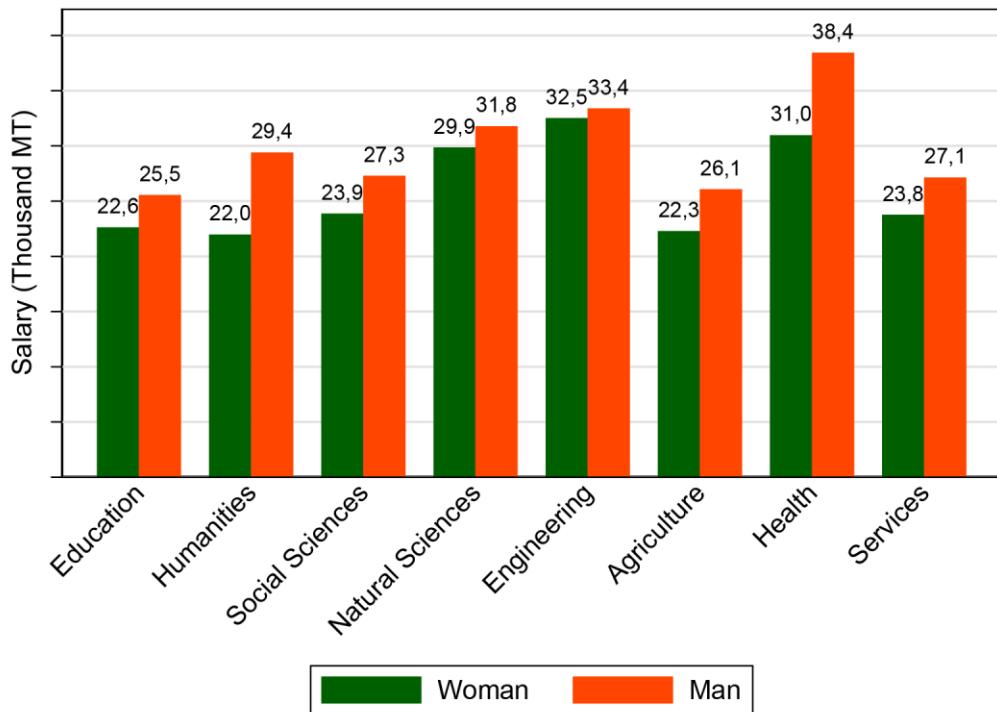
Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

Figure 9 shows salary expectations on completion of one year of work. The first indication, particularly in some study areas, is an expected significant salary increase at the end of one year when compared with the salaries expected in the first month, as presented in Figure 8. This increase is particularly noteworthy among Engineering students. Somewhat surprisingly, and not observed in any other case, the highest average value is expressed by female Engineering students, who expect a salary of more than 61,000 MT, corresponding to an expected 88% increase, after one year of work. This is followed by female Arts and Humanities students, who expect a 57.3% salary increase after the first year of work. The lowest salary increase is expected by male Health students (19.8%). Among females, Health students also have the lowest expected salary increase, namely 31.6%. In terms of these expected increases, the Engineering area exceeds the Health area as the one where both male and female students expect the highest salaries. In general, the profile of expected salaries by study area and gender is similar to that of initial salary expectations.

Figure 9: Expected salary at the end of one year, by study area and gender
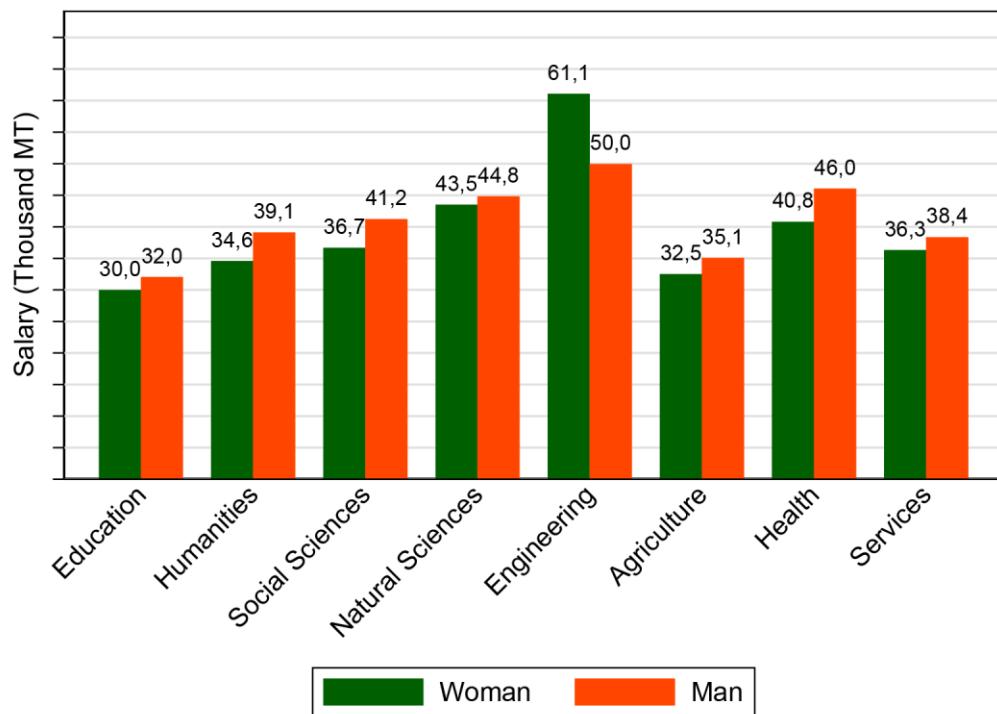
Source: Authors' calculations based on data from the Baseline Survey on the School-to-Work Transitions of University Graduates in Mozambique.

4   Conclusion

We now highlight some results and conclusions:

- Prior to this survey, education statistics already indicated that in Mozambique gender parity is not observed within higher education and is only found up to the early levels of secondary education. This survey also shows a segmentation of courses according to gender. There are significantly more male-dominated study areas, such as Engineering, Natural Sciences and Services, and there are areas which approach greater parity, such as Education, Arts, Social Sciences, Agriculture and Health.

- The survey provides strong indications that geographical proximity is important for the choice of university. A small proportion of final year undergraduate students indicated that they had to move to attend their higher education course. In the same way, the proportion of students who attended primary school in the same provinces of the surveyed universities is also very high or, in the case of Maputo Province, in the neighbouring province.

- In the Natural Sciences and Engineering courses, the average age of students completing their degree is significantly higher (3 years older) than the minimum age for completing a degree. This is even higher in the Education courses (8 to 9 years older). It should be noted that it was in the Education area that the largest number of students indicated that they had previous professional experience and were already working. To a lesser degree, these characteristics are also evident for Health students. This suggests that, for many students, courses in these areas may represent an opportunity to upgrade their qualifications for the purposes of promotion in their current place of employment. In the other areas, the prevailing profile is that of a student who has progressed continuously in the education system until now.

- The proportions of married students and students with children, as well as students with professional experience (in addition to those referred to above), are not insignificant.

- The costs of pursuing higher education are significant. In private universities, these costs easily exceed the minimum wage found in almost all economic sectors and subsectors.

- There are strong indications that the levels of satisfaction of the university students both with the courses in which they are undergraduates and with the universities they are attending have much room for improvement.

- There is a prevalent preference for employment in the private sector. However, there is also a significant proportion of students who are open to entrepreneurship. This is particularly noteworthy among Engineering undergraduates, where one in three students showed this willingness.

- There is a strong match between the preferred sector of activity and the area of the course followed by the undergraduates. This means that the choice of course is particularly relevant for the supply of labour with higher-level qualifications.

- For the students in all study areas, academic skills, followed by professional experience, are considered the key characteristics for employability.

- The majority of the students expect to obtain employment in the first six months after graduation. However, a high proportion indicated uncertainty over the time it would take to find employment, and a large majority feel that they do not have sufficient information about employment opportunities or about how to seek employment.

- The average expected salary exceeds 26,500 MT, which is 2.5 times higher than the highest sectoral minimum wage in Mozambique (found in the financial and banking sector). Notably, the Engineering and Health students expect significantly higher salaries than the undergraduates in other study areas. There is also a lot of optimism regarding the prospects for salary increases after the first year of employment.

- Female undergraduates, even when they have the same training in the same areas as their male counterparts, expect, initially and at the end of one year, to earn salaries that are a few thousand meticais lower than those expected by men.

In terms of policy guidelines, we suggest that the following should be considered:

- Address the lack of knowledge about the labour market and employment opportunities. In particular, increase information about employability and starting salaries for university undergraduates.

- Seek to understand the conditions that lead female university students to expect a lower salary than their male counterparts, as well as the reasons that dictate gender-biased course choices, which risk creating a mismatch between individuals' potentials and their future professional positions. Men and women should be able to choose courses and have the opportunity to follow professional careers that are appropriate to their technical profiles and personal preferences, free of gender bias.

- Conduct an investigation into the importance of geographical restrictions on the educational progress of Mozambican citizens. The expansion of the Pedagogical University to the provinces and the expansion of universities such as UniZambeze and UniLúrio are already steps with potential, but it should be noted that there is still a heavy concentration of undergraduates from Maputo City and Maputo Province.

- Seek to investigate the deterioration of educational parity, which is strong in the first levels of education but weakened in higher education. It would be particularly interesting to study the possible role of grant programmes for women in the areas in which they are underrepresented (positive discrimination).

References

Cochran, W. (1977). *Sampling Techniques.* New York, NY: John Wiley and Sons.

DCES and DPEC (2005). Dados estatísticos sobre o ensino superior e a investigação científica em Moçambique 2004, Direcção para a Coordenação do Ensino Superior do Ministério da Educação e Cultura e Direcção de Planificação, Estatística (DECS) e Cooperação do Ministério da Ciência e Tecnologia (DPEC), Governo de Moçambique.

DCES (2007). Dados estatísticos sobre o ensino superior em Moçambique 2005, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

DCES (2008). Dados estatísticos sobre o ensino superior em Moçambique 2006, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

DCES (2009). Dados estatísticos sobre o ensino superior em Moçambique 2007, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

DCES (2011a). Dados estatísticos sobre o ensino superior em Moçambique 2008, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

DCES (2011b). Dados estatísticos sobre o ensino superior em Moçambique 2009, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

DCES (2012a). Dados estatísticos sobre o ensino superior em Moçambique 2010, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

DCES (2012b). Dados estatísticos sobre o ensino superior em Moçambique 2011, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

DCES (2012c). Dados estatísticos sobre o ensino superior em Moçambique 2012, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

DCES (2016a). Dados estatísticos sobre o ensino superior em Moçambique 2014, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

DCES (2016b). Dados estatísticos sobre o ensino superior em Moçambique 2015, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

DCES (2017). Dados estatísticos sobre o ensino superior em Moçambique 2016, Direcção para a Coordenação do Ensino Superior, Ministério da Educação, Governo de Moçambique.

INE (2015). Relatório final do inquérito ao orçamento familiar – IOF 2014/15. Technical report, Instituto Nacional De Estatística (INE). URL http://www.ine.gov.mz/operacoes-estatisticas/inqueritos/inquerito-sobre-orcamento-familiar .

OESCT (2005). Dados estatísticos sobre o ensino superior e das instituições de investigação 2003. Technical report, Observatório do Ensino Superior, Ciência e Tecnologia, Ministério do Ensino Superior, Ciência e Tecnologia, Governo de Moçambique.

Annex 1: List of courses classified by study area

Agriculture: Agro-Economics and Agricultural Extension; Agriculture and Stock Breeding; Marine, Aquatic and Coastal Biology; Rural Development; Agricultural Economics; Agronomic Engineering; Forestry; Veterinary Medicine.

Natural Sciences: Administration of Information and Network Systems; Biology and Health; Cartography and Geological Research; Geographical Information Sciences; Computer Science; Computer Engineering; Computer and Telecommunications Engineering; Statistics; Physics; Applied Geology; Informatics; Management Informatics; Mathematics; Meteorology; Industrial Chemistry; Information Technology.

Social Sciences: Accounting and Auditing; Business Administration and Management; Anthropology; Business Management; Actuarial Sciences; Communication Sciences; Legal Sciences; Political Sciences; Accounting; Accounting and Auditing; Accounting and Finance; Development Cooperation; Law; Economics; Economics and Management; Geography; Management; Trade Management; Business Management; Tourism Business Management; Human Resource Management; Financial and Banking Management; Port Management; History; Journalism; Regional and Urban Planning; Organizational Psychology; School and Special Educational Needs Psychology; Social and Community Psychology; Social and Organizational Psychology; Sociology.

Education: Education Administration and Management; Education Science; Child Development and Education; Childhood Education; Education and Social Assistance; Visual Education; Basic Education; Biology Teaching; Physical and Sports Education Teaching; Philosophy Teaching; Physics Teaching; French Language Teaching; Geography Teaching; History Teaching; English Language Teaching; Bantu Languages Teaching; Mathematics Teaching; Portuguese Language Teaching; Chemistry Teaching; Mozambican Sign Language; Education Organization and Management; Educational Psychology.

Engineering: Environmental Engineering; Civil Engineering; Process Engineering; Electrical Engineering; Electronic Engineering; Mechanical Engineering; Mechatronics Engineering.

Arts and Humanities: Archaeology; Archaeology and Cultural Heritage Management; Archiving; Performing Arts; Library Science; Linguistics; Mozambican Literature; Music; Drama; Portuguese/French Translation; Portuguese/English Translation.

Health: Hospital Administration and Management; Clinical and Laboratory Analyses; Higher Level Nursing; Pharmacy; General Medicine; Psychology; Clinical Psychology and Social Assistance; Social Services.

Services: Ecology and Terrestrial Biodiversity Conservation; Environmental Education.

Annex 2: Baseline Survey questionnaire

A copy of the questionnaire is presented below. It should be noted that, as the questionnaire is filled in eletronically, this version does not indicate the automatics links.

Questionnaire - hidden analytical reasoning questions

Introdução

Obrigado por participar. Este inquérito vai levar 30-45 mins. Inclui uma serie de perguntas sobre si, sua familia e alguns testes das suas capacidades. Por favor tente responder a todas as perguntas. Não há tempo limite. Use o tempo necessário para responder da forma mais correcta possível.

Por favor clique ("seguinte" / "next") para iniciar o questionário

Informação pessoal e do seu curso

Nesta secção gostavamos de perguntar algumas questões sobre você e a sua universidade. Saiba que todas as respostas são confidenciais e que nenhuma informação pessoal será partilhada com a universidade ou os professores.

Por favor escreva o seu PRIMEIRO nome

_____

Por favor escreva o ÚLTIMO nome

_____

Por favor indique o seu sexo

◯ Mulher

◯ Homem

Por favor indique a sua idade

_____

Em que província se localizava a escola onde frequentou a Educação Primária (se for mais que uma, escolha onde ficou mais tempo)

◯ Cabo Delgado

◯ Gaza

◯ Inhambane

◯ Manica

◯ Maputo Cidade

◯ Maputo Província

◯ Nampula

◯ Niassa

◯ Sofala

◯ Tete

◯ Zambezia

◯ No estrangeiro / Outro

Qual era o tipo de localidade em que estava a sua Escola Primária (se for mais que um, escolhe onde ficou mais tempo)

○ Aldeia

○ Vila

○ Cidade

Qual era o tipo de escola secundária em que andou, antes de entrar na Universidade (se for mais que um, escolhe onde ficou mais tempo)

○ Pública Moçambicana

○ Privada Moçambicana

○ Organização Não Governamental, em Moçambique

○ Comunitária, em Moçambique

○ Religiosa, em Moçambique

○ No Estrangeiro

Por favor seleccione a sua Universidade

○ Universidade Eduardo Mondlane

○ Universidade Católica de Moçambique

○ Universidade Zambeze

○ Universidade São Tomás de Moçambique

○ Universidade Pedagógica

○ Universidade Politécnica

Por favor indique em que Faculdade está a estudar na Universidade Politécnica

○ Escola Superior de Gestão, Ciência e Tecnologias

○ Instituto Superior de Humanidades e Tecnologias

Estuda em que curso da Escola Superior de Gestão, Ciência e Tecnologias da Universidade Politécnica

- ○ Administração e Gestão de Empresas
- ○ Ciências da Comunicação
- ○ Ciências Jurídicas
- ○ Economia
- ○ Engenharia Ambiental
- ○ Engenharia Civil
- ○ Engenharia Eléctrica
- ○ Engenharia Informática e de Telecomunicações
- ○ Gestão Financeira e Bancária
- ○ Informática de Gestão
- ○ Psicologia
- ○ Turismo e Gestão de Empresas Turísticas

Estuda em que curso da Instituto Superior de Humanidades e Tecnologias da Universidade Politécnica

- ○ Administração e Gestão de Empresas
- ○ Ciências da Comunicação
- ○ Ciências Jurídicas
- ○ Contabilidade e Auditoria
- ○ Economia
- ○ Engenharia Civil
- ○ Engenharia Eléctrica
- ○ Engenharia Informática e de Telecomunicações
- ○ Psicologia

Por favor indique em que Faculdade está a estudar na Universidade Pedagógica

- ○ Faculdade de Ciências da Linguagem, Comunicação e Artes
- ○ Faculdade de Ciências Sociais e Filosóficas
- ○ Faculdade de Ciências da Terra
- ○ Faculdade de Ciências da Educação e Psicologia
- ○ Faculdade de Ciências Naturais e Matemática
- ○ Faculdade de Educação Física e Desporto
- ○ Escola Superior Técnica
- ○ Escola Superior de Contabilidade e Gestão

Estuda em que curso da Faculdade de Ciências da Linguagem, Comunicação e Artes da Universidade Pedagógica

- ◯ Ensino de Português
- ◯ Ensino de Francês
- ◯ Ensino de Inglês
- ◯ Jornalismo
- ◯ Artes Cénicas

Estuda em que curso da Faculdade de Ciências Sociais e Filosóficas da Universidade Pedagógica

- ◯ Ensino de História
- ◯ Sociologia
- ◯ Antropologia
- ◯ Ensino de Filosofia
- ◯ História Política e Gestão Pública
- ◯ Direito

Estuda em que curso da Faculdade de Ciências da Terra da Universidade Pedagógica

- ◯ Ensino de Geografia
- ◯ Gestão Ambiental e Desenvolvimento Comunitário
- ◯ Planeamento e Ordenamento Territorial (PLOT)

Estuda em que curso da Faculdade de Ciências da Educação e Psicologia da Universidade Pedagógica

- ◯ Administração e Gestão da Educação
- ◯ Educação de Infância
- ◯ Psicologia Social e das Organizações
- ◯ Ciências de Educação
- ◯ Psicologia Educacional
- ◯ Ensino Básico
- ◯ Educação e Assistência Social

Estuda em que curso da Faculdade de Ciências Naturais e Matemática da Universidade Pedagógica

- ◯ Ensino de Química
- ◯ Ensino de Biologia
- ◯ Ensino de Matemática
- ◯ Ensino de Física
- ◯ Estatística e Gestão de Informaçao
- ◯ Ciências Ambientais
- ◯ Ciências Alimentares
- ◯ Ensino de Química

Estuda em que curso da Faculdade de Educação Física e Desporto da Universidade Pedagógica

- ( ) Ensino de Ed Física e Desporto

Estuda em que curso da Escola Superior Técnica da Universidade Pedagógica

- ( ) Agro-Pecuária
- ( ) Agro-Processamento
- ( ) Engenharia Electrónica
- ( ) Engenharia Civil
- ( ) Educação Visual
- ( ) Design e Tecnologias das Artes
- ( ) Informática
- ( ) Informática Aplicada

Estuda em que curso da Escola Superior de Contabilidade e Gestão da Universidade Pedagógica

- ( ) Gestão de Empresas
- ( ) Economia
- ( ) Contabilidade
- ( ) Gestão de Comercio
- ( ) Gestão de Recursos Humanos

Por favor indique em que Faculdade está a estudar na Universidade São Tomás de Moçambique

- ( ) Faculdade de Agricultura
- ( ) Faculdade de Tecnologias e Ciencias de Informação
- ( ) Faculdade de Ética Ciências Humanas e Jurídicas
- ( ) Faculdade de Ciências Económicas e Empresariais
- ( ) Business School

Estuda em que curso da Faculdade de Agricultura da Universidade São Tomás de Moçambique

- ( ) Economia Agrária
- ( ) Extensão Rural
- ( ) Desenvolvimento Rural

Estuda em que curso da Faculdade de Tecnologias e Ciencias de Informação da Universidade São Tomás de Moçambique

- ( ) Auditoria de Sistemas de Informação
- ( ) Desenvolvimento de Softwares
- ( ) Administração de Sistemas de Informação e Redes
- ( ) Tecnologias e Sistemas de Informação

Estuda em que curso da Faculdade de Ética Ciências Humanas e Jurídicas da Universidade São Tomás de Moçambique

- ◯ Filosofia
- ◯ Sociologia
- ◯ Psicologia Clínica e Organizacional
- ◯ Gestão de Recursos Humanos
- ◯ Comunicação Empresarial
- ◯ Relações Internacionais
- ◯ Direito

Estuda em que curso da Faculdade de Ciências Económicas e Empresariais da Universidade São Tomás de Moçambique

- ◯ Gestão de Empresas
- ◯ Gestão Financeira e Bancária
- ◯ Economia
- ◯ Contabilidade e Auditoria
- ◯ Gestão de Desenvolvimento do Turismo
- ◯ Turismo e Gestão Ambiental
- ◯ Gestão de Empresas Turísticas

Estuda em que curso da Business School da Universidade São Tomás de Moçambique

- ◯ Computer Science
- ◯ Accounting and Auditing
- ◯ Economics
- ◯ Business Management

Por favor indique em que Faculdade está a estudar na Universidade Zambeze

- ◯ Faculdade de Ciências e Tecnologia
- ◯ Faculdade de Ciências Sociais e Humanidades

Estuda em que curso da Faculdade de Ciências e Tecnologia da Universidade Zambeze

- ◯ Arquitectura
- ◯ Ciências Actuarias
- ◯ Engenharia Civil
- ◯ Engenharias Mecatrónica
- ◯ Engenharia Informática
- ◯ Geografia e ciências de informação geográfica
- ◯ Engenharia eléctrica
- ◯ Engenharia de Processos

Estuda em que curso da Faculdade de Ciências Sociais e Humanidades da Universidade Zambeze

- ◯ Contabilidade e Finanças
- ◯ Direito
- ◯ Economia
- ◯ Gestão
- ◯ Sociologia
- ◯ Administração Pública
- ◯ Ciências da Comunicação

Por favor indique em que Faculdade está a estudar na Universidade Católica de Moçambique

- ◯ Faculdade de Economia
- ◯ Faculdade de Ciências de Saúde

Estuda em que curso da Faculdade de Economia da Universidade Católica de Moçambique

- ◯ Economia e Gestão
- ◯ Contabilidade e Auditoria
- ◯ Gestão Portuária
- ◯ Gestão de Recursos Humanos
- ◯ Administração e Gestão de Empresas
- ◯ Gestão de Marketing e Relações Públicas
- ◯ Serviço Social
- ◯ Tecnologias de Informação
- ◯ Planeamento Regional e Urbano
- ◯ Direito
- ◯ Ciência Política e Relações Internacionais
- ◯ Arquitectura

Estuda em que curso da Faculdade de Ciências da Saúde Universidade Católica de Moçambique

- ◯ Medicina Geral
- ◯ Enfermagem Superior
- ◯ Administração e Gestão Hospitalar
- ◯ Análises Clínicas e Laboratoriais
- ◯ Psicologia Clínica e Assistência Social
- ◯ Farmácia
- ◯ Saúde Pública

Por favor indique em que Faculdade está a estudar na Universidade Eduardo Mondlane

- ◯ Faculdade de Agronomia e Engenharia Florestal
- ◯ Faculdade de Arquitectura e Planeamento Físico
- ◯ Faculdade de Ciências
- ◯ Faculdade de Direito
- ◯ Faculdade de Economia
- ◯ Faculdade de Educação
- ◯ Faculdade de Engenharia
- ◯ Faculdade de Filosofia
- ◯ Faculdade de Letras e Ciências Sociais
- ◯ Faculdade de Medicina
- ◯ Faculdade de Veterinária
- ◯ Escola de Comunicação e Artes
- ◯ Curso de Ciências do Desporto

Estuda em que curso da Faculdade de Agronomia e Engenharia Florestal

- ◯ Agro-Economia e Extensão Agrária
- ◯ Engenharia Florestal
- ◯ Engenharia Agronómica
- ◯ Other

Estuda em que curso da Faculdade de Arquitectura e Planeamento Físico

- ◯ Arquitectura e Planeamento Físico

Estuda em que curso da Faculdade de Ciências

- ◯ Biologia e Saúde
- ◯ Ecologia e Conservação da Biodiversidade Terrestre
- ◯ Estatística
- ◯ Física
- ◯ Informática
- ◯ Matemática
- ◯ Meteorologia
- ◯ Química ambiental
- ◯ Química Industrial
- ◯ Química Marinha
- ◯ Geologia Aplicada
- ◯ Biologia Marinha, Aquática e Costeira
- ◯ Cartografia e Pesquisa Geológica
- ◯ Ciências de Informação Geográfica

Estuda em que curso da Faculdade de Direito

- ◯ Direito
- ◯ Cooperação para o Desevolvimento

Estuda em que curso da Faculdade de Economia

- ◯ Economia
- ◯ Contabilidade e Finanças
- ◯ Gestão

Estuda em que curso da Faculdade de Educação

- ◯ Organização e Gestão da Educação
- ◯ Psicologia Escolar e de Necessidades Educativas Especiais
- ◯ Psicologia das Organizações
- ◯ Psicologia Social e Comunitária
- ◯ Língua de Sinais de Moçambique
- ◯ Educação Ambiental
- ◯ Desenvolvimento e Educação de Infância

Estuda em que curso da Faculdade de Engenharia

- ◯ Engenharia Mecânica
- ◯ Engenharia Química
- ◯ Engenharia Civil
- ◯ Engenharia Eléctrica
- ◯ Engenharia Ambiental
- ◯ Engenharia Electrónica
- ◯ Engenharia Informática

Estuda em que curso da Faculdade de Filosofia

- ◯ Filosofia

Estuda em que curso da Faculdade de Letras e Ciências Sociais

- ◯ Geografia
- ◯ Tradução Português/Francês
- ◯ História
- ◯ Sociologia
- ◯ Antropologia
- ◯ Ciências Políticas
- ◯ Arqueologia
- ◯ Arqueologia e Gestão do Património Cultural
- ◯ Ensino de Francês
- ◯ Ensino de Línguas Bantu
- ◯ Ensino de Português
- ◯ Literatura Moçambicana
- ◯ Tradução Português/Inglês
- ◯ Linguística
- ◯ Serviços Sociais

Estuda em que curso da Faculdade de Medicina

- ◯ Medicina

Estuda em que curso da Faculdade de Veterinária

- ◯ Ciência e Tecnologia de Alimentos
- ◯ Ciência e Tecnologia Animal
- ◯ Medicina Veterinária

Estuda em que curso da Escola de Comunicação e Artes

- ○ Jornalismo
- ○ Biblioteconomia
- ○ Marketing e Relações Públicas
- ○ Música
- ○ Arquivística
- ○ Teatro

Em que ano começou o seu curso?

_____

Em que ano espera terminar o seu curso?

_____

Olhando para trás, esta seria a Universidade que escolheria?

- ○ Sim
- ○ Não
- ○ Não tenho a certeza

Olhando para trás, este seria o curso que escolheria?

- ○ Sim
- ○ Não
- ○ Não tenho a certeza

Dentro de um semestre (6 meses), quantos meticais paga de propina na Universidade?

_____

Quantos meticais gasta por mês em material escolar (livros, papel, etc.)?

_____

Quantos meticais gasta por mês em transporte para a universidade?

_____

Recebe alguma bolsa de estudos?

- ○ Sim
- ○ Não

Fim da secção de informação pessoal e do curso. Por favor avance para a secção seguinte

Expectativas de emprego

Nesta secção perguntamos sobre as suas expectativas de emprego após a graduação.

O que planeia fazer depois de completar a sua educação? (Pode escolher várias opções)

- [ ] Prosseguir na educação académica
- [ ] Encontrar outra formação técnica, profissional ou vocacional
- [ ] Trabalhar por conta de outrem
- [ ] Trabalhar num negócio familiar
- [ ] Trabalhar por conta própria
- [ ] Trabalhar numa machamba da família
- [ ] Procurar emprego
- [ ] Ficar em casa e assumir responsabilidades pessoais ou famíliares
- [ ] Não sei

Tem informação suficiente sobre as oportunidades de emprego para graduados?

- ( ) Sim
- ( ) Nao

Tem informação suficiente sobre como encontrar um trabalho?

- ( ) Sim
- ( ) Nao

Tem algum emprego à espera quando graduar?

- ( ) Sim
- ( ) Não

Em quanto tempo espera encontrar o emprego depois de graduar?

- ( ) Em 3 meses
- ( ) 4 a 6 meses
- ( ) 7 a 9 meses
- ( ) 9 a 12 meses
- ( ) Mais de 12 meses
- ( ) Não sei

Como espera procurar emprego? (Pode escolher várias opções)

- [ ] Através de anúncios nos jornais
- [ ] Contactar directamente possíveis empregadores, sem anúncio
- [ ] Através de trabalhos e estágios antes da graduação
- [ ] Através de estágios depois da graduação
- [ ] Através do Centro de Emprego
- [ ] Através de empresas de recrutamento e de trabalho temporário
- [ ] Através da internet (websites) e redes sociais (p.ex. Facebook)
- [ ] Através de família e amigos
- [ ] Não sei

Quantos meticais espera receber no seu primeiro mês de trabalho depois de graduar?

_____

Quantos meticais espera receber por mês após um ano de trabalho (depois de graduar)?

_____

Se pudesse escolher, para que tipo de empregador gostaria de trabalhar? (Escolha uma opção)

- ( ) Sector público (como empregado/a)
- ( ) Sector privado (como empregado/a)
- ( ) Organização sem fins lucrativos (como empregado/a)
- ( ) Negócio familiar (como empregado/a)
- ( ) Por conta própria
- ( ) Não sei

Se pudesse escolher, em que ramo de actividade gostaria de trabalhar? (Escolha uma opção)

◯ Agricultura e Pesca

◯ Indústria Extractiva

◯ Indústria Transformadora

◯ Construção

◯ Comércio

◯ Alojamento e Restauração

◯ Transportes

◯ Tecnologia e Comunicações

◯ Actividades Financeiras

◯ Administração Pública

◯ Educação

◯ Saúde

◯ Não sei

Qual é o aspecto que considera mais importante para a sua possibilidade de arranjar um bom emprego? (Escolha só o mais importante)

◯ As minhas capacidades académicas   ◯ As minhas capacidades não académicas

◯ A forma como me apresento   ◯ As referências dadas por famílias e amigos

◯ A minha experiência prévia profissional   ◯ Não sei

Fim da secção de expectativas de emprego. Por favor avance para a secção seguinte

Raciocínio Numérico

Este é um exercício de raciocínio numérico. Para cada pergunta, há várias respostas alternativas. Somente uma das respostas é correcta em cada caso.

Qual dos jornais tem entre seus leitores uma percentagem maior de mulheres do que de homens no ano 3?

image

☐ Savana

☐ Jornal de Notícias

☐ Zambeze

☐ O País

☐ Diário de Mocambique

Qual é o número (em milhares) de leitores combinado do Savana, Diário de Mocambique e Zambeze no Ano 1?

image

No ano 3, quanto a Alemanha gastou a mais do que a Itália com a importação de computadores?

Se o valor gasto com a importação de computadores para o RU no ano 5 foi 10% menor do que no ano 4, quanto foi gasto no ano 5?

Fim da secção de raciocínio numérico. Por favor avance para a secção seguinte

Raciocínio verbal

No texto a seguir, lê-se algumas informações. É preciso ler o texto. Depois, responde-se a quatro afirmações sobre o texto. Para cada afirmação, seleciona-se uma das possíveis respostas:

Verdadeiro = A afirmação é uma consequência lógica das informações ou opiniões contidas no texto

Falso = A afirmação é logicamente falsa, consideradas as informações ou opiniões contidas no texto

Impossível dizer = Impossível determinar se a afirmação é verdadeira ou falsa sem mais informações

» Raciocínio verbal

"Muitas empresas acham vantajoso empregar estudantes durante o Natal. O pessoal permanente costuma desejar tirar férias nesse período. Além disso, não é raro ocorrerem picos de carga de trabalho durante o Natal, que exigem mais pessoal. Os empregos de Natal também atraem estudantes que podem retornar à empresa depois de terminarem seus estudos. Garantir que os estudantes aprendam o máximo possível sobre a empresa estimula o interesse em um emprego permanente. As empresas pagam aos estudantes um valor fixo, mas sem direito a férias remuneradas ou licença por motivo de saúde.

Afirmação 1 - Algumas empresas empregam estudantes durante o Natal no lugar de pessoal permanente que esteja de férias.

○ Verdadeiro

○ Falso

○ Impossível dizer

» Raciocínio verbal

"Muitas empresas acham vantajoso empregar estudantes durante o Natal. O pessoal permanente costuma desejar tirar férias nesse período. Além disso, não é raro ocorrerem picos de carga de trabalho durante o Natal, que exigem mais pessoal. Os empregos de Natal também atraem estudantes que podem retornar à empresa depois de terminarem seus estudos. Garantir que os estudantes aprendam o máximo possível sobre a empresa estimula o interesse em um emprego permanente. As empresas pagam aos estudantes um valor fixo, mas sem direito a férias remuneradas ou licença por motivo de saúde.

Afirmação 2 - Os estudantes com empregos de Natal recebem os mesmos benefícios de férias remuneradas que o pessoal permanente.

○ Verdadeiro

○ Falso

○ Impossível dizer

» Raciocínio verbal

"Muitas empresas acham vantajoso empregar estudantes durante o Natal. O pessoal permanente costuma desejar tirar férias nesse período. Além disso, não é raro ocorrerem picos de carga de trabalho durante o Natal, que exigem mais pessoal. Os empregos de Natal também atraem estudantes que podem retornar à empresa depois de terminarem seus estudos. Garantir que os estudantes aprendam o máximo possível sobre a empresa estimula o interesse em um emprego permanente. As empresas pagam aos estudantes um valor fixo, mas sem direito a férias remuneradas ou licença por motivo de saúde.

Afirmação 3 - Os estudantes com empregos de Natal estão sujeitos às normas disciplinares e de resolução de problemas laborais da empresa.

○ Verdadeiro

○ Falso

○ Impossível dizer

Fim da secção de raciocínio verbal. Por favor deslize avance para a secção seguinte

Auto-avaliação

Nesta secção, gostaríamos que se avaliasse em comparação com outros

Em comparação com os seus colegas, como é a sua performance académica?

○ Excelente

○ Acima da media

○ Média

○ Abaixo da Média

○ Fraco

○ Não sei

Fim da secção de auto-avaliação. Por favor avance para a secção seguinte

Família e condições de vida

Nesta secção gostaríamos de fazer algumas perguntas sobre si e o seu contexto familiar

As questões seguintes dizem respeito a vocês e à sua situação actual

Teve que mudar de casa para estudar na Universidade?

○ Sim

○ Não

Com quem vive actualmente? (Escolha todas as opções aplicáveis)

☐ Na minha família nuclear (avós, pais, irmãos)

☐ Na minha família extendida (incluindo também tios, primos e outros parentes)

☐ Com amigos ou outros estudantes numa residência privada

☐ Numa residência da universidade

☐ Com a esposa ou esposo

☐ Sózinho(a)

Tem alguma(s) criança(s) sua(s)?

◯ Sim

◯ Não

Está casado(a)?

◯ Sim

◯ Não

Sabe algumas destas línguas locais? (Escolha todas as opções aplicáveis)

☐ Emakhuwa

☐ Cisena

☐ Xichangana

☐ Elomwe

☐ Cishona

☐ Xitswa

☐ Xironga

☐ Outra(s)

☐ Nenhuma

Sabe falar Inglês?

◯ Sim

◯ Nao

Qual é a qualidade das suas capacidades de falar e escrever em Inglês?

◯ Apenas uma capacidade básica

◯ Capacidade de falar e escrever em situações profissionais, mas limitada

◯ Boa capacidade de falar e escrever em situações profissionais

◯ Inglês é a minha língua nativa ou sou fluente em Inglês

As próximas questões têm a ver com a casa em que cresceu.

Qual era o nível mais alto de educação na família onde cresceu?

◯ Sem educação formal

◯ Ensino Primário

◯ Ensino Secundário

◯ Ensino Técnico e Profissional

◯ Ensino Superior

◯ Outro / não sei

Qual era o típo de trabalho mais importante na família onde cresceu? (Escolha uma opção)

○ Assalariado numa instituição pública

○ Assalariado numa empresa ou organização privada

○ Dono(a) de uma empresa não agrícola

○ Trabalhador por conta própria na agricultura

○ Trabalhador por conta própria em actividades não agrícolas

○ Outro / não sei

Fim da secção de família e condições de vida. Por favor avance para a secção seguinte

Qual é a forma que segue o padrão?

Nesta secção mostramos imagens que têm padrões em comum. Por favor, tente identificar, a imagem que segue o padrão apresentado.

- Secção sob reserva -

_____

Fim da secção. Por favor avance para a secção seguinte

yyyy-mm-dd   hh:mm
_____   _____

Experiência de trabalho

Alguma vez realizou um trabalho pago?

○ Sim

○ Não

Quanto tempo durou (ou dura) este trabalho? (se tiver sido mais do que um, refira-se ao que teve maior duração)

○ Até 6 meses

○ De 7 meses a 1 ano

○ Mais de 1 ano

Para que tipo de empregador trabalhou?

○ Uma empresa privada

○ Uma instituição pública

○ O negócio da minha família

○ A machamba da minha família

○ Uma organização sem fins lucrativos

○ Por conta própria

Alguma vez fez um estágio?

○ Sim

○ Não

Quanto tempo durou (ou dura) este estágio? (se tiver sido mais do que um, refira-se ao que teve maior duração)

○ Até 6 meses

○ De 7 meses a 1 ano

○ Mais de 1 ano

Para que tipo de empregador realizou estágio?

○ Uma empresa privada

○ Uma instituição pública

○ O negócio da minha família

○ Uma organização sem fins lucrativos

Fim da secção sobre experiência de trabalho. Por favor avance para a secção seguinte

yyyy-mm-dd   hh:mm

Escolha a afirmação com a qual concorda mais

Nesta secção encontra um conjunto de declarações, para cada caso, por favor escolha aquela com a qual mais concorda.

1. Escolha a afirmação com a qual concorda mais

○ Muitas das coisas más que acontecem na vida das pessoas, acontecem, em parte, devido a má sorte.

○ As coisas más que acontecem às pessoas resultam de erros que elas cometem.

2. Escolha a afirmação com a qual concorda mais

○ Uma das maiores razões pelas quais acontecem guerras é as pessoas não terem interesse suficiente por questões políticas.

○ Haverá sempre guerras. Não interessa o quanto as pessoas se esforcem para as prevenir.

3. Escolha a afirmação com a qual concorda mais

○ Mesmo que seja passado muito tempo, todas as pessoas alcançam o respeito que merecem neste mundo.

○ Infelizmente, muitas vezes o valor de uma pessoa passa despercebido, apesar do esforço que ela faz.

4. Escolha a afirmação com a qual concorda mais

○ A ideia de que os professores são injustos para os alunos não faz sentido.

○ A maior parte dos alunos não percebe o quanto as suas notas são influenciadas por coisas que acontecem por acidente.

5. Escolha a afirmação com a qual concorda mais

○ Se não surgem as oportunidades certas, ninguém pode ser um líder eficaz.

○ Pessoas capazes falham em tornar-se líderes porque não tiram vantagem das oportunidades que surgem.

6. Escolha a afirmação com a qual concorda mais

○ Não interessa o quanto tentes, algumas pessoas nunca vão gostar de ti.

○ Pessoas que não conseguem fazer com que outras gostam delas não sabem como se relacionar com outras pessoas.

7. Escolha a afirmação com a qual concorda mais

○ Chego muitas vezes à conclusão que o que pode acontecer vai acontecer.

○ Confiar no destino nunca correu tão bem para mim como decidir um plano de acção e segui-lo.

8. Escolha a afirmação com a qual concorda mais

○ Para um estudante que se prepara bem, raramente, ou nunca, há um teste injusto.

○ Muitas vezes as perguntas dos testes são tão pouco relacionadas com a matéria do curso que estudar é mesmo inútil.

9. Escolha a afirmação com a qual concorda mais

○ O sucesso é o resultado de trabalho duro; a sorte tem pouco ou nada a ver com isso.

○ Conseguir um bom emprego depende, principalmente, de estar no local certo na hora certa

10. Escolha a afirmação com a qual concorda mais

○ Um cidadão médio (homem ou mulher) pode ter influência nas decisões do Governo.

○ Este mundo é governando por um número pequeno de pessoas com poder; não há muito que uma pessoa normal possa fazer quanto a isso.

11. Escolha a afirmação com a qual concorda mais

○ Quando faço planos, estou quase certo que os posso cumprir.

○ Nem sempre é sábio planear muito para a frente porque muitas coisas, afinal, acabam por depender da sorte

12. Escolha a afirmação com a qual concorda mais

○ No meu caso, conseguir o que quero tem muito pouco ou nada a ver com a sorte

○ Muitas vezes até podíamos decidir o que fazer atirando uma moeda ao ar

Fim da secção. Por favor avance para a secção seguinte

Alimentação

Comeu alguma coisa nas últimas duas horas?

○ Sim

○ Não

Bebeu alguma coisa nas últimas duas horas?

○ Sim

○ Não

O que bebeu? (Escolha todas as opções aplicáveis)

- [ ] Bebida disponibilizada para esta entrevista
- [ ] Refrigerante (não disponibilizada)
- [ ] Água (não disponibilizada)
- [ ] Café ou chá
- [ ] Outra bebida

Fim da secção sobre alimentação. Por favor avance para a secção seguinte

Informação de contacto

No seguimento destas questões, gostaríamos de manter o contacto consigo através de telefone ou email com algumas questões de seguimento ao longo dos próximos 2 anos. Gostaríamos de o fazer para melhor conhecer a experiência dos estudantes na entrada no mercado de trabalho ou continuando os estudos.

Poderiamos contactar-lhe através de telefone? (Receberá um crédito no seu celular para cada participacão)

- ◯ Sim
- ◯ Não

Por favor indique o número de telefone que usa ou tem acesso com mais frequencia? (completo INCLUINDO o identificador da operadora)

_____

Tem um segundo telefone que também usa?

- ◯ Sim
- ◯ Nao

Por favor indique o seu número de telefone (completo INCLUINDO o identificador da operadora)

_____

Caso o número anterior não funcione, por favor indique o número de telefone de um(a) seu(sua) amigo(a) próximo(a) (completo, INCLUINDO o identificador da operadora)

_____

Por favor escreva o nome desse(a) amigo(a)

_____

Caso os números anteriores não funcionem, por favor indique o número de telefone de um(a) seu(sua) familar próximo(a) (completo, INCLUINDO o identificador da operadora)

_____

Por favor indique o nome desse(a) familiar próximo(a)

_____

Poderiamos contactá-lo(la) através de email?

◯ Sim

◯ Não

Por favor, indique o seu email

Esta foi a última pergunta! Muito obrigado!