The Tunisian Labor Market

Women and men do not have equal chances of finding jobs.

Females students make up the majority (68 percent) of university graduates in Tunisia, and both female and male graduates join the labor market in comparable numbers. However, once in the labor market both groups do not have equal chances of finding jobs. In 2014, the unemployment rates for university educated women reached 39 percent, 17 percentage points higher than their male counterparts.

Employer discrimination may be contributing to this large gender gap in unemployment rates.

One hypothesis is that a larger share of women study majors and/or apply to jobs with lower employment potential than men. This may be driven by female students’ perception that some fields discriminate against female employees, be it at the point of hiring, in terms of salary offers, and/or for promotion purposes. It is possible that indeed employers discriminate against female applicants. Employers may believe that women’s capacities are inherently inferior to that of men, and/or that women’s present or future household and childcaring responsibilities will result in lower productivity, compared to that of a male employee.

Study Design

Focus group discussions were conducted to investigate whether university students believe there is gender discrimination in the Tunisian labor market.

Individual questionnaires followed by focus group discussions were conducted with 57 female and male students in their last year of tertiary studies representing four main universities in Tunis. An overwhelming 75 percent of them indicated that gender discrimination is important when they are considering their choice of major or occupation.

“[Employers] say that a woman has a family and children. She should make sacrifices to the detriment of her career and so, she cannot take [work] responsibilities.” —Female student

A field experiment was conducted to test the presence and magnitude of gender-based discrimination by employers at the point of screening.

The experiment followed the correspondence study design, where fictitious and identical male and female resumes are sent in response to job advertisements, and differences in callback rates represent gender discrimination.

Creating resumes. A total of 1,571 pairs of female and male fictitious resumes were created. To ensure that fictitious resumes were representative of Tunisia, actual resumes of Tunisian university students were collected to
construct a database of credible productive characteristics including education degrees, language proficiency, computer skills, internships, certifications, awards and community life), as well as non-productive characteristics (such as hobbies). Next, these characteristics were randomly assigned to each resume, ensuring that, on average, resumes were balanced across genders. Then, fictitious identities were created and assigned to the resumes. These identities consisted of a typical Tunisian name and last name, a telephone number, an email address, a home address, and a photo (which is customary in Tunisian resumes). For the latter, photos of Tunisian university students that consented to get their picture taken were altered in Adobe Workshop to create fictitious photos that mirrored the distribution of Tunisian youth with respect to skin composition and use of veil (for female candidates).

Applying to jobs. Between May 2019 and September 2019, resume pairs were used to apply to job advertisement in four sectors spanning 14 occupations through Tanit Jobs and Option Carrière—the two largest online job platforms in Tunisia. (See Table 1). Together, the four chosen fields capture around 95 percent of advertised vacancies and represent 45 percent of the selected fields of study of students enrolled in higher education in the country.

Measuring responses. Throughout the duration of the experiment, sim cards were purchased and activated 24/7. A female and a male operator were hired and trained to answer the phone, respectively, and record employer callbacks. Email responses were also tracked. The main outcome of interest is whether (a) the employer calls or emails with the possibility of hiring (i.e., either to ask for an interview or for additional information), or (b) does not call back or calls to reject the candidate. Two secondary outcome indicators are also examined: (i) the type of positive employer response (i.e., willing to hire immediately, request for an interview on the spot, request for an interview at a later date, ask for additional information, other), and (ii) average response time from the time of the application.

## Study Findings

Contrary to student beliefs, discrimination against women is only observed in one field: IT. There is no evidence of gender-based discrimination in Engineering, and positive discrimination towards women is observed in Marketing and Finance.

Ordinary Least Squares (OLS) regressions with field- and occupation-level interaction terms were estimated, and log likelihood tests using probit models were conducted as robustness checks. Regression results find the following:

### Table 1. Number and distribution of applications submitted

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of application pairs submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>393</td>
</tr>
<tr>
<td>Civil Engineer</td>
<td>68</td>
</tr>
<tr>
<td>Computer Engineer</td>
<td>186</td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td>60</td>
</tr>
<tr>
<td>Industrial Engineer</td>
<td>45</td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td>34</td>
</tr>
<tr>
<td>IT</td>
<td>402</td>
</tr>
<tr>
<td>IT Specialist</td>
<td>189</td>
</tr>
<tr>
<td>Web Designer</td>
<td>96</td>
</tr>
<tr>
<td>Web Developer</td>
<td>117</td>
</tr>
<tr>
<td>Marketing</td>
<td>437</td>
</tr>
<tr>
<td>Assistant Marketing</td>
<td>129</td>
</tr>
<tr>
<td>Specialist Marketing</td>
<td>173</td>
</tr>
<tr>
<td>Web Marketing</td>
<td>135</td>
</tr>
<tr>
<td>Finance</td>
<td>339</td>
</tr>
<tr>
<td>Accountant</td>
<td>183</td>
</tr>
<tr>
<td>Economist</td>
<td>16</td>
</tr>
<tr>
<td>Financial officer</td>
<td>160</td>
</tr>
</tbody>
</table>

### Engineering

0%

There is no evidence of gender-based discrimination.

### IT

15%

Women are 15 percentage points less likely to receive a callback than men.

### Marketing

19%

Men are 19 percentage points less likely to receive a callback than women.

### Finance

4%

Men are 4 percentage points less likely to receive a callback than women.

The study also finds that there are no gender differences in the time it takes employers to respond to the application. However, differences in the type of employer response are
observed. Women are more likely to get asked for an in-person interview for a later date by 9 percentage points, whereas men are more likely to receive an interview on the spot over the phone by 10 percent points. This may potentially signal that employers would prefer to screen female candidates in person and may also potentially indicate that more scrutiny or potential discrimination is exercised at the interview stage.

In what specific occupations is discrimination observed?

- **Web designer**: Women are 22 percentage points less likely than men to receive a callback.
- **Web developer**: Women are 26 percentage points less likely than men to receive a callback.
- **Marketing assistant**: Men are 22 percentage points less likely than women to get a callback.
- **Marketing specialist**: Men are 27 percentage points less likely than women to get a callback.
- **Financial officer**: Men are 6 percentage points less likely than women to get a callback.

Does the type of skills demanded by the job matter?

Yes, they do:

- **Computer skills**: Women are less likely than men to receive a callback for jobs that require computer skills—which is consistent with the observed discrimination in the IT field.
- **Language skills**: Men are less likely to receive a callback for jobs that require the French language.
- **Microsoft Office**: Men are also less likely to receive a callback for jobs that require knowledge of Microsoft Office—a common package required to perform secretarial and note taking tasks.

Does the type of employer matter?

No gender differences were found in callback rates between local and international firms. However, women are more likely to receive a callback for jobs that are located in Tunis.

Does physical appearance matter to employers?

Not for men. Only for women.

Gender difference in callback rates do not vary by the color of the applicant’s skin (fair or light). However, women who are veiled are 8.5 percentage points less likely to receive a callback rate when compared to non-veiled women.

Conclusions and Policy Implications

**Gender-based discrimination explains part of the gender gap in unemployment rates of university graduates in Tunisia.**

This study finds that women with identical qualifications as men, do not have equal chances to find jobs in the IT field. Just at the point of screening, they are 15 percentage points less likely to receive a callback from an employer. This may be an important factor in explaining why female graduates’ unemployment rate is 36 percentage points higher than their male peers in the Tunisian IT sector.

While this study found discrimination in the IT sector, no discrimination against women was observed in the male-dominated engineering sector, and positive discrimination was found in the finance and marketing sectors.

Some explanations could reconcile the positive discrimination in favor of women in those fields with the widening gaps in unemployment between men and women in the Tunisian labor market. ¹ Given that the experiment ends at the screening phase and not at the point of hiring, it is plausible that discrimination happens at the interview stage and beyond. Additionally, women may have higher reservation wages than men, influenced by high opportunity costs given childcare constraints, preferences for public sector employment, and working conditions in the private (informal) sectors.

**These findings have important implications for policymakers in Tunisia.**

- Measures to reduce possible gender discrimination at entry point, as well as reduce any misplaced perceptions about the productivity and performance of female employees should be adopted particularly in the IT sector.
- Internships and on-the-job training can serve as a credible signal for employers and challenge some of their perceptions about women’s productivity. In the IT sector,

¹ The gender gap in unemployment rates for university graduates is a staggering 48 percentage points for engineering and 17 points for finance.
programs that promote skills training for women seeking to enter IT-related fields could be linked to the educational/vocational programs currently in Tunisia.

✓ Programs such as public information campaigns and career guidance services may be needed to correct any misperceptions of gender discrimination among engineering and finance university students and their families.

✓ Changing norms and customs around inserting photos in applicants’ resumes can be an important step towards reducing employers’ discrimination against women (and veiled women) at the point of screening. However, more needs to be done to ensure that women are not discriminated against at the interview stage or throughout their career progression.

Testing Gender Discrimination in the Tunisian Labor Market: A Field Experiment

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