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## Middle East Brief

### Why Are Egyptian Youth Burning Their University Diplomas? The Overeducation Crisis in Egypt

Nader Habibi and Fatma El-Hamidi

In September 2015, student unions in Egypt staged several protests in front of the higher education ministry. They were protesting a number of issues, such as inadequate educational resources in universities and restrictions on political activities on campus. In one of several simultaneous protests on September 11, a group of university graduates set their PhD and MBA certificates on fire to protest their inability to find suitable jobs despite these advanced degrees. They were particularly upset with the government's failure to create more public sector jobs for university graduates.<sup>1</sup> This unusual symbolic protest by these angry university graduates followed a protest a day earlier in front of the higher education ministry by high school students and their parents, who were demanding an increase in the admissions capacity of public universities.<sup>2</sup>

The seemingly contradictory demands made in these two protests reflect the crisis of higher education in Egypt. On the one hand, large segments of Egyptian society view higher education as the gateway to social status and economic security; hence they press the government to increase university enrollment. On the other hand, the government and the labor market are unable to create enough professional jobs for the large number of students who earn university degrees every year; as a result, a large number of university graduates are unemployed—and among those who are fortunate to *have* a job, many are overeducated and work in professions that do not utilize their training and skills. Economists refer to this labor market condition as "overeducation."

The purpose of this Brief is to analyze the burden of overeducation in Egypt that began in the mid-1980s and has become more prevalent in recent years. It is based on the premise that this crisis is not just a labor market crisis due to weak economic growth: Even if Egypt experiences strong economic growth and a large number of new jobs become available, only a fraction of those jobs will require a university degree. What Egypt is experiencing, rather, is a crisis of overeducation: The supply of university graduates in many educational fields exceeds the domestic labor market's demand for these skills. As such, the Brief begins with an analysis of the political and socioeconomic causes of this crisis, its historical roots, and the current form it has taken. It then discusses the ongoing debate on the subject in Egypt, shedding light on the more recent initiatives by Egyptian policy makers and placing the Egyptian crisis within a larger regional context.

#### Higher Education since President Nasser

Although the first modern university in Egypt (the Cairo University) was established in 1908, the number of universities and their student enrollment grew slowly in the first half of the twentieth century. In that period, access to higher education was very limited, as only the socioeconomic elite were able to afford the cost of a university education. By the early 1950s, there were still only four universities in the country,<sup>3</sup> all of which operated independently.

The first attempt at establishing a national higher education policy began in 1950, when King Farouk's royal decree No. 496 created the Supreme Council of Universities (SCU)<sup>4</sup>. The SCU was created within the Ministry of Education, and its creation coincided with the appointment of Taha Hussein as minister of education. Taha Hussein was one of Egypt's most prominent writers/ intellectuals and an advocate of mass education. He called for free education for all, which was a radical departure from the status quo of 1940s Egypt, in which a majority of citizens were illiterate. Hussein's proposal for free mass education was formally adopted by Gamal Abdel Nasser and other free officers who ended the monarchy in 1952, and it applied to all levels of education, including higher education.

Under Nasser, not only was higher education free for admitted students, but as the number of university graduates grew, he also, starting in 1964, guaranteed public employment opportunities for all university graduates. Not surprisingly, the demand for university studies sharply increased, and Egypt's government responded by investing more resources in higher education and increasing the admissions capacity of universities. Egypt developed a centralized system of tuition-free higher education with a meritocratic admissions policy—but since the more prosperous families could afford to spend more on private tutoring to gain an advantage for their children in the national entrance exam, equality of access to higher education was compromised.<sup>5</sup>

During the 1950s and early 1960s, university enrollment in Egypt grew slowly because the pool of high school graduates was still small. As high school enrollment and graduation increased, however, admissions to universities also increased. Between 1952 and 1969, university enrollment rose from 50,000 to

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The opinions and findings expressed in this Brief belong to the authors exclusively and do not reflect those of the Crown Center or Brandeis University. 160,000 students. Furthermore, as enrollment increased, a large share of students were directed toward science degrees, so that by 1971, 55% of university students were majoring in various sciences as opposed to humanities and social sciences.<sup>6</sup>

The quantitative expansion of Egypt's higher education continued under Anwar Sadat, who initiated major fiscal reforms so as to reduce Egypt's large budget and trade deficit. Inevitably the fiscal budget for higher education came under pressure, but the strong social demand for higher education prevented the government from slowing the growth of university enrollment. Instead, in order to cope with the rising number of students, the salaries of instructors were linked to the number of their teaching hours—a policy designed to encourage the teaching faculty to offer more classes. One result, however, was that although total university enrollment rose from 191,000 in 1971 to 555,000 in 1981, the share of students in science majors, which required more equipment and material resources, fell from 55% to 36%.

The industrial development of Egypt in the 1960s was led by government and public enterprises, so the government had no difficulty hiring university graduates in the public sector: Despite growing public debt and economic instability, President Sadat expanded public sector employment by 108% in one decade, to two and a half million civil servants in 1980.<sup>7</sup> In the 1980s, however, under Hosni Mubarak, public sector job creation was not sufficient to fulfill the government's employment guarantee for all university graduates. Since abandoning the job guarantee was not politically feasible, the government gradually increased the waiting period between graduation and a public job appointment from three years for 1979 graduates to *nine* years for 1985 graduates.<sup>8</sup>

The lower number of new public sector jobs in the 1980s coincided with a growing number of university graduates, and hence to a significant rise in the unemployment rate among job seekers with university degrees.<sup>9</sup> These high rates and budget constraints motivated the government to reduce university enrollment by raising the minimum score on the national entrance exam for admission to universities. After reaching a peak of 660,000 students in 1984, university enrollment was reduced each year, to 567,000 in 1989.<sup>10</sup> This downward adjustment, however, was short-lived, and an upward trend was resumed in the 1990s, under populist pressures for increased access to higher education opportunities.

The economic crisis of the 1980s not only forced the Egyptian government to reduce enrollment in public universities, but also forced the government to reduce the fiscal burden of higher education by means of privatization

reforms. The government reluctantly took two important steps in the 1990s. First, it allowed public universities to generate revenue by offering tuition-based degrees for applicants who had not qualified for free education through the national entrance exam. In addition, public universities were authorized to offer tuition-based foreign language degrees in business, economics, and political sciences, which were perceived to be of higher quality than the tuition-free equivalents in Arabic.<sup>11</sup>

Second, a new higher education law was approved in 1992 allowing for the creation of for-profit private universities. The American University in Cairo was the only private (non-profit) university in Egypt until 1996—when, in response to this reform, five private universities were established. The number of private universities had risen further to twenty by 2011.<sup>12</sup>

Once a portion of the cost of higher education had been shifted to the private sector, the government allowed student enrollment to increase sharply in the 1990s: Total enrollment in higher education institutions had risen to 1.29 million by the 1998-99 academic year.13 This large increase had an adverse effect on the quality of Egyptian higher education, however. The average studentteacher ratio (the number of students per teacher) in higher education rose from 21.3 in 1990 to 29.7 in 2002.14 Furthermore, strong political and popular pressure for access to and the democratization of higher education led to the admission of more students in social sciences and humanities degree programs, which cost less per student. This strategy allowed for the admission of more students to higher education whatever the level of the fiscal budget, but these degrees are less desirable in the labor market.15

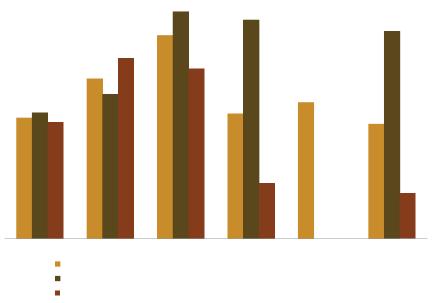
Even though finding suitable employment with a university degree has become more difficult year after year, the strong demand for university education has persisted. The Mubarak government and the ones that followed it after the Arab Spring uprisings have allowed university enrollment to reach 2.5 million as of 2015<sup>16</sup>. In the meantime, the labor market crisis for university graduates became no longer limited to unemployment alone. It has led to a steady rise in the *under*employment of university graduates, and the replacement of less educated workers in low-skilled and semi-skilled jobs with university graduates, as will be explained in the next section.

#### Unemployment and Underemployment Trends among University Graduates

Ever since the early 1980s, Egyptian university graduates have experienced high unemployment rates, and the

proportion of unemployed workers who hold university degrees has consistently exceeded 30% in recent years (Chart 1). Women university graduates have typically suffered higher unemployment rates than men. In the youth category (ages 15–29), the unemployment rate for university graduates was 34.0% in 2012, compared with 20.1% for high school graduates and 4.5% for individuals who had completed only primary school.<sup>17</sup>

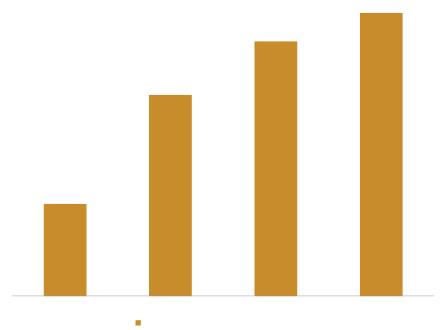
#### Chart 1. Egypt: Percentage of Unemployed who Are University Graduates



Source of data: World Bank Development Indicators , 2016

The high unemployment rate, however, is not the only labor market challenge facing Egypt's university graduates. Despite a strong cultural bias against low-skilled and semi-skilled jobs among educated Egyptians, some graduates are accepting these types of jobs, which do not require university degrees and offer lower wages and benefits by comparison with skilled jobs. When we look at the percentage of working university graduates who are employed in non-university jobs,<sup>18</sup> we see a significant increase in this ratio since 2000. In Chart 2 we observe that this ratio rose from 8% in 1999 to 25% in 2012, meaning that in 2012, one out of every four working university graduates were overeducated for their occupations and did not utilize the specialized skills that they had acquired in university.

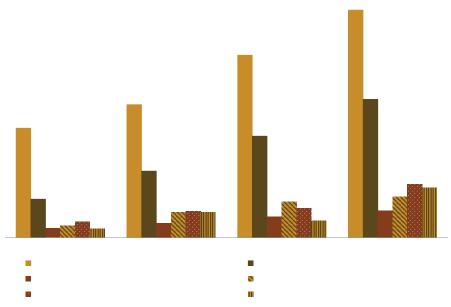
#### Chart 2. Egypt: Percentage of All Workers with University Degrees



Source of data: Egypt Labor Force Survey, various years.

As shown in Chart 3, most of the university graduates who accept non-university jobs are employed in clerical support, service, and sales jobs. These are perceived as more respectable low-skilled jobs than manual work in agriculture and construction. By 2012, nearly 29% of workers in clerical support jobs and 18% of service and sales workers had university degrees—as did over 5% of workers in low-skilled and unskilled jobs, which had never before attracted university graduates. This suggests that the excess supply of university graduates is getting larger and forcing some graduates to accept low-status and low-pay occupations, such as unskilled construction and agricultural work.

#### Chart 3. Egypt: Share of Workers in Non-University Occupations who Have University Degrees



#### Source of data: Egypt Labor Force Survey, various years.

The negative consequences of overeducation are not hard to detect. The rising share of university graduates in lowskilled occupations not only means that these individuals will earn lower wages and suffer emotionally because of their overeducation; it also reduces employment opportunities for job seekers with *lower* levels of education (mostly high school graduates). As more of these jobs (that do not require university skills) are given to university graduates, high school students (and their parents) will have an added incentive to seek a university education, because they observe that even for many types of low-skilled and semi-skilled jobs, a university degree is an advantage. Hence, a large number of young adults feel compelled to seek a college education despite the high rates of unemployment and underemployment among college graduates.

Unemployed and underemployed university graduates suffer high levels of material and emotional discontent, though Egyptian households and the Egyptian government spend large amounts of financial resources on university education for thousands of young adults who cannot use their degrees in productive work. Unable to find well-paying jobs, many young adults have to postpone marriage and rely on their parents for shelter and financial support for several years after graduation. Those who eventually lower their expectations and accept low-skilled jobs often experience a loss of social status.

The adverse consequences of this situation, as we have seen, are not limited to university graduates and their families; the frustration of overeducated young adults (the 20–29 year age group) is a major cause of political and social discontent throughout Egypt. Ever since the late 1980s, a large number of these frustrated young adults have joined Islamist groups such as the Muslim Brotherhood, and some have even been attracted to more extreme jihadist groups that advocate violence.<sup>19</sup> It is worth noting that most of the protesters in the 2011 uprising had higher levels of education than the general population and belonged to this same age category.<sup>20</sup> The potential for unrest among unemployed educated youth remains high.

## The Current Debate and Reform Initiatives in Higher Education

Free university education and guaranteed jobs in the public sector for graduates were two main public policy tools that successive Egyptian governments since Nasser have used to garner popular support in urban areas. For as long as the annual number of graduates was relatively small, Egypt was able to honor the guaranteed public jobs policy. With the steady growth of population and of university enrollment and graduation, however, it became harder to finance the growing cost of higher education and to sustain these policies over time. Yet despite the steady deterioration of labor market conditions for university graduates, the strong demand for higher education has continued, and successive Egyptian governments have tried to expand access to higher education for broad segments of the society by increasing enrollment.

There has been no shortage of proposals and plans in the past two decades to reform Egypt's higher education, but none had directly addressed the issue of overeducation. In an attempt to face the challenges created by both the rising cost of higher education and rising unemployment among degree holders, the Ministry of Higher Education established the National Commission on Higher Education Reform in 1997 to embark on a long-term reform plan over a seventeen-year period.<sup>21</sup> Some of the main objectives were:

- to raise the cost efficiency of the higher education system
- to reduce government funding by consolidating smaller institutions
- to raise the quality of university faculty and staff, and
- to improve the global ranking of Egyptian universities.

But despite a long list of recommendations, the Commission failed to design an effective mechanism to link the education and research activities of the Egyptian higher education system to the current and future needs of the country's labor market. In fact, by centralizing the decision-making process, the establishment of this commission hindered innovation and creativity at the institutional level.

The 1997 reform initiative did not see the excess supply of university graduates as a concern in and of itself; instead, it focused on improving the quality of higher education. The second phase of this reform, which was adopted in 2009, even called for *increasing* "opportunities for higher education in Egypt."<sup>22</sup> As long as institutions of higher education were able to meet the minimum required standards for faculty and educational space, there was no restriction on increasing student enrollment.<sup>23</sup>

Political interest in higher education reform has intensified since the 2011 uprisings. A new reform package, which mirrored the objectives of the earlier National Commission on Higher Education Reform, was proposed in 2014. This package included an additional sixty-one initiatives for promoting a knowledge-based economy and enhancing the training of employable graduates.<sup>24</sup> The package, which is projected to extend until 2022, envisions the continuous expansion of enrollment capacity via the creation of five new universities per year.

Egyptian policy makers anticipate that a portion of this additional capacity will be filled by international students. The SCU has approved a plan to quadruple the enrollment of international students, from 53,000 in 2015 to 200,000 by 2017.<sup>25</sup> Given current political conditions and security risks in Egypt, however, these targets will be hard to achieve, and the excess enrollment capacity is likely to be filled by Egyptian students—which will further exacerbate Egypt's overeducation burden.

Although official government policy calls for expansion of higher education, some recent policies might have an indirect effect in the opposite direction. Soon after being elected, President el-Sisi appointed an advisory council on education and scientific research to revise higher education development plans for the next decade. The recommendations of the council called for continuing the parallel objectives of increasing access to higher education and shifting a larger share of the costs to the private sector. The advisory council announced a proposal to replace free tuition in public universities with a merit-based tuition discount. According to this proposal, tuition in public universities would be free for students with good academic performance, but a partial tuition would be imposed if a student's grades fell below a given threshold. This policy could force some low-performing students with limited financial resources to abandon higher education and hence might reduce enrollment in public universities if and when it took effect.

Were merit-based tuition in public universities to be introduced, it would likely increase students' and policy makers' demand for accountability with respect to the quality of university education and its relevance to the labor market. Under the current system, many students in public universities do not show a strong commitment to studying hard and do not demand high-quality education. This situation is best demonstrated by the reaction in March 2015 of Aya Morsi, a female law student in Ain Shams University, to the merit-based tuition proposal: I didn't choose my university or the college I wanted to join—I was forced to study something I never liked. I was forced to be part of a system that depends only on memorizing information without real learning. Is it fair to be forced to pay for this nonsense, as well? ... Attendance is not mandatory in my faculty. All I have to do is to buy study notes at the end of the semester to prepare for the exams. This happens in all non-technical faculties. I can assure you that 90 percent of my classmates study for this one month to get a degree that won't benefit their career. ... As a student and employee, I spend almost LE5,000 annually on clothes, LE1,500 on transportation, LE1,000 on private tutoring and LE200 on study notes. Now, if I fail my classes, I would have to pay another LE7,000 for the same poor education I receive. This is unfair.<sup>26</sup>

Since the poor quality of university education in Egypt is one of the reasons that university graduates cannot find adequate employment, introduction of a merit-based tuition system might help improve the quality of graduates and make them more employable. There is some doubt about the political feasibility of enforcing this new policy, however, because of potential protests by students and their families. The notion of free access to higher education as a human right has been deeply ingrained in Egyptian culture over the last five decades, and any attempt by the government to change the status quo might face strong opposition.

Another group of proposed reforms is primarily concerned with new labor market programs to help university graduates transition into the job market. These reforms are recommended by several European and international institutions, which are also providing funding to enable their implementation. Youth unemployment at all levels of education is a major concern for Egypt, and these proposed reforms include training and internship programs that are designed in cooperation with local employers. The latest set of proposals in this direction is included in a 2015 report by the European Training Foundation.27 As noted in this report, while a large number of new university graduates are unable to find suitable employment, nearly 50% of Egyptian firms identify deficiencies in skills on the part of these graduates as constraints on their business development.<sup>28</sup> The report recommends better communication between universities and domestic employers in the development of university majors; it also calls on the Egyptian government to consult with employers when designing new higher education policies.

Although these policies will be effective in retraining some university graduates for existing jobs, they do not address the persistent oversupply of university students with poor skills, which on the one hand necessitates these training programs while on the other hand forcing the government to compromise the quality of higher education by making educational resources available to a larger number of students. It appears that since access to higher education is a very popular social demand in Egypt, policy makers are reluctant to impose any formal restrictions designed to reduce enrollment. Instead, their efforts to reduce the fiscal burden of higher education will indirectly reduce demand for enrollment in public universities by making a university education more expensive. But this will not prevent degree applicants from enrolling in private universities—which, under competitive pressure, will reduce their tuitions and consequently offer a low-quality education to their students.

Overeducation is a complex Egyptian social problem for which there is no easy solution, and conventional solutions of the sort discussed above have been partially tried but have not been effective. Egypt's experience is not unique, however: Many developed and developing countries are experiencing similar difficulties with graduate unemployment. Among these, the experiences of two large Middle Eastern countries are worth considering.

Both Iran and Turkey have experienced a high incidence of overeducation in the past decade. University enrollment in Iran doubled, from 2.2 million students in 2005 to 4.4 million in 2014. In Turkey, enrollment in tertiary education<sup>29</sup> rose by 138% between 2005 and 2013, to a record 5.47 million students in the 2013–14 academic year.<sup>30</sup> Hence, the (university) student/population ratio in Turkey is twice as large as that in Egypt, and the number of graduates who will enter the Turkish job market will rise sharply in the next two years.<sup>31</sup>

Since the severe recession that afflicted Iran during 2013 and 2014 as a result of international sanctions, unemployment of university graduates has reached unprecedented levels. As a result, Iranian policy makers for the first time began to see the issue as an overeducation crisis. The higher education ministry announced a reduction in admissions quotas in a few university majors that had experienced severe overeducation in the previous two years. Even some medical schools announced reduced admissions.<sup>32</sup>

These efforts so far have been selective and ad hoc. The Turkish government is also slowly moving in this direction by reducing enrollment in select universities. It recently announced that the minimum grade requirement in the national (university) entrance exams for some majors had been increased<sup>33</sup>—a policy that will indirectly reduce admissions to these programs. So far, neither country has adopted a formal, comprehensive policy linking the

number of university enrollments for specific degrees to labor market conditions. Nevertheless, even the limited steps that have been initiated in these countries might suggest some policy guidelines for Egypt.

#### Conclusion

When Gamal Abdel Nasser offered free university education and guaranteed jobs to university graduates in 1950s, it was a policy that enjoyed overwhelming support. Vis-à-vis the elitist and exclusivist educational policies that had been practiced by the Egyptian monarchy before the 1952 revolution, free and universal education from primary school to higher education was viewed both as equitable and as necessary for industrial progress.

The rapid expansion of tertiary education worked well in the 1960s and early 1970s, when Egypt was enjoying strong industrial growth. In the past three decades, however, while enrollment in higher education has increased, university graduates have experienced high rates of unemployment and underemployment. Yet, despite this undesirable outcome, Egyptians in general remain highly supportive of making higher education accessible to broad segments of the society.

The government has responded to the growing fiscal cost of higher education by issuing permits for private universities and by allowing public universities to generate revenue by offering some tuition-based degrees. These policies have facilitated further increases in university enrollment; but because the growth of private universities has shifted a portion of higher education costs to the private sector, Egyptian politicians are under less fiscal pressure to reduce university enrollment.

The continuation of the current mass higher education system without proper coordination between the manpower needs of the Egyptian economy and the supply of university graduates will result in a significant waste of talents, as well as of financial resources that Egypt can hardly afford. In the 1990s, there was a growing expectation that market-oriented economic reforms of the sort we have described would stimulate the private sector and create well-paying jobs for university graduates. But the level of job creation in the private sector during the past two decades was unfortunately not sufficient to fulfill this expectation.

Since it is nearly impossible for the Egyptian government to create a sufficient number of jobs for university graduates (in either the public or private sector), and restricting enrollment to universities remains highly unpopular, an oversupply of university graduates may well continue unchallenged. What might ultimately compel policy makers to limit university enrollment is a gradual rise in public demand for maintaining a balance between equitable access to higher education and preserving the value of a university degree. As the share of university graduates who cannot find adequate jobs increases, Egypt is likely to witness more degree burning protests, and the political demand associated with these symbolic protests may gradually change from demands for job creation to demands for preserving the value of university degrees.

#### Endnotes

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- 7 Ibid.
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- 9 In 1960, only 3.2% of the unemployed had completed a university education; this percentage had increased to 9.6% in 1976 and 16.0% in 1986.
- 10 Enrollment statistics taken from Richards, "Higher Education in Egypt," Table 1.
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- 12 In addition to these universities, there are also many twoyear and four-year technical institutions in Egypt. As of 2011, there were fifty-one public technical institutions in Egypt and more than one hundred private ones.
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- 18 In the United Nations' categorization of occupations (ISCO), semi-skilled and unskilled occupations, which have one-digit ISCO codes 4 to 9, are considered "non-university occupations," which do not require a university degree.
- 19 For a detailed account of how unemployed and underemployed university graduates are recruited into Islamic movements, see: Wickham, Mobilizing Islam, Ch. 3.
- 20 "Youth Unemployment in the Arab World Is a Major Cause for Rebellion," *International Labour Organization*, April, 5, 2011.\*

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