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Middle East Brief

Iran's Overeducation Crisis: Causes and Ramifications

Nader Habibi

The available data on the employment status of college graduates in countries in the Middle East and North Africa (MENA) point to a gradual but constant increase in unemployment and underemployment of college graduates in many parts of the region. This problem is more acute in the Islamic Republic of Iran than in any other Middle Eastern country and can be best described as an unprecedented overeducation crisis that is likely to get worse in the coming years. This Brief is an attempt to shed light on the causes, magnitude, and consequences of Iran's overeducation crisis—one that has been brought about by a combination of short-sighted government policies and a widespread cultural obsession with college education.

The severity of the crisis has not gone unnoticed by Iranian government officials. In May 2014, Minister of Labor and Social Security Ali Rabiei warned that about 4.5 million university graduates would enter the labor market in the next few years.¹ The significance of this massive injection of additional educated job seekers is underscored by the fact that some 2.5–3 million working-age adult Iranians are already unemployed and looking for work.² The unusually large current student population in higher education indicates that in addition to the hundreds of thousands of high school graduates and less educated individuals who are expected to enter the job market each year, over the next four years, some 1–1.5 million university graduates will also enter the job market every year.

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Managing this massive supply of young job seekers will therefore be one of the most important economic and political challenges that Iran's ruling regime will face in the years ahead. Yet it is not clear how the government will be able to generate a sufficient number of new jobs and economic opportunities under current economic conditions and international tensions. Recent economic data have revealed that even in 2005–11, when Iran enjoyed record-high oil revenues, it had not made much progress in job creation. According to official statistics, whereas the total number of jobs in 2006 was 700,000 larger than in 2001, the number of jobs in 2011 was only 20,000 larger than in 2006.³ The reason for this was that the benefits of higher oil revenues during this period were mostly neutralized by a combination of bad economic policies, pervasive government corruption, and progressively escalating economic sanctions. Many of these issues received greater attention recently as President Hassan Rouhani and his political supporters exposed the abuse and mismanagement of Iran's economy under his predecessor, Mahmoud Ahmadinejad.

While the primary symptoms of the crisis are the growing rates of unemployment and underemployment among young college-educated Iranians, overeducation has important social and political consequences that go far beyond this immediate concern. The unfulfilled expectations of young college graduates can lead to social and political instability. And what makes this crisis even more significant is that in the coming months it will interact with two other important developments: the ongoing international economic sanctions applied against Iran and the sharp decline in the price of oil, resulting in a corresponding drop in Iran's oil revenues. In a context of ongoing (and perhaps increasing) economic sanctions, the falling oil revenues will make it even more difficult for Iran's government to address the unemployment issue. Moreover, the overeducation crisis might have an impact on Iran's bargaining position in its nuclear negotiations with the international community: As the number of jobless university graduates rises, the government might feel more compelled to reach a nuclear agreement in order to gain significant sanctions relief.

The Politics of Education Expansion

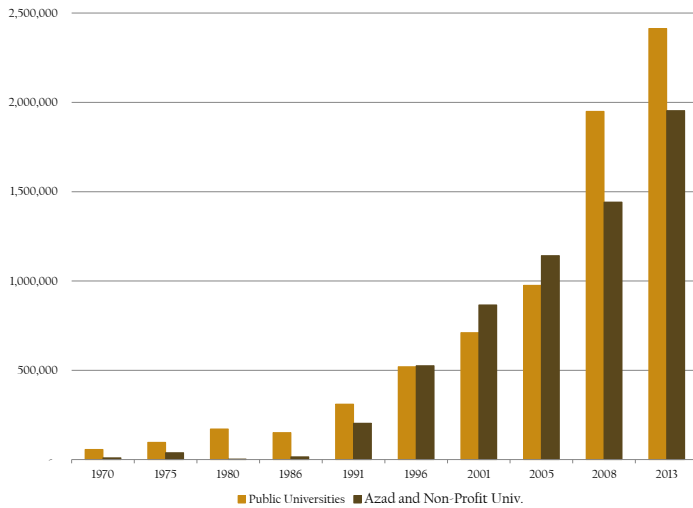
Enrollment in institutions of higher education in Iran was relatively small before the 1979 Islamic Revolution but grew rapidly after the first decade of the Islamic Republic (see Figures 1 and 2). In 1970, some 67,286 students were enrolled in eighty-four domestic universities (all of which were public institutions). Total enrollment had expanded to 514,000 by 1991, by which time enrollment in public universities accounted for only 40 percent of the total; the rest were predominantly enrolled in a semi-private institution called Islamic Azad University.⁴

The rapid growth in enrollment has continued without interruption, and the latest official figure for 2014 is 4,367,901 students.⁵ The increase in enrollment in private universities has mostly been due to the equally rapid expansion of a public university for long-distance education called Payam Nur University, as well as Islamic Azad University as demonstrated in Figure 1.

During the first three years after the Revolution, the Islamic Republic's government closed all universities in the context of a cultural revolution and its related effort to gain political control over universities, which were highly politicized during the last years of the Shah's regime. When the universities

finally reopened in 1984, the government responded to the huge demand for higher education by establishing Islamic Azad University—founded by Mehdi Jaasbi, an ally of President Hashemi Rafsanjani—as a non-profit private university. Azad University enjoyed considerable financial and political support as long as Rafsanjani remained president; it expanded its capacity rapidly and opened branches in many towns and even in large villages.

Figure 1. University Enrollment in Iran, 1970–2008



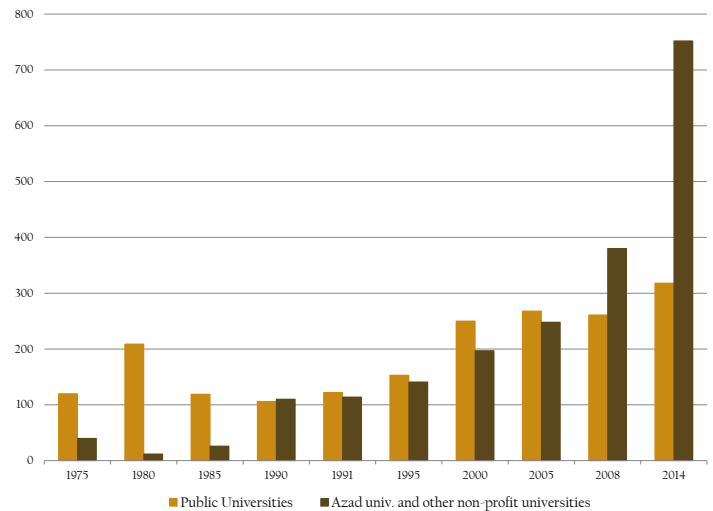
Source of data: Al-Agha et al., “Ravand roshd kami amuzesh aali khosusi v dolati dar jomhuri eslaami Iran”; *Higher Education Statistics*, 2014, Issued by Iran Institute for Research and Planning in Higher Education. (Chart generated by author)

Another important milestone in Iran’s expansion of higher education was the establishment in 1988 of Payam Nur University,⁶ a government-owned open university intended to make higher education available in remote and less developed regions of the country through long-distance-learning programs. Initially, Azad University received more indirect government support and had a significantly larger enrollment than the Payam Nur University. Political rivalries between Rafsanjani and Ahmadinejad during the latter’s presidency, however, led to a shift of government support from Azad University to Payam Nur.

Initially, Ahmadinejad tried to gain control of Azad University’s management, but he faced considerable resistance from supporters of Rafsanjani and some rival conservative groups. Unable to overcome this resistance, Ahmadinejad tried to reduce the university’s access to governmental resources. At the same time, he facilitated the rapid expansion of Payam Nur University by increasing government support for its branch expansion and asset acquisition. He also offered government assistance and bank credit to investors who wanted to establish independent private universities.⁷ As there was no shortage of interest from academic entrepreneurs, the number of private universities rose from 50 in 2005 to 354 in March 2014.⁸

Under Ahmadinejad, the student capacity of these universities also grew rapidly.⁹ This expansion was partly an unintended consequence of Ahmadinejad’s desire to weaken Azad University out of spite for Rafsanjani. As shown in Figure 2, though there were once many more public universities than private ones in Iran, there are now more private universities than public ones. Figure 2 also reveals that there has been a sharp increase in the overall number of universities in Iran.

Figure 2. Growth of Public and Private Universities in Iran, 1975–2014



Source of data: Al-Agha et al., “Ravand roshd kami amuzesh aali khosusi v dolati dar jomhuri eslaami Iran”; *Higher Education Statistics*, 2014, Issued by Iran Institute for Research and Planning in Higher Education. (Chart generated by author)

The rapid expansion in capacity coincided with the arrival of the largest cohort of young high school graduates (aged 18–25), on the one hand, and the widespread popularity of college education among all socioeconomic classes, on the other. The lack of job prospects for high school graduates also served as a motive for many young men and women to go to college. And another motive was the desire of young men (and their families) to postpone their two-year mandatory military service by going to college.

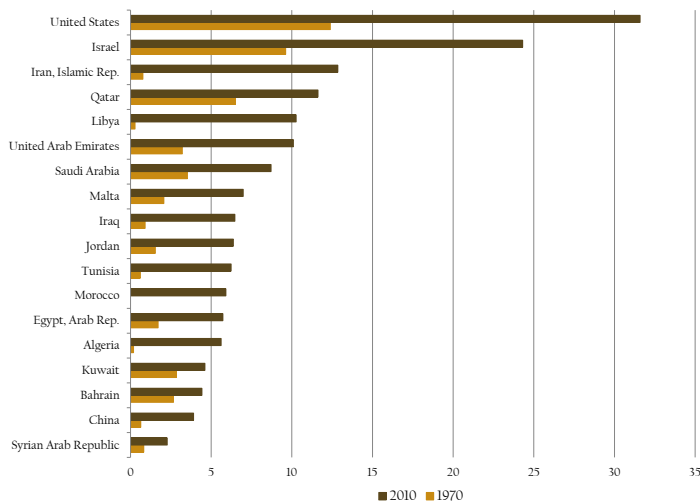
The Army of College Graduates

As a result of the rapid expansion of higher education in Iran in the past three decades, the percentage of Iran’s population with university degrees has increased faster than is the case for all other Middle Eastern countries: from only 0.77 percent of Iran’s adult population aged 25 or older in 1970 to 12.85 percent in 2010—the second highest proportion in the Middle East after Israel (based on the World Bank’s EDUSTAT statistics; see Figure 3). The 2011 census data provided by the Iran Statistics Center offers the still (much) larger figure of 18 percent, providing

further evidence of the rapid increase in the number of Iranian university graduates in recent years.

The percentage of Iran's labor force with a university degree has, as a result, likewise increased substantially. By 2008, 20 percent of Iran's labor force (including individuals actively looking for employment as well as those who are working) had completed tertiary education (EDUSTAT, World Bank). And the 2011 labor force survey by the Iran Statistics Center shows that 18.2 percent of the working population aged ten years or older had completed tertiary education.¹⁰

Figure 3. Percentage of Population Age 25+ Who Completed Tertiary Schooling



Source of data: EDUSTAT, World Bank, Barro-Lee Dataset.

Evidence of Overeducation

A problem with the aforementioned increase in the number of Iran's university graduates is that that number now exceeds the number of available jobs that require a college education. As a result, university graduates in many fields are suffering from high unemployment rates. The unemployment rate for university graduates, which was only 0.44 percent in 1976, had risen to 19.4 percent in 2011 (Table 1). (As in Turkey and Egypt, Iran has a higher unemployment rate for university graduates by comparison with those for less educated job seekers.) The labor force

participation of university graduates grew by an average of 8.2 per year between 1976 and 2011. Yet even as late as in 2011, only 46 percent of university graduates were active in the labor force; a majority of graduates (many of them women) were not working or seeking employment (see Table 1).

The unemployment rate among university graduates varies from one field to another. In most countries, unemployed graduates are usually to be found in the humanities and the social sciences. In Iran, however, high unemployment rates were observed in 2011 even among graduates in engineering (22 percent), the biological sciences (26 percent), and computer sciences (30 percent); whereas the unemployment rate for holders of degrees in the humanities and education was 15 percent or less.¹¹ Indeed, it is likely that unemployment rates for graduates with science and engineering degrees increased even further in 2012 and 2013, as poor economic policy and international economic sanctions led to a severe reduction in industrial activity.

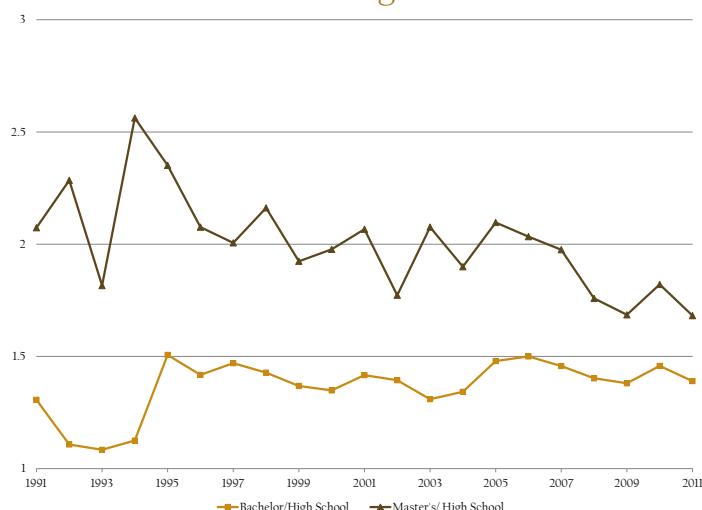
The rapid increase in the supply of university graduates over the past two decades has also had a moderating effect on their relative income advantage over high school graduates. As shown in Figure 4, the ratio of the net income of those with undergraduate degrees to that of high school graduates has remained stable since 1995, while the net income advantage of master's degree holders has suffered a gradual decline. These results are compatible with the increased supply of Master's graduates over the past ten years.¹² According to a 2014 survey of university graduates, more than 52,000 individuals with master's degrees and PhD's were unemployed.¹³

Table 1. Labor Force Participation and Unemployment Rate for University Graduates in Iran

Year	Total University Graduates, Working plus Non-working	Labor Force Participants			Unemployment Rate
		Working	Unemployed	Total	
1976	433,391	286,315	11,365	297,680	0.40
2011	10,011,676	3,741,999	901,619	4,643,618	19.40
Average Annual Growth Rate	9.40	7.6	13.3	8.2	

Source of data: 1976 (1355) National Census Data and 2011 Labor Force Survey.

Figure 4. Ratio of Real Net Income of University Graduates to That of High School Graduates



Source of data: Annual HIES Survey Databases, 1991–2011.

College Graduates in Low-Skill Jobs

When university graduates with bachelors degrees cannot find suitable jobs that match their skills, they have three options: to wait and search until a “suitable” job is found (and be unemployed), to accept a low-skill or unskilled job (and be underemployed), or to go back to university to obtain a graduate degree. As in other Middle Eastern countries, Iranians are very sensitive to the social status of various jobs: Consequently, if there are any prospects for a high-status job, they will avoid low-status jobs at all costs. This behavior results in higher rates of unemployment among college graduates by comparison with less educated job seekers. Furthermore, in Iran (as in most Middle Eastern countries), it is not uncommon for young men and women to live with their parents (and enjoy their material support) until their late 20s and even early 30s. These cultural values reduce the pressure on young college graduates to accept low-skill (“low-status”) jobs.

Table 2. Overeducation Ratios in Various Job Categories

ISCO Job Codes*	Job Category	Percentage of Employees with More Than 12 years of Education				Average Number of Years of Education			
		2001	2005	2009	2012	2001	2005	2009	2012
1400	Managers	64.8	71.6	68.7	76.5	14.02	14.11	13.85	14.60
2100	Specialists, physical scientists, mathematicians, and engineers	92.1	87.1	91.7	93.1	15.62	15.39	15.08	15.39
2200	Biologists and medical scientists	98.4	97.8	92.5	97.7	18.32	18.02	16.15	16.54
2300	Teaching professionals	72.7	75.9	91.0	93.4	14.20	14.36	15.00	15.42
2400	Other professionals (Accountants, Lawyers, ...)	64.3	67.5	74.7	78.8	13.94	14.20	14.30	14.66
3100	Physical science technicians and assistants	32.1	40.3	44.0	53.5	11.68	11.98	11.82	12.54
3200	Life sciences and health technicians and assistants	32.7	32.5	41.2	47.2	11.54	11.48	12.32	12.27
3400	Technicians and technician assistants	22.2	28.4	38.3	37.9	10.58	10.92	11.32	11.45
4100	Office workers	17.0	24.8	40.1	44.9	10.87	11.38	11.91	12.27
4200	Customer service staff	9.5	21.3	30.1	41.6	10.09	10.56	11.50	12.61
5100	Personal services and security personnel	8.3	9.8	11.5	18.2	7.52	7.96	8.13	9.09
5200	Sales associates and sales representatives	4.3	5.0	8.6	11.8	7.90	8.14	8.48	9.08
6100	Skilled agricultural, forestry, and fishing workers	0.8	0.9	0.7	1.8	3.75	4.60	4.64	5.25
7100	Mineworkers	1.5	1.5	2.9	4.2	5.42	5.73	6.49	6.76
7200	Skilled industrial workers	3.2	3.9	4.8	6.4	7.36	7.49	7.73	8.45
7300	Precision tools workers	2.5	1.8	6.2	8.3	5.74	5.72	7.42	8.34
7400	Other industrial workers	0.9	2.0	1.7	4.6	5.76	6.12	6.65	7.15
7500	Carpet weavers	0.8	0.3	0.5	1.7	4.77	4.32	4.47	4.59
8100	Food processing plant operators	5.4	6.6	7.2	12.4	6.61	7.40	7.71	8.69
8200	Heavy machine operators and assembly line workers	0.6	3.6	6.4	5.7	6.72	7.12	8.01	7.96
8300	Vehicle drivers	0.8	1.4	2.4	3.6	6.09	6.39	6.90	7.28
9100	Unskilled service sector workers	0.7	1.5	2.6	4.8	5.26	5.54	6.03	6.49
9200	Unskilled agriculture, forestry, and fishing workers	0.4	0.7	0.8	1.2	3.50	3.92	4.42	4.47
9300	Unskilled mining, construction, and industry workers	0.4	0.8	1.7	2.6	4.17	4.73	5.42	5.80

Source of Data: Iran Statistics Center, HIES databases for 2001, 2005, 2009 and 2012. *International Standard Classification of Occupations, International Labor Organization.

In recent years, however, the persistent excess supply of college graduates in Iran's labor market has gradually forced some college degree holders to compete for low-skill jobs, as many have lost hope of finding a more suitable position. Some college graduates also accept low-skill, entry-level jobs in the public sector as a steppingstone toward a higher-ranking position in the same institution a few years later. It is therefore not uncommon to find some college graduates with degrees in finance and economics starting in low-skill positions, for example, as custodians in state-owned banks.¹⁴

Whose Fault Is It?

As the above statistics have demonstrated, Iran faces a severe crisis of unemployment and underemployment among college graduates. The Iranian government and Iranian society at large are both to be blamed for this crisis. Like citizens in many other developing economies, Iranians are obsessed with university education, and families go to any length to send their young sons and daughters to college: They view a college degree as both a ticket to economic success and a source of social status. This preoccupation with degrees has been partly reinforced by public sector employment policies over the past decade: A college degree is now required for employment in most public sector jobs. Even candidates for many elected positions, such as representatives to city councils and to the national parliament (Majlis), must hold a college degree.

Iran's government responded to its citizens' strong demand for higher education by rapidly expanding the admissions capacity of both private and public universities, which further increased the supply of college graduates. The capacity expansion has been so rapid that many universities have reported significant excess capacity (to admit more students) at the undergraduate level in the 2013–14 academic year.¹⁵

To make matters worse, it appears that the situation has evolved into an overeducation trap. Employers are taking advantage of the excess supply of university graduates to fill low-skill jobs at the expense of job applicants with high school degrees or less—thereby reinforcing the perception among families that in order to obtain even a low-skill or unskilled job, a young man or woman has to have a college degree. As a result, many young adults feel trapped (along with their parents) in a situation that forces them to go to college despite the already existing excess supply of college graduates.

Policy Implications

The rising tide of college graduates in Iran over the past two years has coincided with a period of economic stagnation that is partly a result of the ongoing economic sanctions against the country. The sanctions have pushed the economy into a severe recession that has forced hundreds of thousands of working adults into unemployment or underemployment. The unemployment rate among college graduates is already significantly higher than for high school graduates, and this gap is likely to grow even larger with the arrival of new graduates. And the government is well aware that over one million college graduates will enter the labor force in 2015.¹⁶

This rising tide of unemployed but educated adults can be politically destabilizing. The lack of economic opportunities is likely to radicalize educated youth, who have higher expectations than do uneducated ones.

Concern about the worsening economic prospects of college graduates is likely to have two policy implications for Iran's ruling regime. First, it can create an added incentive for Iran to show more flexibility in the nuclear negotiations. Without a nuclear agreement, not only are the current sanctions likely to remain in place, but they may be intensified—especially under the pressure of the new Republican-dominated U.S. Congress. The need for more flexibility will be partly enhanced by the sharp drop in oil prices, which declined by more than 40 percent in the second half of 2014. The price weakness in the crude oil market is likely to continue in the first half of 2015.

A second possible response is that the security forces, particularly the Basij militia and the Revolutionary Guards, are likely to beef up their preparedness to deal with urban unrest and political protests. High youth unemployment was a major source of discontent that brought large numbers of youth into Arab streets during the 2011 uprisings in Tunisia and Egypt. Regime preparation against urban unrest instigated by unemployed youth will become more significant if the latest round of nuclear negotiations, scheduled to continue until June 2015, fail.

Yet even if Iran eventually enjoys a more stable and faster-growing economy, it is still unlikely that its domestic job market will be able to accommodate all of its college graduates. In the long run, the government must take measures to alter the cultural bias that leads so many high school graduates to pursue higher education. University admissions policies must also be modified to match the admissions figures for each university degree (i.e. accounting) to the long-term labor market demand

projections for holders of that degree. Such changes are needed to avoid both skill shortages in any given field of specialization and an excess supply of college graduates in that field.

Unfortunately, this recommendation for limiting university admissions does not enjoy any popularity among Iranians, and most policy makers are hesitant to introduce them. Rising unemployment among college graduates in the coming years, however, might finally change public opinion regarding the value of mass higher education¹⁷.

Endnotes

- 1 “Moj bikari niruye tahsilkardeh dar rah ast” [A wave of unemployed degree-holders will soon arrive], *Deutsche Welle*, May 10, 2014[in Persian].*
- 2 Ibid.
- 3 Mohamadi Milad, “Bohran eshteghal dar kamin eghtesad iran” [Unemployment crisis awaits the economy], *Tejarat Farda*, no. 89, June 2014[in Persian].*
- 4 Al-Agha et al., “Ravand roshd kami amuzesh aali khosusi v dolati dar jomhuri eslaami Iran” [Quantitative growth of private and public higher education in the Islamic Republic of Iran], *Danesh v Pajuheshdarolum Tarbiati* 5, no. 20 (Winter 2009)[in Persian].*
- 5 “Aamar daneshjuyan saraasar keshvar” [University Students Statistics at national level], *Entekhab*, March 11, 2014[in Persian].*
- 6 Payame Noor University (http://en.wikipedia.org/wiki/Payame_Noor_University).
- 7 These investors, however, turned out to be mostly individuals closely affiliated with Ahmadinejad’s inner circle and the Revolutionary Guards. For a detailed account of Ahmadinejad’s policies toward Azad and Payam Nur Universities, see: “Daneshgah Azad, Saraab-e Ahmadinejad”, [Azad university, Ahmadinejad’s nightmare], *Tabnak*, September 28, 2013[in Persian].*
- 8 “Amaar vaghei Zarfiyat Khali Daneshgah Gheir Entefaei” [True statistics on empty capacity of private universities], *Jahan News*, February 23, 2014[in Persian].*
- 9 As of September 2013, more than 400,000 students were enrolled in private universities. See: “Dalaayel khaali maandan zarfiyat daneshgaahgaye gheir entefaei”, “causes of the excess capacity of non-profit universities], *ISNA News Agency*, September 22, 2013[in Persian].*
- 10 Source: Table 21, Labor Force Survey Results for 2011, Iran Statistics Center[in Persian].*
- 11 These figures are reported in: “Gozideh-haye amari (formerly called Fasnameh Amari, Bahar 1391” [Select Statistics (formerly Quarterly Statistics, Spring 1391 (2012))] , p. 29, Statistics Center, Ministry of Cooperation, Work and Social Welfare [in Persian].*
- 12 High unemployment rates and low wages for college graduates encourage many to enroll for graduate studies. In 2012, nearly 896,000 applicants took master’s degree entrance exams, of which 82,535 were admitted to master’s

programs. (Source: “Afzayesh esteghal az karshenasi arshad v kahesh shanse khabuli” [Increasing interest in Master’s programs and declining chance of admission], *Khabaronline*, February 11, 2013 [in Persian].)*

- 13 “Nerkh bikari dar che reshteh-haei ballast?” [In which fields is the unemployment rate high?], *Buletannews*, October 5, 2014[in Persian].*
- 14 This development was brought to my attention by an economics professor in Tehran who has a close working relationship with state-owned banks.
- 15 “Sunami-e sandeli khaali dar daaneshgah ha”, [The Sunami of empty chairs in Universities], *Tabnak*, March 5, 2015 [in Persian].*
- 16 Vorud 4 milion tahsilkardeh be bazaar kaar”, [Arrival of 4 million university graduates to the labor market], *Afkar News*, November 13, 2014 [in Persian].*
- 17 The rise of overeducation is not limited to Iran, rather it is observed in many countries. The author maintains a website for promotion of research and awareness about overeducation in various countries. Visit: www.overeducation.org.*

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