

**‘BRAIN DRAIN’ FROM TURKEY:
SURVEY EVIDENCE OF STUDENT
NON-RETURN**

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Abstract

The “brain drain” phenomenon has been widely investigated since the mid-1960s both in academic circles and by policymakers. From the developing country perspective, the migration of skilled individuals is viewed as a threat to economic development, and as a costly subsidy from the poor nations to the rich. The focus of this paper is on the return intentions of Turkish students studying overseas. Turkey’s first “brain drain” wave began in the 1960s, with doctors and engineers among the first group of emigrants. Various factors have been cited as important for student non-return, including political instability, lower salaries and lack of employment opportunities in the home country when studies are completed, as well as a preference to live abroad.

The current study presents the findings of a survey conducted by the authors during the first half of 2002, which investigates the return intentions of Turkish students studying abroad at the undergraduate and graduate levels. The aim of the paper is to analyse the new evidence on the return intentions of Turkish students studying abroad in the hope of providing some insights into possible factors that may be important in explaining Turkish student non-return.

1. Introduction

The “brain drain” phenomenon has been widely investigated since the mid-1960s both in academic circles and by policymakers. From the developing country perspective, the migration of skilled individuals is viewed as a threat to economic development, and as a costly subsidy from the poor nations to the rich. Given the important consequences of losing scarce human resources for less developed countries, numerous survey studies on skilled migration and student non-return have been conducted for different parts of the developing world. A partial list includes studies on Asia (Niland, 1970), China (Kao and Lee, 1973; Zweig and Changgui, 1995), Taiwan (Chen and Sue, 1995), Latin America (Cortés, 1980), and on a group of five developing countries that includes Turkey (Hekmati, 1973).

Brain drain is traditionally viewed as the movement of highly skilled individuals—sometimes referred to as knowledge workers—from their home countries to countries that offer them greater opportunities in their area of specialty as well as in terms of living conditions and lifestyle. However, another prevalent form of brain drain is the failure of students to return to their native countries after going abroad to study. In recent years, knowledge-based high-technology countries, such as the United States, have been eager to accept a growing number of foreign professionals and students in order to fill their shortage of skilled manpower and thus perpetuate their innovation-based economic growth.

The most popular study destination for many developing country students is the United States, followed by universities in Western Europe. Developing countries such as China, India, and Turkey rank among the top ten sending countries in total foreign student enrolments at United States universities (IIE, 2001). Many students do not return immediately following the completion of their studies, but stay and work in their country of study. In the United States, the period of study abroad is often followed by a year of training, which may be extended if students are able to find firm sponsorship. Some of these students do not return after having established careers and social networks abroad. Terminating established relations in order to return becomes especially difficult when the political and economic conditions in the home country are uncertain. On the other hand, students returning with advanced foreign degrees and overseas experience may also find that they have received the “wrong” education for the needs of the domestic labor market.

The focus of this paper is on the return intentions of Turkish students studying overseas. Turkey’s first “brain drain” wave began in the 1960s, with doctors and engineers among the first group of emigrants. During that period, Europe was the most popular destination for Turkish professionals and academicians (Kaya, 2002). Political instability and crisis, followed by the military coup in 1960 are believed to have instigated this initial exodus of highly skilled individuals. In recent years, attention has shifted to young university graduates who are seriously contemplating starting their careers abroad as a result of the current economic crisis. Postgraduate studies overseas provide the first step for many in fulfilling this goal. Another serious problem is that of non-returning government-sponsored research assistants who have been sent abroad as an investment toward filling academic positions in the expanding Turkish higher education system.

The brain drain issue has received considerable attention from the Turkish media as a serious economic and social problem, particularly in the aftermath of the economic crises of November 2000 and February 2001. In the earlier 1994 crisis, Turkey’s GNP had declined by 6.1 percent. Although this was a record contraction at the time, the economy recovered quickly in the following year and recorded a positive growth rate of 8.0 percent. The 2001 economic crisis, however, was much more severe and GNP contracted by 9.4 percent, which is the worst growth performance in the history of the Turkish Republic¹. The recent crisis has

¹ Figures were obtained from the State Institute of Statistics website: <http://www.die.gov.tr/ieyd/milhes/page27.html>. Görtin (1996) also indicates that in economic downturns university graduates increasingly replace the positions that were previously filled by high school graduates, and this is said to lead to deskilling of the work force with university education. The tertiary level graduates who work below their appropriate skill level is also seen as an important problem.

been both prolonged and widespread in its repercussions compared to the previous crises, affecting also university graduates on a much wider scale (Isigiçok, 2002). Even graduates of the prestigious universities in Turkey, who usually face better than average prospects in the labor market, were affected. The perception of the brain drain as a serious problem has increased following each crisis, and has also attracted the attention of national authorities. In 2000, the Turkish government decided to form a joint task force of experts from the Turkish Atomic Energy Agency, the Turkish Academy of Sciences (TÜBA) and the Scientific and Technical Research Council (TÜBİTAK), in order to investigate Turkey's brain drain problem (*Cumhuriyet*, 14.01.2000).

According to Ministry of Education statistics, a total of 21,570 Turkish students were studying abroad with their own means in mid-2001. Two-thirds of these students chose universities in Western Europe and North America, while a significant proportion (22 percent) also chose the Turkic republics in Central Asia as study locations. The majority of private students are pursuing undergraduate studies and nearly 90 percent of them are male. This gender gap also persists at the postgraduate levels of study, being slightly higher in the technical fields in comparison to the social sciences. In addition to private students, there are several thousand government-sponsored students who are studying abroad, most of them at the postgraduate level as part of the goal of training academicians to fill positions in state universities. The great majority (90 percent) of the government-sponsored students are studying in the United States and Great Britain.

Various factors have been cited as important for student non-return, including political instability, lower salaries and lack of employment opportunities in the home country when studies are completed, as well as a preference to live abroad. In addition to these factors, several other features of Turkey's political economy are considered to be important in explaining the Turkish brain drain. These include the lack of a national research and development strategy, distortions in the education system and foreign language instruction in schools, all of which have important labor market consequences (Kaya, 2002).

The current study presents the findings of a survey conducted by the authors during the first half of 2002, which investigates the return intentions of Turkish students studying abroad at the undergraduate and graduate levels. Previous survey studies that have examined the Turkish brain drain include Oguzkan (1971, 1975) and Kurtulus (1999). While Oguzkan's study is based on a survey conducted in 1969 of 150 respondents holding a doctorate degree and working abroad, the Kurtulus study looks at the responses of 90 students studying in the United States in 1991. The aim of the paper is to analyze the new evidence on the return intentions of Turkish students studying abroad in the hope of providing some insights into possible factors that may be important in explaining Turkish student non-return.

1.1 Further Background

The figures cited earlier indicate there are a large number of private students pursuing undergraduate studies overseas. Part of the explanation for this can be traced back to the inability of the higher education system in Turkey to absorb the demand for education at the university level. Demographic factors, including a high population growth rate and a high percentage of the young in the total population, have led to both an expansion in demand for schooling and an increase in the Turkish labor force. Labor force participation rates, however, have not kept pace with population growth, showing instead a decline over the years. This is attributed partially to the "discouraged worker effect" from a lack of employment generation despite a high growth rate compared to OECD levels, except during the crisis periods, (Senses, 1994; Tansel 2002b).

According to a recent Higher Education Council report, the high schools in Turkey, which currently take three years to complete, do not provide adequate labor market preparation for

their students². The report indicates that “the main reason for the demographic pressures exerted on the Turkish tertiary system is the fact that high school graduates who are unable to get into college or university lack the knowledge and skills necessary to earn a livelihood” (YÖK, 2001: 30). The lack of in-firm training programs on a wide scale is also believed to aggravate this problem. As a result, university education is seen as an important means for training students and imparting the skills that are critical for securing jobs.

Several empirical studies show that investment in higher education, compared to the other schooling levels, earns a very high private rate of return for both men and women in Turkey (Dayioglu and Kasnakoglu, 1997; Tansel, 1994, 1999). Furthermore, these studies also point to significant regional differentials in the rates of return to education at all levels. While university education provides a high private rate of return in all regions, both developed and underdeveloped, the highest returns are, not surprisingly, found in industrialized districts where the three metropolises, Istanbul, Ankara and Izmir serve as centers of attraction. The regional disparities in the private gains from education as well as the greater educational opportunities have created a massive rural-to-urban exodus. This has, in turn, exacerbated the regional disparities within Turkey, creating squatter settlements with high levels of poverty. While unskilled workers show a high degree of mobility within the domestic economy, highly educated workers show a high degree of international mobility. The uneven development of the Turkish economy with disparities at many levels including education, wages, and employment has created the current conditions, leading to both unskilled internal migration and brain drain to other countries.

Economic development and rapid population growth have increased enrolments at the primary and secondary levels of schooling, which, in turn, has generated a growing public demand for higher education. In response to these demand pressures, the number of universities increased from a total of eight prior to 1970 to seventy-one at the beginning of 1998. The expansion of public and private universities is continuing at a rapid pace today.

The Higher Education Law (*Yüksek Öğretim Kanunu*), enacted in 1981, brought about a major reorganization of the higher education system in Turkey. In 1982, with the establishment of the new constitution, the Council for Higher Education (*Yüksek Öğretim Kurulu* – YÖK from henceforth) was created to plan, coordinate and oversee many of the important activities of the higher education system within the provisions of the higher education law. This was an important step toward the creation of a centralized and unified higher education system that at the same time entailed a compromise in autonomy for individual universities.

The new 1982 constitution also included a provision that allowed non-profit foundations to establish higher education institutions. This officially marked the beginning of the private or “foundation” university system in Turkey³. The first private university, Bilkent, was formed soon after in 1984 and started accepting students in 1986. Since then, following the enactment of the Foundation University Law⁴ (*Vakıf Üniversitesi Yönetmeliği*) in 1991, which clarified the conditions under which foundation universities could be formed and managed, 23 new private universities have been created. The newly established private university system in Turkey has succeeded in attracting talented foreign and Turkish academicians from abroad by

² Indeed, there is informal evidence that suggests high school education is also inadequate in preparing students for university education. To improve their chances of getting into a quality university, many urban high school students go to after-school and week-end private tutorial schools that have sprung up to profit from the enormous competition created by the nation-wide placement exam. It may be reasonable to suggest that, ironically, the formal secondary education system has been overshadowed by the preparations for the university placement exam. A graduate from an Ankara high school, for example, admitted that students in their final year of high school spend most of their in-class time solving exam questions, and that “teachers pretty much stay out of the way because they know that getting into university is important to us.” See also Tansel and Bircan (2002) for an analysis of private tutoring and the demand for education in Turkey.

³ Previous attempts, during the late 1960s and into the 1970s, at forming private universities to meet the growing demand for higher education were thwarted on the ground that they were unconstitutional, and the existing for-profit private higher education institutions were absorbed into the state university system.

⁴ Law No. 3785 passed in 1992 (YÖK, 2002, Section 2).

offering competitive wages and state-of-the-art equipment and facilities. On the other hand, private universities charge tuition fees that are generally out of the income range of a majority of Turkish families, although they provide scholarships to exceptional candidates scoring high on the national placement exam. Enrolments at the private universities are lower than for the state universities partly because these universities promise a lower student to teacher ratio, but more importantly because families find the tuition and education costs prohibitive. Thus, while private universities have partially reversed the academic brain drain to other countries, they have not eased the demand pressures on the higher education system. Relatively few students are able to take advantage of the opportunities provided by the private universities in Turkey. Those who can afford the high tuition fees come from a higher socioeconomic group, and this serves to aggravate the existing problem of unequal opportunities in education.

The number of state universities has also increased dramatically over the years. While there were only eight state universities prior to 1970, this number reached 53 by the year 2000, compared to 21 for the private universities. State universities are free by law, although students must still pay a mandatory "contribution fee" at the start of each term, which is much lower than the tuition in private universities. For this reason, a majority of students enroll in state university programs. State universities, therefore, carry an essential part of the responsibility of providing post-secondary education to a broader group of students. The distance education program offered by Anadolu University since 1982, consisting of both 2-year technical college and 4-year university programs, has become an important means for absorbing some of the demand for higher education, accounting for 30 percent of total enrolments (YÖK, 2001). This unique distance education program has been called the "largest university on Earth" by the World Bank since nearly half a million students are enrolled in this program from different parts of Turkey as well as from different countries (MacWilliams, 2000).

Despite the rapid increase in the number of both private and public universities and the removal of quota restrictions in distance education programs, only a third of all candidates taking the entrance exam in 2001 could be placed in a higher education institution, including distance education. A significant number of those who are placed in higher education programs do not enroll. Many students, for example, who qualify for the distance education program choose not to enroll and instead wait to take the exam the following year in order to be placed in a regular university program. Similarly, those who do not qualify for the more prestigious universities or their desired programs also wait before enrolling. Ministry of Education statistics indicate that only about a third of all students taking the university placement exam are final year high school students; many others take the exam several times in order to be placed in their desired program or school.

There are significant disparities in the quality of higher education institutions as well. The sharp rise in the number of higher education institutions after 1980 has sparked the quantity-quality debate in higher education. It is claimed that the quantitative expansion of universities has occurred at the expense of quality, which is measured in part by indicators such as student-teacher ratios, and the physical resources devoted to teaching and research (Senses, 1994). The public and private resources devoted to higher education have not kept up with the expansion in enrolments, institutions and programs, and there appears to be chronic understaffing in terms of student-teacher ratios, especially for the state universities (Dündar and Lewis, 1999). Academic staff at state universities also receives salaries that are far below those of the private universities. Like the wages of other civil servants in Turkey, the salaries of academicians in state universities are set by legislation and they have not kept up with inflation. The February 2001 economic crisis has made the situation worse by more than halving the value of the academic salaries at the state universities. There is indication that moonlighting and extra teaching activities to supplement incomes are becoming more prevalent (*Cumhuriyet*, 16.07.2001). Such a trend will undoubtedly have dire consequences for research-related activities, and inevitably lead to the loss of some of the best researchers to private and overseas universities.

The quality gap, both perceived and real, at the university level also has important consequences for university graduates entering the labor force in Turkey. The quantitative expansion of universities, with little regard for quality, has yielded graduates with diplomas that appear to have little value in the Turkish labor market. For example, the most lucrative jobs in the labor market are offered to the graduates of a small number of universities with well-established reputations⁵. The “signal” value of obtaining a diploma from one of these institutions, therefore, creates immense competition among high school students for getting acceptance to the more prestigious universities. It is also interesting to note that almost all of the private universities, most of which have been formed after 1995, have adopted English as the language of instruction in order to attract students, because the job market strongly favors candidates with fluency in at least one major language.

Against this backdrop of the labor market conditions and career prospects that students are likely to face in Turkey upon graduation, we turn to the return intentions of Turkish students studying overseas at both the undergraduate and graduate levels.

2. Method

The data analyzed in this study was collected through an internet survey. The address of the web page containing the survey form was sent to the e-mail addresses of potential respondents. The email addresses of students studying abroad were collected from various sources including the directories of universities and research centers located in the US and elsewhere, and alumni pages of universities in Turkey. Turkish student associations in the US, UK and Canada were also contacted in order to help us distribute the cover email containing a link to the survey website. The search for survey candidates concentrated on universities in North America and England; time considerations did not permit the expansion of this search to other important destination countries, such as Germany. The students from the targeted group who were contacted during the initial search process were asked to distribute the cover email letter to their friends and acquaintances who met the survey criteria.

The data collection process began in the middle of December, 2001 and ended in summer 2002. The combination of internet search and “snowball” or referral sampling resulted in a total of 1170 responses from Turkish students studying abroad. After eliminating incomplete responses and responses from non-target populations, the number of valid responses totaled 1103. The questionnaire was structured as a set of close-ended questions with an optional open-ended question at the end that respondents could fill in as they liked with comments about the survey questions or the topic of Turkey’s brain drain in general. The survey consisted of several broad question groups, which included sections on demographic information, educational background, job search and career-related intentions, as well as a section on return intentions and the related “push” and “pull” factors that might be important in the decision to stay overseas after the completion of studies. In this article, we focus on the reasons for non-return of Turkish students studying abroad from a career opportunities perspective.

3. Survey Results: Respondent Profiles

Nearly 90 percent of the respondents are studying in North American universities. The data collected is tilted more toward students studying in the United States (85.6 percent), since a considerable amount of effort was spent on collecting e-mail addresses from the United States. The respondents are predominantly male (61.3 percent) and their ages range between 19 and 44. A little more than half fall into the 25-29 age category. Of those who have indicated their marital status, the great majority are single. Almost two-thirds of the respondents are enrolled in a doctoral degree or postdoctoral program, while the remainder

⁵ A cursory look at the job openings in the classified section of the major Turkish newspapers reveals that for many top-level firms, there is a strong preference for graduates of established universities, and in particular, those that produce candidates who are fluent in at least one of the major foreign languages, with English topping the list. Even when the ads do not specifically mention any universities by name, many are given in English or German which strongly favours candidates with a foreign language education background.

are pursuing masters and undergraduate degrees, with 27 percent and 10 percent shares respectively. Given this profile, the sample may not be truly representative of the total population of Turkish students studying abroad during the period the survey was implemented. However, the volume and diversity of the responses received have been tremendously important for understanding why Turkish student studying abroad are not returning.

3.1 Types of Financial Support

As indicated earlier, the majority of Turkish students studying abroad are private students who are studying with their own means. In our sample, the great majority of respondents are private students, which reflects this distribution. Only about one-fifth are sponsored by public or private organizations in Turkey. Approximately 16 percent of respondents are government-sponsored students who hold scholarships that have a compulsory service requirement in Turkey: 11 percent from the Turkish Ministry of Education (MEB), 5 percent from the Higher Education Council (YÖK), and less than one percent from the Turkish Academy of Sciences (TÜBA) and the Scientific and Technical Research Council (TÜBİTAK).

Many private students later obtain scholarships from the foreign universities or governments. In our sample, half of all respondents are private students who responded to the survey are research or teaching assistants at the institutions they are studying. Many private and government-sponsored students also receive financial support from their families during the course of their study. One third of respondents have received financial support from their families or used previous savings. Many of those without scholarships finance their education by working at a part-time job, usually within the university. Loans, full-time job and spouse's job were also indicated as means for financing overseas studies.

3.2 Socioeconomic Background of Respondents

Parents' educational attainment levels were used as the main indicators of the socioeconomic background of respondents. The parents of the respondents are, in general, highly educated. Close to half of all mothers (44.3 percent) hold a bachelor's or higher degree. This figure is quite a bit higher for fathers at 68.3 percent. This provides some confirmation for the existence of unequal opportunities in education. Students with better means are able to take advantage of existing opportunities in education both in Turkey and abroad. Comparing the socioeconomic background of private students and government-sponsored students reveals that the educational attainment of the parents of the latter tends to be lower.

Table 1 gives a breakdown of parents' educational attainment levels by the gender of the respondent. This table reveals an interesting differentiation between male and female students. The parents of female respondents tend to be more educated than those of male respondents: while a little more than half of the mothers of female students hold a bachelor's or higher level degree, the same is true for only two-fifths of the mothers of male students. Similarly, whereas three-quarters of the fathers of female students have a higher education degree, a little less than two-thirds of the fathers of male students hold the same. This is also an expected result: Tansel (2002a) has verified empirically that a stronger relationship exists between a girl's education and her parents' education than for a boy's education and his parents' education in Turkey. Traditionally, sons tend to be encouraged more than daughters to pursue educational opportunities or goals, but this tendency lessens as the socioeconomic position of the family increases. Thus, we expect girls with more educated parents to be given more encouragement both to pursue higher education studies and for overseas studies.

3.2.1 Majors and Alma Maters

Every 9 out of 10 respondents hold a bachelor's degree reflecting the fact that the majority of respondents are postgraduate students. One third of those with bachelor's degrees are graduates of Middle East Technical University (METU), followed by Bogaziçi, Bilkent,

Istanbul Technical, Istanbul, and Ankara Universities⁶ (See Figure 1). These six universities count among the most prestigious higher education institutions in Turkey. The remaining respondents are graduates of other universities in Turkey and various universities abroad, each of which constitutes less than four percent of the share of graduates. The higher share of graduates from universities that have English instruction, such as METU, Bogaziçi and Bilkent, is not a surprising outcome since English instruction makes the transition to another country easier. Foreign language instruction starting from high school and sometimes even earlier in Turkey is considered to be an important catalyst in facilitating adaptation to a new environment and thus non-return.

“Engineering and technical sciences”, which includes computer programming, is the main field of study among respondents (44 percent). This is followed by “economic and administrative sciences” (28 percent), “math and natural sciences” (11 percent), “social sciences” (7 percent), “education” (5 percent), “medical and health sciences” (2 percent), “architecture and urban planning” (1 percent), “language and literature” (1 percent), and “the arts” (1 percent). Nearly half of all respondents holding a bachelor’s degree indicated computer-related and engineering fields as their major during their undergraduate studies. The high percentage of respondents in the technical fields is likely a reflection of the greater number of graduates produced in these fields by the Turkish higher education system, which is surpassed only by the social sciences where business administration is also a popular subject. Traditionally the technical fields hold great prestige in Turkey and there is a great desire to get accepted into a technical program. This requires a relatively high score on the nation-wide entrance exam, which is even higher for the more prestigious universities because of the greater demand.

3.3 Reasons for Choosing Current Institution of Study Abroad

Various factors have been cited as being important in choosing an overseas study location. For three-fifths of the respondents the fact that their institution provided the most relevant program for their field of specialization was important in their decision for choosing their current institution. One undergraduate student indicated that she chose to study an American university because she was provided greater diversity in terms of the fields of study and curriculum. The reputation and relevance of the program was followed by the respondent’s ability to get acceptance (42 percent), better financial support or scholarship opportunities offered by the university (42 percent), recommendation of the adviser or other professors (37 percent), and the possibility of greater job opportunities (26 percent). The ‘other’ category was also marked by 22 percent of the respondents which indicates that the categories provided did not give the full range of possible reasons for choosing current institution of study. The two categories “having Turkish contacts at institution” and “being with or near spouse” was marked as important by 18 and 11 percent of respondents respectively. This information is summarized in Figure 3.

The respondents were also asked to choose the factor they considered to be the *most* important in their decision to study at their current institution (See Figure 4). “Provided most relevant program” is indicated to be the most important factor for nearly one third of respondents, followed by “best financial support / scholarship” (18 percent) and “able to get acceptance” (11 percent) which ties with the “other” category. Some of the factors indicated as important by those who marked the “other” category are “prestige of institution” (e.g., institution ranked in top 5 percent for field), “recommended by Ministry of Education”, “lower costs”, “friends are there”, “location”, and “weather”. Private students base an important part of their decision on cost considerations and family contacts in the destination location.

⁶ The relatively higher share of METU graduates in the total raises the question of whether there may be a response bias, since the survey is conducted by the authors who are affiliated with METU.

3.3.1 Family Support

The overwhelming majority of respondents (74 percent) indicate that their family was “very supportive” in the initial decision to study abroad. Only 5 percent indicate that their family was “not very supportive” or “not at all supportive”.

When asked if their family would support them if they decided to settle permanently outside Turkey, only 27 percent indicated that their family “would definitely support” them, while 26 percent believed that they “would most likely support” them. This indicates that more than half of the respondents think that their family would “definitely” or “most likely” support their decision to settle abroad, while only 20 percent indicate that their family “would not be very supportive” or “would actively discourage them”. While family support is lower for the decision to settle permanently outside Turkey compared to that for the decision to study abroad, it is still quite high. This may be a reflection of the current economic circumstances in Turkey and the parents’ desire for their children to have a “better future”.

3.3.2 Overall Satisfaction with Life Abroad

Students were asked about their assessment of various aspects of life in their current country of study as compared to Turkey. A great majority (88 percent) indicated academic life to be “better” or “much better” in their current country of study. When asked about their assessment of social aspects of life in their current country, only 19 percent indicate that it is “better” or “much better”, while nearly 70 percent state their living standards to be “better” or “much better”.

4. Return Intentions and the Decision Not to Return or Postpone Returning

In this section, we summarize the findings on the respondents’ reasons for going abroad to study, the difficulties they have faced there, their initial and current intentions about returning to Turkey, and the time frame for returning. Finally, the importance of the “push” and “pull” factors for the respondents is examined.

4.1 Why Study Abroad?

One out of every four respondents indicated that the most important reason for studying abroad was “the prestige and advantages associated with study abroad”. Many indicated that they wanted an international education because they believed that international study programs offered higher quality education. For 17.6 percent of the respondents “lack of facilities and necessary equipment to carry out research in Turkey” was the most important reason for studying abroad.

Does the program level have an impact on the factors deemed important in the decision to study abroad? Close to half (47 percent) of those enrolled in a bachelor’s program abroad indicate that the most important reason for their decision to study in a foreign country is “prestige or better quality education”. This is followed by “lifestyle” at 11 percent and “better environment for the children” at 8 percent. At the master’s level, a significant number of those enrolled in a program abroad—30 percent—also indicate that “prestige and better quality education” is the most important factor in their decision to pursue a degree abroad, followed by “requirement in Turkey” (15 percent), and “need for change / learn a new culture” (13 percent). On the other hand, for doctorate students and postdoctoral scholars, the most important reason is the lack of facilities and resources necessary for research in their field of specialization (26 percent). “Prestige / quality of education abroad” (21 percent), and “requirement in Turkey” (16 percent) follow. Thus, while the majority of students enrolled in bachelor’s and master’s degree programs stated that “prestige or better quality education” was their most important reason for studying abroad, for those in doctorate programs or doing postdoctoral work lack of resources and facilities for doing research was the top reason.

4.2 Initial vs. Current Intentions about Returning to Turkey

There were significant differences in the respondents’ initial and current intentions about returning to Turkey. More than half of all respondents (53 percent) indicated that their initial intention was to return to Turkey. Only about 9 percent indicated that they had left Turkey

without the intention of returning. When asked about their current intentions, only 13.5 percent indicated that they would return immediately after completing their studies. The majority, 35.3 percent, indicated that they would return but not soon after completing their studies, while 27.9 percent expressed that they would probably return, and 22.1 percent indicated that it was either unlikely for them to return or that they would definitely not return. These figures indicate that the proportion of those who do not intend to return has more than doubled after experience abroad. Thus, it appears that overseas experience increases the likelihood of non-return.

In Kurtulus's 1991 study, which consists of a sample of 90 students studying in the United States, more than half the students surveyed indicated they would return immediately after completing their studies in the United States, and a lower share of students stated they wanted to stay for a while longer to gain work experience. It appears that the tendency for students to stay in the host country after receiving their diplomas has increased over the past decade. This seems plausible given the decade of relatively high growth experienced in the United States in the 1990s. Another important factor may be that during the time of the 1991 study, Turkey had not yet experienced the economic crises of 1994, November 2000 and February 2001, which led to negative growth rates for the Turkish economy. The 1968 study by Oguzkan does not directly focus on student non-return, but on Turkish professional and academicians working abroad, with the exception of doctors, who hold doctoral degrees. However, looking at the location of the highest degree held by this group indicates that a significant proportion of respondent were part of the phenomenon of student non-return: 81 percent hold foreign doctorate degrees.

4.2.1 Reasons for Returning and the Time Frame of Return

For about three quarters of those who indicated that they will be returning, 'reaching academic and work experience goals' was marked as an important reason for returning. This was followed by 'missing their family while abroad' (61 percent), and 'children's education' (23 percent). Return reasons do not show significant variation between male and female respondents, although for male respondents 'military duty' is another reason for returning. With regard to the time frame of returning, the majority did not have immediate plans for return: about one third have indicated they will return within 2-5 years, while another one third intends to return within 5-10 years.

4.2.2 Work Intentions after Completion of Studies

The United States was the most popular work location immediately after the completion of their studies for more than half (60 percent) of all respondents, whereas only about one quarter chose Turkey as their work destination. The remaining, in general, chose countries in the West. There appears to be a tendency for choosing a location that is already familiar. The majority of those studying in Canada, for example, indicated Canada to be their immediate work location. Language also appears to be a deciding factor when choosing a work destination. Respondents who have had German language instruction at high school, for example, also have a tendency for choosing German-speaking countries or regions, such as Germany and Austria.

4.2.3 Types of Organizations and Activities at Work after Completion of Studies

The majority (73 percent) of those who intend to return to Turkey after completing their studies indicate that they will start work in a university, and the great majority will be working (85 percent) in a public (or national) university. A shortage of academicians persists at higher education institutions in Turkey. In 1995, the number of positions available at these institutions was pretty much balanced by the supply. In 2000, the number of academicians fell short of demand by 19,000. This gap is projected to widen further to 35,000 in 2005 (SPO, 1995, 2000), since the proliferation of higher education institutions in Turkey since the early 1990s has increased the demand for higher education employees.

Close to one half (45 percent) of those who indicated that they will most likely be working in United States believe they will be working as employees in the non-educational private

sector, while 36.7 percent indicated that they would be working in a 4-year higher education institution. The remainder expect to be employed in a non-profit organization, international organization, or be self-employed. The great majority of those who expect to be working at a four-year educational institution indicated they will work in a private university. Of those who expect to be working in the non-educational private sector, 25.3 percent indicated they will work in US-based private firm, and 19.7 percent in a multinational corporation.

The majority of those who will be working in a public university believe that their main activity would be teaching (48.3 percent), followed by applied research (30 percent), basic research (14.5 percent), and development (3.4 percent). For respondents who indicated that they will be working in a private university, the majority believe their main activity will be applied research (43.2 percent), followed by basic research (27 percent), teaching (27 percent), and development (2.7 percent). Therefore, we may conclude that students who expect to be working in a public university, also expect to be involved more in teaching activities than research, while those who plan to work in a private university believe their activities will be research-oriented. Further, some of those who intend initially to work in a public university are intending to move to a private university within five years.

4.3 Evaluation of “Push” and “Pull” Factors

“Push” factors are those characteristics or circumstances of the home country that prompt a person to migrate to another country, while “pull” factors are the characteristics of the receiving country that provide incentives for individuals to settle in the receiving country. Economic factors or differences in income levels have been cited most often as reasons for the loss of highly skilled workers in developing countries. Respondents were asked to rank various “push” and “pull” factors on a five-point scale ranging from least important “1” to most important “5”⁷ in terms of their relative significance in the decision to remain abroad (see Table 3).

“Better prospects for career advancement” was the item most often marked by respondents as being a “very important” pull factor for going and staying abroad (53 percent). This was followed closely by the greater opportunity for further development in the specialized area of study (51 percent) and by “the existence of a more organized and ordered environment in general” (45 percent). On the other hand, since many respondents appear dissatisfied with social life in their country of study, they marked the item “a more satisfactory social and cultural life” as “not important” in the decision to stay in their host countries.

In terms of the push factors affecting the decision to return, “economic instability and uncertainty” in Turkey was marked most often as a “very important” factor in the decision to remain abroad (52 percent). This is not surprising since unemployment among high school and university graduates reached nearly 30 percent in the aftermath of the February 2001 economic crisis according to the State Institute of Statistics Household Survey results. Economic instability was followed by bureaucratic obstacles at 47 percent, a lower expected income at 41 percent, and “little possibility for advancing in career” at 40 percent. Many of those who marked the “other” category included corruption (bribery, partisanship, nepotism) and, in the case of male respondents, compulsory military duty as important push factors.

One of the most common views expressed in the survey by those contemplating an academic career is that there is a lack of value given to science and to academics in Turkey. Some respondents have indicated that, as a result of this, they fear they will find themselves in an “unproductive environment” when they return. Others have stated that “there is a point where money is no object” and that they would be willing to work for lower wages in Turkey provided that they are “valued and respected”. Anecdotal evidence also indicates that the inability to find satisfying work is a relevant factor in looking for overseas jobs in the non-academic private sector. Many university graduates do not work in their field of study, but in unrelated sectors.

⁷Technically, it is a 6-point scale since items that are “not applicable” are given a score of “0”.

4.3.1 Compulsory Military Service as a Reason for Not Returning

The military service requirement for males in Turkey is generally viewed as a career interruption. For a considerable number of male respondents, postponing their military service was an important reason for pursuing study and work opportunities overseas. Military service in Turkey ranges between 15 to 18 months, and thus represents a significant break from participating in the labor force. The time spent out of the labor market signifies a greater economic loss for the university-educated population in Turkey, since, as corroborated by empirical studies, the economic returns to education are highest at the tertiary level. The time lapse can also lead to significant skill erosion and lower productivity upon resumption of career-related or educational pursuits. The career break may be even more crucial for those with advanced graduate degrees who are pursuing careers in academia and in cutting-edge occupations in which skills must be renewed or upgraded continuously.

In 1980, an important change was made in the military service law. Individuals working abroad for at least three years were allowed exemption from long term military service in return for the payment of approximately €5,000. Instead of the 18 months of regular service, they were required to finish only one month of basic military training. Several other important changes were made in the military service system in 1992, which include the shortening of service duration to 15 months and the extension of the short term military service in return for fees to those living in Turkey. This exemption from long term service, however, could take place only through legislation during periods when the supply of new recruits exceeded the military's demand⁸. While compulsory military service was not listed as a "push" factor in the survey questionnaire, many male respondents indicated that for them and for many of their friends delaying or shortening military service duty played an important role in the decision to not return. One respondent explained in this way:

Compulsory military service is perhaps one of the most important reasons why Turks studying abroad, particularly the male students pursuing a masters degree, delay returning to Turkey. Almost all of the male students studying abroad plan to work three years abroad in order to qualify for short-term military service. Some of these students return to Turkey after three years but others want to continue with their careers abroad and so make plans for permanent settlement in their country of work.

A 25-year-old master's student studying in the United States

4.4 Views of National Scholarship Recipients

Law 1416 (Law Regarding Students to be Sent to Foreign Countries), enacted in 1929, provided many students with the opportunity to study abroad on a scholarship provided by the National Education Ministry (*Milli Egitim Bakanligi - MEB*). The original aim of these scholarships was to train civil servants to fill positions in the growing public sector of the newly formed Turkish Republic. With the expansion of the higher education system, the emphasis shifted to the creation of a cadre of foreign-educated academicians to staff the newly-established universities in Turkey and to thus enrich the educational standards of these universities. In 1987, the Higher Education Council (YÖK) also began awarding scholarships to university graduates for postgraduate studies abroad. The YÖK scholarships share the same purpose as the Ministry of Education scholarships, which is to supply the Turkish higher education system with qualified academic staff. These scholarships also provide foreign study opportunities for students who would otherwise not have been able to finance the expenses involved in overseas education, provided that they meet at least the minimum criteria specified in the terms of these scholarships.

⁸ Most recently, a law was passed in 1999 allowing those born before 1973 to take advantage of short-term military service provided they would pay the fee of around €7,500 to €10,250. Those born before 1960 were allowed to bypass the one month basic military training if they wished. The demand for short term military duty was huge, but not everyone who wanted to benefit from it did, either because of the age limit or the high exemption fee. As a result, some of those who have not completed their military service are waiting for a new law to pass. In the mean time, education and training abroad allow many to delay their military duty, and after three years of full-time work abroad they qualify for short term service anyway, though subject to a higher fee.

Both the MEB and YÖK scholarships are given in return for compulsory academic service in the universities of Turkey. This generally means that for every year of study abroad, the scholarship recipient must spend two years working in a pre-chosen university in Turkey when they complete their studies. Since most of the scholarships are given for doctoral level studies, the amount of the academic service amounts to eight years on the average. Students who fail to comply with the terms of the scholarship must pay back the value of their scholarship plus interest. Between 1987 and 2000, a total of 3504 research assistants were sent abroad on YÖK scholarships to pursue graduate level education. Nearly 90 percent were sent to the United States (50 percent) and England (40 percent), with the remaining 10 percent dispersed over twenty five countries (YÖK, 2001). Presently, 854 YÖK scholarship recipients are continuing with their studies abroad. The current number of students with MEB scholarships is 913, a great majority of whom have been sent to the United States (81.4 percent), followed by England, France and Germany⁹.

Despite the good intentions behind these scholarships, there is indication that they may not be fulfilling their purpose, at least to the extent that they had been envisioned. According to the 2001 report by YÖK, 400 of the total of research assistants sent abroad to study since 1987 have not returned to Turkey. While some scholarship recipients have officially resigned from their position of research assistant, others have been considered as “resigned” for not complying with the terms set out in the scholarship or ending their communication with the Higher Education Council. There is indication of high dissatisfaction among scholarship recipients with regard to the terms of the scholarship, the bureaucratic processes they have had to face, and the general inflexibility shown for special or changing circumstances of the recipients. There is also indication of some abuse of the state scholarships by a number of recipients who view these scholarships primarily as a stepping stone for taking advantage of overseas opportunities that they otherwise could not have afforded. These students opt to pay back the scholarship after earning money abroad instead of fulfilling the compulsory academic service requirement.

Despite the evidence of misuse by some of the scholarship recipients, there appears to be some important deficiencies in the scholarship system that has led to widespread disillusionment and frustration among scholarship holders. Communication with returning scholarship recipients has served to create negative views about the conditions in some of the newly formed universities in Turkey. Some of these include fears that they will be given predominantly teaching duties when they return with little regard for their research interests, and that promotions will be based on political criteria instead of academic merit. One respondent, who returned to Turkey to complete her compulsory academic service, found out that her university did not have a program in her specialization. Her requests to transfer to another university that included her field of study were turned down without explanation, and her attempts to engage in research projects were mired in bureaucratic obstacles. A different respondent listed the following deficiencies of the scholarship and higher education system:

1) There are no facilities or the department in the specific university [in Turkey] which I have been funded through. The [rector] of the university (I think he is really like that) is thinking of assigning me to the technical college. I do not see any reasons to send me studying abroad for that need. I bet just an instructor with a BS degree would be sufficient... 2) YÖK spent almost \$90,000 on me, excluding the tuition fees for four years. So it might have been about \$140,000 if I had not received a tuition waiver. However, they do not want to spend any more money for us to establish a lab or to bring our own software, computers, equipments when we return. I guess for my particular case, I need to have \$10,000-\$20,000 (It seems high but I can earn this money within one year here) to establish my work environment in Turkey in order to be successful and productive for my country. Otherwise, it is not making sense just to bring people back immediately after their graduation without technology or the things they need. 3) I need

⁹ Figures for MEB scholarship recipients were obtained from the Ministry of Education website: <http://yogm.meb.gov.tr/Resmiburslular.htm>

to spend a few more years here before going back to learn really what the overall picture is. The Ph.D. is so specialized that I don't think [it is sufficient] for a person to continue with his/her career without some other sources. I believe there should be [more] inputs, supportive information, and environment for us to be fruitful and productive. These are again not provided in Turkey.

As the anecdotal evidence indicates, scholarship recipients have, by and large, come to share a negative perception about working conditions in the universities where they have to complete their compulsory academic service, especially the newly established universities located in less developed regions. These impressions, in turn, have a negative impact on the decision to return to Turkey for some. Despite the dissatisfactions outlined above, the current survey results indicate that national scholarship recipients are more likely to be returning to Turkey immediately after completing their studies: 37.2 percent indicate they will return immediately after completing their studies compared to 8.6 percent for the remainder.

5. Conclusions

This paper has provided an evaluation of the findings of a survey conducted during the first half of 2002 on the return intentions of Turkish students studying abroad. To summaries, the majority of Turkish students responding to our survey are single, male, studying in the engineering and technical fields, holding a degree from a university in Turkey with English instruction, and having parents who are highly educated. The most cited reason for studying abroad is the perception that a better quality education will be received at the foreign institution of study, based on the institution's reputation, ranking of the program or the presence of an academic thesis supervisor in the case of master's or doctorate level students.

The most important reason for not returning or delaying return appears to be the uncertainty created by the February 2001 economic crisis, which has also hit the educated segment of the population. These students fear that they will not be able to find employment upon their return to Turkey and have chosen to stay abroad for a while to acquire some work experience. More than half the respondents cited economic instability and uncertainty as an important push factor. Thus, the economic crisis combined with existing problems of unemployment or underemployment in certain fields appears to have prompted many students to seek either jobs or study opportunities abroad. The increasing demand for these types of graduates in the United States has made the US a popular destination for recent graduates, although the job market is beginning to tighten in the US. The surprising result is that lower income levels, which is among the most often cited reasons for brain drain from developing to developed countries, appears to be less important than other "push" factors such as bureaucratic obstacles. Higher income in the host countries also does not appear to exert as great a "pull" as opportunities for advancement in the chosen occupation or for further development and training in specialization. This emphasis may be due to the higher number of doctoral level students answering the survey.

Respondents who have chosen to include comments into the questionnaire have given us some important clues with regard to the decision to return or not return to Turkey. Compulsory military service has been given both as a "push factor" in the decision to go abroad and as a reason for non-return. A considerable number of male respondents have indicated "delaying compulsory military service" as a reason for pursuing an overseas degree. Those who have not completed their military service regard long-term military service as an "interruption" causing a "time loss" in education and career. As a result, many go abroad or delay returning in order to fulfill the requirements of short-term military service. For some of these students, this constitutes the first step toward settling in a foreign country, since it means that they are starting their professional careers abroad and adapting to life and work conditions in their country of work. As well, some of those who have entered into working life abroad delay returning to Turkey because they fear the uncertainty of finding employment. Many respondents have cited the unfavorable conditions created by the February 2001 economic crisis as an example.

Several students who have settled abroad, or who plan to, say that they will continue with their lives abroad without cutting their ties to Turkey and act as a sort of “cultural bridge” between their native country and their country of destination. This indicates that although the return potential for these individuals may not be very high, their value as both cultural diplomats and mediums for information and technology transfer between Turkey and their resident countries should make them an important target group for Turkish policymakers. Turkish academic advisors abroad, for example, help ease the transition to a foreign university for many students.

In Turkey, the academic brain drain appears to be particularly troubling, since the number of universities in Turkey has grown rapidly over the last decade in response to the growing social demand for higher education created by demographic pressures. This has created the problem of staffing the newly formed universities. While the compulsory academic service requirement of government-sponsored overseas scholarships was planned as a way to meet part of this need, none-returning scholarship recipients have become a major concern. One of the most common views expressed in the survey by government-sponsored research assistants is the perceived lack of value given to science and to academics in Turkey. Some respondents have indicated that, as a result of this, they fear they will find themselves in an “unproductive environment” if they return to Turkey. Others have stated that “there is a point where money is no object” and that they would be willing to work for lower wages in Turkey provided that they are “valued and respected”.

Have the state investments in higher education, through the national scholarship program, gone to waste? The number of returning students is not the best measure to assess this. Even if all of the government-sponsored students were to return, there is indication that the advanced overseas training they received will not be put to efficient use, especially in the newly-established state universities that lack facilities, equipment and other important resources. Several government-sponsored research assistants have expressed the fear that they will be devoting most of their time in teaching activities at the undergraduate level with little opportunity to do research and develop their knowledge. The current needs of the expanding higher education system seem to be favoring a teaching role for the returning government-sponsored students, and this has led to some disillusionment and lack of motivation among the scholarship recipients. The Higher Education Council has also begun to question the value of sending so many students for overseas studies. As a result, the number of YÖK scholarship recipients has been reduced, and greater emphasis is currently placed on producing new academicians internally through the graduate programs of the established universities in Turkey. However, this requires that a greater amount of resources be devoted to the development of graduate programs. In turn, a greater amount of public investment in higher education is required if undergraduate programs are not to be compromised by a shift of teaching staff to graduate level studies.

In general, students pursuing university degrees abroad appear to be satisfied with academic and economic conditions but indicate that they find social life “lacking”. In spite of this dissatisfaction with social life, nearly a quarter of all respondents are not considering returning to Turkey. One third of those who are considering returning to Turkey are planning to do so within 2 to 5 years, and another third are planning to do so within 5 to 10 years. There is a high probability that delaying return could in time come to mean “no return”. Taking this fact into consideration, one could surmise that the number of students who will never return to Turkey could reach significant proportions.

The recent brain drain from Turkey should not be looked at solely in terms of an employment problem created by the conditions of the economic crises and ensuing uncertainties. Turkey must take seriously the need to develop and expand research and development activities and create opportunities for the transfer of skills and training for which so much investment has been undertaken. What is promising is that a great number of survey respondents have indicated their willingness to return even if some progress is made toward creating the right environment for research and better career development opportunities. The current article

addressed the return intentions of Turkish students who are continuing with their overseas studies. The original study also includes a separate survey of Turkish professionals working abroad. Many of the respondents of this second survey are also part of the student non-return phenomenon, and their answers, we believe, will serve to expand our understanding of why Turkish students are not returning. This study is under progress and it will help us test some of the theoretical arguments put forth in several studies, such as on-the-job training as a cause of brain drain (Chen and Sue, 1995). Another important group to look at is students who have returned; further research could also be done in this area to gain even better understanding of the issue.

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Figure 1: Alma Maters of Respondents holding Bachelors Degrees (n=967)

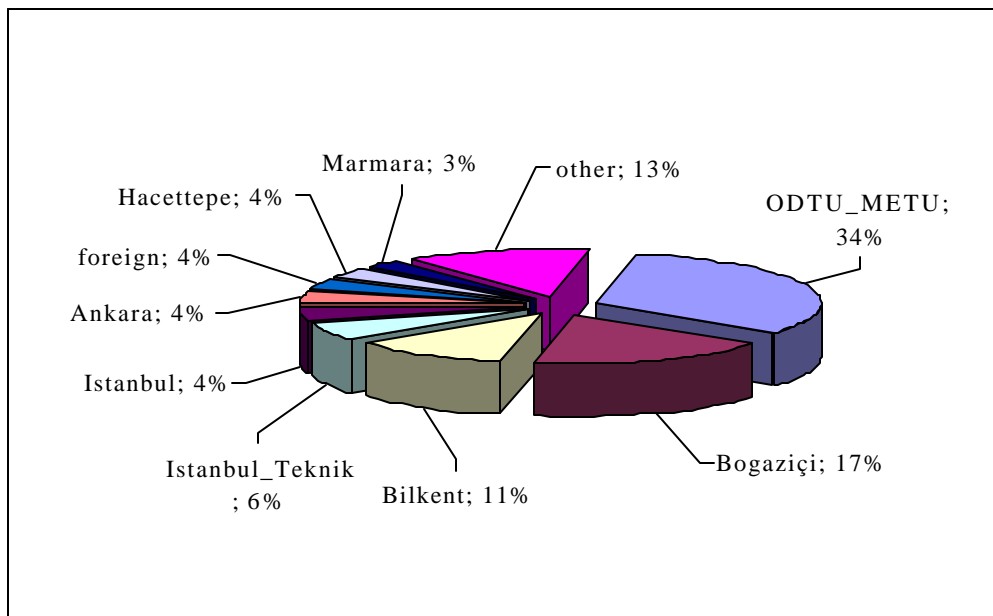


Figure 2: Current Fields of Study (n=1003)

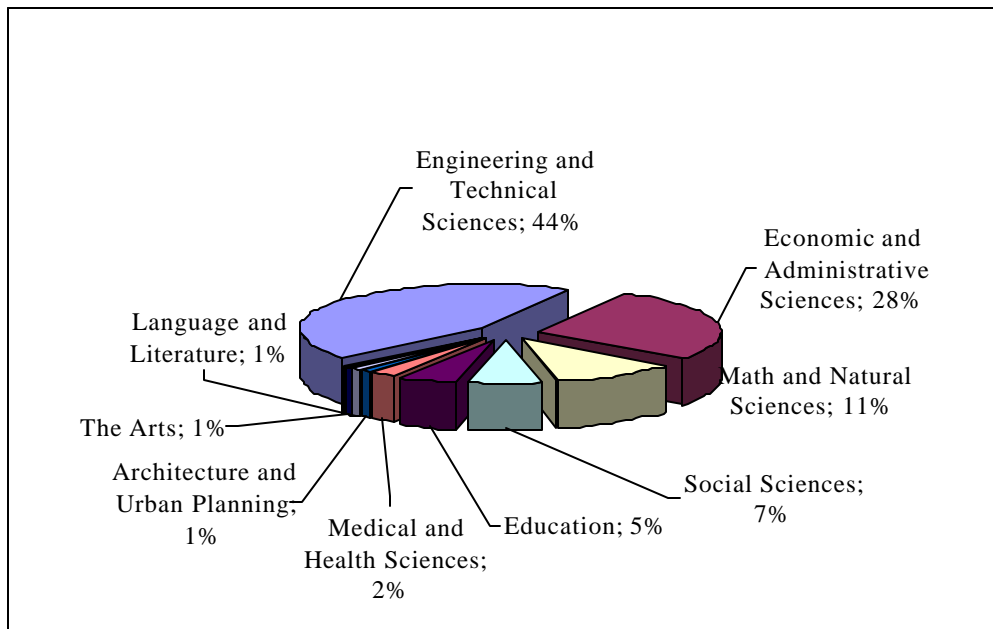
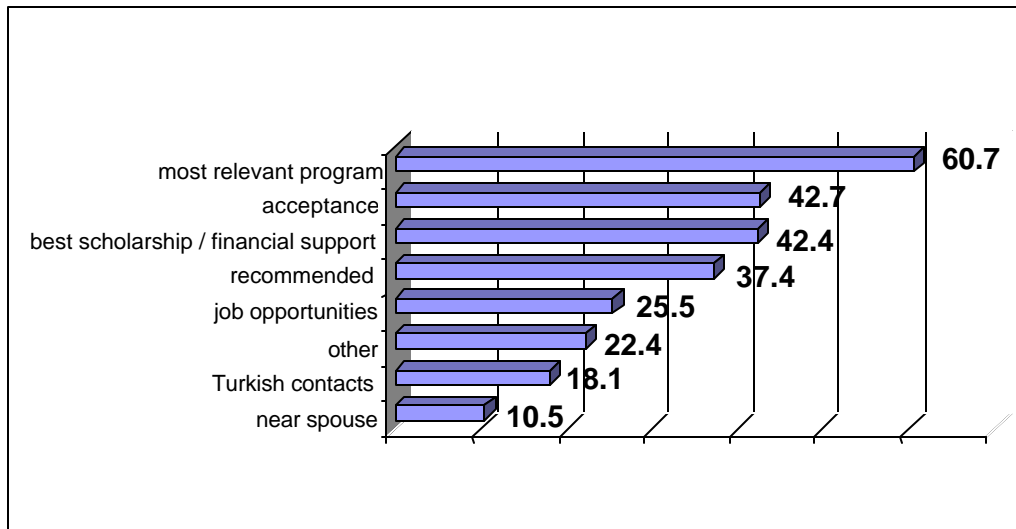
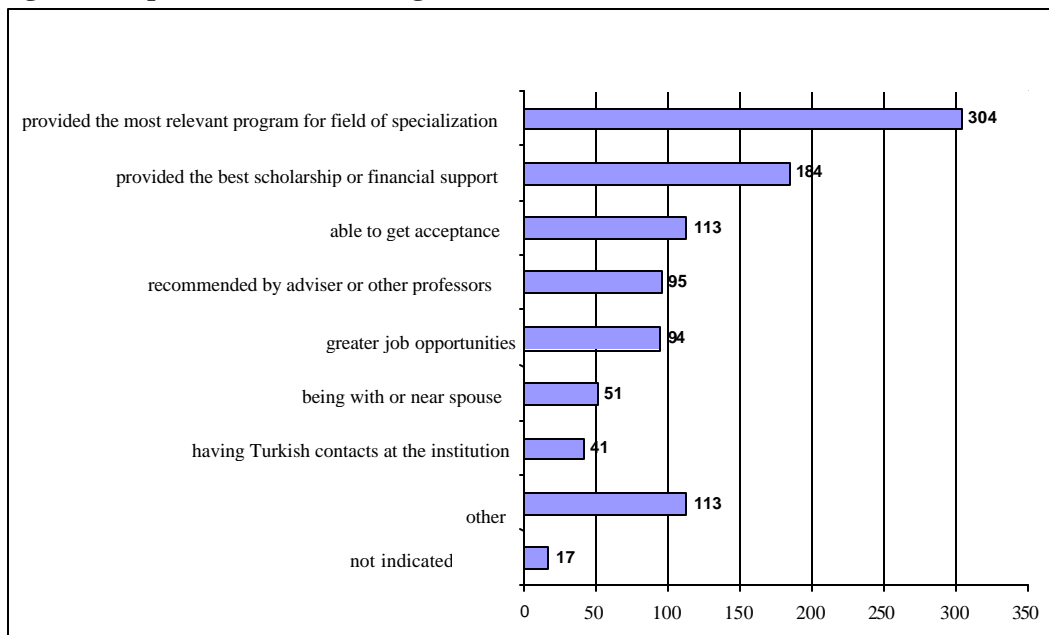


Figure 3: Reasons for Choosing Current Institution (by % of respondents marking category)



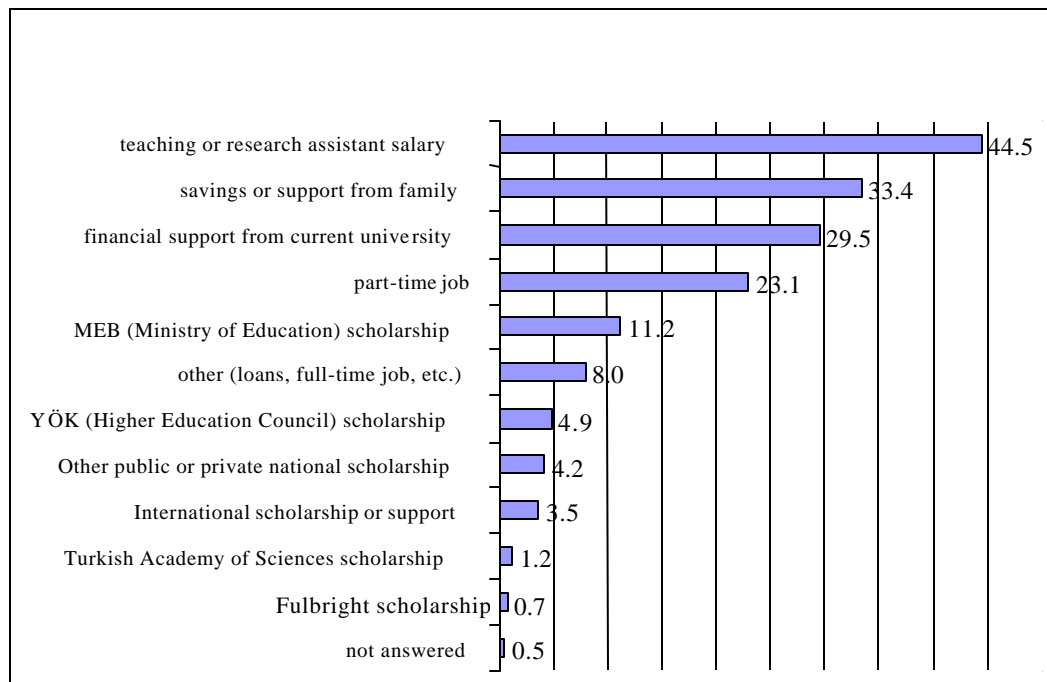
Note: Respondents were asked to mark all valid choices.

Figure 4: Top Reasons for Choosing Current Institution (n=1009)



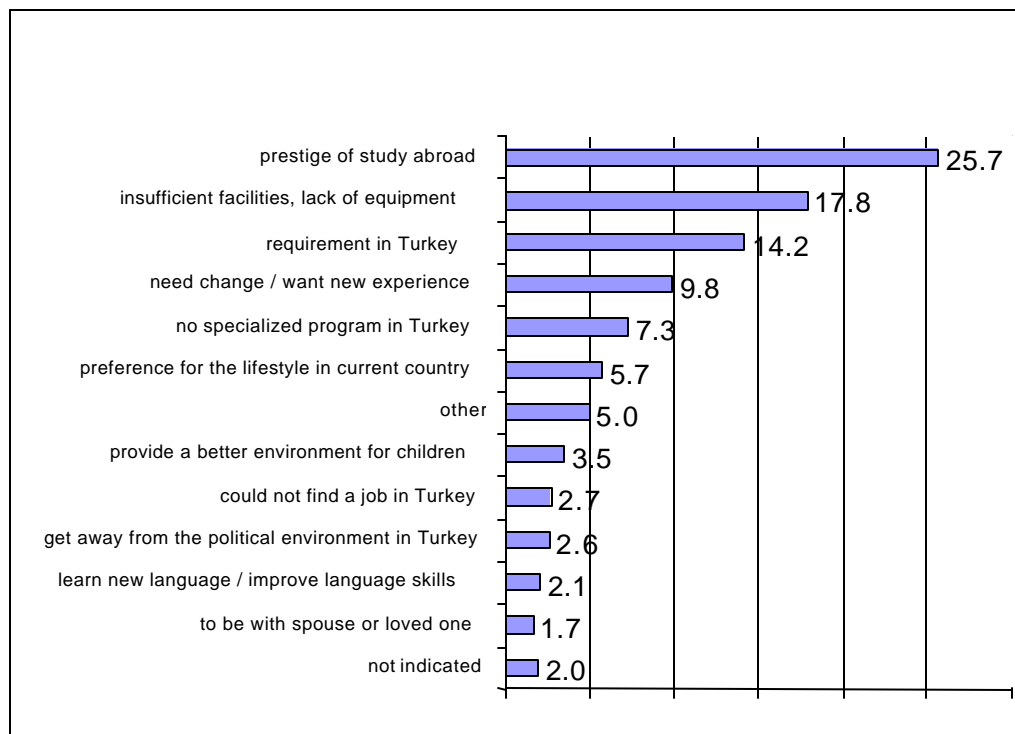
Note: Respondents were asked to choose the most important factor.

Figure 5: Students Abroad by Type of Financial Support, percentage (n=1106)



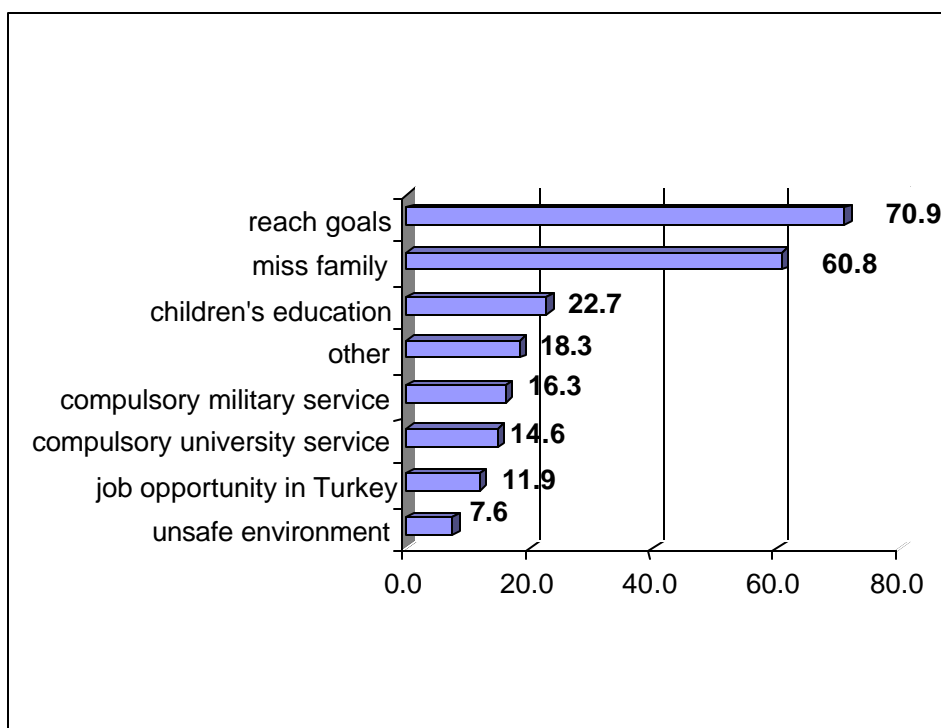
Note: The sum of the figures does not add to 100, since respondents could choose more than one relevant source of financial support for their study abroad.

Figure 6: Factors Cited as 'Most Important' for Going Abroad (%) (n=1009)



Note: Respondents were asked to choose the most important factor.

Figure 7: Return Reasons for Those Indicating They Will Return (n=780)



Note: Respondents were asked to mark all valid choices.

Table 1: Parents' Educational Levels by Gender of Respondent, (percent)

Highest Education Level Completed	Total	Female	Male
<i>Mother :</i>			
below primary	7.7	3.8	10.3
primary	17.0	13.7	19.2
middle	5.9	6.1	5.7
high	24.4	25.2	23.9
bachelors	33.4	38.4	30.2
masters	6.8	8.3	5.9
doctorate	4.7	4.5	4.8
total %	100.0	100.0	100.0
total number	1086	424	662
<i>Father:</i>			
below primary	2.7	2.6	2.7
Primary	11.9	7.6	14.7
Middle	3.7	3.3	3.9
High	12.4	11.6	13.0
Bachelors	44.7	48.8	42.0
Masters	14.0	14.2	13.9
Doctorate	10.7	12.0	9.8
total %	100.0	100.0	100.0
total number	1086	425	662

Note: The total is less than the full sample of 1103 since some of the respondents did not indicate one or both of their parent's educational attainment levels. Due to rounding the totals may not sum to 100.

Table 2: Overall Assessment of Academic, Social and Standard of Living Aspects of Life Abroad, percent (n=1103)

Assessment:	Academic	Social	Standard of living
much better	62.0	8.5	44.1
Better	25.5	10.2	25.8
neither better or worse	9.5	37.4	20.5
Worse	1.9	32.4	7.1
much worse	0.2	10.7	1.8
don't know	0.2	0.5	0.2
did not indicate	0.7	0.4	0.5

Table 3: Assessment of ‘Pull’ and ‘Push’ Factors by Respondents (percent)

	Very Imp.	Imp.	Some- what Imp.	Not Imp.	Not at all Imp.	Not Applic
<i>PULL FACTORS (n=1096)</i>	5	4	3	2	1	0
A. High occupational income	39.0	37.8	15.6	3.2	1.7	2.7
B. Greater opportunity to advance in profession	52.5	29.6	8.1	3.5	1.8	4.5
C. Better work environment (flexible work hours, relaxed setting, etc.)	39.6	28.1	14.9	6.4	4.0	7.0
D. Greater job availability in my area of specialization	43.5	31.6	10.9	4.3	1.8	8.0
E. Greater opportunity for further development in area of specialty	51.1	30.8	9.2	2.2	1.6	5.0
F. A more organized and ordered environment in general	45.3	31.2	12.0	4.7	2.8	4.0
G. More satisfying social and cultural life	12.5	15.9	21.3	15.9	17.0	17.3
H. Proximity to important research or innovation centers	34.1	26.2	19.4	7.0	3.8	9.5
I. Spouse's preference to stay or spouse's job being in current country	10.8	10.6	8.4	4.7	7.8	57.7
J. Better educational opportunities for children / want children to continue their education	8.7	11.0	10.6	6.2	8.8	54.7
K. Need to finish or continue with current project	16.4	13.5	9.5	6.1	9.1	45.4
L. Other	3.2	0.5	0.0	0.3	0.2	95.9
<i>PUSH FACTORS (n=1093)</i>	5	4	3	2	1	0
A. Low occupational income	40.9	32.5	16.6	3.7	2.1	4.3
B. Little opportunity for advancement in occupation	39.7	31.8	12.2	4.7	2.7	8.9
C. Limited job opportunities in my field of expertise	33.9	24.7	15.5	8.5	4.4	13.1
D. No opportunity for advanced training in my field	29.3	26.3	17.3	9.7	4.9	12.5
E. Being far from important research centers and from new advances	35.3	23.4	16.4	10.1	3.2	11.6
F. Lack of financial resources and opportunities to start up my business	18.3	16.2	15.8	11.9	9.8	28.2
G. Less than satisfying social and cultural life	9.3	13.6	19.5	15.8	19.7	22.1
H. Bureaucracy, inefficiencies in organization	47.4	23.9	15.6	6.4	2.2	4.6
I. Political pressures, discord	37.0	21.2	17.2	8.5	5.7	10.5
J. Lack of social security	27.5	23.8	20.2	10.9	6.2	11.5
K. Economic instability, uncertainty	51.6	24.5	15.2	4.0	2.3	2.5
L. Other	7.1	1.0	0.6	0.0	0.1	91.2

Note: The number of respondents who did not answer the questions on push and pull factors is excluded from the percentages

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