

PART 7. STRIKING A NEW PATH FOR MEASUREMENT OF RECENT FLOWS

A Pilot Survey of Foreign Researchers in Public Research Bodies in Italy — Characteristics of Recent Migrants



Table of Contents	Page
1. Introduction	1
2. Survey methods: Choosing the Sample and Sending the Questionnaire	3
2.1. The Sample	3
2.2. The Responses	3
3. The Survey Results	5
3.1. Demographic Data	5
3.2. Types of Work	6
3.3. The Migratory Project	8
4. Conclusions	18
5. Bibliography	20
6. Annex of Tables	21
7. Technical Annex	52
7.1. List of Institutes Surveyed	52
7.2. The Questionnaire and Related Documentation	54

Skill Mobility and the International Scientific Circuits: A Survey of Foreign Researchers in Italian Public Research Bodies¹

1. Introduction

A series of gradual but profound transformations are taking place in national scientific systems as a result of economic and social change. This has been brought about by the growing demands being placed on science to come up with solutions for socio-economic and environmental problems, as well as by economic globalization and the increasing interchange between the world of research and technological innovation in systems of production (Todisco, 2000).

To respond to these new demands, the most industrialised countries find themselves in need of an ever larger number of highly qualified people to engage in research and development activities. Yet, for reasons that no one has been able to fully explain, these countries are experiencing a sharp decline in enrolments in the science faculties of their universities (Le Scienze, 2001). The low level of demographic growth in developed countries has further exacerbated the shortage of human resources in science and technology (Boulier, 1999). The inevitable result of this is that the wealthy nations are trying to attract the most skilled professional elements of less developed countries, and incorporate them in their own systems of research. Even though the situation today is different in many respects to what it was in the middle of the 20th century when the Royal Society (1963) in England first coined the expression "brain drain", many developing countries nonetheless fear that the migration of their most skilled human resources to the wealthier nations of the world will compromise their economic development (Iredale and Appleyard, 2001).

For the EU, the international mobility of scientists in general, and highly qualified persons specifically, is a priority area of interest. In the framework of the various activities receiving EU support, considerable attention has been lavished on studies of "skill migrations".

After its pilot study of foreign researchers living in Rome (see Second Interim Report, Section 3.1.1 and Third Interim Report Section 5), the Italian team finalised a questionnaire designed to mine information about foreigners engaged in research in Italy.

The questionnaire consists of three sections:

- demographic data
- work activity information
- the migratory project — push and pull factors

The questionnaire also leaves room for the foreign researchers to make some general observations regarding their stay in Italy. In addition to considering the typical aspects of the phenomenon, such as whether the decision to emigrate was voluntary or involuntary, caused by political, religious, or economic considerations and so on, the questionnaire also seeks to explore the scientific motivations that prompted the respondent to choose one country rather than another. Accordingly, the questionnaire asks the interviewees to tell of

— through what channels they learned of the opportunity for the post that they now hold in Italy;

¹ The survey was carried out by M. Carolina Brandi of CNR-IRPPS for the project *The Brain Drain — Emigration Flows for Qualified Scientists*. This paper was prepared by M. Carolina Brandi.

- whether the economic or political conditions in the country of origin made it impossible to continue research in the respondent's chosen field of study, and hence forced emigration;
- whether the decision to go abroad was caused by the lack of employment opportunities adequate to the respondent's level of professional qualification in the home country (e.g. underemployment);
- whether the decision to emigrate was inspired by a desire to obtain greater freedom in work and life;
- whether the decision to emigrate was connected with the need to sustain an interchange of knowledge with other countries in the respondent's scientific field, or else connected with the prospect (particularly relevant for young people) of obtaining qualifications abroad in a scientific field that is not developed in the home country, or is in any case more developed elsewhere.

The questionnaire paid particular attention to identifying the foreign researcher's terms of employment in Italy, as well as the terms of employment previously held by the researcher in his or her country of origin, and the scientific field in which he or she is working. Above all, every request for information in the questionnaire was accompanied by a list of possible replies that were easy to understand and designed with the specific purpose of obtaining as homogenous a picture as possible of the diverse scientific systems of various countries, given that the differences in standards can be considerable, especially with respect to academic qualifications. By adopting this method, the questionnaire ensured that the information gathered in Italy was more readily comparable with the data from analogous surveys carried out elsewhere as part of the same project.

Defining the various types of working contracts can be problematic, despite the availability of international nomenclature. We adhered to internationally recognised nomenclature (e.g. ISCO-88 for professions). It is well known that in the field of research and development as well as, of course, in many other activities, terms and conditions of employment are determined by rules and regulations that vary widely from one country to the next. This makes international comparisons difficult and we must therefore work from the postulation that the information relating to foreign researchers' contracts in Italy may be compared only in the most general terms with data from other countries.

2. Survey Methods: Choosing the Sample and Sending the Questionnaire

2.1. The Sample

At first glance, selecting the sample of interviewees might seem an elementary task, given that the questionnaire was addressed to all foreign researchers and highly-skilled workers employed in Italian public research institutes. Identifying the institutes and the people to whom the questionnaire should be sent to was therefore extremely straightforward — the difficulty was in reaching them.

In view of the fact that no official statistics relating to foreign academics in Italy are kept by ISTAT (the national statistics office), nor by the research institutes themselves or the universities (just as no information is maintained on Italian researchers working abroad), obtaining a statistically correct sample was a challenge. We decided to send the questionnaire to the central offices of research institutes of Italy, **and** also directly to the heads of the various divisions of the institutes, and asked them to have all foreign researchers present in the institute in whatever capacity between January - July 2001 to fill out the questionnaire.

The questionnaire was sent to all public research institutions. In general, administrators proved willing to co-operate with the survey.

2.2. The Responses

Research structures situated throughout the country, 459 of them, received the questionnaire. Only 60 of the research structures failed to respond, while 268 reported no foreign workers in the period in question. Out of a total of 378 foreign researchers employed in the remaining 131 research structures, 241 responded to the questionnaire (Figure 1).

The largest concentration of foreign workers was to be found in the Consiglio Nazionale delle Ricerche (National Research Council: CNR) and the Istituto Nazionale di Fisica Nucleare (National Institute of Nuclear Physics: INFN), which respectively account for 46.9% and 31.5% of the total. The Ente Nazionale per le Energie Alternative (National Agency for Alternative Energy: ENEA) and the Istituto Superiore di Sanità (National Institute of Health: ISS) returned a much smaller number of responses: 5.8% and 4.1% of the total. Other entities and agencies produced, almost without exception, isolated responses only (Table 1).

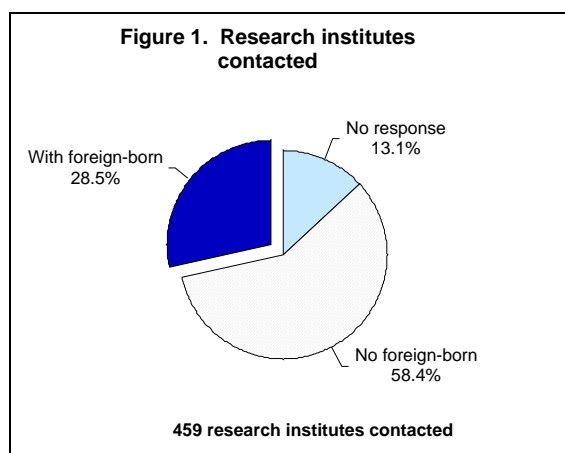


Table 1. Response rates of surveyed institutes.			
Institutes	Total foreign researchers	Respondents	
		Number	Percent
National Research Council (CNR)	190	113	46.9
National Institute for Nuclear Physics (INFN)	133	76	31.5
Institute for New Technologies Energy and Environmental (ENEA)	14	14	5.8
National Institute for Material Physics (INFM)	6	3	1.2
National Institute for Health (ISS)	10	10	4.1
Other institutes	25	25	10.4
Total	378	241	100.0

It should be noted the institutes from which the vast majority of responses arrived together account for 80% of the research activity carried out in Italy and employ the bulk of non-university public sector researchers. Thus the responses from these institutions were sufficiently broad in scope to provide an almost complete overview of the scientific disciplines.

3. The Survey Results

3.1. Demographic Data

3.1.1. Marriage and family

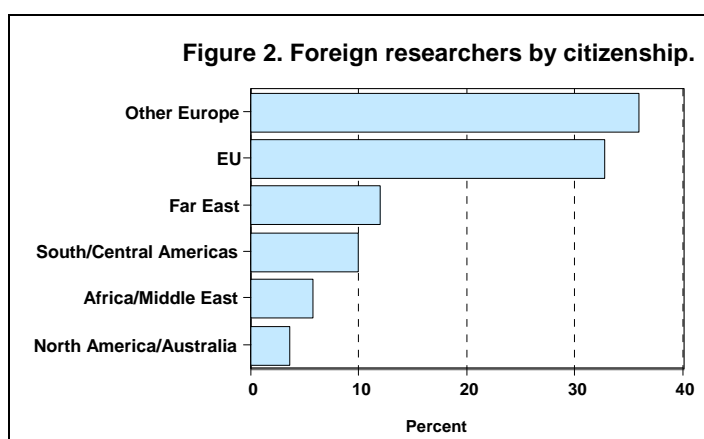
The demographic section of the questionnaire received responses from 178 men and 62 women. Of these, 60% of the men and 40% of the women were married; more than half (57.3%) reported no children; those that did report having children had one or two at most. Only 30% of the women had children and one in five of them reported just one child. Almost 60% of the respondents were not living with their families in Italy. Almost all those who were living with their families came from the EU or East Europe.

3.1.2. Education levels of the family

Regardless of their country of origin, almost all the respondents came from families with good educational levels. In a majority of cases, both parents had at least a high school diploma (41%), and often a university degree (39% of father and 30% of mother), a pattern that is also to be found among the parents of Italian researchers. The parents of female researchers had a slightly higher educational level than those of their male counterparts.

3.1.3. Country of origin (citizenship)

The largest shares were from the EU and other European states which account for, respectively, 33% and 36% of our sample (Figure 2). A significant share of researchers (12%), came from the Far East, and a further 10% from South and Central America (most of them from Argentina). A mere nine respondents to our survey came from North America or Australia and fourteen persons from North Africa and Middle East.



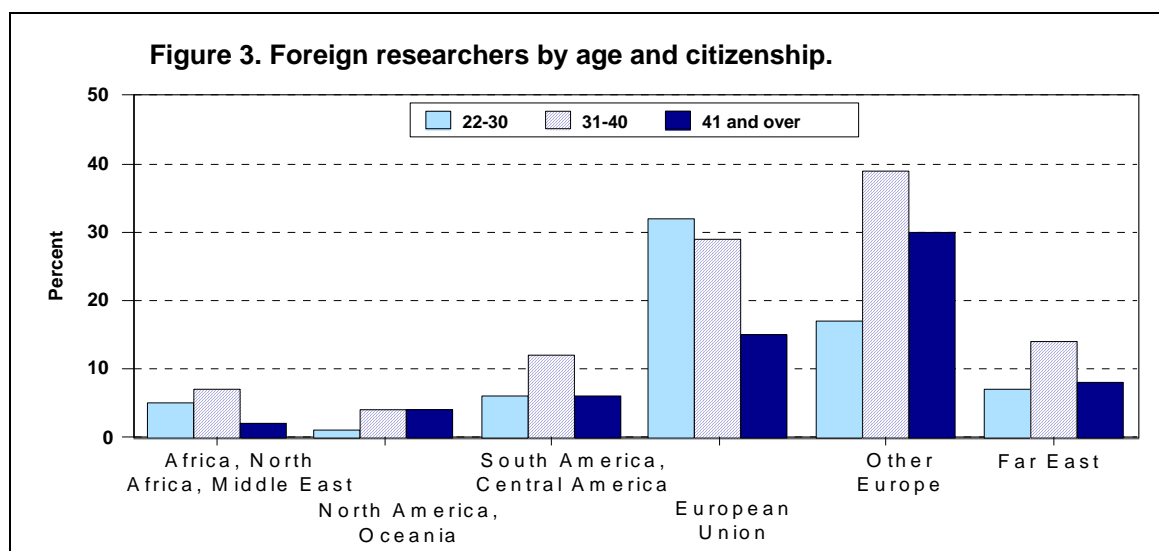
Among EU citizens, the most numerous were the French, Germans, and Spanish who together account for 63.3% of EU research workers in Italy. Among the other European countries, the majority (74.4%) came from Russia, Romania and Albania. Of those from the Far East, the vast majority (75.9%) came from China.

3.1.4. Gender

Across the entire spectrum of nationalities, women numbered considerably fewer than men. In this respect, French researchers equally divided between women and men, were the exception. There was a complete absence of female researchers from Germany.

3.1.5. Age

The average age of the foreign scientists who responded to our survey was 36 years. The average age varied considerably depending on the geographic area of origin. Foreign research workers from member states of the European Union were notably younger than those from other countries — 40.0% of them were under 30 years of age. The majority of other foreign workers belonged to the 31-40 age group, though some were older than 40 (Figure 3). Women were on average younger than their male colleagues: 40.0% of foreign female researchers in Italy were under 30 years of age compared to 24.2% of their male counterparts.



3.1.6. Level of qualification

A rather obvious finding from our survey was that the foreign workers possessed high educational qualifications. Of the respondents, 56% declared they had a PhD, 28.6% a *Laurea*-equivalent (university degree lasting 4-6 years), and 11.1% a Bachelor's degree (3-4 years). In this last group, more than one-third of the respondents also reported a Master's degree. More than half the holders of a *Laurea*-equivalent and around a third of PhD holders also reported a Master's degree. It should be noted that some of the interviewees (4.3%) declared a Master's degree only (e.g. no Bachelor degree) plus other unspecified academic qualifications.

3.2. Types of Work

3.2.1. Post before coming to Italy

Almost all the foreign researchers interviewed (about 89.6%) had been working in the field of scientific research before coming to Italy, and 37.5% of them had had permanent contracts of employment. On the other hand, a significant number (some 15%) came to Italy after a PhD or postdoctoral fellowship.

The type of employment contract held by the workers before coming to Italy turned out to be strongly associated with the geographic area of origin. If we look at the two largest geographical groups, we can see that among those from European countries outside the EU, a large majority (about 70%) had previously held contracts of employment in the research sector, and some 54.8% had had a permanent post. Among persons from EU member states, just 48.4% had previously had a contract of employment; a share of 15.6% had held

permanent posts whereas 39% had had a scholarship, mostly at doctorate level.

Some 12% of the respondents were on sabbatical. It is interesting to note that only three of the researchers using their sabbatical leave to work in Italy came from the EU and only four of all of the sabbatical researchers were women.

3.2.2. Funding

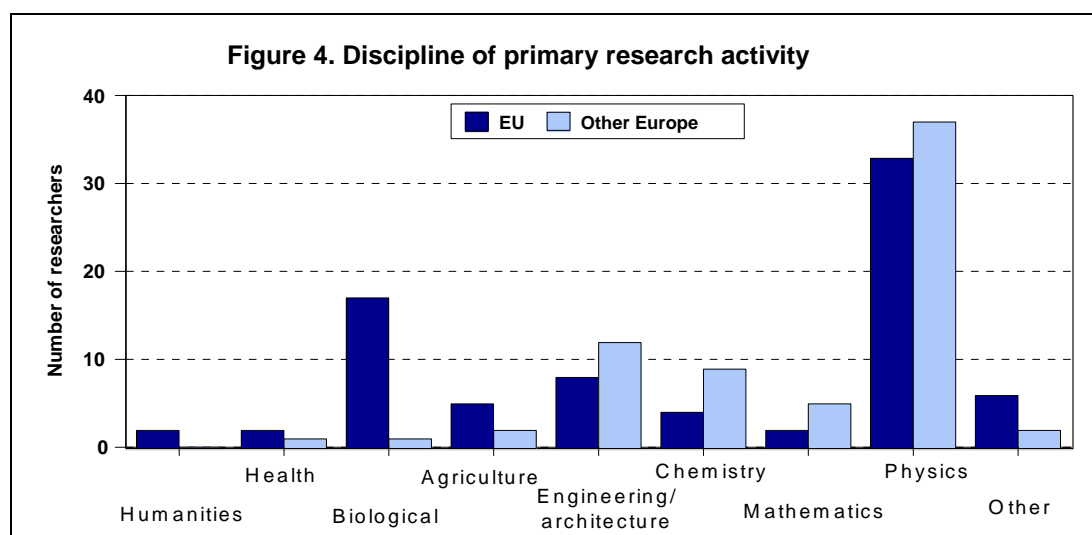
With respect to the terms of employment and professional grades accorded to foreign researchers by Italian institutes, the survey found that while many (38.3%) were being paid out of scholarship grants, almost as many (36.6%) were employed on limited term or permanent contracts of employment. In this latter group, the distribution is notably concentrated at the lower end of the seniority scale (74.4% researchers; 23.2% senior researchers and 2.3% research directors). This distributive pattern also occurs among Italian research scientists. Visiting professors accounted for 11.1% of our sample. For self evident reasons, researchers in Italy on scholarship grants tended to be younger than those with contracts of employment.

The chief financial sources for the salaries of foreign research scientists in Italy are the regular operating funds of the host Italian institutes (44.5%) and EU funded projects (27.3%). Very few foreign researchers were in receipt of funding from corporations.

3.2.3. Fields of scientific inquiry

The foreign researchers in Italy operate mainly in physics, biology, chemistry and Engineering. These are the very same disciplines that have been able to amass most resources in recent decades, and are therefore best placed to cultivate international contacts (Figure 4).

The geographical origins of the researchers from abroad varied considerably from one discipline to another. In engineering, citizens from EU member states and other European countries made up the majority of foreign researchers, though the discipline also boasts a sizeable number of researchers from other countries. In the biological sciences, however, 70.8 % of foreign researchers came from the EU and a mere 4.2 % from non EU countries. In



the field of physics, 42 % of foreigners came from non-EU countries, 37.5 % from EU countries and 13.6 % in the Far East.

3.3. The Migratory Project

3.3.1. Length of stay

One of the chief variables in the survey that demands attention refers to the length of time spent in Italy by foreign researchers. It has often been suggested that a definition of brain drain should be related to the length of stay abroad. Although this remains a subject of the brain-drain/brain-gain debate, we shall nonetheless present the results of our survey with reference to this parameter.

The majority of the interviewees (52%) were found to have been living in Italy for less than one year. Of these, 76.8% had been in Italy for no more than six months. Also, 69.1% of the foreign researchers expected to leave Italy within one year.

A more precise indicator of the duration of stay can be obtained by looking at the real lengths of time that foreign researchers intend to spend in Italy. This is obtained by summing the period the interviewee has already spent in Italy and the length of time he or she expects to remain. On the basis of this calculation, we found that only a minority of our sample (16.2%) expected to stay in Italy for more than five years, and a sizeable group (37.3%) planned to remain for less than one year. Those foreign researchers who planned to spend only a brief period of time in Italy strongly influenced the average results of sample as a whole.

Nationality as a factor — A breakdown by nationality suggests that some differences exist in the length of stay depending on the country of origin. Citizens of non-EU countries in particular showed a certain tendency to remain either for very brief or for very long periods, whereas researchers from EU countries spend an average of 1 or 2-3 years in Italy. One possible explanation of this is those researchers planning to stay in Italy for a longer-than-average period were also above the average age.

Age as a factor — The survey found that 44.3% of those in the under 30 years of age cohort meant to stay in Italy for just one year, and 36.1% for a period ranging from one to three years. Only a few in this age group expected to remain for more than four years, and a mere 1.6% declared an intention to stay in Italy for more than ten years. We can therefore conclude that almost all the foreign researchers belonging to this age group regard their stay in Italy as temporary.

Foreign research scientists aged 31 to 40 years, however, displayed a marked tendency to stay longer: only 29% were planning to stay for one year or less, 36.6% for two or three years, and 14% for four or five years. Some intended to stay even longer, and a substantial share (12.9%) planned to remain in Italy for more than ten years. These results suggest that this age group encompasses a number of researchers who intend to settle in Italy on a permanent basis.

The higher the age group, the greater the proportion of those intending to stay in Italy for a long period. In the 40-50 age group, 26.3% of foreign research workers planned to spend more than ten years in Italy, and among those aged over 50 the proportion rose to 20%. It is worthwhile pointing out that researchers in the over 50 age cohort who declared their intention to stay in Italy for ten years or more were implicitly announcing an intention to settle permanently in this country given the period of their stay brings them to retirement age.

Gender as a factor — Women tend to stay in Italy less than men: 48.1% planned to remain for only a year (compared to 32.0% of men) and 29.6% for a period of more than one but less than three years (for men the figure was 33.3%).

Prior post as a factor — Practically all of the persons who had been on a scholarship in another country before coming to Italy planned to remain for a rather limited period of time. On the other hand, no particular pattern was discernible among those who had held a stable post of employment or a limited term research contract before coming to Italy. The time this disparate group intended to remain in Italy was distributed rather uniformly, regardless of the type of contract held before the Italian experience.

Marriage (civil status) as a factor — Civil status appears to have had some bearing on the time they intended to stay in Italy. Out of 94 unmarried respondents, 47.7% intended to stay just one year and 30.2% two or three years. Only 2% in this category planned to stay for more than ten years. Of the 133 married or cohabiting foreign workers, 20.9% planned to remain in Italy for more than ten years, 31.3% for one year or less, and 32.2% for 2-3 years. These results came as a bit of a surprise because one might expect those without family ties to be willing to dwell in the country for a longer period of time. The most likely explanation is that in this case the civil status of the guest worker may not in fact have a direct influence on the duration of the stay but simply reflects the fact that an unmarried status is more frequent among young researchers, the majority of whom, as we have seen, are scholarship students in Italy for a fixed and rather short term.

Employment conditions — The conditions of employment and professional grades attributed to the interviewees are two parameters that seem to influence many when questioned about intended length of stay. The majority of scholarship researchers remain in Italy for one year or, at most, 2-3 years, being the typical length of a fellowship, of a post-doctorate scholarship, and of a doctorate scholarship, respectively. Among visiting professors, more than 60% were in Italy for just one year, which is the typical duration of a sabbatical. On the other hand, 28.3% of those with contracts of employment as researchers, and 27.8% with contracts as senior researchers declared they would stay in Italy for ten years and more. This suggests the notion that the provision of a suitable contract of employment in Italy is an effective means of securing the long-term presence of foreign research scientists. The correlation that exists between the job status of the foreign researchers and the length of their stay in the country also accounts for the distribution by age mentioned above. It makes sense that older researchers should be offered senior positions and young researchers scholarships, and this can constitute an insufficient incentive for permanent immigration to Italy.

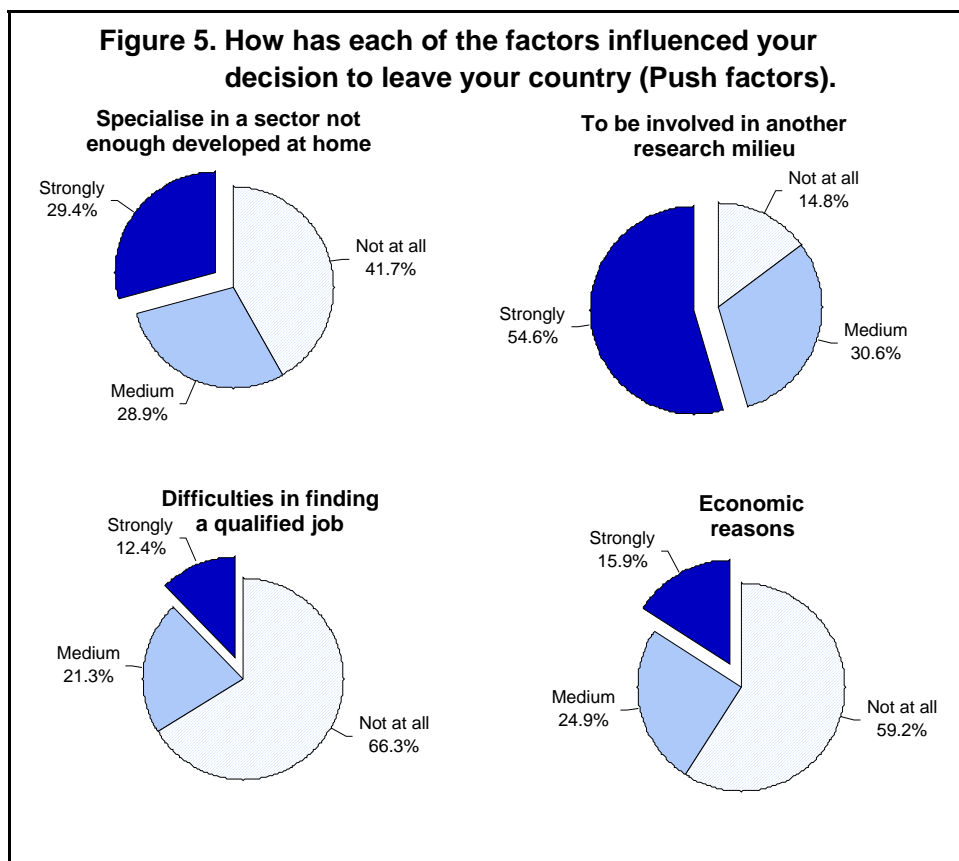
Scientific discipline as a factor — If we analyse the figures with respect to scientific discipline, we note that a higher proportion of long-term stays (five years and more) occurs among those working in the field of physics and biology than among those in the field of chemistry. Indeed, in the field of chemistry, almost all researchers from abroad (94.3%) expected to remain no more than four years in Italy, and no one for more than ten years. Among the biologists however, 15.4% anticipated remaining in Italy for more than ten years, while the corresponding figure for physicists was 13.4%. The statistics for other disciplines were too randomly scattered for us to make any further speculations on this point.

3.3.2. Reasons for being in Italy

Push factors — One of the most interesting questions we posed in our survey asked interviewees to state their chief motivation for leaving their home country (e.g., the push factors).

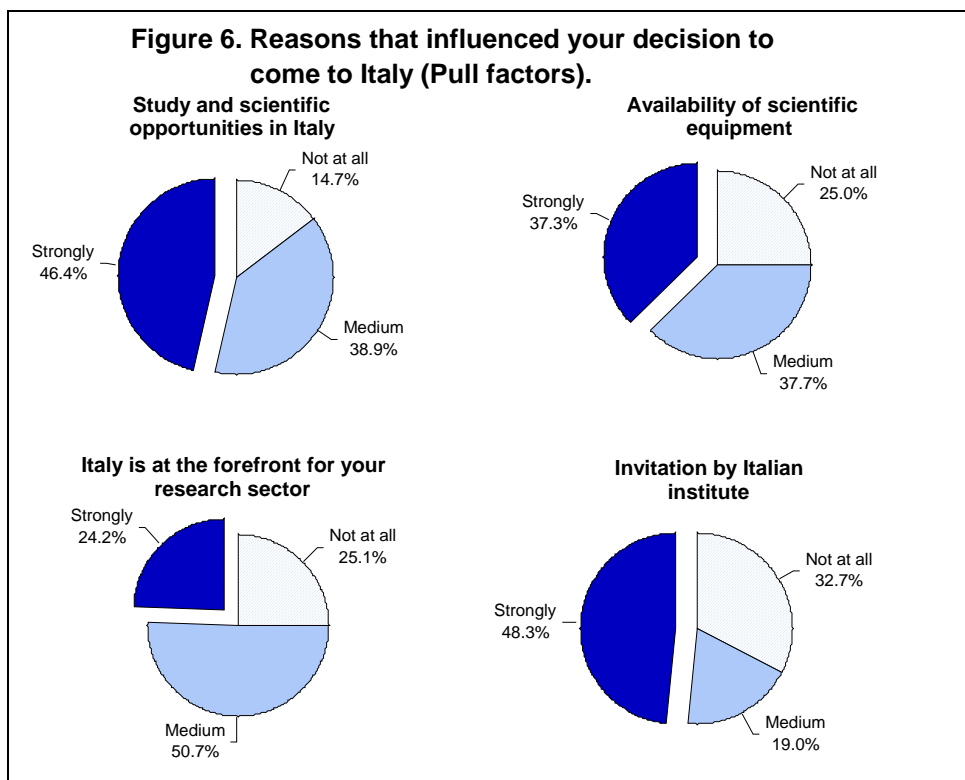
The motivation advanced by the largest number of respondents was a desire to institute contacts with other research environments, which more than half the sample considered very

important, and 30.6% considered fairly important. A smaller but significant number of respondents (29.4%) indicated an ambition to specialise in a field that was insufficiently developed in their home country as the chief deciding factor, and 28.9% considered this fairly important. Similarly, the desire to have greater freedom in work and life was a very or fairly important factor for 54.0% of the respondents. The survey found that very few of the respondents cited difficulty in finding work adequate to their qualifications in their home country as their main reason for leaving. Economic considerations also came well down in the scale of priorities, which is hardly surprising given the low salaries of scientific workers in Italy. The number of those who cited political reasons or the desire to join family members was negligible (Figure 5).



Pull factors — A large proportion of interviewees declared that they had chosen Italy because they felt it offered good or excellent opportunities for study and scientific training. This is an extremely significant finding. Invitations from Italian research institutes were also decisive, being considered very important by 48.3% of the interviewees, and fairly important by 19%. Furthermore, many of the respondents believed that Italy was at the forefront of scientific research in their field. (Figure 6).

The availability of scientific equipment was very important for 37.3% and fairly important for 37.7% of those who chose Italy as their destination. The possibility of securing a more stable post of employment and the existence of bilateral agreements between Italy and the country of origin seemed to matter little.



With respect to the non-professional factors that drew the immigrants to Italy, the only factor with any real weight was a sense of cultural affinity. Knowledge of the Italian language was not an important factor, an obvious enough finding given the limited use of Italian abroad. Geographic proximity was also practically without influence. The respondents did not report having been attracted to Italy as a country that was easy to enter and reside in and Italy is not, in fact, easy for foreign workers to enter. Our survey turned up very few cases of people coming to the country owing to the Italian origins of their family. Similarly, very few came to Italy because they had married an Italian citizen or because they were accompanying a spouse who had found work in Italy.

The data that we analysed indicate that foreign research scientists who left their home countries to take up a post in Italy were driven by a rather complex series of diverse factors whose relative importance varied from person to the next. In fact, if we look at the data in more detail, we can see that, as a rule, neither the push nor the pull factors were particularly correlated to the expected duration of the stay in Italy, though there were some significant exceptions.

Among the diverse factors encouraging researchers to leave their home countries, we found that instituting contacts with a different scientific environment, while of importance for our sample as a whole, was decisive among those who intended to remain in Italy for less than a year. If we measure this factor on a scale of relevance ranging from 0 to 2, we find that those planning to stay in Italy for less than one year accorded it a value of 1.7. Conversely, difficulty in finding suitably qualified work in the home country was of practically no relevance (score: 0.2) for those intending to stay in Italy for one year or less, but was not negligible (score: 0.6) for those intending to stay in the country for more than ten years. Similarly, economic considerations were of negligible importance for those planning short-term stays, who thus rated it with a relevance value of just 0.3, but were rather more important for those intending to remain in the country for longer (0.6-0.7).

The researchers' scientific field of study also had a considerable bearing on their reasons for emigrating. We found that the desire to specialise in a sector that was insufficiently developed in the home country was a pretty irrelevant consideration for biologists, but very important for those studying human sciences or agriculture. The situation is reversed with respect to the difficulty of finding suitably qualified employment in the home country. In this case, researchers from the human sciences and agriculture attributed zero relevance to this factor, whereas for chemists and physicists it was a significant push factor (0.6-0.7). A similar picture emerges if we look at the economic factors behind the respondents' decision to come to Italy.

As far as pull factors are concerned, the opinions of foreign researchers were generally homogenous right across the board and regardless of the duration of their stay, but for a few exceptions. On the whole, knowledge of the Italian language is considered irrelevant, but not among those planning to remain in Italy for less than one year, who attributed it a value of 0.9, and the differences we encountered in respect of this factor cannot be written off as simple statistical oscillations.

Also the possibility of securing a more stable post of employment in Italy is evaluated differently depending on the planned period of stay. This factor is of practically no consequence (with a relevance value ranging between 0.2 and 0.4) for those who intend to stay in Italy for one year or less (and the reasons for this are pretty self-evident). On the other hand, the relevance of this factor is fairly significant (score: 0.9) for those intending to stay in Italy for more than ten years.

Regarding the push factors that led the respondents to leave their country of origin, we found that the geographical location of the country of origin made a difference. For example, difficulty in finding work adequate to qualifications, which measured extremely low on the scale of relevance for the sample as a whole, nonetheless had a rather significant relevance for researchers from EU countries. On the other hand, economic considerations were not important for these researchers, which is in keeping with the average for the sample as a whole, but out of step with researchers – especially if male - from European countries outside the EU, who attach considerable importance to economic considerations.

Professional pull factors showed few variations between one discipline and another, though the few exceptions are interesting. For example, the fact that Italy is advanced in a given area of science was considered fairly important by all immigrant researchers, but in certain fields such as agriculture and human and social sciences, it was one of the most important factors of all (with a relevance value of 1.3).

In general, the possibility of obtaining a more stable post of employment was not a significant factor, and in the field of chemistry its relevance is practically nil; but in other disciplines such as human sciences, its relevance was far from negligible (0.7).

Geographical origins do not seem to have a great influence on the decision to choose Italy as a country of destination. Nonetheless, it ought to be noted that the availability of scientific equipment was important for a higher percentage of non-EU than EU citizens (apart from those from North America). The existence of bilateral agreements for scientific co-operation was considered a fairly important factor by citizens from non-EU countries, but not by those from EU countries.

Since non-professional pull factors are unrelated to fields of study, their weight does not vary from one professional discipline to another. The relative significance of non-professional pull

factors does not seem to show any correspondence with the foreign worker's country of origin. Even so, a small but not negligible percentage of researchers from the EU (around 14%) and Latin America (around 15%) listed their being married to an Italian citizen as having had major influence on their decision to come to Italy. Among workers from other geographical areas, however, this factor was rare or inexistent.

3.3.3. The channels of information

The only two significant channels through which the interviewees learned of the possibility of working in Italy were:

- invitation from the Italian research institute that then engaged them, and
- information received by colleagues and friends.

In any case, it is interesting to note that the planned duration of the stay in Italy has a certain bearing also on the channels of mobility. Apart from direct invitations by Italian institutes, easily the major channel of contact, job notices published in journals also emerged as an important source of information for 19.5% of those who remained in Italy for one year or less. For those who remain in the country for a longer period, organisations as well as transfer and mobility programmes played a significant role.

The main channels by which foreign researchers came into contact with the Italian institutes that employ them differ from one discipline to the next. For instance, in agriculture, mobility programmes have a greater role than in other fields, while in medicine a full 60% of interviewees reported that they had been contacted by a friend or colleague. Those working in chemistry represent a special case: a large number declared that they had found work opportunities by themselves, and very few had come to Italy on the invitation of an Italian research institute.

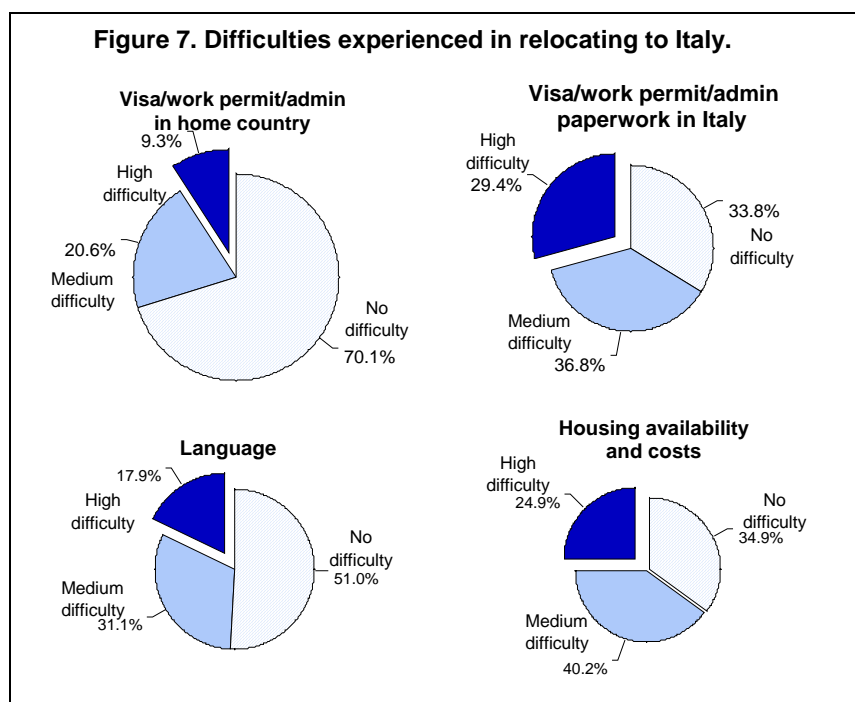
The channels of contact also vary depending on the geographical region of origin. For researchers from EU countries, searches conducted on the Internet (13.1%) and transfer programmes (11.8%) were important contact sources, but were little used by researchers from countries outside the EU (3.7% and 5.0%, respectively). European non-EU researchers showed a more marked tendency (17.5%) to discover work opportunities from specialist journals than their EU counterparts (13%).

3.3.4 Difficulties encountered

When asked about the difficulties that they encountered during their stay in Italy, many interviewees mentioned the inconveniences involved in obtaining work papers and permits of stay, as well as Italian bureaucracy in general (Figure 7).

These problems provoked strong denunciations from many non-EU research scientists (and in particular from the few research workers from North America).

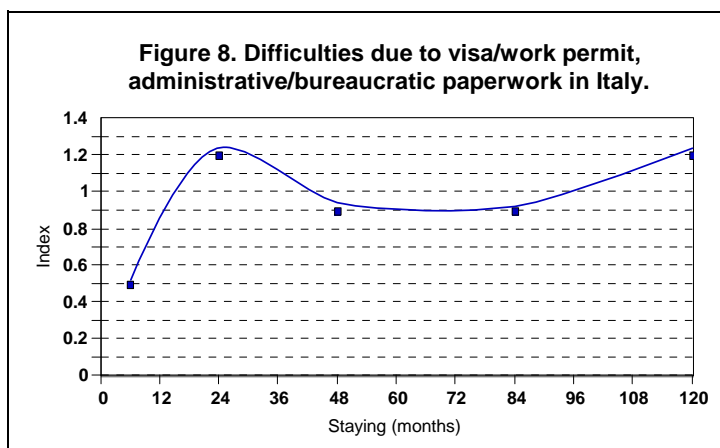
Surprisingly, while these bureaucratic impediments were also considered important by researchers from EU countries, they do not appear to have been particularly felt by the Chinese. That said, a large number of Chinese researchers diplomatically declined to respond to this and other questions that might have led them to make implicit political judgements about Italy or their own country. It was certainly no surprise to find that almost all the respondents mentioned finding affordable accommodation as one of their main problems, and for workers from EU countries, it was by far the most frequently mentioned difficulty.



Perhaps less predictable was the finding that around 50.9% of the respondents experienced no problems relating to the language. However, this is probably in large part due to the use of English as a lingua franca in the scientific community. Other possible sources of difficulties, such as the lack of information about Italy before travelling to the country, or problems relating to the family, did not figure in any statistically relevant manner.

Some of the difficulties encountered were, naturally enough, directly related to the duration of the researcher’s stay in the country. The bureaucracy involved in obtaining a visa and permit of stay in Italy was of minor importance for those planning to remain in Italy for one year or less, but became increasingly important as the visiting period increased in length (Figure 8).

With several anomalies (probably due to age cohort size differences), the significance accorded to the problems of bureaucracy reached a value 1.2 for those intending to stay in Italy for one to three years, fell to 0.9 for those planning to stay in Italy for three to ten years, and climbed to 1.2 for those intending to reside in Italy for more than ten years. Clearly, foreign research workers in Italy are very sensitive to bureaucratic difficulties, the exception being those who remain in Italy for a few months only and therefore experience no problems relating to visas or work permits.



A perfectly logical finding was that knowledge of the Italian language (on average considered of little importance by the respondents) was considered rather problematic by those intending to live in Italy up to four years (0.8), while those expecting to remain in Italy for more than ten years considered it a negligible factor (0.3).

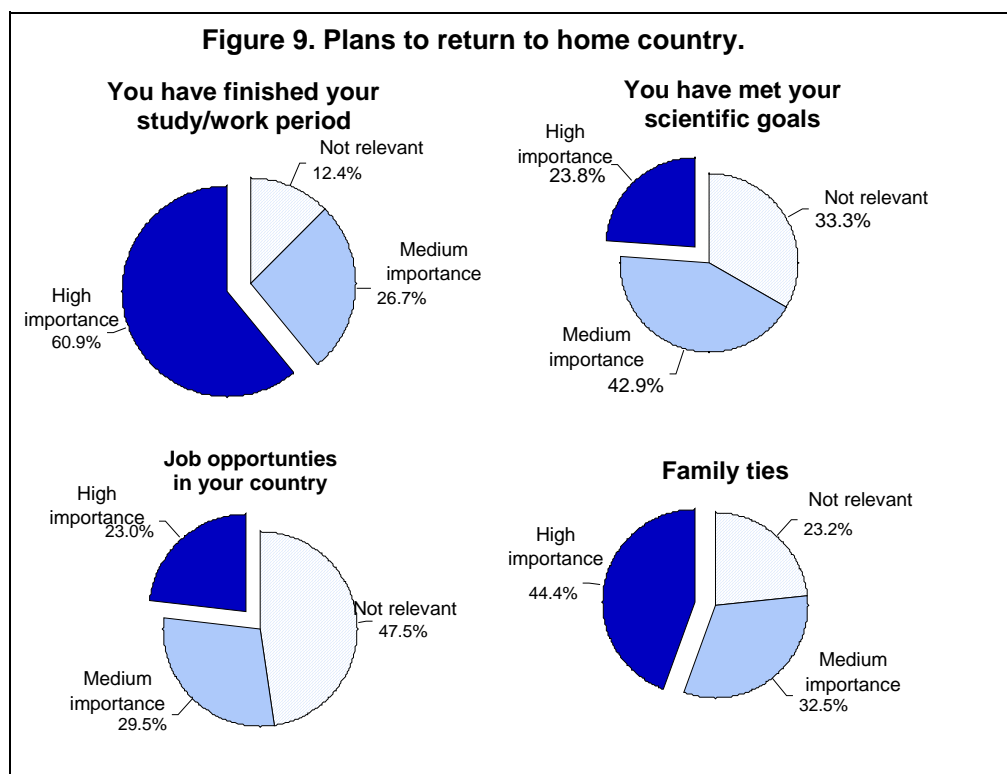
3.3.5. Returning home and opinions on brain drain

A large share of the researchers surveyed (71%) intended to return to their country of origin. The completion of the period of time decided in advance was considered a very compelling reason for returning home by 60.9% of respondents and fairly compelling by 26.7%. Naturally, this figure reflects the fact that a considerable percentage of interviewees were in Italy as fellowship holders. Other important motivations mentioned were family ties, a very important motivation for 44.4% of the respondents and fairly important for 32.5%.

A significant number of respondents declared that the achievement of the scientific objectives they had set themselves in coming to Italy was a very important (23.8%) or fairly important (42.9%) motivating factor for the decision to return home. The emergence of new employment opportunities in the country of origin was found to be a less influential factor, considered very important by 23.0% of respondents and fairly important by 29.5% (Figure. 9).

Very few affirmed that they wished to return home owing to the differences of culture between Italy and their country of origin. Only two respondents considered religious differences as being very important.

As we have already noted, the causes for returning to the country of origin vary in accordance with the duration of the period spent in Italy. Coming to the end of a visit whose length was determined beforehand is the predominant reason of return for those who intended to stay in Italy for a brief period, and so for them the emergence of new work opportunities back home

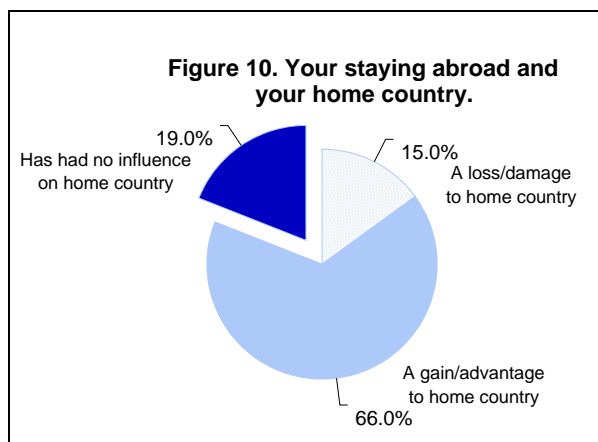


is immaterial. On the contrary, employment opportunities in the country of origin are much more important for those who have been in Italy for a medium to long period. The accomplishment of scientific goals established beforehand is a major factor for those who intended to go home after a brief period in Italy, but is of no importance for those who intend to remain in Italy for a lengthy period. Interestingly, the reasons for returning home did not substantially vary among researchers from different disciplines and different countries.

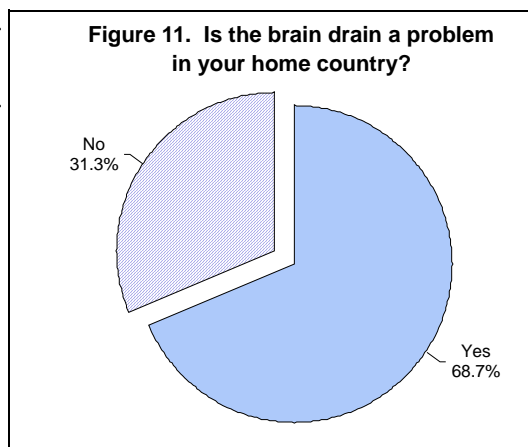
Of the 69 foreign researchers who declared they had no intention of returning to their home

countries, 77% were European, and roughly half of these were citizens of the EU. The desire to remain in Italy was an important factor for the majority (57.6%) of the 69, but the others were planning to move to another country where they could obtain higher salaries. Very few showed any interest in moving to a country that is scientifically more advanced, or with which they might have greater cultural affinity.

It is also interesting to observe that a large majority of the interviewees (66.7%), felt their stay in Italy was advantageous for their home country, regardless of the country of origin (Figure. 10). Significantly, the percentage of those who entertain this belief decreases according as the length of their stay in Italy increases. So, while 79.2% of those who intended to stay in Italy for one year or less believed their stay in Italy was beneficial to their country of origin, this belief was affirmed by only 21.1% of those intending to remain here for more than ten years. In parallel with this, those who consider their period in Italy as having no



bearing one way or the other on the country of origin (18.6% of the total) systematically rose from 14.3% among those who intended to stay in Italy for one year or less to 63.2% among those who intended to stay in Italy for more than ten years. This finding suggests that most foreign researchers regard spending a period of time abroad as beneficial precisely because they return home at the end of the migratory interval. The responses to this question varied with respect to the field in which the researcher was working: actually, while 81.8% of the agricultural scientists consider their period in Italy as an advantage for their country, only 54.4% of those working in medical sciences share this opinion. With respect to the geographic area of origin, only the scientists coming from the Far East seem to doubt that their stay in Italy was advantageous for their home country. About two thirds (68.7%) of the respondents said the brain drain was considered a major problem in their home country was 68.7% (Figure 11).



By and large, most of us will concur with these claims: opportunities for employment in the world of research are lacking, funds are scarce and the policies of national governments pay insufficient heed to the problems of the scientific community and, especially, the field of pure research. These failings drive many to look farther afield, particularly to the United States, for better opportunities. It is interesting that this analysis of the situation holds true not only for researchers in East Europe and developing countries, but also for their counterparts in EU member states, especially those in the south (Spain, Portugal and Greece).

British, French and Dutch researchers are divided between those who believe factors relating to work and economics in the home country prompt researchers to go to the United States, and those who believe extensive international mobility is necessary in the world of science. Of those who responded to this point, only the Germans believed their national research system was so good as to prevent a brain drain. Indeed, they believe their system succeeds in attracting foreign researchers to Germany. Also interesting is the fact that some researchers (mainly Indians and Russians, but also one Dutch citizen) believe that the brain drain does not constitute a problem for their country, because the number of researchers is simply so large that any loss can easily be made up.

In the section where they were invited to express their own thoughts about their stay in Italy, the researchers mostly expressed highly favourable opinions. In many cases, they spoke in general terms about the hospitality of the Italian people and expressed appreciation of the Italian lifestyle, and the culture, art, natural beauty and climate of the country. Many, however, also expressed admiration for the level of scientific inquiry in Italy, the excellence of the working environments and the equipment available to the public research system of the country. These, then, are among the reasons that a majority of visiting researchers found their stay in Italy extremely rewarding and want to repeat the experience.

On the other hand, many of the comments highlighted the difficulties encountered by foreigners living in Italy. Particularly recurrent were complaints regarding the acquisition of permits of residence and work, and the Italian bureaucracy.

These problems provoked strong denunciations from the few researchers from North America — one American woman declared in no uncertain terms that obtaining the necessary papers had been "a nightmare". She claimed that the only people likely to succeed in coming to work in Italy were "those who (i) have good Italian, (ii) are healthy enough to face at least one journey to Italy and numerous journeys within the United States to obtain a visa... [and] (iii) had a certain number of good Italian friends, preferably in influential positions... who are prepared to pull strings." Many other researchers from non-EU states spoke of similar problems, albeit in less colourful language, many other researchers from outside the EU reported similar difficulties. Many, especially among those from East Europe, expressly stated that these very difficulties were the reason they were not contemplating settling in Italy permanently. In addition to the bureaucratic problems, some mentioned that the lack of academic recognition accorded their qualifications made it impossible to obtain a tenured post befitting their professional level.

A surprising finding was that many researchers from member states of the EU also complained of difficulties relating to work and residency permits. For instance, a German respondent declared: "It is hardly acceptable that a citizen of the EU should have to queue in police headquarters for six hours to obtain a residency permit." A Spanish respondent was of the opinion that "the bureaucracy is stupidly complicated for EU citizens who should be able to enjoy free movement."

Another problem keenly felt by workers from EU countries was that the salary levels in Italy are well below those of their country of origin. As a Dutch researcher remarked, the pay is so bad that not only is it hard to enjoy the cultural opportunities that a stay in Italy should afford, but it is even difficult to make ends meet from one month to the next.

4. Conclusions

The extent to which we may derive general observations from the data we have illustrated is conditioned by the fact that the Italian system of research is considerably different from the systems in other EU states and developed countries in general. Although it may be relatively large, Italian GDP consists only in a very small part (6% in 2000) of high-technology products and services. Consequently, if we measure annual spending on research in Italy, we find that the public greatly outweighs the private sector, and the mobility between the public sphere and private enterprise is very limited. A foreign researcher with experience in the Italian public research system is therefore highly unlikely to find a permanent or long-term place of employment in private enterprise afterwards, whereas this is commonplace in other countries such as the United States. Further, the ratio of public spending to GDP and the ratio of R&D workers to the total workforce are both far lower than the EU average (Ministry of Universities, Research, Science and Technology, 2001).

Italy is therefore one of the industrialised countries with the lowest number of foreigners working as professionals and technicians. Unlike many other OECD and EU states, Italy has not devised any legislation that might draw in intellectual resources from abroad (Mahroum, 2001), or even offer incentives to Italian emigrant scientists to return (ADI, 2000). In these circumstances, it is hardly surprising that the intake of foreign researchers in Italy is far lower than the outflow of Italian researchers abroad. It is for this very reason that our survey was based on a small number of workers.

Given the rather small number of subjects involved in the survey, we can only make inferences about some very general tendencies. Even so, they are rather interesting. Even though the numerical presence of foreign researchers in Italian scientific institutes is small, it is not proportionately negligible with respect to the total number of researchers in Italian public research institutes (roughly 9,000). The foreign research workers in the period of our survey amounted to roughly 4% of the active scientific workforce at the time, though in some fields, the proportion was considerably higher: up to a maximum of 18.2% in INFN. This survey therefore demonstrates that these institutes are securely connected to the international circuit of scientists.

The Italian scientific institutes are chosen as a place for the completion of research training by many young academics from EU countries, particularly from France, Germany and Spain, all of which have a long history of strong cultural links with this country. In addition, the Italian institutes absorb a significant inflow of mature academics from East European countries and from a number of countries outside Europe, who come to Italy to acquire the scientific prestige that some of our research institutes can offer, and avail themselves of the quality equipment that is available here. Even so, since the number of foreign researchers intending to settle down on a permanent basis or for a long period of time in Italy is low, we cannot claim that Italy has yet become a country that attracts significant intellectual resources, not even from less economically developed countries.

In view of the appreciation expressed by respondents for the quality of the scientific institutes of Italy and the equipment available here, the chief reasons for their reluctance to settle in Italy can probably be ascribed to the low salary levels, the unlikelihood of permanent contracts of employment, and the poor prospects for career advancement in Italian research public institutes.

Given the situation, it is clear that a survey of foreign workers in the public research system of Italy cannot produce conclusions relating to the brain drain phenomenon. On the plus side, however, the practical absence of an inflow of this sort makes it possible to obtain some useful indications relating to what we might call the “natural mobility” of scientists, because factors extraneous to the internal mechanisms of the scientific system are already excluded. In this respect, our findings point both to significant differences and interesting similarities between the migration of “professionals” and the migration of “scientists.”

The chief difference is that when scientists move abroad, they are generally motivated by a desire to engage in quality work. Accordingly, the prestige of the host institute, the equipment it puts at their disposition and the working environment are determining factors, whereas other considerations that are very important to other professionals, such as career opportunities and economic compensation are less important (Koser & Salt, 1999). Further, the organisations most likely to pilot the migration of scientists are the “scientific networks” (i.e. direct contacts between researchers and research institutes), whereas the organisations that most professionals use are intermediation agencies (Iredale, 2001).

At the same time, our survey came across several major similarities. In the first place, both groups were far more disposed to temporary rather than permanent migration. That said, with respect to the situation we analysed, it was simple enough to divide the scientists between “skilled transients” (those who go abroad for a certain number of years) and “visitors” (those who stay abroad for brief periods only), whereas among other professionals, as Appleyard (1985) has already pointed out, this distinction is fading. Indeed, the profiles of the respondents to our survey reveal a substantial difference between those research workers in Italy for a brief period, and those in the country for several years.

Another major similarity is that scientific migration, in common with other forms of skilled migration, is considerably influenced by the attitudes towards foreigners not only of the immediate working environment, but the potential host society as a whole. The comments made by our interviewees demonstrate that being made to feel welcome is greatly appreciated and makes up for other kinds of problems such as, for example, the burden of bureaucracy. Conversely, Hooper (2001) argues that the substantial failure of Germany to attract Indian information technologists is due to the fact that the media has persuaded the Indians that German society is not open to foreigners.

Our survey led us to conclude that the movement of scientists between countries is the most developed form of “professional migration” and essentially an integral part of the process of internationalisation of scientific research. Since this process began so long ago and has reached an advanced stage, scientists nowadays subscribe to the idea that they are part of a single community whose common interests, conduct and a shared language are a unifying force more powerful than the separatist impulses of national identity.

5. Bibliography

1. ADI, 2000, *Cervelli in fuga : Storie di menti italiane fuggite all'estero*, Avverbi Edizioni
2. Appleyard R., 1985, *Processes and determinants of international migration*, paper presented to the IUSSP seminar on Emerging Issues in "International Migration", Bellagio, May
3. Appleyard R., 1991, *International Migrations: challenge for the Nineties*, IOM, Ginevra
4. Boulier, 1999, *La Migration des competences: enjeu de justice et de solidaritè internationale*, « People on the move », XXVIII, 81, pp. 69-79
5. Hooper, J., 2001, *Germany to offer permanent future to skilled migrants*, "The Guardian", 5 July: 12.
6. Iredale R., Appleyard R., 2001, *Introduction Special Issue: International Migration of the Highly Skilled*, "International Migration quarterly review" vol. 39, n.5 Special Issue 1/2001
7. Iredale R., 2001, *The Migration of Professionals: Theories and Typologies*, "International Migration quarterly review" vol. 39, n.5 Special Issue 1/2001
8. Koser K; Salt J.: *The geography of highly skilled international migration*, "International Journal of Population Geography", vol. 3. N. 4, dec. 1997, pp. 285-303.
9. Le Scienze *Cosa succede nelle nostre Università ?* "Le Scienze", Vol. LXVI, n. 389, gennaio 2001, pp18-19
10. Mahroum S., 2001, *Europe and the Immigration of Highly Skilled Labour*, "International Migration quarterly review" vol. 39, n.5 Special Issue 1/2001
11. MURST, 2001, *La ricerca scientifica, le nuove regole e le scelte operative* presentazione Ortensio Zecchino, Salerno Editrice Roma MMI
12. Royal Society, "Emigration of Scientists from the United Kingdom, Report of a Committee appointed by the Council of the Royal Society", London, 1963
13. Todisco E., *Mobilità dei cervelli e mobilità delle conoscenze* Atti del Convegno Internazionale *Migrazioni, scenari per il XXI secolo*, Sessione di Firenze, Firenze, 27-30 settembre 2000.

6. Annex of Tables

- Table VI-I-A1. Foreign researchers by age, gender and citizenship: Both sexes.
- Table VI-I-A2. Foreign researchers by age, gender and citizenship: Women.
- Table VI-I-A3. Foreign researchers by age, gender and citizenship: Men.
- Table VI-I-A4. Parents' education (qualification).
- Table VI-I-A5. Foreign researchers by citizenship and civil status.
- Table VI-I-A6. Do you live in Italy with your family or part of it?
- Table VI-I-A7. Employment before coming to Italy.
- Table VI-I-A8. Are you on sabbatical leave?
- Table VI-I-A9. Foreign researchers' positions in Italian public research institutions.
- Table VI-I-A10. The discipline of primary research activity.
- Table VI-I-A11. How long have you been staying in Italy?
- Table VI-I-A12. How long will you remain in Italy?
- Table VI-I-A13. Factors of decision to leave your country: to be involved in another research milieu.
- Table VI-I-A14. Factors of decision to leave your country: difficulties in finding a job.
- Table VI-I-A15. Factors of decision to leave your country: economic reasons.
- Table VI-I-A16. Factors of decision to leave your country: more autonomy in work or life.
- Table VI-I-A17. Factors of decision to come to Italy: study and scientific opportunities.
- Table VI-I-A18. Factors of decision to come to Italy: availability of scientific equipment.
- Table VI-I-A19. Factors of decision to come to Italy: invitation by Italian institution.
- Table VI-I-A20. Factors of decision to come to Italy: other factors/cultural affinity.
- Table VI-I-A21. Factors of decision to come to Italy: geographic proximity.
- Table VI-I-A22. Difficulties experienced relocating in Italy: visa/work permit administrative/bureaucratic paperwork in Italy.
- Table VI-I-A23. Difficulties experienced relocating in Italy: visa/work permit waiting period.
- Table VI-I-A24. Difficulties experienced relocating in Italy: language.
- Table VI-I-A25. Are you planning to return to your country: you have finished your study/work period.
- Table VI-I-A26. Are you planning to return to your country: you have met your scientific goals.

Table VI-I-A27. Are you planning to return to your country: job opportunities have arisen in your country.

Table VI-I-A28. How did you hear about the job you are currently in?

Table VI-I-A29. Is the brain drain a problem in your country of origin?

Table VII-1-A1. Foreign researchers by age, gender and citizenship: Both sexes.(Questions 1-4)							
Regions	Age				Total	n.a.	By region %
	<-30	31-40	41-50	51 and over			
Africa, North Africa, Middle East	5	7	1	1	14	0	5.9
North America	1	4	2	2	9	0	3.8
South America, Central America	6	12	6	0	24	0	10.1
European Union	32	29	8	7	76	3	31.9
Other European Countries	17	39	21	9	86	0	36.1
Far East	7	14	4	4	29	0	12.2
Total	68	105	42	23	238	3	100.0
Age distribution - both sexes.							
Regions	Age				Total		
	<-30	31-40	41-50	51 and over			
Percent							
Africa, North Africa, Middle East	35.7	50.0	7.1	7.1	100.0		
North America	11.1	44.4	22.2	22.2	100.0		
South America, Central America	25.0	50.0	25.0	0.0	100.0		
European Union	42.1	38.2	10.5	9.2	100.0		
Other European Countries	19.8	45.3	24.4	10.5	100.0		
Far East	24.1	48.3	13.8	13.8	100.0		
Total	28.6	44.1	17.6	9.7	100.0		

Table VII-1-A2: Foreign researchers by age, gender and citizenship: Women (Questions 1-4).							
Regions	<-30	31-40	41-50	51 and over	Total	n.a.	By region %
Africa, North Africa, Middle East	2	1	0	0	3	0	4.9
North America	1	0	1	2	4	0	6.6
South America, Central America	1	6	2	0	9	0	14.8
European Union	12	4	0	1	17	1	27.9
Other European Countries	8	12	2	0	22	0	36.1
Far East	1	5	0	0	6	0	9.8
Total	25	28	5	3	61	1	100.0
Age distribution - women							
Regions	<-30	31-40	41-50	51 and over	Total	n.a.	
Percent							
Africa, North Africa, Middle East	66.7	33.3	0.0	0.0	100.0	0.0	
North America	25.0	0.0	25.0	50.0	100.0	0.0	
South America, Central America	11.1	66.7	22.2	0.0	100.0	0.0	
European Union	70.6	23.5	0.0	5.9	100.0	5.9	
Other European Countries	36.4	54.5	9.1	0.0	100.0	0.0	
Far East	16.7	83.3	0.0	0.0	100.0	0.0	
Total	41.0	45.9	8.2	4.9	100.0	1.6	

Table VII-I-A3. Foreign researchers by age, gender and citizenship: Men (Questions 1-4).							
Regions	<-30	31-40	41-50	51 and over	Total	n.a.	By region %
Africa, North Africa, Middle East	3	6	1	1	11	0	6.2
North America	5	6	4	0	15	0	8.5
South America, Central America	0	4	1	0	5	0	2.8
European Union	20	25	8	6	59	1	33.3
Other European Countries	9	27	19	9	64	0	36.2
Far East	6	9	4	4	23	0	13.0
Total	43	77	37	20	177	1	100.0
Age distribution - Men							
Regions	<-30	31-40	41-50	51 and over	Total	n.a.	
Africa, North Africa, Middle East	27.3	54.5	9.1	9.1	100.0	0.0	
North America	33.3	40.0	26.7	0.0	100.0	0.0	
South America, Central America	0.0	80.0	20.0	0.0	100.0	0.0	
European Union	33.9	42.4	13.6	10.2	100.0	1.7	
Other European Countries	14.1	42.2	29.7	14.1	100.0	0.0	
Far East	26.1	39.1	17.4	17.4	100.0	0.0	
Total	24.3	43.5	20.9	11.3	100.0	0.6	

Table VII-I-A4. Parents education (qualification) (Question 5).				
Father's education	Men	Women	n.a.	Total
1 - Primary education	24	3	0	27
2 - Lower secondary	14	3	0	17
3 - Upper secondary	40	14	0	54
4 - Non university degree	31	9	0	40
5 - University degree	59	29	0	88
Not reported	10	4	1	15
Total	178	62	1	241
Mother's education	Male	Female	n.a.	Total
1 - Primary education	31	6	0	37
2 - Lower secondary	26	3	0	29
3 - Upper secondary	37	19	0	56
4 - Non university degree	31	6	0	37
5 - University degree	43	24	0	67
Not reported	10	4	1	15
Total	178	62	1	241

Table VII-I-A5. Foreign researchers by citizenship and civil status (Question 6).						
Regions	Civil Status				Total	n.a.
	single	married/ cohabit	widower /widow	divorced		
Africa, North Africa, Middle East	10	4	0	0	14	0
North America	2	5	0	1	8	1
South America, Central America	9	13	1	1	24	0
European Union	37	39	0	1	77	2
Other European Countries	27	52	0	7	86	0
Far East	9	20	0	0	29	0
Total	94	133	1	10	238	3
As a percent						
Regions	Civil Status				Total	n.a.
	single	married/ cohabit	widower /widow	divorced		
Africa, North Africa, Middle East	71.4	28.6	0.0	0.0	100.0	0.0
North America	25.0	62.5	0.0	12.5	100.0	12.5
South America, Central America	37.5	54.2	4.2	4.2	100.0	0.0
European Union	48.1	50.6	0.0	1.3	100.0	2.6
Other European Countries	31.4	60.5	0.0	8.1	100.0	0.0
Far East	31.0	69.0	0.0	0.0	100.0	0.0
Total	39.5	55.9	0.4	4.2	100.0	1.3

Table VII-1-A6. Do you live in Italy with your family or part of it? (Question 8).				
Regions	Yes	No	Total	n.a
Africa, North Africa, Middle East	2	12	14	0
North America	5	4	9	0
South America, Central America	12	12	24	0
European Union	33	43	76	3
Other European Countries	35	50	85	1
Far East	9	20	29	0
Total	96	141	237	4
Region distribution as a %				
Regions	Yes	No	Total	n.a
Africa, North Africa, Middle East	2.1	8.5	5.9	0.0
North America	5.2	2.8	3.8	0.0
South America, Central America	12.5	8.5	10.1	0.0
European Union	34.4	30.5	32.1	75.0
Other European Countries	36.5	35.5	35.9	25.0
Far East	9.4	14.2	12.2	0.0
Total	100.0	100.0	100.0	100.0
Response distribution as a %				
Regions	Yes	No	Total	n.a
Africa, North Africa, Middle East	14.3	85.7	100.0	0.0
North America	55.6	44.4	100.0	0.0
South America, Central America	50.0	50.0	100.0	0.0
European Union	43.4	56.6	100.0	3.9
Other European Countries	41.2	58.8	100.0	1.2
Far East	31.0	69.0	100.0	0.0
Total	40.5	59.5	100.0	1.7

Table VII-1-A7. Employment before coming to Italy (Question 10).			
Were you working?	Yes	No	Total
Men	163	15	178
Women	53	9	62
n.a.	0	1	1
Total	216	25	241
As a %	Yes	No	Total
Men	75.5	60.0	73.9
Women	24.5	36.0	25.7
n.a.	0.0	4.0	0.4
Total	100.0	100.0	100.0
If you were working in the research sector your job was:	Men	Women	Total
a) on fixed term contract	43	8	51
b) a permanent position	64	17	81
c) a study fellowship	9	0	9
d) a PhD fellowship	14	7	21
e) post-Doctorate fellowship	10	2	12
f) other	7	1	8
n.a.	16	18	34
Total	163	53	216
As a %	Men	Women	Total
a) on fixed term contract	26.4	15.1	23.6
b) a permanent position	39.3	32.1	37.5
c) a study fellowship	5.5	0.0	4.2
d) a PhD fellowship	8.6	13.2	9.7
e) post-Doctorate fellowship	6.1	3.8	5.6
f) other	4.3	1.9	3.7
n.a.	9.8	34.0	15.7
Total	100.0	100.0	100.0

Table VII-1-A8. Are you on sabbatical leave (Question 13).									
Continent	Men		Women		Gender not reported	Total			
	Yes	No	Yes	No					
Africa, North Africa, Middle East	6	5	0	3	0	14			
North America	2	3	1	3	0	9			
South America/Central America	4	11	0	9	0	24			
European Union	3	57	0	18	1	79			
Other European Countries	7	57	3	19	0	86			
Far East	4	19	0	6	0	29			
TOTAL	26	152	4	58	1	241			
Continent	Yes			No			Gender not reported	Total	Grand total
	Men	Women	Total	Men	Women	Total			
Africa, North Africa, Middle East	6	0	6	5	3	8	0	14	
North America	2	1	3	3	3	6	0	9	
South America/Central America	4	0	4	11	9	20	0	24	
European Union	3	0	3	57	18	76	1	79	
Other European Countries	7	3	10	57	19	76	0	86	
Far East	4	0	4	19	6	25	0	29	
TOTAL	26	4	30	152	58	211	1	241	
%	10.8	1.7	12.4	63.1	24.1	87.6	0.4	100.0	

Table VII-1-A9. Foreign researchers' positions in Italian public research institutions.							
(Question 14).							
	Men		Women			Both sexes	
Position	#	%	#	%	n.a.	#	%
Research director	2	1.1	0	0.0	0	2	0.8
Senior researcher	20	11.2	0	0.0	0	20	8.3
Researcher	48	27.0	16	25.8	0	64	26.6
Visiting professor/scholar	23	12.9	3	4.8	0	26	10.8
Fellowship holder	63	35.4	26	41.9	1	90	37.3
Other	19	10.7	14	22.6	0	33	13.7
N.A.	3	1.7	3	4.8	0	6	2.5
Total	178	100.0	62	100.0	1	241	100.0

Discipline	Africa, North Africa, Middle East	North America	South America / Central America	European Union	Other European Countries	Far East	Total
Biology	0	0	2	14	1	0	17
Chemistry	0	0	0	4	9	2	15
Physics	3	0	4	33	36	12	88
Other	10	8	18	28	21	11	96
n.a.	3	1	0	0	17	4	25
Total	16	9	24	79	84	29	241

Discipline	Africa, North Africa, Middle East	North America	South America / Central America	European Union	Other European Countries	Far East	Total
Biology	0.0	0.0	8.3	17.7	1.2	0.0	7.1
Chemistry	0.0	0.0	0.0	5.1	10.7	6.9	6.2
Physics	18.8	0.0	16.7	41.8	42.9	41.4	36.5
Other	62.5	88.9	75.0	35.4	25.0	37.9	39.8
n.a.	18.8	11.1	0.0	0.0	20.2	13.8	10.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Other: 04-History, 07-Social sciences, 10-Law and jurisprudence, 16-Agriculture and biology technologies, 17-Agricultural technology, 18-Biochemistry, 20-Biophysics, 22-Other agriculture and biological sciences, 23-Engineering and applied science technologies, 27-Computer technologies, 35-Engineering and applied sciences, 37-Architectural engineering, 38-Aeronautical and aerospace engineering, 39-Biology engineering, 40-Chemical engineering, 42a-Design/systems engineering, 42b-Electrical/electronic engineering, 43-Industrial engineering, 44-Mechanical engineering, 46-Other engineering, 47-Forestry, 50-Health technologies, 51-Health sciences/professions, 52-Biomedical research, 53-Pharmacy and pharmaceutical sciences, 55-Other health sciences, 56-Mathematics and physical sciences, 57-Applied mathematics, 59-Sciences, 60-Geology and related fields, 61-Mathematical statistics, 63-Metallurgy and materials sciences, 65-Other mathematics and physical sciences.

Table VII-1-A11. How long have you been staying in Italy? (Question 17).					
Continent	n.a.	up to 1 year	2-3 years	over 3 years	Total
Africa, North Africa, Middle East	1	6	9	0	16
North America	0	6	1	2	9
South America/Central America	0	12	7	5	24
European Union	3	46	14	21	84
Other European Countries	0	38	26	15	79
Far East	2	17	4	6	29
Total	6	125	61	49	241
As a % - country distribution					
Continent	n.a.	up to 1 year	2-3 years	over 3 years	Total
Africa, North Africa, Middle East	16.7	4.8	14.8	0.0	6.6
North America	0.0	4.8	1.6	4.1	3.7
South America/Central America	0.0	9.6	11.5	10.2	10.0
European Union	50.0	36.8	23.0	42.9	34.9
Other European Countries	0.0	30.4	42.6	30.6	32.8
Far East	33.3	13.6	6.6	12.2	12.0
Total	100.0	100.0	100.0	100.0	100.0
As a % - duration distribution					
Continent	n.a.	up to 1 year	2-3 years	over 3 years	Total
Africa, North Africa, Middle East	6.3	37.5	56.3	0.0	100.0
North America	0.0	66.7	11.1	22.2	100.0
South America/Central America	0.0	50.0	29.2	20.8	100.0
European Union	3.6	54.8	16.7	25.0	100.0
Other European Countries	0.0	48.1	32.9	19.0	100.0
Far East	6.9	58.6	13.8	20.7	100.0
Total	2.5	51.9	25.3	20.3	100.0

Table VII-1-A12. How long will you remain in Italy? (Question 18).					
Continent	n.a.	up to 1 year	2-3 years	over 3 years	Total
Africa, North Africa, Middle East	4	8	4	0	16
South America/Central America	3	15	5	1	24
North America	1	4	4	0	9
European Union	23	29	20	6	79
Other European Countries	17	53	11	2	84
Far East	5	21	3	0	29
Total	53	130	47	9	241
As a % - country distribution					
Continent	n.a.	up to 1 year	2-3 years	over 3 years	Total
Africa, North Africa, Middle East	7.5	6.2	8.5	0.0	6.6
South America/Central America	5.7	11.5	10.6	11.1	10.0
North America	1.9	3.1	8.5	0.0	3.7
European Union	43.4	22.3	42.6	66.7	32.8
Other European Countries	32.1	40.8	23.4	22.2	34.9
Far East	9.4	16.2	6.4	0.0	12.0
Total	100.0	100.0	100.0	100.0	100.0
As a % - duration distribution					
Continent	n.a.	up to 1 year	2-3 years	over 3 years	Total
Africa, North Africa, Middle East	25.0	50.0	25.0	0.0	100.0
South America/Central America	12.5	62.5	20.8	4.2	100.0
North America	11.1	44.4	44.4	0.0	100.0
European Union	29.1	36.7	25.3	7.6	100.0
Other European Countries	20.2	63.1	13.1	2.4	100.0
Far East	17.2	72.4	10.3	0.0	100.0
Total	22.0	53.9	19.5	3.7	100.0

Table VII-1-A13. Factors of decision to leave your country. (Question 20).						
Question 20b - To be involved in another research mileu						
	Gender					
	Male	Female	Total			
At all	26	6	32			
Medium	47	19	66			
Strongly	83	34	118			
Total answering	156	59	216			
n.a.	22	3	25			
Total	178	62	241			
By discipline	At all	Medium	Strongly	Total answered	n.a	Total
Agriculture science	3	1	8	12	0	12
Biological science	4	7	12	23	1	24
Chemistry	0	6	9	15	0	15
Physics	12	24	39	75	13	88
Engineering, Architecture science	5	11	17	33	4	37
Health science	2	4	4	10	1	11
Mathematics	1	3	2	6	2	8
Humanities science	1	1	6	8	0	8
Other	1	6	4	11	2	13
n.a.	3	3	17	23	2	25
Total	32	66	118	216	25	241
Regions	At all	Medium	Strongly	Total answered	n.a	Total
Africa, North Africa, Middle East	2	4	7	13	1	14
South America, Central America	3	5	16	24	0	24
North America	2	2	4	8	1	9
Far East	3	9	8	20	9	29
Other European Countries	9	25	41	75	11	86
European Union	13	21	42	76	3	79
Total	32	66	118	118	25	241
Duration	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	3	12	51	66	12	78
2-3 years	4	27	36	67	2	69
4-5 years	3	8	11	22	4	26
6-9 years	5	4	6	15	0	15
over 10 years	6	8	11	25	1	26
Total answered	21	59	115	195	19	214

Table VII-1-A14. Factors of decision to leave your country. (Question 20).						
Question 20c - Difficulties in finding a qualified job						
		Gender				
		Male	Female	Total		
At all		89	44	134		
Medium		36	7	43		
Strongly		19	6	25		
Total answering		144	57	202		
n.a.		34	5	39		
Total		178	62	241		
Discipline	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	10	1	0	11	1	12
Biological science	13	8	2	23	1	24
Chemistry	7	2	3	12	3	15
Physics	40	15	13	68	20	88
Engineering, Architecture science	21	8	3	32	5	37
Health science	7	1	1	9	2	11
Mathematics	5	2	1	8	0	8
Humanities science	8	0	0	8	0	8
Other	5	3	2	10	3	13
n.a.	18	3	0	21	4	25
Total	134	43	25	202	39	241
Regions	At all	Medium	Strongly	Total answered	n.a.	Total
Africa, North Africa, Middle East	6	4	0	10	4	14
South America, Central America	16	5	0	21	3	24
North America	6	1	1	8	1	9
Far East	12	0	2	14	15	29
Other European Countries	53	17	5	75	11	86
European Union	41	16	17	74	5	79
Total	134	43	25	202	39	241
Duration	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	47	9	1	57	21	78
2-3 years	37	16	10	63	6	69
4-5 years	13	7	3	23	3	26
6-9 years	8	2	3	13	0	13
over 10 years	14	6	5	25	3	28
Total answered	119	40	22	181	33	214

Table VII-1-A15. Factors of decision to leave your country. (Question 20).						
Question 20d - Economic reason						
	Gender			Total		Total
	Male	Female	Total			
At all	77	41	119			
Medium	40	10	50			
Strongly	27	5	32			
Total answering	144	56	201			
n.a.	34	6	40			
Total	178	62	241			
Discipline	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	10	1	0	11	1	12
Biological science	18	1	3	22	2	24
Chemistry	6	4	3	13	2	15
Physics	27	28	15	70	18	88
Engineering, Architecture science	18	7	5	30	7	37
Health science	8	2	0	10	1	11
Mathematics	2	1	3	6	2	8
Humanities science	8	0	0	8	0	8
Other	8	1	1	10	3	13
n.a.	14	5	2	21	4	25
Total	119	50	32	201	40	241
Regions	At all	Medium	Strongly	Total answered	n.a.	Total
Africa, North Africa, Middle East	5	5	0	10	4	14
South America, Central America	16	3	1	20	4	24
North America	7	0	1	8	1	9
Far East	9	6	1	16	13	29
Other European Countries	22	27	24	73	13	86
European Union	60	9	5	74	5	79
Total	119	50	32	201	40	241
Duration	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	40	14	1	55	23	78
2-3 years	36	13	16	65	4	69
4-5 years	10	9	4	23	3	26
6-9 years	7	4	2	13	0	13
over 10 years	15	5	4	24	4	28
Total answered	108	45	27	180	34	214
n.a.	11	5	5	21	6	27
Total	119	50	32	201	40	241

Table VII-1-A16. Factors of decision to leave your country. (Question 20).						
To be more autonomous in my work or life (question 20f)						
Gender breakdown	Gender			Total	n.a.	Total
	Male	Female	Total			
(Not) at all	62	30	92			
Medium	47	15	63			
Strongly	35	10	45			
Total answering	144	55	200			
n.a.	34	7	41			
Total	178	62	241			
Discipline breakdown	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	4	4	3	11	1	12
Biological science	8	7	7	22	2	24
Chemistry	6	3	3	12	3	15
Physics	32	27	11	70	18	88
Engineering, Architecture science	14	8	8	30	7	37
Health science	5	3	2	10	1	11
Mathematics	2	3	1	6	2	8
Humanities science	7	1	2	10	3	13
Other	7	1	0	8	0	8
n.a.	7	6	8	21	4	25
Total	92	63	45	200	41	241
Region breakdown	At all	Medium	Strongly	Total responding	n.a.	Total
Africa, North Africa, Middle East	4	2	4	10	4	14
South America, Central America	14	5	1	20	4	24
North America	4	0	4	8	1	9
Far East	4	9	4	17	12	29
Other European Countries	28	22	22	72	14	86
European Union	38	25	10	73	6	79
Total	92	63	45	200	41	241
Duration	At all	Medium	Strongly	Total responding	n.a.	Total
up to 1 year	25	14	17	56	22	78
2-3 years	26	22	15	63	5	68
4-5 years	12	8	3	23	4	27
6-9 years	5	5	3	13	0	13
over 10 years	14	6	4	24	4	28
Total answered	82	55	42	179	35	214

Table VII-1-A17. Factors of decision to come to Italy (Question 21).						
Question 21aa - Study and scientific opportunities in Italy						
	Gender			Total		
	Male	Female	Total			
At all	27	4	31			
Medium	62	20	82			
Strongly	62	35	98			
Total answering	151	59	211			
n.a.	27	3	30			
Total	178	62	241			
Discipline	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	0	2	10	12	0	12
Biological science	4	13	6	23	1	24
Chemistry	0	5	9	14	1	15
Physics	15	34	28	77	11	88
Engineering, Architecture science	3	12	15	30	7	37
Health science	3	4	2	9	2	11
Mathematics	0	3	3	6	2	8
Humanities science	1	0	7	8	0	8
Other	3	4	4	11	2	13
n.a.	2	5	14	21	4	25
Total	31	82	98	211	30	241
Regions	At all	Medium	Strongly	Total answered	n.a.	Total
Africa, North Africa, Middle East	0	3	8	11	3	14
South America, Central America	1	6	14	21	3	24
North America	1	4	3	8	1	9
Far East	2	8	9	19	10	29
Other European Countries	10	31	35	76	10	86
European Union	17	30	29	76	3	79
Total	31	82	98	211	30	241
Duration	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	5	21	38	64	14	78
2-3 years	9	26	28	63	6	69
4-5 years	5	6	12	23	3	26
6-9 years	1	5	6	12	1	13
over 10 years	6	14	8	28	0	28
Total answered	26	72	92	190	24	214
n.a.	5	10	6	21	6	27
Total	31	82	98	211	30	241

Table VII-1-A18. Factors of decision to come to Italy (Question 21).						
Question 21ab - Availability of scientific equipment						
	Gender					
	Male	Female	Total			
At all	37	14	51			
Medium	55	22	77			
Strongly	56	19	76			
Total answering	148	55	204			
n.a.	30	7	37			
Total	178	62	241			
Discipline	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	1	5	6	12	0	12
Biological science	9	10	3	22	2	24
Chemistry	1	5	9	15	0	15
Physics	17	24	33	74	14	88
Engineering, Architecture science	8	12	8	28	9	37
Health science	4	4	1	9	2	11
Mathematics	3	2	2	7	1	8
Humanities science	3	4	4	11	2	13
Other	3	5	0	8	0	8
n.a.	2	6	10	18	7	25
Total	51	77	76	204	37	241
Regions	At all	Medium	Strongly	Total	n.a.	Total
Africa, North Africa, Middle East	2	4	4	10	4	14
South America, Central America	2	13	8	23	1	24
North America	5	3	0	8	1	9
Far East	1	9	8	18	11	29
Other European Countries	14	40	19	73	13	86
European Union	28	36	11	75	4	79
Total	52	105	50	207	34	241
Duration	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	14	22	33	69	18	87
2-3 years	22	31	20	73	7	80
4-5 years	5	13	10	28	4	32
6-9 years	6	3	10	19	1	20
over 10 years	4	8	3	15	4	19
Total answered	51	77	76	204	34	238
n.a.	0	0	0	0	3	3
Total	51	77	76	204	37	241

Table VII-1-A19. Factors of decision to come to Italy (Question 21).						
Question 21ad - Invitation by an Italian Instit						
	Gender			Total	n.a.	Total
	Male	Female	Total			
At all	44	25	69			
Medium	30	10	40			
Strongly	79	22	102			
Total answering	153	57	211			
n.a.	25	5	30			
Total	178	62	241			
Discipline	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	6	1	4	11	1	12
Biological science	10	6	6	22	2	24
Chemistry	2	3	8	13	2	15
Physics	20	12	45	77	11	88
Engineering, Architecture science	10	6	15	31	6	37
Health science	4	2	3	9	2	11
Mathematics	1	2	5	8	0	8
Humanities science	4	4	2	10	3	13
Other	2	0	6	8	0	8
n.a.	10	4	8	22	3	25
Total	69	40	102	211	30	241
Regions	At all	Medium	Strongly	Total answered	n.a.	Total
Africa, North Africa, Middle East	6	2	3	11	3	14
South America, Central America	6	5	9	20	4	24
North America	2	1	5	8	1	9
Far East	6	3	10	19	10	29
Other European Countries	15	13	50	78	8	86
European Union	34	16	25	75	4	79
Total	69	40	102	211	30	241
Duration	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	22	12	30	64	14	78
2-3 years	19	15	32	66	3	69
4-5 years	6	3	13	22	4	26
6-9 years	4	1	8	13	0	13
over 10 years	12	4	7	23	5	28
Total answered	63	35	90	188	26	214
n.a.	6	5	12	23	4	27
Total	69	40	102	211	30	241

Table VII-1-A20. Factors of decision to come to Italy (Question 21).						
<i>Question 21ba - Other factors - Cultural Affinity</i>						
	Gender			Total	n.a.	Total
	Male	Female	Total			
At all	36	7	43			
Medium	53	30	84			
Strongly	62	20	82			
Total answering	151	57	209			
n.a.	27	5	32			
Total	178	62	241			
Discipline	At all	Medium	Strongly	Total	n.a.	Total
Agriculture science	3	4	4	11	1	
Biological science	3	12	7	22	2	
Chemistry	0	7	7	14	1	
Physics	23	24	29	76	12	
Engineering, Architecture science	8	7	16	31	6	
Health science	2	5	2	9	2	
Mathematics	0	5	2	7	1	
Humanities science	1	6	3	10	3	
Other	1	3	4	8	0	
n.a.	2	11	8	21	4	
Total	43	84	82	209	32	
Regions	At all	Medium	Strongly	Total answered	n.a.	Total
Africa, North Africa, Middle East	6	1	3	10	4	14
South America, Central America	1	10	8	19	5	24
North America	0	5	3	8	1	9
Far East	7	8	2	17	12	29
Other European Countries	11	27	41	79	7	86
European Union	18	33	25	76	3	79
Total	43	84	82	209	32	241
Duration	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	8	27	25	60	18	78
2-3 years	15	27	25	67	2	69
4-5 years	3	9	11	23	3	26
6-9 years	4	4	5	13	0	13
over 10 years	10	6	8	24	4	28
Total answered	40	73	74	187	27	214
n.a.	3	11	8	22	5	27
Total	43	84	82	209	32	241

Table VII-1-A21. Factors of decision to come to Italy (Question 21).						
Question 21bf - Other factors - Geographical proximity						
		Gender				
		Male	Female	Total		
At all		93	31	125		
Medium		41	19	60		
Strongly		9	5	14		
Total answering		143	55	199		
n.a.		35	7	42		
Total		178	62	241		
Discipline	At all	Medium	Strongly	Total answering	n.a.	Total
Agriculture science	6	3	2	11	1	12
Biological science	13	7	1	21	3	24
Chemistry	9	4	0	13	2	15
Physics	40	24	7	71	17	88
Engineering, Architecture science	23	7	0	30	7	37
Health science	6	1	1	8	3	11
Mathematics	5	1	0	6	2	8
Humanities science	7	2	1	10	3	13
Other	8	0	0	8	0	8
n.a.	7	12	2	21	4	25
Total	124	61	14	199	42	241
Regions	At all	Medium	Strongly	Total answering	n.a.	Total
Africa, North Africa, Middle East	6	4	0	10	4	14
South America, Central America	19	0	0	19	5	24
North America	8	0	0	8	1	9
Far East	9	3	1	13	16	29
Other European Countries	38	30	6	74	12	86
European Union	44	24	7	75	4	79
Total	124	61	14	199	42	241
Duration	At all	Medium	Strongly	Total answering	n.a.	Total
up to 1 year	23	28	5	56	22	78
2-3 years	42	14	7	63	6	69
4-5 years	19	4	0	23	3	26
6-9 years	9	3	0	12	1	13
over 10 years	18	6	0	24	4	28
Total answered	111	55	12	178	36	214
n.a.	13	6	2	21	6	27
Total	124	61	14	199	42	241

Table VII-1-A22. Difficulties experiences relocating in Italy (Question 22).						
Question 22c - Visa/Work permit administrative/bureaucratic paperwork in Italy						
	Gender			Total	n.a.	Total
	Male	Female	Total			
At all	43	25	69			
Medium	58	17	75			
Strongly	45	15	60			
Total answering	146	57	204			
n.a.	32	5	37			
Total	178	62	241			
Discipline						
	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	8	2	1	11	1	12
Biological science	9	6	7	22	2	24
Chemistry	3	7	3	13	2	15
Physics	18	32	21	71	17	88
Engineering, Architecture science	8	12	12	32	5	37
Health science	2	4	4	10	1	11
Mathematics	1	2	3	6	2	8
Humanities science	1	3	5	9	4	13
Other	6	2	0	8	0	8
n.a.	13	5	4	22	3	25
Total	69	75	60	204	37	241
Regions						
	At all	Medium	Strongly	Total answered	n.a.	Total
Africa, North Africa, Middle East	6	3	0	9	5	14
South America, Central America	12	8	1	21	3	24
North America	1	4	3	8	1	9
Far East	7	5	5	17	12	29
Other European Countries	17	31	25	73	13	86
European Union	26	24	26	76	3	79
Total	69	75	60	204	37	241
Duration						
	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	33	14	8	55	23	78
2-3 years	14	26	24	64	5	69
4-5 years	8	11	5	24	2	26
6-9 years	5	6	3	14	0	14
over 10 years	5	11	10	26	2	28
Total answered	65	68	50	183	32	215
n.a.	4	7	10	21	5	26
Total	69	75	60	204	37	241

Table VII-1-A23. Difficulties experiences relocating in Italy (Question 22).						
Question 22d - Visa/Work permit waiting period in Italy						
	Gender					
	Male	Female	Total			
At all	72	36	109			
Medium	35	10	45			
Strongly	34	10	44			
Total answering	141	56	198			
n.a.	37	6	43			
Total	178	62	241			
Discipline	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	8	1	1	10	2	12
Biological science	13	5	4	22	2	24
Chemistry	7	3	3	13	2	15
Physics	33	22	14	69	19	88
Engineering, Architecture science	18	4	8	30	7	37
Health science	5	2	2	9	2	11
Mathematics	2	1	3	6	2	8
Humanities science	5	1	3	9	4	13
Other	6	2	0	8	0	8
n.a.	12	4	6	22	3	25
Total	109	45	44	198	43	241
Regions	At all	Medium	Strongly	Total answered	n.a.	Total
Africa, North Africa, Middle East	6	3	0	9	5	14
South America, Central America	14	5	1	20	4	24
North America	5	0	3	8	1	9
Far East	7	7	1	15	14	29
Other European Countries	32	13	27	72	14	86
European Union	45	17	12	74	5	79
Total	109	45	44	198	43	241
Total Time	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	33	14	8	55	23	78
2-3 years	14	26	24	64	5	69
4-5 years	8	11	5	24	2	26
6-9 years	5	6	3	14	0	14
over 10 years	5	11	10	26	2	28
Total answered	65	68	50	183	32	215
n.a.	4	7	10	21	5	26

Table VII-1-A24. Difficulties experiences relocating in Italy (Question 22).						
Question 22f - language						
	Gender					
	Male	Female	Total			
At all	76	32	108			
Medium	48	17	66			
Strongly	30	8	38			
Total answering	154	57	212			
n.a.	24	5	29			
Total	178	62	241			
Discipline	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	7	2	2	11	1	12
Biological science	10	7	5	22	2	24
Chemistry	8	1	4	13	2	15
Physics	36	27	12	75	13	88
Engineering, Architecture science	13	15	4	32	5	37
Health science	7	1	2	10	1	11
Mathematics	3	4	1	8	0	8
Humanities science	4	4	3	11	2	13
Other	6	0	2	8	0	8
n.a.	14	5	3	22	3	25
Total	108	66	38	212	29	241
Regions	At all	Medium	Strongly	Total answered	n.a.	Total
Africa, North Africa, Middle East	4	5	1	10	4	14
South America, Central America	18	2	1	21	3	24
North America	2	3	2	7	2	9
Far East	1	9	11	21	8	29
Other European Countries	45	23	10	78	8	86
European Union	38	24	13	75	4	79
Total	108	66	38	212	29	241
Duration	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	30	21	15	66	12	78
2-3 years	29	20	14	63	6	69
4-5 years	14	9	1	24	2	26
6-9 years	3	6	3	12	1	13
over 10 years	20	3	2	25	3	28
Total answered	96	59	35	190	24	214
n.a.	12	7	3	22	5	27

Table VII-1-A25. Are you planning to return to your country? (Question 23).				
<i>Question 23aa - If yes, You have finished your study/work period</i>				
	Gender			Total
	Male	Female		
At all	12	8		20
Medium	30	13		43
Strongly	72	25		98
Total answering	114	46		161
n.a.	10	1		11
Total	124	47		172
Discipline	At all	Medium	Strongly	Total answered
Agriculture science	0	4	5	9
Biological science	1	2	7	10
Chemistry	2	2	10	14
Physics	11	19	34	64
Engineering, Architecture science	2	4	15	21
Health science	1	2	2	5
Mathematics	0	0	1	1
Humanities science	1	1	7	9
Other	2	1	2	5
n.a.	0	8	15	23
Total	20	43	98	161
Regions	At all	Medium	Strongly	Total
Africa, North Africa, Middle East	0	3	7	10
South America, Central America	2	5	8	15
North America	1	1	4	6
Far East	1	8	15	24
Other European Countries	10	12	33	55
European Union	6	14	31	51
Total	20	43	98	161
Total Time	At all	Medium	Strongly	Total answered
up to 1 year	3	14	51	68
2-3 years	11	17	25	53
4-5 years	1	8	11	20
6-9 years	0	1	5	6
over 10 years	1	0	2	3
Total answered	16	40	94	150

Table VII-1-A26. Are you planning to return to your country? (Question 23).						
Question 23ab - If yes, You have met your scientific goals						
	Gender			Total answered	n.a.	Total
	Male	Female	Total			
At all	36	13	49			
Medium	40	23	63			
Strongly	25	9	35			
Total answered	101	45	147			
n.a.	23	2	25			
Total	124	47	172			
Discipline	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	2	3	4	9	1	10
Biological science	4	4	2	10	2	12
Chemistry	1	9	3	13	1	14
Physics	26	20	7	53	13	66
Engineering, Architecture science	7	7	6	20	3	23
Health science	1	1	3	5	0	5
Mathematics	0	2	0	2	1	3
Humanities science	1	2	5	8	2	10
Other	1	4	0	5	1	6
n.a.	6	11	5	22	1	23
Total	49	63	35	147	25	172
Regions	At all	Medium	Strongly	Total		
Africa, North Africa, Middle East	2	2	6	10		
South America, Central America	3	10	3	16		
North America	2	2	2	6		
Far East	5	6	3	14		
Other European Countries	17	26	10	53		
European Union	20	17	11	48		
Total	49	63	35	147		
Duration	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	14	31	14	59	14	73
2-3 years	15	21	16	52	3	55
4-5 years	9	8	2	19	3	22
6-9 years	3	0	2	5	1	6
over 10 years	1	0	0	1	2	3
Total answered	42	60	34	136	23	159
n.a.	7	3	1	11	2	2
Total	49	63	35	147	25	172

Table VII-1-A27. Are you planning to return to your country? (Question 23).						
Question 23ac - If yes, Job opportunities have arised in your Country						
	Gender			Total	n.a.	Total
	Male	Female	Total			
At all	49	17	66			
Medium	25	16	41			
Strongly	20	11	32			
Total answering	94	44	139			
n.a.	30	3	33			
Total	124	47	172			
Discipline	At all	Medium	Strongly	Total answered	n.a.	Total
Agriculture science	3	3	3	9	1	10
Biological science	4	3	2	9	3	12
Chemistry	5	5	2	12	2	14
Physics	31	6	14	51	15	66
Engineering, Architecture science	11	4	4	19	4	23
Health science	1	3	0	4	1	5
Mathematics	1	1	0	2	1	3
Humanities science	2	2	3	7	3	10
Other	3	1	1	5	1	6
n.a.	5	13	3	21	2	23
Total	66	41	32	139	33	172
Regions	At all	Medium	Strongly	Total		
Africa, North Africa, Middle East	2	3	3	8		
South America, Central America	6	4	4	14		
North America	3	1	1	5		
Far East	4	5	3	12		
Other European Countries	30	16	5	51		
European Union	21	12	16	49		
Total	66	41	32	139		
Duration	At all	Medium	Strongly	Total answered	n.a.	Total
up to 1 year	28	18	7	53	20	73
2-3 years	22	14	13	49	5	54
4-5 years	9	5	5	19	3	22
6-9 years	1	0	5	6	0	6
over 10 years	0	0	1	1	2	3
Total answered	60	37	31	128	30	158
n.a.	6	4	1	11	3	14
Total	66	41	32	139	33	172

Table VII-1-A28. How did you hear about the job you are currently in? (Question 24)												
<i>I found it on my own with the help of:</i>	Gender											
	Male	Female	Total									
newspaper or other print medium	8	11	19									
the Internet	14	3	17									
a mobility/transfer programme	15	5	20									
a professional organisation	11	5	16									
a third party	3	5	8									
none of the above	6	4	10									
I was actively recruited by my	51	12	63									
I was told about the job by a friend	43	11	54									
other	18	3	21									
Total answering	169	59	228									
n.a.	9	4	13									
Total	178	63	241									
<i>I found it on my own with the help of:</i>												
Discipline	news- paper/ other print medium	the Internet	a mobility /transfer programme	a profession al organisa tion	a third party	none of the above	I was actively recruited by my current employer	I was told about the job by a friend	other	Total answer ing	n.a.	Total
Agriculture science	1	1	3	0	0	1	3	3	0	12	0	12
Biological science	0	2	2	2	0	2	7	6	2	23	1	24
Chemistry	1	2	1	2	2	4	1	2	0	15	0	15
Physics	2	7	6	7	0	0	31	22	10	85	4	89
Engineering, Architecture science	4	2	3	2	1	2	12	8	1	35	2	37
Health science	0	0	2	0	1	0	1	6	0	10	1	11
Mathematics	0	0	1	0	1	0	3	1	1	7	0	7
Humanities science	0	0	1	0	0	1	3	2	1	8	0	8
Other	0	3	1	2	1	0	1	1	3	12	0	12
n.a.	11	0	0	1	2	0	1	3	3	21	5	26
Total	19	17	20	16	8	10	63	54	21	228	13	241
<i>I found it on my own with the help of:</i>												
Regions	a news paper or other print medium	the internet	a mobility /transfer programme	a profession al organisa tion	a third party	none of the above	I was actively recruited by my current employer	I was told about the job by a friend	other	Total answer ing	n.a.	Total
Middle East	1	1	4	1	0	0	0	3	3	13	1	14
South America, Central America	2	0	2	2	1	0	4	11	2	24	0	24
North America	0	1	0	0	2	1	1	1	3	9	0	9
Far East	1	2	1	7	0	1	5	7	2	26	3	29
Countries	14	3	4	4	4	4	27	15	5	80	6	86
European Union	1	10	9	2	1	4	26	17	6	76	3	79
Total	19	17	20	16	8	10	63	54	21	228	13	241
<i>I found it on my own with the help of:</i>												
Duration	a news paper or other print medium	the internet	a mobility /transfer programme	a profession al organisa tion	a third party	none of the above	I was actively recruited by my current employer	I was told about the job by a friend	other	Total answer ing	n.a.	Total
up to 1 year	14	6	4	7	3	4	15	12	8	73	5	78
2-3 years	1	8	5	4	3	3	16	19	7	66	3	69
4-5 years	0	1	3	3	0	0	9	7	3	26	0	26
6-9 years	0	0	2	2	1	0	3	4	0	12	1	13
over 10 years	1	1	3	0	0	3	10	7	2	27	1	28
Total answered	16	16	17	16	7	10	53	49	20	204	10	214

Table VII-1-A29. Is the brain drain a problem in your country of origin?(Question 26).					
		<i>Gender</i>			Total
		Male	Female	n.a.	
Yes		106	39		145
No		48	17	1	66
Total answering		154	56	1	211
n.a.		24	6		30
Total		178	62	1	241
Discipline					
	Yes	No	Total	n.a.	
Agriculture science	9	3	12	0	
Biological science	10	10	20	4	
Chemistry	11	1	12	3	
Physics	57	21	78	10	
Engineering, Architecture science	24	9	33	4	
Health science	4	5	9	2	
Mathematics	4	2	6	2	
Humanities science	4	8	12	1	
Other	4	4	8	0	
n.a.	18	3	21	4	
Total	145	66	211	30	
Regions					
	Yes	No	Total	n.a.	
Africa, North Africa, Middle East	9	2	11	3	
South America, Central America	17	7	24	0	
North America	1	8	9	0	
Far East	13	11	24	5	
Other European Countries	66	6	72	14	
European Union	39	32	71	8	
Total	145	66	211	30	
Duration					
	Yes	No	Total	n.a.	
up to 1 year	55	21	76	11	
2-3 years	48	22	70	10	
4-5 years	22	7	29	3	
6-9 years	11	8	19	1	
over 10 years	9	8	17	2	
Total answered	145	66	211	27	
n.a.	0	0	0	3	

7. Technical Annex

7.1 List of Institutes Surveyed

Name	Location	Region
Centro di Specializzazione e Ricerche Economico-Agrarie per il Mezzogiorno	Portici (Napoli)	Campania
Centro Italiano di Studi Sull'Alto Medioevo	Spoletto	Umbria
CNR - Consiglio Nazionale delle Ricerche	Roma	Lazio
ENEA - Ente per le Nuove Tecnologie l'Energia e l'Ambiente	Frascati	Lazio
ENSE - Ente Nazionale delle Sementi Elette	Milano	Lombardia
ICRAM - Istituto Centrale per la Ricerca Scientifica e Tecnologica Applicata al Mare	Roma	Lazio
IEN - Istituto elettrotecnico Nazionale "Galileo Ferraris"	Torino	Piemonte
IIMS - Istituto Italiano di Medicina Sociale	Roma	Lazio
INEA - Istituto Nazionale di Economia Agraria	Roma	Lazio
INFN - Istituto Nazionale per la Fisica della Materia	Genova	Liguria
INFN - Istituto Nazionale di Fisica Nucleare	Frascati	Lazio
INFS - Istituto Nazionale per la Fauna Selvatica "A. Ghigi"	Ozzano Dell'Emilia	Emilia Romagna
INN - Istituto Nazionale della Nutrizione	Roma	Lazio
INO - Istituto Nazionale di Ottica	Firenze	Toscana
INSEAN - Istituto Nazionale per Studi ed Esperienze di Architettura Navale**	Roma	Lazio
ISAE Istituto di Studi e Analisi Economica	Roma	Lazio
ISFOL - Istituto per lo Sviluppo Formazione Professionale	Roma	Lazio
ISMA - Istituto Sperimentale per la Meccanizzazione Agricola	Monterotondo	Lazio
ISPESL - Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro	Roma	Lazio
ISS - Istituto Superiore della Sanità	Roma	Lazio
ISTAT - Istituto Nazionale di Statistica	Roma	Lazio
Istituto di Diritto Agrario Internazionale e Comparato	Firenze	Toscana
Istituto Italiano di Studi Germanici	Roma	Lazio
Istituto Nazionale di Alta Matematica " F. Severi"	Roma	Lazio
Istituto Nazionale di Geofisica	Roma	Lazio
Istituto Papirologico "G. Vitelli"	Firenze	Toscana
Istituto Sperimentale Agronomico	Bari	Puglia
Istituto Sperimentale Lattiero-Caseario	Lodi	Lombardia
Istituto Sperimentale per Colture Industriali	Bologna	Emilia Romagna
Istituto Sperimentale per il Tabacco	Scafati	Campania
Istituto Sperimentale per l'assestamento forestale e per l'apicoltura	Trento	Trentino Alto Adige
Istituto Sperimentale per l'Enologia	Asti	Piemonte
Istituto Sperimentale per l'Orticoltura	Salerno	Campania
Istituto Sperimentale per la Cerealicoltura	Roma	Lazio

Istituto Sperimentale per la Elaiotecnica	Pescara	Abruzzo
Istituto Sperimentale per la Floricoltura	Sanremo	Liguria
Istituto Sperimentale per la Frutticoltura	Roma	Lazio
Istituto Sperimentale per la Nutrizione delle Piante	Roma	Lazio
Istituto Sperimentale per la Olivicoltura	Rende	Calabria
Istituto Sperimentale per la Selvicoltura	Arezzo	Toscana
Istituto Sperimentale per la Viticoltura	Conediano	Veneto
Istituto Sperimentale per la Zoologia Agraria	Firenze	Toscana
Istituto Sperimentale per la Zootecnia	Roma	Lazio
Istituto Sperimentale per le Colture Foraggere	Lodi	Lombardia
Istituto Sperimentale per lo Studio e la Difesa del Suolo	Firenze	Toscana
Istituto Sperimentale Valorizzazione Tecnologica Prodotti Agricoli	Milano	Lombardia
Laboratorio Centrale di Idrobiologia	Roma	Lazio
MI Stazione Sperimentale per la Seta	Milano	Lombardia
Museo Civico di Storia Naturale	Milano	Lombardia
OGS - Osservatorio Geofisico Sperimentale	Saonico	Friuli Venezia
Osservatorio Astrofisico di Arcetri	Firenze	Toscana
Osservatorio Astronomico "V. Cerulli" di Collurania	Teramo	Abruzzo
Osservatorio Astronomico di Bologna	Bologna	Emilia Romagna
Osservatorio Astronomico di Brera	Milano	Lombardia
Osservatorio Astronomico di Capodimonte	Napoli	Campania
Osservatorio Astronomico di Catania	Catania	Sicilia
Osservatorio Astronomico di Padova	Padova	Veneto
Osservatorio Astronomico di Palermo "Giuseppe S. Vaiana"	Palermo	Sicilia
Osservatorio Astronomico di Roma	Roma	Lazio
Osservatorio Astronomico di Torino	Pino Torinese	Piemonte
Osservatorio Astronomico di Trieste	Trieste	Friuli Venezia
Osservatorio Vesuviano	Napoli	Campania
Stazione Sperimentale del Vetro	Venezia	Veneto
Stazione Sperimentale Industrie Oli e Grassi	Milano	Lombardia
Stazione Sperimentale per i Combustibili	San Donato	Lombardia
Stazione Sperimentale per l'Industria delle Conserve Alimentari in	Parma	Emilia Romagna
Stazione Sperimentale per l'Industria delle Pelli e delle Materie	Napoli	Campania
Stazione Sperimentale per la Cellulosa, Carta e Fibre Tessili	Milano	Lombardia
Stazione Sperimentale per le Industrie delle Essenze e di Derivati	Reaio Calabria	Calabria
Stazione Zoologica "Anton Dohrn"	Napoli	Campania
UCEA - Ufficio Centrale di Ecologia Agraria	Roma	Lazio

7.2. The Questionnaire and Related Documentation.



CONSIGLIO NAZIONALE DELLE RICERCHE
Istituto di studi sulla ricerca e documentazione scientifica
Via Cesare de Lollis, 12 00185 Roma

SURVEY ON EMIGRATION FLOWS FOR QUALIFIED SCIENTISTS INDAGINE SUI FLUSSI INTERNAZIONALI DEI RICERCATORI

Dear Colleague,

We ask you please to answer this questionnaire directed to foreign researchers spending a study or work period in an Italian research Institution.

We are carrying out a research project on international flows of scientists and engineers in collaboration with other European Union Countries. The data we are collecting on our Country will be compared to those of the other participants in order to get a complete picture of this phenomenon that has up to now been scarcely analysed. Considered the high relevance of scientists' mobility as a relevant tool for diffusion of knowledge, we hope you will participate in this survey.

Thank you for your co-operation.

The CNR Institute for Studies on Scientific Research and Documentation is part of the National Statistical System (SISTAN act n. 322, art.7, 1989) and guarantees the total confidentiality of all data collected.

For any further information please do not hesitate to contact us:

Dr.ssa M. Carolina Brandi e-mail brandi@isrds.rm.cnr.it, tel 0644879216 fax 064463836

Dr.ssa Sveva Avveduto e-mail avveduto@isrds.rm.cnr.it, tel 0644879210 fax 064463836

Caro/a Collega,

La invitiamo a rispondere al questionario che segue destinato al personale di ricerca straniero che sta svolgendo periodi di studio e/o lavoro presso le istituzioni di ricerca italiane.

L'analisi che stiamo svolgendo si iscrive in un progetto di ricerca sui flussi internazionali di ricercatori e tecnici svolto in correlazione con altri paesi dell'Unione Europea ed è finalizzata al reperimento di dati ed informazioni per il nostro Paese che verranno comparati con quelli degli altri partecipanti al progetto. Al termine di tale processo si potrà disporre di un quadro più completo del fenomeno, finora scarsamente analizzato. Data l'importanza del fenomeno della mobilità delle risorse umane come veicolo di diffusione del sapere, ci auguriamo che vorrà partecipare a tale rilevazione e la ringraziamo fin d'ora per la sua cortese collaborazione.

L'Istituto di studi sulla ricerca e documentazione scientifica del CNR fa parte del Sistema Statistico Nazionale (SISTAN d.l.g. 6.9.1989 n.322 art.7) e garantisce la più completa riservatezza dei dati.

Per ogni chiarimento non esiti a contattarci ai seguenti recapiti:

Dr.ssa M. Carolina Brandi e-mail brandi@isrds.rm.cnr.it, tel 0644879216 fax 064463836

Dr.ssa Sveva Avveduto e-mail avveduto@isrds.rm.cnr.it, tel 0644879210 fax 064463836

DEMOGRAPHY DATA (DATI DEMOGRAFICI)

1. **Age (Età):** [][]
2. **Country of birth (Nazione di nascita):**
3. **Citizenship (Cittadinanza)**
4. **Gender (Sesso):** M [1] F [2]
5. **Parents' education (qualification) (Titolo di studio dei genitori) (specify code, annex A)**
 - a) father padre: []
 - b) mother madre: []
6. **Civil status (Stato civile):**
 - a) single (celibe/nubile) [1] b) married/cohabiting (coniugato/a o convivente) [2]
 - c) widower/widow (vedovo/a) [3] d)divorced (separato/a o divorziato/a) [4]
7. **Children (Figli):**
 No [0] Yes [1] number [][]
8. **Do you live in Italy with your family or part of it (Vive in Italia con tutta o parte della sua famiglia) ?**
 No [0] Yes [1]
9. **Specify your qualifications (Indichi il suo percorso formativo)**

Qualifications (Titoli di studio acquisiti)	Discipline (specify code annex B)	Country of study (Nazione di conseguimento)
a) Bachelor (o diploma universitario italiano)		
b) Master		
c) Degree (o laurea)		
d) PhD (o dottorato di ricerca)		
e) Other specify (altro)		

JOB ACTIVITY (ATTIVITA' LAVORATIVA)

10. **Were you working before coming to Italy (Lavorava prima di venire in Italia)?**
 No [0] Yes [1]
- 10a) *If you were working what kind of occupation were you in? (specify code annex C) code.....*
 (Se sì che tipo di lavoro svolgeva) (specificare codice allegato C)
- 10b) *If you were working in the research sector your job was:*
 (Se svolgeva un lavoro di ricerca era):

- a) on fixed term contract [] b) a permanent position [] (a tempo determinato)
 (a tempo indeterminato)
 c) a study fellowship [] d) a PhD fellowship [] e) post-Doctorate fellowship [] f)
 other []
 (borsista universitario) (borsista di dottorato) (borsista post dottorato)
 (altro)

11. Please specify in which Countries have you been working, in the research sector, longer than one year and for how many years. (Indichi in quali paesi, prima di venire in Italia, ha lavorato nel settore della ricerca [per più di un anno] e specifichi la durata del soggiorno e la data)

Country (Paese)	N.of years (n. anni)	Reference years (periodo di riferimento anno):	
-----	-----	from -----	to-----
-----	-----	from -----	to-----
-----	-----	from -----	to-----
-----	-----	from -----	to-----
-----	-----	from -----	to-----

12. Please specify in which Italian research institution are you presently working

(Nome dell'ente di ricerca italiano in cui attualmente lavora)

- a) name
- b) city.....
- how long have you been there for (da quanto tempo)? (n. months) [][]

13. Please specify your present situation (Indichi la sua posizione attuale):

13a) *Are you on a sabbatical leave?* No [0] Yes [1] length months [][]
 (Sta usufruendo di un periodo sabatico?)

13b) *Are you on a contract leave?*
 (Sta usufruendo di un contratto?) (annex D specify code)

a) Beginning of your contract (Inizio dell'attuale contratto) month [][] year [][][]

b) End of your contract (Fine dell'attuale contratto) month [][] year [][][]

14. Position (Qualifica):

- a) research director (direttore di ricerca/ tecnologo) [1] d) visiting professor/scholar [4]
 b) senior researcher (primo ricercatore/tecnologo) [2] e) fellowship holder (borsista) [5]
 c) researcher (ricercatore/tecnologo) [3]
 f) other, specify (altro) [6]

15. Your contract relies on (Il suo attuale contratto grava su):

- a) Italian hosting Institution funds (Fondi ordinari dell'ente italiano) [1]
 b) Your home Institution budget (Fondi dell'ente straniero da cui proviene) [2]
 c) Italian public research project budget (Fondi di progetti italiani di ricerca pubblici) [3]
 c) European Union or other international organisation funds (Fondi di progetti dell'Unione Europea o altra Organizzazione internazionale) [4]
 d) Private firms funds (Contratto di impresa) [5]

e) Other, specify (Altro)

[6]

16. Please specify the discipline of your primary research activity (annex B discipline classification), (Indichi la disciplina prevalente della sua attività di ricerca)
specify code [][]

MIGRATION PROJECT (PROGETTO MIGRATORIO)

17. How long have you been staying in Italy? (n. months) [][]
(Da quanto tempo è in Italia?)

18. For how long will you remain in Italy? (n. months) [][]
(Quanto pensa di rimanere ancora in Italia a lavorare)

19. In which Country were you living before coming to Italy? Country :
(In quale nazione viveva prima di venire in Italia?)

20. Please state how much each of these reasons has influenced your decision to leave your Country
(Indichi quanto ciascuno di questi motivi ha influenzato la decisione di lasciare il suo Paese)

	At all (per niente)	Medium (abbastanza)	Strongly (molto)
a) Specialise in a sector not enough developed home (specializzarsi in un settore non sufficientemente sviluppato in patria)	[0]	[1]	[2]
b) To be involved in another research mileu (avere contatti con altri ambienti di ricerca)	[0]	[1]	[2]
c) Difficulties in finding a qualified job (difficoltà di trovare lavoro adeguato alla sua professionalità)	[0]	[1]	[2]
d) Economic reasons (motivi economici)	[0]	[1]	[2]
e) Political reasons (motivi politici)	[0]	[1]	[2]
f) To be more autonomous in my work or life (essere più libero/a nel lavoro e/o nella vita)	[0]	[1]	[2]
g) Family reunification (ricongiungimento familiare)	[0]	[1]	[2]
h) Other, specify (altro, specificare)	[0]	[1]	[2]

21. Please state how much each of these factors has determined your choice of coming to Italy

(Indichi quanto ciascuno di questi fattori l'ha spinto a venire in Italia?):

21a) Professional factors (fattori professionali)	At all (per niente)	Medium (abbastanza)	Strongly (molto)
a) Study and scientific opportunities in Italy (occasioni di studio e / di formazione scientifica in Italia)	[0]	[1]	[2]
b) Availability of scientific equipment (disponibilità di attrezzature scientifiche)	[0]	[1]	[2]
c) Italy is in the forefront for your research sector (l'Italia è all'avanguardia nel suo settore di ricerca)	[0]	[1]	[2]
d) Invitation by an Italian institution (invito di una Istituzione scientifica italiana)	[0]	[1]	[2]
e) More stable job opportunities (opportunità di lavoro più stabile)	[0]	[1]	[2]
f) Bilateral agreements between Italy and your Country (esistenza di accordi bilaterali tra il suo Paese e l'Italia)	[0]	[1]	[2]
g) Other, specify (altro, specificare)	[0]	[1]	[2]

21b) Other factors (altri fattori)	At all (per niente)	Medium (abbastanza)	Strongly (molto)
a) Cultural affinity (affinità culturale)	[0]	[1]	[2]
b) Knowledge of Italian language (conoscenza della lingua italiana)	[0]	[1]	[2]
c) Italian origin of your family (origine italiana della sua famiglia)	[0]	[1]	[2]
d) Married/cohabiting with an Italian partner (coniugato/a convivente con un italiano/a)	[0]	[1]	[2]
e) You moved because your spouse/mate was employed in Italy (ha seguito il suo partner che ha trovato lavoro in Italia)	[0]	[1]	[2]
f) Geographical proximity (prossimità geografica)	[0]	[1]	[2]
g) Easy access and residence in Italy (facilità di ingresso e permanenza)	[0]	[1]	[2]
h) Other, specify (altro, specificare)	[0]	[1]	[2]

22. Please indicate which difficulties have you experienced relocating in Italy (Indichi le difficoltà che ha incontrato nel trasferirsi in Italia):	None (nessuna)	Medium (abbastanza)	Strongly (molto)
a) Availability of information on Italy prior to relocating (disponibilità di informazione sull'Italia prima di trasferirsi)	[0]	[1]	[2]
b) Visa/work permit administrative/bureaucratic paperwork in your Country (difficoltà connesse a permessi di lavoro, di soggiorno e burocrazie nel suo Paese)	[0]	[1]	[2]
c) Visa/work permit administrative/bureaucratic paperwork in Italy (difficoltà connesse a permessi di lavoro, di soggiorno e burocrazie in Italia)	[0]	[1]	[2]
d) Visa/work permit waiting period in Italy (tempi di attesa troppo lunghi relativi ai permessi di lavoro e di soggiorno)	[0]	[1]	[2]
d) Visa/work permit for family members in Italy (problemi per un eventuale ricongiungimento familiare)	[0]	[1]	[2]
f) Language (lingua)	[0]	[1]	[2]
g) Housing availability and costs (alloggi disponibilità e costi)	[0]	[1]	[2]
h) Family related (i.e. schools, health/medical system) (questioni familiari: es. scuola, copertura sanitaria etc.)	[0]	[1]	[2]
i) Other, specify (altro, specificare)	[0]	[1]	[2]

23. Are you planning to return to your Country? (Ha intenzione di ritornare in patria ?) No [0] Yes [1] 23a) <i>If yes, please indicate the importance of the following reasons</i> (Se sì indichi l'importanza delle seguenti ragioni):	No importance (di nessuna importanza)	Medium importance (abbastanza importante)	High importance (molto importante)
a) You have finished your study/work period (ha concluso il suo periodo formativo/lavorativo)	[0]	[1]	[2]
b) You have met your scientific goals (ha raggiunto i risultati scientifici che si era prefisso)	[0]	[1]	[2]
c) Job opportunities have arisen in your Country (si sono sviluppate opportunità di lavoro nel suo Paese)	[0]	[1]	[2]
d) Familiar ties (legami familiari)	[0]	[1]	[2]
e) Cultural differences with your Country (differenze culturali con il suo Paese di origine)	[0]	[1]	[2]
f) Religious differences with your Country (differenze religiose)	[0]	[1]	[2]
g) Other, specify (altro, specificare)	[0]	[1]	[2]

23b) <i>If not, please indicate the importance of the following reasons</i> (Se no indichi l'importanza delle seguenti ragioni)	No importance (di nessuna importanza)	Medium impor- tance (abbastanza importante)	High importance (molto importante)
a) You plan to remain in Italy (intende restare in Italia)	[0]	[1]	[2]
b) You plan to go to another Country where better salaries are available (Intende andare in un altro Paese dove i salari sono più alti)	[0]	[1]	[2]
c) You plan to go to another Country where your research sector is better developed (intende andare in un Paese in cui il suo settore di ricerca è più sviluppato)	[0]	[1]	[2]
d) You plan to go to a Country you feel more culturally similar to yours (intende andare in un Paese con il quale ha più affinità culturale)	[0]	[1]	[2]
e) Other, specify (altro, specificare)	[0]	[1]	[2]

24. How did you hear about the job in Italy you are currently in (Come è venuto a conoscenza del suo attuale lavoro in Italia?)

24a) *I found it on my own with the help of* (l'ho trovato da solo tramite):

- a) a newspaper or other print medium (i.e. advertisement in science magazine) [1]
(una rivista o altre fonti a stampa)
- b) the Internet [2]
- c) a mobility/transfer programme (i.e. business or education programme) [3]
(un programma di mobilità/trasferimento)
- d) a professional association/organisation (i.e. engineering association) [4]
(una associazione/organizzazione professionale)
- e) a third party (i.e. placed name with employment agency) [5]
(un intermediario – agenzia)
- f) none of the above [6]
(nessuna delle voci precedenti)

24b) *I was actively recruited by my current employer* [7]
(sono stato contattato direttamente dal mio attuale datore di lavoro)

24c) *I was told about the job by an acquaintance/colleague/friend* [8]
(ho saputo di questo lavoro da un amico/conoscente/collega)

24d) *Other, specify* (altro)

25. Do you think that you staying abroad for your Country of origin

(Ritiene che la sua permanenza all'estero per il suo Paese di origine:)

a) Has been a loss/damage [1]
(sia stata un danno) why ? (perché)

a) Has been a gain/advantage [2]
b) (sia stata un vantaggio)
why ? (perché)

c) Has had no influence

(non abbia avuto conseguenze)

[3]

why ? (perché)

26. Is the brain drain a problem in your Country of origin ? (Il problema della fuga dei cervelli è sentito nel suo Paese di origine ?)

No [0] Yes [1]

Why (perché)

Thank- you very much for your co-operation. We invite you now to express your opinions concerning your stay in Italy (i.e. Did you find your stay in Italy pleasant? If you have to leave Italy would you like to come back? What could be done to ease your return?)

(Grazie per la collaborazione. La invitiamo ad esprimere di seguito considerazioni od opinioni sul suo soggiorno in Italia per es. Si è trovato bene? Se deve andare via le piacerebbe ritornare spesso in Italia? Che cosa si potrebbe fare per facilitare il ritorno? Ecc.)

ALLEGATO C - INTERNATIONAL STANDARD CLASSIFICATION OF OCCUPATIONS ISCO-88

Major group 1: Legislators, senior officials and managers

11 *Legislators and senior officials*

- 111 Legislators
- 112 Senior government officials
- 113 Traditional chiefs and heads of villages
- 114 Senior officials of special interest organizations

12 *Corporate managers*

- 121 Directors and chief executives
- 122 Production and operations department managers
- 123 Other departmental managers

13 *General managers*

- 131 General managers

Major group 2: Professionals

21 *Physical, mathematical and engineering science professionals*

- 211a Physicists
- 211b Chemists
- 212a Mathematicians
- 212b Statisticians
- 213 Computing professionals
- 214a Architects
- 214b Engineers

22 *Life science and health professionals*

- 221 Life science professionals
- 222 Health professionals (except nursing)
- 223 Nursing and midwifery professionals

23 *Teaching professionals*

- 231 College, university and higher education teaching professionals

24 *Other professionals*

- 241 Business professionals
- 244 Social sciences and related professionals
- 245 Writers and creative or performing artists

Major group 3: Technicians and associate professionals

31 *Physical and engineering science associate professionals*

- 311 Physical and engineering science technicians
- 312 Computer associate professionals

32 *Life science and health associate professionals*

- 321 Life science technicians and related associate professionals
- 322 Modern health associate professionals (except nursing)

33 *Teaching associate professionals*

34 *Other associate professionals*

- 342 Business services agents and trade brokers
- 346 Social work associate professionals

Major group 4: Clerks

Major group 5: Service workers and shop and market sales workers

Other, specify

ANNEX D – CLASSIFICATION OF CONTRACTS AVAILABLE IN ITALIAN RESEARCH INSTITUTIONS

- 01 Fixed term contract (Art. 36, 23, 17)
- 02 Fellowship awarded by the Italian hosting Institution
- 03 Fellowship awarded by the another Italian institution or firm
- 04 Fellowship awarded by International of foreign Institutions (Nato, EU. etc.)
- 05 Research contract granted by the Italian hosting Institution
- 06 Research contract granted by the another Italian Institution or firm
- 07 Other (specify).