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**Highly Skilled Migration from Albania:
An Assessment of Current Trends
and the Ways Ahead**

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C O N T E N T S

1. Introduction	4
2. The Debate on the Brain Drain	5
2.1 <i>Brain Drain: A Threat for Developing Countries</i>	6
2.2 <i>Brain Drain: A Source of Positive Feedback Effects as Well</i>	7
3. Albanian Migration and the Brain Drain	9
3.1 <i>Migration from Albania: An Overview</i>	9
3.2 <i>Brain Drain in Albania</i>	11
4. The Study	13
4.1 <i>Methodology</i>	13
4.2 <i>Findings of the Study</i>	14
5. Optimising Highly Skilled Migration from Albania: Turning Brain Drain into Brain Gain	19
5.1 <i>Reforming the Education System</i>	19
5.2 <i>Return Migration</i>	21
5.3 <i>The Diaspora Option</i>	23
6. Concluding Remarks	26
6.1 <i>Suggestions for Further Research</i>	27
References	28
Annex 1: List of Surveyed Institutions and Universities	33

1. Introduction

Within the last decade, developed countries' immigration policies have become increasingly skewed in favour of skilled migrants¹(Beine, Docquier and Rapoport 2003; OECD 2003) who, while bringing economic benefits, are also seen to assimilate more easily into their host societies. This trend has raised considerable concern among policy makers in developing countries, who are wary of having to bear the costs of educating skilled workers, only to lose the most entrepreneurial and talented of these to more developed countries. As argued by Kapur and McHale (2005), since people endowed with a high level of human capital are essential to institution building and institutional reforms, the loss of these personnel (referred to also as the 'brain drain') could potentially trap developing countries in poverty. Yet, while economists have identified a number of factors that accentuate the harm associated with the phenomenon of brain drain, more recent research has raised some questions as to whether skilled migration is truly detrimental to development. Without denying the negative effects, this research points out that skilled migration can contribute to building capacity in sending countries. For example, the prospect of exit via emigration can increase the bargaining power of productive citizens in their countries of origin, forcing governments to give value creators better deals in the form of lower taxes, better conditions of work or even reducing levels of bribery and corruption, in effect inducing governments to act in their country's own long-term interest. Recent experiences have shown that members of the diaspora – especially returnees with a deep knowledge of successful institution building, can be important forces for institutional reforms.

In the context of economic globalisation, while ensuring the freedom of the individual, the international experience has been that it is difficult to prevent migration. Existing evidence suggests that migration of highly skilled workers can play a complex role in institutional development. In this context, the real challenge faced by policy makers in developing countries today is how to minimise the losses and maximise the benefits from their talents living and working abroad.

One of the most striking recent examples of the emigration of highly skilled workers is Albania. Although partial and fragmented, the figures present clear evidence that brain drain is no small matter in Albania. Due to continued political instability, the slow pace of economic reform, cuts in funds and personnel in research institutes and, of course, the opening of its borders, skilled migration increased considerably after the democratic events in 1990. The phenomenon has been so massive that its effects are easily recognisable, especially on education and the research system (Tafaj 2001). Work by the Centre for Economic and Social Studies (CESS 2004) suggests that about 50 percent of all lecturers, research staff and intellectuals in the country, most of them young and trained in part in the West, have left Albania since 1990. In addition, nearly

¹ Highly skilled migrants are commonly understood in migration literature as those with tertiary education.

66 percent of Albanians known to have completed a doctoral degree in Western Europe or the US since 1990 have either emigrated from Albania or never returned after their graduation (UNDP 2006a).

While it is the right of these highly talented individuals to look for environments where they are more valued, it may be argued that their absence has affected institutional development in Albania, meaning both the supply of institution builders and the demand for better institutions². Indeed, in the last few years, this issue has finally attracted the attention of both the Albanian government and the larger civil society (AIIS 2005). Consequently, a number of well-publicized civil society initiatives as well as a government strategy have been put in place to deal with the phenomenon.

Despite all this recent attention on the emigration of the highly skilled, to the best of our knowledge, the migration of highly skilled workers from Albania has yet to be analysed in a systematic way. This is mainly due to a lack of reliable data documenting the brain drain in the country³. As a result, much of the discussion on brain drain from Albania has been of an anecdotal nature. There is an urgent need to have a more accurate picture of the size and intensity of this phenomenon.

By making use of qualitative and quantitative data collected in Albania in 2006 as well as quantitative data derived from a data bank established by CESS in collaboration with the Soros Foundation over 1998-1999 and 2003-2004, we hope to contribute towards filling the existing gap. This paper is organised as follows. Section 2 provides a summary of the existing debate on the economic literature concerning migration of highly skilled workers from developing countries. Section 3 first briefly reviews the pattern and chronology of Albanian emigration since 1990, before looking specifically at the emigration of the highly skilled. Section 4 presents the results obtained from analysing the information collected by our team in 2006 as well as CESS' data bank. This section is divided into two parts: the first explains the methodology employed for data collection; and the second presents the results. Section 5, based on the findings of the survey and examples of encouraging experiences from other countries, discusses a number of channels through which Albania can turn its brain drain into brain gain. The last section concludes and suggests some of the areas where research would involve a high payoff in terms of policy recommendations.

2. The Debate on the Brain Drain

Traditional literature on brain drain, grounded in the economics of education, tends to stress the negative

² For an excellent discussion of the role of highly skilled individuals in institution building in developing countries, see Kapur and McHale (2005).

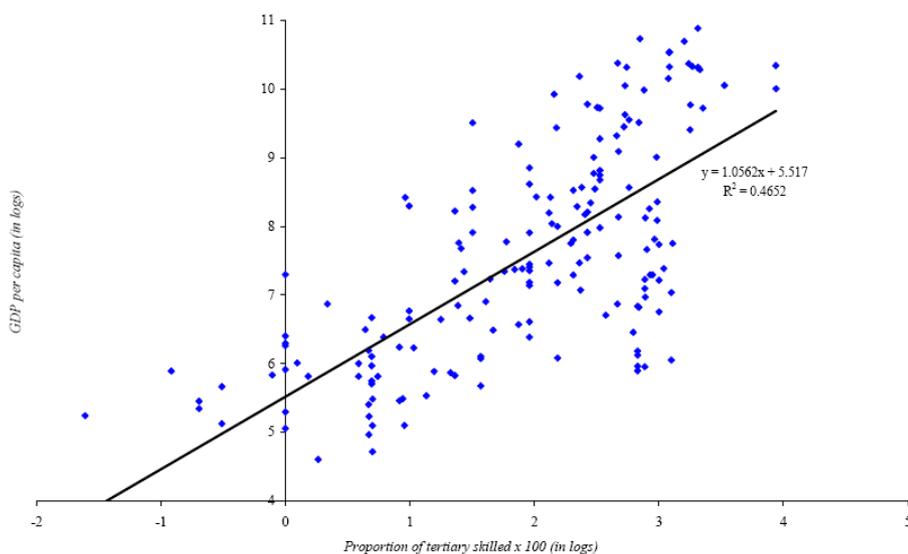
³ Until recently, national statistics have been reporting the number of emigrants in total without giving details on their age, educational level or purpose of migration.

effects of skilled migration from developing countries. However, the newer literature, rooted in neoclassical theory, is more nuanced as to the effects of the brain drain. In what follows, we will summarise the arguments of both these strands of literature.

2.1 Brain Drain: A Threat for Developing Countries

The traditional economics literature on brain drain typically argues that an outflow of highly skilled workers is likely to harm their country of origin reducing, for instance, the average level of human capital in the country's labour force. While in the short run a decline in human capital has a direct negative impact on output per capita, in the medium and long term it seriously affects the country's capacity to innovate and adopt modern technologies⁴ (Berry and Soligo 1969; Bhagwati and Hamada 1974; Lucas 2004; McCulloch and Yellen 1977). A look at cross-country data shows that the relationship between human capital and output per worker is strong (Figure 1). Modern theories of endogenous growth reinvigorated analyses of the relationship between education, migration and growth. But the first models to address the brain drain issue in an endogenous growth framework continued to emphasise its negative effects (Haque and Kim 1995; Miyagiwa 1991; Wong and Yip 1999). Apart from the loss of valuable human capital, other potential detrimental responses associated with brain drain, emphasized by the traditional literature, refer to higher public education expenditures and taxes, generation of some leapfrogging effects on low wages in sending countries, as well as higher unemployment of unskilled labour (Bhagwati and Hamada 1974).

Figure 1: Human Capital and GDP Per Capita (average 1995-2005)



Source: Docquier 2006

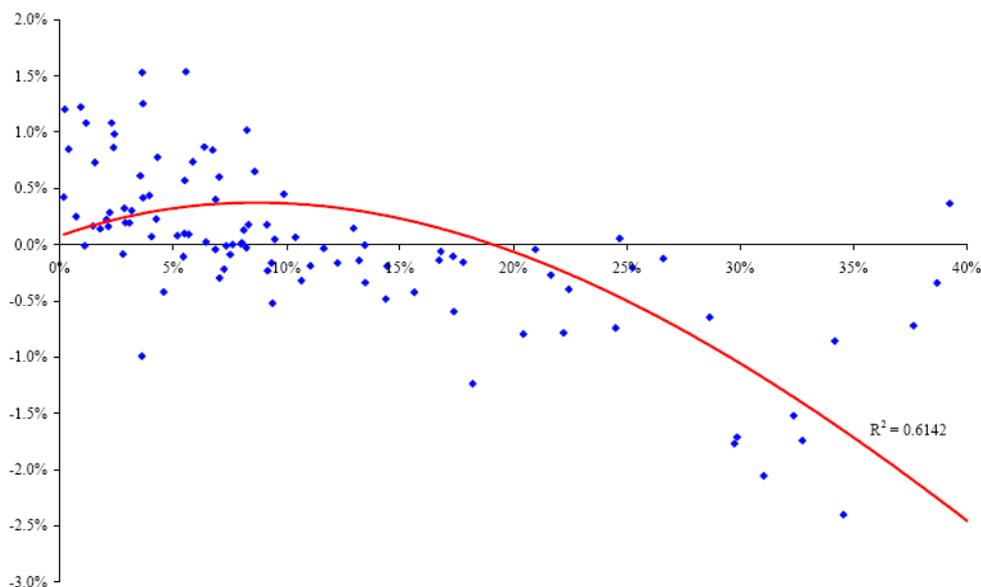
⁴ According to Bhagwati (1976), even when skilled workers happened to be unemployed at home, their social marginal productivity is not necessarily nil, as they could have moved inland in the countryside, where they would have been employed productively.

2.2 Brain Drain: A Source of Positive Feedback Effects As Well⁵

The more recent literature on brain drain is however less pessimistic and more nuanced as to the effects of the brain drain. While recognising the importance of human capital for economic development, it also identifies a number of factors that work in the opposite direction, generating what is sometimes referred to as 'beneficial brain drain'. The oldest argument here is probably the notion that emigration provides a social 'safety valve' for unemployed skilled workers in less developed countries (Bhagwati and Rodriguez 1975). A recent wave of theoretical contributions (Mountford 1997; Stark, Helmenstein and Prskawetz 1997, 1998; Beine, Docquier and Rapoport 2001, 2003) demonstrates that the possibility of emigration raises returns to education and may therefore boost investment in education. It could then well be that even after some of the educated workers have moved abroad, the home country's share of educated people rises rather than falls (Stark and Wang 2002).

Using the Carrington-Detragni estimates of emigration rates for the highest (tertiary) education as their measure of brain drain, Beine, Docquier and Rapoport (2003) find a positive and highly significant effect of migration prospects on gross human capital formation in a cross-section of 50 developing countries. Figure 2 gives the reduced-form impact of brain drain on residents' human capital.

Figure 2: Simulated Contribution of Skilled Migration Rate (x-axis) to Human Capital (y-axis)



Source: Docquier 2006

⁵ It is important however to mention that the arguments brought by the newer literature on brain drain are valid only when there is no brain waste. The term 'brain waste' is used to define situations when there is a mismatch between the skills offered by the skilled migrants and those demanded by the host labour market (for example, when a nuclear physicist finds work as a taxi driver or a bartender).

Beine, Defoort and Docquier (2006) used Docquier and Marfouk's data set (2006) and found evidence of a positive effect of skilled migration prospects on gross (pre-migration) human capital levels in a cross-section of 127 developing countries.

A different line of argument emphasises the role of remittances. According to Ratha (2004), the negative effects of brain drain are offset to some extent by remittances from migrant workers. This money raises the disposable income of recipients and their subsequent demand for various goods, most notably education (Glytsos 2001; Docquier and Marfouk 2006). However, there are many unresolved issues with this strand of literature. For instance, it is theoretically unclear whether educated migrants would remit more than their uneducated compatriots. On the one side, the former may remit more because of higher income or to meet their implicit commitment to fund educational investments. On the other side, educated migrants usually tend to come from more wealthy families, which are less in need of remittances, unless the country of origin undergoes a major crisis (Kapur and McHale 2005). Furthermore, skilled workers tend to migrate with their families, on a more permanent basis, and are therefore less likely to remit (Faini 2006).

The more recent literature on brain drain claims that sending countries can benefit from the return of migrant professionals, bringing back increased skills and knowledge (Dos Santos and Postel-Vinay 2003, 2004). However, the question of whether skilled migrants are inclined to return remains open⁶.

A number of studies have examined the impact of highly skilled workers' migration on the quality of governance (Bucovetsky 2003; Haupt and Janeba 2004). They argue that by constraining governments' abilities to tax human capital, the possibility of brain drain can induce governments to act in their country's long term interest, for instance, by raising the long term level of human capital investment and per capita income.

Considering the welfare effects of the migration of workers who produce a public good (knowledge), Kuhn and McAusland (2006) claim that while skilled migrants would benefit from higher wages and better research facilities offered by developed countries, those remaining in the home country would also benefit as the emigrants could potentially produce 'better knowledge' abroad than if they had remained at home.

Since the late 1990s, the skilled diaspora, through diaspora externalities, have come to constitute an important part of discussions on the potential benefits of the emigration of the skilled. Thus, the most recent research in this area claims that even when the brain drain depresses the average level of schooling, it is likely to increase FDI inflows (Rapoport and Kugler 2006; Docquier and Lodigiani 2006).

⁶ Borjas and Bratsberg (1996) demonstrate, for example, that return migration is characterised by negative self-selection and is seldom among the highly skilled unless sustained growth precedes return.

3. Albanian Migration and the Brain Drain

3.1 Migration from Albania: An Overview

With the exception of the communist period (1945-1990) when all forms of migration were strictly prohibited, Albanians, due to the relative scarcity of resources and opportunities within the country, have been travelling and settling abroad for work. However, it is since 1990 that emigration from Albania has reached epic proportions. Indeed, emigration has become perhaps the single most important political, social, and economic phenomenon as well as a dominating fact of everyday life in post-communist Albania (Carletto *et al* 2004; Nicholson 2002). The initial spark was the fall of the communist regime in 1990, which, even by East European standards, was excessive in its controls of citizens' life and economic activities. The fall of the regime and the unravelling of the centrally planned economy unleashed a demographic shift at an unprecedented pace. Tens of thousands of desperate people streamed over the mountainous border into Greece or commandeered often fragile boats to sail to Italy⁷.

Stabilization of both the political and economic situation after 1993 reduced emigration flows which, however, remained sizable. Inflation dropped to less than 10 percent in 1995 from a high of 226 percent in 1992, unemployment fell from 28 to 12 percent, and annual real GDP growth rates rebounded from -7.2 percent to approximately 9 percent from 1993 to 1996 (Carletto *et al* 2004).

The collapse of a series of national pyramid 'saving' schemes in late 1996 and the beginning of 1997 sparked another surge in emigration. The pyramid schemes, which had their origin in a weak formal credit system and a thriving informal market unregulated by the government, were fuelled in large measure by emigrants' remittances. At the highest point, over 2 million deposits were made in these schemes, representing over half of 1996 GDP as people sold their houses, land, livestock and other assets in order to invest on the promise of receiving up to 40 percent monthly returns on investment (Carletto *et al* 2004). The collapse, which lasted 4 months beginning in December 1996, brought down the government and triggered riots in which about 2,000 people were killed. The country fell into anarchy as the Army and the police lost control, armories were looted and foreign nationals evacuated (Jarvis 1999). Tens of thousands of Albanians fled the country. Many of them were repatriated, and a multinational force led by Italy helped to restore order and prevent a larger exodus (Pastore 1998). The return of political and economic stability in the years after helped curb and stabilize the migratory outflows.

⁷ Hall (1994) suggests that some 300,000 people – one in ten of the population – left Albania during 1990-1993.

There are no systematic data documenting the year-on-year development of Albanian emigration post-1990. There are some data on individual emigration episodes (such as the 4,500 'embassy migrants' who were granted refuge in mid-1990, or the 26,000 'boat-migrants' who were enumerated as they landed in Italy in March 1991), but annual flow data do not exist (Barjaba and King 2005). The first official data on emigration were issued by the Albanian Ministry of Labor and Social Affairs in 2000. The ministry estimated there were 800,000 Albanian migrants living abroad at the end of the 1990s: 500,000 in Greece, 200,000 in Italy and the remainder scattered across a range of other European countries and the United States, Canada and Australia. A more accurate perspective on the scale of emigration was made available with the 2001 Albanian Census. Using the census residual method (calculating net emigration as the residual of inter-censal population change minus the net difference between births and deaths), INSTAT (2002) suggested that 600,000 Albanians had emigrated and remained abroad during the period 1989-2001. Emigration was particularly evident among males (largely between 18 and 35 years of age), whose population dropped over 20 percent. More recent estimates in the National Strategy on Migration (IOM 2004) raised the figure to one million, equivalent to one-third of the Albanian population and over 35 percent of the Albanian labour force.

Based on earlier studies, three types of international migration can be currently identified in Albania (Carletto et al 2004). First, the very common *short term international migration* (for periods of days, weeks, or months), almost exclusively to Greece, particularly from bordering regions; second, *long term international migration*, to Greece and Italy as well as other countries in the European Union; and third, *legal long term international migration* to the US and Canada.

Emigration has contributed to remittances becoming a major source of income for many Albanian households and for the national economy. Officially, emigrants' transfers are estimated to have reached US\$ 1 billion annually in 2004, constituting 14 percent of GDP (IMF 2005). They have served as the most important source of foreign currency in Albania and have helped to finance an ongoing deficit in trade balance. Through increased savings, remittances have also helped the recovery of the banking sector.

A number of emigration information sources stress that emigrants include substantial outflows of highly skilled Albanians from Albania's universities and science and arts institutions – highly skilled individuals who had been staff at Albania's universities and other research institutions (Gedeshi et al 1999; Tafaj 2001; AIIS 2005; Horvat 2004). Some of them, in particular during the 1980s and 1990s, had been educated and trained in the universities of Western Europe or the US. Indeed, currently Albania has one of the highest emigration rates of highly skilled workers in the Balkan region: almost 50 percent of lecturers and researchers have left the country since 1990 (UNDP 2006a).

3.2 Brain Drain in Albania

We follow the AIIS (2005) approach and distinguish three categories of highly skilled workers that have left Albania since 1990. The first category consists of highly skilled individuals who emigrated, mainly illegally, during the two surges of mass migration in 1990-1993 and 1997-1999. Their migration decision was motivated mostly by economic, but often also by physical, survival.

The second category consists of highly skilled migrants (like scientists, technicians, researchers etc.) that emigrated mainly for economic reasons. Migrating mainly through legal channels, these individuals had usually planned the migration with the intent of permanent settlement abroad. According to AIIS (2005), there were four reasons for migration of this category of highly skilled: (i) budgetary cuts for research and development in Albania; (ii) appearance of a weak private sector which lacked the capacity to finance scientific research or even employ highly-qualified managers; (iii) political interference in state-run research and higher education institutions; and (iv) failure of the scientific community to adapt to the new system.

The third category consists of (i) Albanian-educated professors and technicians who, once abroad, enrolled in institutions of higher learning in order to improve their skills; and (ii) students of the post-1990 generation who left the country primarily for educational purposes. These are individuals who have taken advantage of possibilities offered by life in a free and open country to further their comparative advantage in the job market by completing their higher education abroad. It is estimated that every year 2,000 to 4,000 Albanian students (representing 5 to 10 percent of students enrolled in public higher education institutions⁸ in 2002-03, for example) leave to attend universities abroad, mainly in Italy, France, Germany, England, Greece and USA (Tafaj 2005; Nazarko 2005). Over 25,000 young Albanians are currently studying abroad⁹ and many hundreds are attending Master's or PhD programs in western universities (UNDP 2006a). Some 12,000 Albanian students are enrolled in Italian universities alone (AIIS 2005). This figure is likely to be much higher if we bear in mind that thousands of Albanian households have emigrated to Greece, Italy, England, Germany, the US, Canada, etc., and a larger contingent of their children enroll each year in the universities of these host countries.

Available evidence (CESS 2000; CESS 2004) indicates that unlike individuals in the first two categories, those that belong to the third are usually more open to the possibility of return as long as Albania creates the professional and, in some cases, the economic and political environment necessary for them to lead fulfilling lives.

⁸ The enrolment in public higher education institutions is 97 percent of the total (INSTAT 2005).

⁹ According to the World Bank, the number of students enrolled in public higher education institutions in Albania was estimated to be around 43,600 (excluding PhD students) in 2002-03.

When analyzing the migration of highly skilled Albanians, it is important to recognize that a significant proportion of them undergo occupational deskilling when they emigrate: former engineers, economists, teachers or artists are very often employed as gardeners, cleaners, baby sitters, housekeepers, painters or decorators. According to Glytsos (2006), the brain drain from Albania does not become a brain gain for the receiving countries, but rather a brain waste. This is the case with 74 percent of the educated Albanians in Greece, 67 percent in Italy, 58 percent in Austria and 70 percent in the US (Barjaba 2004). However, by doing low-status jobs in Western countries highly skilled Albanian emigrants earn much more than they would pursuing their careers in Albania (Barjaba and King 2005). It is therefore not surprising that in 2001, almost a third of Albania's intelligentsia was seeking work outside the country (Horvat 2004).

In the last few years, awareness of the brain drain has increased significantly. Migration of highly skilled individuals and its effects on the Albanian economy and society have been hotly debated in media articles (AIIS 2005). A number of well-publicized civil society initiatives as well as a government strategy have also been put in place to deal with the issue. It appears however that no serious empirical studies exist to substantiate the impact of brain drain on the Albanian economy and society. While considerable effort has been put into collecting, maintaining and even updating data on remittance inflows to Albania, no equivalent interest has been shown in human capital outflows. This is for the large part because Albania, like most developing countries, lacks the capabilities to compile and maintain data on the emigration of highly skilled workers. In addition, the principal measures of human capital used in migration literature – years of schooling or level of education – say little about quality. They say even less about the areas of study and how serious the loss of skilled personnel may be in important areas such as science or technology.

This notwithstanding, one can generally find two views, one negative and one moderate, proposed by researchers on the seriousness of the brain drain in Albania. In the negative view, the outflows of human capital are seen as very serious, putting future economic development, education and research in jeopardy (AIIS 2005; Bogdani 2003; Gedeshi *at al* 1999; Naegele 2001; Tafaj 2001). There is concern that the drain of highly qualified Albanians would have not only economic but also political and social consequences. Researchers are afraid that the absence of well-educated voters poses a serious threat to democracy and the electoral process itself (AIIS 2005). Nevertheless, neither has any official documentation nor any serious empirical research been done to support this view.

The more moderate view, expressed mostly by outsiders, claims that there are no real negative effects of the emigration of highly skilled workers from Albania and that the brain drain should not be a cause for concern (Horvat 2004). Glytsos (2006) argues that the (gradual) increase of the gross enrolment ratio in tertiary

education (enrolment/number of persons of tertiary education age) from 14 per cent to 18 per cent during the period 1988-2003 in Albania is to be seen as inspired, at least in part, by the possibilities for migration for the highly skilled. The negative is the lack of any benefits from this form of emigration except the growing remittances, which in 2004 amounted to US\$ 1 billion (IMF 2005), constituting some 14 percent of the GDP¹⁰ (almost the size of an economic sector).

4. The Study

4.1 Methodology

Our reflections in this section (and in the section that follows, are based on the analysis of both primary and secondary data obtained through:

- a) *Semi-structured interviews with leaders of research and academic institutions in Albania.* A total of 30 semi-structured interviews were conducted with leaders of research institutes and universities, researchers and lecturers, new graduates wishing to migrate, and researchers who had returned to Albania after completing their education abroad and were now established in different (public) institutions¹¹. The questions raised in these interviews aimed to figure out the causes and consequences of highly skilled emigration, as well as the potential for forms of cooperation with Albanian researchers abroad. All interviews were recorded and transcribed prior to analysis.
- b) *Interviews with Albanian researchers working in scientific/academic institutions abroad.* A total of 15 interviews were conducted via e-mail with Albanian researchers and lecturers working abroad. Randomness in sampling was not possible largely due to the fact that there is no accessible data from which to draw such a sample. The interviewed persons had all emigrated after the socio-political change in Albania (i.e. after 1992) and after they had received their early educational training in Albania. They had all completed their graduate studies and were employed in their areas of specialization.
- c) *A survey of 40 research institutions and centres under the umbrella of the Academy of Science (13), Ministry of Agriculture and Food (12) and other ministries and 10 public universities across the country* (a full list of the institutes, research centres and universities is available in Annex I). The survey was carried out during the period November 2005-January 2006 and its outreach included the districts of Tirana, Shkodra, Fushe-kruje, Durres, Elbasan, Korce, Lushnje, Fier, Vlore and Gjirokaster. The questionnaire was completed by either Directors of Human Resources (for the universities) or heads

¹⁰ However, as with data on emigration, national statistics have also not been able to offer details on the size /share of remittances sent by skilled migrants.

¹¹ Since emigration from private enterprises or private universities requires far more extensive research and it is very difficult to measure and assess at the current stage, in our study we are focusing mainly on the emigration of researchers and university lecturers from public institutions.

of research institutions/centres. The survey collected information on the number of researchers/lecturers who had emigrated since 1991 from these institutions/universities (divided by the country and year of emigration), as well as on their individual characteristics like age, scientific degrees and areas of expertise, work experience in the institution, training obtained abroad, etc.

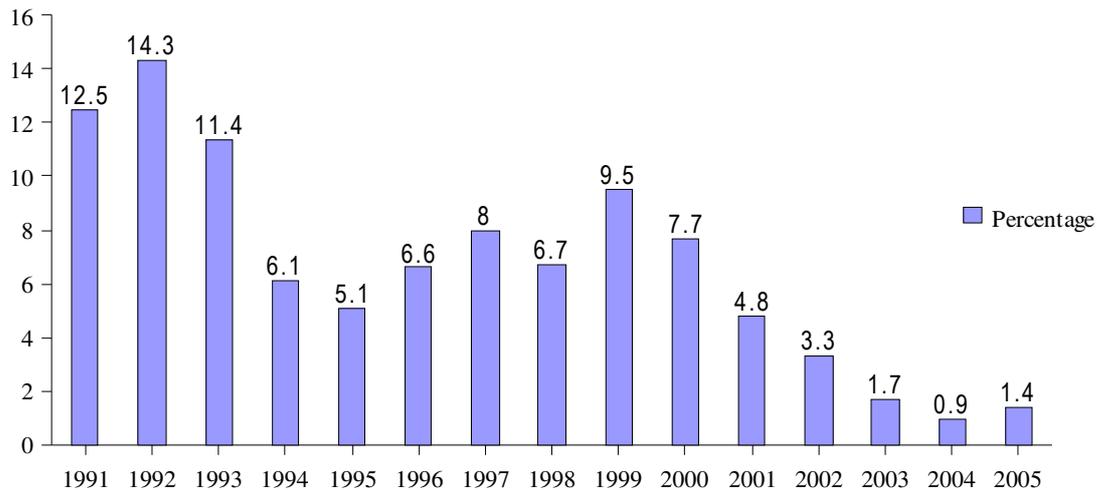
The study also makes use of quantitative data derived from a data bank established by CESS in collaboration with the OSFA (Open Society Foundation in Albania) in the period 1998-1999 and 2003-2004. The data bank contains information on some 1,140 Albanian scholars who at the time of the survey had either completed or were still attending a master's or doctoral programme at universities or research institutions in Western Europe and the US.

4.2 Findings of the Study

The survey of (public) Albanian universities and research institutions/centers revealed that during the period 1991-2005, some 1,295 academics and scientific workers had emigrated. Data provided by INSTAT (Albanian Institute of Statistics) indicates that in 2005 there were about 2,500 persons employed as scientific personnel (lecturers, assistants, researchers etc.) in public universities and research institutes in Albania. This means that for the period surveyed, more than 50 percent of academics and scientific workers had emigrated abroad. Most of them were young (47.3 percent were aged between 25 and 34 at the time of emigration) and emigrated with their families (71.4 percent).

As the data indicates, migration of academics and researchers from universities and research institutions reached its peak in the periods 1991-93 and 1997-99 (Figure 3). The peak of 1991-1993 reflects the sudden opening up of the country after a 45-year period of self-isolation as well as the economic, political and social crisis that emerged in the first years of transition. The peak of 1997-99 could be largely explained by the economic, political and social chaos that overwhelmed Albania after the collapse of the pyramid schemes.

Figure 3: Dynamics of brain drain during 1991-2005



Source: CESS' survey, January 2006

There has been a decline in the emigration of academics and researchers since 2000¹². This might be attributed to an improvement in the economic and social situation in Albania¹³. As stated in one of the semi-structured interviews, in recent years, the emigration curve in the Academy of Sciences' Institutions has marked a decline because the wages of scientists, and of people engaged in research, have gone up quite substantially¹⁴.

Increase in the average age of researchers employed by research institutes/centres in Albania was given as another factor explaining the declining tendency. Thus, the head of one of the visited institutes stated: 'One of the major reasons explaining the declining emigration rates in the agricultural institutions is the increase of average age. At the moment, the average age is over 45 years.' According to data provided by the Albanian Ministry of Agriculture and Food, only 9 percent of the research staff in the institutions under its umbrella were aged below 30, 14 percent belonged to the age group 31-40, with the rest (77 percent) being 41 and older.

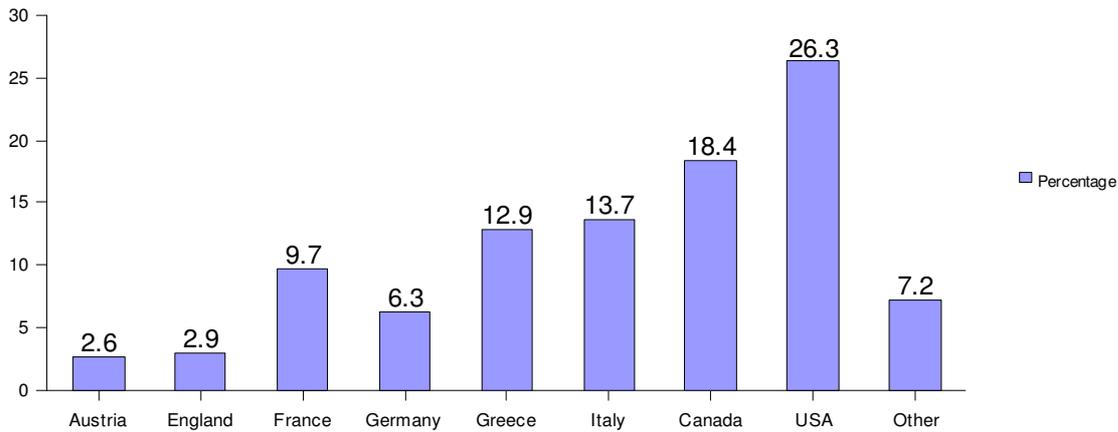
As concerns geographical distribution, the findings of our survey reveal that by late 2005, North America, the US and Canada represented the top destinations for Albanian academics and researchers (Figure 4).

¹² Nevertheless, brain drain still continues as many of Albanian's brightest students now succeed in studying elsewhere in Western Europe and the US (King 2005).

¹³ According to WDI (2005), the Albanian economy has grown at an average annual rate of about 6 percent since 1993 and GDP per capita in constant purchasing power parity dollars has doubled to US\$ 4,330 in just 10 years.

¹⁴ In 2004, the average salary in the public sector was double the average salary in 1998. And the salary of academics and scientific personnel was more than triple (IMF 2006)

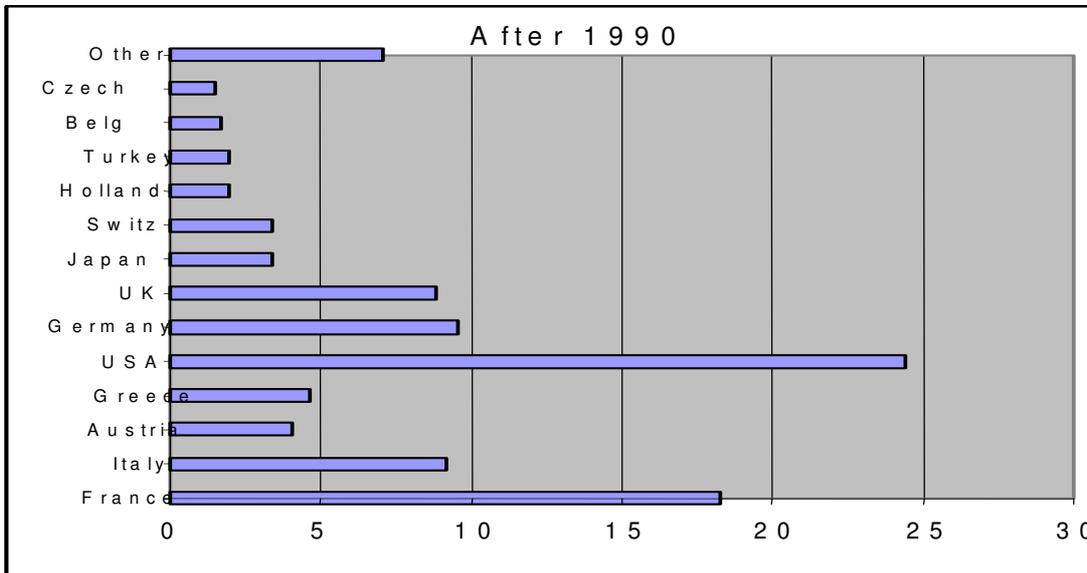
Figure 4: Emigration of academics and researchers by the country of destination in 2005



Source: CESS' survey, January 2006.

A previous study by CESS (2004) had indicated that the US was also the top destination for Albanians who had completed or were still doing their doctoral studies (Figure 5).

Figure 5: The Share of Albanian PhDs by the Countries in which Doctoral Studies were Pursued After 1990



Source: CESS. Updating the Database of Overseas Graduates, 2004.

It is indeed interesting to note that although emigration of Albanians is largely concentrated on the two neighbouring countries of the European Union, Greece and Italy¹⁵, our survey revealed that highly skilled Albanian emigrants preferred to go much further. Indeed, the emigration of highly skilled specialists to Greece

¹⁵ Greece and Italy are the destination countries for about 87% of Albanian emigrants (de Zwager *et al.* 2005)

and Italy acquires the features of a mass emigration as they are not in occupations commensurate with their degrees, leading to a 'brain waste' (UNDP 2006a). And nor is the waste or misuse of Albanian brain confined to Greece or Italy. Independent evidence from surveys in other host countries substantiates the existence of Albanian 'brain waste' (Barjaba 2004; King, Mai and Dalipaj 2003; UNDP 2000). Interim results of surveys by CESS also suggest that as many as 60 percent of Albanian intellectuals abroad are not working in their profession. One of the leaders at the Institute of Oil and Gas in Fier reported: 'As far as I know, only 5 to 10 percent of the specialists of this institute who emigrated are employed in their area of competence in the host country. Others are doing common jobs.' Of course, more detailed research is needed to elaborate the 'brain waste' issue but if it is of this magnitude, there is no doubt that it represents a considerable and irreversible loss for Albania.

The degree of 'brain waste' seems to be smaller for Albanians who have completed their Master's or PhD studies abroad. The (little) existing evidence shows that it is relatively easier for this category to make use of their human capital and integrate in the host labor markets. Thus, although there may have been some self-selection of more successful graduates in the sample, the CESS data bank (CESS 2004) indicates that almost 91 percent of those who responded, and who had obtained a PhD abroad, were performing jobs that matched their level of qualification. Indeed, the higher standard of education in the host countries (compared to Albania) as well as extra skills and insights obtained during the studies (like language skills or knowledge of the specificities of the host labor markets) help Albanians gain access to better-status jobs in the countries where they complete their Master's or doctoral studies.

All those interviewed emphasized that the emigration of highly skilled personnel meant that Albanian universities and research institutes/centres are becoming less competitive, and there is a drop in standards. A university rector, for example, complained:

[Because of brain drain] we notice degradation in the quality of work. The level of lecturing is quite poor, since a newly graduated lecturer cannot have the same level of know-how as an experienced one. Often, to address certain problems, I need to order the creation of ad hoc commissions, as the experts are missing. Those who used to be best have already emigrated and those ranked behind are hired from the private sector. If the rector faces difficulties in this respect, how can a student find the expert to consult or argue a thesis?!

Yet, reformers throughout post-communist Europe recognize that prospects of creating a new, stable democratic system in these countries, including Albania, would strongly depend on putting in place effective educational reform. A weak educational system today would result in the creation of a weak elite, and it is the elite who need to shoulder the responsibility of guiding the post-communist government in the next decade

(Tascu, Nottsinger and Bowers 2002). And, if the standard of teaching is poor at the level of public universities, the prospects for creating an effective and responsive future social and political order will be severely compromised.

The scale of the brain drain and especially the desire to emigrate amongst the young scientific personnel in universities and research institutions all over the country has negatively affected the long-term motivation for conducting research. For, while engagement in research yields results only in the long term, the brain drain encourages people to think in the short-term. As an academic at the Polytechnic University of Tirana stated:

Thinking in the short-term has become 'a modus vivendi'. Young people are predisposed to program in the short-term. Many of them consider the university as a trampoline to reach another country or win a scholarship. They are always in the hope of something better to follow. I do fear these deformations, which inhibit their ability to mature as researchers/scientists.

In many of research institutions, research 'memory' is wasting away, and no means remain for the transmission of experience and knowledge from one generation to the other. As the head of an institution under the Ministry of Agriculture and Food stated: 'Because of the brain drain, our institutions are suffering the loss of a part of their research memory. We have made efforts to create a register of the research results or a database accessible to all of us. But, it's not at all easy.'

The head of another research institute commented:

One of the peculiarities of the emigration of researchers is the emigration of middle-aged and highly qualified people. As a result, in our institute only the age groups at the extremes remain -- the oldest and the youngest contingents. Given that the young professionals do not possess adequate experience, the transmission of know-how becomes difficult.

All our sources indicate that in the last years emigration from Albania has stabilized. Nevertheless it is likely to continue in the near future as a result of both, the demand for labour (and low birth rates) in the West¹⁶, and the poor economic conditions in Albania (despite some improvements, Albania remains the poorest country in the Balkan region and the among the poorest countries in Europe). In addition, the newest trend in EU countries, in the increasingly global battle for the best and brightest, is to deliberately target highly qualified immigrants (see, for example, the EU Blue Card scheme). In this context, today's challenge for Albania is how to capitalize on current migratory processes in order to improve its own medium and long term growth.

¹⁶ Studies suggest that current population age structures in European countries like Italy, Greece and Germany -- destinations which are quite attractive to Albanian emigrants -- can be maintained until the year 2050 only through immigration.

5. Optimizing Highly Skilled Migration from Albania: Turning Brain Drain into Brain Gain

The presence of a highly skilled elite is a necessity if Albania wants to proceed with economic development and successfully implement reforms. The brain drain, which Albania is currently facing, may have detrimental effects on the Albanian transition if proper policies are not put in place. In the discussion that follows we highlight a number of channels through which the country can reduce the outflows of highly qualified citizens as well as provide the opportunity to those that have already emigrated to actively engage in the economic and social development processes at home.

5.1 Reforming the Education System

Stark, Helmenstein and Prskawetz (1997, 1998) have demonstrated that the possibility of emigrating to higher wage countries may stimulate individuals to pursue higher education in anticipation of finding higher paid work abroad. As enrolments increase, spurred by the perceived opportunity for emigration, average human capital increases and, therefore, overall source country growth gets stimulated (Stark and Wang 2002). Related to these arguments, there is the view that policies aimed at improving the quality and capacity of higher educational institutions in source countries is likely to have a beneficial long-term impact (Lowell, Findlay and Stewart 2004).

Aiming to update the data bank established by CESS in the period 1998-1999, in co-operation with the Soros Foundation in Tirana, CESS conducted a new survey with PhD holders or candidates in universities in Western Europe and the US in 2003-2004. In this survey, 108 individuals were asked what they would like to see changed with respect to working conditions in Albanian universities and research institutions. Twelve percent of the respondents called for radical reforms. In particular, they wanted these institutions managed by individuals selected according to professional rather than political criteria. They wanted to see individuals who could understand research and motivate researchers. The respondents also wanted to see gender equality at all levels. Some respondents (10 percent) called for the application of international and fair selection standards by universities and research institutions when hiring scientific personnel. Another 10 percent highlighted the need for increased investments in academic and scientific infrastructure from both the public and private sectors.

Existing evidence and international experience suggests that in order to avoid the outflow of the best and brightest students and researchers, Albania must offer a more attractive education system for potential students as well as academics and researchers. Amongst the steps that can be taken in this direction are:

- Improving the existing infrastructure as well as training teaching personnel in higher education institutions: Most Albanian students choose to study abroad because they are unhappy with the quality and quantity of information provided by Albanian universities (Kajsiu 2005). Albanian universities have indeed shown some interest in modernizing their curricula¹⁷. While new universities have been set up, existing ones have quadrupled the number of departments they boast since 1990¹⁸. However, the increase in demand for higher education has not been accompanied by an increase in full-time teaching personnel, nor in the necessary infrastructure. Consequently, universities have been forced to hire outside the higher education system, including often untrained and unqualified teaching staff. According to 1998-99 data provided by the Albanian Ministry of Education, half of the academic staff of 7 (out of the 11 at that time) higher education institutions were not suitably qualified (Tsakonas 2002)¹⁹. Albania's economic situation of course has important implications for feasibility at this point. With severely constrained public finances, it is very difficult for the government to address all infrastructure and teaching needs of the higher education system in the country. Cooperative ventures or partnerships between Western countries and Albania could hence be very useful at this stage.
- Setting up higher education institutions that provide high quality education for the talent at home: Creation of Western style programs like the Executive MBA program at the American University in Bulgaria, for example, or the American Higher Education Information Center in Hungary, would be a first step in this regard. Since setting up of such institutions would be rather expensive at a time when the Albanian state lacks the financial sources, stimulation of private investors²⁰, both Albanian and foreign, to participate more actively in the higher education system in the country is advised.
- Reforming (public) institutions of education and research: Educational reform is very important for increasing 'supply side' incentives to keep the country's best and brightest at home. A study on brain drain carried out in 10 EU countries (Casey, Mahroum and Barre 2001) concluded that institutional attractiveness is a cornerstone for slowing the brain drain and turning it into brain gain. Only reformed institutions that operate on the basis of democratic rules have a long term strategy of reform, and extensive cooperation with others abroad can be attractive, especially for young Albanian scientists.
- Reversing the long-term decline in funding for research and development: In particular, special grants should be given to (public) universities and research institutes to make it possible for them to open new positions for talented young Albanian scientists. Close cooperation of the Albanian government

¹⁷ There are 14 public higher education institutions in Albania, 9 of which are universities and 5 non-university tertiary institutions.

¹⁸ In 1990 there was only one university and seven higher pedagogical and agricultural institutes in Albania. In the period between 1992 and 1996, 4 of the latter acquired University status.

¹⁹ Very recently the Albanian government announced that in 2008, Albanian public universities would be able to hire, according to their needs, up to 400 new lecturers and assistants. While this provides a possible solution to the lack of teaching staff at universities, there is also unhappiness in some quarters with the government's proposal that priority be according to hiring candidates who have studied in Western universities (Bardhi 2008).

²⁰ One way of stimulation would be, for example, by exempting private investors interested in investing in tertiary education from the high 20 percent value added tax.

- with potential donors would assure there are enough funds for research.
- Consolidating existing (public) universities instead of feverishly establishing new ones without prior internal or external debate: The establishment of the University of Durres in 2006 is a case in point. Quality becomes the first casualty when there is such expansion without consolidation. A recent media article indicated that students at this university were requesting the rector to lower the pass marks to 40 percent (Metropol 2007).

5.2 Return Migration

Return migration of the highly skilled is thought to generate significant benefits for migrant-sending countries: their newly acquired skills, taste for innovation, financial resources and links to networks can boost productivity and economic development at home (Lowell, Findlay and Stewart 2004). So far, favourable impacts have been attributed to returning highly skilled migrants in Ireland, Korea, China, Taiwan and India. For example, by providing a significant boost to human capital resources at a time when skill shortages were becoming more apparent, returning Irish emigrants fuelled the Irish economy, and the high-tech sector in particular (Kapur and McHale 2005). Taiwan's leapfrogging might also in no small measure be attributed to returning scientists and may well have served as one model for China's or India's current information technology boom (Saxenian 2001). In Jamaica also there has been a recent increase in return migration, driven by an improvement in the country's fortunes and a perception that returnees can assume higher levels of responsibility at home and at a much younger age than they could in the US or the UK (Kapur and McHale 2005).

Yet, although the return option has been successfully realized in a number of newly industrialized or big developing countries, the existing evidence suggests that the return began and was sustained by fast economic expansion in these countries, leading to the growth of industry, scientific and technical systems, and a narrowing of the gap in the standard of living between these countries and more developed countries²¹. In addition, in the case of skilled migrants, return migration tends to amplify the initial selection bias (Borjas and Bratsberg 1996). Solimano (2002) reports that, at least in science and engineering, a large fraction of PhD graduates from developing countries tends to remain in the US after graduating. According to Teferra (2004), China's most talented technicians overseas have also ignored the government's pleas to return.

Nonetheless, those amongst the highly skilled who do return are likely to have a utility function that places greater weight on the public good rather than private return. Furthermore, such individuals are likely to have a greater commitment to institution building, which is a non-tradable public good with returns that cannot be

²¹ It was the huge turnaround in the Irish economy in the 1990s, for example, that lured many emigrants back. In South Korea and Taiwan in earlier years, return migration of the highly skilled increased once technology sectors took off in these countries.

appropriated privately (Kapur and McHale 2005). Ammassari (2003) finds that in West Africa, for example, returnees were instrumental in introducing new work practices and technologies and in stimulating investment.

Turning to Albania, we are aware of only two studies aiming to analyze the return migration option among highly skilled Albanian emigrants: one conducted by the Albanian Institute for International Studies (AIIS) in 2004 and the other conducted by the Center for Economic and Social Studies (CESS) in 2003-2004. The AIIS study targeted Albanian students abroad in general (and included returnees) while the CESS study targeted PhD holders or candidates in universities in the EU and the US. Although the samples obtained by both surveys were not representative²² and as such no serious inferences can be made, the results still provide several important hints. For example, the AIIS study revealed that while 21.4 percent of Albanian students abroad had definitely decided to return upon completion of their studies, a larger share (36.9 percent) considered it an option. Even if only 10 percent of Albanians currently studying abroad return, the gain of human capital (that may not have been developed had the students stayed in Albania) for such a small country would be enormous (about 2,500 professionals with university degrees from Western countries), especially if we consider that the current number of scientists and academics employed in Albanian universities and research institutes/centers is approximately 2,500.

It seems that career-related issues as well as income are seen by highly skilled Albanian emigrants as important factors when deciding to return to Albania. In the AIIS study, when the individuals who were not sure if they would return (36.9 percent) were asked to specify reasons for not returning, almost half of them (44.4 percent) named an unattractive work ethic as the primary reason. Living standards came as the second reason (38.9 percent) and scarce employment opportunities in Albania came as the third (33.3 percent). These three factors were also rated as the most important factors influencing the decision not to return for the group of students who were *not* planning to return (57.1 percent, 42.3 percent and 34.3 percent respectively). In the CESS survey, income was specified as the most important factor (32 percent of respondents stated that higher remuneration was necessary to justify the many years' investment to get a PhD and enable them to have a decent standard of living), followed by the economic and political stability of the country (picked by 16 percent of the respondents).

Currently, a number of civil society initiatives exist that deal with the return of Albanian students abroad. These include MJAFT!, Albstudent, and New Albanian Generation (AIIS 2005). In the period 1998-2004, the OSFA in Tirana initiated a fellowship programme, the main aim of which was to attract back students who had graduated abroad. The programme financed 156 individuals who returned to Albania and accepted

²² The lack of complete demographic data on this population makes it almost impossible to design a representative survey.

employment in the public sector²³. It awarded them between 1 and 4 supplementary wages at an average payment of US\$ 350 per month (Nazarko 2005). The private sector has also begun to take an active interest in attracting Albanian students who graduated abroad. Raiffesen Bank, for example, recently concluded an internship with 40 students, some of them currently studying abroad. The Albanian Chamber of Commerce has also initiated a similar project.

However, experience from other countries has shown that programmes to encourage the return of overseas professionals can be very costly in terms of, for example, being able to offer competitive salaries and the fixed costs of establishing research centres, which might in turn create resentment amongst those who stayed at home, increasing their incentive to depart. Only an open, growing economy offering opportunities will encourage highly skilled migrants to return, and eventually make retention of the best and brightest a possibility. But the current high rates of corruption and lack of transparency in Albania is preventing the implementation of a successful economic strategy²⁴. The situation is marked by low wages, high unemployment, and inadequate health and educational services. Without noticeable improvements in governance indicators and especially in internal organizational norms that establish clear, transparent, and universal rules of behaviour, the capability of Albania to attract well-educated employees, particularly those who graduated abroad, remains very low.

5.3 The Diaspora Option

Since the late 1990s, many developing countries that have been experiencing large outflows of highly skilled workers have been paying more attention to the so-called 'diaspora option', which assumes that although people decide to move for better opportunities, they may still wish to be involved with the development of their home country and retain connections and networks because of cultural, familial or other ties. As Meyer and Brown (1999) note, a crucial advantage of tapping into the diaspora is that it is not dependent on the massive infrastructural investment that is required to make return an option as it consists in capitalizing on already existing resources. Especially because people tend to associate with others sharing the same norms and values, networks of expatriates can have a high impact and thus the highly skilled can contribute to the development of their home country even if they are not physically at home. In addition, through these networks the home country may have access not only to their individual embodied knowledge but also to the socio-professional networks in which they are inserted overseas (OECD 2001). Therefore, the diaspora option represents a potentially relatively low-cost way of capturing tangible returns from highly skilled emigrants.

²³ It is worth mentioning that under this fellowship programme, 26 fellows were promoted to higher-ranking positions, of which six came to ministers, deputy ministers and ambassadors (UNDP 2006b).

²⁴ In 2006, Albania was ranked 111 out of 163 countries (Transparency International).

Many countries, including Hungary, Romania, Poland, Slovakia, Croatia, India, China, Malaysia, South Korea, Singapore, Taiwan, Tunisia, Morocco, South Africa, Chile and Columbia, seem to have tapped with different degrees of success into their diasporas. From the beginning of the post-socialist transition, Hungary, for example, has made attempts to activate its network of emigrant scientists. At the same time, the Polish of Chicago, the Slovaks of New York, and the Croatians of Sydney are all getting mobilized by their countries of origin (Portnoff 1996). The FORS Foundation seeks to involve Romanian scientists both in Romania and abroad in contributing to the socio-economic development and reform process of that country (Meyer and Brown 1999). In Thailand, the government-sponsored project, *Thai Reverse Brain Drain Project*, facilitates technical linkages with Thais living overseas (Lucas 2003). Columbia co-ordinates the *Caldas Network of Scientists and Engineers Abroad* (Ellerman 2003). And the Malaysian and South African governments have increasingly made use of the Internet to involve highly skilled expatriates.

Although a new and still developing option, the diaspora option has received substantial support also from international organizations such as UNESCO, UNDP, IOM and the World Bank on account of the advantages that it holds for co-operation and development in developing countries. These institutions are running programmes that aim to involve diasporas in development through skills exchange – either through temporary return, or even 'virtual' return. Thus, UNDP has been promoting TOKTEN (Transfer of Knowledge Through Expatriate Nationals) in countries such as China, India, Lebanon, Nepal, Pakistan, Palestine, the Philippines, Turkey, and Vietnam, whilst a similar and more recent IOM programme, MIDA (Migration and Development in Africa), has sought to promote the engagement of highly skilled professionals in Africa, notably in Rwanda, Burundi, the Democratic Republic of Congo and Ghana. There is also a TOKTEN-style programme in Somalia called QUESTS (Qualified Expatriate Somali Technical Support), which is aimed at highly skilled expatriates in education, health and agriculture. Indeed, UNDP has initiated a similar programme in Albania as well since March 2006 (UNDP 2006b).

In recent years, Albanian emigrants have also created networks such as the Alb-Shkenca Forum (the largest of these networks with 850 members, mostly scholars), Albstudent (International Network of the Students' Associations), the Albanian Forum, etc. Alb-Shkenca members, for instance, discuss among themselves many of the current problems in Albania and express their commitment 'in offering a volunteer contribution' for the progress of science and technology in the country (Alb-Shkenca Bulletin 2006). Active participation by intellectuals living and working in Albania in these fora plays a significant role in adjusting the suggestions emerging here to Albanian realities. Mr Myqerem Tafaj, currently chief advisor to the Albanian minister for education, for instance, is an active member of the Alb-Shkenca Forum.

A great advantage of the diaspora option is that it does not require massive infrastructural investment, which is

often beyond the reach of many developing countries. But it does require a firm commitment on the part of the countries of origin, as well as strategic thinking and management. The Albanian government, for instance, needs to assist in the creation and consolidation of Albanian scientific diaspora networks. With new communication technologies, it is relatively easier to establish networks to connect the scientific and academic elite overseas with the national scientific and academic community. This cooperation would help the national communities both to obtain recent information of a scientific and technical nature, and to consolidate and become global. Indeed, in an era of globalisation, such global links may be more important than the human capital 'stock' in Albania.

The little evidence that exists suggests that a large part of the Albanian diaspora is willing to co-operate with universities and research institutions at home. According to the CESS data bank (2004), nearly 89 percent of those with a doctoral degree working in the West expressed willingness to collaborate (Table 1).

Table 1. The Will of Diaspora for Co-operation with Albanian Institutions

<i>The will for cooperation with the Albanian institutions</i>	<i>By percentage</i>
Yes	89.3
No	1.8
It depends	0.9
NA	8.0
Total	100

Source: CESS, Updating the database of overseas graduates, 2004

This cooperation can be realized in various forms. Interviews with the heads of universities and research institutions in Albania and with Albanian academics and researchers living abroad suggest the following:

- Invite Albanian academics and researchers working in universities, laboratories and research institutions of industrialized countries to deliver a few weeks' or months' cycle of lectures in Albanian universities, depending on their expertise. In the long run, it might even be possible to organize lectures through video links (Tafaj M 2005). In this way, the country can tap into emigrant Albanian academics and researchers without them having to physically return.
- Invite Albanian academics and researchers abroad, depending on their expertise, to provide training and consultancy in Albania, especially for the government.
- Invite Albanian academics abroad to act as peer reviewers for research published in Albanian scientific journals.
- Those who are enrolled for a Master's or PhD abroad could be encouraged to conduct their thesis on a field linked to Albanian issues. In addition, when they complete their dissertation, the same students

could be encouraged to put into practice their learning through, for example, getting them actively involved in different consultancy projects undertaken by the Albanian government or international organizations like IOM, IMF or the World Bank.

- Based on their international experience, Albanians abroad could be brought into teams to draft project proposals for grants allocated by international institutions. They can also be invited to participate in the assessment of the efficiency of projects implemented in Albania and which require international expertise.
- Albanian skilled expertise from abroad could be used in the establishment of new academic and research institutions.

Universities and research institutes in Albania should be part of these initiatives in order to ensure a committed and long-term approach to bringing back and utilizing these capacities in the form of curriculum formulation and education projects. Indeed, the Albanian government should establish a special program in order to offer financial possibilities for universities and research institutions to invite back Albanian academics and researchers who work abroad for short periods. Albanian diplomatic embassies could play a supportive role in this endeavour, particularly in the US, France, UK, Germany, Italy, Austria, Greece, and Switzerland, maintaining regular contact with highly skilled Albanian expatriates, inviting them to formal ceremonies or whenever high-ranking personalities from Albania visit these countries, while also informing them about new developments at home.

However, successful cooperation with the research diaspora hinges on the reform of these institutions at home, including improvements in the quality of research, reflected particularly in the poor quantity and quality of publications in local journals and the negligible number of publications in international journals (Luçi 2004).

6. Concluding Remarks

This study has made an effort to shed light on the out-migration of highly skilled workers, the so-called 'brain drain', from Albania. Amongst the massive emigration flows in the post-1990 period, this phenomenon has been rated as particularly relevant to undermining the quality of the country's transition. Given the multiple migratory venues open to highly skilled Albanians, it will become increasingly difficult for Albania to retain the existing pool of technicians and scientists unless proper policies are in place, and soon. International experience has shown that it is difficult to prevent emigration. At the same time, the weakness in institutional capacities means that Albania cannot really afford another decade of brain drain. Fortunately, because of media articles as well as widespread anecdotal evidence, the awareness of the phenomenon has increased significantly in the last few years.

Given the fact that gaps in economic and social development between Albania and the EU or the US are likely to persist into the coming decade (Albania is the second poorest country in Europe), the migration of highly skilled individuals to destinations outside Albania will continue. The emerging priority for Albania is not to stop migration, but to see how the benefits of migration might be optimised, tapping into the educated and skilled both at home and abroad. There are three possible routes to achieving this. The first would be by reforming the existing education system in the country. Since strengthening educational institutions is likely to have a beneficial long-term impact, it would be beneficial for Albania to offer a more attractive education system for potential students as well as professors and researchers who might want to return. Second, there is the (ideal) option of return migration with expatriates bringing home new skills, experience and financial resources. This, however, entails certain preconditions, which can hardly be met in the short or medium term, although the AIIIS (2005) study suggests that it is time for Albania to formulate a national strategy to attract and integrate Albanians who studied abroad into both academia and the civil service. The third channel would be the mobilization of the Albanian diaspora. Although the vast majority of Albanian highly skilled emigrants may be firmly grounded in their new destinations, a good number of them would be willing to contribute to political, economic and social life in Albania and become part of the transnational community that links Albania to the rest of the world. We think that it is time to move beyond bemoaning the flight of Albanian intellectuals. Given the interest and commitment of Albanian highly skilled emigrants to contribute at home, Albania should pay closer attention to encouraging a continuous dialogue with its citizens wherever they settle.

6.1 Suggestions for Further Research

The sections above highlighted the lack of information and analysis on a variety of issues that seem to be crucial in assessing the size and intensity of highly skilled migration from Albania. The lack of research prevents Albanian policy makers from having the relevant information to develop a coherent policy framework to deal with the brain drain and its implications.

An examination of current labour market developments in Albania would be an area particularly worthy of further analysis. The analysis should aim to identify whether there have been labour shortages in skilled categories, and how this is changing the relative wage levels for different skill classes in Albania. For example, recent trends in skilled migration suggest that it is concentrated in certain sectors – IT and health, for example (Commander, Kangasniemi and Winters 2002). Does this trend hold for Albanians as well? If yes, then what would be the implications for the future of these sectors (or others where the existence of skilled labour shortages would be identified)? How would wages in these sectors be affected by labour shortages?

Another area that merits further research is how Albanian diaspora networks have been operating until now and how public policies in the country can reduce the costs of various services provided by them to Albanian highly skilled migrants.

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Annex 1. List of Surveyed Institutions and Universities

I. Academy of Sciences

1. Institute of Popular Culture.
2. Institute of hydro-meteorology.
3. Institute of Biological Researches.
4. The Arts' Research center.
5. Institute of Nuclear Physics.
6. Institute of Informatics.
7. Seismic Institute.
8. Institute of Linguistics.
9. Institute of History.
10. Institute of Archaeology.
11. Institute of Geography.
12. Institute of Hydro Works' Research.
13. Institute of Economy.

II. Ministry of Agriculture, Food and Protection of Consumer.

1. Veterinary Research institute.
2. Land Research institute.
3. Zoo-technical Studies' Institute.
4. Plant Protection Institute, Durrës
5. Fishery Research Institute, Durrës
6. Vegetables-potatoes' Institute.
7. Agricultural Research Institute, Lushnje.
8. Olive Institute, Vlorë.
9. Institute of Maize and Rice, Shkodër.
10. Institute of Fodder, Fushë-Krujë.
11. Institute of Food.
12. Institute of Beet, Korce

III. Institutions under the umbrella of other ministries

1. Institute of Urban studies and designing
2. ITNPM
3. Institute of Statistics.
4. Institute of Oil and Gas, (Fier)
5. Institute of Public Health
6. Institute of Pedagogic Studies
7. Institute of Geological Studies and Designing
8. Institute of Construction Technology studies
9. IKPK
10. Institute of Culture Monuments
11. Institute of Geological studies
12. Institute of Transport
13. Institute of chemistry
14. The mechanic and wood studies' and designing institute.
15. Institute of Metallurgical studies, Elbasan

IV. Universities and High Schools

1. Polytechnic University , Tiranë
2. University of Tirana, Tiranë
3. Agronomic University, Tiranë
4. Academy of Arts, Tiranë
5. Institute of Physical Culture, Tiranë
6. “Fan Noli” University, Korçë
7. “Ismail Qemali” University, Vlorë
8. “Eqrem Cabej” University , Gjirokastër
9. “Luigj Gurakuqi” University, Shkodër
10. “Aleksandër Xhuvani” University, Elbasan