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**The Role of the Diaspora in Generating Foreign Direct  
Investments in Armenia**

**Abstract**

In view of the increasing role of Diasporan and emigrant networks for the home countries in the globalized world, this paper examines the impact of Armenian Diaspora on generating Foreign Direct Investment (FDI) in Armenia between 1994 and 2004. The broader purpose is to understand how the Diaspora influenced the process of attraction of FDI to Armenia. This paper provides quantitative assessments of the share of Diaspora-connected FDI to total FDI, the number of Diaspora-connected investors, and the size of “pseudo” FDI. It also describes its dynamics and major trends, as well as identifying and modeling major motivational factors stimulating investment decisions by Diaspora Armenians.

## INTRODUCTION

Armenia is a small, post-socialist country in a transitional period. As a land-locked country with scarce natural resources, it is involved in a regional conflict with one of its neighbors, Azerbaijan, and suffers transportation blockade with another neighbor, Turkey. For Armenia, a country that only has a population of 3.0<sup>1</sup> (2004) million and large Diasporan<sup>2</sup> communities of more than 6 million living all over the world (See Appendix A), the ethnic Armenian Diaspora is viewed as an exceptional asset for the national economy to generate FDI and private transfers, gain political support and advocate Armenian culture abroad.

In the early nineties, Armenia experienced the sharpest decline in GDP among the former Soviet republics (GDP in 1993 was 47% of 1990 level), a drastic shortage of electricity, financial crises resulting in hyperinflation (11,000% annually in 1993)<sup>3</sup>, miserable wages and the shutting down of factories. Economic stabilization programs undertaken by the government, support by international financial institutions, the humanitarian aid of Diaspora organizations/communities, international organizations and private transfers from recent migrants all helped enable Armenia to alleviate the burden of transition, the consequences of the devastating 1988 earthquake, transportation blockade and the war with Azerbaijan. Since 1999, Armenia has experienced one of the fastest growth rates in the world partly attributable to Diaspora infrastructure rebuilding grants, private transfers and the increasing Diaspora-connected FDI inflows in some sectors of industry and services.

Currently, Armenia faces a difficult challenge to move from a resource-driven to investment-driven stage of competitive development as the economy should be re-oriented towards efficiency through massive investments in technologies and business processes. The speed and success of such transition will be dependent on the ability to infuse large amounts of productive capital into competitive sectors. Foreign direct investments are the top priority source for such capital since they bring also much needed access to foreign and more sophisticated markets, know-how, managerial skills and competences. The need for more aggressive FDI-centered strategy is obvious. In case of Armenia, the Diaspora is considered one of the most important levers to attract FDI. While implementing this strategy, the evaluation of past performances in this area can provide valuable insights and factual evidence to the most effective approaches.

Part I of this paper provides estimates of the number of Diaspora-connected investors as well as the share of Diaspora-connected FDI (to be defined below) to total amount of FDI; it also deals with its composition, distribution by countries and sectors of the economy and its role in catalyzing economic growth.

Part II examines the key motivational and triggering factors that affected the decision of Diasporan investors to choose Armenia as an investment location. The key issues of interest are the understanding of importance of ethnic identity and affiliation versus mere business interest as a driving force to invest in Armenia. It also examines the role and size of the so called “ethnic identity discount” in the form of acceptance by Diaspora investors of a lower level of return on investment and/or higher business risk, as well as identification of major motivational forces for different Diaspora investor groups.

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<sup>1</sup> World Development Indicators, WDI-online

<sup>2</sup> “Diaspora” is: 1a. A dispersion of people from their homeland; 1b. The community formed by such people. 2. Dispersion of an originally homogeneous entity, such as language and culture. “Network” is an extended group of people with similar interests or concerns who interact for mutual assistance or support. (American Heritage College Dictionary, 2002). In this paper the term “Diaspora or emigrant networks” is referred to the dispersion of people of ethnic Armenian descent, and communities formed by Armenians in foreign countries who interact with each other for mutual benefits and support based on ethnic affiliation.

<sup>3</sup> Source: National Statistical Service of Armenia - NSS

## LITERATURE REVIEW

During recent years, there has been increasing interest towards the study of business and social networks of emigrants (Diasporans), both in Armenia and within the international context. These studies provide insight on how these networks facilitate international trade between their host countries (or countries of citizenship) and the homeland, how they become involved in political and business life, generate additional income for their family members in the form of private transfers, serve as a prime source for skills and technology transfer, generate FDI, provide local companies with information on current market trends, help export homeland products, etc. (Rauch 2001; Rauch et al, 2002; Miller 1998; Kotkin 1992; Kao 1993; Freinkman 2001; Minoian et al, 2005; Naím 2002; Pandey et al 2004, Davone 2005; Devan et al, 2001; Roberts et al. 2005; Samuelian et al 2003; Sahin 2003, and many others).

Financial transfers to Armenia, Diasporan tourism, consumption and technical assistance (knowledge and technology transfer) were of interest to many researchers, experts and politicians, and think-tanks (Gevorkyan and Grigorian, Freinkman, Roberts and Banaian, Manaseryan, Armenia 2020, Miller, Samuelian et al, Gillespie et al, and others). Minoian and Freinkman (2005) surveyed first-mover Diasporan investors (established Diasporans from the US and Argentina). However, there has been little and fragmented effort to study the Armenian Diaspora's investment activities and its role in the economic history of Armenia.

In international literature, factors affecting FDI generating processes in transition economies were studied from different viewpoints. Kinoshita and Campos (2003) found that in the case of 25 transition economies, one of the most important determinants of FDI flows is institutions such as the protection of property rights, independent court systems, clear rules and enforcement mechanisms, etc. Kinoshita and Mody (2001) found that previous private experience of individual companies and current investment decisions by competitors (in case of Japanese firms) is positively correlated with individual company decisions to invest in a particular location (emerging market economy) and positively affect its priority over other options. Sachs's (2005) concept of close positive relationship between FDI in emerging economies and their distance from advanced markets (he takes Stuttgart, as a reference point) is remarkable in considering its implications for Armenia. Gillespie et al. (1999) examined what influenced the interest of potential Diasporans in homeland investment for four different Diaspora communities in the US (first and higher generation of emigrants from Armenia, Cuba, Iran and Palestine). The findings show that altruism and ethnic advantage positively affect their interest in homeland investment.

Studies of the experience of countries with comparatively large Diaspora's and their role in direct investments in homeland economy constitute a special interest. Thus, according to some estimates in 1999 70% of China's \$50 billion in FDI came from Chinese people living abroad<sup>1</sup> (Devan, et al, 2001). Kao shows that Chinese entrepreneurs were the first or second most important source of FDI in Thailand, the Philippines and Vietnam (Kao, 1993). The story of the Jewish Diaspora's role in revival of the Israeli economy is well known, especially in the high tech industry and the creation of Israeli venture capital industry. However, Davone (2005) argues that "although the Diaspora, particularly in the United States, has been famously generous to Israel and critical to its foundation and success, the community has not even been the major business investors in Israel, either in technology or

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<sup>1</sup> However, the flow of FDI is somewhat overstated, it is estimated that a quarter of the flows originate in China and are sent to Hong Kong and then returned to China to take advantage of preferential policies not open to domestic investors.

generally. Direct Diaspora investment and stock purchases have averaged only 6% of domestic gross capital formation (Kleiman) over Israel's history.”

However, we have not been able to identify any country-specific detailed study on Diasporan business involvement on a firm or company level in FDI processes in the homeland economy, its detailed history, nor with the correlation between major homeland-Diaspora events and economic growth. Armenia can be viewed as a classic example of such an experience. The small size of the economy enabled us to conduct a company level detailed assessment of the so called Diaspora-connected FDI. Viewed from this perspective, Armenia can be considered as a “natural laboratory” for testing vital assumptions regarding the role of the ethnic Diasporas in homeland development. In some sectors of economy, the first Diasporan investors played a catalytic role in generating new FDI for local companies, thus attracting both Diaspora-owned and foreign companies, drawing the government's attention to the need of changing current legislation and undertaking new development programs. This paper is one of the first attempts to estimate the Diaspora involvement in investments in Armenia and the factors affecting that process.

# **PART I: THE STATE OF THE DIASPORA-CONNECTED FDI IN 1994-2004**

## **Methodology**

In this study, we operate with three types of indicators of the Diaspora's involvement in FDI processes in Armenia:

1. Number of Diaspora-connected Investors - DCIR
2. Number of Diaspora-connected companies (companies with Diaspora capital) - DCC
3. Amount of Diaspora-connected foreign direct investments – DCI

The methodology of our estimates of the size and structure of the Diaspora-connected investments implied very detailed company-level research. We considered this as the only possible and accurate method of estimate. Though extremely time-consuming and labor-intensive, such analysis was in fact possible due to the small size of the Armenian economy and, hence, the relatively small number of companies with foreign capital (as well as shareholders; there are less than 3 shareholders per company on average), thus ensuring comprehensiveness. The list of companies with foreign capital, including some pertinent shareholder information between 1994 and 2004, was acquired from the State Registry of Armenia. However, the list was incomplete, and the authors supplemented it by using multiple sources such as Internet, Spyur catalogue, consulting companies, industry associations, Diaspora organizations, etc. The information on the investment size of different groups of companies was obtained from the National Statistical Service on an aggregated basis. Based on this, a special dataset was created incorporating detailed information on the country of origin of investors, sectoral distribution, the relationship of Diaspora-connected investors with other investors in the same company, and the generation of Diasporan investors (i.e. so called “old” or “new” Diasporan), etc.

*In total, about 2,600 companies and 6,500 shareholders have been analyzed and explored.*

It is also worth mentioning that all the data was acquired using exclusively legal methods without violation of any principle of confidentiality.

### **Important Definitions:**

***Diaspora-connected investors (DCIR):***<sup>1</sup> Here we distinguish 3 types of foreign investors and classify each category.

- A. *Individual Diasporan investors:* Diasporans (both old and new) who invested in a particular company alone or with other Diasporan investors. If the same Diasporan has invested in another company, s/he is considered a separate investor, since the FDI-recipient company is different. Hence, the real number of individual Diasporans who invested in local companies is less than the number of Diaspora-connected investors calculated by the mentioned principle, though the difference is small enough to consider the DCIR as a proxy of actual number of Diaspora investors (without double-accounting investors with multiple investments in different Armenian companies).
- B. *Diaspora-connected individual investors:* Foreign investors who invested in local companies together with Diasporan investors and new emigrants or a foreign company somehow connected to the Diasporan investor (friend, colleague or business partner from the country of current or previous citizenship, residency or other

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<sup>1</sup> Throughout the remaining text, the term “Diaspora-connected investor” (DCIR) will be referred to all three categories of investors.

identifiable connection). The same approach described above regarding identification of the investor status was applied in this case as well.

- C. *Diaspora-connected corporate investors*: A foreign company that invested in a local company somehow connected to the Diaspora (one of the top executives or a key shareholder of the foreign company is a Diasporan; the foreign company invested in other Armenia-located company; the foreign company invested in Armenia because of Diasporan connections, i.e. Diasporans who assisted in generating FDI for a particular local company). The same approach described above regarding different corporate investor counting processes was applied in this case as well.

### ***Diaspora-connected Investor Identification Principles***

We adopted a conservative approach in identifying the status and connection of investors to the Diaspora. When speaking of a conservative approach, we mean a bias towards non-inclusion of an investor in the list of DCIR if there was no sufficient evidence of its relationship with the Diaspora. Thus, our analysis provides the lowest estimate of the level of DCI and DCIR. We followed this principle for the sake of accuracy of the methodological base of the research; however, one should take into account that the actual level of DCI may be 10-20% higher (in our opinion).

For instance, in the case of the United States, according to our analysis, 89% of investors are Diaspora-connected investors. However, this figure may be higher possibly reaching 92% or 93% if we included companies registered in the states of Wyoming or Delaware (off-shore zones). Generally, the lacking data on companies registered in off-shore zones were the major problem while identifying the status of investors.

In many cases, the database did not provide accurate data on investors' country of origin, addresses, names and other important information. (e.g. sometimes the state registry database had only the "property of foreign residents" entry instead of the legal status). If the direct call or other methods did not provide the required information or any indication of investor's connection to the Diaspora, we classified them as non-Diasporan investments in-keeping with the most conservative approach in our estimation strategy.

In selected cases, use of additional criteria such as location of FDI-recipient company (e.g. all major companies registered in Arinj, Kotayk region are connected to Multi Group controlled by a well-known Armenian businessman), its sector or the company name provided important hints. The important by-product of this analysis was the identification and estimate of the "pseudo" or "ersatz" FDI, i.e. investments made by local businessmen but structured mainly through off-shore territories and registered as foreign investments in Armenia.

Yellow pages and online company registers and databases, online newspapers and journals were critical in identifying Diaspora-connected corporate investors (e.g. [www.infors.ru](http://www.infors.ru), [www.kompass.com](http://www.kompass.com), [www.ukdata.com](http://www.ukdata.com), [smallbusiness.dnb.com](http://smallbusiness.dnb.com)). Significant amount of information was processed including names of executives, status of the company, location, the sector, list of partners, investment history, locations abroad, etc.

### **Principles of Estimates of the Diaspora-Connected Investments Size**

Based on identification of DCIR and DCC, as well as companies with "pseudo" FDI, we classified the companies with foreign investments into four groups:

1. *Large Infrastructure*. We included non-Diaspora related infrastructure companies that invested relatively large amounts of capital. The group included Armentel, Armrusgasprom, Electric Distribution Networks, and Hrazdan Energetic Company.

2. *Pseudo FDI or “Local” companies.* This group includes the companies that are registered as foreign ones, mainly through off-shore territories, but are believed to represent local capital. We did a careful analysis of each company in the group and think the group represents a “minimum” number of companies with pseudo FDI. Following our conservative approach, we did not include companies that may potentially represent local capital if the conjecture could not be back up with firm data and evidence.
3. *Large foreign investments.* The group includes “big fish” companies, Diaspora-unrelated companies that made large investments during the considered period. The group includes Yerevan Brandy Company, Castel Group, the largest mining and quarrying companies, Armenal, as well as companies included in the “Debt-Equity Swap” program with Russia.
4. *Other non-Diaspora companies with foreign capital*
5. *Diaspora-connected companies*

With the assistance from the Ministry of Trade and Economic Development, we obtained accurate data on the first two groups of companies, as well as accurate estimate of investments made by the third group of companies. Looking at the amount of investments made by the remaining two groups of companies, we assumed that the size of investments will approximately reflect the number of investors in each group, therefore, we applied the coefficient (percentage) derived from the DCIR analysis.

## **The Diaspora-Connected Investment Trends in 1994-2004**

To some extent, the number of DCIR reflects the Diaspora’s interest in investing in Armenia better than the absolute amount of DCI since the invested amounts are so small that only one or two big investments undertaken by one or two committed Diasporans can completely skew the DCI level. DCIR more precisely reflects changes in perceptions, attitude and thinking of the Diaspora on a mass level. Thus, general shifts in Diaspora investment attitudes can be captured more by the DCIR indicator, which in and of itself is not a precise economic or social indicator; nevertheless, it provides alternatives for a fact-based, post hoc evaluation. We didn’t operate much with the DCC indicator, since it almost mimics the DCIR trends due to the nearly ironclad pattern of investing with two or three co-investors exercised by all foreign investors, including the Diasporans. As such, its analysis would not add any significant value to the study.

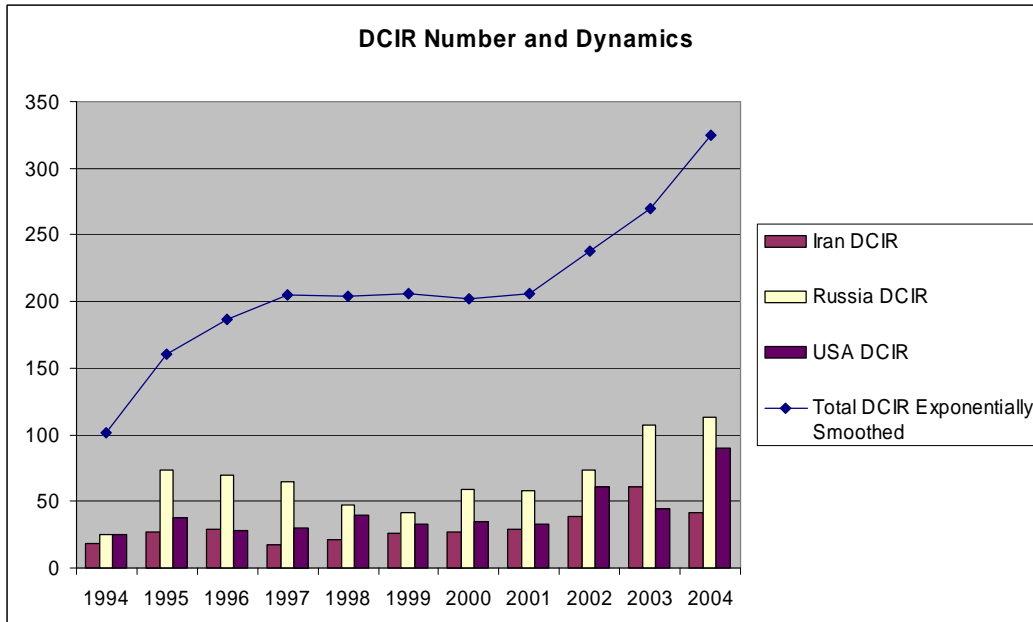
### *Diaspora-Connected Investors: Dynamics and Trends*

Armenia’s Diaspora-connected FDI composition (countries of origin) from 1994 to 2004 reflects the distribution of Armenian population in various traditional Diasporan settlements, and the nuances of Armenia-Diaspora relations. The company level statistical research conducted by the authors showed that during this period of time, 69% of foreign investors that invested in Armenia were Diaspora-connected investors (DCIR), and 68% of FDI-recipient companies were Diaspora-connected (DCC).

In the case of several large-scale investments, Diasporans managed to leverage their networks and attract both foreign investors and Diasporans from the same and other countries. This cooperation can be widely observed in the cases where one of the Diasporan investors was originally from a Middle-Eastern country such as Cyprus or Turkey. In several cases, Diaspora-connected investors preferred to structure investments to Armenia through off-shore territories rather than through their country of citizenship to enjoy favorable tax regimes. The majority of these types of investors are Russian Diaspora-connected investors.

Generally, there are three distinct leader countries as sources of Diaspora investors for Armenia – Russia, USA and Iran. The number of DCIR from these countries comprises 60% of all DCIR from 1994 to 2004. The same pattern is observed regarding Diaspora-connected FDI recipient companies. The Diasporan investors from Russia, USA and Iran invested in 63% of all DCC. The leading group is followed by France, Syria and Lebanon (72% together with the three leaders).

**Figure 1. The Number of Diaspora-connected investors in Armenia and Its Dynamics**



A broad cause-and-effect analysis is possible and general trends are traceable only on the statistics of countries with large Diaspora communities, such as Russia, USA, and Iran. Smoothing the total DCIR data (in order to eliminate the impact of casual fluctuations) in comparison to the number of DCIR from the three countries with major Diaspora communities which set the pace for Diaspora investments (Russia, USA, Iran) shows a clear general observable trend persistent across all these countries. The trend is the increase of DCIR number from 1995 through 1996; then stabilization and decrease in 1997 and acceleration in 1998; then, reversing of the trend in 2000 towards the increase, intensifying in 2002 until 2004.

The Diaspora was perceived as the first generator of investments in Armenia after the end of military operations with Azerbaijan and the commencement of an economic stabilization program supported by the IMF and the World Bank. However, the events that unfolded at the end of 1994 adversely affected the inclination of the Diaspora to invest. Particularly, the government of Armenia banned the activities of one of the oldest and strongest political party in the Diaspora – the Armenian Revolutionary Federation (ARF). The image of Armenia as a possible investment destination suffered substantially. Though the data shows that DCIR increased almost twice in 1995 compared to 1994 (unmatched rate of increase in subsequent years), this could be attributable to investments by the most patriotic groups of Diasporans as well as exceptional business opportunities provided by large-scale privatization deals. Such an interplay of contradictory factors (convergence of “opportunity” and “shock”) to a large extent contributed to “freezing” of the Diaspora involvement in investing in Armenia at a very low level compared to the potential (from 1994 to 2004, there were only 2,526 DCIR from the Armenian Diaspora which exceeds 6 mln. people).

Decrease in the number of DCIR in 1997 could be explained by the deteriorating image of the political and economic regime in Armenia, especially after controversial presidential elections in 1996 and the worsening of the Armenia-Diaspora relationship. In 1998, two

major events affected the DCI attraction processes: the resignation of Levon Ter-Petrossian followed by Robert Kocharian's election and the Russian financial crisis. Unfortunately, our estimates of DCI begin in 1998 and we are not able to analyze the impact of those broad factors on the total amount of the attracted Diaspora capital. However, the decrease in the number of DCIR from Russia, and the dissimilar increase in the number of Armenian-American investors – *ceteris paribus* – could be partly attributed to those factors.

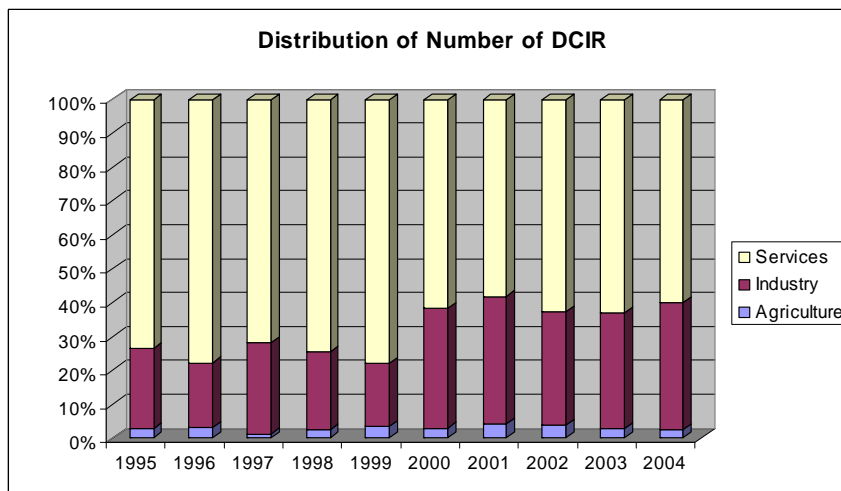
Generally, the effects of major political and economic events can be traced with a definite lag. The lag is often short in the case of negatively perceived political events, and is longer in case of positively perceived political events and all types of economic events. Thus, the trends from 1998 to 2000 are strongly affected by political events also carrying the lagged influences of mostly positive political and economic factors of preceding years. In those years, investors were awaiting domestic and foreign policy shifts (in February 1998, President Kocharyan annulled the ban on ARF, and in December signed a decree aimed at strengthening cultural, economic and business ties with the Diaspora). Assassination of key political figures (the PM, the Chairman of National Assembly, MPs) affected the DCIR attracting processes in 2000, negating the effects of the first Armenia-Diaspora conference and the first Pan-Armenian games held in the fall of 1999 in Yerevan. Surprisingly enough, it mostly affected the Diaspora investors rather than non-Diaspora investors: their share of all foreign investors fell to 57%.

Since 2001, there has been a clear trend of involvement of more and more Diaspora investors in the Armenian economy. Starting with the celebrations of the 1700<sup>th</sup> anniversary of the Adoption of Christianity as state religion, series of Diaspora-Armenian events (Pan-Armenian games, Investment Conference in NY, Diaspora-Armenia Economic Conference, etc.) fueled the process of Diaspora-Armenia investment relations. These developments brought also the increase in the share of DCIR in the total number of foreign investors, reaching 84% in 2004.

### *Sectoral Distribution of Diaspora-Connected Investors*

The analysis reveals that there has been a significant difference across various sectors in terms of Diaspora involvement. The “usual suspect” sectors are ITC, gems and jewelry, food processing, construction and selected sub-sectors in apparel. We define these sectors as Diaspora-connected sectors since their growth was significantly affected by DCI<sup>1</sup>.

**Figure 2 Distribution of Number of Diaspora-connected Investors in Armenia**



First-movers in each of the Diaspora-connected sectors of the economy entered those sectors in 1994 and 1995. Diasporans have demonstrated a preference to investing mostly in service industries. Agriculture, which represents a large share of the Armenian economy, has received comparatively little attention

<sup>1</sup> Though more than 40% of all Diaspora-connected investors invested in trade in 1994-2004, trade is still not considered a Diaspora-connected sector.

from the Diaspora. Among the many reasons, it is worth noting the very low levels of productivity and, hence, competitiveness of the sector and its relative disconnect from export markets. The dynamics of industry distribution of the number of DCIR over the last years does not reflect any peculiar trend or causal relationship. The one noteworthy observable trend is the increase in the share of industry starting in 2000; income growth, improvement of infrastructure and export opportunities attracted increasing number of Diasporans to invest in industry. Within the services sector the share of trade decreased gradually, settling at 40% in 2004.

### *Estimates of Diaspora-Connected Foreign Direct Investments*

Based on the methodology and estimate principles described above, we have estimated the size of each component of FDI. The distribution is as follows:

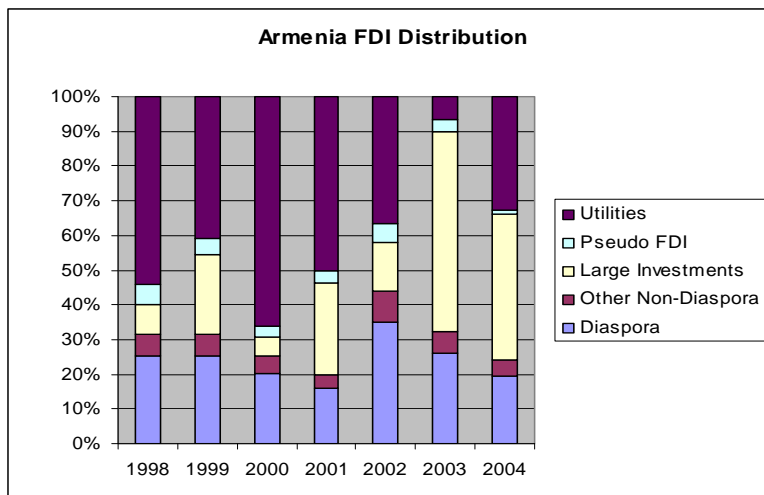
**Table 1 Distribution of FDI in Armenia, 1998-2004, thousand USD**

	1998	1999	2000	2001	2002	2003	2004	1998-2004
<b>Diaspora</b>	72,690	32,960	24,130	13,750	47,890	39,810	43,750	274,980
<b>Other Non-Diaspora</b>	18,170	8,240	6,030	3,440	11,970	9,950	10,940	68,740
<b>Large Investments</b>	2,100	30,000	6,800	18,000	22,000	88,100	95,200	262,200
<b>Pseudo FDI</b>	13,870	5,610	3,680	2,490	7,480	5,190	2,480	40,800
<b>Utilities</b>	125,550	53,480	79,420	38,180	51,620	10,450	74,360	433,060
<b>Total FDI</b>	232,380	130,290	120,060	75,860	140,960	153,500	226,730	1,079,780

*Thus, the cumulative DCI in 1998-2004 totals about 275mln. USD accounting for about 25% of total FDI in this period.*

The share of DCI in 1998-2004 without utilities makes – 43%, large investments – 41%, other non-Diaspora related – 10% and “pseudo” FDI – 6%.

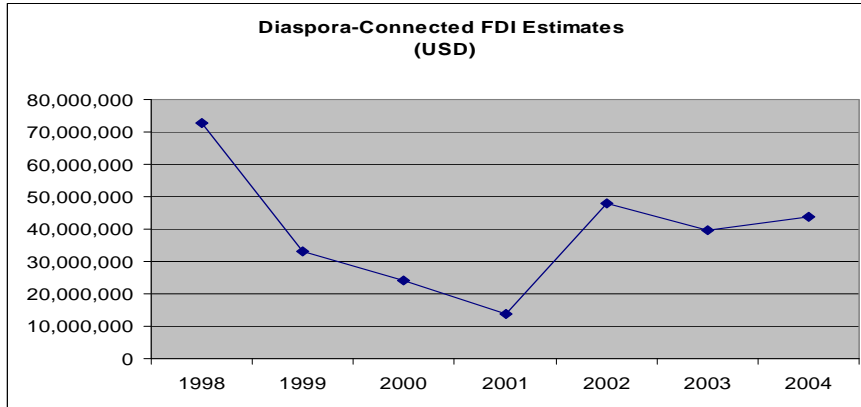
**Figure 3. The Distribution of FDI Between Different Groups of Investors in Armenia**



The largest portion of FDI has been attracted through four non-Diaspora connected investment deals in infrastructure – 40% in 1998-2004. This is followed by DCI and large investments, approximately 25% and 24% respectively. Our estimate of “pseudo-FDI” is around 4% from total investments. The peak of DCI share was in 2002 (26%).

There has been a decreasing trend in DCI amounts since 1998 until 2001, which reversed in 2002 and stabilized around 40-45mln. USD levels in 2003-2004. This is consistent with the trend in DCIR reflecting the key role of 2001 events in triggering Diaspora business interest towards Armenia.

**Figure 4 DCI trends in 1998-2004**



### ***Diaspora-Connected Sectors***

The transitional years witnessed the re-emergence and growth of selected sectors that became important drivers of economic growth in Armenia. The potential of these sectors spurred the Diaspora's interest and its investment activities evolved around these sectors (though other involvement types, such as market access, market intelligence, and technical assistance were also very important). The logical consequence was that the Diaspora's influence became one of the key ingredients of success. This allowed us to label them as Diaspora-connected sectors. The Diaspora-connected sectors started to benefit from the DCIR involvement in the early 1990s, at first through the facilitating of knowledge transfer. There are two major features of the Armenian Diaspora-connected sectors that are characteristic to many other countries with a significant Diaspora role in the development of the homeland economy. First, the Diaspora-connected sectors are mainly export oriented sectors with sales in countries with major Diaspora communities. Second, Armenians have traditionally been involved in these sectors for decades and sometimes centuries (e.g. in the case of jewelry) and achieved global recognition for high quality.

### ***ICT Sector***

The first movers in ICT sector in the early 90s, such as Synergy International Systems, ViaSphere International, Hylink Corporation, HPL International, and Khartia sparked the formation of the Armenian ICT industry. The process of attracting new players continued in the period of 1997-1999, with investments from other Diaspora-owned and foreign dynamically growing companies (Boomerang Software, Credence Systems, Virage Logic, E-Logic, Shant Laboratories, etc). These companies entered the Armenian market as a result of trial outsourced contracts successfully completed by a new generation of Armenian programmers that were trying to earn their living in difficult years (1993 and 1994) by learning new programming languages and by contacting Diasporans for possible outsourced contract opportunities.<sup>1</sup>

The growth of the sector has continued since 2000 onwards when new players of the ICT sector entered the market (Synopsis, Lycos, Systrotech, Netsys, Xalt, SMS, Informatic Solution, Cad International, E-Z-Cad Inc., etc). In December 2000, the ICT sector was declared as a priority sector and ICT Master Strategy was designed by the government to promote the future growth of the sector.

The strongly Diaspora-influenced start helped position Armenia as an IT country and attract international brands into Armenia (Lycos, Synopsis). The entry of Synopsis into Armenian marked a significant milestone of the maturity of the Armenian IT industry.

### ***Gems and Jewelry***

<sup>1</sup> "The Story of the Emerging Armenian IT cluster", teaching case by EVRC, p.3.; unpublished.

From 1994 to 1996, the first movers in this sector were representatives of the Arslanian Family from Belgium, and a couple of investors from the US, Russia, and Syria. In 1996, Lily Jewelry, Canada-based-company, entered Armenia. In 1998, Furfan Ltd acquired the Diamond Company of Armenia (a deal was made through Diasporan connections from Moscow). The processed diamonds were exported to Belgium or Moscow and distributed mainly through Diaspora channels<sup>1</sup>.

Since 2000 this sector has become attractive for both foreign and Diasporan investors (Arevakn, Modern Tech, Gem Corp International, etc). The increased volumes and images of the Armenian cut and processed diamonds attracted the owner of LLD Diamonds, Lev Levaev. LLD Diamonds acquired Shoghakn Company. In 2002, the growth of the sector attracted a few new investors (Diamotech, Eastern Diamond, Jewel Tech, and Precision Diamond). In 2003, a three-year development program for 2004-2006 was undertaken by the government to promote this sector. In 2003 and 2004, Diasporans from the United States, Russia, Jordan, and France invested in nine more companies. The Armenian International Jewelers' Association (AIJA) worldwide, and Armenian Jewelers' Association (AJA) in Armenia enabled Armenian producers to become members of the well-established Diasporan jewelers' network, promoting collaboration, export and distribution of Armenian gems and diamonds<sup>2</sup>.

### ***Tourism***

The first movers in this sector, from 1994 to 1997, were companies, such as Levon Travel, Sidon, Saberatur, Sati, Tatev TTT, Europe Hotel, Ani Plaza Hotel and Armenia Marriott Hotel (1998). In 1998 and 1999, the sector started attracting more and more Diaspora investors at an accelerating rate from Lebanon, Syria, France, USA, and Russia resulting in the growth of investments in restaurants and cafes taking advantage of the increasing number of tourists visiting Armenia. Many Diaspora-owned tour operator and travel agencies were established in Armenia in 1998.

Since 2000, the tourism sector has experienced steady growth, partially due to the major event in 2001 (the 1700<sup>th</sup> anniversary of the Adoption of Christianity) that increased the number of Diaspora tourists. A large number of tour operators in this sector (about 135 companies) are owned by Diasporans or Diaspora-connected companies. These companies promote Armenia as a tourism destination in their countries thus attracting both Diasporan and foreign tourists.

### ***Agribusiness/Food Processing***

The rapid growth of the food processing sector was achieved due to selected sub-sectors, such as alcoholic and non-alcoholic beverages, mineral water and canned food. A remarkable example of a Diaspora-assisted entry of a major international brand is the establishment of Coca-Cola Bottlers Armenia Company. Other pioneers include Jermuk Mineral Water Company, Tavush Wine and Brandy Company. The canned food sub-sector followed the beverages sub-sector in terms of the Diaspora initial push. Two early major investments were made in the first half of the 1990s in Manuk Plant and Armenian Lolik. Since the Soviet times, Armenian alcoholic beverages (particularly brandy) and mineral water were well-known in the Soviet countries. Armenians living in foreign countries were also nostalgic for Armenian foodstuff. These factors provided a significant market opportunity and the sector grew rapidly, attracting both foreign (Pernod Ricard) and local investors in the second half of the 1990s and the first half of the 2000s. Major investments were made in Borodino Yerevan, Waterlock, Aregak Brandy Company, Kaghtsrashen Wine Factory, Voske Takar, Arabkir Alco, Garry and Patrick Brothers, Alishan companies and others.

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<sup>1</sup> Nathan Inc. and JAA, Armenia Competitiveness Assessment Report, 2004

<sup>2</sup> [http://www.businessarmenia.com/html/jewelry\\_\\_\\_diamonds.html](http://www.businessarmenia.com/html/jewelry___diamonds.html)

### ***Apparels***

The main sub-sector in apparels influenced by the presence of Diasporan investors is carpet production. The first mover entering this market was Tufenkian Trancaucasus in 1994. Diasporan investors from Russia, USA and Iran made investments in 6 companies from 1994 to 1996. The production of this sector is mainly export-oriented. The Garni Group entered market in 1998 and the House of Dravidian in 1999. The second wave of Diasporan investors started in the first half of the 2000s (Itar, Nane Design, Armen Carpet, Patrick and Garry Brothers, etc).

### ***Construction***

Among the first movers into this sector were such companies as Ranchpar, Sipan and Arcon and a few Diasporan-owned companies from Russia from 1994 to 1995. The developments in this sector triggered adjacent productions of chemicals, wooden and plastic goods, and furniture. The major move of Diaspora investors in this sector started in 1998 and 1999 (Hovnanian International, Bamo, etc). Since 2001, the sector started booming due to the Lincy Construction Grant projects, and more and more Diasporans were buying houses and apartments in Yerevan and in its suburbs. In 2003 and 2004, the construction of North and Main Avenues, the development of residential areas mainly for Diasporans, as well as the agreement of the Yerevan and Moscow City Municipalities regarding the participation of Armenian construction companies in Moscow construction projects and Russian companies in Yerevan projects respectively, attracted both Diaspora and foreign, predominantly Russian companies. This sector attracted many investors from Switzerland, Russia, United Kingdom, United States and Iran (Itarco, Fragma, Oridom, Karart, Yerevan, Marada, Raffi Arev, Heritage Development, Artcar Construction, Jer Tag Enterprises, Masisavan, Vanahovit, Alnes Construction, Palimsest, and many others) in 2002-2004.

### **Country Participation Patterns**

***Russia.*** The largest number of Diaspora investors came from Russia (29% of all investors), 76%<sup>1</sup> of whom were invested in Yerevan. Investments in services were dominant in the investment pattern from 1994 to 2004 (70% of investors). Russian-Armenians were inclined to invest mainly in trade (55% of investors that invested in services). Family, friends and relatives and the respective relations were prevailing characteristics among the Russian Diasporan and local investors.

***United States.*** The second largest group of investors came from the United States (17%). The majority of American-Armenians invested in services (62% of investors). Out of these investments only 36% of investors invested in trade. 25% of the investors invested in manufacturing, of which 30% invested in apparels, gems and jewelry, 7% invested in construction.

***Iran.*** The third largest group of investors came from Iran (14%). The majority of Diasporans invested in services (62% of investors, 53% out of these in trade). 30% of Armenian-Iranians invested in manufacturing (32% of which in chemicals production). Only 4% of investors invested in construction.

The share of investors in a particular sector of economy varied across countries (investors from Belgium dominated in gems and jewelry, Canada – again gems and jewelry; UK - pharmaceuticals and chemicals production).

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<sup>1</sup> The areas of investment are taken from the State Registry, and National Statistical Service. However, the company could have changed the main activity it had been priorly involved in.

## **PART II: MOTIVATIONAL FACTORS OF DIASPORA INVESTMENTS**

As the Diaspora is one of the major players in the investment processes in Armenia, it is imperative to understand the underlying motivational forces that drive and energize them to invest in Armenia. For this purpose, we designed and conducted a short survey among Diaspora businessmen who had already invested in Armenia. We tried to estimate the role of ethnic identity and altruism as motivational factors while introducing and operating with the concept of the “ethnic identity discount”<sup>1</sup>.

One of the most important characteristics of the Armenian Diaspora is coexistence of the newly established Diaspora of new emigrants with the well-established old Diaspora. Different groups of Diasporans have different perceptions and attitudes regarding the homeland and different interests while investing in Armenia. What is the major motivational force for different Diaspora groups: altruism focusing on family and friends, ethnic attachment and patriotic feelings, or pure business interest? Does the Diaspora or recent migrants invest to merely support family and friends or it is a way to help the homeland prosper? Is there any variation in motivation and triggering factors for different Diaspora groups?

### **Ethnic Identity or Family and Friends Altruism**

While acknowledging that ethnic identity plays a catalytic role in motivating Diasporans to invest in Armenia, the survey aimed at providing factual evidence on how much it affected the actual investment decisions and more importantly, whether it is simply a “ticket to the game” or can it be interpreted into a special attitude towards Armenia as an investment destination. We assumed that the special attitude could be expressed through the acceptance of an “ethnic identity discount”. The willingness of Diaspora investors to accept an “ethnic identity discount” was framed as readiness to accept a lower level of return on investments or higher risks while investing in Armenia. The survey also distinguished a notion of triggering factors. Besides understanding the main channels and “occasions” that prompted the Diasporans to invest, it also helped us differentiate between ethnic attachment and patriotism (or for simplicity sometimes referred as “ethnic identity”) as opposed to altruism directed at family. “Ethnic identity” is referred to “being Armenian and performing duties that Armenian identity obliges.” The family and friends altruism, though intermingled with the notion of ethnic identity, stresses more the need to help family, close relatives and friends emerge from poverty and/or prosper. Our assumptions were the following: if a Diasporan selected ethnic identity or altruism as a major motivational force that affected their decision to invest in Armenia, and at the same time family and friends played a role in investment decision-making, the investor is considered to be mostly motivated by family and friends altruism. In other cases of ethnical motivation, we considered them as investors motivated solely by ethnic attachment. Below we will refer to these two groups of investors as family altruism investors and ethnic identity investors, respectively. Our first assumption was that these groups would have identifiable differences in investment behaviors, particularly concerning the level of ethnic discount. The second assumption was that the differences could be captured also in attitudes and behavior between Diaspora investors born in Armenia (particularly recent migrants) and those born outside of Armenia.

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<sup>1</sup> The term “patriotic discount” is more widely used; however, we preferred to use “ethnic identity discount” since we believe it better conveys the subtle nuances of feelings of Diasporans towards Armenia.

## Survey Sample

Our database of companies with foreign capital allowed us to construct a comprehensive population of Diasporan investors (who actually invested in Armenia). For sampling purposes we initially adopted quota sampling approach, based on the “place of birth” criterion. Two strata were identified - Diasporans born in Armenia and Diasporans born abroad, with respective proportions of each stratum almost equal to the relative number of Diaspora investors (Armenia-born and Diaspora-born) in the total number of all Diaspora investors. Convenience or judgment sampling was decided to apply to select the respondents within each stratum. For survey purpose mainly Diasporans that invested from 2000 onwards were contacted to complete the survey (some of them invested in more than one company). About 150 investors from 15 countries (United States, Russia, Cyprus, Bulgaria, Georgia, Germany, United Kingdom, Canada, Poland, France, Lebanon, Syria, Iran, Iraq, and Netherlands) were contacted to complete the survey questionnaire. Since the non-response rate was very high, only 37 respondents from 12 countries (United States, Russia, Cyprus, Bulgaria, Georgia, Germany, United Kingdom, Canada, Poland, France, Lebanon, and Iran) returned the survey questionnaires (for understandable reasons). Although we understand that such a small survey such as this cannot be considered to be representative of the entire Diaspora-connected investors’ universe, it provided us with valuable information to validate our basic assumptions (generally accepted) about Diasporan attitude towards investing in Armenia. For a future more comprehensive analysis there is a definite need to widen the respondents’ base.

## Survey Results

Table 2 Descriptive statistics

Variable	N=37
<i>Age</i> (Age of Diasporan )	49 <sup>a</sup> (13) <sup>b</sup>
<i>Schooling</i> (Number of years of schooling completed )	17,03 (3,5)
<i>Birth</i> (Place of birth of Diasporan, 1= Born in Diaspora, 0=Born in Armenia )	81%
<i>Experience</i> (Prior experience in the invested area; 1= Prior Experience, 0=No Experience)	62%
<i>Assistance</i> (Technical assistance, outsourced contract opportunities for local companies, export assistance prior to investment as a key triggering factor; 1=Assistance influenced investment decision, 0=No assistance)	30%
<i>Contacts</i> (Frequent visits, family/friends contacts prior to investment as a key triggering factor; 1= Contacts affected investor's decision, 0=Contacts did not affect)	54%
<i>Identity</i> (Ethnic identity affiliation (being Armenian) as a key motivational factor affected the investment decision, 1=Factor affected investor's decision, 0= Factor did not affect)	84%
<i>Business Interest</i> (Business interest as a key motivational factor affected the investment decision, 1= Factor influenced the investment decision, 0= Factor did not affect)	41%
<i>ED - Ethnic Discount</i> (Willingness to accept an "ethnic identity discount", i.e. take higher business risks or accept a lower return on investments due to ethnic identity/altruism toward Armenia, 1= Willingness to accept the "discount", 0= No "discount" accepted)	89%
<i>Transfer</i> (Knowledge/technology transfer occurred as a result of the investment, 1= Transfer occurred, 0=No transfer)	73%

<sup>a</sup> mean

<sup>b</sup> standard deviation

## Findings

A number of hypotheses that we tested proved to be statistically insignificant. No significant relationship has been identified regarding different indicators, such as motivational or triggering factors (technical assistance, business interest, contacts, etc.), demographic variables (age, number of years of schooling, etc.), investment size, prior experience in the invested areas, etc. It proved to be impossible to identify a single indicator that strongly affected the willingness of Diaspora investors to accept the “ethnic discount”. However, the survey provided first-hand evidence for assessing our two assumptions.

### *Assumption 1. Family Altruists vs. Ethnic Identity Investors*

Investors driven by family and friends altruism have less focus on business interest (24% of the respondents of this group) than investment driven by ethnic attachment (43% of the group, see Appendix I). The family altruist investors are more focused on altruistic side of the investment (helping and supporting the family and friends), therefore business interest is simply overshadowed in the mixture of motivational factors.

Ethnic identity investors are completely willing to accept the ethnic identity discount (100%), which provides a definite answer to the above formulated question regarding the special attitude of ethnically motivated investors towards Armenia: is it more than “a ticket to the game” for them? The results of the survey showed that the motivation by ethnic identity can be clearly quantified by investors in the form of discount to the rate of return (or premium to risks). Family altruists are slightly less inclined to accept that discount.

### *Assumption 2. Armenia-born Diasporans vs. Diaspora-born Diasporans*

There has been a significant motivational difference between these two groups of investors.

The family and friends type of altruism seems to be a major motivation for Armenia-born Diasporans to invest in Armenia as opposed to Diaspora-born investors who are more inclined to invest as a result of their ethnic attachment to Armenia. Definitely, this reflects the fact that Armenia-born Diasporans have stronger family ties to Armenia and therefore motivation to help their relatives.

Family and friends that contact and visits to Armenia affected the decision of 86% of Armenia-born Diasporans or recent migrants, prevailing over pure business interest (see Appendix J). For 83% of this class of investors, ethnic identity still plays a role in the decision-making. Generally, ethnic identity is a motivational factor for only 71% of these investors as opposed to 87% for Diaspora-born investors.

This class of investors was less inclined to accept the “ethnic identity discount”. 71% of Armenia-born Diasporans were willing to accept the “ethnic identity discount” in the form of higher risks and a lower level of return on investment, even if the pure business interest was not the key and only triggering factor affecting the investment decision in majority of cases.

Identity was a key motivational factor to invest in Armenia in the case of 87% of Diaspora-born investors. For 31% of this category of investors, along with identity, business interest played a crucial role in the investment decision. Only for 10% of Diaspora-born investors business interest is the only motivation to invest (however, 67% of these investors agreed to accept the “ethnic identity discount”). The prevailing majority, 93% of Diaspora-born investors accept the “ethnic identity discount”.

This group of Diasporans played a crucial role in attracting large-scale investments to Armenia. 33% of this type of Diasporans, prior to investing in Armenia, were providing technical assistance, assisting local companies in getting outsourced contracts and in exporting their products and services, even though some of them did not have any experience in the given area. In 80% of the cases, Diaspora-connected investments served as a primary source of technology and knowledge transfer for DCC.

The most acceptable level of the ethnic identity discount is the range between 20% and 50% for both categories of investors. Almost 8% of the respondents were ready to accept more than 75% discount.

## Summary

<i>Armenia-born Diasporan Investors</i>	<i>Diaspora-born Investors</i>
<ul style="list-style-type: none"> <li>• Kith and kin relations matter in investment decisions more eclipsing mere business interest, and is the major triggering factor in investment decisions</li> </ul>	<ul style="list-style-type: none"> <li>• Ethnic attachment or patriotic feelings are key motivational forces. Kith and kin relations are not predominant in investment decision-making.</li> </ul>
<ul style="list-style-type: none"> <li>• The majority of investors are inclined towards accepting ethnic identity discount.</li> </ul>	<ul style="list-style-type: none"> <li>• Ethnic identity strongly affects investment decisions and the willingness to accept ethnic identity discount (even in such cases when the investment was generated based on pure business interest)</li> </ul>
<ul style="list-style-type: none"> <li>• Mere business interest is not the major motivational factor</li> </ul>	<ul style="list-style-type: none"> <li>• Sole business interest is not the predominant motivational factor</li> </ul>
<ul style="list-style-type: none"> <li>• Knowledge/technology transfer occurred in majority of cases</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge/technology transfer occurred in majority of cases</li> </ul>

## FINDINGS AND CONCLUSIONS

- The Diaspora played an important role in foreign direct investment attraction processes in Armenia in the transitional period; however, its level of involvement was less than conventional wisdom would suggest. About 69% of all foreign investors that invested directly in the Armenian economy were Diaspora-connected investors. According to our estimates, they invested around 275 mln. USD from 1998 to 2004, which makes approximately 25% of total FDI in Armenia. An average Diaspora-connected investor invested on average 150,000 USD in Armenia (derived by dividing total DCI by total DCIR level during the 1998-2004 period). Only about 2,200 individuals or corporate entities from the Diaspora or connected to the Diaspora entered the Armenian market as investors during the period of 1994-2004. This analysis provides the evidence that although the Diaspora's role in economic development of Armenia was extremely important, mainly charity and humanitarian aid, advocacy and political support, information and knowledge transfer and provision of market access were significant. Armenia does not yet occupy a top place in the hierarchy of investment alternatives for the Diaspora; it does not enjoy enough competitive business appeal to the Diaspora.
- Given the considerable external constraints Armenia successfully competed with other transition countries in attracting FDI, however it still lags behind many transitional countries in terms of per capita FDI or the share of FDI in GDP (see Appendix L). Without the Diaspora factor (lacking in other countries), these indicators could be even worse. There are numerous objective factors, such as lack of sizeable natural resources, small domestic market, isolation from major goods and capital markets that unfavorably affect Armenia's ability to attract FDI. Therefore, Armenia's FDI attraction strategy has been reasonably relied on the exploitation of the Diaspora resources and networks, and has viewed the Diaspora as the major target for capital resources. However, this strategy of generating small scale investments from patriotically motivated part of the Diaspora is not appropriate for the next stage of competitive development that requires massive investments.
- Our analysis shows that the large infrastructure and non-Diaspora investment deals generated more capital flows than Diaspora-connected investments. Indeed, the infrastructure along with resource-based industries led the sectors receiving foreign investment in emerging economies. However, one should take into account that despite turbulent developments and emergence of totally new types of products, services and market segments in infrastructure sectors (e.g. telecom), infrastructure is an "enabler" and its growth is restricted by the growth of the entire economy. Large amounts of investments in the infrastructure in Armenia were attracted mainly through lucrative (sometimes politically-driven) privatization deals. This channel is almost exhausted, therefore large-scale investments in the infrastructure could perpetuate only if a sound strategy on a national level is elaborated and implemented.
- Large investments studied in the paper were also pushed by the privatization process. The Diaspora's involvement was marginal in large investments in natural resource-based industries (mainly in metallurgy) compared to other non-resource based sectors. Generally, the privatization-led FDI attraction model is almost exhausted; therefore there is a clear need for a new model and strategy.
- The Diaspora still remains an untapped resource for Armenia from the perspective of investment capital. As the study shows, the, Diaspora's involvement has been mainly on a relatively small scale, investing comparatively small amounts (kind of "testing the

ground” rather than committing serious capital). Without going into fundamental reasons that deter the Diasporans from bigger involvement, it is clear that there is a need for more risk dispersing vehicles of investment, i.e. institutional forms of collective investments that will be better positioned to attract small-scale investments, to allow investors to avoid direct involvement in business in Armenia. These types of arrangements are more consistent with the current perceptions prevailing in the Diaspora and its level of readiness to be involved in business in Armenia. At this stage, the most feasible forms of institutionalizing, namely investments, should have a quasi-development nature supported by the government. Whichever form these investment vehicles can take, be it investment funds, development banks or bonds, at this stage they would do well to capitalize on the readiness of the Diaspora to accept an ethnic discount. Given the entire context of reality and perceptions in Armenia-Diaspora relationships, these quasi-development institutions seem to be the most realistic mechanisms and modes of collaboration with risk-averse, but ethnically-driven Diasporans that constitute a considerable part of the entire Diaspora.

- The strategy towards the Diaspora should start becoming more differentiated. Different Diaspora groups have different motivations, and the policy should capture these differences by a segregated and well-thought approach to each group. The informal and more altruistic intentions directed towards family and friends of Armenia-born Diasporans can be encouraged and translated into additional investments instead of direct assistance in line with improvements in the business climate for small and medium enterprises. Investment behavior focused on ethnic identity is much more sensitive to far-flung changes in the homeland; therefore, “direction-setting” events and initiatives that clearly communicate the messages from Armenia are extremely important tools for energizing this cohort of investors. However, the promises and declarations are not enough as experience shows. The ethnic discount is applied by those who have already decided to invest, in other words who have already decided to enter into the game. But the decision to enter should be positively reinforced by the homeland. Direction-setting requires vision and strategy, real actions require motivation, and effective communication requires skills. It is all about leadership. The leadership should be provided by Armenia.
- The Diaspora was instrumental in bringing most of the international brands present in Armenia (Marriott, HSBC, KPMG, Coca-Cola, Synopsis). These are the most successful cases of utilization of the Diaspora’s potential and should be carefully analyzed not only for replication on a bigger scale, but also for elaborating effective Diaspora-Armenia business partnership models. Besides investment generation, these types of business models have numerous spillover effects in the economy. This mode of collaboration can be considered even more important since multinational corporations control bigger amounts of capital and bring expertise, technology and management skills.
- A radical progress in FDI attraction can occur only with a fundamental re-orientation of Armenia’s policy towards being more business oriented, namely development of a clear value proposition targeted at major multinational companies that seek new locations for outsourcing, R&D, production and other activities of global value chains that mainly require organized, high skill labor. The Diaspora’s network can become the most important pillar of this new strategy. This could become the most effective use of the Diaspora potential. The most important target group would be ethnic Armenians occupying executive positions at various large, multinational corporations.

## Appendix A. Distribution of Armenian Diaspora

<i>Country</i>	<i>Population</i>	<i>Country</i>	<i>Population</i>
Albania	500	Kyrgyzstan	3,285
Argentina	130,000	Latvia	5,000
Austria	3,000	Lithuania	2,500
Australia	35,000	Luxembourg	10
Belarus	25,000	Lebanon	234,000
Belgium	10,000	Mexico	500
Brazil	40,000	Moldova	7,000
Bulgaria	30,000	Monaco	200
Canada	40,615	Netherlands	3,000
Chile	1,000	New Zealand	600
China	16	Norway	1,000
Columbia	250	Philippines	8
Costa Rica	20	Poland	92,000
Cuba	100	Qatar	150
Cyprus	2,740	Romania	3,000
Czech Republic	10,000	Russia	2,250,000
Denmark	3,000	Senegal	15
Dominican Republic	75	Singapore	35
Egypt	6,500	South Africa	200
Estonia	2,000	South Korea	12
Ethiopia	400	Spain	1,000
Finland	1,000	Sudan	1,000
France	450,000	Swaziland	8
Georgia	460,000	Sweden	5,000
Germany	42,000	Switzerland	5,000
Ghana	15	Syria	150,000
Greece	20,000	Tajikistan	6,000
Hungary	15,000	Thailand	1,000
Honduras	900	Turkey	80,000
Hong Kong	16	Turkmenistan	32,000
India	560	UAE	3,000
Indonesia	10	Ukraine	150,000
Iran	100,000	United Kingdom	18,000
Iraq	20,000	United States	1,400,000
Ireland	50	Uruguay	19,000
Israel	3,000	Uzbekistan	70,000
Italy	2,500	Venezuela	2,500
Ivory Coat	20	Vietnam	8
Japan	10	Yugoslavia	10,000
Jordan	51,533	Zambia	8
Kazakhstan	25,000	Zimbabwe	28
Kuwait	5,000	<b>Total</b>	<b>6,092,897</b>

Source: <http://www.armeniadiaspora.com/followup/index.html>

**Appendix B. Distribution of Diaspora-connected (DCIR) and Foreign Investors by Countries, 1994-2004**

No	Country	DCI	Total number of foreign Investors	% of DCI in total
1	Afghanistan	0	2	0%
2	Argentina	3	3	100%
3	Australia	16	16	100%
4	Austria	6	9	67%
5	Bahamas	2	6	33%
6	Belarus	13	16	81%
7	Belgium	21	24	88%
8	Belize	1	2	50%
9	Brazil	8	8	100%
10	Bulgaria	30	34	88%
11	Canada	50	58	86%
12	China	0	60	0%
13	Cuba	3	3	100%
14	Cyprus	16	56	29%
15	Czech Republic	15	21	71%
16	Denmark	0	1	0%
17	Egypt	5	9	56%
18	Estonia	4	4	100%
19	Ethiopia	1	1	100%
20	France	119	133	89%
21	Great Britain	51	103	50%
22	Georgia	86	110	78%
23	Germany	48	70	69%
24	Greece	24	29	83%
25	Hungary	1	2	50%
26	Iceland	0	2	0%
27	India	5	48	10%
28	Iran	336	846	40%
29	Iraq	9	10	90%
30	Ireland	1	7	14%
31	Israel	17	19	89%
32	Italy	13	45	29%
33	Japan	0	2	0%
34	Jordan	11	11	100%
35	Kazakhstan	13	14	93%
36	Korea, Rep	0	8	0%
37	Kuwait	2	2	100%
38	Kyrgyz Republic	4	4	100%
39	Latvia	15	15	100%
40	Lebanon	91	111	82%
41	Lichtenstein	4	5	80%
42	Lithuania	3	6	50%
43	Luxembourg	4	5	80%
44	Malaysia	0	2	0%
45	Moldova	1	2	50%
46	Monaco	3	3	100%
47	Morocco	0	1	0%
48	Netherlands	24	37	65%
49	Norway	0	1	0%
50	Pakistan	0	9	0%
51	Panama	1	3	33%

52	Poland	9	16	56%
53	Romania	3	3	100%
54	Russia	732	818	89%
55	Seychelles	0	1	0%
56	Singapore	0	1	0%
57	Slovakia	1	5	20%
58	Spain	5	5	100%
59	Sweden	8	9	89%
60	Switzerland	31	42	74%
61	Syria	96	119	81%
62	Tajikistan	0	1	0%
63	Tanzania	0	1	0%
64	Thailand	2	2	100%
65	Turkey	41	72	57%
66	Turkmenistan	4	6	67%
67	UAE	13	19	68%
68	Ukraine	32	35	91%
69	USA	457	517	88%
70	Uzbekistan	9	10	90%
71	Venezuela	1	1	100%
72	Yugoslavia	2	3	67%
<b>Total</b>		<b>2526</b>	<b>3684</b>	<b>69%</b>

### Appendix C. Number of Foreign Investors in Armenia

Year	Total	DCC	DCC Share in Total
1994	97	77	79%
1995	263	166	63%
1996	244	163	67%
1997	268	179	67%
1998	239	152	64%
1999	257	156	61%
2000	254	144	57%
2001	225	152	68%
2002	296	210	71%
2003	299	230	77%
2004	368	291	79%
<b>Total</b>	<b>2810</b>	<b>1920</b>	<b>68%</b>

### Appendix D. Number of Companies with Foreign Capital in Armenia

Year	Total	DCIR	DCIR Share in Total
1994	127	102	80%
1995	330	219	66%
1996	326	212	65%
1997	340	224	66%
1998	324	203	63%
1999	344	207	60%
2000	350	198	57%
2001	298	210	70%
2002	393	269	68%
2003	394	303	77%
2004	458	379	83%
<b>Total</b>	<b>3684</b>	<b>2526</b>	<b>69%</b>

## Appendix E. Number of Diaspora-connected Investors

	Country of Origin	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
1	Argentina			1				1				1	3
2	Australia			2			1				3	10	16
3	Austria		2	1			1				1	1	6
4	Bahamas					1			1				2
5	Belarus	1	2			3		3	1	1		2	13
6	Belgium	1	1	1	5		2	4		4	1	2	21
7	Belize						1						1
8	Brazil		1	3	2		1	1		1			9
9	Bulgaria	2	2	5	6	4	1	1	3	2	1	3	30
10	Canada	3		5	5	3	4	6	5	8		11	50
11	Cuba				3								3
12	Cyprus		1			3	2	2	3	3	1	1	16
13	Czech Republic			4	3	1	1		1		3	2	15
14	Egypt	1	3	1									5
15	Estonia							2	2				4
16	Ethiopia					1							1
17	France	3	17	10	18	7	9	13	5	7	18	12	119
18	Great Britain	4	1	1	5	7	5	3	4	9	3	9	51
19	Georgia	3	6	7	12	12	8	6	10	8	8	6	86
20	Germany		6	7	3	2	6	4	5	8	4	3	48
21	Greece		1	3	1	4	2	5	3	2	3		24
22	Hungary				1								1
23	India		1			1		1			2		5
24	Iran	18	27	29	17	21	26	27	29	39	61	42	336
25	Iraq		5					3		1			9
26	Ireland											1	1
27	Israel		1		2	5	1		1	1	1	5	17
28	Italy			4	3	1			3		1	1	13
29	Jordan						3			2		6	11
30	Kazakhstan			2		2		1	2	2	2	2	13
31	Kuwait					2							2
32	Kyrgyz Republic										1	3	4
33	Latvia			1	1		2	1	4	1	4	1	15
34	Lebanon	3	7	6	9	7	17	3	10	9	11	9	91
35	Lichtenstein				1	1		1	1				4
36	Lithuania				1	1	1						3
37	Luxembourg		1					2		1			4
38	Moldova			1									1
39	Monaco					3							3
40	Netherlands	1		3	7	3		2	4		1	3	24
41	Panama								1				1
42	Poland	2		3			1	2				1	9
43	Romania			1		1			1				3
44	Russia	25	73	70	65	47	42	59	58	73	107	113	732
45	Slovakia						1						1
46	Spain				1	1	1				2		5
47	Sweden		2		1			1	1			3	8
48	Switzerland		4		3	2	6	1	2	5	1	7	31
49	Syria	6	12	10	3	9	13	4	8	5	15	10	95
50	Thailand					2							2
51	Turkey		1		11	2	6	1	3	6	1	10	41
52	Turkmenistan	1					1	1				1	4
53	UAE	1	1	1			1	1	2	5		1	13
54	Ukraine	2	2	2	3	3	8		3	3	3	3	32
55	USA	25	38	28	30	40	33	35	33	61	44	90	457
56	Uzbekistan		1		2			1	1	2		2	9
57	Venezuela											1	1
58	Yugoslavia					1						1	2
	<b>Total</b>	<b>102</b>	<b>219</b>	<b>212</b>	<b>224</b>	<b>203</b>	<b>207</b>	<b>198</b>	<b>210</b>	<b>269</b>	<b>303</b>	<b>379</b>	<b>2526</b>

## Appendix F. Number of Diaspora-connected companies

Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Argentina			1				1				1	3
Australia			1			1				3	5	10
Austria		2	1							1	1	5
Bahamas												0
Belarus	1	2			3		1	1	1		2	11
Belgium	1			5		1	3		3	1	1	15
Belize						1						1
Brazil			3	2			1					6
Bulgaria	2	2	4	5	4	1	1	2	1	1	2	25
Canada	2		3	4	3	2	5	2	4		4	29
Cuba				2								2
Cyprus					2	1	1	1	2		1	8
Czech Republic			3	3		1				2	1	10
Egypt	1	1	1									3
Estonia							1	1				2
Ethiopia												0
France	2	13	9	8	4	4	5	4	7	15	11	82
Great Britain	3	1	1	4	2	2	1	2	6	1	3	26
Georgia	3	3	4	8	8	7	6	7	5	8	5	64
Germany		5	6	3	2	3	2	4	6	4	3	38
Greece		1	1	1	4	2	3	3	1	2		18
Hungary				1								1
India							1			1		2
Iran	11	17	16	11	10	17	10	13	23	29	29	186
Iraq		3					3		1			7
Ireland											1	1
Israel		1		1	2	1		1	1		3	10
Italy			2	2				1			1	6
Jordan						2			1		2	5
Kazakhstan			2		1		1	2	2	1	1	10
Kuwait					1							1
Kyrgyz Republic											3	3
Latvia			1	1		2	1	2	1	4	1	13
Lebanon	2	6	6	8	5	12	1	5	8	4	7	64
Lichtenstein					1		1	1				3
Lithuania				1	1	1						3
Luxembourg		1					1		1			3
Moldova			1									1
Monaco					1							1
Netherlands	1		2	4	3			2			3	15
Panama												0
Poland	2		1				1				1	5
Romania			1		1			1				3
Russia	17	55	55	54	40	35	48	48	59	88	90	589
Slovakia						1						1
Spain				1	1					1		3
Sweden		2		1			1	1			2	7
Switzerland				1	1	2		1	1	1	4	11
Syria	3	6	8	2	6	9	2	6	2	10	6	60
Thailand					1							1
Turkey		1		5	1	1	1	2	5	1	5	22
Turkmenistan	1					1	1				1	4
UAE	1		1			1	1	2			1	7
Ukraine	2	2	2	3	3	6		3	3	3	3	30
USA	19	31	22	27	27	21	25	24	51	37	72	356
Uzbekistan				2			1	1	2		2	8
Venezuela											1	1
Yugoslavia					1						1	2
<b>Total</b>	<b>74</b>	<b>155</b>	<b>158</b>	<b>170</b>	<b>139</b>	<b>138</b>	<b>131</b>	<b>143</b>	<b>197</b>	<b>218</b>	<b>280</b>	<b>1803</b>

## Appendix G. Number of Diaspora-connected Companies with Investors From More Than One Country

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
<i>Multi-country investor company</i>	<b>3</b>	<b>11</b>	<b>5</b>	<b>9</b>	<b>13</b>	<b>18</b>	<b>13</b>	<b>9</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>117</b>
<i>Investor by country</i>												
Austria						1						1
Bahamas					1			1				2
Belgium		1	1	1		1	1					5
Brazil		1				1			1			3
Bulgaria								1	1		1	3
Canada	1					2	1	1	2		6	13
Cyprus		1				1		2	1	1		6
Czech Republic					1			1				2
Estonia							1	1				2
Ethiopia					1						1	2
France	1			4	1	4	6	1		1		18
Great Britain					5	1	2		2	2	3	15
Georgia		2	3	1	1	1			1			9
Germany		1	1			3	2		2			9
Greece							2			1		3
India		1			1							2
Iran		3			4	1	1	1	6	6	1	23
Israel				1	2					1		4
Italy				1	1			2		1		5
Kazakstan										1		1
Kyrgyz Republic										1		1
Latvia								1				1
Lebanon				1	1		2			6	1	11
Lichtenstein				1								1
Luxembourg							1					1
Netherlands				2			2			1		5
Panama								1				1
Poland						1						1
Russia	1	5	3	5	5	2	5	2	2	8	2	40
Spain						1				1		2
Switzerland		4		2	1	3	1	1	4		1	17
Syria		1			1		2	2	2	2	3	13
Turkey				3	1	5					2	11
UAE		1							5			6
Ukraine						2						2
USA	3	2	2	1	6	12	4	3	4	4	5	46
Uzbekistan		1										1
<b>Total</b>	<b>6</b>	<b>24</b>	<b>10</b>	<b>23</b>	<b>33</b>	<b>42</b>	<b>33</b>	<b>21</b>	<b>33</b>	<b>37</b>	<b>26</b>	<b>288</b>

## Appendix H. Number of DCC Structured Through Off-shores

DCC linked to	Cyprus	Great Britain	Ireland	Luxemburg	Panama	Belize	USA (WY, DL)	Lichtenstein	Total
Russia	9	9			1	1		3	23
USA		5	1	2					8
Greece		1							1
Israel		1							1
Argentina							1		1
<b>Total</b>	<b>9</b>	<b>16</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>34</b>

**Appendix I. Survey Statistics: Family Altruists vs. Ethnic Identity Investors**

	n=17, if Identity=1, and Contact =1	n=14, if Identity=1, and Contact =0
Age	51.1 (13.1)	49.7 (11.7)
Schooling	17.5 (3.2)	16.6 (3.3)
Birth	70%	100%
Experience	59%	79%
Assistance	29%	43%
Business Interest	24%	43%
Ethnic Discount	94%	100%
Transfer	65%	79%

**Appendix J. Survey Statistics: Armenia-born vs. Diaspora-born Investors**

	n=30, Birth=1	n=7, Birth=0
Age	51.2 (11,8)	41.3 (13.02)
Schooling	17,6 (3.1)	14.6 (3.99)
Experience	70%	29%
Assistance	33%	14%
Contacts	47%	86%
Identity	87%	71%
Business Interest	37%	57%
Ethnic Discount	93%	71%
Transfer	80%	43%

**Appendix K. Survey Statistics: ED vs. Business Interest**

	n=33, ED=1	n=4, ED=0
Age	50.2 (12.)	42,25 (12.3)
Schooling	17.3 (3.4)	17 (4.08)
Experience	67%	25%
Assistance	33%	0%
Contacts	55%	50%
Identity	91%	25%
Business Interest	39%	50%
Birth	84%	50%
Transfer	73%	75%

## Appendix L. FDI Statistics for Selected Transition Countries

<b>Armenia</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
GDP per capita, PPP (current international \$)	1,839	2,079	2,209	2,422	2,733	3,138	3,671
Foreign direct investment, net inflows (% of GDP)	3.17	11.66	6.61	5.45	3.30	4.66	4.31
Net FDI Inflows, per capita (current US\$)	16.09	69.41	38.80	33.48	22.64	36.10	39.56
<b>Azerbaijan</b>							
GDP per capita, PPP (current international \$)	1,816	2,002	2,177	2,571	2,877	3,218	3,617
Foreign direct investment, net inflows (% of GDP)	28.13	23.01	11.14	2.46	3.97	22.33	46.02
Net FDI Inflows, per capita (current US\$)	142.23	129.28	63.92	16.14	27.93	170.39	399.00
<b>Bulgaria</b>							
GDP per capita, PPP (current international \$)	4,990	5,216	5,399	5,990	6,483	6,906	7,501
Foreign direct investment, net inflows (% of GDP)	4.87	4.22	6.32	7.94	5.98	5.81	7.12
Net FDI Inflows, per capita (current US\$)	60.73	65.06	99.75	124.26	102.77	114.97	181.44
<b>Estonia</b>							
GDP per capita, PPP (current international \$)	7,986	8,453	8,665	9,779	10,803	11,806	12,913
Foreign direct investment, net inflows (% of GDP)	5.41	10.42	5.49	7.09	9.09	4.04	9.81
Net FDI Inflows, per capita (current US\$)	190.14	418.79	221.84	282.81	397.72	209.52	658.37
<b>Georgia</b>							
GDP per capita, PPP (current international \$)	1,569	1,688	1,775	1,990	2,151	2,333	2,666
Foreign direct investment, net inflows (% of GDP)	6.91	7.34	2.94	4.31	3.42	4.93	8.46
Net FDI Inflows, per capita (current US\$)	49.53	54.67	17.23	27.78	23.53	36.26	73.97
<b>Kazakhstan</b>							
GDP per capita, PPP (current international \$)	3,602	3,624	3,903	4,594	5,330	5,897	6,663
Foreign direct investment, net inflows (% of GDP)	5.96	5.20	9.41	7.01	12.80	10.49	6.77
Net FDI Inflows, per capita (current US\$)	83.89	74.17	103.80	85.16	190.15	173.67	140.37
<b>Russian Federation</b>							
GDP per capita, PPP (current international \$)	6,000	5,894	6,360	7,086	7,573	8,130	9,033
Foreign direct investment, net inflows (% of GDP)	1.20	1.02	1.69	1.04	0.81	1.00	1.85
Net FDI Inflows, per capita (current US\$)	33.02	18.82	22.62	18.64	17.06	24.02	55.49
<b>Uzbekistan</b>							
GDP per capita, PPP (current international \$)	1,328	1,371	1,435	1,516	1,600	1,664	1,737
Foreign direct investment, net inflows (% of GDP)	1.13	0.93	0.71	0.55	0.73	0.67	0.69
Net FDI Inflows, per capita (current US\$)	7.06	5.82	4.96	3.04	3.32	2.57	2.74

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