

# Which factors drive illegal immigration?

*An empirical analysis of the U.S. and the E.U.*

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Fabrizio Costantino

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TESI DOCTORAL UPF / 2013-2014

DIRECTOR DE LA TESI

Dr. Iñigo Ortiz de Urbina Gimeno

DEPARTAMENT DE DRET



## **Abstract**

This thesis aims to provide quantitative evidence on the flows of illegal immigrants in the U.S. and the E.U. After describing the flows in space and time (years 2000-2011), the actors involved, and the role of criminal organizations as facilitator of illegal immigration, I test the correlation between the variables (GDP Growth Rate, Unemployment Rate, Gini Coefficient and Minimum Wage) recognized by the literature as drivers of illegal immigration in the U.S. and the E.U. and the number of illegal immigrants apprehended at the border of these areas.



## List of Abbreviations

ACS – American Community Survey

ARDL – Autoregressive Distributing Lag

BLS - Bureau of Labor Statistics

CESifo – Center for Economic Studies, Munich Society for the promotion of economic research

CESPI – Centro Studi di Politica Internazionale

CIREFI - Centre for Information, Discussion and Exchange on the Crossing of Frontiers and Immigration

CPB – United States Custom Border Patrol

CPI – Consumer Price Index

CPS - Current Population Survey

CReAM - Centre for Research and Analysis of Migration

CRS – United States Congressional Research Service

DHS - Department of Homeland Security

INS - Immigration and Naturalization Service

DICE - Database for Institutional Comparisons in Europe

E.U. – European Union

FIMATHU - Facilitated Illegal Immigration Affecting Austria and Hungary

*GBP – British Pound*

GCIM – Global Commission on International Migration

GDP – Gross Domestic Product

ICMPD - International Centre for Migration Policy Development

ILO - International Labor Organization

IRCA – Immigration Reform Control Act

IZA – Institute for the Study of Labor

NBER – National Bureau of Economic Research

NGO – No-for-Profit Organization

OECD – Organization for Economic Cooperation and Development

SIVE – Sistema Integrado de Vigilancia Exterior

U.S. – United States of America

UCL – University College London

UCLA – University of California Los Angeles

UN – United Nations

UNODC – United Nations Office on Drugs and Crime

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# Chapter I. Introduction

## 1.1 Introduction

The issues linked with global migration gained a prominent role in the international arena in the last twenty years, when the gradual integration of the different national economies matched with the emergence of new types of transnational crimes, one of which is the facilitation of illegal immigration. Globalization made capitals move fast from one side to the planet to another, aided by the gradual lowering of barriers.

Because of their valuable revenues and job opportunities United States and Europe became the natural destination of illegal flows of immigrants coming from South America and Africa and, consequently, one of the primary objectives for the facilitators of illegal immigration. The deregulatory trends have been accompanied by a progressive limitation regarding migratory movements. Europe and more recently the United States begun to rise a number of barriers (physical and legal) to immigration which resulted in stricter border controls and an increase in the requirements needed to be accepted in the host countries. The main reason behind this opposite trend is the fear, by the public, that immigrants may pose a threat to their jobs (through a lowering of average wages), and become a source of ethnic and religious conflict.

The usual starting point analyzes migrants as driven by a range of factors which make them move from a country to another. However, for a long time, most of the scientific approaches<sup>1</sup> dealt essentially with the motivations leading people to emigrate illegally, without however providing any empirical support for their frameworks, as the low quality of the available data has long rendered it unsatisfactory to conduct in-deep

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<sup>1</sup> CARLING, Jørgen. "Migration, human smuggling and trafficking from Nigeria to Europe". *Geneva: International Organization for Migration*, 2006. Available at: <http://publications.iom.int/bookstore/free/MRS23.pdf>; ARONOWITZ, Alexis A. "Smuggling and trafficking in human beings: the phenomenon, the markets that drive it and the organizations that promote it". *European Journal on Criminal Policy and Research* 2001, 9.2:163-195; HERMAN, Emma "Migration as a family business: The role of personal networks in the mobility phase of migration." *International Migration* 2006, 44.4: 191-230; SALT, John and STEIN, Jeremy "Migration as a business: the case of trafficking". *International migration* 35.4, 1997: 467-494; KOSER, Khalid and SALT, John, "The geography of highly skilled international migration." *International Journal of Population Geography*, 1997, 3.4: 285-303.

quantitative analyses. A large body of research on illegal immigration focused on the situation of illegal residents, and on the real effects of legislation on this phenomenon, but only briefly addressed unauthorized *migration* itself<sup>2</sup>. As argued by Bakewell, these studies tended to choose the theory which better fitted the context, making it clean by failure and often developing another theory to cope with the next dataset<sup>3</sup>.

While illegal migration is a problem which gained public attention only in recent times, current research (with the exception of Hanson and Spilimbergo, who tested the effect of the influence of wages in the U.S. on flows of illegal immigrants<sup>4</sup> crossing the U.S.-Mexico border<sup>5</sup>), limits its scope on the analysis of the factors which seem to drive illegal immigrants from one place to another, lacking empirical evidence about how these factors drive the flows of illegal immigrants. This last aspect becomes crucial if migrants are likely to be responsive to economic factors typical of the countries of destination of the flows of illegal immigrants<sup>6</sup>

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<sup>2</sup> CORNELIUS, Wayne A. "Controlling 'unwanted' immigration: Lessons from the United States, 1993–2004". *Journal of Ethnic and Migration Studies*, 31.4, 2005: 775-794; KING, Russell. "Towards a new map of European migration". *International Journal of Population Geography*, 2002:89-106; ANTHIAS, Floya and LAZARIDIS, Gabriella (ed.). *Gender and migration in Southern Europe: Women on the move*. Berg, 2000; QUASSOLI, Fabio "Migrants in the Italian underground economy". *International Journal of Urban and regional research*, 23.2, 1999:212-231; HUNTOON, Laura. "Immigration to Spain: implications for a unified European Union immigration policy". *International Migration Review*, 1998: 423-450; BODEGA, Isabel, et al. "Recent migrations from Morocco to Spain". *International migration review*, 1995: 800.

<sup>3</sup> BAKEWELL, Oliver "Keeping Them in Their Place: the ambivalent relationship between development and migration in Africa". *Third world quarterly*, 2008, 29.7: 1341-1358.

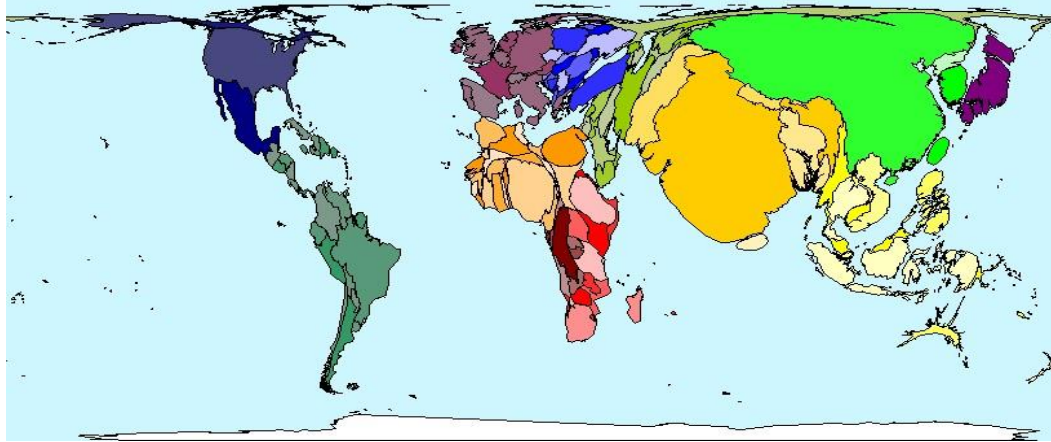
<sup>4</sup> According to Hanson, illegal migrants tend to arrive in larger numbers when the U.S. economy is expanding (relative to Mexico and the Central American countries that are the source of most illegal immigration to the United States) and move to regions where the job market grows strongly. Conversely, legal immigrants are "subject to arbitrary selection criteria and bureaucratic delays, which tend to disassociate legal inflows from U.S. labor-market conditions". See HANSON, Gordon. "The economic logic of illegal immigration". *CRS No. 26. New York: Council on Foreign Relations*, April 2007: 5; HANSON, Gordon H. and SPILIMBERGO, Antonio. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border", *American Economic Review*, *American Economic Association*, December 1999, vol. 89(5): 1337-1357.

<sup>5</sup> CARD, David and LEWIS, Ethan G. "The diffusion of Mexican Immigrants during 1990s: Explanations and Impacts", in George J. Borjas, ed. *Mexican Immigration to the United States*. Chicago: University of Chicago Press, 2007.

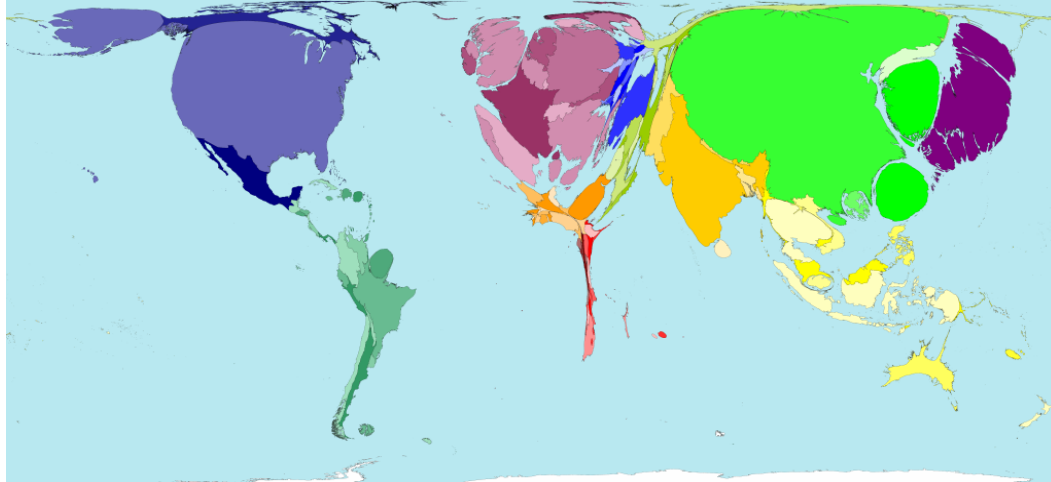
<sup>6</sup> Legal immigration, in contrast, responds to economic conditions more slowly. Annual quotas for green cards are fixed and clearing the queue for a green card requires several years, making legal permanent immigration insensitive to the U.S. business cycle. Quotas for temporary legal immigration do change over time but do not track the U.S. economy with much precision. Relative to illegal immigrants,

### Box 1. World's distribution of wealth and population

*World Map based on distribution of population, 2002*



*World map based on distribution of wealth, forecast 2015*



**Source: World mapper (available at <http://www.worldmapper.org/images/largepng/164.png>)**

**The maps above depict the global distribution of population and wealth. The dimension of each territory shows the virtual proportion of the global population and wealth. While the first map illustrates the distribution of population, the second shows the difference in wealth among territories by using Gross Domestic Product (GDP) as parameter.**

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temporary legal immigrants are far less mobile, as most work visas are tied to a particular employer. See MARTIN, Susan. "U.S. Employment-Based Admissions: Permanent and Temporary". *Migration Policy Institute Policy Brief No.15*, January 2006. At the same time, Hanson and Spilimbergo provide evidence of month-to-month changes in illegal immigration revealing an increase of illegal entries of 6% on the U.S.- Mexico border as a consequence of a Mexican wages fall of 10% relative to U.S. wages. See HANSON, Gordon H. and SPILIMBERGO, Antonio. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border", *American Economic Review*, American Economic Association, December 1999, vol. 89(5): 1337-1357.57.

Considering the number and the variety of the factors involved in illegal immigration, this thesis intends to contribute to the improvement of the current debate providing original quantitative evidence on the effect undertaken by the factors commonly recognized as driving illegal immigrants towards the U.S. and the E.U. It also purports to show new pathways to further research on particular problems that have not been researched yet or where little analysis has been done.

## 1.2 Objectives of the thesis

This work will try to answer the following questions:

- i. How many illegal immigrants tried to enter the U.S. and the E.U. in the years 1999-2011?
- ii. Which factors drive illegal immigration to the U.S. and the E.U.?
- iii. How much and in which way do these factors drive illegal immigration?
- iv. Do these factors work in the same way for the U.S. and the E.U.?

To answer these questions this thesis will analyze illegal immigration from a social, legal and economic (i.e. as a market where demand and supply meet) point of view, to assess whether economic oscillations and legal restrictions in destination countries exert an influence on illegal immigration, and given the case what kind of influence.

In addition to presenting the latest findings on the topic, the first part of this thesis will deal with the selection of possible economic and social drivers of illegal immigration. In a second step the existence of a relationship between these hypothetical drivers (independent variable) and illegal immigration (dependent variable) will be verified<sup>7</sup>.

To pursue this goal, after providing the reader with the current definitions of the phenomenon according to international law, this work sets itself the following objectives:

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<sup>7</sup> Different domestic legislations in destination countries (U.S. and Spain, Italy, Malta and Greece for the E.U.) are then provided in the annex. These countries are selected here as they are the most important points of entry of illegal immigrants directed to Europe.

- a. analysis of the factors recognized by the literature as drivers of illegal immigration;
- b. analysis of the flows of illegal immigrants directed to the U.S. and the E.U. in the years 2000-2011
- c. standardization and measurement of the variables;
- d. test of correlation between these drivers and illegal immigration in the U.S. and the E.U.

## 1.3 Methodology

To pursue the objectives above, the following methodology will be adopted:

### A. Regarding objective one:

- i. Review of findings achieved by criminological and sociological research on illegal immigration:
  - a. Drivers of illegal immigration.
- ii. Review of the legislation on immigration approved by the countries which are the destination of the illegal flows of immigrants in the U.S. and Europe:
  - a. United States;
  - b. Spain;
  - c. Italy;
  - d. Malta;
  - e. Greece.

### B. Regarding the second objective:

- i. Analysis of the flows of illegal immigrants apprehended in the following regions:
  - a. United States.

- b. The European Union, represented by the following States<sup>8</sup>:
  - i. Spain;
  - ii. Italy;
  - iii. Malta;
  - iv. Greece.

C. Regarding the third objective:

- i. Extrapolation and standardization of the variables in the U.S. and the E.U.:
  - a. GDP Growth Rate;
  - b. Unemployment Rate;
  - c. Income Inequality (Gini coefficient);
  - d. Minimum Wage;
  - e. Legal Enforcement.

D. To achieve the fourth objective:

- i. Analysis of the relationship between illegal immigration and the independent variables for:
  - a. U.S.;
  - b. E.U. (aggregate level).

Gross domestic product growth rate (GDP), Unemployment rate, Income inequality, Minimum wage and Border Enforcement will be analyzed by examining the linear relationships between the independent economic variables (increase/decrease of GDP, unemployment rate and minimum wage, income inequality and border enforcement in the U.S. and the E.U.) and the dependent variable (increase/decrease of the number of immigrants apprehended at their borders, for the years 1999-2011). Tests of statistical correlation will be used to verify the type and the force of the relationships between the variables.

This thesis is divided in four chapters: after presenting the objectives and the academic relevance of the thesis, this first chapter reviews the literature on illegal immigration. The second chapter analyzes the features of the U.S. and E.U. markets, together with

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<sup>8</sup> The data on illegal immigrants of the single border countries of the E.U. will be later aggregated to create a single variable.



their implications for the market for illegal immigration in the form of facilitators and price regulation. At the same time, it provides original quantitative evidence about the flows of illegal immigrants. The third chapter analyzes the factors which drive illegal immigration and their relationships with the flows of illegal immigrants directed to the U.S. and the E.U. in the years 1999-2011. The fourth chapter will verify the force and the type of the correlation between illegal immigration and the factors analyzed.

### 1.3.1 Available data and potential threats to its validity

This thesis focuses on the effect of the drivers operating in the countries where illegal immigrants are apprehended (the U.S. and the countries at the external borders of E.U. - Spain, Italy, Malta, and Greece -). I examine these drivers in the United States by using data provided by the U.S. Department of Homeland Security (DHS) and data on GDP Growth Rate, U.S. Minimum Wage, Gini coefficient, Unemployment Rate (provided by the OECD database) and Border Enforcement (DHS). For the European Union, I examine the drivers by using data on apprehension provided by the Ministries of Interior of Italy, Malta and Greece and the ministry of Social Issues of Spain with data on GDP Growth Rate, E.U. Minimum Wage<sup>9</sup>, Gini coefficient, Unemployment Rate of the Euro Area (provided by the OECD database) and Border Enforcement (Eurostat). The empirical results provide evidence on how relative wages, expansions in the labor market and border enforcement influence the illegal immigration in the U.S.<sup>10</sup> and the E.U.

The main challenge of this work is however related to the quality of the proxy used to measure illegal immigration. Thus, we not observe the number of illegal immigrants entering every year but the number of illegal immigrants apprehended by the U.S.

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<sup>9</sup> Mean extracted from the countries belonging to the Euro-Area.

<sup>10</sup> There are also other quantitatively important flows of illegal immigrants (like the one directed from China to Australia), but flows directed to the E.U. and the USA are commonly recognized as the most relevant because of the amount of money involved.

border patrol<sup>11</sup> and by the national authorities of the countries at the external borders of the E.U. Our approach indirectly captures illegal immigration. The strategy used is therefore to examine illegal immigration indirectly by examining the factors that determine border apprehensions<sup>12</sup>, which is the only proxy available to measure the illegal immigration inflows<sup>13</sup>. However, it has to be taken into account that illegal immigrants almost never have documents with them when apprehended, and in many cases lie about their real nationality to make their repatriation more difficult and at the same time increase their possibilities of obtaining an asylum stay<sup>14</sup>. All these circumstances make data on the push factors of migration almost inexistent yet.

Illegal immigration is a phenomenon that is by its nature not easy to measure, given the absence of reliable data. This difficulty is first of all related to the illegal, in many jurisdictions criminal nature of the phenomenon, which makes it hard to identify both the offence and the social background of the victims/offenders. Legal immigrants are officially registered by the authorities, and so are their nationality, work and family networks. The count of the number of legal immigrants is therefore exact (or at least as exact as the count of natural citizens). Conversely, the count of illegal immigrants is not as accurate, due to the illegal nature of the phenomenon. Immigrants try to cross the

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<sup>11</sup> Data collection about people consciously involved in illegal activities can be a rather challenging endeavor, more so when the illegal activities are “victimless offences”, such as illegal migration. Statistics on illegal immigration are very often collected in diverse ways at different times by different actors and are particularly hard to come by even in those countries with good statistical sources and collection systems. This difficulty is caused by two factors. First, the lack of a common language between the actors in the field complicates data comparison. Second, the availability of adequate information is subject to geographical variations, a factor that may hamper meaningful international analysis. See DELAUNAY, Daniel and TAPINOS, Georges. *La mesure de la migration clandestine en Europe*. Oficina de Publicaciones Oficiales de las Comunidades Europeas, 1998.

<sup>12</sup> See *supra*, footnote 4 and corresponding text.

<sup>13</sup> The only methodology explicitly used for estimating the flows of illegal immigrants to Europe is the projection of border apprehensions. This is done, for example, by Heckmann, who introduced the necessity of calculating a ratio to estimate also the illegal immigrants *not apprehended*, and Martin and Widgren who, assuming a ratio of border apprehensions to illegal immigrants of 1:2, estimated some 500,000 illegal entries to the E.U. in 2001. See HECKMANN, Friedrich. “Illegal Migration: What Can We Know and What Can We Explain?” *International Migration Review*, Issue 3, Volume 38, 2004:1103-1125; MARTIN, Philip L. and WIDGREN, Jonas. “International Migration: Facing the Challenge”. *Population Bulletin* Vol. 57, No.1, UN Population Reference Bureau, 2002.

<sup>14</sup> The only effort made in this sense is to collect data through self-identification. The only available government data source, therefore, pertains to the number of apprehensions done by the authorities of each country of apprehension in the performance of their enforcement duties.

border undetected, and thus a methodological difficulty is generated, as the count will only include the immigrants apprehended but not the immigrants which manage to enter a country unnoticed.

Other issues involve the following main topics:

- i. The country of origin of the immigrants (since many immigrants travel without documents to make their repatriation more difficult);
- ii. The country of destination (since the country of apprehension may not be the same country as that of the intended destination);
- iii. The immigrant social network;

Many immigrants can manage to cross the border undetected, while others can be apprehended more than once in the same year. Finally, the number of individuals apprehended any given year is also determined by the level of enforcement of the national border authorities for that year. Any understanding, though limited, is often weakened by the small empirical basis provided<sup>15</sup>. This difficulty is caused by two factors. First, the lack of a common data collection method among the actors in the field (authorities, researchers) complicates data comparison. Second, the availability of adequate information is subjected to geographical variations, a factor that may hamper a meaningful international analysis.

The last 6 years have seen a rapid evolution of the availability of data on illegal immigration at the regional/national/local levels. However, the quantity and quality of data on the smuggling networks is still low, and it is clear that there is a need for an improvement of data-collection instruments. Even though apprehension data<sup>16</sup> is the

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<sup>15</sup> BRIGGS, Vernon Jr. "Methods of analysis of illegal immigration into the United States". *International Migration Review*, Vol. 18, No. 3, Autumn, 1984 : 626.

<sup>16</sup> Analyzing the European case, Jandl notes that only one methodology exists for estimating the number of illegal entries, while there are many to estimate the size of populations of illegal immigrants living in a country, and often these methodologies produce very different estimates of the same phenomenon. See JANDL, Michael. "Estimates on the Numbers of Illegal and Smuggled Immigrants in Europe". *Presentation at the 8<sup>th</sup> International Metropolis Conference*, Vienna: *International Centre for Migration Policy Development*, 2003. At the same time, Collyer underlines that the empirical evidence is very limited, as the number of people arrested is the only reliable basis on which these estimates are usually made. See COLLYER, Michael. "The Development Impact of Temporary International Labor Migration

only proxy used for measuring the illegal inflows, is still a conceptually weak indicator because it only counts those illegal aliens who failed while trying to enter into a certain country<sup>17</sup>. In particular, not all aliens entering to a given country illegally are intercepted by the local authorities. Thus, every year, a number of immigrants crossing the border goes unrecorded. Moreover, some migrants are apprehended repeated times in the same reporting period, with the result that data on interceptions literally refer to counts of the number of apprehensions (incidence) and not to the number of persons apprehended (prevalence), making it difficult, or rather impossible to avoid multiple counting, since some persons, especially along the border between the U.S. and Mexico, are caught more than once in any given year. This problem, however, has always been present in the data, and according to Briggs there is no reason to believe that this multiple counting problem is proportionately more severe now than it was in the past<sup>18</sup>. Hence, rising apprehensions, as reflected in the data, can be used in a general way to infer increasing numbers of illegal immigrants, despite the duplication problem<sup>19</sup>. Finally, numbers on apprehensions are strongly related to changes in border patrol enforcement in detecting and intercepting illegal immigrants.

Data collection by national and E.U. authorities needs to be improved and integrated with the aim of establishing a global authority to govern migration and protect migrants' rights. Many immigrants keep crossing the border undetected, rendering the data partial. These differences are consequences of certain domestic factors, such as the punishment of illegal migration (in those countries where it exists) and the difficulties in the implementation of transnational treaties, such as the United Nations Protocol against the

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on Southern Mediterranean Sending Countries: Contrasting Examples of Morocco and Egypt". *Development Research Centre on Migration, Globalisation and Poverty*, University of Sussex, 2004.

<sup>17</sup> KOSER, Khalid. *Irregular migration, state security and human security*. Global Commission on International Migration, 2005.

<sup>18</sup> See Briggs, *op. cit. infra*, footnote 15.

<sup>19</sup> The U.S General Accounting Office report of 1982 commented that "estimates of the number of illegal aliens are a necessary statistic for policymakers" (p. 1). Therefore, the first effort started in the 1970s and continued in the 1980s. However, these attempts limited their extent to the assessment of the total illegal population in the U.S., without providing any new improvement to the methods for assessing the magnitude of the yearly inflows.

Smuggling of Migrants by Land, Sea and Air<sup>20</sup>, which render the analysis more difficult at an aggregate level<sup>21</sup>.

Because data on illegal migration is scarce for the reasons above explained, which partially match the issues related to criminal data<sup>22</sup>, the use of published data on illegal migration involves a number of serious issues that make inter-country comparisons of superficially comparable information quite hazardous. In addition to these differences, emigrants and immigrants are also defined quite differently according to the domestic legislation of the different countries, even when the sources of such data are similar. It is commonly recognized that data collection by the police uses different phenomenological indicators that frequently do not even reflect the essential elements of their criminal legislation<sup>23</sup>.

Furthermore, organizations which support victims of crime have developed their own operational definitions, determined by their directives and aims, making the integration of data from different sources one of the main obstacles to overcome. Heckmann criticizes the limitations of quantitative approaches analyzing illegal immigration, as they largely rely on statistics gathered by national authorities for administrative reasons, making them necessarily incomplete<sup>24</sup>. Salt focuses on the difficulty in comparing

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<sup>20</sup> The Smuggling Protocol was adopted by United Nations General Assembly resolution 55/2, 2000, and entered into force on 28 January 2004.

<sup>21</sup> KILLIAS, Martin and RAU, Wolfgang. "The European sourcebook of crime and criminal justice statistics: a new tool in assessing crime and policy issues in comparative and empirical perspective". *European Journal on Criminal Policy and Research*, 2000, 8.1: 3-12; AEBI, Marcelo F.; KILLIAS, Martin; TAVARES, Cynthia. "Comparing crime rates: The international crime (Victim) survey, the European sourcebook of crime and criminal justice statistics and Interpol statistics". *International Journal of Comparative Criminology*, 2002, 2.1: 22-37.

<sup>22</sup> RUBIN, Marilyn M. et al. "Cross-National Studies to Illuminate the Crime Problem One Less Data Source Left Standing". *Journal of Contemporary Criminal Justice*, 24.1, 2008: 50-68 and AEBI Marcelo F. et al. *European sourcebook of crime and criminal justice statistics*. Amsterdam: Boom Juridische Uitgevers, 2006.

<sup>23</sup> GREENFIELD, Lawrence A. LANGAN, Patrick A. and SMITH, Steven K. "Police use of force: Collection of national data". *U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics*, 1997. Available at: <http://www.bjs.gov/content/pub/pdf/ndcopuof.pdf>; BOTTOMLEY, Keith, A. and COLEMAN, Clive. *Understanding crime rates: Police and public roles in the production of official statistics*. Westmead: Gower, 1981.

<sup>24</sup> HECKMANN, Friedrich. "Methodological problems in the study of illegal migration". *The Center for Migration and Development Working Paper series, Princeton University*. Working paper 03-09e 2003.

statistics collected by different sources, as they are often collected using non-standardized instruments, at different times and with different categorizations, often creating problems of comparability within countries<sup>25</sup>. According to Koser this is *a fortiori* true because of the international character of the phenomenon, its organizational complexity, and its illegal nature<sup>26</sup>. It should also be reminded that illegal migrants need to keep their identity hidden in order to reach their goals. In addition, access to data on illegal immigration is often problematic, as the data collected by the authorities is frequently not of public access<sup>27</sup>. Given the above illustrated difficulties to come to an exact estimation of illegal immigration only by its flows, some scholars quantify the level of illegal immigration on the basis of the income generated by the phenomenon. For example, according to UNODC, the route from South/Centre America to United States has an annual value at destination of around 6,6 billions of dollars (in terms of smugglers' income) while the route from Africa to Europe has a value of 150 millions (also in terms of smugglers' income)<sup>28</sup>.

## 1.4 Literature Background

So far, academic research has come to several findings about the facilitation of illegal immigration as a global business: Aronowitz observes how illegal immigration could not have reached such extent without involving a large system of interests inside the

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<sup>25</sup> SALT, John. "Trafficking and human smuggling: A European perspective". *International Migration*, 2000, 38.3: 31-56.

<sup>26</sup> See KOSER, *op. cit. supra*, footnote 17.

<sup>27</sup> The European Union has been collecting data on border apprehensions since 1995 in the context of its CIREFI (Centre for Information, Discussion and Exchange on the Crossing of Frontiers and Immigration) working group, but the data collected are kept confidential. Similarly, the data on illegal migration collected by the Inter-governmental Consultations Asylum, Refugee and Migration Policies in North America and Australia are also not publicly available. See ADAMOLI, Sabrina, DI NICOLA, Andrea, SAVONA, Ernesto U. ZOFFI, Paola. *Organised crime around the world*. Helsinki: Heuni Publication series n. 31 (1998). Available at: <http://www.heuni.fi/uploads/mmadzpnix.pdf>

<sup>28</sup> See also the information provided *infra* in Chapter II, p. 33 for the U.S. and p. 39 for the E.U.

global market<sup>29</sup>. Furthermore, he argues that smugglers behave as “entrepreneurs” and avoid legal enforcement by using bribery, deceit, and fraud<sup>30</sup>. Salt and Stein analyze world-wide migration as a global business with both legitimate and illegitimate sides<sup>31</sup>. The market for illegal immigration has been defined by some authors as a business made up of “*institutionalized networks*” composed by a number of agents, individuals, and institutions acting with commercial interest<sup>32</sup>. According to the estimates of Koser, migrant-smuggling might be as profitable a business as drug smuggling, since it raises worldwide an income of about \$7 billion per year<sup>33</sup>.

The literature maintains that oscillations in the global labor market are a key factor in illegal immigration<sup>34</sup>. Changes in Gross Domestic Product (GDP), wages and unemployment rates are expected to influence the number of illegal immigrants crossing the borders of United States and the European Union every year<sup>35</sup>. While positing reasons behind the increases in illegal immigration, the literature still lacks quantitative evidence to support these assertions<sup>36</sup>. A cost/benefit evaluation is at the basis of the

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<sup>29</sup> ARONOWITZ, Alexis A. “Smuggling and trafficking in human beings: the phenomenon, the markets that drive it and the organisations that promote it”. *European Journal on Criminal Policy and Research* 9.2, 2001:163-195.

<sup>30</sup> On this topic, see also *infra*, pp.56-57.

<sup>31</sup> SALT, John and STEIN, Jeremy “Migration as a business: the case of trafficking”. *International migration*, 1997, 35.4: 467-494.

<sup>32</sup> “Such criminal businesses and the business of criminality go far beyond simple economic and capitalist criteria and entrepreneurship and entrepreneurial ability play a significant part in creating criminal wealth. Indeed, it is part of committed criminality.” See SMITH, Robert. “Understanding entrepreneurial behaviour in organized criminals”. *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 3 Iss: 3, 2009: 256-268 (p. 266).

<sup>33</sup> UNITED NATIONS OFFICE ON DRUGS AND CRIME. *The globalization of crime: A transnational organized crime threat assessment*. United Nations: New York, 2010.

<sup>34</sup> ZHANG, Sheldon. *Chinese human smuggling organizations: Families, social networks, and cultural imperatives*. Stanford University Press, 2008; HERMAN, Emma. “Migration as a family business: The role of personal networks in the mobility phase of migration”. *International Migration*, 2006, 44.4: 191-23.

<sup>35</sup> UNITED NATIONS OFFICE ON DRUGS AND CRIME. *The globalization of crime: A transnational organized crime threat assessment*. United Nations: New York, 2010; YANG, Dean. “International Migration, Remittances and Household Investment: Evidence from Philippine Migrants’ Exchange Rate Shocks”. *The Economic Journal*, 2008, 118.528: 591-630.

<sup>36</sup> With the exception of: ALEKSYNSKA, Mariya. *Regular and Irregular Migration in Times of Global Economic Crisis: Perceptions and Realities*. CEPII Report, 2010. Available at:

choice of the migrant when legal immigration becomes more difficult for the reasons explained above (such as more restrictive legislation on migration, both in departure and destination countries, or practical issues in order to get a visa), as they may decide to use illicit means in order to cross the borders<sup>37</sup>

As explained by Zimmermann<sup>38</sup>: “*Economic migration is normally a voluntary market transaction between a willing buyer (whoever is willing to employ the migrant) and a willing seller (the migrant), and is hence likely to be both economically efficient and beneficial to both parties. Indeed, the basic economic theory of migration is very similar to that of trade; and, like trade, migration generally is expected to yield welfare gains*”<sup>39</sup>. Hanson focused on the differential of wages in Mexico and the USA, reporting an average hourly wage of \$ 2.40 in Mexico and \$ 8.70 in the USA for the year 2000. This means that comparing 35 hours a week and 48 weeks per year would lead to a gain of \$ 10,600 in annual income<sup>40</sup>. The main difference between migration and trade, as pointed out by Glover (*op. cit.* note 37) is that, differently from goods or capitals, migrants are economic as well as social agents, with a degree of control over the migration decision. In general, countries with a greater supply of labor will pay average lower wages when compared to countries with larger capitals. Consequentially, since

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[<sup>37</sup> GLOVER, Simon, et al. “Migration: An Economic and Social Analysis, RDS Occasional Paper 67”, Home Office: London, 2001. Available at: <http://library.npia.police.uk/docs/homisc/occ67-migration.pdf>](http://www.cepii.fr/CEPII/fr/publications/reports/abstract.asp?NoDoc=3432;ORRENIUS, Pia M. and ZAVODNY, Madeline. “Do amnesty programs reduce undocumented immigration? Evidence from IRCA”. <i>Demography</i>, 2003, 40.3: 437-450; HAINES David W. and ROSENBLUM, Karen Elaine (ed.). <i>Illegal immigration in America: A reference handbook</i>. Greenwood Publishing Group, 1999.</a></p></div><div data-bbox=)

<sup>38</sup> ZIMMERMAN, Klaus F. “Tackling the European migration problem”. *The journal of economic perspectives*, 1995, 9.2: 45-62:48.

<sup>39</sup> Although some scholars argue that the facilitation of illegal immigration is mainly dealt by some smaller criminal groups, data seem to contradict these claims. According to ICMPD estimations, the number of smuggled people is between 25,000 and 84,000, with figures towards the lower end of this scale being the most credible. Fees generated by illegal immigrants from the Mediterranean are between €233 million and €781 million per year, making illegal immigration the second transnational crime after drug smuggling for the volume of money produced. See INTERNATIONAL CENTRE FOR MIGRATION POLICY DEVELOPMENT *Arab and European Partner States Working Document on the Joint Management of Mixed Migration Flows*. Luxembourg: Office for Official Publications of the European Communities, 2007.

<sup>40</sup> HANSON, Gordon H. “Illegal migration from Mexico to the United States”. *Journal of Economic Literature, American Economic Association*, vol. 44(4), pages 869-924, December.



labor is mobile, workers will improve the allocation of labor resources by moving from a country with lower wages to one with higher salaries.

The main idea guiding the most recent theoretical research in the economics of immigration<sup>41</sup> is that there exists an "immigration market"<sup>42</sup> which drives immigrants across potential host countries<sup>43</sup>. Any individual residing in a given country considers the possibility of remaining in that country or migrating to a number of potential host countries. Individuals make the migration decision after a cost/benefit evaluation of the various alternatives, choosing the option that best suits them considering the constraints (financial, legal and emotive) that regulate the migration process<sup>44</sup>.

A large body of research has focused on the determinants of international migration (both legal and illegal)<sup>45</sup>. With the terms "determinants" or "drivers" of migration researchers refer to those factors that influence migration decisions, including the magnitude of the various influences. In the context of illegal migration, the terms usually refers to factors that influence decisions to cross international boundaries clandestinely while trying to evade controls to settle more or less permanently in the destination country.

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<sup>41</sup> BORJAS, George J. *The analytics of the wage effect of immigration*. Working Paper 14796. National Bureau of Economic Research, 2009. Available at <http://www.nber.org/papers/w14796>; CHISWICK, Barry R. "The Impact of Immigration on the Level and Distribution of Economic Well-Being". *The Economics Of Immigration: Selected Papers of Barry R. Chiswick*. Cheltenham, UK: Edward Elgar Publishing 2005.

<sup>42</sup> According to this perspective, firms (or countries) offer different "employment" contracts. Individuals compare these offers and non-randomly sort themselves among the available jobs (countries).

<sup>43</sup> BORJAS, George J. "Immigrants, Minorities, and Labor Market Competition", *NBER Working Papers 2028*, National Bureau of Economic Research, Inc. 1987.

<sup>44</sup> These constraints include not only the individual's financial resources (which determine the extent of migration and the means of transportation used), but also the legal environment imposed by both sending and receiving countries. These different circumstances generate variations in migration costs among potential immigrants from different countries.

<sup>45</sup> MAYDA, Anna Maria. "International migration: A panel data analysis of the determinants of bilateral flows". *Journal of Population Economics*, 2010, 23.4: 1249-1274; HANSON, Gordon H.: *The economic logic of illegal immigration*. Council Special Report N. 27, Council on Foreign Relations, New York 2007; O'ROURKE, Kevin H. and SINNOTT, Richard. "The determinants of individual attitudes towards immigration". *European Journal of Political Economy*, 2006, 22.4: 838-861; HANSON, Gordon H. and SPILIMBERGO, Antonio. "Political economy, sectorial shocks, and border enforcement". *Canadian Journal of Economics/Revue canadienne d'économique*, 2001, 34.3: 612-638.

Another difference in methodological perspective can still be found between micro studies and macro studies of the determinants of international migration. From an empirical point of view, this distinction is dictated by data, but the theoretical models that underlie each type of study are also frequently different. Whereas micro studies use data on individual migrants<sup>46</sup> (or perhaps on individual families), macro studies use aggregate data. The aggregate data may refer to aggregate migration flows, such as the total flow between country  $i$  and country  $j$  during year  $t$ , or to aggregate characteristics of origin and/or destination countries<sup>47</sup>. In empirical models, this distinction is between the dependent and independent variables. Aggregate characteristics may in turn refer to countries or to regions within a country. Regional characteristics within a country are important in studies of immigrant location patterns within the receiving nation, for example. Studies of immigrant location patterns contribute to knowledge concerning why the immigrants moved. When micro data are used as a dependent variable, however, aggregate data may also be used as independent variables. Such aggregate characteristics are frequently meant to distinguish the importance of place characteristics from the importance of personal characteristics. The focus of the present study is on aggregate (or macro) determinants of the decision to make an international move<sup>48</sup>.

Many studies take a bilateral perspective in that they analyze flows between a given pair of countries over time. In some cases these studies include controls for the factors attracting migrants towards some alternative nation, but in other cases they make no reference whatsoever to alternative destinations. Such studies appear to have never considered two-way flows between the countries, probably due to data limitations. In contrast to the bilateral perspective, many studies take a multilateral perspective in that

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<sup>46</sup> KENNAN, John and WALKER, James R. "The Effect of Expected Income on Individual Migration Decisions". *Econometrica*, vol. 79, 2011: 211-251; QUILLIAN, Lincoln. "Migration Patterns and the Growth of High-Poverty Neighborhoods, 1970-1990". *American Journal of Sociology* 105, 1999: 1-37; MASSEY, Douglas S., GROSS, Andrew B., and SHIBUYA, Kumiko. "Migration, Segregation, and the Geographic Concentration of Poverty". *American Sociological Review*, 59, 1994: 425-445.

<sup>47</sup> HANSON, Gordon H. and SPILIMBERGO, Antonio. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border", *American Economic Review*, *American Economic Association*, December 1999, vol. 89(5): 1337-1357.

<sup>48</sup> HANSON, Gordon H. "Illegal Migration from Mexico to the United States", *Journal of Economic Literature*, vol. 44(4), 2006: 869-924.

they analyze flows from many individual sources to a given destination or from a given country/place to many alternative destinations. Whereas bilateral approaches entail the use of time-series data, multilateral approaches involve pooling cross-section and time-series data. Like the bilateral studies, the multilateral studies also focus on one-way flows.

Several other distinctions are of some importance, and in the following sections many of these will appear. A large body of literature on the determinants of international migration focuses on the late nineteenth and early twentieth centuries, and in this sense those studies are historical as opposed to contemporary. Whereas numerous studies treat international migration as a process involving a given pair of countries (country A – departure- and B –arrival-) over a specific period of time, others disaggregate the flows<sup>49</sup>. This procedure allowed specific focus on various population subgroups that are expected to be more responsive to economic incentives or that are of specific interest in their own right. For example, male migrants are frequently examined, presumably because of their higher rates of labor force participation<sup>50</sup>. Another distinction regards the level of skills of the migrants involved in the movement from less-developed to more-developed countries. While some researchers focus on the movement of high-skilled workers in the context of the “brain drain” process, researchers on illegal immigration concentrate on the movements of less-skilled individuals<sup>51</sup>. In a limited number of cases, return migration has been studied in the international migration context. This topic is common in studies of internal migration, but the lack of data on emigration probably restricts efforts to examine the phenomenon in the context of

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<sup>49</sup> GREENWOOD, Michael J. and MCDOWELL, John M. “The Macro-Determinants of International Migration: A Survey”. Contribution to the Conference *Mass Migration in Europe: Implications in East and West*. Vienna, 1992. Available at: <http://www.colorado.edu/Economics/courses/fall11-4292-001/Macro%20Determinants%20of%20International%20Migration.pdf>.

<sup>50</sup> BRATSBERG, Bernt; RAGAN Jr, James F. and NASIR, Zafar M. “The effect of naturalization on wage growth: A panel study of young male immigrants”. *Journal of Labor Economics* 20.3, 2002: 568-597; FUNKHOUSER, Edward and TREJO, Stephen J. “Labor Market Skills of Recent Male Immigrants: Evidence from the Current Population Survey”. *The Industrial and Labor Relations Review*, 1994, Vol. 48: 792.

<sup>51</sup> GREENWOOD, Michael J. “The Economics of Mass Migration from Poor to Rich Countries: Leading Issues of Fact and Theory”, *American Economic Review, Papers and Proceedings*, May 1983: 173-177; HAINMUELLER, Jens and HISCOX, Michael J. “Attitudes toward highly skilled and low-skilled immigration: evidence from a survey experiment”. *American Political Science Review*, 104.1, 2010: 61-84.

international migration. Another topic that has received little attention is geographically indirect international migration, which refers to a situation where an individual moves from country *A* to country *B* and later moves on to country *C*.

As reported in the data, *A* is frequently the country of birth and *B* is the country of last permanent residence<sup>52</sup>. ‘Onward’ migration has drawn some attention with respect to internal migration. Although data on geographically indirect international migration is limited, Greenwood and Trabka<sup>53</sup> provided a fairly detailed descriptive analysis of such migration to the United States. Oscillations in the economy clearly play a crucial role in the analysis of the determinants of migration, whether the migration is internal or international. According to most scholars, the first point for an economic analysis of migration is the expected utility model. This model sees an individual potential migrant as *maximizing a utility function subject to a budget constraint*<sup>54</sup>. The existing differentials in money wages are assumed by the function to mirror opportunities for real utility gains, and macro-level job opportunities (such as employment rate) are supposed to reflect the probability and benefits of employment and wages. The potential immigrant then presumably chooses the destination country that maximizes his/her expected utility net of the costs of migration. Accordingly, if the expected utility gains of the considered alternative locations are low, or if the costs of migration are too high, the potential migrant might decide not to migrate. With respect to international migration, institutional constraints which lead to immigration restrictions might inhibit free movement and thus blunt the economic forces that drive the flow. Wage rates and annual income levels are the most used indicators in studies of internal migration, and measures of cost of living are often introduced to convert money measures to real measures.

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<sup>52</sup> BARRETT, Frank A. “A schema for indirect international migration”. *International Migration Review*, 1976, Vol. 10, No. 1: 3-11.

<sup>53</sup> GREENWOOD, Michael J. and TRABKA, Eloise. “Temporal and Spatial Patterns of Geographically Indirect Immigration to the United States”. *International Migration Review*, 1991: 93-112.

<sup>54</sup> HAUG, Sonja “Migration networks and migration decision-making”. *Journal of Ethnic and Migration Studies*, 2008, 34.4: 585-605.

The neoclassical theory of labor migration explains the phenomenon as a result of national expected income differentials<sup>55</sup>. Therefore, migratory flows should mainly be directed towards regions with comparatively higher incomes and lower unemployment rates. Extensions of this theory account for the presence of other determinants such as network effects, distance from the origin country and immigration policies<sup>56</sup>

The most recognized migration theory is the *labor market theory*. According to it, the demand of work produced by the economic structure drives immigration towards developed countries. By comparison, labor markets of destination countries offer jobs with higher wages and working conditions, while on the other hand job markets of departure countries feature lower wages and overall poorer working conditions. Within the developed society, indigenous are not willing to take these jobs in the secondary market as there is little to no return in terms of wages, experience, education or skill<sup>57</sup>. This shortage of laborers increases the demand for immigrant workforce.

Dorigo and Tobler elaborate this theory by developing a model in which the drivers that influence migration are divided in *push* and *pull* factors<sup>58</sup>. Almost all of these factors show a strong connection with the economy, where the reasons influencing the people to move to another country are linked with the employment opportunities of the destination countries, the quality of their labor demand, and the differences in wages with the native countries of the immigrants. These factors are considered as they *persuade the migrant to move from his/her country of origin to a new country*.

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<sup>55</sup> See the seminal work of John R. HARRIS and Michael P. TODARO. "Migration, unemployment and development: a two-sector analysis". *The American Economic Review*, 1970, 60.1: 126-142.

<sup>56</sup> MAYDA, Anna Maria. "International migration: A panel data analysis of the determinants of bilateral flows". *Journal of Population Economics*, 2010, 23.4: 1249-1274.

<sup>57</sup> BORJAS, George J. "The Analytics of the Wage Effect of Immigration". *National Bureau of Economic Research*, Working Paper No. 14796, 2009.

<sup>58</sup> The push and pull equilibrium formula is:  $M_{ij} = (R_i + E_j) / d_{ij}$ ,  $i \neq j$ . According to this model,  $M_{ij}$  is the magnitude (number of people) moving from an hypothetical place  $i$  to place  $j$  (of  $r$  places) in a certain time interval. The coefficient  $d_{ij}$  defines the distance between these places.  $R_i$  is the "push" factor which has an hypothetical impact on place  $i$ , and  $E_j$  is the "pull" factor towards place  $j$ . DORIGO, Guido and TOBLER, Walter. "Push-Pull Migration Laws". *Annals. Association of American Geographers*, 1983: 1-17.

### 1.4.1 The factors which drive illegal immigration

According to Duvell<sup>59</sup>, illegal migration is driven by asymmetries between the demand for labor and the supply, which implies a tension between economics and politics, meaning that politics – for various, more or less rational reasons – prevents businesses from regularly hiring the workers they need. Thus, low-skilled labor migration is pushed towards illegal migration channels. The author also argues that the main trouble lies in the availability of low-skilled and accordingly low paid workers, because local workers are increasingly well educated, whilst the remaining local low skilled refuse the low-paid jobs available.

The common approach to the genesis of illegal immigration "push-pull" theories focuses on labor flows as an outcome of poverty and backwardness in the departure countries of immigration flows. Representatives of this perspective provide lists of "push factors" and "pull factors" as causal factors determining the size and directionality of immigrant flows. Two underlying assumptions lie behind these factors: first, the expectation that the poorer sectors of the societies show a higher elasticity to the variations in the labor market; second, the assumption that migratory flows depend on the existence of inequalities on a global scale<sup>60</sup>. Academic research explains illegal immigration with the *push and pull equilibrium model of migration*, which identifies all the key factors generating the phenomenon<sup>61</sup>. This model explains the drivers that influence migration by dividing them into *push* and *pull* factors: economic oscillations, social changes, and unemployment ("push factors") in the native countries work synchronically with higher wages, demand for labor and legislation on migration ("pull factors") in the receiving countries. *Push factors* include features such as social, economic, and legal hardships in the poorer countries, while *pull factors* include the

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<sup>59</sup> DUVELL, Franck. "Paths into Irregularity: The Legal and Political Construction of Irregular Migration". *European Journal of Migration and Law*, 2011, 13.3: 275-295.

<sup>60</sup> PORTES, Alejandro and BÖRÖCZ, József. "Contemporary immigration: theoretical perspectives on its determinants and modes of incorporation". *International migration review*, 1989:606-630.

<sup>61</sup> See *supra*, *op. cit.* footnote 58.

elements featuring a comparative advantage in the richer countries<sup>62</sup>. From an economic point of view<sup>63</sup>, illegal immigrants act as an important supply of low-skilled labor, showing a higher dependence to labor market conditions than legal immigration, which makes them particularly appealing to U.S. and E.U. employers<sup>64</sup>. Illegal immigration responds to aggregate economic shocks, both in destination and source countries<sup>65</sup>. Thus, the supply of illegal immigrants is characterized by more flexibility to economic oscillations than the supply of legal immigrants, because an illegal market circumvents the employment protections and standard contracts that reduce flexibility in licit labor markets. Accordingly, the demand for immigrant labor is expected to rise during periods of expansion and to fall during downturns. In the current global economic recession, a model of economic migration can determine the driving forces of population movements<sup>66</sup>. From a social point of view, domestic legislations restricting immigration acquired an important role in the last decade, especially in those countries that are interception points of illegal immigrants (such as Spain, Italy, Greece, and Malta). Quality of life is the main reason for the majority of people to migrate to another country, so a high presence of crime or unsecure/unsafe labor conditions back home may have an impact in encouraging migration to safer countries.

In some cases local taxes are also taken into account. Employment growth rates and/or unemployment rates are typical measures of the probability of getting a job. A difficulty arises in the international (illegal) migration context, which is also the topic of this thesis, since wages rates, earnings levels, and income levels are typically not immediately/simultaneously comparable between nations. The measure of the cost-of-

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<sup>62</sup> SHAW, Paul R. *Migration Theory and Fact: A Review and Bibliography of Current Literature*. Regional Science Research Institute, Philadelphia 1975.

<sup>63</sup> The occurrence (or not) of a crime is a consequence of a cost-benefit evaluation made by the criminal actor, dependent on the situational context, the costs to be sustained and the alleged benefits. See BECKER, Gary. "Crime and Punishment: An Economic Approach" in *Journal of Political Economy*, vol. 76 (2), March–April 1968: 196-217.

<sup>64</sup> HANSON, Gordon H. and SPILIMBERGO, Antonio. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border", *American Economic Review*, *American Economic Association*, December 1999, vol. 89(5): 1337-1357.

<sup>65</sup> BECKER, Charles M. et al. "The migration response to economic shock: lessons from Kazakhstan". *Journal of Comparative Economics*, 2005, 33.1: 107-132.

<sup>66</sup> BORJAS, George J. "Economic theory and international migration". *International migration review*, 1989:457-485.

living differences leads to a supplementary set of issues. Wage rates, due to differences in the relative size of the diverse sectors of production, are differentially representative<sup>67</sup> across countries<sup>68</sup>. Another issue that arises in studies of the determinants of migration concerns the relative importance of conditions in origin areas compared to potential destination areas. Sometimes this debate is characterized in terms of the *push* of origin conditions versus the *pull* of destination conditions, an issue which has gained a fairly prominent place in studies of international migration<sup>69</sup>.

### 1.4.2 Historical studies

Economic historians, demographers, and other scholars have long debated and agreed on the role played by economic conditions in source countries and economic conditions both in the U.S. and Europe as drivers of the migratory flows. These studies typically focused on transatlantic migration until the early 1920s, when restrictions to migration in North America appear to have considerably limited the flows<sup>70</sup>. Another focus point is the relative importance of the effect of low wages and lack of employment opportunities in Europe in encouraging people to depart, compared with the effect exerted by high wages and plentiful employment opportunities in the U.S. in attracting migrants at a time when aggregate scale economies probably existed in North America.

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<sup>67</sup> Conventional migration theories share a focus on economic differentials as the main driver of migration. For this reason, research on immigration focuses on labor migration, which implies a separation from research on forced or refugee migration.

<sup>68</sup> Mansoor and Quillin agree about the role of GDP per capita as the most comprehensive measure for macroeconomic studies of international migration. However, gross domestic product is an index that usually entails problems of statistical significance, especially for quantitative studies, as its variance among the years is often very small. See MANSOOR, Ali; QUILLIN, Bryce (leading authors). *Migration and remittances. Eastern Europe and the Former Soviet Union*, 2007. The World Bank. Available at: [http://siteresources.worldbank.org/INTECA/Resources/257896-1167856389505/Migration\\_FullReport.pdf](http://siteresources.worldbank.org/INTECA/Resources/257896-1167856389505/Migration_FullReport.pdf).

<sup>69</sup> DORIGO, Guido and TOBLER, Walter. "Push-Pull Migration Laws". *Annals. Association of American Geographers*, 1983: 1-17.

<sup>70</sup> About the role of restrictions on migration see *infra*, Chapter III, p. 68.



These studies focused on the importance of unemployment rates, which according to different authors is a key factor in explaining the flows<sup>71</sup>.

Summarizing, historical studies of migration directed to Europe and the United States suggest that economic conditions in the destination countries, specifically wage rates and variations on labor market, had an important effect on driving migratory flows. At the same time, the economic conditions of destination countries appeared to be more important in explaining the flows than those in the source countries<sup>72</sup>.

### 1.4.3 Contemporary longitudinal studies

Since the end of World War II, an increasing number of studies have dealt with the determinants of international migration. Similarly to the studies on historical migration, these studies center on the economic drivers. However, contemporary research seems to go well beyond the simple analysis of the economic drivers in several ways. One reason is the improvement of the quality and quantity of data related both to information on the migration flows themselves and on origin and destination countries, which allowed the first statistical test of empirical hypothesis.

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<sup>71</sup> GREENWOOD, Michael J. and MCDOWELL, John M. "Differential economic opportunity, transferability of skills, and immigration to the United States and Canada". *The Review of Economics and Statistics*, 1991: 612-623; EASTERLIN, Richard A. "Influences in European overseas emigration before World War I". *Economic Development and Cultural Change*, 1961, 9.3: 331-351; KUZNETS, Simon. "Long swings in the growth of population and in related economic variables". *Proceedings of the American Philosophical Society*, 1958, 102.1: 25-52; KUZNETS, Simon and RUBIN, Ernest. *Immigration and the foreign born*. NBER Books, 1954; BRIGHT, Margaret L. and THOMAS, Dorothy S. "Interstate migration and intervening opportunities". *American Sociological Review*, 1942, 6.6: 773-783.

<sup>72</sup> On balance, the historical immigration from countries such as Greece, Ireland, Portugal, and Spain — suggest that the economic, social, and political developments effects in the country should be also taken into account. DUMONT, Jean-Christophe and SPIELVOGEL, Gilles. "Return Migration: A New Perspective", in *Annual Report 2008. Organization for Economic Cooperation and Development (OECD), International Migration Outlook, Paris 2008*. Available at: <http://www.oecd.org/els/mig/43999382.pdf>; PAPADEMETRIOU, Demetrios and TERRAZAS, Aaron. *Immigrants and the current economic crisis: research evidence, policy challenges, and implications*. Migration Policy Institute, Washington, 2009. Available at: [http://www.migrationpolicy.org/pubs/lmi\\_recessionjan09.pdf](http://www.migrationpolicy.org/pubs/lmi_recessionjan09.pdf)

A large part of the quantitative studies of bilateral migration flows adopts a temporal perspective, in the sense that they use time-series data on migration between a given pair of countries<sup>73</sup>. The main limitation of these studies is their failure in taking into account economic conditions in alternative destinations as well as other shortcomings, such as few degrees of freedom. Nevertheless, in certain cases these analyses<sup>74</sup> reflected the quantitative effect of the differential economic advantage on migratory flows, whereas in other cases they did not<sup>75</sup>

Fleisher and Maldonado examined the flows of migrants directed from Puerto Rico to the U.S. mainland by using a time-series analysis, finding that differential economic opportunity has a key role in explaining this flow. Maldonado, basing her conclusions on a regression analysis argued that "changes in relative wages and relative unemployment rates between Puerto Rico and the United States are the primary explanatory variables"<sup>76</sup>. Studying the annual Irish emigration rate to Britain between 1951 and 1971, Walsh finds that economic variables (such as average wages of industrial workers and unemployment rate) in both Ireland and England act as important determinants of the bilateral migration flows between these countries<sup>77</sup>. The author also argues that migration shows a quick response to economic oscillations, and that economic conditions of three or more years prior to year  $t$  do not have any larger effect on the flows. Jerome's seminal study observed that migration to the U.S. was within a year responsive to the variations in economic opportunities in the U.S.<sup>78</sup> Chapin,

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<sup>73</sup> Time series analysis is a technique designed to see how patterns change (or not) over time and addresses some of the weaknesses associated with simpler methods, such as Ordinary Least Squares regression analysis.

<sup>75</sup> HANSON, Gordon H. "Illegal Migration from Mexico to the United States", *Journal of Economic Literature*, vol. 44(4), 2006: 869-924; HANSON, Gordon H. and SPILIMBERGO, Antonio: "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border". *Research Department Publications 4036, Inter-American Development Bank, Research Department*, 1996; DRETTAKIS, E. G. "Distributed Lag Models for the Quarterly Migration Flows of West Germany, 1962-72". *Journal of the Royal Statistical Society, Series A*, 1976: 365-373.

<sup>76</sup> FLEISHER, Belton M. "Some economic aspects of Puerto Rican migration to the United States". *The Review of Economics and Statistics*, 1963, 45.3: 245-253; MALDONADO, Rita M. "Why Puerto Ricans Migrated to the United States in 1947-73". *Monthly Labor Review* 1976, 99: 7 ff. (quote at p. 14).

<sup>77</sup> WALSH, Brendan M. "Expectations, information, and human migration: specifying an econometric model of Irish migration to Britain". *Journal of Regional Science*, 1974, 14.1: 107-120.

<sup>78</sup> JEROME, Harry. *Migration and Business Cycles*. New York Free Press, 1926.

Vedder, and Gallaway analyze migration from Great Britain, the Netherlands, and West Germany to South Africa over the period 1950-1967 using a multivariate model testing the effects of single economic variables of departure and destination countries on the migratory flows<sup>79</sup>. Analyzing unemployment rates in both the origin country and in South Africa, in separate regressions for each country with values of  $R^2$  ranging from 0.88 to 0.95 these authors obtain positive and significant coefficients on this variable for each departure country, and negative and significant coefficients for the destination country.

This first chapter has introduced the objectives of this thesis and the methodology which will be used in their pursuit. The literature background has provided a list of factors which are likely to determine illegal immigration, which will be analyzed in this work. The chapter has also described a great deal of studies of migration flows which focus on the importance of economic opportunities in explaining migration. These studies also seem to give more importance to economic variations in the labor market than to wage differentials. At the same time, the literature shows the lack of quantitative evidence on the effect of these factors.

The thesis will now continue as follows: the second chapter provides initial data about the impact of illegal immigration in the U.S. and the E.U. together with a description of the market mechanism which creates the demand for illegal immigration. The third chapter presents a list of factors which according to the literature are determinants of illegal immigration, at the same time verifying the existence of any type of relationship between these factors and illegal immigration. The fourth chapter will then test the statistical relationship between these variables, drawing afterwards the main conclusions.

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<sup>79</sup> CHAPIN, Gene L. VEDDER, Richard K. and GALLAWAY, Lowell E. "The Determinants of Emigration to South Africa, 1950–1967". *South African Journal of Economics*, 1970, 38.4: 268-274.



## Chapter II. Illegal immigration as a market: scope and price regulations

This chapter aims to illustrate the structure of the illegal market for immigration and to offer new evidence on the number of illegal immigrants apprehended in the United States and Europe. Illegal immigration involves the use of air, sea, or land transportation. While the crossing the U.S.-Mexican border occurs via land, in the case of Europe trips by boat are the means of transportation most usually employed by immigrants, with air trips being usually undertaken by those who can afford higher fees, as this latter option involves higher costs, both for facilitators and immigrants<sup>80</sup>. This option is however very rare, since airports are normally subjected to stricter controls than other entry accesses, which entails the use of (irregular) travel documents by immigrants using this means of transportation, such as counterfeited IDs, fake or stolen passports, visas or other travel documents. In addition, any regular document for non-authorized immigrants would imply bribing or fraud on the part of the agencies which are in charge of the issue and/or the process of such documents.

The patterns used in the facilitation of illegal immigration are subjected to variations, according to the different features of the areas where the operations take place. The *modus operandi* depends on two different factors: first, the economic condition of the migrants (which determines the fee they can afford), second their zone of origin. Smugglers propose different options for facilitating the crossing of the borders. The safer and more comfortable the trips offered, the more expensive the price. The routes are designed according to the features of the departure, transit and destination countries, as well as the means of transport, to get the maximum benefit in exploiting the weaknesses of the controls at destination countries. Immigration is usually divided between permanent, temporary, and seasonal. To reach a better understanding of which factors influence the decision to migrate, this chapter will focus on the *intention* of the immigrant.

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<sup>80</sup> ARONOWITZ, Alexis A. "Smuggling and trafficking in human beings: the phenomenon, the markets that drive it and the organisations that promote it". *European Journal on Criminal Policy and Research* 2001, 9.2:163-195.

**Fig. 2.1 – Immigrants found hidden in a car**



Migration may reflect an intention of the migrant to remain in the destination country for a long period of time or for a mid/short term period<sup>81</sup>. Temporary migration implies a minor commitment to the destination country, at least temporal, either because of the intention of the migrant to move on to another place or to return home or because of the intention, on the part of the host government, to limit the migrant's stay. Guest workers who meet the labor demand in U.S. and Western Europe fulfill the common notion of temporary workers. In other cases, although they do not always show up as migrants (or

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<sup>81</sup> One of the implications of temporary residence is the possibility of “overstaying”. The term “overstayer” is used to define individuals granted limited leave to enter or remain in a certain country which neither left the country on the date indicated. Overstaying is considered a criminal offence in a large part of the countries of the E.U. and in the U.S. See CARLING, Jørgen. “Migration control and migrant fatalities at the Spanish-African borders”. *International Migration Review*, 2007, 41.2: 320.

permanent resident aliens) in official statistics, individuals may gain temporary residence in a host country for the purpose of getting certain types of work experience, or for other work-related reasons.

## **2.1 The routes of illegal immigration to the U.S. and the E.U.**

Among the more documented illegal migration flows, those directed to the U.S. through the Mexican border and those to the E.U. by sea are the most relevant because of the quantity of money involved, which is subject to a constant increase (*op. cit.* note 88).

These routes can be divided into two main passages:

- i. From Africa/Asia to Europe
- ii. From Latin-America to the USA

Fargues notes that the “*routes to Europe and USA have been increasingly dangerous, perhaps in conjunction with tightened controls on the shortest ways and migrant’s smugglers inventing new but longer and therefore riskier routes*”<sup>82</sup>. The greater resources dedicated to external border enforcement<sup>83</sup>, as well as the new restrictions posed by the governments on migration, have made crossing the border more difficult (because of very strict immigration controls and visa policies), more dangerous (because of the greater risks that migrants face during the journey) and more expensive (as the major risks which smugglers have to face imply an increase of the price for the service).

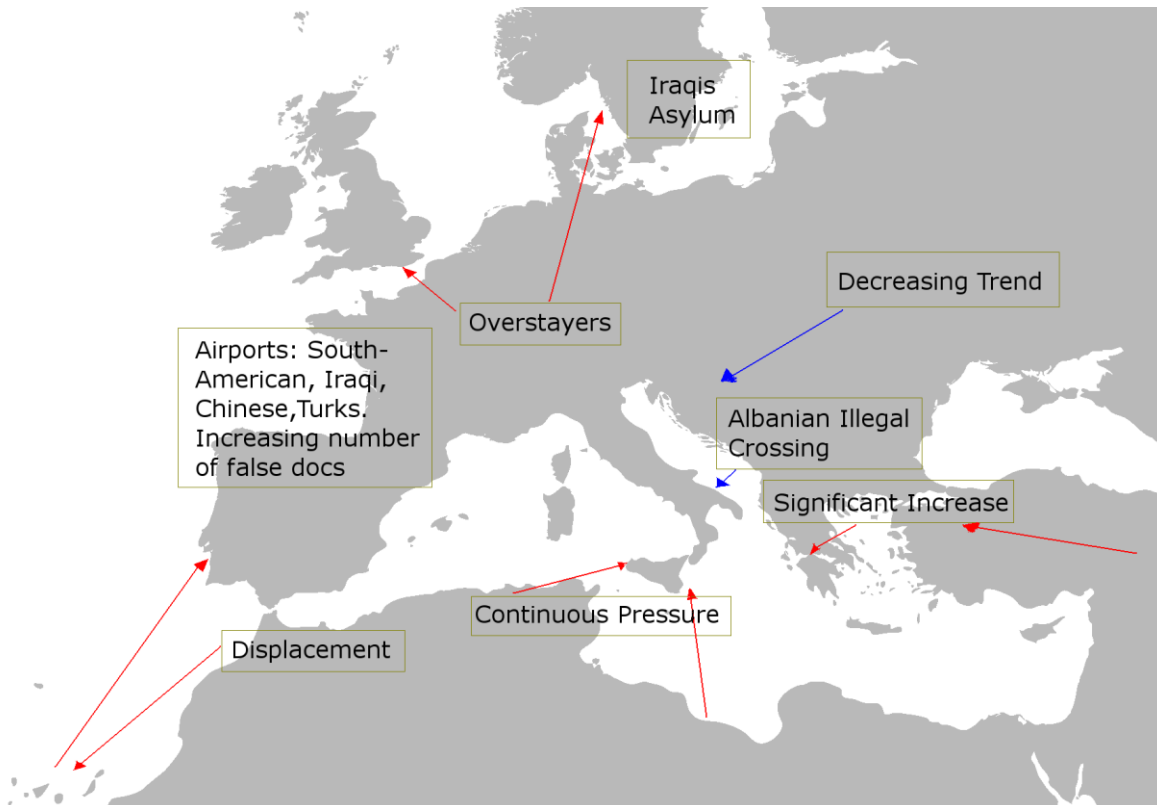
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<sup>82</sup> FARGUES, Philippe. *Emerging Demographic Patterns across the Mediterranean and their Implications for Migration through 2030*. Migration Policy Institute, Washington, DC 2008:13. Available at: <http://www.migrationpolicy.org/pubs/fargues-paper.pdf>.

<sup>83</sup> See United States Department of Homeland Security statistics on border enforcement, U.S. Government Budget, available at <http://www.dhs.gov/xlibrary/assets/budget-bib-fy2012.pdf> and E.U. Budget 2005-2012 published by Frontex. Available at [http://www.frontex.europa.E.U./assets/About\\_Frontex/Governance\\_documents/Budget/Budget\\_2012.pdf](http://www.frontex.europa.E.U./assets/About_Frontex/Governance_documents/Budget/Budget_2012.pdf).

According to ICMPD estimation<sup>84</sup>, the movement of illegal migrants by sea resulted in an estimation of approximately 100,000 illegal migrants crossing the Mediterranean Sea each year. The same source also refers that “nearly 10,000 persons died in the last 10 years while attempting to cross the Mediterranean Sea” (p.8).

**Fig. 2.1.1 - Migrants flows to Europe. Situation at the external borders<sup>85</sup>.**



**Source: Author’s elaboration from data provided by Frontex<sup>86</sup> (2009)**

As pointed out in the previous chapter, the proxy commonly used to measure illegal immigration is the number of apprehensions per year by the local authorities at the

<sup>84</sup> INTERNATIONAL CENTRE FOR MIGRATION POLICY DEVELOPMENT. *Irregular transit migration in the Mediterranean: some facts, futures and insights*. ICMPD, Vienna, 2004.

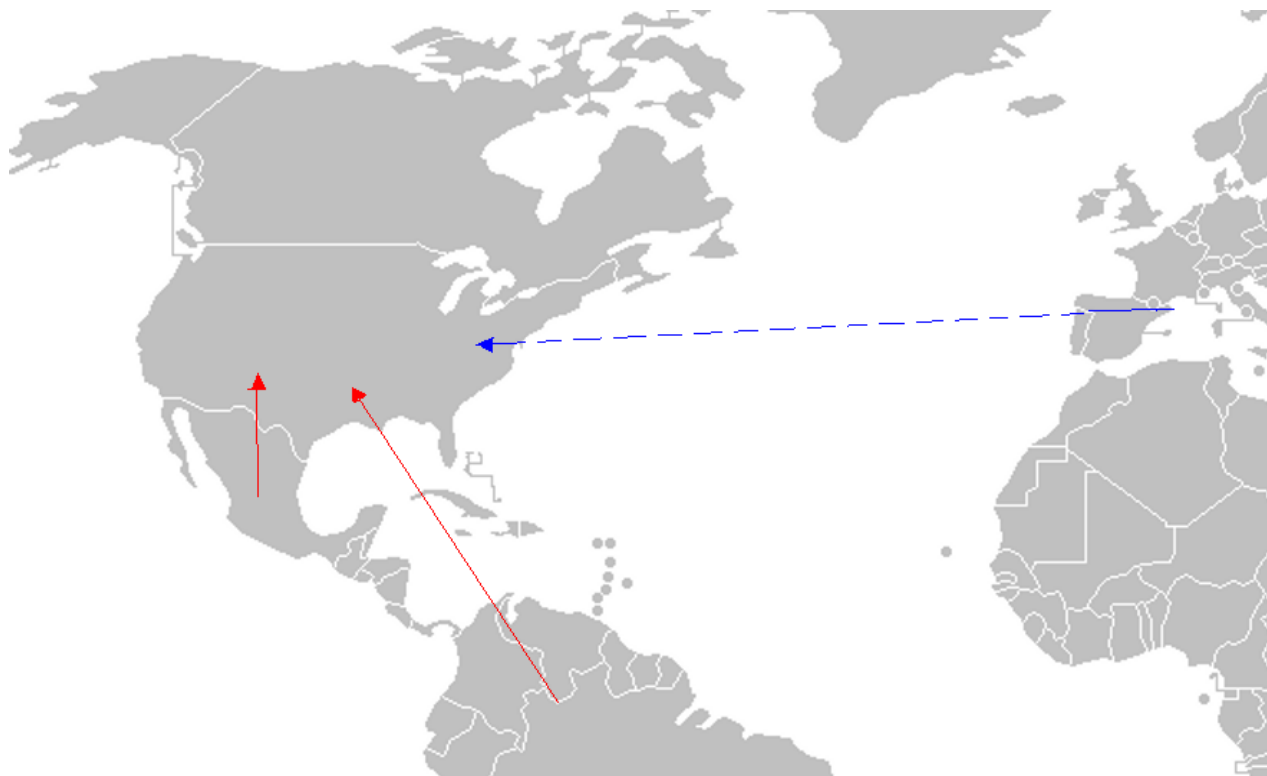
<sup>85</sup> This map shows the key points of pressure at E.U. borders. Arrows indicate the direction of the flows of illegal immigration directed to E.U. countries.

<sup>86</sup> Frontex the “E.U. agency based in Warsaw, was created as a specialized and independent body tasked to coordinate the operational cooperation between Member States in the field of border security”. Frontex’s principal activity is “to strengthen border security by ensuring the coordination of the Member States’ activities in the implementation of Community measures relating to the management of the external borders. The activities of Frontex are intelligence driven”. The information within quotation marks was taken from <http://www.frontex.europa.E.U>.



borders of the areas of destination. In this sense, it is important to specify that almost all apprehensions of illegal aliens entering Europe take place in Spain, Italy, and Malta for the South-European borders, and in Greece for the East-European.

**Fig. 2.1.2 - Migrants flows to North America. Situation at the external borders<sup>87</sup>.**



**Source: Author's elaboration from data provided by Frontex, 2009.**

These countries represent the external borders of the E.U. involved in the illegal immigration issue. Similarly, apprehensions of illegal immigrants trying to cross U.S. border take place mainly in the border sectors of California, Arizona, and Texas.

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<sup>87</sup> Arrows indicate the direction of the flows of illegal immigration directed to the U.S.

## 2.2 The routes of illegal immigration from Centre/Southern America to the U.S.

This subsection shows the main features of the route of immigrant flows directed from Centre/Southern America to the U.S. The central characteristics can be summarized as follows.

### **Route**

*Source:* Mexico, Central America, Latin America

*Vector:* Land

*Destination:* Mainly U.S.

### **Dimensions**

*Annual market volume:* 3,000,000 entries (one migrant may enter more than once per year)

*Annual value at destination:* U.S. \$ 6,6 billion (income for smugglers)

### **Smugglers**

*Groups Involved:* Transnational Mexico-based criminal groups (Gulf Cartel/Zetas, MS-13 and others), occasional and part-time smugglers

*Estimated trend:* Declining

*Potential effects in region:* Illegal migration and vulnerability of migrants

*Likelihood of effects being realized:* High<sup>88</sup>

### 2.2.1 What is the nature of the market?

The United States were founded by the coming together of different flows of immigrants from all over the world. Thus, receptivity to immigrants has been one of the keystones of the country. The United States currently hold the largest foreign population of any country in the world. Large part of these migrants is authorized, but a third of the

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<sup>88</sup> Source: UNITED NATIONS OFFICE ON DRUGS AND CRIME. *The globalization of crime: A transnational organized crime threat assessment*. United Nations: New York, 2010.

total number of immigrants in the U.S. is still illegal. Around 80% of these illegal immigrants come from Latin America, and a range from 25% to 40% entered the country with a temporary authorization and stayed in the U.S. beyond the allowed period (*overstayers*). The remaining part entered the country illegally. Migrants from countries whose citizens are usually denied of a visa are more likely to use illegal immigration facilitators. The main case is that of Mexicans, who are frequently apprehended while crossing the border without authorization. It has been estimated that over 90% of Mexican illegal migrants<sup>89</sup> are assisted by criminal organizations<sup>90</sup>.

Taking into account the fact that the average daily income for Latin American countries is around two dollars, it is interesting to explore whether the earnings of Latin American immigrants into the U.S. have a role as driver of illegal immigration. In addition, the solid web of networks created by the immigrant communities allows quick insertion, albeit unauthorized, in the social and economic system of the United States.

### 2.2.2 How is the Smuggling Conducted?

The border between the United States and Mexico is the main doorway for illegal immigrants to the United States, but it also serves other functions. Besides being the country of belonging of the majority of illegal immigrants apprehended by the U.S. authorities, Mexico is also the transit country<sup>91</sup> for almost the totality of illegal immigrants coming from Central and Southern-America. Although no complete statistics on illegal immigration towards the United States are available yet, the impact of the phenomenon has been assessed relying on data about apprehensions along the border between the U.S. and Mexico, where 900,000 immigrants have been

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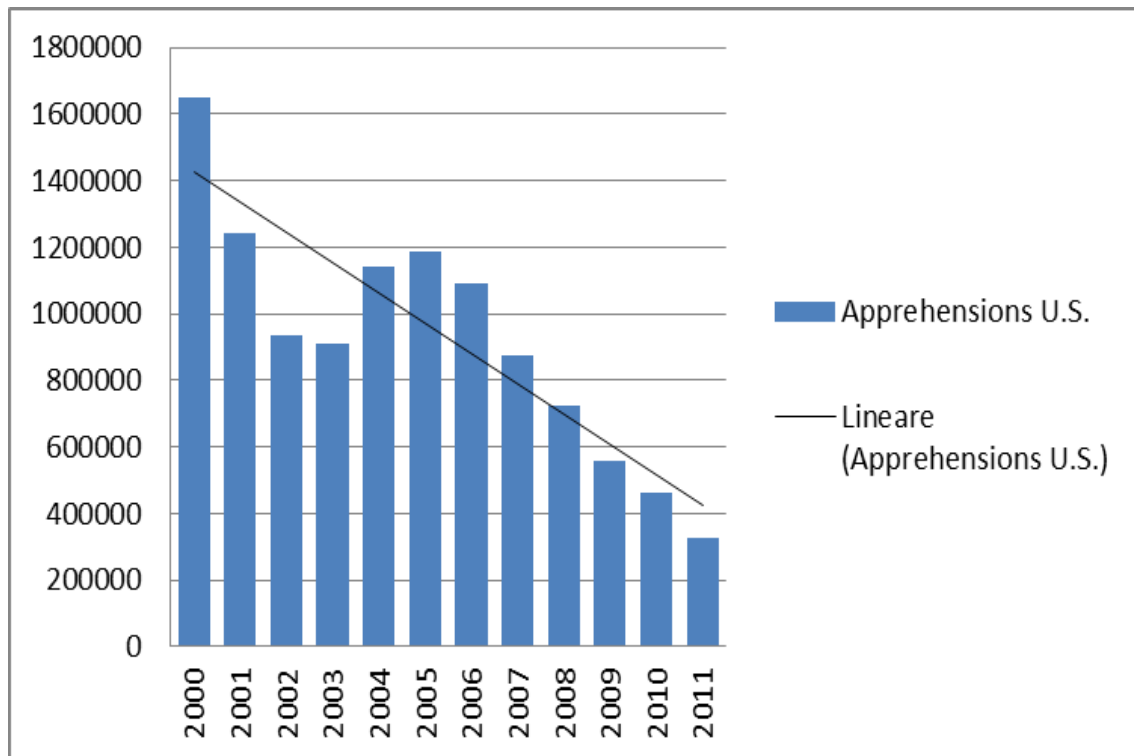
<sup>89</sup> The number of convicted facilitators of illegal immigration has also increased significantly, from 589 in 1995 to 2,457 in 2004. See UNITED STATES OF AMERICA, Government Accountability Office, *Combating Alien Smuggling: Opportunities Exist to Improve the Federal Response*, document GAO-05-305. Washington, D.C. May 2005.

<sup>90</sup> Mexico is not only the major country of origin of illegal migrants to the United States (over 450,000 a year) but also a transit country for illegal migration from Central and South America. See PASSEL, Jeffrey S. *Estimates of the size and characteristics of the undocumented population*. Washington, D.C. Pew Hispanic Center, 21 March 2005. Available at: <http://www.pewhispanic.org>.

<sup>91</sup> CARLING, Jørgen. "Migration control and migrant fatalities at the Spanish-African borders". *International Migration Review*, 41.2, 2007: 316-343.

apprehended in 2003, and almost 1,2 million in 2004 and 2005<sup>92</sup>. Figure 2.2.1 shows a descending trend of immigrants apprehended at the U.S. Southwestern Border. A first decrease is observed after 2001 (probably because of the 9-11 terrorist attacks and the consequent rise on security expenditures), then another one in 2006, consequential to the economic downturn.

**Fig 2.2.1 - Apprehended illegal migrants at the U.S. Border (2000-2011)**



**Source: Author's elaboration based on data provided by the U.S. - Department of Homeland security.**

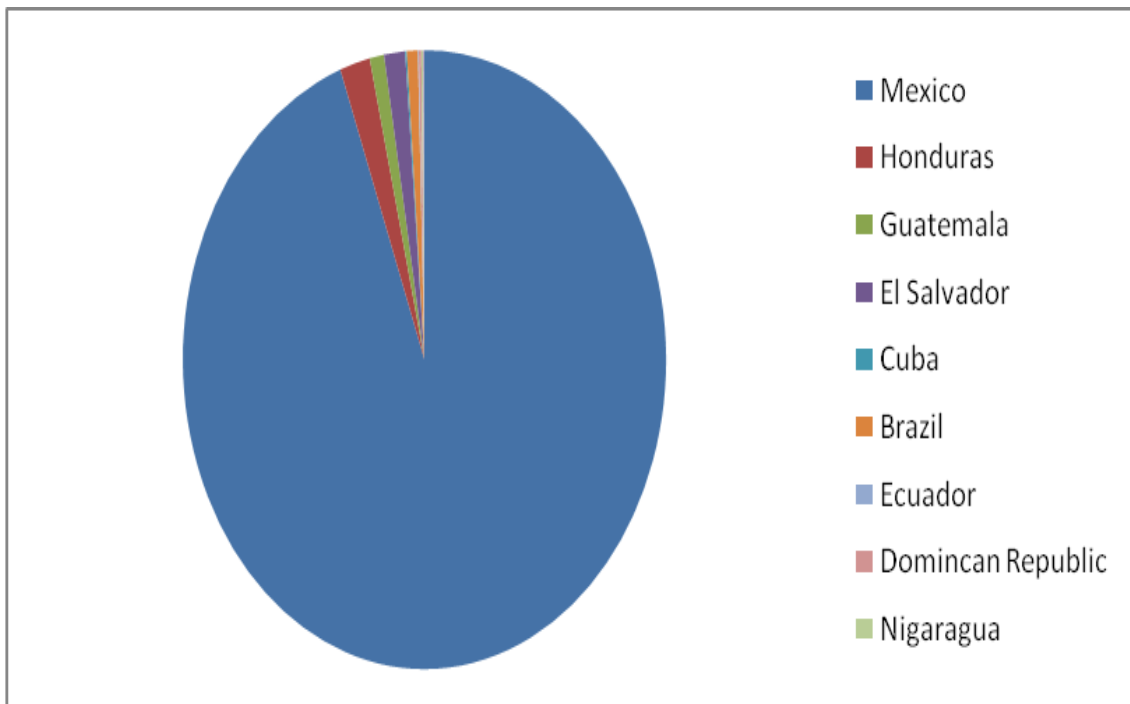
The Homeland Security Act of 2002, which established the Department of Homeland Security and introduced new regulations on immigration, seems to have had a limited effect on the numbers of illegals apprehended in the following years. Thus, after a small decrease observed in the year 2003, the flows started to rise again in the years 2004 and 2005, to decrease again in the following years. Taking into account the economic downturn which began in 2006, we may speculate that oscillations in labor market could have a significant effect on driving the flows.

<sup>92</sup> ZHANG, Sheldon. *Smuggling and Trafficking in Human Beings: All Roads Lead to America*. Westport, Connecticut, Praeger, 2007, p.21.

### 2.2.3 Countries of origin of illegal immigrants

In 2005, 93 percent of unauthorized migrants were of Mexican nationality. However, between 2002 and 2005 the number of immigrants from nations other than Mexico registered a significant increase<sup>93</sup>, with four countries being the most represented: Brazil, El Salvador, Guatemala, and Honduras<sup>94</sup>.

**Fig. 2.2.2 - Immigrants apprehended at U.S. border by nationality**



**Source: Author's elaboration based on data provided by U.S. – Department of Homeland Security.**

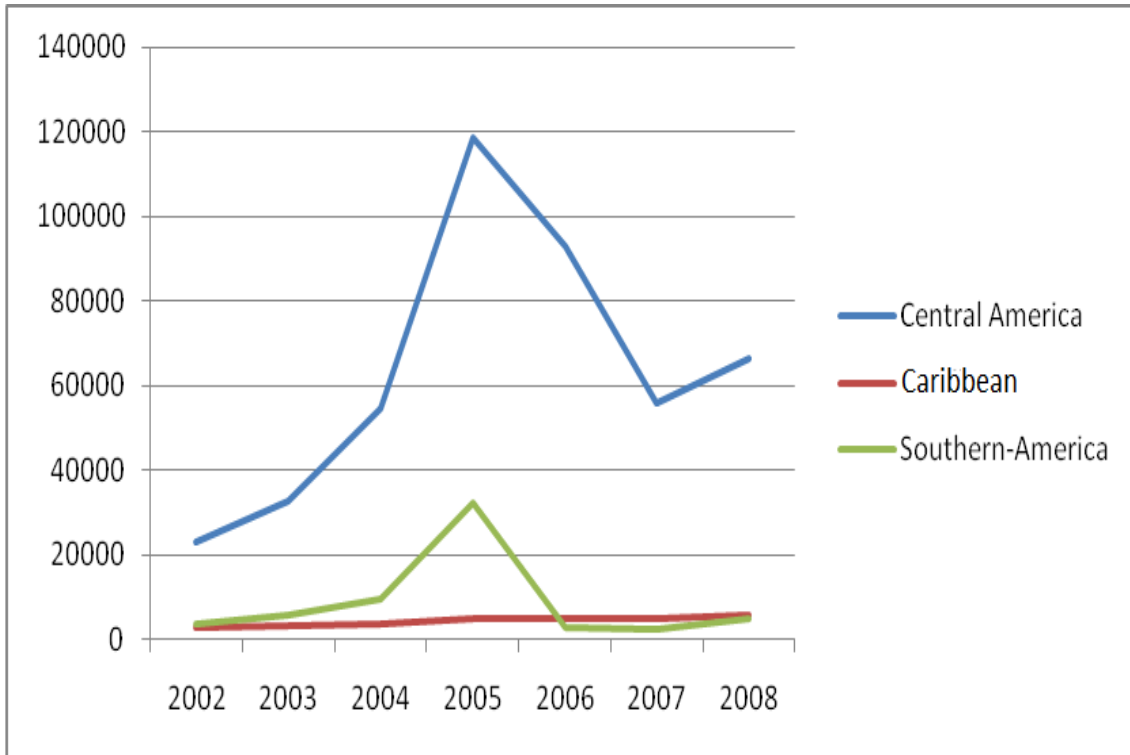
Moreover, the number of apprehensions of non-Mexican immigrants has increased from 4% of the total number of migrants apprehended in 2002 to 15% in 2009. In spite of the aforementioned, the Mexican flow still remains the most relevant today. Finally, the

<sup>93</sup> NUÑEZ-NETO, Blas; SISKIN, Alison; VIÑA, Stephen. *Border Security: Apprehensions of Other Than Mexican Aliens. Congressional Research Service Report for Congress*, Washington 2005 (available at <http://trac.syr.edu/immigration/library/P1.pdf>).

<sup>94</sup> GUERETTE, Rob T. and CLARKE, Ronald V. "Border Enforcement, Organized Crime, and Deaths of Smuggled Migrants on the United States–Mexico Border". *European Journal on Criminal Policy and Research*, 2005, 11.2: 159-174.

percentage of Mexicans using the help of criminal organizations to cross the borders has increased during the last twenty years to reach almost the totality<sup>95</sup>.

**Fig. 2.2.3 - Migrants apprehended at the U.S. borders by macro-areas of origin (other than Mexico)**



**Source: Author's Elaboration based on data provided by U.S. – Department of Homeland Security.**

The enhancing of both law restrictions and border fences with Mexico had the effect of displacing the migrant flows into increasingly harsher terrains, such as the Sonora desert in Arizona. According to UNODC, the displacement<sup>96</sup> of migratory flows into more

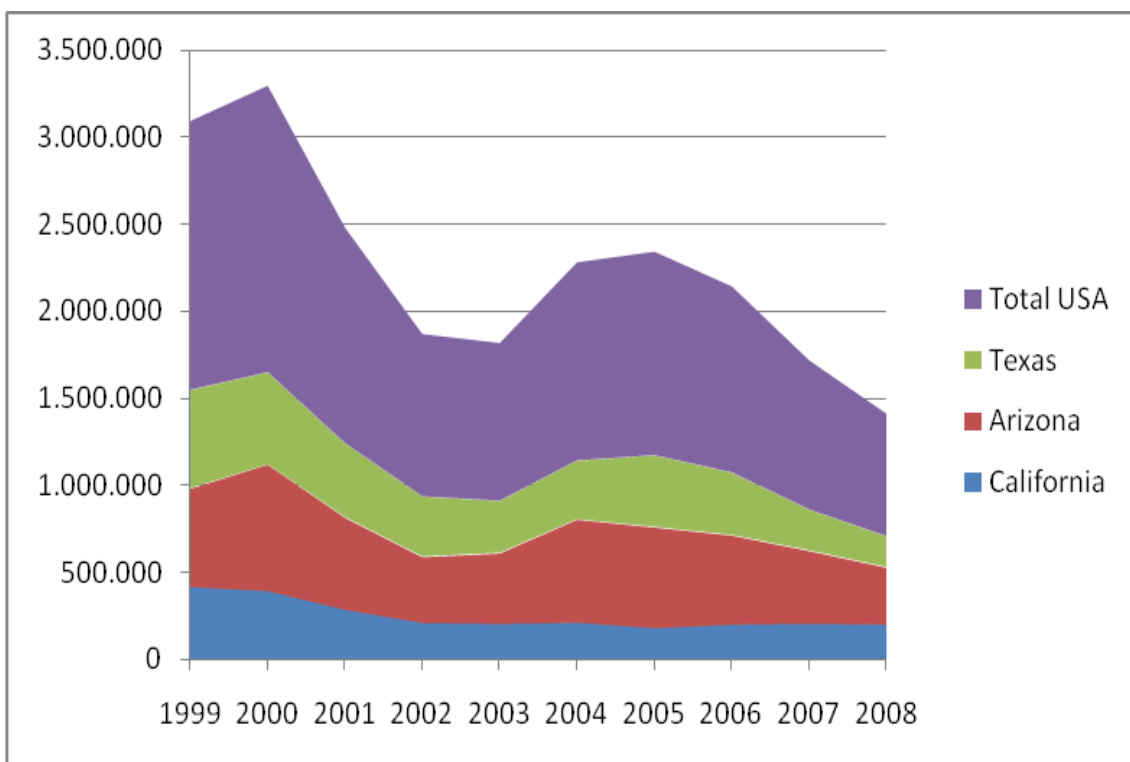
<sup>95</sup> Ibidem.

<sup>96</sup> By “crime displacement” reference is made to the relocation of crime from one place, time, target, offense, or tactic to another, as a result of some crime prevention initiative. This term encompasses all the changes offenders can make so that they can continue to offend. See GUERETTE, Rob T. and BOWERS, Kate J. “Assessing the Extent of Crime Displacement and Diffusion of Benefits: A Systematic Review of Situational Crime Prevention Evaluations”. *Criminology*, 2009, 47(4): 1331-1368.

dangerous zones may be the principal reason behind a growing number of detected migrant deaths<sup>97</sup>.

The figure 2.2.4 shows an overall decline of the apprehensions of illegal immigrants caught while trying to cross the borders undetected since 1999. Years 2004-2005 registered a peak of apprehensions in the sectors of Arizona and Texas. Arizona currently registers the largest amount of illegal aliens apprehended, followed by Texas and California. Given the current economic situation, the hypothesis is that the stock of illegal immigrants entering the U.S might be subject to change in response to the recession.

**Fig. 2.2.4 - Trends in apprehensions at the U.S. south-west border (number of apprehension per sectors)**



**Source: Congressional Research Service (CRS) Presentation of U.S. Custom and Border Protection (CBP) Data.**

<sup>97</sup> UNITED NATIONS OFFICE ON DRUGS AND CRIME. *The globalization of crime: A transnational organized crime threat assessment*. United Nations: New York, 2010.

Available Data seem to suggest both slower growths in the stock of the foreign-born in the United States and slightly slowing inflows of immigrants (particularly Mexicans). A recent decrease in the stock of immigrants has been recorded in the U.S. In addition, data from different population surveys suggest that the historic increase in the stock of immigrants in the United States is actually slowing. Thus, a first slowdown was registered by the U.S. Census Bureau American Community Survey<sup>98</sup> (ACS) data for 2007. An increase in the numbers of over 500,000 immigrants between 2006 and 2007 (from 37.5 million to 38.1 million) has been observed, while in the years between 2000 and 2006 the ACS observed how the annual growth in the foreign-born population was considerably higher — around one million. More recent data provided monthly by the CPS<sup>99</sup>, according with data provided by the U.S. Federal Bureau in 2010, show a leveling-off of the annual inflow of unauthorized immigrants since mid-2007 of around the 8%<sup>100</sup>.

## 2.3 The routes of illegal immigration from Africa to Europe

This subsection shows the main features of the route of immigrant flows directed from Africa to the E.U. The central characteristics can be summarized as follows:

### **Route**

Source: Africa (mainly North Africa, but also West and East-Africa)<sup>101</sup>

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<sup>98</sup> American Community Survey (2007). Available at: <http://www.census.gov/acs/www/>.

<sup>99</sup> The Current Population Survey (CPS) is a statistical survey conducted by the United States Census Bureau for the Bureau of Labor Statistics (BLS). The CPS is the source of numerous high-profile economic statistics, including the national unemployment rate, and provides data on a wide range of issues relating to employment and earnings. The monthly unemployment rate is also computed from the data collected from the Current Population Survey. Available at: <http://www.census.gov/cps/>.

<sup>100</sup> PASSEL, Jeffrey S. and COHN, D'Vera. *U.S. Unauthorized Immigration Flows Are Down Sharply Since Mid-Decade*. Pew Research Hispanic Trend Project, 1 September, 2010. Available at: <http://www.pewhispanic.org/2010/09/01/us-unauthorized-immigration-flows-are-down-sharply-since-mid-decade/>.

<sup>101</sup> So far, only a few studies on sea routes in the departure countries have been carried out which analyse the flows of illegal migrants departing from Morocco and Libya. See CARLING, Jørgen. "Unauthorized



Vector: Land and sea

Destination: E.U.

### **Dimensions**

Annual market volume: 55.000 migrants smuggled

Annual value at destination: U.S. \$ 150 million (income for smugglers)

### **Smugglers**

Groups Involved: Moroccans, Libyans and Turks, different brokers at the hubs

Estimated trend: Ondulatory

Potential effects in region: Illegal migration, migrant's death<sup>102</sup>

## **2.3.1 What is the nature of the market?**

The flows of illegal immigrants coming from Africa and directed to Europe have features which make them similar to the flow directed from Central and South America to the U.S. Another, although dangerous, way of reaching Europe, is to approach one of the European islands near the coast of Africa to be apprehended on purpose and then moved to the mainland to be processed. In this case, the migrants' chances lie on the possibility of being released with a written order to leave the country, and then stay illegally.

## **2.3.2 How is the smuggling conducted?**

Illegal immigration from Africa and Asia directed to Europe by sea encompasses several routes and facilitators. In Europe the issue of illegal immigration gained importance since the early 90's, when a dramatic increase in the number of immigrants intercepted at the coasts of Spain and Italy was registered. Ten years later, Greece and Malta also

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migration from Africa to Spain". *International Migration*, October 2007, vol. 45, No. 4: 3-37; COSLOVI, Lorenzo. *Biglietti diversi: destinazione comune indagine sul mercato dell'emigrazione irregolare dal Marocco centrale verso l'Italia e la Spagna*. CeSPI Working Paper No. 32. 2007; MONZINI, Paola. *Il traffico di migranti via mare*. In *L'Italia Promessa: Geopolitica e Dinamiche Organizzative del Traffico di Migranti verso l'Italia*, CeSPI Working Paper No. 9, 2004.

<sup>102</sup> UNITED NATIONS OFFICE ON DRUGS AND CRIME. *Globalization of Crime a Transnational Organized Crime Threat Assessment*. United Nations, New York, 1 June 2010.

began to be involved. According to UNODC approximately 65,000 illegal migrants landed in Italy, Malta, and Spain in 2006. In 2007, 40,000 illegal migrants were estimated to arrive to those three countries.

The routes to Europe can be divided in four main passages<sup>103</sup>:

- i. To Italy, across the Channel of Sicily from Libya and Algeria;
- ii. to Malta, from Libya and Algeria;
- iii. To Spain, from Algeria and Morocco, either by crossing the Atlantic to the Canary Islands, the Alboran Sea to the mainland, or through the enclaves of Ceuta and Melilla;
- iv. To Greece by sea or land from Turkey.

### 2.3.3 Countries of origin of the illegal immigrants

A large part of the immigrants apprehended at the European borders come from sub-Saharan countries, including Ivory Coast, Ghana, Liberia, Nigeria, Senegal, and Somalia. All the sea crossings into the E.U. are managed by criminal organizations, and the passages implicate different dangers for the immigrants<sup>104</sup>. The normal duration of a journey from sub-Saharan Africa to Europe is a few months, but it can also last several years. In this case, immigrants spend a long period of time along the way to gather more funds in order to proceed with the journey. Once migrants reach the African coasts, the final step for them is to get to Europe by sea.

In all North-African countries, illegal immigration is the most frequent pattern of immigration<sup>105</sup>. However, despite considerable interest in the topic, there is to this date

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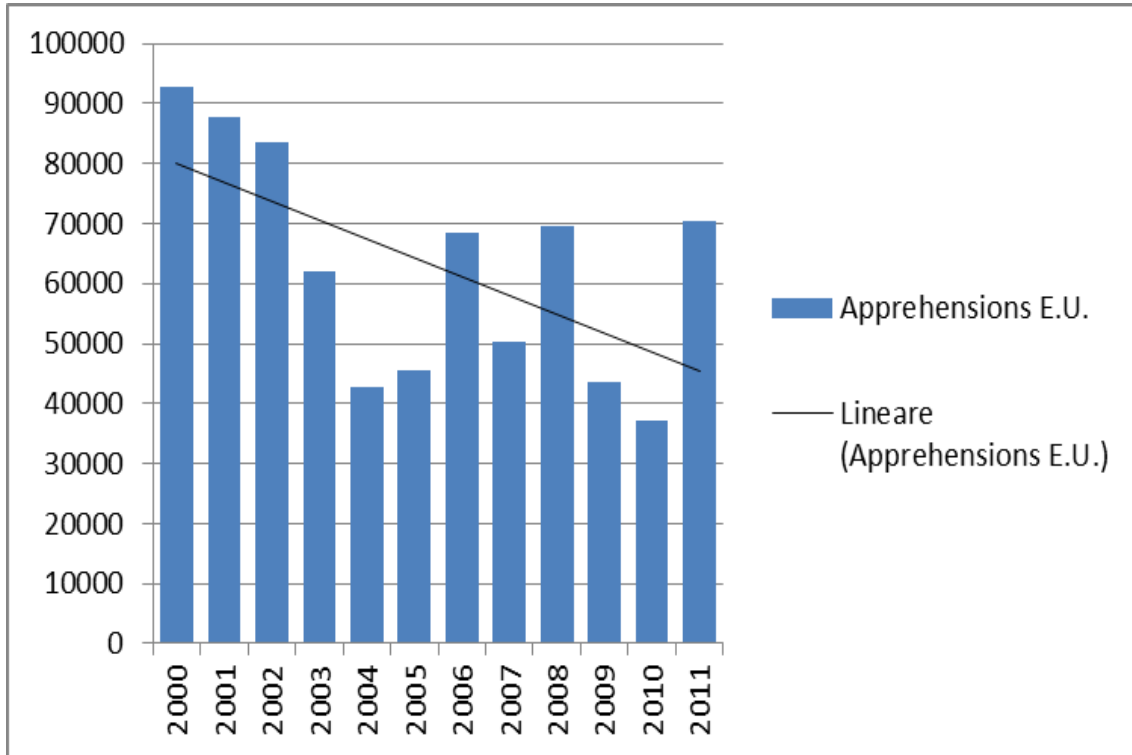
<sup>103</sup> UNODC has previously identified three different routes, by combining Malta and Italy. See UNITED NATIONS OFFICE ON DRUGS AND CRIME. *Globalization of Crime a Transnational Organized Crime Threat Assessment*. United Nations, New York, 1 June 2010: 55-77.

<sup>104</sup> MONZINI, Paola. "Il traffico di migranti per mare verso l'Italia: sviluppi recenti (2004-2008)". *CeSPI Working Paper* No. 43. Rome: *Centro Studi di Politica Internazionale*, 2008.

<sup>105</sup> FARGUES, Philippe. *Emerging Demographic Patterns across the Mediterranean and their Implications for Migration through 2030*. Migration Policy Institute, Washington, DC 2008:13. Available at: <http://www.migrationpolicy.org/pubs/fargues-paper.pdf>.

no precise measurements of how many illegal immigrants annually enter Europe<sup>106</sup> evading detection<sup>107</sup>.

**Fig. 2.3.1 – Migrants Apprehended at the sea border of Europe (2000- 2011)**



**Source: Author’s elaboration based on official statistics of multiple national authorities (Ministry of Interior, Italy and Malta; Ministry of Social Issues, Spain; Ministry of Public Order, Greece).**

Those countries are also significant destinations of international migration in its three main forms: refugees, transit and labor migration. However, they have not yet developed instruments and policies allowing the regular entry and integration of migrants. Figure 2.3.1 shows the number of illegal immigrants apprehended while trying to enter Europe undetected. It includes at an aggregate level the apprehensions made at the national maritime borders by national authorities of Spain, Malta, Italy, and Greece. The peak of apprehensions was reached in 2001/2002, followed by a sharp drop

<sup>106</sup> See FARGUES, *op. cit.*, p. 16, par. 1.3.1.

<sup>107</sup> MORREL-SAMUELS, Palmer. “Measuring illegal immigration at U.S. border stations by sampling from a flow of 500 million travelers”. *Population and Environment*, 2002, 23.3: 285-302.

in the trend with a slight oscillatory pattern until 2009. This decrease could be connected to the adoption among E.U. border countries of new restrictions on immigration<sup>108</sup>.

## Countries at the external border of the European Union: Empirical Evidence

### a) Spain

Spain recently became the main doorway for illegal immigration in Europe, receiving more than a third of the immigrants of the entire European Union in 2003<sup>109</sup>. In addition, Spain has become the main hub of immigration to Europe, getting to be a transit country for migrants from the south on their way to other areas of the continent. In this sense, it is important to focus on the role of the different domestic legislations on migration approved during the last decade<sup>110</sup>.

The approval of LO 4/2000<sup>111</sup> was followed by a slow decrease of illegal flows towards Spain in the years 2001 and 2002 (see fig.2.3.2).

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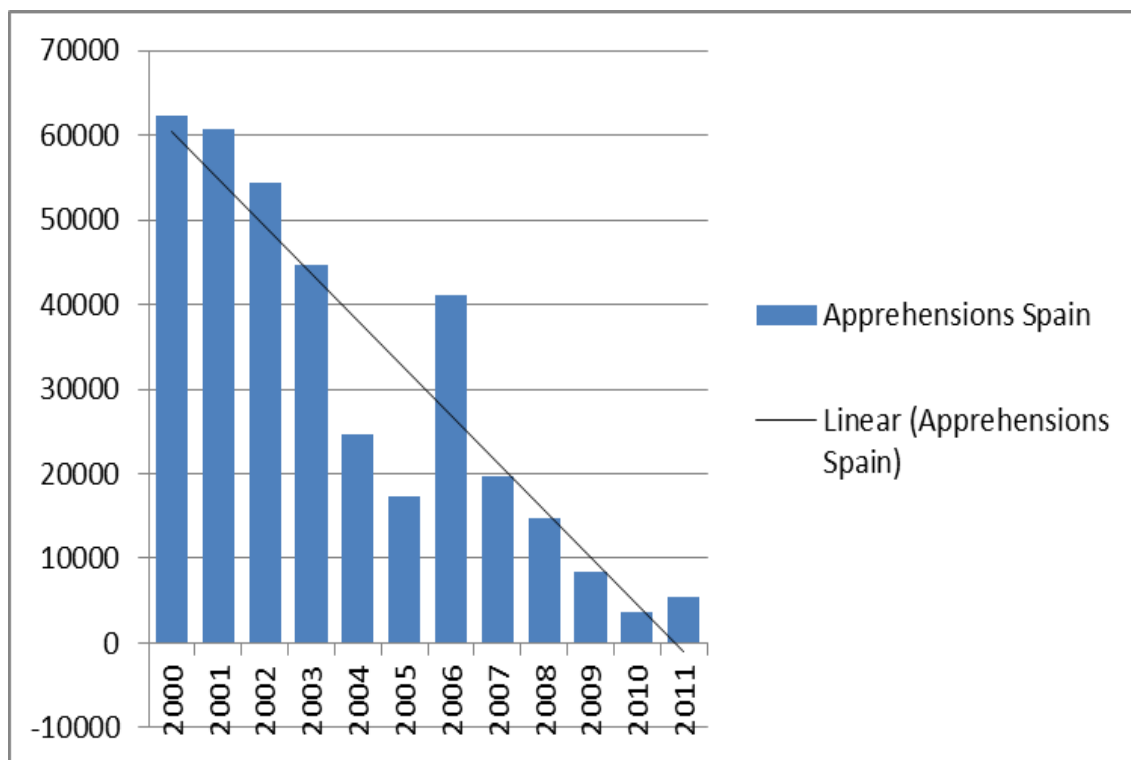
<sup>108</sup> See “Legge della Repubblica italiana 30 luglio 2002, n. 189” and Ley Orgánica 4/2000, de 11 de enero, “sobre derechos y libertades de los extranjeros en España y su integración social”, described *infra* in Annex I, p.117.

<sup>109</sup> CALAVITA, Kitty. “Immigration, law, and marginalization in a global economy: Notes from Spain”. *Law & Society Review*, 32, 1998: 529, and CARRASCO, Raquel; JIMENO, Juan F.; and ORTEGA, Carolina, “The effect of immigration on the labor market performance of native-born workers: some evidence for Spain”. *Journal of Population Economics*, 2008, 21.3: 627-648.

<sup>110</sup> BENTOLILA, Samuel; DOLADO, Juan J. and JIMENO, Juan F. “Does immigration affect the Phillips curve? Some evidence for Spain”. *European Economic Review* 52.8, 2008: 1398-1423.

<sup>111</sup> “On the rights and Obligations of Foreigners in Spain and their Social Integration”. This new legislation gave major importance to the issues related to the integration of the immigrants involving the concession of increased rights to immigrants such as free health services and education. At the same time, however, it introduced new restrictions on immigration (see *infra*, Annex I, p. 117).

**Fig. 2.3.2 - Apprehended illegal migrants at the sea border of Spain (2000-2011)**

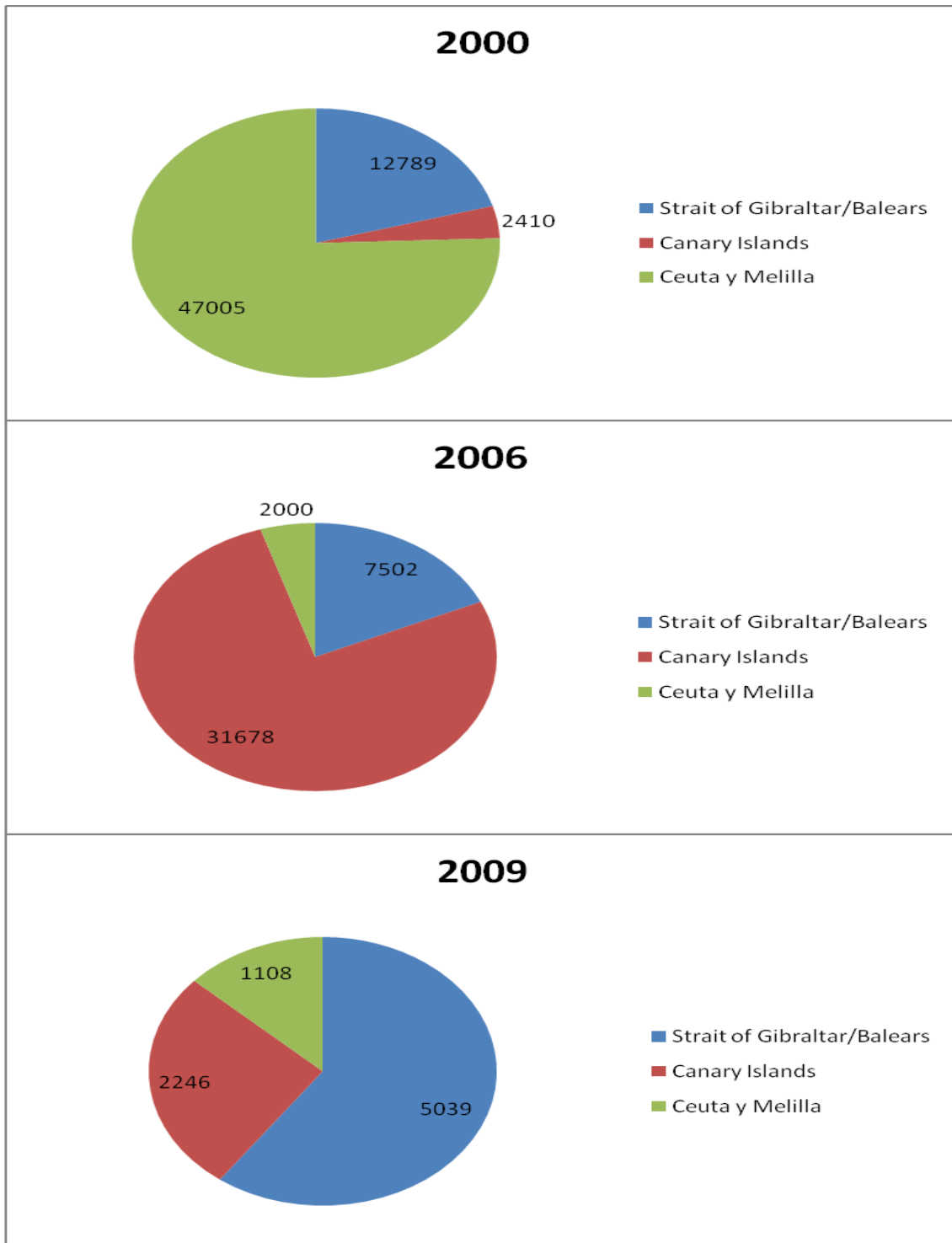


**Source: Author's elaboration based on data provided by Ministry of Social Issues, Spain.**

The passing of LO 14/2003 aimed at increasing the requisites needed to legally enter Spain, was followed by a more consistent decrease in apprehensions in the years 2004 and 2005 which however does not explain a new increase in 2006. After the economic downturn of 2007, the trend started to register a decrease, tendency that continued until 2010. However, 2011 registered again an increase, with 5443 immigrants apprehended by the Spanish border Patrol<sup>112</sup>.

<sup>112</sup> Recent data provided by the Civil Guard evidences a new decrease of the border apprehensions in Spain for 2012, with 332 apprehensions. See: <http://www.lavanguardia.com/internacional/20130919/54387764414/espana-paises-mediterraneo-ue-acuerdo-contra-inmigracion-ilegal.html>

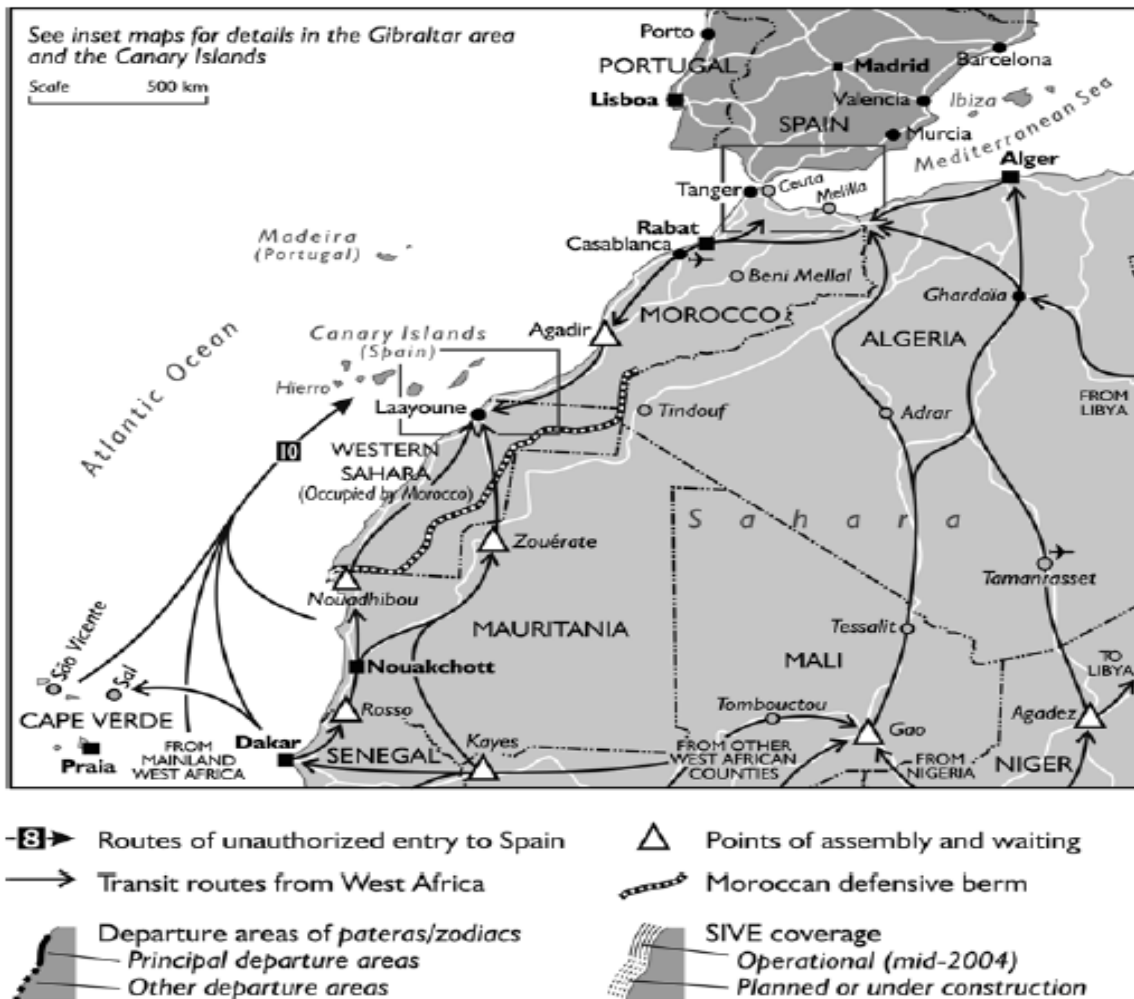
**Fig. 2.3.3 - Points of interception for illegal immigrants apprehended at Spanish coasts (years 2000, 2006, 2009)**



Source: Author's elaboration based on data provided by Ministry of Social Issues, Spain.

In the years 2003-2004 the illegal flows of immigrants arriving by sea were equally divided between the Canary Islands and the Spanish Peninsula. There were also several attempts of illegal entry across the borders of the two Spanish enclaves in Africa, Ceuta and Melilla.

**Fig. 2.3.4 - Routes of Unauthorized migration from Africa to Spain<sup>113</sup>**



*The information in the map is compiled from a large number of media reports, official documents, and research reports from the period 2000–2005<sup>114</sup>.*

<sup>113</sup> Source: CARLING, Jørgen. “Unauthorized migration from Africa to Spain”. *International Migration*, October 2007, vol. 45, No. 4: 3-37.

<sup>114</sup> SIVE is the acronym for the “Integrated System of External Vigilance” (UE). See also *infra*, Annex I, p. 117.

According to Carling<sup>115</sup>, the stabilization of the number of interceptions of illegal immigrants of the year 2000 has been followed by a significant increase of the flows directed to the Canary Islands. In 2009, the flow of immigrants was further displaced to the strait of Gibraltar and to Balears. Carling also described the presence of “waiting zones” positioned close to the points of departure of all these routes, where transit migrants are waiting for the right moment to avoid the checkpoints at the borders of Europe. The majority of migrants directed to Europe passing through Spain are North Africans (Moroccans, Algerians) and West-Africans (Senegal, Gambia, and Guinea Bissau). Illegal immigration across the maritime borders in Spain has for a long time been facilitated by using small vessels called *pateras*, with a carrying capacity of around 15 passengers. These types of vessels are nowadays most of the time replaced with *zodiacs*, rubber boats that can hold up to 70 passengers<sup>116</sup>. No official statistics are available on the nationality of smuggled migrants who arrived to Spain by sea.<sup>117</sup>

## b) Italy

Figure 2.3.5 shows the number of illegal immigrants apprehended in the years 1999-2010 in Italy. Similarly to Spain, the trend shows a general decrease in apprehensions, a decisive role also played here by legal restrictions and enforcement at the borders<sup>118</sup>.

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<sup>115</sup> CARLING, Jørgen. “Migration control and migrant fatalities at the Spanish-African borders”. *International Migration Review*, 41.2, 2007: 316-343.

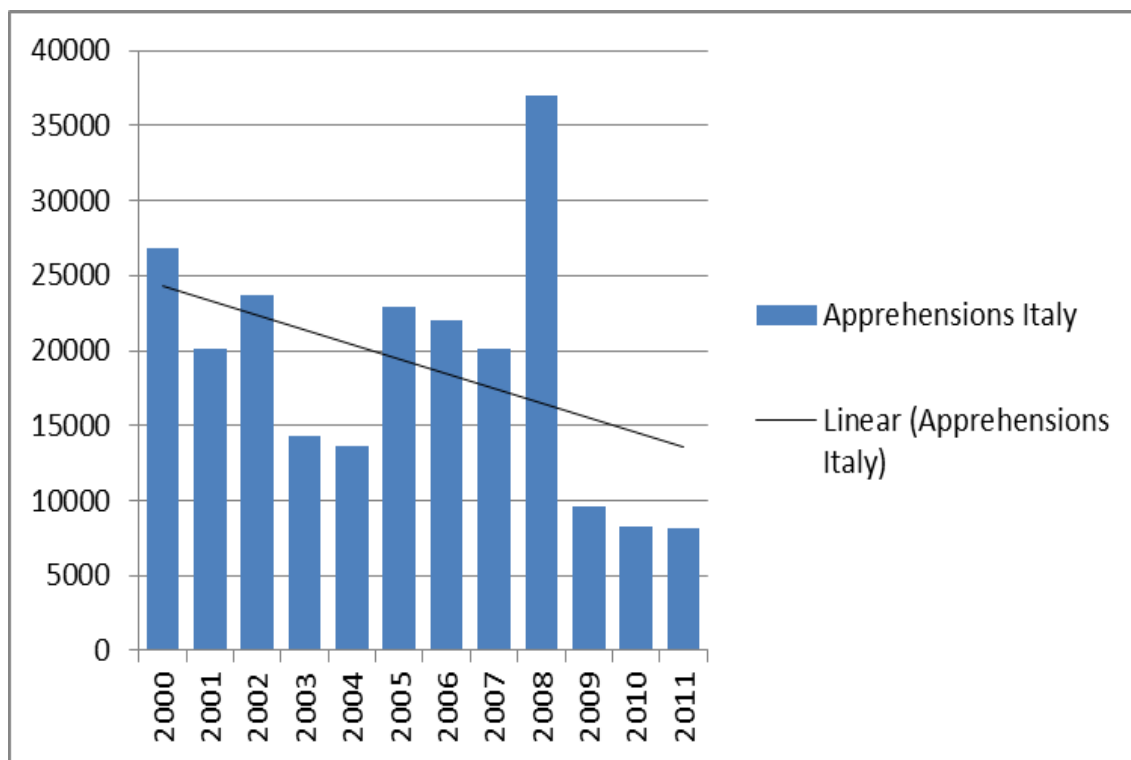
<sup>116</sup> Mantilla, J. R., and M. Mora . “Muchos ni luchan. Si se caen al agua, ni siquiera bracean.” *El País (Madrid)*, August 5, 2004. Available at: [http://elpais.com/diario/2004/08/05/ultima/1091656801\\_850215.html](http://elpais.com/diario/2004/08/05/ultima/1091656801_850215.html).

<sup>117</sup> The only available source is a 2008 study by the NGO “ACCEM”. Accem is a non-governmental and non-profit organisation that provides support and reception to refugees and immigrants in Spain through promoting their social and labour integration. This organization conducted on a random sample on West African migrants arrived in Spain in the same year. According to this study, 12.6 percent of immigrants came from Ivory Coast, 11.4 percent from Guinea Bissau, 11.1 per cent from Mauritania, 9 percent Mali, 9 percent from Burkina Faso, 7.3 per cent from Ghana, 6.8 per cent from Gambia, 4.8 percent from Nigeria and 3, 6 percent from Senegal. See ACCEM, *Estudio sobre Población Subsahariana Llegada a Costas Españolas*, 2008. Available at [http://www.accem.es/ficheros/documentos/pdf\\_publicaciones/estudiopahi\\_2008.pdf](http://www.accem.es/ficheros/documentos/pdf_publicaciones/estudiopahi_2008.pdf).

<sup>118</sup> CARLING, Jørgen. “Unauthorized migration from Africa to Spain”. *International Migration*, October 2007, vol. 45, No. 4: 3-37; HUNTOON, Laura. “Immigration to Spain: implications for a unified European Union immigration policy”. *International Migration Review*, 1998: 423-450.



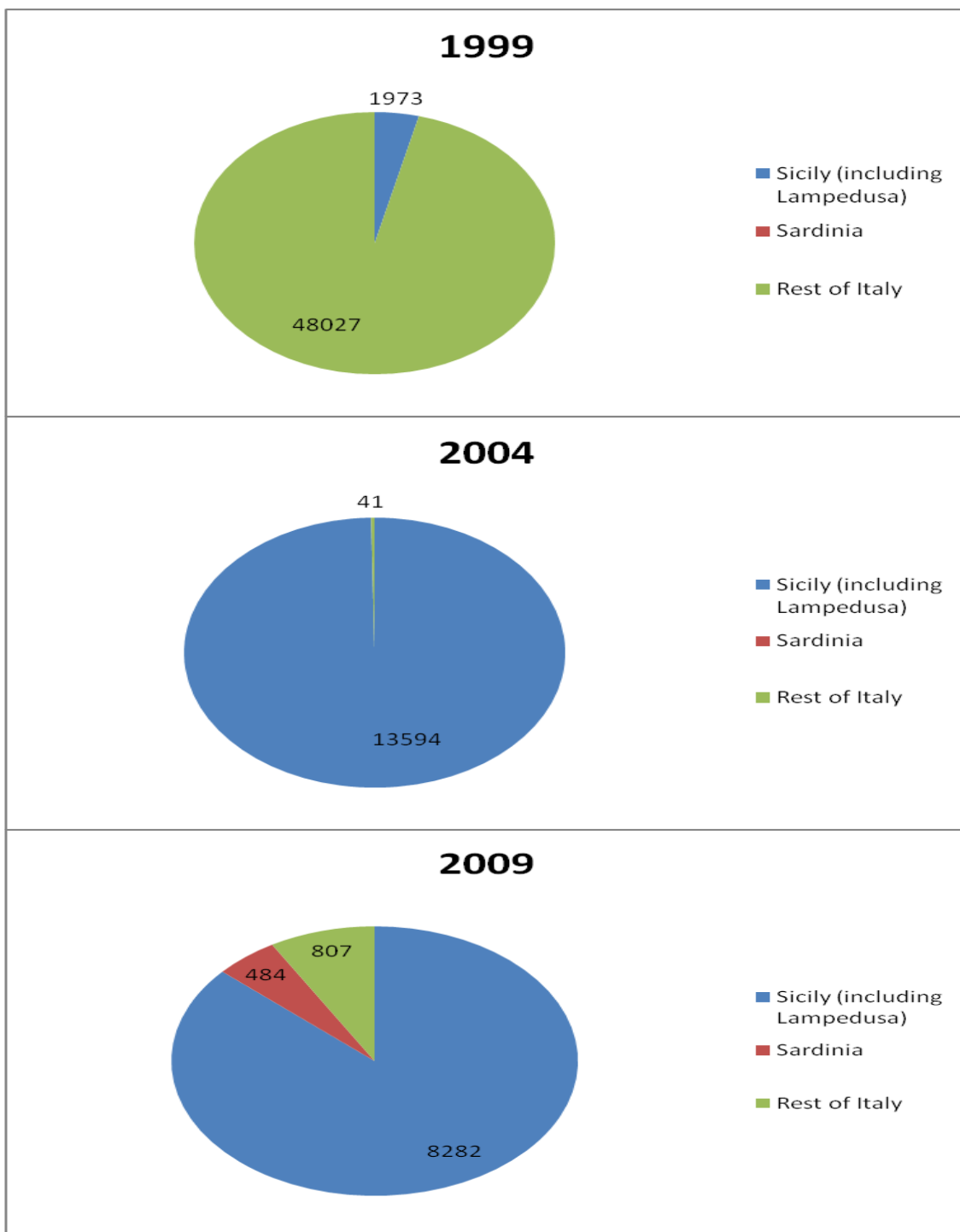
**Fig. 2.3.5 - Migrants Apprehended at the sea border of Italy (2000-2011)**



**Source: Author's elaboration based on data provided by Ministry of Interior, Italy.**

Law 189/2002, which introduced new and strong restrictions on immigration, has been followed by a strong decrease on apprehensions in the following years. An approach taking into account only the legislation would also in this case fail to explain further oscillations in the flows (2000, 2009) which seem to be related to further factors (see fig. 2.3.11 and the “displacement effect”). The tendency line describes the trend as overall decreasing.

**Fig. 2.3.6 – Interception point for migrants apprehended in Italy at sea border<sup>119</sup> (1999, 2004, 2009)**



**Source: Author's elaboration based on data provided by Ministry of Interior, Italy.**

<sup>119</sup> Most of the sea apprehensions registered in the Rest of Italy in the nineties and early 2000s referred to South East Europeans (Albanians) directed to the south east coast of Italy. This flow is totally extinguished nowadays.

Italy is destination for immigrants of different African origins<sup>120</sup>, mainly North Africans, from the Horn of Africa and from West Africa, coming mainly from Somalia, Tunisia, Algeria, Eritrea, and Morocco<sup>121</sup>. The smuggling hub (or *transit country*) is the Libyan western coast, used to reach the island of *Lampedusa*<sup>122</sup> (Italy). Libya has been recognized as the main smuggling hub for migrants directed to Italy, and organized smuggling hubs are positioned all along the main Libyan departing points. These hubs are entirely controlled by criminal organizations<sup>123</sup>, which connect them with other smuggling rings operating along ways from East and West Africa.

### c) Greece

The trend of illegal immigrants trying to cross the Greek borders has been subjected to a constant increase since 2006, and since 2009 Greece has registered the largest number of migrants intercepted at sea border in the E.U. countries (about 25,000, which reached 57,000 in 2011, see fig. 2.3.7). According to İçduygu, Turkey plays a leading role in the system of illegal immigration to the east of the Mediterranean<sup>124</sup>. Most of the migrants apprehended in Greece through the Turkish route come from Asia. Africans were increasingly making use of the same routes since 2007, probably because of the displacement effect involving the increased difficulties in the Italian and Spanish

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<sup>120</sup> Large part of the illegal migrants travelling to Italy and Spain by sea departs from North African countries, especially the Libyan Arab Jamahiriya (flows directed to Italy), Morocco and Algeria (to Spain). However, from the early 1990s until 2002, most illegal travel originated in Albania, Malta, Turkey and non-Mediterranean countries See BREDELOUP, Sylvie and PLIEZ, Olivier. *The Libyan Migration Corridor*. Robert Schuman Centre for Advanced Studies, European University Institute, 2011 (available at <http://cadmus.eui.eu/bitstream/handle/1814/16213/EU-US%20Immigration%20Systems%202011%20-%202003.pdf?sequence=1>).

<sup>121</sup> ZINCONI, Giovanna. "The making of policies: Immigration and immigrants in Italy". *Journal of Ethnic and Migration Studies* 32.3, 2006: 347-375; ZANFRINI, Laura. *Leggere le migrazioni. I risultati della ricerca empirica, le categorie interpretative, i problemi aperti*. Franco Angeli, 1998.

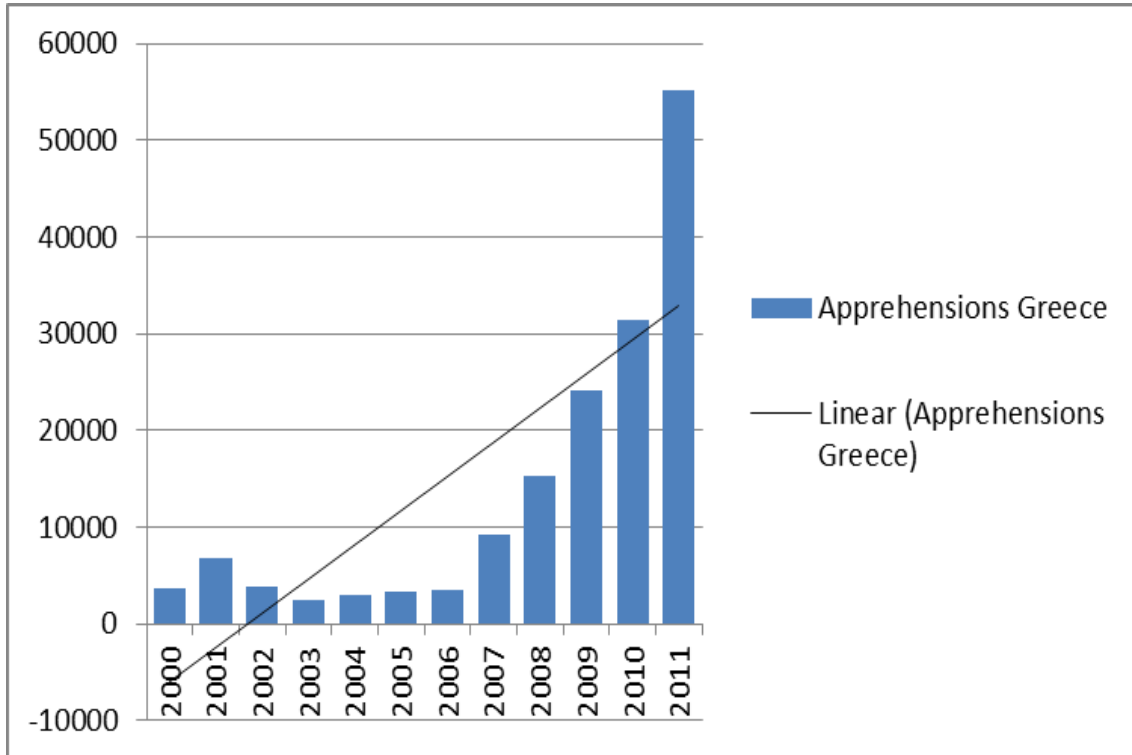
<sup>122</sup> A common operative pattern is for smugglers to leave migrants alone in the boats once the island of Lampedusa is approached, with no sailors or with inexperienced ones. This hub is still the most active for the Italian case, despite the great risks for the immigrants which often result in multiple deaths. See also <http://www.bbc.co.uk/news/world-europe-24436779>

<sup>123</sup> UNITED NATIONS OFFICE ON DRUGS AND CRIME. *Smuggling of Migrants: A global review*. United Nations, New York, 2011.

<sup>124</sup> İÇDUYGU, Ahmet. *Irregular migration in Turkey*. International Organization for Migration, 2003.

routes<sup>125</sup>. Concerning the nationalities of the illegal immigrants involved, the situation in Greece appears to be different when compared to the other European countries<sup>126</sup>.

**Fig. 2.3.7- Apprehended Migrants at sea borders in Greece (2000-2011)**



**Source: Author’s elaboration based on data provided by Ministry of Public Order, Greece.**

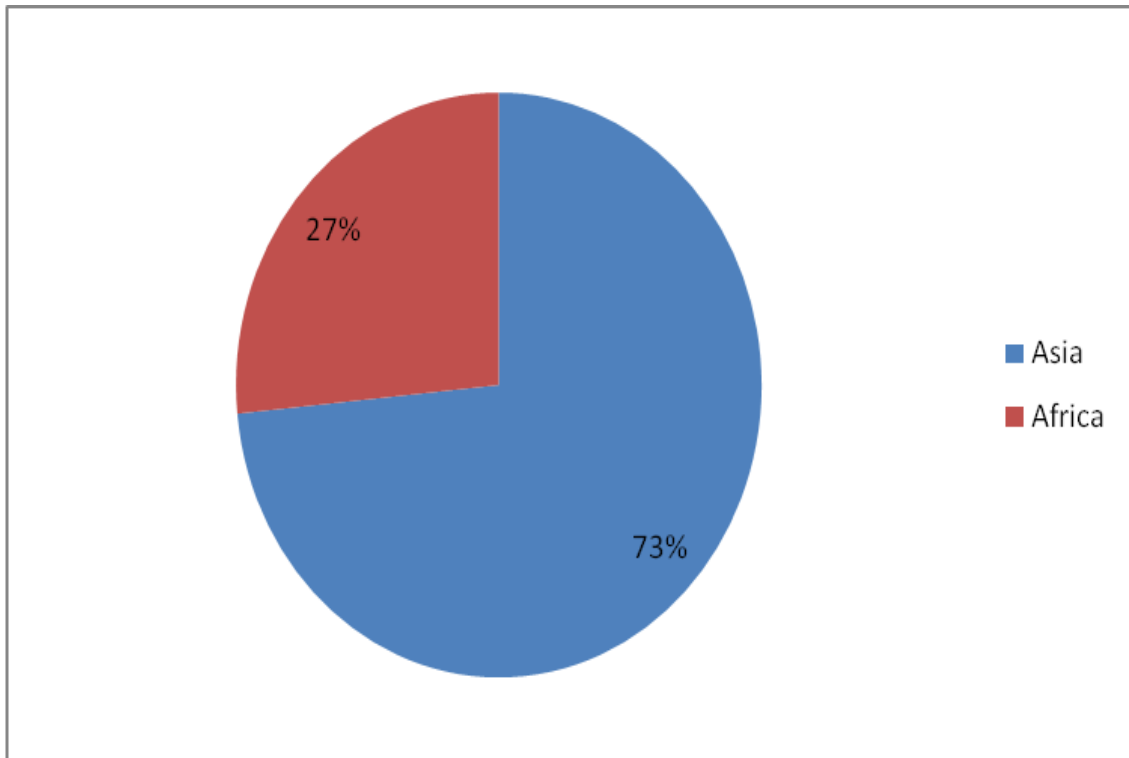
Most of the migrants arrived by sea and land come from Asia (mainly Afghani, Middle Eastern, and South Asians). Migrants departing from Turkey usually head to the Greek islands of Chios, Samos, and Lesbos, which are only 1.5 km away from the Turkish

<sup>125</sup> BALDWIN-EDWARDS, Martin and LIOS-ROTHSCH, Constantina. “Immigration and Unemployment in Greece: perceptions and realities”. *South European Society and Politics*, 1999, Vol.4.3: 206-221.

<sup>126</sup> PIPERAKIS, Andromachi S.; MILNER, Chris and WRIGHT, Peter W. “Immigration, trade costs and trade: gravity evidence for Greece”. *Journal of Economic Integration* 18.4, 2003:1-13; LAZARIDIS, Gabriella. “Immigration to Greece: a critical evaluation of Greek policy”. *Journal of Ethnic and Migration Studies*, 1996, 22.2: 335-348.

coast<sup>127</sup>. Alternatively, they can be transported across the river Evros. The tendency line describes the trend as increasing.

**Fig. 2.3.8 - Migrants apprehended at the Greek borders, by zone of origin (year 2009)**



**Source: Author's elaboration based on data provided by Ministry of public order, Greece.**

Particular caution should be used when analyzing data on apprehensions of illegal immigrants crossing the sea borders of Greece, as some of these were held at the Greek islands. According to the Greek national authorities, 9,049 apprehensions were made in 2006, 9,240 in 2007 and 5,332 in the first half of 2008. Although these figures appear to be definitely high, İçduygu observes that different aspects of illegal immigration between Turkey and Greece still remain unknown<sup>128</sup>. In addition, part of the facts and data collected might be based partially on speculation.

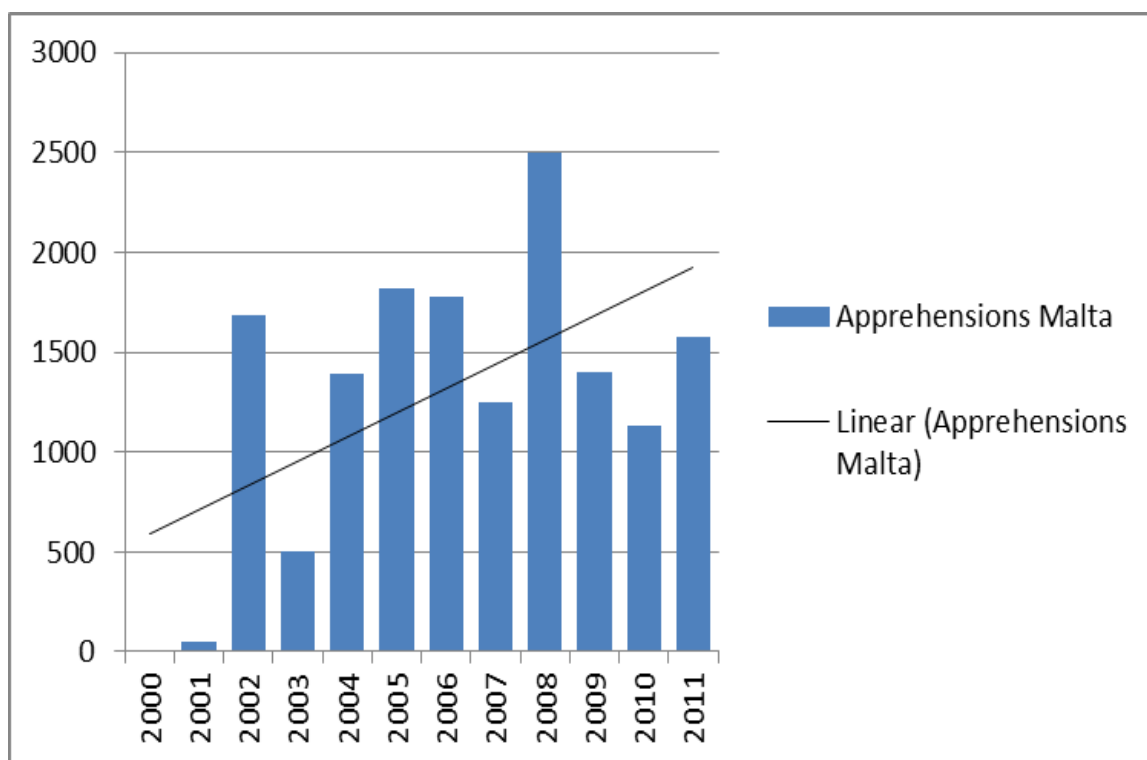
<sup>127</sup> SARRIS, Alexander H. and ZOGRAFAKIS, Stavros. "A computable general equilibrium assessment of the impact of illegal immigration on the Greek economy". *Journal of Population Economics*, 1999, Vol. 12.1:155-182.

<sup>128</sup> BALDWIN-EDWARDS, Martin and LIOS-ROTHSCH, Constantina, *op. cit. infra*, footnote 124.

#### d) Malta

Illegal immigration is an issue of equal importance for Malta, even though the figures for the flows remain limited in comparative perspective<sup>129</sup>. According to figures provided by the Maltese Ministry of the Interior, a number between 1,500 and 2,000 illegal immigrants have been smuggled yearly in Malta since 2002<sup>130</sup>. Landings are increasing: in 2008 the number of migrant arrivals almost doubled that in 2007, reaching 2,500<sup>131</sup>. The tendency line describes an increasing trend of apprehensions for Malta.

**Fig. 2.3.9 - Apprehended Migrants at sea borders in Malta (2000-2011)**



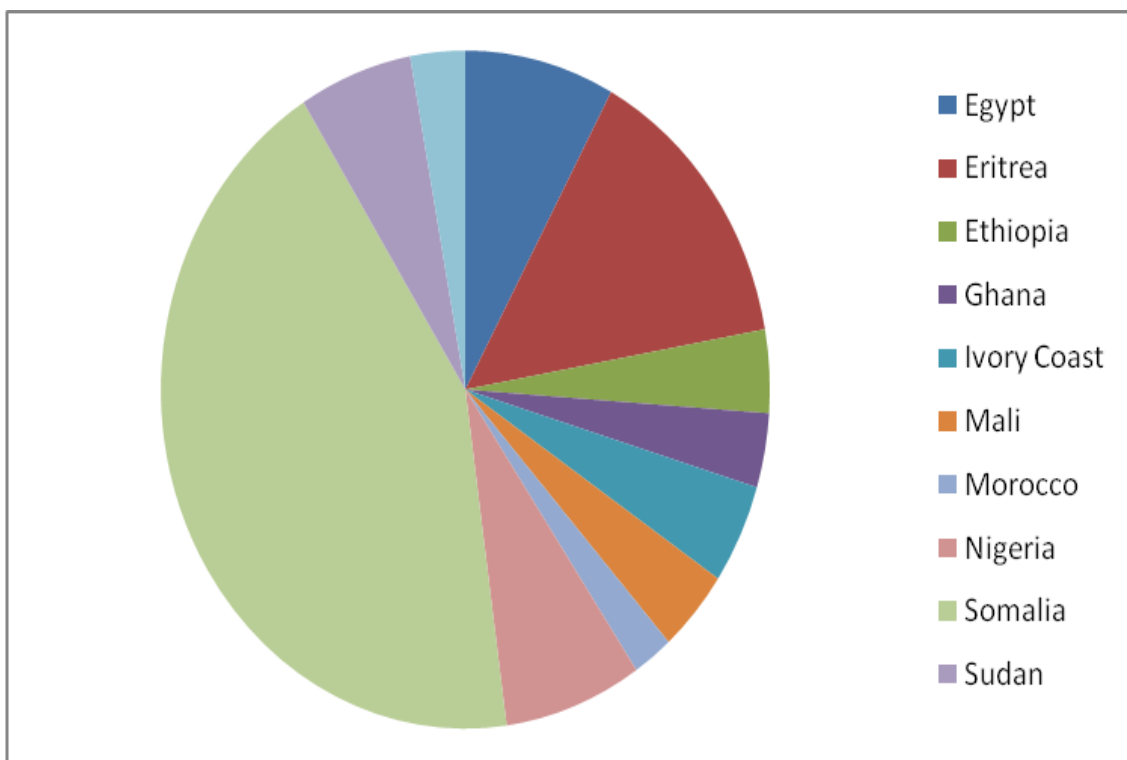
**Source: Author's elaboration based on data provided by Ministry of Interior, Malta.**

<sup>129</sup> KING, Russell and THOMSON, Mark. "The Southern European model of immigration: do the cases of Malta, Cyprus and Slovenia fit Themes". *Journal of Southern Europe and the Balkans* 10.3 2008: 265-291; SCIURBA, Alessandra. "Malta, movimenti migratori e contesto internazionale. Tra" campi" e dispositivi di controllo della mobilità". *Franco Angeli, Diritto, immigrazione e cittadinanza*, 2007:1-18.

<sup>130</sup> LUTTERBECK, Daniel. "Small Frontier Island. Malta and the Challenges of Irregular Immigration". *Mediterranean Quarterly*, 2009, Vol. 20/1: 119-144.

<sup>131</sup> Ibidem.

**Fig. 2.3.10 - Migrants apprehended at the Maltese borders<sup>132</sup>, by country of origin (years 2005-2009)**



**Source: Author’s elaboration based on data provided by Ministry of Interior, Malta.**

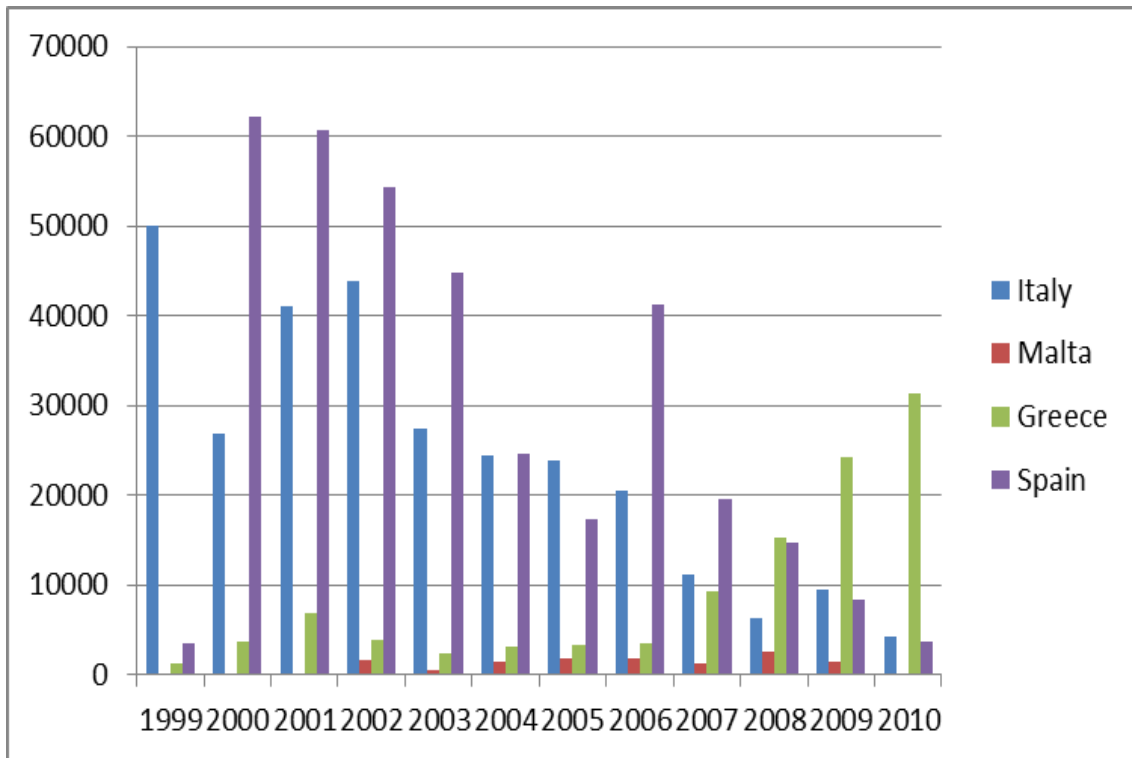
According to Lutterbeck<sup>133</sup>, enforcement actions against illegal immigration conducted by Spanish and Italian law enforcement resulted in a partial displacement of the flows to Malta. A growing number of immigrants coming from West Africa, and in particular immigrants from Mali and Ivory Coast are directed to Maltese coasts. The flows, according to the data provided by Maltese authorities, seem however to be still moderate, remaining limited to about 2,500 apprehensions per year<sup>134</sup>.

<sup>132</sup> Until 2005 Malta was an important point of arrival and departure for migrants wishing to enter Europe. The archipelago had been a hub for North African routes and even an intercontinental hub for smuggling from Asia (mainly from China): migrants arrived by air and in two hours were transported in rubber dinghies to southern Sicily by local smuggler organizations. Since Malta joined the European Union, its role has been reduced, as it is almost impossible for migrants to leave the islands. See MONZINI, Paola. “Il traffico di migranti per mare verso l’Italia: sviluppi recenti (2004-2008)”. *CeSPI Working Paper* No. 43. Rome: *Centro Studi di Politica Internazionale*, 2008.

<sup>133</sup> See *infra*, *op. cit.* footnote 130.

<sup>134</sup> *Ibidem*.

**Fig. 2.3.11 – Migrants apprehended at the borders of Europe, by country of apprehension (1999-2010)**



**Source: Author’s elaboration based on official statistics from multiple national authorities (Ministry of Interior, Italy and Malta: Ministry of Social Issues, Spain; Ministry of Public Order, Greece)**

Figure 2.3.11 provides a clear picture of what has been previously defined as the *displacement effect* of illegal migratory flows<sup>135</sup>. The drop of apprehensions of illegal immigrants in Italy, which was influenced by the introduction of new legislation<sup>136</sup> adopted in 1998, was then followed by an increase of apprehended immigrants in Spain. A latter new decrease in Spain subsequent to the introduction of the commonly known as *Ley de Extranjería, LO 4/2000*<sup>137</sup>) was followed by a new increase of apprehensions at Italian borders in the years 2001-2002. Apprehensions in Italy decreased again in

<sup>135</sup> This is a good example of what criminologists define as “spatial displacement”, with offenders that switch from targets in one location to targets in another location. There are five types of displacement (temporal, tactical, target, offense, spatial) featuring different effects. See ECK, John E. “The threat of crime displacement”. In: *Problem Solving Quarterly* 6:3, 1993: 527-546.

<sup>136</sup> Law 6 march, 1998 n. 40: "Regulation of Immigration and rules on the condition of the aliens".

<sup>137</sup> See *infra*, Annex I, p. 117.



2003 and 2004, following the approval of a new legislation restricting migration. Similar trends and alternations in pikes concerning these two countries can be observed following the entire line.

## **2.4 The organizations facilitating illegal immigration: core resources and structural risk**

Just as legal business, the illegal immigration market is characterized by the production and/or distribution of (illicit) goods and services, with a network of relations between producers, distributors, retailers and money managers on the supply side and consumers on the demand side<sup>138</sup>. All the transfers involved are voluntary, and for this reason it is often difficult to define a victim, unless it is some abstract construct like “society as a whole”. The transfers also generate income earned by the supplier and expenditure by the consumer, rather than losses.

Criminal organizations find incentives to operate when the migrant is not able to cross the border alone, for geographical or legal reasons. The facilitation of illegal immigration is very attractive for *criminal entrepreneurs* because it involves relatively low risk compared with the high earnings (except for the smugglers directly involved in the transport). Frontex recently provided evidence on the presence of facilitators along the external borders of EU<sup>139</sup>. According to this agency, notwithstanding an increase during the first months of 2011, the number of facilitators of illegal immigration detected has been subjected to a steady drop in the last two years. This long-term decline may in part be due to the shift to other methods such as document fraud to mimic legal entry to the EU, which results in facilitators being able to operate remotely and in safer conditions than high-risk activities like accompanying migrants during border-crossing. In the second quarter of 2012, there were 1785 detections of facilitators

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<sup>138</sup> GOTTSCHALK, Peter and SMITH, Robert. “Criminal entrepreneurship, white-collar criminality, and neutralization theory”. *Journal of Enterprising Communities: People and Places in the Global Economy*, 2011, Vol. 5: 300–308.

<sup>139</sup> Frontex *FRAN (Frontex Risk Assessment Network) Quarterly Report for the Second Quarter of 2012 (April-June)*.

of illegal migration, which is an 8% reduction compared to the same period the year before in 2011<sup>140</sup>.

Although European agencies have started to collect data about the presence of facilitators in the E.U., the information about the organizational structure of groups that facilitate illegal immigration into the United States is still scattered. According to Zhang [2010], facilitators of illegal immigration towards the U.S. do not have a rigid command structure and so are more difficult to identify and enumerate. There are multiple layers of low-level operatives involved in the smuggling process which support each other to deliver customers to their final destination and collecting the fees. Sources reviewed reveal a substantial lack of comprehensive research on the organizational structures of smuggling networks in Latin America, with the exception of Mexico<sup>141</sup>.

The market for illegal immigration is almost always driven by the demand, which is extremely volatile, and depends on a number of factors (legislations of departure/destination countries, oscillations in these countries' economies, demand for jobs, wages) characterized by high variability. Due to the enhancement of the barriers to migration by destination countries this demand is constantly increasing. Illegal immigration takes on the features of a vast industry that depends on keeping the flow of migrants moving. Jointly with the provision of the final service, the illegal border crossing, the degree of success of these activities determines the "entrepreneurial risk". This risk is strongly influenced by the specific features of the countries involved in the smuggling operations such as legislation and legal enforcement. Hence, in some countries the illegal immigrant is considered as guilty as the supplier, whereas in some others he/she is not, in spite of the many efforts done by international authorities in

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<sup>140</sup> Over the last year, Spain has detected an increase of the numbers of facilitators within its territory. One criminal organization, which facilitated the illegal entry of Iranian nationals to the UK, was dismantled on Tenerife, which is one of the main embarkation hubs towards several British airports.

<sup>141</sup> While no detailed information is available, some limited explanations can be found in Kyle and Scarcelli's work, which analyzed the structural evolution of the Cuban smuggling networks in response to the new United States enforcement strategies after 11 September 2001. According to the authors, smuggling networks have evolved from a "self-service" market (where migrants could simply arrange their own mean of transport) to a permanent presence in the same Mexican coastal regions beside drug smuggling organizations. See KYLE, David and SCARCELLI, Marc. "Migrant smuggling and the violence question: evolving illicit migration markets for Cuban and Haitian refugees". *Crime, Law, and Social Change*, vol. 52, No. 3, 2009.

coordinating local governments towards an establishment of common rules of prevention and enforcement.

The traditional criminal organization<sup>142</sup> was more vulnerable to legal enforcement<sup>143</sup>, since capturing the lowest ranks of the organization would often lead to its leaders. Additionally, a blow dealt by enforcement agencies frequently implied problems of re-organization of the criminal activities, strongly affecting the profits of the organization itself and raising its entrepreneurial risk. At the same time, criminal organizations had to adapt their structure in order to seek for new, less controlled routes and explore for new business opportunities and market shares. The horizontal structure allows a prompt re-organization of the activities, increasing the demand responsiveness to maintain market-competitiveness and thus ensuring a higher resilience to economic and structural breakdowns. The more a criminal organization develops horizontal interdependencies, by elevating the level of responsibility of baseline employees and eliminating layers of middle management, the better it can respond to market variations. This may involve, for example, issues such as the recruiting of new or more specialized professional employees with specific skills in order to respond to variations in demand more efficiently, thus obtaining higher profits.

Schoelenhardt identified up to ten different categories of agents working in a single migrant-smuggling episode<sup>144</sup>, with financiers at the top of the organization in charge of investing the profits of the activity and supervising the smuggling. Horizontality thus

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<sup>142</sup> The United Nations Convention against Transnational Crime defines an “organised criminal group” (article 2(a)) as a structured group of three or more persons that exists over a period of time, the members of which act in concert aiming at the commission of serious crimes in order to obtain a direct or indirect financial or other material benefit. See: United Nations Convention Against Transnational Organized Crime, G.A. Res. 25, annex I, U.N. GAOR, 55th Sess., Supp. No. 49, at 44, U.N. Doc. A/45/49 (Vol. I) (2001), *entered into force Sept. 29, 2003*.

<sup>143</sup> Criminal groups are considered to be organized when they focus on the obtainment of illegal profits and commit systematically crimes with serious damage to society, with an ability of shielding their criminal activities from the authorities. See FIJNAUT, Cyrille; BOVENKERK, Francis; BRUINSMA, Gutfeld and VAN DE BUNT, Hein. *Organized Crime in the Netherlands*. The Hague: Kluwer Law International, 1998.

<sup>144</sup> These categories include recruiters, transporters, informers and money-launderers—with financiers at the top of the organization competent in investing the profits of the activity and supervising the smuggling. See SCHLOENHARDT, Andreas. “Organised Crime and Migrant Smuggling”. *Australia and the Asia-Pacific Research and Public Policy Series*, No. 44. Canberra, Australian Institute of Criminology 2002.

ensures a higher level of decision-making skills under conditions of time-pressure and uncertainty to find the resources necessary to cover the initial expenses to begin the operation of recruiting smugglers<sup>145</sup>. To adequately react to sophisticated law enforcement strategies and technologies, criminal organizations depend on employees who are able to perform very specialized tasks and seize new opportunities for criminal activities and modify the methods, means, and routes of smuggling in response to changing law enforcement and legislative measures<sup>146</sup>.

**Fig. 2.4.1 – The prices of illegal immigration**



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<sup>145</sup> The evidence collected from interviews with migrants, police and legal experts indicates that there is often an intense rivalry between smugglers competing for the same pool of customers. This competition is mainly horizontal, i.e. between facilitators operating out of a common smuggling hub or along the same stages of smuggling routes.

<sup>146</sup> SOUTHERLAND, Mittie D and POTTER, Gary W. "Applying organization theory to organized crime". *Journal of Contemporary Criminal Justice*, 1993, 9.3: 251-267.

The vulnerability to market forces and the lack of formal dispute resolution mechanisms mean that threats or acts of violence are often used to handle non-cooperative collaborators or market-raiding competitors<sup>147</sup>. However, such acts provoke another source of organizational vulnerability: the state's intervention. Criminal organizations operate "against the state"<sup>148</sup>, and face a constant risk of interference, member arrest and asset seizure.

#### 2.4.1 Supply and demand dynamics of illegal immigration facilitators

Illegal markets –including the market for illegal migration- are defined by the interaction of competitive forces. Migrants act like customers purchasing services along the path to the places commonly recognized along the road as smuggling hubs. A competitive market environment consists of a number of primary factors which also delineate its structure. Their interaction creates market forces of pressure that define the offer and the price of the illegitimate good provided by the criminal enterprise. According to Dean et al. these primary factors are: the business enterprise itself, its suppliers, and its customers, the various competing business enterprises offering the same or new products and/or services, as well as substitute products/services<sup>149</sup>. The criminal organization is placed at the center of this illicit market<sup>150</sup>. The main goal of its existence is to make a profit which derives from the sale of a product/service in an environment where market demand for that product/service is supposed to be available. The criminal organization can either be the direct producer or be supplied by a provider which can guarantee a continuous supply of that product/service.

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<sup>147</sup> BILGER, Veronika; HOFMANN, Martin and JANDL, Michael. "Human smuggling as a transnational service industry: Evidence from Austria", *International Migration*, vol. 44, 2006, No. 4: 59-93

<sup>148</sup> PAOLI, Letizia. "The paradoxes of organized crime". *Crime, law and social change*, 2002, 37.1: 51-97.

<sup>149</sup> DEAN, Geoff; GOTTSCHALK, Petter; FAHSING, Ivar A. *Organized crime: policing illegal business entrepreneurialism*. Oxford University Press, 2010.

<sup>150</sup> Although no comparative statistics are available, it is commonly assumed that the facilitation of illegal immigration was a relatively limited phenomenon before 1993, while recent analyses assess that 80 per cent of migrants use facilitators. See ZHANG, Sheldon. *Smuggling and Trafficking in Human Beings: All Roads Lead to America*. Westport, Connecticut. Praeger, 2007.

## **Box 2- Possible Costs and Externalities of Illegal Immigration**

- 1. With the exception of sales tax, the income earned by illegal immigrants is not taxable. This represents forgone fiscal revenue.*
- 2. Illegal migrants offer an unfair competitive advantage to firms that employ them over firms that do not.*
- 3. Illegal migrants are not covered by a minimum wage or national and industry wage agreements. They are therefore more likely to undercut the wages of the low skilled.*
- 4. Whether entry is legal or illegal may affect the quality of migrants, even if the legal migration scheme does not select on the basis of skill. Skilled workers or professionals are much more likely to enter if there is a legal channel, even if their qualifications are not a condition of entry.*
- 5. Employers may decide not to abide by health and safety regulations, leading to the potential for migrant death and injury. Police and health services may be called upon to rescue or treat the injured, to investigate the reasons for death, or to bury the dead.*
- 6. Forced to live underground, and with little access to legitimate employment, migrants are more likely to be exposed to the world of crime.*
- 7. Stigmatization of illegal migrants can undermine social cohesion if it spreads to cover those who entered legally.*
- 8. Illegal migrants may be encouraged to stay longer than they might desire and to remain even when unemployed because of the risks of detection and associated costs of entering and leaving.*

**Source: The OECD Database Staff**

Although for a long time it was assumed that organized criminals had a monopolistic hold on their markets<sup>151</sup>, truth is that criminal markets are subjected to the same sort of competitive market forces which are typical of the legal economy. Gambetta observes how the competitive advantage of criminal organizations in selling their services is greater the lesser the demand side knows of its internal structure, as this lowers the

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<sup>151</sup> See CHANG, Juin-Jen; LU, Huei-Chung; CHEN, Mingshen. "Organized crime or individual crime? Endogenous size of a criminal organization and the optimal law enforcement". *Economic Inquiry*, 2005, 43.3: 661-675.

probability of being detected by enforcement agencies<sup>152</sup>. Polo insists on the role of the agents to carry out tasks characterized by opportunistic behavior in the absence of legal contracts<sup>153</sup>. Hence, a paradox lies at the heart of the relationship between illegal migrants and authorities seeking to apply increasingly rigorous laws designed to restrict the opportunities for migration to people belonging to legally designated categories: the paradox that an increase in the rigor with which laws are made and implemented may readily translate into a rise in criminal activities associated with illegal migration.

To keep their supply and availability of criminal goods high, criminal organizations facilitating illegal immigration require more small sub-units of criminal specialists. These sub-units work with external individuals to provide the services at the different stages of the route from the departure to the destination country, and are at the same time more rapid to adjust to new market opportunities. This ensures higher responsiveness and flexibility in finding new and more efficient ways to routinely turn to niche markets for specific expertise, giving rise to the implementation of a differentiated employment policy<sup>154</sup> and a separation of the tasks to suit the growing demand<sup>155</sup>.

## 2.4.2 The price of the smuggling service

Figure 2.4.1 illustrates the mechanism which regulates the price of the illicit goods provided by the criminal organization<sup>156</sup>. The structure of suppliers – criminal

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<sup>152</sup>GAMBETTA, Diego. “Fragments of an Economic Theory of the Mafia”. *European Journal of Sociology*, 1988, 29.01: 127-145.

<sup>153</sup> POLO, Michele. “Internal cohesion and competition among criminal organizations”. *The economics of organised crime*, 1995:87-109.

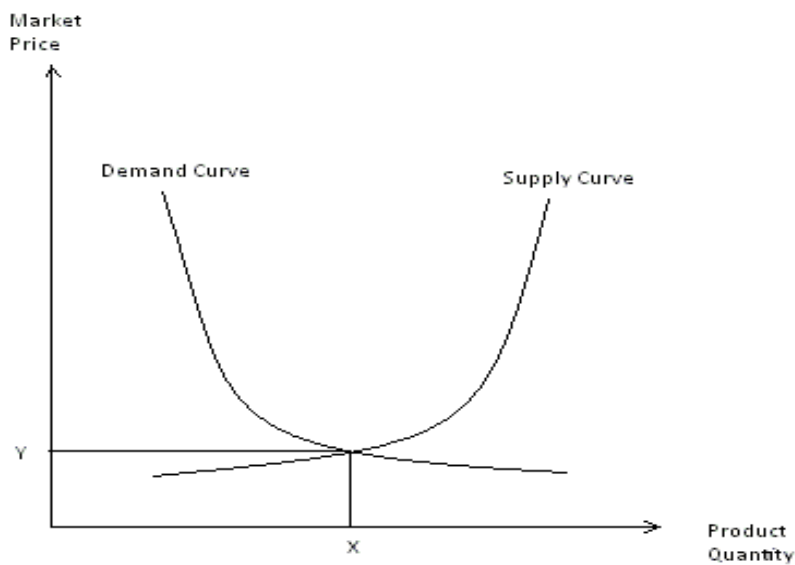
<sup>154</sup> DESROCHES, Frederick John. *The crime that pays: Drug trafficking and organized crime in Canada*. Canadian Scholars’ Press, 2005; SHELLEY, Louise I. and PICARELLI, John T. “Methods not motives: Implications of the convergence of international organized crime and terrorism”. *Police Practice and Research*, 2002, 3.4: 305-318;

<sup>155</sup> LYMAN Michael D. and POTTER, Gary W. *Organized crime*. Upper Saddle River Prentice Hall, NJ, 2000.

<sup>156</sup> The most comprehensive attempt to assess the costs of the facilitation of illegal immigration from a worldwide perspective was made by PETROS, Melanie. “The costs of human smuggling and trafficking”. *Global Migration Perspectives*, No. 31 Geneva, *Global Commission on International Migration*, April 2005. Available at:

organization – and customers generates competitive forces on both sides of the equation. As any normal business enterprise, the criminal organization produces or buys (from a certain supplier) the product/service at the cheapest possible price to then re-sell it to its customers for the highest possible price in order to maximize its profits.

**Fig. 2.4.1 Market Price determined by intersecting supply and demand curves**



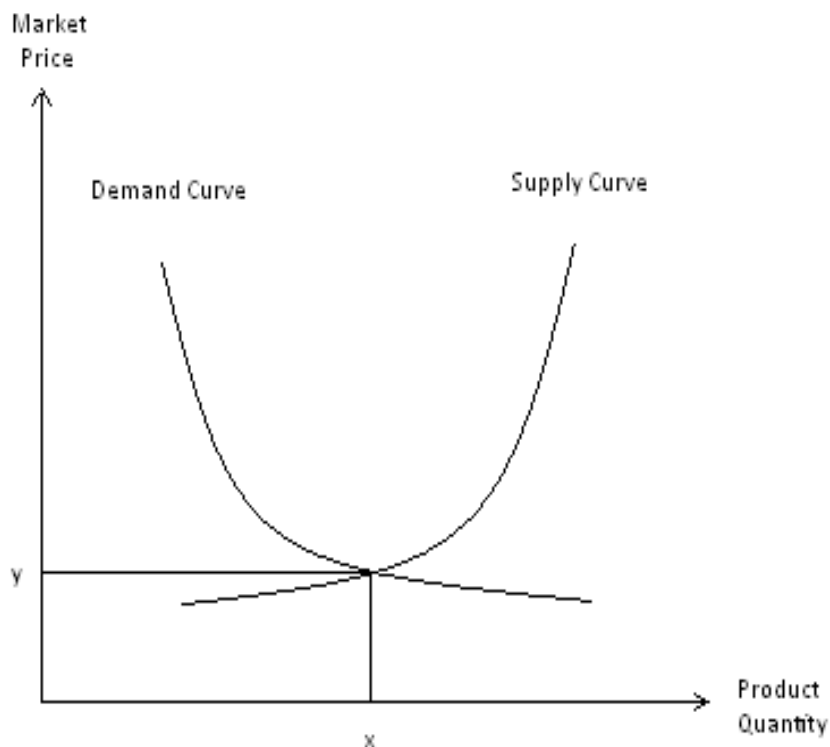
At the same time, customers want to pay the lowest possible price for the good/service, whilst suppliers will try to earn as much money as they can from selling the good/service to the organization. Prices of criminal goods such as drugs, prostitution and facilitators of illegal immigration follow these rules.

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[http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/policy\\_and\\_research/gcim/gmp/gmp31.pdf](http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/policy_and_research/gcim/gmp/gmp31.pdf). According to research findings, the price is determined by the distance and complexity of the route, the degree of institutional control along the route and the reception of migrants in transit and destination countries.



**Fig. 2.4.2 – Market Price when demand elasticity is low**



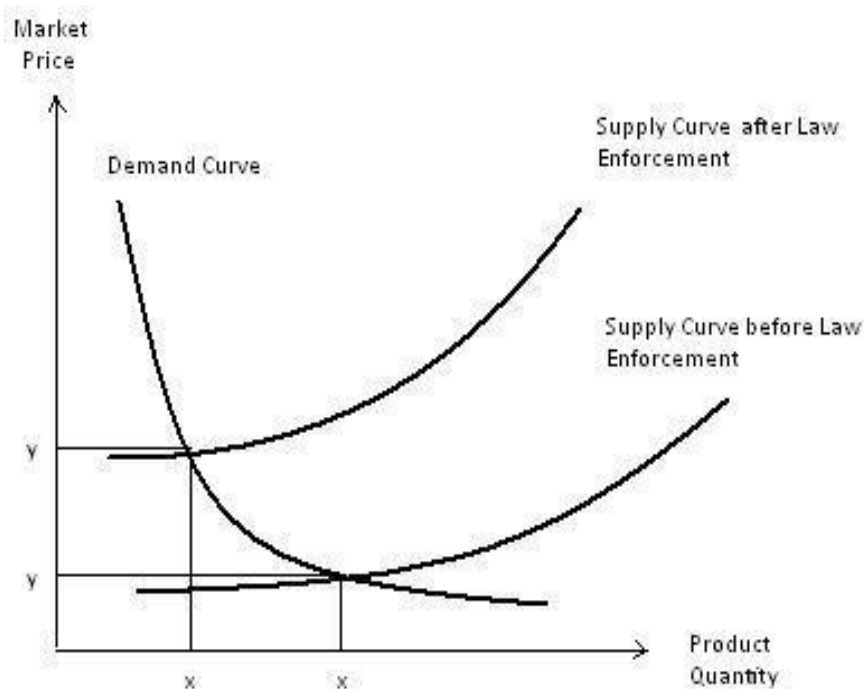
The price of the service for the final customer is therefore determined by the point where the demand curve meets the supply one. The market for illegal immigration is thus determined by the interplay between the supply curve and the demand curve (Fig. 2.4.2). This means that an *increasing* product price leads to an *increase* in the supply of the good/service while a *decreasing* product price will lead to a *decrease* in the supply. Therefore, when law enforcement is successful in dismantling a certain criminal organization facilitating illegal immigration, some of the supply of the good “facilitation of illegal immigration” will disappear from the market, at least temporarily. As a consequence, such market disruption will lead to a decrease of the supply and a consequential increase of the price for a single unit of the service<sup>157</sup>.

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<sup>157</sup> MINRON, Jeffrey. “The effect of drug prohibition on drug prices: evidence from the markets for cocaine and heroin”. *Review of Economics and Statistics*, 2003, 85(3):522–530; LAMONT, Owen A. and THALER, Richard H. “Anomalies: The Law of One Price in Financial Markets”, *Journal of Economic Perspectives*, 2003, vol. 17(4): 191-202; KLEIMAN, Mark A.R. “Enforcement swamping: A positive-feedback mechanism in rates of illicit activity”. *Mathematical and Computer Modelling*, 1993, Jan; 17(2): 65–75.

Another important feature in these market dynamics is what economists call “elasticity”, which is how the change of one economic variable affects others. For example, if supply changes drastically due to a minor price change, then this would be referred to in economic language as the price elasticity of the demand being high<sup>158</sup>. In other words, price elasticity of demand measures the nature and degree of the relationship between changes in quantity demanded of a good and changes in its price. A price elasticity of 1 means that a unit increase of the price will generate a drop of the demand by a unit.

**Fig. 2.4.3 - Market Place Fluctuations due to Law Enforcement**



The most important implication when analyzing the prices of illegal goods is that when law enforcement actions are successful the prices for the illegal good will rise and thus make the market more attractive for the entrance of new criminal competitors. If they do enter the market, these new competitors will cause the price to drop, as shown in figure 2.4.3. The unintended consequences of the success of law enforcement actions might serve only to establish a “supply gap” in the market that will be filled by another

<sup>158</sup> PAGOULATOS, Emilio and SORENSEN, Robert. “What determines the elasticity of industry demand?”. *International Journal of Industrial Organization*, 1986, Vol.4.3: 237-250.

criminal organization, with higher prices to be paid for the final good/service provided<sup>159</sup>.

More recently a growing number of authors, such as Herman and Zhang<sup>160</sup>, expanded their business approach to criminal organizations by including the role undertaken by the social networks and families involved in the illegal immigration process. An important contribution in this sense has been provided by so-called “Network Theory”, which examines the structure of relationships between social entities<sup>161</sup>. According to this theory, migrants are already linked prior to their departure by informal ties of friendship, religion and family. Herman sums up these perspectives arguing that migration business theory should be complemented with a network theory providing additional elements to economic factors, like social ties<sup>162</sup>. The structure of relationships which migrants and smugglers weave has the effect of increasing the chances for migrants (and smugglers) of reaching their goals.

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<sup>159</sup> However, the use of the business approach to describe the dynamics beneath the facilitation of illegal immigration has been subjected to critics. The main critic argues that this approach covers only the visible part of illegal immigration, while excluding everything which is not transparent. See PASTORE, Ferruccio; MONZINI, Paola; SCIORTINO, Giuseppe. “Schengen's soft underbelly? Irregular migration and human smuggling across land and sea borders to Italy”. *International Migration*, 2006, 44.4: 95-119.

<sup>160</sup> ZHANG, Sheldon. *Chinese human smuggling organizations: Families, social networks, and cultural imperatives*. Stanford University Press, 2008; HERMAN, Emma "Migration as a family business: The role of personal networks in the mobility phase of migration." *International Migration*, 2006, Vol.44.4: 191-230.

<sup>161</sup> See CONTRACTOR, Noshir S.; WASSERMAN, Stanley and FAUST, Katherine, “Testing multitheoretical, multilevel hypotheses about organizational networks: An analytic framework and empirical example”. *Academy of Management Review*, 2006, 31.3: 681-703.

<sup>162</sup> See footnote 160.



## Chapter III. The drivers of illegal immigration

The goal of this section is to describe those factors which are recognized by the literature to drive flows of illegal migrants to the U.S. and the E.U. The larger aim is to contribute to the current debate on quantitative estimates of illegal immigration.

A large part of the literature on illegal immigration limits its scope to the description of the patterns of the phenomenon and their links with the law and the economy, without however providing any quantitative evidence of their impact on illegal immigration<sup>163</sup>. The reasons behind this omission/failure are mainly related to the quality of the data used for the measurement of illegal immigration (apprehension of illegal immigrants by national authorities at the borders of the U.S. and the E.U.). However, apprehension at the borders is the only proxy used to measure illegal immigration<sup>164</sup> and despite its shortcomings can currently be considered a reliable basis for a quantitative analysis, a conclusion that is reinforced by the constant improvement of the methods of collection and the ongoing harmonization of the data and domestic legislations of the member states<sup>165</sup>.

The determinants of immigration<sup>166</sup> have been the target of extensive research<sup>167</sup>. Even though it is still difficult to offer a taxonomy of these factors, scholars agree that

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<sup>163</sup> KOSLOWSKI, Rey. *The Evolution of Border Controls as a Mechanism to Prevent Illegal Immigration*. Washington, DC: Migration Policy Institute, 2011. Available at: [http://syb.icisleri.gov.tr/ortak\\_icerik/syb/THE%20EVOLUTION%20OF%20BORDER%20CONTROLS%20AS%20A%20MECHANISM%20TO%20PREVENT%20ILLEGAL%20IMMIGRATION.pdf](http://syb.icisleri.gov.tr/ortak_icerik/syb/THE%20EVOLUTION%20OF%20BORDER%20CONTROLS%20AS%20A%20MECHANISM%20TO%20PREVENT%20ILLEGAL%20IMMIGRATION.pdf).

<sup>164</sup> DUVELL, Franck. *Irregular immigration, economics and politics*. CESifo DICE Report, March 2011. Available at [http://www.compas.ox.ac.uk/fileadmin/files/People/staff\\_publications/Duvell/1210202.pdf](http://www.compas.ox.ac.uk/fileadmin/files/People/staff_publications/Duvell/1210202.pdf); Hanson, Gordon H. "Illegal Migration from Mexico to the United States". *Journal of Economic Literature, American Economic Association*, vol. 44(4), pages 869-924, December 2007.

<sup>165</sup> BRIGGS, Vernon Jr. "Methods of analysis of illegal immigration into the United States". *International Migration Review*, Vol. 18, No. 3, Autumn, 1984: 626; JANDL, Michael. "Estimates on the Numbers of Illegal and Smuggled Immigrants in Europe". *Presentation at the 8<sup>th</sup> International Metropolis Conference, Vienna: International Centre for Migration Policy Development*, 2003.

<sup>166</sup> DE HAAS, H. "The determinants of international migration: conceptualizing policy, origin and destination effects", *IMI Working Paper 32*, 2011. Available at <http://www.imi.ox.ac.uk/about-U.S./people/hein-de-haas#sthash.t0O7gUsh.dpuf>.

<sup>167</sup> BOSWELL, Christina. "The political functions of expert knowledge: knowledge and legitimation in European Union immigration policy". *Journal of European Public Policy*, 2008, 15.4: 471-488; BAUER,

migratory flows respond to both economic and non-economic cycles in destination areas<sup>168</sup>. There is a range of factors that exert influence in any given migratory phenomenon. In the case of illegal immigration, the focus is to understand what the precise drivers are, at any given time and in any given sphere, in a specific crime market, where the classical model also includes law enforcement<sup>169</sup> as a variable influencing the price and thus decreasing/increasing the demand (and so the number of illegal immigrants)<sup>170</sup>. A complete identification of the factors which drive illegal immigration involves the analytical complexity of a market-by-market analysis of what particular criminal business is or could potentially be operating. Such a crime business market analysis involves several factors interacting one with another, which in turn makes some factors more important or influential in some markets and/or contexts than others at different periods of time.

The neoclassical theory of labor migration explains the movement of people by recourse to regional or national differences in expected incomes<sup>171</sup>. Migratory flows should therefore be directed towards regions with comparatively higher incomes and lower unemployment rates. Extensions of this theory account for differences in relatively favourable employment. Wage conditions, along with the presence of network effects, distance from the origin country, and immigration policies, are recognized as the

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Thomas K. and ZIMMERMANN, Klaus F. *Assessment of possible migration pressure and its labour market impact following EU enlargement to Central and Eastern Europe*. IZA Research Report 3, Bonn: 1999. [http://www.iza.org/en/webcontent/publications/reports/report\\_pdfs/report\\_pdfs/iza\\_report\\_03.pdf](http://www.iza.org/en/webcontent/publications/reports/report_pdfs/report_pdfs/iza_report_03.pdf); ZAVODNY, Madeline. "Determinants of recent immigrants' locational choices". *International Migration Review*, 1999, 1014-1030. BORJAS, George J. "Economic theory and international migration". *International migration review*, 1989: 457-485.

<sup>168</sup> MASSEY, Douglas. "Social and economic aspects of immigration". *Annals of the New York Academy of Sciences* 1038, 2004: 206–212

<sup>169</sup> Hanson and Spilimbergo provided the first quantitative evidence about the effect undertaken by legal enforcement to counter illegal immigration. See HANSON, Gordon and SPILIMBERGO, Antonio. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border" *The American Economic Review* Vol. 89, No. 5, 1999: 1337-1357

<sup>170</sup> See Fig 2.4.3, p.64.

<sup>171</sup> MANSOOR, Ali; QUILLIN, Bryce (leading authors). *Migration and remittances. Eastern Europe and the Former Soviet Union*, 2007. The World Bank. Available at: [http://siteresources.worldbank.org/INTECA/Resources/257896-1167856389505/Migration\\_FullReport.pdf](http://siteresources.worldbank.org/INTECA/Resources/257896-1167856389505/Migration_FullReport.pdf)

principal causes of immigration<sup>172</sup>. As previously said, the inner features of illegal immigration limit any quantitative analysis to the sole factors operating in the areas where illegal immigrants want to go. Differently to legal flows, which are counted and documented, the count of illegal immigrants does not provide any information about the immigrants' nationality, as a large part of them do not have documents or proof of nationality when apprehended.

To sum up, the main migration drivers are<sup>173</sup>:

- *Labor demand* – The economic expansion of developed countries requires a given number of unskilled workers, very often migrants.
- *Higher wages* - The gap between the wages in the native country and the expected wages in destination countries may encourage people to migrate;
- *Lower taxes*;
- *Better living conditions*.

For many undocumented immigrants the underground economy is the only mean of finding a job. It is true that the existence of the underground economy increases the employment opportunities of unauthorized migrants, particularly so when trafficking networks are operating too. Issues related to data availability in the departure countries led the literature to concentrate on the host country of migrant workers.

Feridun explored the effect of GDP per capita and unemployment on immigration in Sweden<sup>174</sup> by using the autoregressive distributing lag<sup>175</sup> (ARDL) bounds testing

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<sup>172</sup> HAUG, Sonja “Migration networks and migration decision-making”. *Journal of Ethnic and Migration Studies*, 2008, 34.4: 585-605; HAINMUELLER, Jens and HISCOX, Michael J. “Attitudes toward highly skilled and low-skilled immigration: evidence from a survey experiment”. *American Political Science Review*, 104.1, 2010: 61-84. BRATSBERG, Bernt; RAGAN Jr, James F. and NASIR, Zafar M. “The effect of naturalization on wage growth: A panel study of young male immigrants”. *Journal of Labor Economics* 20.3, 2002: 568-597; FUNKHOUSER, Edward and TREJO, Stephen J. “Labor Market Skills of Recent Male Immigrants: Evidence from the Current Population Survey”. *The Industrial and Labor Relations Review*, 1994, Vol. 48: 792.

<sup>174</sup> FERIDUN, Mete. “Immigration, income and unemployment: An application of the bounds testing approach to cointegration”. *The Journal of Developing Areas*, 2007: 37-49.

<sup>175</sup> Model for time series data in which a regression equation is used to predict current values of a dependent variable based on both the current values of an explanatory variable and the lagged (past

approach. Results showed a causal link between immigration and these variables. A later study by Gonzalez-Gomez seemed to confirm the causal link between economic growth and immigration directed to Germany and Switzerland<sup>176</sup>.

The aim of this chapter is to present the factors which are recognized by the literature as drivers of illegal immigration and illustrate their relationship with the phenomenon. However, particular caution should be used before giving any predictive value to the analysis at this stage, as this chapter is only meant to explore possible relationships between the variables. In addition, some drivers, such as the facilitators of illegal immigration, do not have reliable quantitative proxies and will only be analyzed qualitatively by describing a number of case studies (see Annex II, *infra*).

### **3.1 The role of the labor market as a driver of illegal immigration**

The economic pull factors of illegal migration largely match those affecting regular migration: wealth, employment opportunities, and good working conditions. However, some of the determinants of illegal and regular migration differ. First, countries with less regulated economies and larger informal sectors, such as Spain or Italy, offer more opportunities to illegal immigrants than highly regulated countries, such as Sweden. Illegal immigrants are attracted to sectors with businesses that are less controlled or regulated, and to areas (such as multi-ethnic cities) where their illegal situation is less visible<sup>177</sup>

Before proceeding with the analysis, it is important to take into account the different implications (or the different degree of influence) when we analyze similar economic

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period) values of this explanatory variable. See also CROMWELL, Jeff B. et al. *Multivariate Tests For Time Series Models*. SAGE Publications Inc., 1994.

<sup>176</sup> GONZÁLEZ-GÓMEZ, Manuel. “The causality between economic growth and immigration in Germany and Switzerland”. *The Economic and Social Review*, 2011, 42.3: 271-287.

<sup>177</sup> DUVELL, Franck. “Illegal Immigration in Europe. Patterns, Causes and Consequences”. In Timmerman, Christiane; Lodewyckx, Ina; Bocklandt, Yves 2008. *Grenzeloze solidariteit, over migratie en mensen zonder wettig verblijf*. Leuven: Acco, 2008, 17-30.



variables which act into different labor market situations. Differentials in productivity between the U.S. and the E.U. reflect the differences between these two labor markets. New research sheds some light on differential patterns of growth in *labor intensive* sectors, explaining the different performances of productivity recorded in the European economy and that of the U.S.<sup>178</sup>.

Labor market protections<sup>179</sup> affect the demand for illegal workforce, influencing illegal immigration to a lesser extent when compared to areas with less employment protection. Moreover, while the U.S. is a unique market, homogenously regulated, the European Union aggregates different market demands of member countries featuring diverse characteristics which can affect the flows of illegal immigrants in different ways. The United States features a more flexible labor market and, since illegal immigration is expected to be more elastic to economic shocks than its legal counterpart, it is expectable that immigration directed to the two areas analyzed will react in a different way to the economic shocks, with a higher level of response of the flows of illegal immigrants directed to the U.S.<sup>180</sup>

Conversely, legal immigration is less responsive to economic cycles as it is subjected to arbitrary selection criteria and bureaucratic delays, which have the effect of disassociating legal inflows from U.S. labor-market conditions<sup>181</sup>. Over the last half-

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<sup>178</sup> For an account emphasizing the key role of market service sectors in accounting for the productivity growth divergence between the two regions, see VAN ARK, Bart O'MAHONY, Mary and TIMMER, Marcel P. "The Productivity Gap between Europe and the United States: Trends and Causes". *Journal of Economic Perspectives*, 2008, Vol 22, No.1,: 25– 44.

<sup>179</sup> Hopenhayn and Rogerson focused on the potential costs of labor protection. Such protection is recognized to disturb the reallocation of resources from declining firms to more dynamic ones with above average productivity growth. In addition, these protective devices tend to alter the allocation of resources among sectors. See HOPENHAYN, Hugo & ROGERSON, Richard. "Job Turnover and Policy Evaluation: A General Equilibrium Analysis", *Journal of Political Economy*, University of Chicago Press, vol. 101(5), 1993:915-38.

<sup>180</sup> The most reliable estimates of the sensitivity of Mexican regions to U.S. labor market shocks are provided by DONATO, Katherine M.; DURAND, Jorge and MASSEY, Douglas S. "Stemming the Tide? Assessing the Deterrent Effects of U.S. Immigration and Control". *Demography*, May 1992:139-57.

<sup>181</sup> MARTIN, Susan. *U.S. Employment -Based Admissions: Permanent and Temporary*. Migration Policy Institute Policy, Brief No. 15, January 2006.

century, there appears to be little or no response of legal immigration to the U.S. unemployment rate<sup>182</sup>.

Illegal immigrants show higher dependence to the labor market than their legal counterparts, and they are expected to respond to aggregate economic shocks in destination<sup>183</sup> as well as in source countries<sup>184</sup>. Thus, the supply of illegal immigrants is expected to be more responsive to economic oscillations than the legal supply, as the illegal market by-passes employment protections and standard contracts that reduce flexibility in labor markets<sup>185</sup>. If regular migration is responsive to economic cycles, illegal migration is even more so.

This section will test the following economic indicators in their influence on illegal immigration:

- GDP Growth Rate %
- Unemployment Rate
- Minimum Wage
- Gini Coefficient

These factors include the most widely used indicators for assessing the general wealth of a country<sup>186</sup>, as well as its labor market prosperity<sup>187</sup>. In order to examine their effect

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<sup>182</sup> James Hollifield and Valerie F. Hunt find that, over the period of 1891–1945, there is a negative correlation between the U.S. legal immigration and the U.S. unemployment rate, indicating that immigrant inflows are larger when U.S. labor markets are tighter. After 1945, this relationship breaks down. See HOLLIFIELD, James F. and HUNT, Valerie F. “Immigrants, Markets, and Rights: The U.S. as an Emerging Migration State”, paper prepared for presentation at the *Migration Ethnicity Meeting* (MEM) at IZA in Bonn, Germany, May 13–16, 2006. Available at: [http://www.iza.org/conference\\_files/MEM2006/hollifield\\_j2745.pdf](http://www.iza.org/conference_files/MEM2006/hollifield_j2745.pdf).

<sup>183</sup> HANSON, Gordon H. *The Economics and Policy of Illegal Immigration in the United States*. Washington, DC: Migration Policy Institute 2010. Available at: <http://irps.ucsd.edu/assets/037/11124.pdf>.

<sup>184</sup> MCKENZIE, David J. “How do households cope with aggregate shocks? Evidence from the Mexican peso crisis”. *World Development*, Volume 31, Issue 7, July 2003: 1179-1199.

<sup>185</sup> For the implications of employment protections and non-standard contracts on immigration see also BALDWIN-EDWARDS, Martin. “Southern European labor markets and immigration: A structural and functional analysis. Employment 2002” MMO Working Paper 5, Panteion University, Athens, Greece, 2002:19.

<sup>186</sup> HANSON, Gordon H. *The economic logic of illegal immigration*. Council Special Report N. 27, Council on Foreign Relations, New York, 2007.

on illegal immigration, this research will focus on the apprehensions made along the borders of U.S. and E.U. In the case of the E.U., the apprehensions made in each single country at the external borders (Spain, Italy, Malta, Greece) will be aggregated in a single value. The economic indicators will then refer to U.S. and the E.U. Euro Area.

### 3.1.1 Theoretical Framework

The classical theoretical model of migration explains the phenomenon in terms of an income maximization problem where a potential immigrant from origin country  $o$  chooses the destination based on the virtual profits of migrating after calculating migration costs. According to Grogger and Hanson, Ortega and Peri, and Beine *et al.*, it is possible to assume a linear utility function<sup>188</sup>. The equilibrium formula of an agent from a country deciding to remain in the same country is therefore:

$$U_{o,o} = Y_o + A_o + \varepsilon_o$$

Where  $Y_o$  is the income in the origin country,  $A_o$  represents country-specific factors (such as legislation) and  $\varepsilon_o$  is the extreme-value distribution error term. Immigration researchers use either aggregate measures of income (i.e., GDP) or micro-level measures of income (i.e., wages) to model  $Y$ .

The equilibrium for an agent from a country  $o$  who decides to migrate to destination  $d$  is:

$$U_{d,o} = Y_d + A_d - C_{d,o} + \varepsilon_d$$

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<sup>187</sup> GIULIETTI, Corrado. “Is the Minimum Wage a Pull Factor for Immigrants?” IZA Discussion Paper No. 5410, *Institute for the Study of Labor*, 2010. Available at SSRN: <http://ssrn.com/abstract=1733735>; HARRIS, John R. and TODARO, Michael P. “Migration, unemployment and development: a two-sector analysis”. *The American Economic Review*, 1970, 60.1: 126-142.

<sup>188</sup> GROGGER, Jeffrey and HANSON, Gordon H. “Income maximization and the selection and sorting of international migrants”. *Journal of Development Economics*, 2011, 95.1: 42-57; ORTEGA, Francesc and PERI, Giovanni. “The causes and effects of international migrations: Evidence from OECD countries 1980-2005”. NBER Working Paper No. 14833. National Bureau of Economic Research, 2009. Available at: [http://www.nber.org/papers/w14833.pdf?new\\_window=1](http://www.nber.org/papers/w14833.pdf?new_window=1); BEINE, Michel; DOCQUIER, Frédéric; RAPOPORT, Hillel. “Brain drain and economic growth: theory and evidence”. *Journal of development economics*, 2001, 64.1: 275-289.

In the case under analysis here, the equilibrium of international migration includes economic factors (GDP, Unemployment Rate, Minimum Wage and Income inequality), represented by  $Y_d$ , country specific factors (such as the legislation) represented by  $A_d$ , and geographical factors such as the distance from departure to destination, represented by  $C_{d,o}$ . Consider now an individual in Mexico who is considering to migrate towards the U.S. The factors that may influence his decision are GDP, Unemployment Rate, Minimum Wage and Income inequality in the destination country (respectively  $G^{US}$ ,  $WM^{US}$   $IN^{US}$ ), as well as the probability to be apprehended along the U.S.-Mexico border,  $P$ . The direct costs of illegal migration also include the price of the transport, securing safe passages through the border and foregone wages during migration. These costs vary according to the individuals involved and to variations inside the U.S. economy mirrored by  $G^{US}$ ,  $WM^{US}$   $IN^{US}$ .

Using and extending the equilibrium of illegal immigration proposed by Hanson and Spilimbergo<sup>189</sup>, the number of immigrants attempting to cross illegal borders at time  $t$ ,  $M_t$  can be expressed as:

$$M_t = M ( G_t^{US} + WM_t^{US} + IN_t^{US} ) [ P, O_t ]^{190} \quad [I]$$

The apprehension probability,  $P$ , will be determined by the expenditure on enforcement dedicated by the U.S. government to the patrolling of the borders with Mexico. We will use equilibrium [1] as a basis for our empirical work.

Economic variables are often subject to problems of collinearity, as one variable (such as GDP) might be correlated to another (unemployment). During peak periods of the business cycle when the economy is experiencing rapid growth in real GDP, there will be an increase in employment, as businesses seek workers to produce a higher output. A very quick growth of GDP, however, can cause price inflation as entrepreneurs are forced to outbid one another for a progressively limited amount of workers. On the

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<sup>189</sup> HANSON, Gordon and SPILIMBERGO, Antonio. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border" *The American Economic Review* Vol. 89, No. 5, 1999: 1337-1357

<sup>190</sup> Where  $O_t$  represents the geographical distance from the country A to the country B, which is included in the formula as a decisional parameter.

other hand, during depressions of the business cycle and economic downturns the economy experiences declines in real GDP and rising unemployment rates.

In a cross-country analysis, such as the one carried out in this thesis, unobserved country-specific effects could result in biased estimates. For example, the estimate of the coefficient on the destination country per worker GDP may be positive. Based on this result, it is not clear whether immigrants go to countries with higher wages or, alternatively, whether countries with higher wages have other characteristics that attract immigrants.

### 3.2 Gross Domestic Product

Gross domestic product (GDP) is the measure which reflects the market value all the final goods and services produced within a country in a given period of time. GDP per capita is one of the most widely used indicators of a country's standard of living. A large part of the researchers used GDP Growth Rate as a driver of flows of immigrants<sup>191</sup>.

GDP is considered the most comprehensive index for analyzing economic expansion and the global situation during recession<sup>192</sup>. The general explanation for migratory trends among countries is that an increase in GDP per capita drives migrants from lower-income to higher-income countries<sup>193</sup>. Disparities in GDP per capita between developed countries and the poor world, similarly to the gap between wages, are likely to increase in a constant way. Income is considered one of the most important determinants of immigration, and one of the different measures of income is included in

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<sup>191</sup> FACCHINI, Giovanni and MAYDA, Anna Maria. "What Drives Immigration Policy? Evidence Based on a Survey of Governments' Officials". *Frontiers of Economics and Globalization*, Emerald 2010, Vol. 8: 605-648; ADAMS JR, Richard H. and PAGE, John. "International migration, remittances, and poverty in developing countries". *The OECD Database*, 2003; JENNISSEN, Roel. Economic determinants of net international migration in Western Europe. *European Journal of Population/Revue Européenne de Démographie*, 2003, Vol.19.2: 171-198.

<sup>192</sup> O'ROURKE, Kevin. "Europe and the Causes of Globalization, 1790 to 2000". Trinity College Dublin, Department of Economics, Trinity Economics Papers 01/2002.

<sup>193</sup> ARONOWITZ, Alexis A. "Smuggling and trafficking in human beings: the phenomenon, the markets that drive it and the organisations that promote it". *European Journal on Criminal Policy and Research* 9.2, 2001: 163-195.

almost every quantitative model explaining international migration. Recent research by Clark, Hatton and Williamson<sup>194</sup>, Lewer and Van den Berg<sup>195</sup>, Lewer, Pacheco and Rossouw<sup>196</sup>, Facchini and Mayda<sup>197</sup> and Ortega and Peri<sup>198</sup> all found evidence that growth in GDP (in the origin and/or destination country) can be a significant predictor of cross-country immigrant flows. The essential rationalization for migratory trends among countries is that the increasing gap between GDP per capita drives migrants from lower-income to higher-income countries. According to Jennisen<sup>199</sup>, the analysis of the relationship between labor sending countries and labor receiving countries in Western Europe, Gross Domestic Product (GDP) per capita shows a positive effect, while the analysis of unemployment shows a negative effect on net international migration. The effect of GDP and unemployment on international migration is similar between host and home countries, even though the effect is not necessarily significant. This effect of the GDP of destination countries on immigration is also supported by other studies. By testing a co-variance model, Karemera et al., found a positive significant effect of income in the U.S. and Canada on international labor migration<sup>200</sup>. However, only income significantly affects labor migration to the USA. By using the VAR framework,

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<sup>194</sup> CLARK, Ximena; HATTON, Timothy J. and WILLIAMSON, Jeffrey G. "Where do US immigrants come from, and why?" NBER Working Paper No. 8998, *National Bureau of Economic Research*, 2002. Available at: [http://www.nber.org/papers/w8998.pdf?new\\_window=1](http://www.nber.org/papers/w8998.pdf?new_window=1).

<sup>195</sup> LEWER, Joshua J. and VAN DEN BERG, Hendrik. "A gravity model of immigration". *Economics Letters*, 2008, 99.1: 164-167.

<sup>196</sup> LEWER, Joshua J.; PACHECO, Gail and ROSSOUW, Stephanié. "Do non-economic quality of life factors drive immigration?" IZA Discussion Papers, 2009.

<sup>197</sup> FACCHINI, Giovanni and MAYDA, Anna Maria. "What Drives Immigration Policy? Evidence Based on a Survey of Governments' Officials". *Frontiers of Economics and Globalization*, Emerald 2010, Vol. 8: 605-648.

<sup>198</sup> ORTEGA, Francesc and PERI, Giovanni. *The causes and effects of international migrations: Evidence from OECD countries 1980-2005*. National Bureau of Economic Research, 2009.

<sup>199</sup> JENNISSEN, Roel. Economic determinants of net international migration in Western Europe. *European Journal of Population/Revue Européenne de Démographie*, 2003, Vol.19.2: 171-198.

<sup>200</sup> KAREMERA, David; OGULEDO, Victor Iwuagwu and DAVIS, Bobby. "A gravity model analysis of international migration to North America", *Applied Economics*, 2000:1745-1755.

Islam found a positive relationship between GDP per capita and the flows of immigrants directed to Canada<sup>201</sup>.

**Data**

Data for GDP Rates is provided by The OECD Database for both the U.S. and the E.U. Data on apprehensions for the U.S. is provided by Department of Homeland Security (DHL). For the E.U., data on apprehension is aggregated on the basis of the data provided by the ministries of interior of Italy, Spain, Malta, and Greece.

**Fig. 3.2.1 - Relationship between GDP Growth Rate and Apprehensions in the U.S. (Years 1999-2011)**

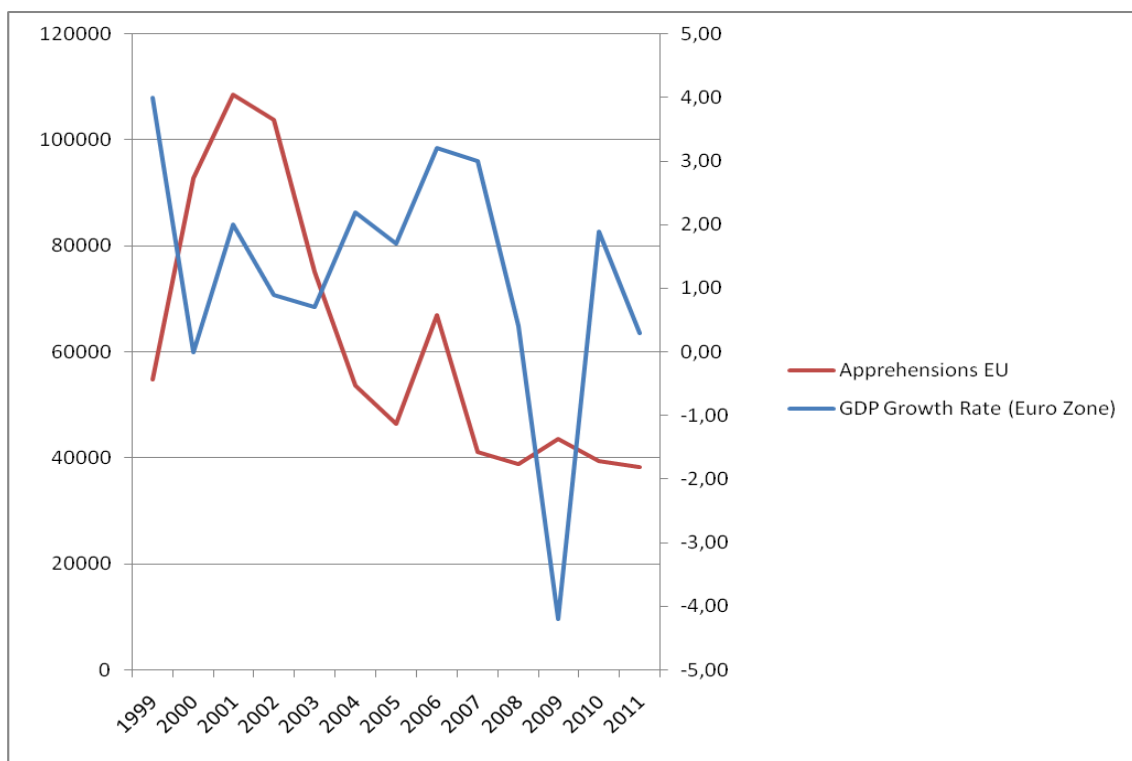


**Source: Author’s elaboration. Data for GDP Rates is provided by The OECD Database. Data on apprehensions for U.S. is provided by Department of Homeland Security (DHL).**

<sup>201</sup> ISLAM, Abdul. “Immigration unemployment relationship: the evidence from Canada”. *Australian Economic Papers*, 2007, Vol.46.1: 52-66.

As can be observed in figure 3.2.1, the curves of GDP and Apprehensions have a similar tendency, where drops in GDP (see years 2000, 2001, and from 2004 to 2009) match with a drop in illegal immigrants apprehended. However, the recent recovery of the economy after the downturn of 2006 was not accompanied by a new increase of apprehensions. A possible answer is that migrants considered this recovery only temporary (the years 2010-2011 registered a new drop in GDP). For the first time in years, the United States has seen a great drop in the number of illegal immigrants.

**Fig. 3.2.2 - Relationship between GDP Growth Rate (Euro Zone) and Apprehensions in the E.U. (Years 1999 -2011)**



**Source: Author's elaboration. Data for GDP Rates is provided by The OECD Database. For the E.U. data on apprehension is aggregated on the basis of the data provided by the Ministries of Interior of Italy and Malta, the Ministry of Public Order in Greece and the Ministry of Social Issues in Spain.**

In 2009, illegal immigrants in the United States were about a million fewer than in 2007, while from 1990 to 2007 the number of illegal immigrants was subject to a constant increase, with an average of 500,000 per year. By 2009 the population



decreased to approximately 11 million, and 2010 estimates suggest little change from 2009.

The situation for the E.U. is different (see fig. 3.2.2), at least regarding the apparent relationship between the two curves. Thus, while GDP generally decreased between 1999 and 2011 as did apprehensions, the connection between the two variables seems to be weaker than in the U.S. This can depend on several reasons: first of all, the values for the E.U. are aggregated, and so less plain than the U.S. ones. Second, the legislative restrictions approved in the different border countries seem to have had an effect on discouraging/displacing the migratory flows<sup>202</sup>. Third, the job market in the E.U. is more rigid than the American. However, the sole use of GDP as indicator of wealth of a certain country has been criticized by scholars of very different persuasions, such as Shostak or Nussbaum/Sen<sup>203</sup>. For instance, the GDP framework fails in explaining whether final goods and services that were produced during a particular period of time are a reflection of real wealth expansion, or a reflection of capital consumption.<sup>204</sup>

### 3.3 Unemployment Rate

Variations inside the informal labor market in the destination countries act as one of the main drivers of illegal immigration. Hence, the employment opportunities offered by a particular destination country or a particular situation of work-demand may have an effect on the demand for immigration<sup>205</sup>. The demand for economic migration is likely

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<sup>202</sup> HANSON, Gordon H. "Illegal Migration from Mexico to the United States", *Journal of Economic Literature*, vol. 44(4), December 2006: 869-924; KOSER, Khalid. *Irregular migration, state security and human security*. Global Commission on International Migration, 2005.

<sup>203</sup> SHOSTAK, Frank. *Running on Empty*. Ludwig Von Mises Institute, February 17th, 2004. Available at: <http://mises.org/daily/1454/>. Martha Nussbaum and Amartya Sen have jointly developed the "Human Development Index" now used among others by different UN bodies instead of the GNP to assess a country's population well-being. NUSSBAUM, Martha and SEN, Amartya (eds.), *The Quality of Life*, Oxford: Clarendon Press, 1993.

<sup>204</sup> At the same time, it does not include the wealth produced by black money, often involved in the low skilled market.

<sup>205</sup> James Hollifield and Valerie F. Hunt find that, over the period of 1891–1945, there is a negative correlation between U.S. legal immigration and the U.S. unemployment rate, indicating that immigrant

to be oriented by the situation inside the labor market, where illegal migrants adjust more quickly to labor market oscillations by moving to another place of residence or by changing jobs<sup>206</sup>. Illegal migrants are expected to be more responsive than regular migrants to changes in the labor market<sup>207</sup>. Therefore, labor from countries that have a low income and high unemployment will migrate to countries that have a higher income and lower rate of unemployment<sup>208</sup>. In this sense, Warin and Svaton maintain that immigrant inflows are attracted by low unemployment rates in the Euro Area<sup>209</sup>. An increase of job opportunities often pulls people towards a new country.

The unemployment rate is a measure of the frequency of unemployment. It is calculated as a percentage by dividing the number of unemployed individuals by the total number of individuals currently in the labor force<sup>210</sup>. According to our hypothesis we should expect a negative relationship between the Unemployment rate and the number of immigrants apprehended at the borders of the E.U. and the U.S.

## Data

Data for unemployment rates is provided by the OECD Database both for the U.S. and the E.U. Data on apprehensions for the U.S. is provided by the Department of Homeland Security (DHL). For the E.U. data on apprehension is aggregated on the basis of the data provided by the ministries of interior of Spain, Italy, Malta, and Greece.

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inflows are larger when U.S. labor markets are tighter. After 1945, this relationship seems to weaken. See HOLLIFIELD, James F. and HUNT, Valerie F. "Immigrants, Markets, and Rights: The U.S. as an Emerging Migration State", *paper prepared for presentation at the Migration Ethnicity Meeting (MEM) at IZA in Bonn, Germany*, May 13–16 2006.

<sup>206</sup> MASSEY, Douglas S. and ESPINOSA, Kristin E. "What's driving Mexico-US migration? A theoretical, empirical, and policy analysis". *American journal of sociology*, 1997: 939-999.

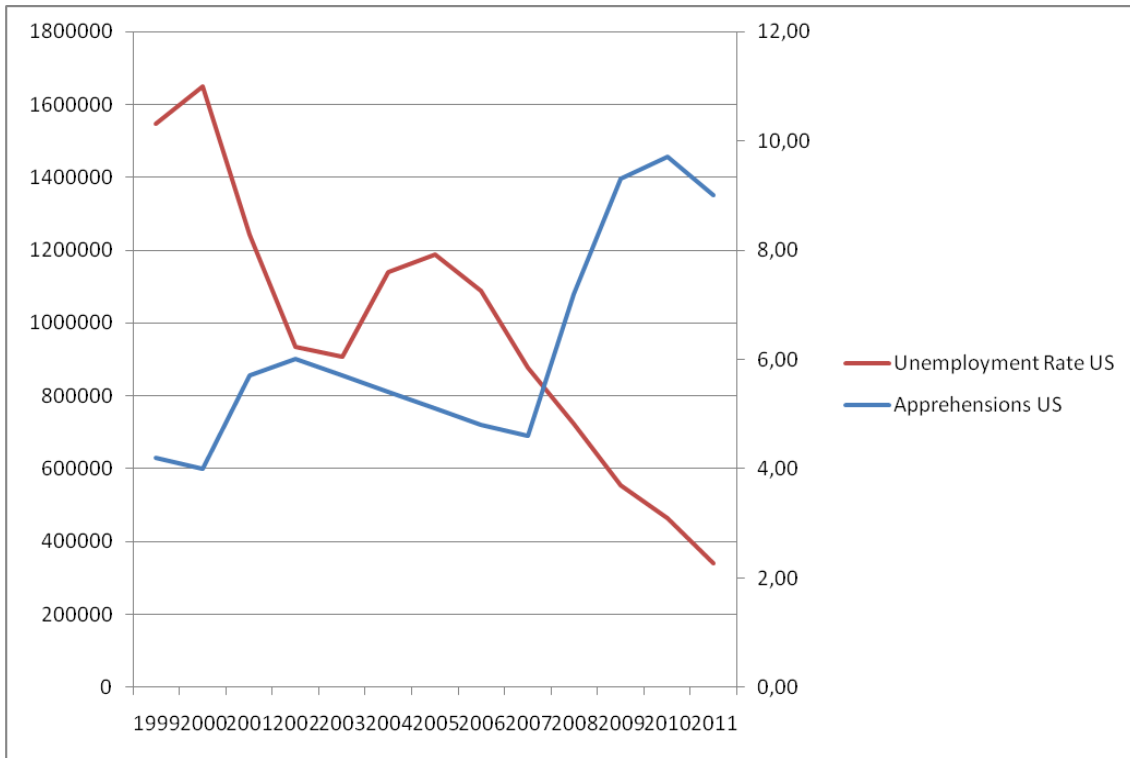
<sup>207</sup> Legal immigration of skilled workers is hindered by queues for visas and lags in adjusting visa levels, which reduce the economic responsiveness of such immigration. In contrast, flows of illegal immigrants are closely tied to U.S. and Mexican business cycles.

<sup>208</sup> MASSEY, Douglas S. "Theories of international migration: a review and appraisal". *Population and development review*, 1993:431-466.

<sup>209</sup> WARIN, Thierry; SVATON, Pavel. European migration: welfare migration or economic migration?. *Global Economy Journal*, 2008, Vol. 8.3.

<sup>210</sup> INTERNATIONAL LABOR ORGANIZATION: Resolution concerning statistics of the economically active population, employment, unemployment, and underemployment, adopted by the Thirteenth International Conference of Labor Statisticians, October 1982:4.

### 3.3.1 - Relationship between Unemployment Rate and Apprehensions in the U.S. (Years 1999-2011)



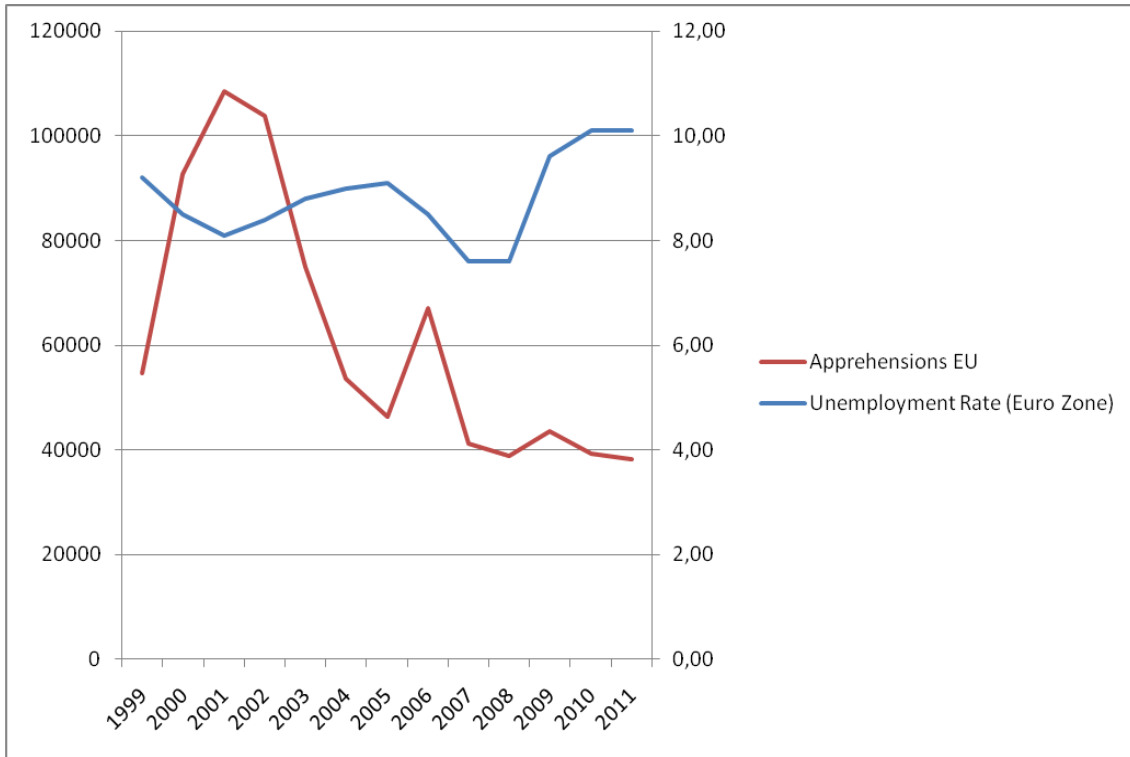
**Source: Author’s elaboration. Data for Unemployment Rates is provided by The OECD Database. Data on apprehensions for the U.S. is provided by the Department of Homeland Security (DHL).**

Chart 3.3.1 shows a negative relationship between unemployment rate and illegal immigration in U.S. A drop in employment opportunities corresponds to less illegal immigrants apprehended for all the years examined. However, although the decline in the number of illegal immigrants can be attributed primarily to the current economic downturn, increased enforcement efforts also played a role. The inflow/outflow of illegal immigrants in the United States has long been known to be influenced by the nation’s economic performance. Unemployment rates are currently higher than before the recession, and were even lower among illegal immigrants than other workers.

Unemployment has weakened the job magnet that attracts a large part of the illegal immigrants to the U.S. An increase of interior enforcement has led to dramatic increases in repatriations of illegal immigrants. 2009 registered a record of 393,000 illegal

immigrants deported, compared to less than 200,000 annually in the early 2000s, and less than 100,000 annually before 1997<sup>211</sup>

**Fig. 3.3.2 - Relationship between Unemployment Rate (Euro Zone) and Apprehensions in E.U. (Years 1999-2011)**



**Source: Author's elaboration. Data for Unemployment Rates is provided by The OECD Database. For the E.U. data on apprehension is aggregated on the basis of the data provided by the Ministries of Interior of Italy and Malta, the Ministry of Public Order of Greece and the Ministry of Social Issues of Spain.**

Chart 3.3.2 shows the situation in the E.U. The trend of the two slopes is also in this case similar to the U.S. ones. A growth of unemployment also corresponds with a decrease of apprehensions made along the border. The relationship between the trends appears however to be less regular than in the case of the U.S. For example, in 2009 an increase of unemployment was followed by more apprehensions.

<sup>211</sup> JOHNSON, Hans P. and HILL, Laura. *Illegal immigration*. Public Policy Institute of California, 2006.

### 3.4 Minimum Wage

The minimum wage is the lowest hourly, daily or monthly remuneration established by law that employers may pay to workers. Likewise, it is the lowest wage at which workers may sell their workforce. The minimum wage is generally acknowledged to increase the standard of living of workers, and to reduce poverty and inequality. However, critics of the minimum wage argue that it has the effect of increasing unemployment, particularly among low-skilled workers probably by excluding some of them from the labor market. A change in the minimum wage has an effect on expected wages because it has an impact on both the average wage and the overall employment<sup>212</sup>.

Theories about the effects of the minimum wage can be divided into two main fields: the classical view, built upon the model of Stigler<sup>213</sup>, and a more recent view known as *the new economics of the minimum wage* – inspired by the work of Card and Krueger<sup>214</sup>, which challenges Stigler’s classical perspective. The core difference between the two models regards the effects of minimum wage on employment. The first (known as “neoclassical”) model expects a compulsory minimum wage to bind entrepreneurs to pay higher wages than the market clearing level, and consequentially to reduce employment to the point where the marginal revenue product of labor equals the minimum wage. Both wage and employment effects depend on the elasticity of demand and supply. On the other hand, researchers of migration’s new economics (second model) argue that, due to the presence of frictions in the labor market, a moderate increase in the minimum wage may lead to non-negative employment outcomes<sup>215</sup>.

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<sup>212</sup> ESPENSHADE, Thomas J. “Unauthorized Immigration to the United States”. *Annual Review of Sociology* Vol. 21, 1995: 195-216 and ORRENIUS, Pia M. “The Role of Income Shocks on Migration Behavior and Migrant Self- Selection: The Case of Return Migrants from Mexico, 1970-1988”. *Mimeo, UCLA*, 1987.

<sup>213</sup> STIGLER, George J. “The economics of minimum wage legislation”. *The American Economic Review*, 1946, 36.3: 358-365.

<sup>214</sup> CARD, David and KRUEGER, Alan B. “Time-series minimum-wage studies: a meta-analysis”. *The American Economic Review*, 1995, 85.2: 238-243.

<sup>215</sup> MANNING, Chris. “Structural change, economic crisis and international labour migration in East Asia”. *The World Economy*, 2002, 25.3: 359-385.

Markets may be imperfect because of rigidity in the labor turnover and the presence of mobility costs or asymmetric information.

The model of imperfect competition consists of a monopolistic labor market, with employers having some market power in setting wages. Card and Krueger extend this framework by presenting a model in which entrepreneurs increase the wages to discourage turnover<sup>216</sup>. More recently, alternative models of equilibrium wage settings have been developed, with the general implication that employment effects are not unambiguously negative, as predicted by the classical framework. Favorable employment conditions and adequate wages are considered by many scholars the principal drivers of migration<sup>217</sup>. However, research on the role played by labor market institutions, such as the minimum wage, is rather scarce. According to Giulietti, a minimum wage in the receiving country has ambiguous effects on immigration: on the one hand, average wages will increase, whereas on the other employment opportunities might be unfavourably affected<sup>218</sup>. However, Manning disagrees with Giulietti's estimation of the direct effect of wages on immigration, as a minimum wage in the receiving country creates disequilibrium in the labor market, which may encourage or deter immigration.

The other issue regards the effect that minimum wages can have on illegal immigration. As previously said, illegal immigration is a phenomenon which seems to be more responsive in countries with a more de-regulated labor market, and increases of minimum wages can imply a greater presence of the state inside the labor market.

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<sup>216</sup> See *op. cit.*, *supra* footnote 214.

<sup>217</sup> FACCHINI, Giovanni and MAYDA, Anna Maria. "What Drives Immigration Policy? Evidence Based on a Survey of Governments' Officials". *Frontiers of Economics and Globalization*, Emerald 2010, Vol. 8: 605-648; LEWER, Joshua J.; PACHECO, Gail and ROSSOUW, Stephanié. "Do non-economic quality of life factors drive immigration? *IZA Discussion Papers*, 2009. Available at: <http://ftp.iza.org/dp4385.pdf>; ORTEGA, Francesc and PERI, Giovanni. *The causes and effects of international migrations: Evidence from OECD countries 1980-2005*. NBER Working Paper No. 14833. National Bureau of Economic Research, 2009; HANSON, Gordon H. *The economic logic of illegal immigration*. Council Special Report N. 27, Council on Foreign Relations, New York, 2007.

<sup>218</sup> GIULIETTI, Corrado. "Is the Minimum Wage a Pull Factor for Immigrants?" *IZA Discussion Paper No. 5410, Institute for the Study of Labor*, 2010. Available at SSRN: <http://ssrn.com/abstract=1733735>.

The main investigation on the relationship between minimum wage and immigration was conducted by Castillo-Freeman and Freeman<sup>219</sup>. The two authors examined the changes in outbound migration from Puerto Rico as a result of the extension of the U.S. minimum wage to the island. They observed how the minimum wage had significantly risen over the years, reaching 60% of the average wage in 1987 (compared to less than 35% in the U.S.). According to the authors, an increase of the minimum wage also increased the movement of low-skilled workers to the U.S., preventing high levels of unemployment. However, as highlighted in their work, “economic analysis has no clear prediction about how the volume of migration might respond to higher minimum wages”(ibidem, p.183). Therefore, the effects of the policy appear to be ambiguous, as immigration could both be subject to an increase or a decrease as a consequence of the minimum wage.

## Data

Data for Minimum Wages is provided by the U.S. Department of Labor and by Eurostat<sup>220</sup>.

By observing the chart in figure 3.4.1, it seems that increases in the minimum wage in the U.S. have a negative effect on the number of immigrants apprehended at the border with Mexico. Thus, it may be that an increase on minimum wages led to a decrease on apprehensions. An increase of the minimum wage may mean an increase of the presence of the state in the labor market which could affect the incoming number of illegal immigrants . This perspective has been criticized by other economists, such as Coy or Epstein and Heizler<sup>221</sup> which suggested a positive relationship between the stock of

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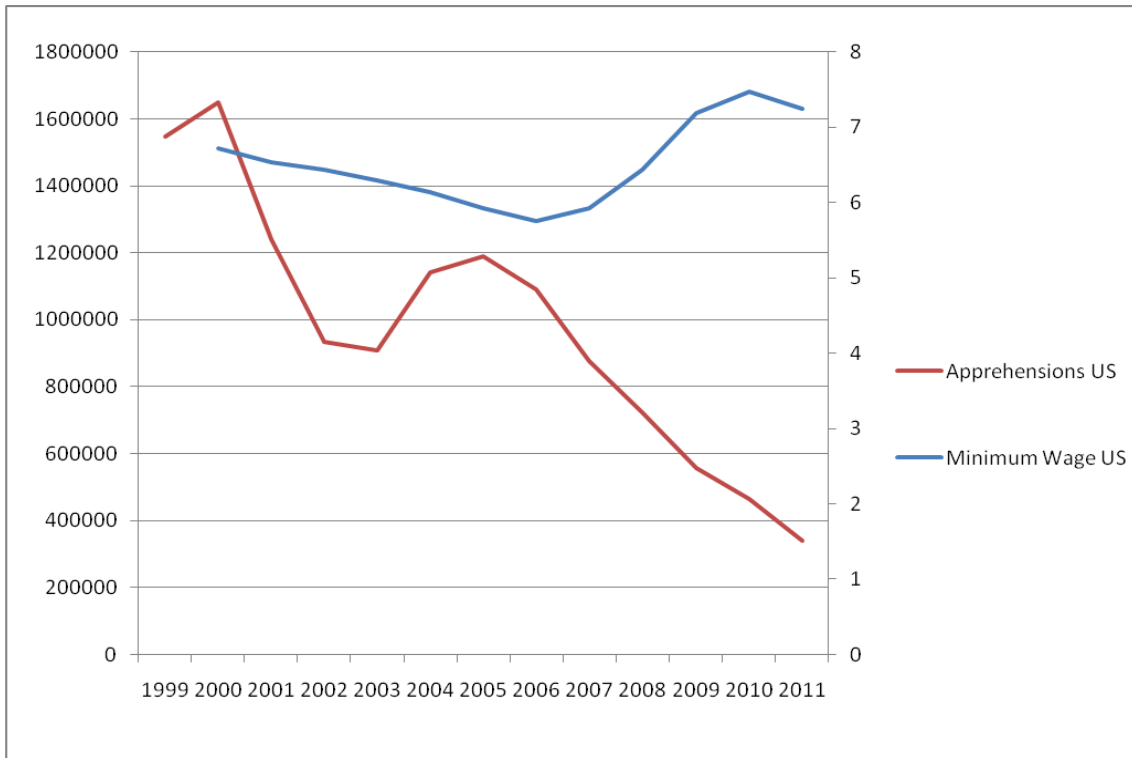
<sup>219</sup> CASTILLO-FREEMAN, Alida and FREEMAN, Richard B. “When the minimum wage really bites: the effect of the US-level minimum on Puerto Rico”. In: Borjas/Freeman (eds.): *Immigration and the workforce: Economic consequences for the United States and source areas*. University of Chicago Press, 1992: 177-212.

<sup>220</sup> In the case of the E.U., the value is obtained by aggregating the annual value of the countries (belonging to Euro Area) which established the minimum wage and extracting the mean. In our case: Italy, Germany, Austria, Finland.

<sup>221</sup> COY, Peter “Could a \$9 Minimum Wage Reduce Illegal Immigration?” *Bloomberg Business Week*, (February 13, 2013). Available at: <http://www.businessweek.com/articles/2013-02-13/could-a-9-minimum-wage-reduce-illegal-immigration>; EPSTEIN, Gil S. and HEIZLER, Odelia. *Illegal migration, enforcement, and minimum wage*. Emerald Group Publishing Limited, 2008.

employed illegal immigrants and the level of minimum wage<sup>222</sup>. Thus, another hypothesis is that if companies pay more for low-skilled work, they'll have an easier time finding native-born workers and legal immigrants to fill the jobs. That will decrease the demand for illegal workers in a given country.

**Fig. 3.4.1 - Relationship between Minimum Wage and Apprehensions in U.S. (Years 1999-2011)**



**Source: Author's elaboration. Data for Minimum Wages is provided by U.S. Department of Labor for U.S. Data on apprehensions for U.S. is provided by the Department of Homeland Security (DHL).**

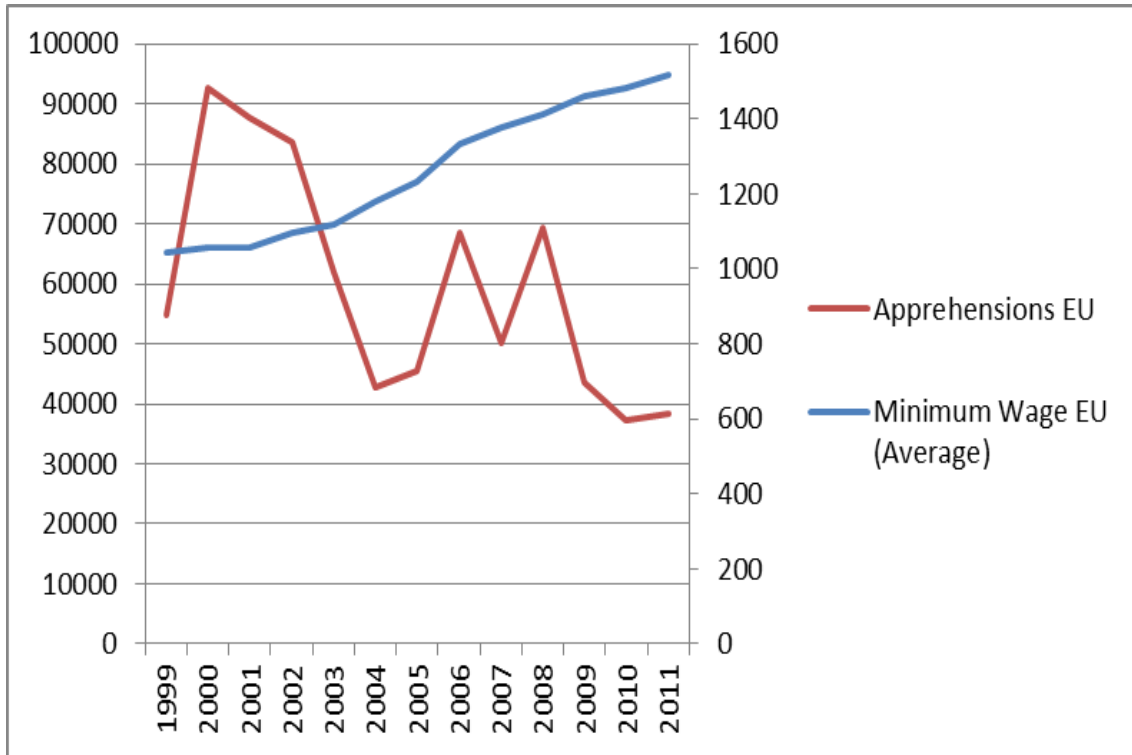
The relationship between minimum wage and apprehensions shown in Fig. 3.4.2 seems even stronger. However, particular caution should be used also in the case below. Minimum wage in the E.U. takes into account every single member state variation in

<sup>222</sup> The employer may thus employ illegal workers, who are perfect substitutes for the legal unskilled workers. The employer pays wages which are lower than the minimum wage only to illegal immigrants. When an illegal worker is apprehended, both the worker and the employer are affected: the illegal worker is expelled from the country and the employer fined.



the minimum wage, as immigrants are expected to be responsive to the variations of the intended destination countries, not only the ones at the borders.

**Fig. 3.4.2 - Relationship between Minimum Wage (Average, Euro Zone) and Apprehensions in the E.U. (1999-2011)**



**Source: Author’s elaboration. Data for Minimum Wages is provided by Eurostat. The value is obtained by aggregating the annual value for each country belonging to the euro-zone and extracting the mean. Data on apprehension is aggregated on the basis of the data provided by the Ministries of Interior of Italy and Malta, the Ministry of Public Order of Greece and the Ministry of Social Issues of Spain.**

In addition, some countries<sup>223</sup> do not have a minimum wage, so they are not counted.

### 3.5 Income Inequality (Gini Coefficient)

Is the share of skilled workers in the labor force increasing the demand for low skilled workers and thus the flows of illegal immigrants to the U.S. and the E.U.? Illegal

<sup>223</sup> Italy, Austria, Finland, and Germany in the Euro Area.

immigrant workforce is mainly a supply of low skilled labor<sup>224</sup>. While being related to illegal immigration, minimum wage cannot describe variations between incomes within the same year, which have to be considered when testing the response of illegal immigration<sup>225</sup>. If there are several country-specific studies on the consequences of immigration on the economy of receiving countries, there is a lack of broad studies about the effect of inequality on immigration flows<sup>226</sup>.

The Gini coefficient is a specific bounded dispersion measure used to analyze diverse phenomena, such as income distributions, unemployment, trading balance, or residential density. Various authors have examined the Gini coefficient in several ways: Brewer et al. give an explicit estimator based on probability samples<sup>227</sup>, while Nygård and Sandström used Gini coefficient to estimate family of inequality parameters, including the most well-known income inequality measure<sup>228</sup>.

This thesis analyzes the Gini coefficient by assuming that the greater the coefficient (and so the inequality), the lesser the possibilities for the immigrant to find adequate low-skilled job opportunities. The Gini coefficient is an index of statistical dispersion which measures inequality among a given number of values belonging to a frequency distribution (for example levels of income). A Gini coefficient of 0 expresses perfect equality, where all values are the same (everyone has an exactly equal income). A Gini coefficient of 1 expresses maximal inequality among values (only one person has all the

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<sup>224</sup> CARD, David. "Immigration and Inequality", *American Economic Review*, 2009, Vol. 99(2): 1-21.

<sup>225</sup> Kahanec et al. found a correlation between inequality as measured by the Gini coefficient and the share of skilled workers in the labor force. See KAHANEC, Martin; ZAICEVA, Anzelika and ZIMMERMANN, Klaus F. "Lessons from migration after EU enlargement". In M. Kahanec and K. F. Zimmermann (eds.), *EU Labor Markets after Post-Enlargement Migration*, Springer: Berlin, et al. 2009, 3-45.

<sup>226</sup> The exception to this rule is represented by the works of D'AMURI, Francesco and PERI, Giovanni. *Immigration, jobs and employment protection: Evidence from Europe*. National Bureau of Economic Research, 2011; ANGRIST, Joshua D.; KUGLER, Adriana D. "Protective or counter-productive? Labour market institutions and the effect of immigration on EU natives". *The Economic Journal*, 2003, Vol.113: 302-331.

<sup>227</sup> BREWER, Mike; SIBIETA, Luke and WREN-LEWIS, Liam. *Racing away? Income inequality and the evolution of high incomes*. University College London, 2007.

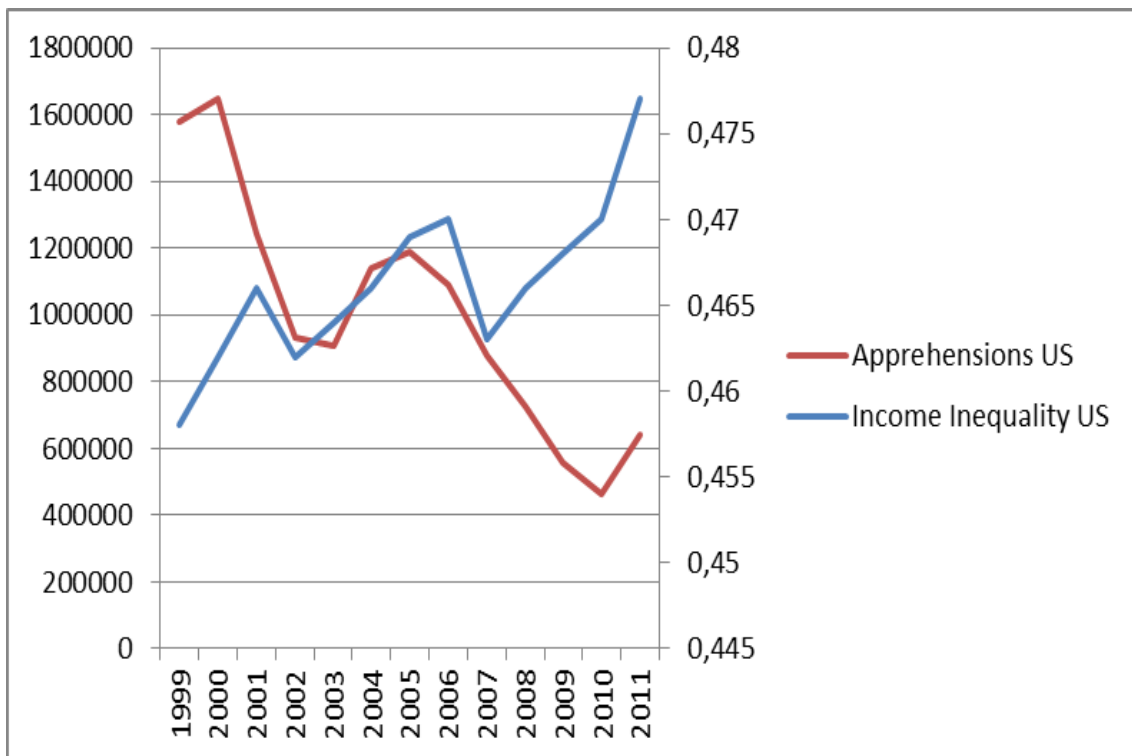
<sup>228</sup> NYGÅRD, Fredrik and SANDSTRÖM, Arne. "Income inequality measures based on sample surveys". *Journal of econometrics*, 1989, 42.1: 81-95.

income). The Gini coefficient is commonly used as a measure of inequality of income or wealth.<sup>229</sup>

### Data

Data for income inequality (Gini coefficient) is provided by U.S. Census Bureau – Department of Commerce for the U.S. and by Eurostat for the E.U.

**Fig. 3.5.1 - Relationship between Income Inequality and Apprehensions in U.S. (Years 1999-2011)**



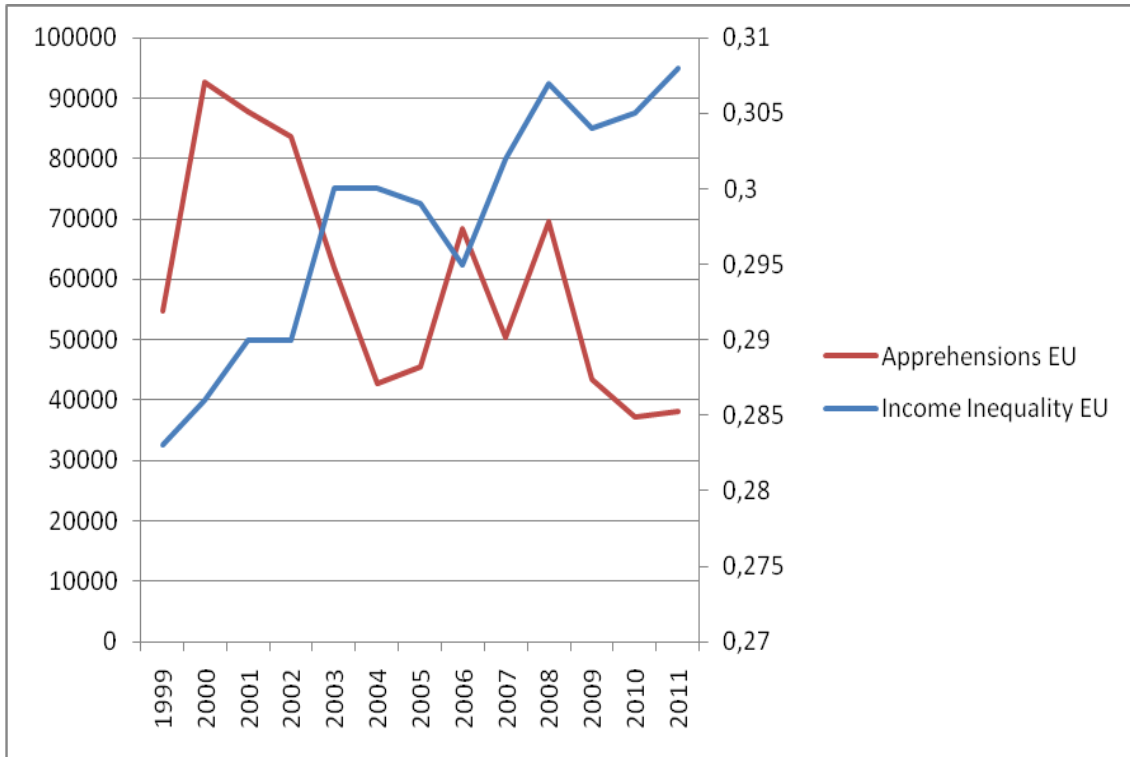
**Source: Author’s elaboration. Data for income inequality (Gini coefficient) is provided by U.S. Census Bureau – Department of Commerce. Data on apprehensions for U.S. is provided by the Department of Homeland Security (DHL).**

The trend shown in Figure 3.5.1 seems irregular. In a first stage, (2000-2007) the two slopes move accordingly, suggesting a positive relationship. Since 2007, however, the relationship between the Gini coefficient and border apprehensions becomes negative, where increases in inequality between wages correspond to decreases in apprehensions of illegal immigrants. However, the year of change matches the global downturn of

<sup>229</sup> GINI, Corrado. “On the Measure of Concentration with Special Reference to Income and Statistics”, Colorado College Publication, General Series No. 208, 1936:73–79.

2007, which seems to have an even more important role in changing the response of the dependent variable.

**Fig. 3.5.2 - Relationship between Income Inequality (Euro Zone) and Apprehensions in E.U. (Years 1999-2011)**



**Source: Author's elaboration. Data for income inequality (Gini coefficient) is provided by Eurostat. Data on apprehension is aggregated on the basis of the data provided by the Ministries of Interior of Italy and Malta, the Ministry of Public Order of Greece and the Ministry of Social Issues of Spain.**

A similar situation is shown by chart 3.5.2 for E.U. 2007 seems the year that marks a cleavage in the behavior of the two slopes. Also in this case, the relationship became clearly negative after this year.

### Partial Conclusion

The graphical descriptions of the relationship between the economy and illegal immigration for U.S. and E.U. provided in this section show the certain existence of an association between the economic variables hypothesized to influence illegal immigration. However, GDP Growth Rate, and Unemployment Rate seem to have

stronger effects on the phenomenon than the simple wages indicators (Minimum wage and Gini Coefficient). The economic downturn can be seen as a cleavage for these two latter indicators, which has apparently weakened the relationship with illegal immigration.

Finally, legal immigration procedures are slowed down by bureaucracy and lags in adjusting visa levels, which reduce the economic value of such immigration. Flows of illegal immigrants, on the other hand, are strongly tied to U.S. and Mexican economic performances. Illegal immigration to the E.U. and to the U.S. seems to be responsive to the same economic factors, although the relationship between these factors and illegal immigration to the U.S. seems to be stronger.

### **3.6 The role of legal enforcement as a driver of illegal immigration: empirical evidences**

An exclusive focus on the effects of the economy and labor market on illegal immigration would exclude the role of legislation of destination countries in encouraging/discouraging illegal flows of immigrants. However the decrease of apprehensions after the approval of legislation in both areas (see Annex I, *infra*), seems to have an impact on the phenomenon. According to Hanson, the decline in the number of illegal immigrants can be attributed in part to the Great Recession, but increased enforcement efforts certainly also played a role<sup>230</sup>.

Some scholars focus on the role of governments in creating a gap between policies orientated to prevent illegal immigration and implementation practice that provide the conditions for illegal migration, such as a lack of enforcement agents<sup>231</sup>. Further

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<sup>230</sup> HANSON, Gordon and SPILIMBERGO, Antonio. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border" *The American Economic Review* Vol. 89, No. 5, 1999: 1337-1357.

<sup>231</sup> KOSLOWSKI, Rey. *The Evolution of Border Controls as a Mechanism to Prevent Illegal Immigration*. Washington, DC: Migration Policy Institute, 2011. Available at: [http://syb.icisleri.gov.tr/ortak\\_icerik/syb/THE%20EVOLUTION%20OF%20BORDER%20CONTROLS%20AS%20A%20MECHANISM%20TO%20PREVENT%20ILLEGAL%20IMMIGRATION.pdf](http://syb.icisleri.gov.tr/ortak_icerik/syb/THE%20EVOLUTION%20OF%20BORDER%20CONTROLS%20AS%20A%20MECHANISM%20TO%20PREVENT%20ILLEGAL%20IMMIGRATION.pdf).

motivations for accepting some level of illegal migration lie in the political economy of internal and external controls when the costs of enforcement exceed its benefits<sup>232</sup>.

Maley analyzes the effect of legislation on illegal migration; according to his perspective, the state provides indirectly the conditions for organized crime to sneak in. Without the criminalization of some goods, there would be no illegal market. "*Without illicit goods*", says Maley, "*there is no need to manage the risk of being caught*"<sup>233</sup> (p.354). In other words, demand for state-criminalized goods produces state-threatening actors<sup>234</sup>. This vulnerability of law to market forces and the lack of formal dispute resolution mechanisms mean that threats or acts of violence are often used instead to handle non-cooperative collaborators or market-raiding competitors. However, such acts involve another source of organizational vulnerability: the state. Hence, criminal organizations operate "against the state"<sup>235</sup> and face a constant risk of interference, members arrest and asset seizure. The migrants best connected with criminal networks become the ones most likely to succeed in their aim to migrate illegally. However, it is not always clear where the network starts and ends and whether an apparently successful operation has actually fulfilled its objective of significantly degrading or destroying the network.

Among economists there has been a growing interest on the study of the implications of immigration policies since the seminal paper by Benhabib<sup>236</sup>. It remains unclear to what

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<sup>232</sup> JAHN, Andreas and STRAUBHAAR, Thomas. "A survey of the economics of illegal migration". *South European Society and Politics*, 1998, Vol. 3.3: 16-42; BORJAS, George J. "Economics of migration". *International Encyclopedia of the social and behavioral sciences*, Section No. 3.4, Article No. 38, 2000. Available at: <http://www.ppge.ufrgs.br/GIACOMO/arquivos/eco02268/borjas-2000.pdf>.

<sup>233</sup> MALEY, William. "Security, people-smuggling, and Australia's new Afghan refugees". *Australian Journal of International Affairs*, 2001, 55.3: 351-370.

<sup>234</sup> MEYERHOFF, Martin. *International Organized Crime Affects State Authority. Reason Enough for War?* Grim Verlag, 2006. Available at: <http://www.grin.com/de/e-book/110474/international-organized-crime-affects-state-authority-reason-enough-for>.

<sup>235</sup> PAOLI, Letizia. "The paradoxes of organized crime". *Crime, law and social change*, 2002, Vol.37:165.

<sup>236</sup> See BENHABIB, Jess. "On the political economy of immigration". *European Economic Review*, 1996, 40.9: 1737-1743. More recent work on the political economy of immigration, can be found: [for the U.S. context](#), BERTOCCHI, Graziella & STROZZI, Chiara. *L'evoluzione delle leggi sulla cittadinanza: una prospettiva globale*, Department of Economics Paper 0626, University of Modena and Reggio E., Faculty of Economics "Marco Biagi", 2010; FACCHINI, Giovanni, MAYDA, Anna Maria and MISHRA, Prachi.

extent entry restrictions are able to control immigration flows. Legislation includes also the establishment of physical barriers, which seem to have an effect on the decisions of the potential migrants to depart, increasing the price of the services (see fig. 2.4.3, *supra*) and at the same time decreasing the possibility of crossing the borders undetected.

### 3.6.1 The effect of legal enforcement in the U.S.

It may seem paradoxical, but truth is that “illegal immigration is not entirely unregulated”<sup>237</sup>. Thus, to a certain level, the U.S. government regulates the inflow of illegal immigrants by choosing how many resources to allocate to enforcement at the border and deter the employment of illegal workforce<sup>238</sup>.

Since the 1990’s the U.S. government has tried to enforce its border-control policies by allocating an increasing quantity of resources to counter illegal migration at its borders. The interest in the issue of the efficiency of border controls in the United States has risen dramatically over the past few decades. Due to the increasing number of illegal immigrants and (especially since September 11, 2001) to prevent the entry of potential terrorists, the U.S. government has dedicated more resources to their border enforcement. The resources to prevent entries at unauthorized locations have primarily been allocated at the U.S.-Mexico land border, where the vast majority of unauthorized entries occur, and “have included the construction of physical fencing; an extraordinary array of radars, ground sensors, and unmanned aerial vehicles designed to detect border

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“Do interest groups affect U.S. immigration policy?”. *Journal of International Economics*, Vol. 85(1), 2011:114-128; FACCHINI, Giovanni and STEINHARDT, Max Friedrich “What drives U.S. immigration policy? Evidence from congressional roll call votes”. *Journal of Public Economics*, vol. 95(7-8), (2011): 734-743; for the E.U. context see MAYDA, Anna Maria. “Why are people more pro-trade than pro-migration?”, CReAM Discussion Paper Series 0611 Centre for Research and Analysis of Migration (CReAM), Department of Economics, University College London, 2006; ORTEGA, Francesc and POLAVIEJA, Javier G. “Labor-market exposure as a determinant of attitudes toward immigration”, *Labor Economics*, vol. 19(3), 2012: 298-311.

<sup>237</sup> HANSON, Gordon H. *The Economics and Policy of Illegal Immigration in the United States*. Washington, DC: Migration Policy Institute 2010. Available at: <http://irps.ucsd.edu/assets/037/11124.pdf>.

<sup>238</sup> Though the United States does not set the level of illegal immigration explicitly, existing enforcement policies effectively permit substantial numbers of illegal aliens to enter the country. In 2005, the illegal immigrant population was estimated to be 11.1 million individuals, up from 5 million in 1996 and 8.4 million in 2000. See ESPENSHADE, Thomas J. "Does the Threat of Border Apprehension Deter Undocumented U.S. Immigration?" *Population and Development Review*, December 1994, 20(4): 871-91.

crossers and dispatch border agents to apprehend them; and a five-fold increase in the number of agents deployed at the Southwest border over a period of less than two decades”<sup>239</sup> .

Since 2001 the Border Patrol has more than doubled (see chart 3.6.2, *infra*), with 20,000 officers apprehending immigrants in their attempt to enter the country illegally. Together with an increase of the number of agents deployed, other measures have been implemented to strengthen the level of enforcement. First, the construction of border fencings at key crossing points at the U.S.-Mexico border; second, the use of technology such as unmanned aerial vehicles to patrol remote border locations; third, increased restrictions and prosecution for the immigrants apprehended. An increase of the price to be paid for migrating illegally resulted in a decrease of incentives for potential migrants to U.S. Thus, the price for smuggling services at the U.S.-Mexico border rose from \$1,250 in the late 1990s up to \$2,750 in 2008 (adjusted for inflation, *op. cit.* note 237, *supra*).

## Data

Data on the Enacted Border Patrol Budget and the number of patrol agents deployed on U.S.- Southern border is provided by the U.S. Customs and Border Protection.<sup>240</sup> Over five years, the entire U.S. Customs and Border Protection (CBP) workforce increased by nearly 50 percent, from approximately 40,000 in 2005 to 58,575 in 2010; these staffing increases have been relatively greater for the Border Patrol. The budget for border security more than doubled over the past five years, from \$1,671 million in fiscal year (FY) 2005 to \$3,587 million in FY 2010 (see Table 3.6.1).

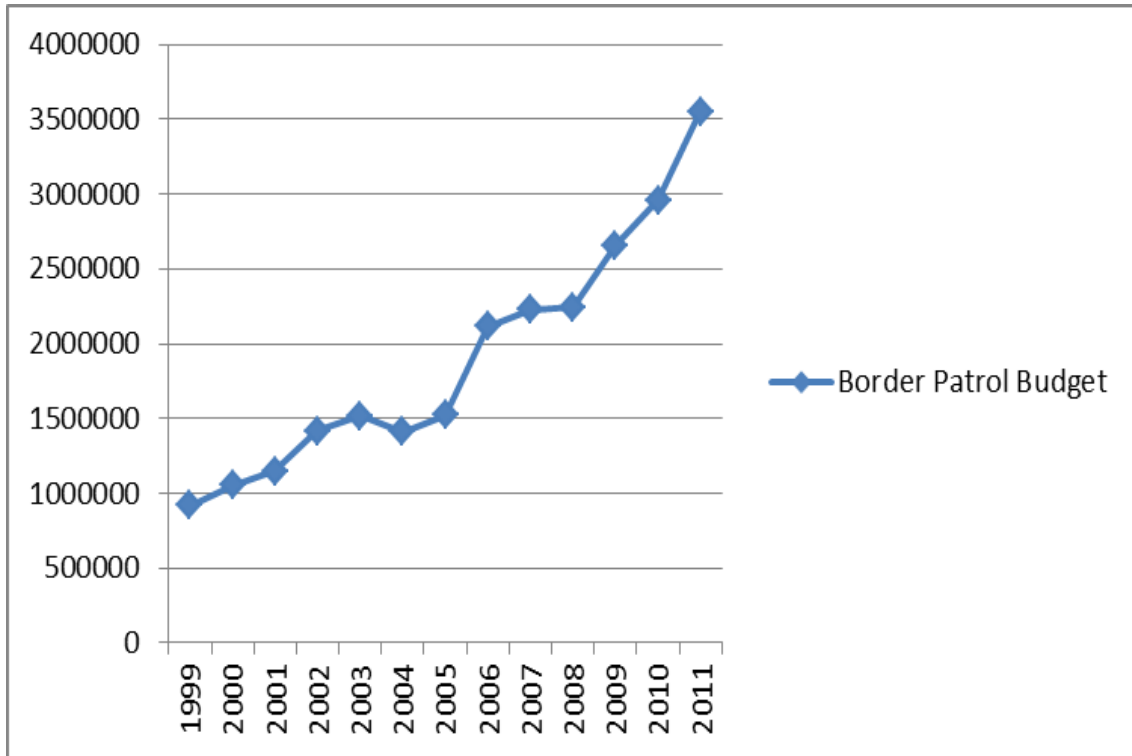
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<sup>239</sup> Koslowski, Rey. *The Evolution of Border Controls as a Mechanism to Prevent Illegal Immigration*. Washington, DC: Migration Policy Institute, 2011: 1. Available at: [http://syb.icisleri.gov.tr/ortak\\_icerik/syb/THE%20EVOLUTION%20OF%20BORDER%20CONTROLS%20AS%20A%20MECHANISM%20TO%20PREVENT%20ILLEGAL%20IMMIGRATION.pdf](http://syb.icisleri.gov.tr/ortak_icerik/syb/THE%20EVOLUTION%20OF%20BORDER%20CONTROLS%20AS%20A%20MECHANISM%20TO%20PREVENT%20ILLEGAL%20IMMIGRATION.pdf).

<sup>240</sup> The U.S. Customs and Border Protection (CBP) aims to secure the homeland by preventing the illegal entry of people and goods while facilitating legitimate travel and trade. While its priority mission is to keep terrorists and their weapons out of the U.S. It also has a responsibility for securing the border and facilitating lawful international trade and travel while enforcing hundreds of U.S. laws and regulations, including immigration and drug laws. More information available on <http://www.cbp.gov/xp/cgov/about/>.



**Fig.3.6.1 - Enacted Border Patrol U.S. Budget by Fiscal Year (1999-2011)**

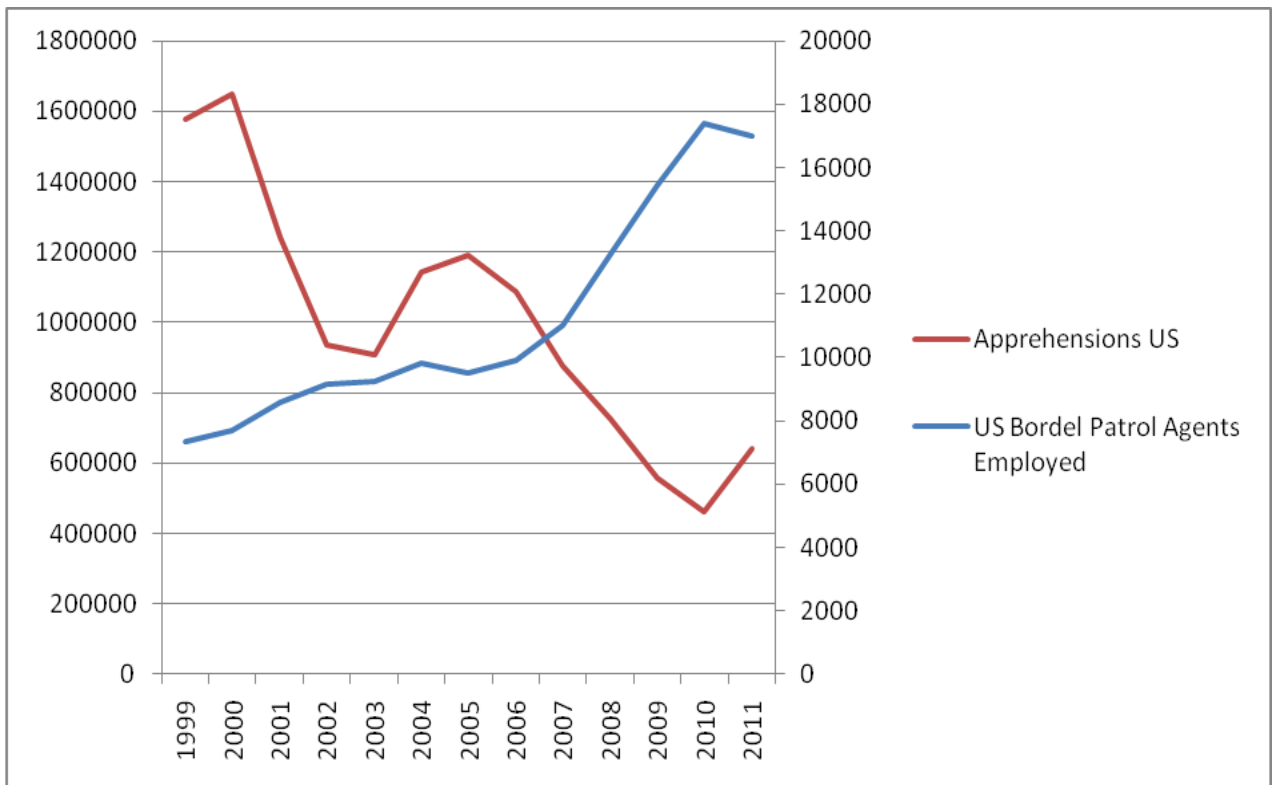


**Source: Author's elaboration based on data provided by U.S. Custom and Border Protection (CPB).**

While enforcement clearly plays a role in illegal migration patterns, the variation in illegal immigration over time is largely a response to changes in the U.S. macroeconomy, as well as the economies of migrants' home countries. In the United States, wages for low-skilled labor rise and fall over the business cycle. Correspondingly, wages drop during downturns, as falling demand makes prices drop, bringing wages down, too. The value to business of having access to low-skilled labor is greatest when economic growth is high and least when it is low. Effective border control encompasses a broad sweep of responsibilities, geographies and activities that involve entry and admission processes. Enforcement at U.S. territorial borders with Mexico represents one of the main spending entries in the U.S. budget, and is the most prominent pillar in the Immigration enforcement system. A constantly increasing budget has been allocated to this field and Border Patrols have been doubled between 2005 and 2012. The objective, according to an immigration management perspective, is to increase the cost of illegal immigration for immigrants and smugglers alike. Fig. 3.6.1

shows how the resources allocated to immigration enforcement have impacted the trend of illegal immigrants apprehended along the U.S.-Mexico border. The drop of apprehensions continued also after the decrease of dollars spent by the U.S. government since 2009.

**Fig. 3.6.2 – U.S. Border Patrol Agents at Southern Border and Apprehensions of illegal immigrants in the U.S. (years 1999-2011)**



**Sources: Author’s elaboration. Data on U.S. Border patrol agents employed is provided by U.S. Custom and Border Protection (CPB). Data on apprehensions for U.S. is provided by the Department of Homeland Security (DHL).**

Historically, the resources allocated to CBP for border enforcement have increased. The growth has included dramatic increases in CBP staffing, particularly for the Border Patrol, which has doubled in size over seven years to 21,370 agents as of fiscal year 2012<sup>241</sup>. Great sums have also been allocated to infrastructure and technology. The adoption of a risk-management approach to border security defined DHS’s tasks in

<sup>241</sup> DHS, *FY 2012. Budget in Brief* (Washington, DC: DHS, 2011): 9, [www.dhs.gov/xlibrary/assets/budget-bib-fy2012.pdf](http://www.dhs.gov/xlibrary/assets/budget-bib-fy2012.pdf)

agreement with a risk-management approach. The idea of preventing all illegal entries was then abandoned as it was no longer considered an attainable outcome for efficient border enforcement actions<sup>242</sup>. Voluntary return, which was the prevailing enforcement response to illegal border crossing for many years, is now being supplanted by a variety of actions (e.g. criminal prosecution or repatriation into the Mexican interior or at a location elsewhere along the U.S.-Mexico border) that are more consequential, both for the migrant and for the immigration system more broadly. The objective is to raise the costs — monetary, legal, and psychological — of illegal migration for both migrants and smugglers<sup>243</sup>.

### 3.6.2 The effect of legal enforcement in the E.U.

“The aim of border control is to help to combat illegal immigration and trafficking of human beings and to prevent any threat to Member States’ internal security, public policy, public health and international relations”. (Schengen Code , 6)

Globalization continues to pose new challenges to E.U. Border control, which still is one of the main issues for the Union to deal. It is therefore crucial to concentrate resources in the latest technical advances in order to keep borders secure. These measures are said to ensure safety for all<sup>244</sup>, since they reduce the number of illegal immigrants who cross the borders undetected, increase internal security as a whole by

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<sup>242</sup> Statement of Janet Napolitano, Secretary of Homeland Security, “Press Conference with Secretary of Homeland Security Janet Napolitano; Immigration and Customs Enforcement Director John Morton; Los Angeles County, California, Sheriff Lee Baca; Harris County, Texas, Sheriff Adrian Garcia; Fairfax County, Virginia, Sheriff Stan Barry on New Immigration Enforcement Results” (briefing, Washington, DC, October 6, 2010).

<sup>243</sup> See page 75, equilibrium formula [1].

<sup>244</sup> ARONOWITZ, Alexis A. “Smuggling and trafficking in human beings: the phenomenon, the markets that drive it and the organisations that promote it”. *European Journal on Criminal Policy and Research* 9.2, 2001:163-195

contributing to the prevention of cross border crime, reduce the trafficking of drugs, weapons and illicit substances, and prevent the deaths of illegal immigrants during the journey. Border management became recently one of the greatest challenges for the European Union, as it merged both security related issues and the responsibility to look after the human rights of migrants. A wide range of instruments can directly or indirectly be used in order to achieve a more efficient border management. At the same time, the sphere of actions in the area of justice and home affairs is currently under reform, a situation that still makes a clear evaluation of the overall functioning of the general E.U. border management framework difficult.

Frontex is the agency in charge for external border security. It coordinates the activities of the national border authorities for the security of E.U. borders with non-member states. Frontex, together with Europol, has important powers in the area of the enforcement of illegal immigration and human trafficking. The European Union acts according to three proposals to prevent these offences. These are (i) the establishment of a European External Border Surveillance System<sup>245</sup> (EUROSUR); (ii) the establishment of an Entry-Exit System (EES) to record the movement of people into and out of the Schengen area to facilitate the identification of visa “overstayers”; and (iii) the institution of a Registered Traveller Programme (RTP), to provide faster entry procedures into the Schengen area to third country nationals considered not to pose a security risk to the E.U.. The establishment of the Amsterdam Treaty in 1999 ensured new powers to the E.U. regarding border control matters and a new role for the European Commission in developing E.U. legislation. The European Commission successively launched the “smart borders” initiative in 2008. The project included border gates, automated ID checks, new databases and increased pre-screening measures together with a roadmap for the implementation of the European Border surveillance System. EUROSUR pictures the use of radars, GPA tracking systems and independent pointing systems to detect small vessels directed to E.U. territory.

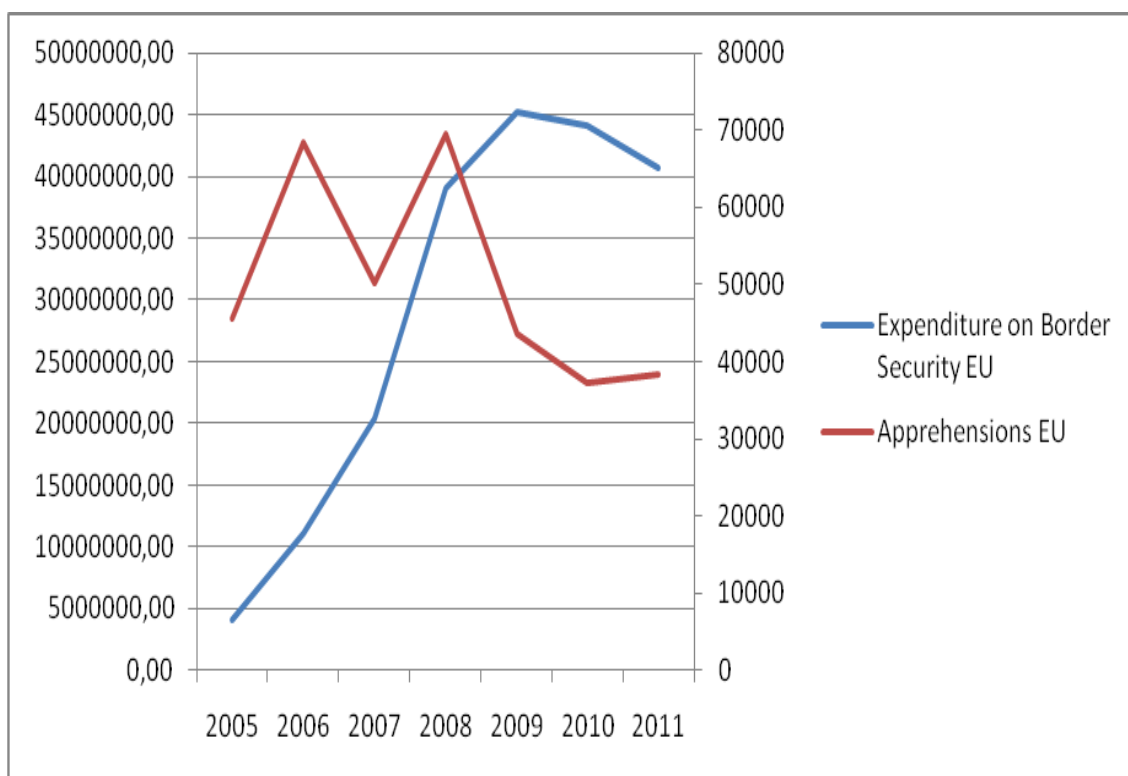
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<sup>245</sup> The implementation of the EUROSUR project is for the European Union the “decisive step in the gradual establishment of a common European integrated border management system” The External Borders Fund is the main solidarity mechanism for the Member States in sharing the financial burden in the European Union. See also <http://www.frontex.europa.E.U./eurosur>.

## Data

The External Borders Fund<sup>246</sup> provides support to the protection of E.U. external borders “through co-operation among authorities and establishment of common rules and practices to facilitate both a secure border as well as smooth movement of legal travelers at the borders”.

**Fig. 3.6.3 – E.U. budget on external borders (in Euro) and Apprehensions of illegal immigrants in E.U. (years 2005-2011)**



**Source: Author’s elaboration. Data on the expenditure for the security of external borders of the E.U. is provided by Eurostat. Data on apprehension is aggregated on the basis of the data provided by the Ministries of Interior of Italy and Malta, the Ministry of Public Order of Greece and the Ministry of Social Issues of Spain.**

The fields covered by border controls are two: first, preventive policy at enforcement level, which includes the apprehension of illegal migrants and traffickers at the borders

<sup>246</sup> The fund has four main objectives: i) efficient administrative organization for implementation and information exchange; ii) data collection and improvement of the coordination between border crossing points, as well as surveillance tasks, checkpoints and systems of identification at external borders; iii) efficient management of the flows of persons at external borders as well as improved collaboration in the contrast of the forging of fake travel documents; iv) implementation of E.U. legislation for the external borders security.

through the use of surveillance and patrolling. Second, preventive policing at legal crossing points intended to receive travelers. In this second case, legal conditions usually exist for the methodical processing of typically co-operative third-nationals, while in the first case settings can be much more precarious both for border guards and illegal migrants.

For the E.U., data on expenditure on border security is limited to the first year of publication, in 2006. Nevertheless, it is possible to observe a consistent increase in the expenditure on border security, which almost doubled since 2006, with a general decrease on apprehensions of illegal immigrants at the borders of the E.U. To fight illegal flows of immigrants, Spain established the SIVE, a system of surveillance intended to monitor its maritime southern border. According to Zapata-Barrero and De Witte this had an effect on discouraging the arrival of illegal immigrants at the Spanish borders, but at the same time led smugglers to find new routes, such as the land borders with Morocco of the enclaves of Ceuta and Melilla<sup>247</sup>. The situation escalated in 2005, when these enclaves were subject to around 4,200 people attempting to cross the border, the majority of them coming from Sub-Saharan Africa. This last development resulted in the building of two more fences and the approval of a new bilateral agreement with Morocco which permitted the direct expulsion of immigrants apprehended at the border with Ceuta and Melilla.

Border management is both a challenge and an opportunity that the E.U. should tackle with cooperation, coordination, and interoperability between all member states. It is a challenge, but upon implementation of new technologies it will help contribute towards an increased security for all citizens with the attainment of more secure frontiers. It would also provide member states with the opportunity to improve their current capabilities while working together to the benefit of the E.U. as a whole.

In sum, the establishment of new policies of border governance is a challenge for the E.U., as it would join two goals that are often in tension: to facilitate the movement of people while increasing the control over them. However, an integration of the politics

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<sup>247</sup> ZAPATA-BARRERO, Ricard and DE WITTE, Nynke. "The Spanish governance of EU borders: Normative questions". *Mediterranean Politics*, 2007, 12.1: 85-90.

on migration has to face the different economic interests of the member countries and security concerns that shape border security policies.

### Final remarks

The figures provided in this section have shown the relationships between the drivers of illegal immigration identified by the literature. Both the number of apprehensions of illegal immigrants by the national authorities at the borders of the U.S. and the E.U. and the economic performances in destination areas seem to have an important role in driving the immigrants towards these areas. However, a number of problems may affect the validity of a statistical analysis including all these variables at the same time in a single model. First, the economic variables may show problems of mutual correlation in their effect on illegal flows of immigrants. Second, the level of enforcement seems to have a weight on the number of illegal immigrants apprehended in the U.S. and the E.U., with the latter area showing problems of data reliability.





## **CHAPTER IV. Illegal immigration, labor market and border enforcement in the U.S. and the E.U. A test of correlation**

This chapter aims to verify the correlation between illegal immigration and the economic variables representing the labor market in the U.S. and the E.U. The charts illustrated in the previous chapter evidenced a relationship between labor market performance in the U.S. and the E.U (proxied by GDP Growth Rate, Unemployment Rate, Minimum Wage and Gini coefficient) and the number of illegal immigrants apprehended each year at the border of these areas. At the same time, the increase of border enforcement in both the areas analyzed matches with a decrease of immigrants apprehended.

As previously explained, illegal migrants are expected to be more responsive to changes in the labor market than regular migrants<sup>248</sup>. Therefore, labor from countries that have low income and high unemployment will migrate to countries that have a higher income and a lower rate of unemployment. The labor market in the destination countries acts as one of the determinants for illegal immigration. Hence, the employment opportunities offered by a particular destination country or a particular situation of work-demand is expected to have an effect on the demand for immigration<sup>249</sup>. The demand for low-skilled migration is oriented by the situations inside the labor market, where illegal migrants adjust more quickly to labor market oscillations by moving to another place of residence or changing jobs. The illegal immigrant workforce mainly supplies low skilled labor<sup>250</sup>.

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<sup>248</sup> Legal immigration of skilled workers is hindered by queues for visas and lags in adjusting visa levels, which reduce the economic responsiveness of such immigration. Flows of illegal immigrants, in contrast are closely tied to U.S. and Mexican business cycles.

<sup>249</sup> Testing two different models (AR-1 and OLS), Hanson and Spilimbergo provided evidence of a response of illegal immigrants to labor market variations within the same year. See HANSON, Gordon and SPILIMBERGO, Antonio. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border" *American Economic Review* Vol. 89, No. 5, 1999: 1337-1357

<sup>250</sup> HANSON, Gordon H. *The economic logic of illegal immigration*. Council Special Report N. 27, Council on Foreign Relations, New York, 2007.

**Tab 4.1 – Variable definitions, Data Source and Summary Statistics**

<b>Independent Variables</b>	<b>Definition</b>	<b>Mean U.S. (Std. Deviation)</b>	<b>Mean E.U. (Std. Deviation)</b>
<b>Gdp Growth Rate %</b>	GDP Growth Rate per year	2,1462 (1,98268)	1,2846 (1,975)
<b>Unemployment Rate</b>	Unemployment rate per year	6,2077 (1,96743)	8,8385 (0,860)
<b>Minimum Wage</b>	Minimum Wage (per hour in U.S., per month in E.U. both deflated per the local PPP).	4,6308 (0,3974)	1082,5378 (166,425)
<b>Gini coefficient</b>	Gini coefficient per year	0,466 (0,005)	0,298 (0,008)
<b>Border Enforcement</b>	Enacted Border Patrol U.S. Budget by Fiscal Year (in thousand Dollars) / E.U. budget on external borders (in Euro)*	29229170,71 (17007896,94)	1902727,308 (800818,7660)

**Years: 1999-2011**

\*Both Budgets are deflated per the local Consumer Price Index (CPI)

<b><u>Dependent Variable</u></b>	<b><u>Definition</u></b>	<b><u>Mean U.S. (Std. Deviation)</u></b>	<b><u>Mean E.U. (Std. Deviation)</u></b>
<b>Apprehensions</b>	Apprehensions of illegal immigrants at the external Borders of U.S. and E.U. per year	999534,54 (3,648)	61774 (19253,2)

**Years: 1999-2011**

## 4.1 The method: Bivariate Analysis

This chapter aims to test the hypotheses of association between border apprehensions of illegal immigrants in the U.S. and the E.U. and the factors introduced in the previous chapter (U.S. Unemployment Rate, GDP Growth Rate, Minimum Wage and Gini coefficient). In particular, this chapter uses statistical analysis of correlation to explain the relationship between the two variables and to determine their strength and significance. The *Pearson's Coefficient*<sup>251</sup> of correlation will be used to verify the relationships.

## 4.2 Apprehensions Correlations: United States

Tab. 4.2.1 - U.S. Results for apprehensions correlations

Variable	Pearson Coefficient
GDP Growth Rate	0.545
Unemployment Rate	-0.863**
Minimum Wage	-0.456
Gini coefficient	-0.596*
<i>Number of Observations</i>	11
<i>Period analyzed</i>	1999-2011

**Dependent Variable: Illegal immigrants apprehended at the U.S.-Mexico borders (years 1999-2011)**

**\*\*Significant at the 0.01 level; \*Significant at the 0.05 level**

Illegal immigration to the U.S. is negatively associated to U.S. unemployment rate, with a correlation coefficient of -0.86 (significant). This means that a decrease of employment opportunities in the U.S. is associated with a decrease of immigrants apprehended at the U.S. borders. At the same time, illegal immigration is positively associated to increases in the U.S. GDP (coefficient 0.54). Increases of income

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<sup>251</sup> The *Pearson correlation coefficient* is a measure of the linear correlation (dependence) between two variables  $X$  and  $Y$ , giving a value between +1 and -1 inclusive, where 1 is total positive correlation, 0 is no correlation, and -1 is negative correlation. It is widely used in the sciences as a measure of the degree of linear dependence between two variables.

inequality in the United States (Gini coefficient) are negatively associated with the number of immigrants apprehended at the U.S. borders with a correlation of -0.60 (significant). Finally, an increase in minimum wages corresponds to a drop in apprehensions (coefficient -0.46). This relationship has been explained by Duvell, according to whom an increase of minimum wage often matches with an increase in the labor market's tightness, which has the effect of dropping the demand for low skilled workers<sup>252</sup>.

**Tab. 4.2.2 – U.S. results for apprehensions' correlations with law enforcement at the borders**

<b>Variable</b>	<b>Pearson Coefficient</b>
<b>Enacted Border Patrol U.S. Budget</b>	-0.851**
<i>Number of Observations</i>	11
<i>Period analyzed</i>	1999-2011

**Dependent Variable: Illegal immigrants apprehended at the U.S.-Mexico borders**

**\*\*Significant at the 0.01 level; \*Significant at the 0.05 level**

The degree to which migration costs rise in response to intensified enforcement has been termed the cost elasticity of migration cost with respect to enforcement, and the degree to which the number of potential illegal immigrants falls in response to increased costs can be termed the migration elasticity with respect to cost. One important aspect of illegal-assisted migration costs that can be quantified and measured is the fee charged by smugglers of illegal immigrants. Intensified enforcement activities should increase the difficulty and the cost to a smuggler for getting clients successfully across the border, and this increased cost for the smuggler would in turn be passed on to clients through an increase in the smuggling cost. It is probable that an increased smuggling cost would reduce the motivation of individuals to migrate illegally, dropping the number of border apprehensions.

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<sup>252</sup> DUVELL, Franck. "Paths into Irregularity: The Legal and Political Construction of Irregular Migration". *European Journal of Migration and Law*, 2011, 13.3: 275-295.

The correlation analysis confirms the relationship between the budget dedicated to border security and the decrease of the apprehensions of illegal immigrants along the border between U.S. and Mexico (Tab 4.2.2). The correlation coefficient is - 0.85 (significant) and indicates a strong negative relationship between the two variables.

### 4.3 Apprehensions' Correlations: Europe

**Tab. 4.3.1 - E.U. Results for apprehension correlations**

<b>Variable</b>	<b>Pearson Coefficient</b>
<b>GDP Growth Rate</b>	0.345
<b>Unemployment Rate</b>	-0.645*
<b>Minimum Wage</b>	-0.656*
<b>Gini coefficient</b>	-0.651*
<i>Number of Observations</i>	11
<i>Period analyzed</i>	1999-2011

**Dependent Variable: illegal immigrants apprehended at the E.U. External borders (years 1999-2011)**

**\*\*Significant at the 0.01 level; \*Significant at the 0.05 level**

Table 4.3.1 shows the correlation coefficients for the E.U. At a first glance, it seems that some variables have a different relationship with border apprehensions if compared to the U.S. case. First, labor market has an overall weaker driving effect on illegal migration. The relationship between GDP growth rate and border apprehensions (coefficient 0.34) is also here positive but weaker than in the U.S. (0.54). At the same time, unemployment rate has a similar but weaker negative correlation (-0.64 in the E.U. compared to the -0.86 in the U.S.) with border apprehensions. Conversely, the E.U. has stronger coefficients of correlation between Minimum Wages and border apprehensions (-0.65, significant), while the Minimum wage in the U.S. is lesser correlated with apprehensions (-0.46). The relationship between the Gini coefficient and

border apprehensions is again negative in the E.U. (correlation coefficient -0.65, where for the U.S -0.60, both significant).

**Tab. 4.3.2 - E.U. Results for apprehensions correlations with law enforcement at the borders**

<b>Variable</b>	<b>Pearson Coefficient</b>
<b>E.U. budget on external borders</b>	- 0.335
<b>Number of Observations</b>	8
<b>Period analyzed</b>	2004-2011

**Dependent Variable: illegal immigrants apprehended at the E.U. External borders (years 1999-2011)**

**\*\*Significant at the 0.01 level; \*Significant at the 0.05 level**

Similarly to the U.S., a negative association between the amount of resources dedicated to external border security (deflated for Euro Area Consumer Price Index - CPI) and the number of illegal immigrants apprehended at the borders it is observable in the E.U., with a correlation coefficient of -0.33. However, considering the lesser number of observations for the E.U., it is not possible to compare the force of the relationship (which, however, is also negative in this case) with the U.S. case.

## **4.4. Estimation Results**

This paper used data on border apprehensions by U.S. border patrol and by national authorities of Spain, Italy, Malta and Greece to analyze illegal immigration from Mexico to United States and from Africa/Turkey to the European Union. The results show a correlation between border apprehensions in the U.S. and the E.U. and the variations in the labor market of these areas. I have also found a strong negative correlation between unemployment rate and apprehensions in both the U.S. and the E.U., with a correlation coefficient of -0.86 for the U.S. and -0.64 for the E.U., confirming the hypothesis of a negative relationship between illegal immigration and

changes in the labor market. GDP Growth Rate in both the U.S. (coefficient 0.54) and the E.U. (0.34) are positively associated with border apprehensions. Apprehensions are also responsive to U.S. and E.U. minimum wages, showing a negative correlation with coefficients of -0.46 for the U.S. and -0.65 for the E.U. The increase of income inequalities in the United States and Europe (Gini coefficient) are negatively associated with the number of immigrants apprehended at their borders with a correlation coefficient of -0.60 for the U.S. and -0.65 for the E.U.

Finally, we provide evidence about the negative correlation of apprehensions with the number of border patrols deployed along the Southwestern border of the U.S. This relation is negative and very strong, with correlation coefficients of -0.85 for the U.S. and of -0.33 for the E.U.

#### 4.4.1 Interpreting the results

While the results on the apprehensions of the two flows are interesting in their own right, the motivation of the empirical exercise is to see what it can teach us about the factors which determine illegal attempts of border crossing in both the U.S. and the E.U.

From the equilibrium formula [2] explained in the third chapter we can extract  $A_t = P_t * M_t$  (where  $A_t$  is border apprehensions,  $P_t$  is the probability for the migrant of being apprehended and  $M_t$  is the illegal attempt to cross the border). Hanson and Spilimbergo succeed in writing the elasticity equilibrium point for illegal immigration from Mexico to the U.S. by using wages as regressor<sup>253</sup>. It is possible to extend this formula to all the regressors put to exam in this thesis. For the U.S.:

$$[2] \partial \ln A / \partial \ln (G_t^{US} + WM_t^{US} + IN_t^{US}) = (1 + \partial \ln P / \partial \ln M) * \partial \ln M / \partial \ln (G_t^{US} + WM_t^{US} + IN_t^{US})$$

Similarly for the E.U.:

$$[3] \partial \ln A / \partial \ln (G_t^{EU} + WM_t^{EU} + IN_t^{EU}) =$$

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<sup>253</sup> HANSON, Gordon H. and SPILIMBERGO, Antonio. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border", *American Economic Review*, American Economic Association, December 1999, vol. 89(5):1337-1357.

$$(1 + \partial \ln P / \partial \ln M) * \partial \ln M / \partial \ln (G_t^{EU} + WM_t^{EU} + IN_t^{EU})$$

The terms of interest are :

$$\partial \ln M / \partial \ln (G_t^{US} + WM_t^{US} + IN_t^{US}) \text{ and } \partial \ln M / \partial \ln (G_t^{EU} + WM_t^{EU} + IN_t^{EU})$$

Which reflect the elasticity of border apprehensions to these factors. Both areas show illegal immigration to be responsive to unemployment rate, to minimum wages and income inequality (Gini coefficient) in both the areas analyzed. The analysis provides a further empirical support for the recent achievements by a growing number of scholars<sup>254</sup> who have stressed the importance of the economic growth in the destination countries as a driver of cross-country immigrant flows. As previously noted, weaker correlation coefficients for the E.U. were expected, due to the methodological reasons explained in the previous chapters, since all the variables have to be analyzed at an aggregate level. The U.S. also has a longer history of data collection, which also implies a higher reliability of data on apprehensions and enforcement level.

The previous chapter provided evidence on the effect of enforcement in decreasing the elasticity of illegal immigration in both the U.S. and the E.U. From a theoretical point of view it is possible to also provide the responsiveness of the apprehension probability which can be extracted from [3] as:

$$[4] \partial \ln A / \partial \ln H = \partial \ln P / \partial \ln H + (1 + \partial \ln P / \partial \ln M) * \partial \ln M / \partial \ln H$$

$\partial \ln P / \partial \ln H$  is therefore the responsiveness to legal enforcement, which is the direct effect of legal enforcement on illegal immigration.

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<sup>254</sup> MAYDA, Anna Maria. "International migration: A panel data analysis of the determinants of bilateral flows". *Journal of Population Economics*, 2010, 23.4: 1249-1274; LEWER, Joshua J.; PACHECO, Gail; ROSSOUW, Stephanié. *Do non-economic quality of life factors drive immigration?*. IZA Discussion Papers, 2009; ORTEGA, Francesc and PERI, Giovanni. "The causes and effects of international migrations: Evidence from OECD countries 1980-2005". *National Bureau of Economic Research*, 2009; LEWER, Joshua J.; VAN DEN BERG, Hendrik. "A gravity model of immigration". *Economics letters*, 2008, 99.1: 164-167; CLARK, Ximena; HATTON, Timothy J.; WILLIAMSON, Jeffrey G. "Explaining US immigration, 1971-1998". *The Review of Economics and Statistics*, 2007, 89.2: 359-373.



Another essential peculiarity of these relationships is that they are almost immediate: a change in the labor market affects illegal immigration in the same year, reinforcing the idea of a tight connection between illegal immigration to the U.S. and the E.U. and their labor market. Macroeconomic instability may therefore condition the nature of labor market integration between the neighboring countries. Therefore, new initiatives to reduce the gap of wages between the U.S. and the Latin-American countries<sup>255</sup> would reduce the flows of immigrants directed to North-America. Combined with the conclusions of many studies which assigned push factors such as low wages in the native countries a relative minor role<sup>256</sup>, the evidence provided in this paper attributes conditions in the labor market the role of key factor in driving illegal immigration towards the United States and the European Union.

## 4.5 Conclusions

This thesis has used data on apprehensions provided by the U.S. Border patrol, the Ministries of Interior of Italy, Malta and Greece, and the Ministry of Social Issues of Spain. It has also examined illegal immigration from Mexico to United States and from Africa and Turkey to the European Union. Considering the limitations of the data and the method of analysis used, which require particular caution before claiming any causal nexus, results show that in both areas taken into exam illegal migration is correlated with the economic performances in these areas, with particular reference to employment opportunities. Illegal immigration is also correlated with the U.S. and the E.U.

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<sup>255</sup> NAFTA (North American Free Trade Agreement) was an agreement between the U.S., Canada and Mexico aimed to reduce this gap. This agreement raised inflation-adjusted wages by 0.17% in the U.S. and by 1.30% in Mexico therefore reducing this gap. However, large part of the illegal immigrants apprehended is other than Mexican. In an illegal immigration perspective, this would mean extending the agreement to the other Southern American countries.

<sup>256</sup> HANSON, Gordon H. and SPILIMBERGO, Antonio. "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border", *American Economic Review*, *American Economic Association*, vol. 89(5) (December 1999): 1337-1357; GREENWOOD, Michael J. and MCDOWELL, John M. "The Macro-Determinants of International Migration: A Survey". Contribution to the Conference *Mass Migration in Europe: Implications in East and West*. Vienna, 1992. Available at: <http://www.colorado.edu/Economics/courses/fall11-4292-001/Macro%20Determinants%20of%20International%20Migration.pdf>; GREENWOOD, Michael J. "The Economics of Mass Migration from Poor to Rich Countries: Leading Issues of Fact and Theory", *American Economic Review*, *Papers and Proceedings*, May 1983: 173-177.

minimum wage, while a widening of the income inequality (Gini coefficient) matches with a decrease of the illegal immigrants apprehended. At the same time, an increase of border enforcement is correlated with a drop in apprehensions of illegal immigrants for both the U.S. and the E.U.

Summarizing, these are the results that have been achieved so far:

- Illegal immigration is responsive to variations in the labor markets of the U.S. and the E.U.;
- The response of illegal immigration to these factors is immediate (within the same year);
- An increase on border enforcement in the U.S. and the E.U. is correlated with a decrease of the illegal immigrants apprehended each year;
- Flows of illegal immigrants are often displaced from an area to another of U.S. and E.U. in response to the variations of the above factors;
- The results of the empirical analysis show a relationship between GDP Growth, Unemployment Rate, Minimum Wage and Income Inequality in the U.S. and the E.U. and illegal immigration, thus confirming the hypothesis of Hanson<sup>257</sup> on the connection between the number of illegal immigrants apprehended and the local demand for low skilled workers;
- The correlation between labor market and border apprehensions is stronger in U.S. than in E.U. Further factors typical of the departure countries<sup>258</sup> (such as war and events like the “arab spring”) may have a role in pushing migrants from Africa to the E.U.

#### **4.5.1 Recommendations for future research**

The evidence provided in this thesis has shown that, even carefully taking into account the limitations of data in quantifying with precision illegal immigration, it is however

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<sup>257</sup> HANSON, Gordon H. and SPILIMBERGO, Antonio. “Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border”, *American Economic Review*, *American Economic Association*, December 1999, vol. 89(5): 1337-1357.

<sup>258</sup> About the role hypothetical factors of the countries of departure, see sections 1.3.1. p. 7.

possible to establish trends and patterns of the phenomenon, which provide essential tools for future research on the determinants of illegal immigration.

The facilitation of illegal immigration is currently the second illegal business in terms of the amount of money involved<sup>259</sup>. However, the contentiousness surrounding immigration keeps the succeeding governments away from tackling the issue. As a result of this study, it has emerged that labor market has a crucial role because of its impact on the drivers of illegal migration. At the same time, it is also likely that the forthcoming economic recovery will lead to new and probably wider migratory flows. Migration will inevitably be a crucial feature of global society, at least until the economic gap between developed and under-developed world is eliminated or drastically reduced. When thinking about new policies to regulate illegal immigration, governments should accurately separate the distributional impacts of illegal immigration from its aggregate effects.

The results reached by this thesis further demonstrate how the persistence of illegal immigration is connected to its strong economic rationale. Impeding illegal immigration, without creating other ways to facilitate legal entry, will conflict with the same market forces that push for moving labor from low-productivity, low-wage countries to the high-productivity, high-wage U.S. and E.U. labor markets. The evidence provided in this thesis reinforces this perspective, as the acceptance of these market pressures is behind proposals for a large-scale expansion of temporary legal immigration. Highly regulated inflows of temporary low-skilled foreign labor would on the other hand be unlikely to attract much interest from employers. Therefore, any creation of rigid legal channels to provide for flows of guest workers may result in an incentive for employers to avoid the new guest workers and continue to hire illegal immigrants instead. Any new policy aimed to reduce the demand for illegal-immigrant labor should as much as possible mimic the current beneficial aspects of illegal immigration, primarily the possibility for employers to be able to hire the types of workforce they need. As informal job networks help integrate the U.S. and Mexican labor markets, a proposal for the U.S. would be to formalize these networks by allowing

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<sup>259</sup> UNITED NATIONS OFFICE ON DRUGS AND CRIME. “The globalization of crime: A transnational organized crime threat assessment”. *United Nations*: New York, 2010.

employers and employees in the two countries to legally match. The situation for the E.U. is however more complicated, as the link between the economy and illegal immigration is less strong, as evidenced in this thesis, and mediated by other factors typical of the countries of departure, such as war and natural disasters. In addition, the simple mimicking of the beneficial parts of illegal immigration for the new legal channels of entry would however not take into account specific categories of migrants such as asylum seekers that have no elasticity with economic performance in the E.U. In this case, a key role has been played by bilateral agreements between countries of departure and destination, such as the Italy-Libya agreement of 2011<sup>260</sup> or the agreements between Spain and Morocco.

It is also important for policy makers to take into account the net economic impact of immigration on the economy while devising new regulatory policies. However, available evidence suggests this impact to be modest<sup>261</sup>. While immigration of high-skilled individuals has a small positive impact on the incomes of a certain country residents, the arrival of low-skilled immigrants, legal or illegal, seems to have a small negative impact<sup>262</sup>. Given that the estimates in question require strong assumptions and in the end are only a fraction of a percent of U.S. GDP<sup>263</sup>, immigration still appears to be one of the top challenges for countries in the developed world.

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<sup>260</sup> “Memorandum of Understanding” with the National Transitional Council. This document focuses on measures to reduce illegal immigration and in it the two countries commit to exchange information on migration flows and engage in shared support to combat illegal migration. See also *infra*, Annex I, p.117.

<sup>261</sup> SMITH, James P. and EDMONSTON, Barry eds. *The new Americans: Economic, demographic, and fiscal effects of immigration*. National Academies Press, 1997; CHISWICK, Barry R. “The Impact of Immigration on the Level and Distribution of Economic Well-Being”. *The Economics Of Immigration: Selected Papers of Barry R. Chiswick*. Cheltenham, UK: Edward Elgar Publishing 2005; FRIEDBERG, Rachel and HUNT, Jennifer “The impact of immigrants on host country wages, employment and growth”. *The Journal of Economic Perspectives*, 1995, 9.2: 23-44.

<sup>262</sup> The CIS estimates that in 2002 households headed by illegal immigrants paid taxes equal to \$16 billion and imposed costs on the government equal to \$26.3 billion. In that year, U.S. GDP was \$10.47 trillion.

<sup>263</sup> CIS finds that in 2002 illegal immigrants on net received \$10 billion more in government benefits than they paid in taxes, a value equal to 0.1 percent of U.S. GDP in that year. With unauthorized immigrants accounting for 5 percent of the U.S. labor force, U.S. residents would receive a surplus from illegal immigration of about 0.03 percent of GDP. Combining these two numbers, it appears that, as of 2002, illegal immigration caused an annual income loss of 0.07 percent of U.S. GDP.

The results of the analysis finally demonstrate that the need to rewrite the rules does not only cover financial markets, but migration control policies as well. Data provided by Frontex has shown a decrease in the presence of facilitators of illegal immigration in the last two years. This long-term decline may in part be due to the structural change of these organizations (see Annex II, *infra*) or a shift on their patterns, involving document fraud and new ways to mimic legal entry to the E.U.<sup>264</sup>

The issue of illegal migration in the next coming years remains one of the main challenges for developed countries. According to the findings reached in this chapter new flows will be expected to increase when the economies recover from the recession and more jobs become available. The analysis of flows directed to the U.S and the E.U., the structural changes of the facilitators of illegal immigration and the upswing of illegal flows from North Africa during the Arab Spring has also shown that developments beyond Europe's borders can quickly lead to changes in migration patterns.



## ANNEX I: Legal Overview

### Spain

#### 1. General Immigration Trends

The history of immigration in Spain is relatively short if we compare it with many other European countries and United States. For a long time, Spain has mainly been a ‘country of emigration’. However, immigration to Spain has increased considerably in the last decades, passing from 500,000 foreigners in 1995 to 4.48 million foreigners in 2007<sup>265</sup>. In the last years the Spanish government attempted to regulate migratory flows in accordance to the needs of the national labor market. This led to the implementation of quotas for immigrant workers and budget efforts directed to the strengthening of border enforcement. Legislative instability has been one of the major problems for Spanish policies on migration<sup>266</sup>, leading to the presence of an estimated 1,300,000 illegal immigrants in Spain in 2005<sup>267</sup>.

#### 2. Policy and legislation on Immigration

Immigrants in Spain can be in a “stay or residence” situation. Stay is the presence in Spanish territory for a period of time of up to 90 days. Residents are the foreigners who reside in Spain with a valid residence permit. Residence can be temporary or permanent. Three different situations are contemplated by the legislation: the special regime for students, the residence of undocumented people and refugees, and the residence of minors. Residence permits are granted by the Ministry of Interior and the Ministry of

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<sup>265</sup> Instituto Nacional de Estadística: *Encuesta Nacional de Inmigrantes 2007: Una monografía*. Available at: <http://www.ine.es/ss/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobheadertype=Content-disposition&blobheadervalue1=attachment%3B+filename%3Deni07.pdf&blobkey=urldata&blobtable=MungoBlobs&blobwhere=363%2F361%2Feni07%2C0.pdf&ssbinary=true>

<sup>266</sup> LOPEZ, Maria Pabon. Immigration Law Spanish-Style: A Study of Spain's Normalization of Indocumented Workers. *Geo. Immigr. LJ*, 2006, 21: 571.

<sup>267</sup> FERNÁNDEZ BUEY, Francisco. “Dos reflexiones sobre inmigración en Europa”. *La Insignia. España*, julio del 2005. Available at: [http://www.upf.edu/materials/polietica/\\_pdf/mig2reflexionessobreinmigracion.pdf](http://www.upf.edu/materials/polietica/_pdf/mig2reflexionessobreinmigracion.pdf)

Labor and Social Affairs, through the Foreigners Bureau of the Sub-delegation of the Government in each province (Organic Law, Art. 67(2); Implementing Regulation, Art. 159; Art. 160; Art. 161; Art. 162). An alien wishing to reside in Spain more than three months is required to have a residence permit. A main distinction is made between temporary residence, from three months up to five years, and permanent residence. The administrative decisions and resolutions may be appealed by the immigrant, and their execution normally follows the general legal regime, with the exception of some expulsion cases.

The first piece of legislation on migration was approved in 1985, before joining the EC. This law (LO 7/1985, sobre derechos y libertades de los extranjeros en España –On the rights and freedoms of foreigners in Spain-, passed July 1 1985) “outlined the rights and obligations of foreigners inside the country with restrictions based on the notion that, following membership, Spain would be considered by potential migrants as a transit country in order to reach other Member States - traditional receivers”<sup>268</sup>.

At that time, the legislator perceived immigration as a temporary phenomenon, so the typology of residence permits, and other topics, such as family reunification and integration, were not deemed as of primary relevance. This law went unmodified for 15 years when, from 2000 to 2003, another four pieces of legislation were approved. It is clear that during those years politicians were trying to find a point of equilibrium, looking for a legal framework which could serve the dual purpose of effectively regulating the subject and protecting the human rights of immigrants.

Three different stages can be identified on the laws on immigration approved so far by the Spanish government. The first relays on the creation of a legal basis for entry and stay procedures, the second relates to the assumption that immigration had become structural and not temporary (introduction of social integration and family reunification), whereas the last relates to the strengthening of security related issues.

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<sup>268</sup> ZAPATA-BARRERO, Ricard and DE WITTE, Nynke. “The Spanish governance of EU borders: Normative questions”. *Mediterranean Politics*, 2007, 12.1: 85-90 (p.87).



According to Zapata Barrero and De Witte<sup>269</sup>, this seems to be connected to the attempt to adapt legal frameworks to current immigration flows. Although politicians seem to agree on the importance of the issues related to migration, there is conflict about the measures to be taken to efficiently manage immigration flows, and the management of illegal flows of migrants has become one of the main issues on the Spanish political agenda is. The frequent legislative changes have been linked to the difficulty of the Spanish legal system to find a stable legal framework, which has resulted in legislation which has often been more oriented to current migration flows than to the development of a long term strategy. Although political parties seem to agree on the importance of controlling migration in an appropriate way, they disagree on the measures to be adopted by the state, and specifically on the point of equilibrium between social ordering and human rights. While immigrant presence in the Spanish job market is quite pronounced, the immigrant worker is actually "administratively" penalized because of his or her distinct administrative status. Such legal difficulties, in large part, have resulted in an enormous group of employees without labor contracts<sup>270</sup>. However this "administrative failure" is not the only cause of the illegal hiring practices: similarly to other E.U. countries, the Spanish economy is characterized by a sizeable percentage of underground employment, which represents the ideal "breeding ground" for over one million jobs for undocumented foreigners.

Maritime borders apart, Spain also has land borders with Morocco in the enclaves of Ceuta and Melilla, in the North African coast. Since 1991, Spanish and Moroccan authorities approved a number of agreements in order to control undocumented flows, and the construction of a barbed-wire border fence 7.8 kilometer long for Ceuta and 10.5 km for Melilla together with an external radar system of surveillance ("Sistema Integral de Vigilancia Externa", known as SIVE<sup>271</sup>). The Schengen treaty made VISA

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<sup>269</sup> Ibidem.

<sup>270</sup> A recent study published by Social Security Administration found that 56% of immigrants who said they had trouble finding a job referred to the "lack of papers" as the issue that had led to this hardship. TEZANOS, Jose Felix. *Condiciones de Trabajo de los Trabajadores Inmigrantes en España*. GETS-UNED. 2007.

<sup>271</sup> "Integrated System of External Vigilance", aimed to facilitate early detection and central command. The Guardia Civil, a joint military and civilian police force, operates SIVE.

necessary in 1991, and frontier workers coming from Morocco could use their passport for a maximum stay of 24 hours. These visa policies were adopted in the early nineties, and the issues related to the control of the flows and protection of the borders, together with the integration of documented immigrants began to come under scrutiny. In 1994, the government created a General Direction of Migrations and a Plan for the Social Integration of Immigrants. As a consequence, a first regulation of the right to family reunification as well as the introduction of permanent residence permits was initiated in 1996 through a modification of the Ordinance accompanying the 1985 law.

In the second half of the nineties Spain faced a growing need for labor. The consequent increasing number of immigrants recommended the modification of existing legislation in an attempt to adapt it to the then current necessities. The demand for labor in some areas and economic sectors of Spanish economy could not be satisfied by native workers, which led to the ratification of an agreement between the Government, Employer Organizations and Trade Unions in 1999. This agreement enabled the temporary hiring of foreign workers in their countries of origin whenever the native supply of workers was insufficient. To respond to these changing circumstances, the Government proceeded urgently with a project to modify the LO 7/1985. In 11 January 2000 the LO 4/2000, “on the rights and Obligations of Foreigners in Spain and their Social Integration”, was approved. This new law gave major importance to the aspects of integration and the concession of increased rights to immigrants such as free health services and education. For the first time, the structural character of immigration was recognized.

The controversies resulting from the adoption of the 4/2000 legislative text, and specifically the tension between the integration of the immigrants and the control of the immigrant flows led to a political polarization which resulted in additional difficulties in combining such opposing visions into a coherent immigration policy. Symbolic in this

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The system currently features: i) a set of fixed and mobile sensors (such as radars and infrared cameras) able to detect vessels from a distance of 25 kilometers; ii) a control center in which can follow the vessel by remote control of the sensors able to estimate the number of people on board.; iii) one or more interception units (boats, helicopters, and cars) which are deployed in order to intercept the vessel approaching the shore.

sense was the widespread political disagreement regarding the stipulations of LO 4/2000. The “Partido Popular”, after winning the 2000 elections with an absolute majority, approved a modification of this legislation with the aim to make it more restrictive. This last modification reduced immigrants’ rights and at the same time enhanced the Administration’s range of action to control and manage the incoming flows based on the GRECO<sup>272</sup> Program, a basic plan of political harmonization and immigration regulation. LO 8/2000, passed on December 22 2000, was also intended to respond to international obligations related to immigration, and in particular to incorporate the principles adopted by the E.U. Member States during their meeting in Tampere on October 16 and 17, 1999, concerning the “creation of an area of freedom, security and justice”, as well as the “Schengen community patrimony on entry controls, visa issuance, regulation of stay and the carrier’s responsibility and sanctions”. The new law came into force in January 2001 and modified the previous LO 4/2000, which had been adopted less than one year before.

The new legislation’s most important modifications were aimed at giving priority to deportations as immigrants who were working without valid permits, and increased penalties were applied to owners of businesses that were found to be employing such immigrants without the required documentation. New conditions related to family reunification and unaccompanied minors were also stipulated. In addition, and for the first time, sanctions to combat the trafficking of human beings were adopted. The contrast of illegal immigration was a crucial feature of LO 8/2000, which also emphasized the enhancement of border controls and the diversification of the checkpoints, such as the introduction of the SIVE in the Gibraltar Strait<sup>273</sup> and the Canary Islands. This new law also increased the responsibilities of the Ministry of Interior with the creation of the position of Secretary of State for Immigration and

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<sup>272</sup> The main objective of the Plan GRECO (Programa Global de Regulación y Coordinación de la Extranjería e Inmigración), which was implemented from 2001 until 2004, was to tackle all aspects of immigration management, in line with the European Union approach. It addressed the following key areas: i) Planning immigration according to European Union directives; ii) Integration of foreign residents; iii) Admission regulation to ensure peaceful coexistence within Spanish society; iv) Management of the shelter scheme for refugees and displaced persons.

<sup>273</sup> Due to the increased border control in the Strait of Gibraltar and the expulsions of illegal immigrants apprehended along the border with Morocco, a new maritime route has recently developed between Mauritania and the Canary Islands.

Emigration, with general powers in matters relating to immigration. Similarly to other E.U. Member States, since 9/11 immigration policy in Spain was subject to significant changes oriented to security related questions.

A new legislation was then introduced in 2003 (LO 14/2003, passed on November 20 2003). A variety of circumstances occurred during the previous two laws showed the need to adapt the legislation to the continuous variation of the immigration phenomenon. The significant growth of the flows of immigrants in the previous years, together with the changes in entry channels and lengths of stay led to the introduction of new regulatory instruments with the aim to enable an improved and simplified ordering of migration inflows. However, this goal was not actually achieved.

Other measures, such as the increase of the resources dedicated to the facilitation of documented immigration and additional reinforcement of the mechanisms to fight illegal immigration, human trafficking and deportation were also proposed. Measures to encourage cooperation with operators in the transportation business were introduced in order to gather more information on people moving into Spanish territory, also with the goal to improve the existing instruments and thus guarantee the security of international transport, especially by air.

Since this moment, and despite the constant increase in the numbers of undocumented migrants, governments relied mainly on wide-scale regularization programs rather than trying to come up with new ways of addressing this growing problem. Thus, in 1998 a regularization process was scheduled. After the adoption of LO 4/2000, a four-month period was announced, and all the foreigners who could prove employment settlement and who could also provide evidence of their arrival prior to June 1999 were invited to apply. Out of 246,086 applications, 60% were resolved favorably<sup>274</sup>. The following year, after the approval of LO 8/2000, a new regularization process was approved. This new process was designed to deal with applications rejected in the previous one; once again, a large number of them were favorably resolved. The intense increase in the stock of unregistered immigrants in 2004-2005 required a new “exceptional” Government

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<sup>274</sup> ARANGO, Joaquín and SUÁREZ, Liliana. *La regularización de extranjeros del año 2000*. Centro para el Estudio de las Migraciones y la Ciudadanía, Instituto Universitario Ortega y Gasset, Madrid, 2002.

intervention which was dubbed the “extraordinary regularization process”. Finally, LO 14/2003 was the first law that did not include any regularization process in its text. It was however included in the accompanying ordinance, and so the last (and largest) regularization process was implemented in 2005, with almost 700,000 applications filed, 87% of which were favorably resolved. However, even after this last regularization, at the end of 2005 there were about 1,300,000 undocumented immigrants within Spanish territory<sup>275</sup>.

The current economic crisis, which began in 2007, meant an excess of workers in the labor market, which in turn has promoted the adoption of restrictive measures for the admission of new immigrants. In 2008, the government of the time adopted the measure of capitalization of unemployment benefits with the aim to give people incentives to return to their countries of origin, with unsatisfactory results. The only measure of this kind envisaged in the new legislative reform in the case of unemployment is voluntary return.

On 23 July 2009, a Royal Decree modifying the Ordinance of 4/2000 was adopted, granting the power to stipulate initial work permits to the Autonomous Region labor authorities with the participation of State authorities. Following Carling’s work<sup>276</sup>, this measure could have been more useful in the past, when there were strong differences in regional demands for workers which could not be satisfied owing to rigidity and slow processing, and which in many cases obliged businesses to employ immigrants without work permits. Consequently, a new reform in the legislation which comprises strengthening sanctions for immigrants working without the necessary documentation (such as an increase in deportations) has been adopted in the same year.

Internment of undocumented immigrants has been expanded to up to 60 days in the Internment Centre for Foreigners (CIE), and fines of up to Euros 10,000 are also foreseen. Moreover, people who registered in their municipality foreigners who were found not to be living at the declared address were also fined. This, in order to prevent

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<sup>275</sup> LOPEZ, Maria Pabon. Immigration Law Spanish-Style: A Study of Spain's Normalization of Indocumented Workers. *Geo. Immigr. LJ*, 2006, 21: 571.

<sup>276</sup> CARLING, Jorgen. “Unauthorized migration from Africa to Spain”. *International Migration*, vol. 45, October 2007 No. 4: 3-37.

undocumented immigrants from obtaining free health services, as in Spain one of the conditions to obtain health services is to be registered in the municipality (*empadronamiento*). New reinforcement of policy control measures regarding the entry and deportation of third country nationals is also foreseen. Regarding family reunions, a further feature of the new law is that foreigners can reunite with immigrant parents or grandparents older than 65 years who live in Spain only if they have five years of documented residence. Unfortunately, there are no further plans to address the issue of chain reunification, which should be legally addressed now as it could well become the main source of immigration increases in the near future. Following the recommendations of the Council Directive 2009/50/EC of 29 May 2009 on the conditions of entry and residence of third-country nationals for the purposes of highly qualified employment, extensive support was given by the main parliamentary groups. According to the European Union Justice Commissioner Franco Frattini, Europe draws only about 5% of the skilled foreign workforce - compared to the 55% who head for the United States<sup>277</sup>.

To summarize, while it is clear that some restrictive measures on migration have been taken in recent years; it remains overall true that "...the mechanism for generating regular immigration opportunities to satisfy the demand for immigrant labor has been hopelessly under-dimensioned and extremely inefficient in the past"<sup>278</sup>.

Ultimately, large scale regularizations have perhaps been the most distinctive feature of Spanish immigration policy in recent years.

### **3. Comparison of Conditions in Member State with those established by the E.U.**

Spanish and E.U. legislation show some differences on the protection granted to permanent residents against procedures. Spanish laws dispose expulsion "only for serious breaches of public policy or security" (OL 4/2000, Art. 54(1); Art. 57(5)).

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<sup>277</sup> FRATTINI, Franco. *Enhanced mobility, vigorous integration strategy and zero tolerance on illegal employment: a dynamic approach to European immigration policies*. High-level Conference on Legal Immigration Lisbon, 13 September 2007.

<sup>278</sup> SANDELL, Rickard. *Were they pushed or did they jump? The rise in sub-Saharan immigration*. Demography and Population. Real Instituto Elcano, 2005. Available at: <http://www.realinstitutoelcano.org/analisis/835/Sandell835.pdf>.

Procedures for the legal admission of economic immigrants are based on justified economic needs, as provided by the national employment circumstances, alongside a quota system. In reply to repeated calls for modification, the Spanish legislation introduced a visa for job-seekers as a complement to the search for a job in Spain in the country of origin. Finally, a single procedure for residence and work authorizations has been established involving the employer in the process by allowing him to apply on behalf of the alien to be employed.

#### **4. Cooperation with Third Countries**

Among the measures adopted by the Spanish government to regulate migration flows, a decisive role is assigned to bilateral agreements with countries of origin, and particularly those countries with outcoming flows of important dimension. These treaties may help as instruments with which to implement a global national policy on immigration<sup>279</sup>. Such type of agreements have been signed with Morocco, Colombia, Ecuador, the Dominican Republic and Peru and are mainly referred to alien workers which are nationals of the contracting parties authorized to participate in remunerated activities as employed persons on Spanish territory (including seasonal workers). The issues covered by these agreements are: selection of applicants and job offers, employment contracts, permits for stay and work, employment and social conditions of workers in Spain, and rights of immigrants in Spain and return to their countries of origin. The agreements provide for the development of the cooperation among the sending and destination countries and for the fight against illegal immigration, and human trafficking. They also recognize the right of the migrant to reunite with certain members of his/her family, as specified under the Spanish law.

The treaties examined are related to the idea of joint development between developed and developing countries. Workers who have had the chance to train and gain professional experience in developed countries may become important agents for development in their countries of origin. In this direction, the agreement with Colombia

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<sup>279</sup> RIPOL CARULLA, Santiago . “La nueva doctrina global de defensa preventiva: consideraciones sobre su carácter y fundamento”. In: García/Rodrigo (eds.): *El imperio inviable: el orden internacional tras el conflicto de Irak*. Tecnos, 2004: 141-164.

and Ecuador establishes that measures are implemented with the aim to encourage the reintegration of migrant workers in Colombia and Ecuador, in the broader conception of emigration experience as a factor of economic, social and technological development.

Bilateral agreements between Spain and the above countries still fail in dealing with the full migratory cycle, which may hamper the full achievement of the objectives envisaged by those treaties. Morocco for example is a “proxy” country for the migratory flows. Thus, the migration cycle often begins in Sub-Saharan Africa where Morocco is just a country of transit. These agreements do not take this issue into account, since their scope extends to national citizens of both countries, and not to people coming to other countries. To tackle this issue and to take into account the full migratory cycle, the last years have seen a new type of agreement, signed between Spain and Sub-Saharan African States (including Gambia, Guinea, Guinea Bissau, and Mauritania). These agreements provide for the return of citizens that arrive in Spain and guarantee the rights acquired in one of the involved countries.

## Italy

### 1. General Immigration Trends

Being for a long time a country of emigration, in the 1970s there were fewer than 300,000 foreign citizens in Italy. Their number increased until half a million by the end of the 1980s, with the proportion of E.U. immigrants dropping to a quarter. Italy began to be considered as a destination country by immigrants from the developing areas of the world looking for a job, partly because of the displacement effect of the more restrictive legislation in force in other European countries. Today, the estimated number of illegal immigrants living in Italy is around 1,000,000 persons<sup>280</sup>.

The first comprehensive law on immigration was approved in 1986. In the meantime the presence of foreigners had registered a consistent increase. In 1986 450,000 people were registered and then regularized, whereas in the period from 1990 to 1999 217,718

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<sup>280</sup> CARITAS/MIGRANTES,. *Immigration Statistical Dossier 2010*. Available at: [http://www.caritas.it/home\\_page/pubblicazioni/00002486\\_Dossier\\_Statistico\\_Immigrazione\\_Caritas\\_Migrantes\\_2011.html](http://www.caritas.it/home_page/pubblicazioni/00002486_Dossier_Statistico_Immigrazione_Caritas_Migrantes_2011.html)



permits were granted for the purpose of work and 220,080 for family reunification. The immigration population<sup>281</sup> registered an increase of around 8,000 per year in the 1990s<sup>282</sup>

## 2. Policy and legislation on Immigration

The evolution of Italian legislation on immigration has been characterized by the difficulties regarding the issue, since the first law approved in the 1980s, through the 1990s and up to the latest law, passed in 2002. The history of Italian legislation on this field can be divided into two periods.

In the first period, which ended with the approval of law 943, passed on December 30 1986, the International Labor Organization (ILO) was the main input for the implementation of the principles of the convention on migrant workers, n. 143/1975, which had already been ratified by Italy.

The second period, which began in 1986 and extends until the present, has seen the role of European Union as the main external source for promoting the changes in legislation, first with the introduction of the Schengen Agreement, followed by the revision of the treaties giving more consideration to the issues of immigration. The role of the E.U. has been to guarantee against any lowering of standards below a certain guaranteed minimum level of human rights. The European vision has been interpreted differently according to the spirit of the current national governments, to which the E.U. leaves a degree of self-determination for policy making, with the result that the domestic legislations of the different member states still remain highly differentiated. This can of course constitute a problem, especially for the correct classification of crimes such as smuggling of migrants and trafficking in persons.

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<sup>281</sup> Seasonal workers represent the main component of the immigrants currently in Italy, and they are especially present in the agricultural sector in the Southern parts of Italy. In 2005, the number of visas granted was 1,076,080, of which 35.3 per cent granted to employees and 40.1 per cent for family reunification. An additional fairly large group is represented by visas for study (11 per cent). See CARITAS/ MIGRANTES. *Immigration Statistical Dossier 2005*, p. 304 and *Immigration Statistical Dossier 2006*, p. 80. Available at: <http://www.dossierimmigrazione.it/comunicati.php?tipo=schede&qc=100>.

<sup>282</sup> CARITAS-MIGRANTES. *Immigration Statistical Dossier 2006*. Available at: [http://www.caritas.it/home\\_page/pubblicazioni/00000537\\_Dossier\\_Statistico\\_Immigrazione\\_Caritas\\_Migrantes\\_2006.html](http://www.caritas.it/home_page/pubblicazioni/00000537_Dossier_Statistico_Immigrazione_Caritas_Migrantes_2006.html).

### Law 943/1986 and the regulation of immigrants in the labor market

During the 1970s, the International Labor Organization (ILO) approved Convention no. 142/1975 “on the protection of immigrants and the repression of trafficking”. Italy ratified this convention five years later with law no. 158 of 10<sup>th</sup> April 1981. However, it only came into force five years later. Article 3 of law no. 158/1981 empowers the Government to enact, within a year, decrees with the force of ordinary law to guarantee the implementation of the obligations contained in the ratified convention.

In the meantime, the situation had become more urgent since, due to the steady increase of the incoming flows of illegal immigrants, the public debate on immigration had become more hostile. The “fear of invasion” led to an enhancement of the requisites necessary for the immigrants to be accepted. As a side effect, these measures brought about an increase in the number of illegal immigrants.

Law no. 943, passed 30<sup>th</sup> December 1986 established new “rules concerning the employment and working conditions of non-E.U. immigrants and against illegal immigration”. It included new programs of employment aimed to linking the demand for labor to the supply, regulations for the access to the labor market and to facilities, the removal of eventual barriers to immigrant’s human rights, the right to family reunification, the protection against discriminations, the provision of housing, and cultural programs. However, these proposals were not followed by sufficient financial support, since no specific budget was included in the law.

This law allowed the employment of foreign workforce only after ascertaining that no local workers were available for the position. It was also planned (article 5a) to create a list of workers living abroad who had applied for Italian companies. However, this plan was not followed by effective measures of implementation, and this issue was taken up again more effectively in the 1998 law.

### The “Martelli law” (39/1990) and the regulation of residence permits

The approval of law 39/1990, passed February 28, proved that there was a demand for low skilled labor which immigrants could perform at a lower price than Italians. The

legal framework of law 943/1986 was revealed inadequate to deal with this new situation, since it involved a slow-moving bureaucracy and a high level of discretion. The government of the time pushed for the approval of new legislation which would include the indications given by the E.U. including elements such as entry and residence, work and welfare abolishing at the same time the so-called “geographical limitation” on asylum. The situation required a fast procedure of approval which prompted the government to intervene through the decree no. 416 of 30 December 1989, which became law no. 39 on 28 February 1990<sup>283</sup>.

The most important features of law no. 39/1990 can be summarized as follows:

- i. abolition of the geographical limitations on asylum;
- ii. more regulation of the concession of entry visas, conditions for renewal (including the assessment of remittance before the first renewal), enrollment in local registers;
- iii. planning of the number of entries and their beneficiaries;
- iv. legal protection for immigrants;
- v. new entry and border controls<sup>284</sup>;
- vi. establishment of a new fund to finance reception centers, introduction of procedures of integration of information between the regions, recognition of foreign qualifications, hiring of social workers by the Ministry of Labor;
- vii. the launch of a general amnesty for 220,000 foreigners which could demonstrate that they were in the Italian territory before the law approval.

However, the new law still lacked adequate measures for the integration of immigrants, which forced the government to pass a new bill, no. 5353/1992, with new measures regarding reception and housing.

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<sup>283</sup> This law did not create an integral program to manage the flows of migrants, rather maintaining an economic view of immigration, which still remains a constant feature of Italian immigration legislation.

<sup>284</sup> Illegal and legal immigrants who do not have the required qualifications are expelled. Expelled immigrants have 15 days to leave Italy on their own, otherwise they will be deported by the police.

### The first comprehensive law on immigration (40/1998)

In 1998, the number of legally resident immigrants increased to 1,240,721 (around 2.2% of the population). Immigration therefore became a structural phenomenon in Italy which required accurate legislation and flexible regulations in relation to the entry of migrants. At the same time the field of human rights required attention, with measures aimed at improving access to work and promoting integration (permanent residence permits after five years and integration programs). Illegal immigrants had access to health care and compulsory schooling and were granted access to the legal process and to appeals against decisions. On the other hand, this legislation allowed detention for up to 30 days in detention centers (*Centri di permanenza temporanea- CPT*) for undocumented immigrants<sup>285</sup>.

A new bill approved in 1999<sup>286</sup> amended law 140/1998 as follows:

- i. Measures to regularize immigrants present in Italy before 27<sup>th</sup> March 1998 for work or family reasons.
- ii. Regulations for the implementation of Law no. 40 were adopted on 3<sup>rd</sup> November, 1999 incorporating the existing rules still in force. This became the *Testo Unico* (Comprehensive Text) on immigration law.

### The new measures of Law 189/2002

The new law introduced the “contratto di soggiorno” (residence contract) which associated the entry and residence permits more strictly with the job market. A

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<sup>285</sup> This law provides a permanent residence permit (*carta di soggiorno*) that regulates the process also to get Italian citizenship. This law also introduced the Temporary detention centres for illegal and illegal immigrants (CPT). CPTs are where people who will be forcedly deported (as determined by the *Legge Martelli*) are placed. Immigrants who must be identified and asylum seekers are also placed in the CPTs, but temporarily.

<sup>286</sup> *Decreto del Presidente della Repubblica* n. 394 del 31 Agosto 1999 (G.U. n. 258 del 03-11-1999 - Suppl. Ord. n. 190).

residence permit is agreed to the immigrants with permanent employment, with priority given to the immigrants coming from states with bilateral agreements. The new law introduced a general reduction in the duration of residence permits from two years to one for employed immigrants and from one year to 6 months for the unemployed. The length of residence necessary to gain a permanent residence permit (*carta di soggiorno*) was also increased from five to six years. Family reunification was subjected to further restrictions for parents and other relatives. On the other hand, a large regularization of domestic workers and other categories which were working informally was introduced. Finally, this legislation reintroduced the requirement that the entry of foreign workers was only possible if hired directly by an employer (as in the 1986 law). Its main concern is however to restrict entry and illegal immigration, thus maintaining the basic approach of Law 40/98<sup>287</sup>.

#### The “Security Package” of Law 94/2009

Law 94/2009, amending the Consolidated Immigration Act (D.Lg 286/1998) introduced new restrictions on illegal migration, which becomes a crime. The implemented measures can be summarized as follows:

- i. A system of credit points for the immigrants with permit of stay. The non-attainment of credit threshold may involve the loss of the permit of stay.<sup>288</sup>
- ii. Definition of illegal immigration as a crime (for both immigrants and facilitators), requiring public officers to report the presence of an illegal immigrant. New fines are introduced for illegal immigrants who can now be detained for more than six months.
- iii. Requests for money transfers and some petitions to national authorities must be accompanied by the residence permit<sup>289</sup>.

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<sup>287</sup> Forced detention – and no longer the intimation of detention – becomes the ordinary rule: all illegal immigrants found by police on Italian ground without the necessary documentation must be identified and deported to their countries of origin. Non-Italian citizens serving a two-year custodial sentence may be deported instead. The system of protection for asylum-seekers and refugees (the so-called SPRAR) is introduced.

<sup>288</sup> Does not apply to refugees, people under other forms of international protection, E.U. citizens and their family members, third country nationals who have made use of the family reunion clauses, disabled, unaccompanied minors, and victims of smuggling.

In terms of stay and residence rules, aliens who have lived regularly in Italy for at least six years with a residence permit allowing for an unlimited number of renewals can apply for a “Residence Card” (L 189/2002, Art. 8(1)). Foreign spouses, minors and parents of Italians or E.U. citizens living in Italy can apply for the Card. The resident status granted by the card is not time-limited, but the document must be renewed every five years. The grant of the Unlimited Residence Permit depends on the fulfilment of the following requirements: five years of residence under a valid permit; adequate income; sufficient accommodation. Unlimited Residence Permits and Residence Card have slightly different requirements. Unlimited residence includes permits for family-reunification, employment and self-employment, and excluding permits for study, temporary permits, asylum permits, and generally short-term permits. Unlimited permits are not granted to foreigners who can pose a danger public to public order or security. Spouses, minors, dependent children and parents may also apply. Permits must be issued within three months and are for an unlimited period of time. Residence permits can be withdrawn in cases of expulsion, fraud, in case of absence from the territory of the E.U. for more than 12 months or when the reasons for its granting cease to exist.

### **3. Comparison of Conditions in Member State with Conditions established at E.U. Level and International Level**

Italian law adopted great part of the directives coming from E.U. with significant delay. Directive 2003/109/EC on long-term residence and Directive 2003/86/EC on family reunification were transposed into Italian law in February 2007. In addition, the definition of the beneficiaries of family reunification has recently been expanded in Italian law (Law 94 of July 15, 2009) and is actually broader than that stipulated in Directive 2003/86/EC.

### **4. Cooperation with Third Countries**

Italy has signed bilateral agreements on migration with Libya, Tunisia, and Egypt. On June 17, 2011, the Italian government signed a “Memorandum of Understanding” With

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<sup>289</sup> Application for health care, school and birth certificates are exempted.

Libya, during the National Transitional Council. This document focuses on measures to reduce illegal immigration and the two countries commit to exchange information on migration flows and engage in shared support to combat illegal migration. In January 21, 2012 the two countries signed the “Declaration of Tripoli,” which reportedly encompasses the main provisions of the treaty signed previously. In a recent visit on April 3, 2012, the Italian Minister of the Interior, signed the so-called “*Processo Verbale*” on migration control.

Similar trends are to be found in Italian-Tunisian relations. The first contact between Italy and Tunisia dates back to the late 1990s. On August 6, 1998 Italy and Tunisia signed a readmission and police cooperation agreement in which Italy committed to provide Tunisia with operational and financial support, and a preferential deal for immigration quotas. On December 13, 2003 a further police cooperation agreement was signed regarding the training of the Tunisian police to control the maritime border with Italy through technical assistance and closer cooperation between the two countries. Other more recent agreements (such as the April 5, 2011 “exchange of notes”) were oriented to improve the enforcement and provide measures for faster repatriation procedures. This granted temporary protection status and free circulation within the Schengen area to over 20,000 Tunisian migrants who landed in Italy between January 1 and April 5, 2011. At the same times, Tunisian citizens arriving in Italy after April 5, 2011 would be returned to Tunisia.

On May 17, 2011, Italy and Egypt signed a Memorandum of Understanding on migration and employment. The agreement was aimed to implement new activities of vocational training and envisions the creation of a Coordination Office for the selection of potential migrants to Italy. Egypt’s interim government after Mubarak’s fall committed to respect the accord signed by the two countries in 2009 on illegal migration and youth employability through ad hoc training activities. Between January and September 2011, Italy repatriated Egyptian nationals who entered to Italy illegally.

# Malta

## 1. General Immigration Trends

Along its history, Malta has principally been a country of emigration. The last years, however, have seen the upswing of a wave of illegal immigrants attempting to reach the E.U.<sup>290</sup>, until reaching the pike in 2008, when 84 boats came from North Africa bringing 2775 people. Therefore, in 2005 Malta asked for E.U. aid for the reception of illegal immigrants; repatriation of those denied refugee status, resettlement of refugees into E.U. countries, and maritime security. The Maltese legislation defines immigration explaining the different categories and the rights of the immigrants.

## 2. Policy and legislation on Immigration

The entry of foreigners into the Maltese Islands is regulated by the Immigration Act, Chapter 217 of the Laws of Malta. Residence Permits are granted in agreement with Legal Notice No. 205 of 2004 (Immigration Regulations). Legal Notice No. 278 of 2006 (Regulation on Long-Term Residents) transposes the provisions of Council Directive 2003/109/EC concerning long-term residences. The Immigration Act provides regulations on the following issues: the exclusion of foreign spouses of citizens of Malta and their minor children from the obligation of periodical permission granted from the Immigration Authorities; the allowance of temporary or permanent residence permits; the granting of work permits for aliens.

Residence permits are granted to foreigners who have been authorized to stay in Malta for more than three months for the following purposes: i) employment, ii) retirement, iii) study or iv) long-term residence. A permanent residence permit authorizes a foreigner to stay for an indefinite period, but precludes him from entering the job market in Malta, as the employment purpose is granted only in exceptional cases. The visa grant process is managed by the Immigration Police, which is headed by the main Immigration Officer in Malta. Applications are to be submitted already in the country of

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<sup>290</sup> FREEMAN, Colin and SQUIRES, Nick. "E.U. immigration: Malta is the smallest state, and we are carrying a burden that is much bigger than any other country". *The Telegraph*, 21 July 2013. Available at <http://www.telegraph.co.uk/news/worldnews/europe/malta/10192458/E.U.-immigration-Malta-is-the-smallest-state-and-we-are-carrying-a-burden-that-is-much-bigger-than-any-other-country.html>.



departure of the applicant and may be submitted either directly by the applicant or to a Maltese Embassy or Consulate found in the migrant's country of origin or residence.

Different types of visa can be granted by the Maltese government (Immigration Regulations, Art. 11(b)). These are: single-entry visas (one month of duration to applicants, normally tourist – visa), multiple-entry visas (three, six, or twelve month) and transit visas (issued if the stay in Malta is no longer than 24 hours). Finally, student visas are granted to applicants enrolled in a full-time education program in Malta: the duration of this last visa is the academic year.

While E.U. nationals do not require a visa, citizens of a number of third countries are not required to have a visa when residing in Malta for up to three months. However, third country nationals and E.U. citizens are required to apply for a work permit. Around 45% of immigrants landed in Malta have been granted refugee status (5%) or protected humanitarian status (40%)<sup>291</sup>.

The “Principal Immigration Officer” is selected by the Prime Minister. His main power is to issue visas to any person arriving in Malta for a period of up to three months, according to the Immigration Act, Art. 6 (b). The Principal Immigration Officer can also impose particular conditions of residence, can extend the period of stay and widely impose further conditions for the stay. Immigrants wishing to apply for a visa must meet the following requirements: sufficient funds to support themselves during their stay in Malta, criminal registry, and “not being considered a threat to public policy or national security” (Immigration Regulations, Art. 11).

### **3. Comparison of Conditions with those established at the E.U. and International Level**

Malta is compliant with all the directive provisions relating to immigration since its accession to the E.U. in 2002. However, a debate is currently taking place on the compulsory detention policy of the illegal migrants who land in Malta, held in various

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<sup>291</sup> INTERNATIONAL ORGANIZATION ON MIGRATION. *World Migration Report 2011. Communicating effectively on migration*. International Organization on Migration, 2011.

camps arranged by the Maltese Army. This policy was denounced by several NGOs<sup>292</sup>, and in July 2013 the European Court of Human Rights declared Malta's detention policy of illegal immigrants as arbitrary, lacking in adequate procedures to challenge detention, and in breach of its obligations under the European Convention on Human Rights<sup>293</sup>.

#### **4. Cooperation with Third Countries**

Malta has signed two bilateral agreements regarding reciprocity advantages on social security for Libyan and Australian citizens.

### **Greece**

#### **1. General Immigration Trends**

Greece has traditionally been a country of emigration, mostly of unskilled labor. The rapid economic development between 1960 and 1970 required a greater supply of unskilled labor. This shortage was at the time resolved by welcoming immigrants, mainly from Asian and African countries, but still continues today due to a blend of different reasons. Greece joined to the European Community in 1981 and this occurrence was followed by a complete re-structuration of its society accompanied by an increase in immigration flows. In 2001, the number of immigrants was 762,000, 391,600 of which were employed, roughly 9.5 per cent of the overall employed population of Greece<sup>294</sup>.

#### **2. Policy and legislation on Immigration**

Greek legislation encompasses the following cases of immigration: work, family reunification and studies/training. Special statuses, such as victims of trafficking in human beings, are subjected to specific residence permits. The current legislation

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<sup>292</sup> “Malta faces problems with children of illegal immigrants”. Times of Malta, 10 June 2008. Available on <http://www.timesofmalta.com/articles/view/20080610/local/malta-faces-problems-with-children-of-illegal-immigrants.211803>

<sup>293</sup> See European Court of Human Rights (ECHR) Press Release 231 of 23.07.2013

<sup>294</sup> CAVOUNIDIS, Jennifer. “Migration to Greece from the Balkans”. *South-Eastern Europe Journal of Economics*, 2004, 2.2: 35-59.

regulating immigration in Greece is Act 3386 of 18 August 2005, "on entry, residence and social integration of third-country nationals into the Greek territory". The Ministry of the Interior is the main responsible for its implementation and has issued two Circulars regarding its application: Circular No. 26 of 1 September 2005 and Circular No. 38 of 23 December 2005. Act 3386/2005 has more recently been modified by Act 3536 of 22 February 2007 "on determining matters in migration policy and other issues falling into the competence of the Ministry of the Interior, Public Administration and Decentralization". Act 3386/2005 primarily aims to: (a) rationalize the incoming migratory flows while taking into account the needs of the Greek social and economic texture; (b) to avoid the arbitrary alteration of the status of lawfully residing foreigners; (c) to guarantee adequate and human conditions of employment for migrant workers; (d) to introduce a system of social integration for migrants; (e) to apply Greek legislation and rules of enforcement to avoid the uncontrolled entry and exit of foreigners; (f) to introduce incentives for potential foreign investors in Greece; and (g) to guarantee the full exercise of the rights of third-country nationals, and the full and free development of their personal skills and aspirations in Greek social and economic life.

Article 5 of Act 3386/2005 establishes the following requirements for third-country nationals who want to be granted an entry visa: i) personally apply to the competent consular office and provide a passport, which must be valid for at least three months after the expiration of the visa; ii) provide a copy of his criminal record from the competent authorities of his country of residence;- iii) not be included in the list of undesirable persons maintained by the Greek Ministry of Public Order; and iv) not be considered as a potential threat to public health, order or security, as well as to Greece's international relations. In order to issue a reunification visa, the applicant residing in Greece is demanded to submit an application accompanied by the following documents: a certificate of family status; proof of the minimum annual income required for him and his family and a proof of adequate accommodation. For the grant of an employment visa, the applicant is required to provide his employment contract, including the name of the employer, the typology of work performed, and the details about the wage. Finally, the submission of the following documents is required in the case of a visa for study purposes: i) the certificate of enrolment/ registration from the relevant University,

ii) a proof of the payment of any enrolment fees; iii) a certificate of adequate proficiency of the language of instruction; iv) evidence of the existence of adequate financial resources to cover expenses for living, study, and return to the country of origin; iv) full medical insurance cover.

However, article 84 of Law 2286/2005 continues to forbid Greek public services, legal entities, and local governmental organizations from offering services to immigrants who cannot prove that they have entered in Greece legally, unless it is an emergency situation or when the person in question is a minor<sup>295</sup>.

Greek legislation includes two categories of residence: short stay (the so-called Schengen visa with a validity of up to three months) and long-term stay (the so-called national visa, with a validity of more than three months). As a general rule, immigration is considered long-term stay.

### **3. Comparison of Conditions with those established at the E.U. and the International Level**

With Act 3386, passed August 18 2005, Greek legislation follows the indication given as part of the Common Immigration Policy, incorporating into the domestic legislation and taking the necessary steps to implement the following European Council directives: Council Directive 2003/109/EC concerning long-term residence; Council Directive 2003/86/EC on the right to family reunification; and Council Directive 2004/38/EC on freedom of movement of third-country nationals who are family members of an E.U. citizen. However, several European Courts have recently decreed that Greece is not obeying the minimum standards of treatment for asylum seekers. The consequence is that, illegal migrants who reach other countries cannot be sent back to Greece.

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<sup>295</sup> See TRIANDAFYLLIDOU, Anna. "Greek Immigration Policy at the Turn of the 21st Century. Lack of Political Will or Purposeful Mismanagement?". *European Journal of Migration and Law*, 11.2, 2009: 159-177.

## 4. Cooperation with Third Countries

Article 65(3) of Act 3386/2005 establishes: “In the context of activities for the social integration [of migrants], beneficial measures could be included which are capable of assisting the development of the country of origin, in case third country nationals return to it.” Arguably, Article 65(3) could be seen as contradictory, as the whole issue of integration mainly concerns third country nationals who plan to reside as long-term residents. Moreover, with the current economic downturn prevailing in Greece there are little possibilities that any Greek government will on its own account implement the provisions of Article 65(3). However, the protection of third-country nationals in Greece is not regulated by bilateral agreements between Greece and the respective third countries but rather than being based on agreements reached between the E.U. and such States. Currently, there is only one pilot program implemented between Greece and Albania, under the European Commission program AENEAS.

## United States

### 1. General Immigration Trends

Immigration policy in the United States is different from the policies of the different E.U. countries, as it reflects multiple goals as it primarily served for the reunion families by applying immigrants who already have family members living in the United States<sup>296</sup>. More recently, it mainly seeks to select workers with precise skills to fill jobs which are in shortage. Third, it attempts to provide protection to people who face the risk of racial, religious or political persecution in their country of origin. Finally, it aims to guarantee the ethnical diversity by “providing admission to people from countries with historically low rates of immigration to the United States”<sup>297</sup>. To implement these wide-ranging goals, the government established several categories of permanent and temporary admission.

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<sup>296</sup> LEMAY, Michael and ELLIOTT, Robert B. eds. *U.S. Immigration and Naturalization Laws and Issues: A Documentary History*. Greenwood Press, 1999.

<sup>297</sup> CONGRESS OF THE UNITED STATES, “Immigration Policy in the United States”. February 2006 (p.9). Available at: <http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/70xx/doc7051/02-28-immigration.pdf>

About 11,5 million unauthorized aliens were in the United States in early 2011, according to the Department of Homeland Security (DHS)<sup>298</sup>. Immigrants found to be in violation of U.S. immigration laws may be expelled from the country through a formal process (also including other penalties such as imprisonment, fines, or prohibition against future entry) or may be invited to depart voluntarily<sup>299</sup>. In 2004, about 203,000 people were formally expelled, and about 1 million others decided to leave the country voluntarily.

## 2. Policy and legislation on Immigration

Immigration has received the attention of U.S. policymakers since the nation's founding. In 1790, Congress established a procedure to enable people born out of the country to become U.S. citizens. The first federal law which qualitatively limited immigration was approved in 1875, consisting in the prohibition of entry for criminals and prostitutes. The following year, the Supreme Court declared that the regulation of immigration was the exclusive responsibility of the federal government. To face the increase in the flows of incoming immigrants, Congress enacted the Immigration Service in 1891, with the federal government assuming responsibility for processing all immigrants that were applying for admission to the United States. Congress established a quota system according to the country of origin as part of the Quota Law in 1921 and revised in 1924. Each nationality was assigned of a quota based on its representation in the previous U.S. census statistics. In a first step, the Department of State provided a limited number of visas each year through the U.S. embassies abroad. Then the Immigration Service admitted immigrants which provided a valid visa.

The Immigration and Nationality Act Amendments of 1965 abolished the national-origins quota system, substituting it with a categorical preference system. However, it did not abolish all the numerical restrictions; the government set a total immigration cap per country and for each preference category with the exemption of immediate relatives of U.S. citizens. The Refugee Act of 1980 created a comprehensive refugee policy

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<sup>298</sup> More informations available at: [http://www.dhs.gov/xlibrary/assets/statistics/publications/ois\\_ill\\_pe\\_2011.pdf](http://www.dhs.gov/xlibrary/assets/statistics/publications/ois_ill_pe_2011.pdf)

<sup>299</sup> ZOLBERG, Aristide. *A Nation by Design: Immigration Policy in the Fashioning of America*. Harvard University Press, 2006.

granting the President the authority to establish the number of refugees to be admitted per year bringing U.S. policy in line with the 1967 Protocol to the 1951 United Nations Refugee Convention.

The Immigration Reform and Control Act of 1986 dealt with the issue of illegal immigration, enhancing the legal enforcement and at the same time creating new possibilities to legal immigration<sup>300</sup>. Employers who were revealed to consciously hire or recruit unauthorized aliens were subjected to sanctions. The new legislation also introduced two amnesty programs for illegal immigrants and a new categorization for seasonal agricultural employees: a) The Seasonal Agricultural Worker amnesty program allowed persons employed for at least 90 days in agricultural jobs to apply for permanent residence. b) The Legally Authorized Workers amnesty program allowed current unauthorized immigrants who had lived in the United States since 1982 to be legalized. These two amnesty programs regularized the status of roughly 2.7 million people residing in the United States.

The Immigration Act of 1990 set a flexible cap for legal admissions at 675,000, of which 480,000 would be family-based, 140,000 would be employment-based, and 55,000 would be diversity immigrants. This legislation introduced temporary residence permits for professional workers coming from countries that have a free-trade agreement with the United States<sup>301</sup>.

In 1996, as a response to continuing concerns about unauthorized immigration, the Illegal Immigration Reform was mainly dedicated to border enforcement, increasing the number of border patrol officers and introducing new border control measures<sup>302</sup>. Moreover, it established a pilot program in which social services agencies could check by telephone or electronically to confirm the eligibility of people applying for either jobs or welfare benefits. The Homeland Security Act of 2002 established the

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<sup>300</sup> The Illegal Immigration Reform and Immigrant Responsibility Act of 1996 further expanded resources for border enforcement and made it easier to deport illegal aliens and criminal aliens.

<sup>301</sup> U.S. DEPARTMENT OF HOMELAND SECURITY, *2005 Yearbook of Immigration Statistics*, Office of Immigration Statistics, 2006.

<sup>302</sup> KNICKERBOCKER, Brad. "Illegal immigrants in the U.S.: How many are there?" *The Christian Science Monitor*, May 16, 2006. Available at: <http://www.csmonitor.com/2006/0516/p01s02-ussc.html>.

Department of Homeland Security (DHS) and at the same time rationalized the Immigration and Naturalization Service (INS) the agency previously in charge of dealing with immigration services, border enforcement/inspections. Almost all the functions of the INS were shifted to DHS. The previous law was merging immigrant services and enforcement within the same agency; those functions are now separated among different bureaus of DHS. Immigration and naturalization are the duty of the Bureau of Citizenship and Immigration Services. The border enforcement functions of the INS are divided in two different bureaus: the Bureau of Immigration and Customs Enforcement and the Bureau of Customs and Border Protection.

The two main goals of the U.S. current immigration policy are: first, to reunite families by admitting immigrants who already have family members living in the United States and to admit workers in labor fields with demand for labor; second, to provide a refuge for asylum seekers. Current legislation includes two different ways for noncitizens to enter the United States lawfully: permanent admission and temporary admission. Lawful permanent residents (LPRs) are people granted of a permanent residence (green card holders). Immigrants eligible for permanent admission include close relatives of U.S. citizens and workers with specific job skills. The second category of lawful admission is temporary admission, which is granted to foreign citizens who seek entry to the United States for a limited time and for a specific purpose (temporary work, study or tourism).

### **3. Cooperation with Third Countries**

The relations with Mexico, country sharing the border with the U.S., can be divided into three main phases between the late 19 century and the 1990s: mostly laissez faire policies prior to World War II, with modest individual controls; a period of managed migration which can be seen as a first bilateralism during the wartime “Bracero Program” and a “policy of no policy” in Mexico and a de-facto acquiescence to illegal migration in the United States from the 1960s until the middle- 1990s. Finally, the late 1990s through 2001 marked an apparent turning point in relations as the two countries took the first small but important steps toward an efficient collaboration and to begin comprehensive bilateral migration negotiations. The terrorist attacks of 9/11 however



somehow spoiled those negotiations, and while the two countries kept on cooperating on a number of enforcement measures, they did not manage to place the broader issue of migration on top of their agendas.

The recent “Border Security, Economic Opportunity, and Immigration Modernization Act” bill of 2013<sup>303</sup> aims to make it easier for many undocumented immigrants to be regularized. At the same time, the bill increases the border patrol of up to 40,000 agents with the objective of strengthening the external borders of U.S. It also introduces a points-based immigration system to foster talent-based immigration. The United States and Mexico agreed for the first time on a set of procedures regarding deportation notices and measures of expulsion, including permanent procedures between U.S. and Mexican agents on deportation proceedings (Mechanisms of Consultation), and between border officials (Border Liaison Mechanisms). The 2001 bilateral agreement emphasized the subject of “shared responsibility” between the two countries outlining a four point framework, including : i) legalization for great part of illegal Mexicans in the United States<sup>304</sup>, ii) improved border enforcement, iii) a temporary work program for Mexican nationals in the United States, and a public-private partnership to help origin communities in Mexico. The following year, 2002, United States and Mexico signed a 22-point Border Partnership Action Plan, which emphasized the use of technology and shared data to facilitate legal flows, at the same time discouraging illegal facilitators.

The Mérida Initiative, a multilateral program announced in October 2007 to combat drug and weapons smuggling, and human trafficking in Mexico, Central America, and the Caribbean is the most important program of collaboration between USA and third-countries, encompassing \$1.8 billion for the program (\$1.5 billion for Mexico). The Merida Initiative provided gear and preparation to military, police, and legal officials.

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<sup>303</sup> Approved by Senate on June 27, 2013 (Roll Call 168: 68-32)

<sup>304</sup> BUREAU OF INTERNATIONAL LABOR AFFAIRS. *Effects of the Immigration Reform and Control Act: Characteristics and Labor Market Behavior of the Legalized Population Five Years Following Legalization*. Washington, DC: U.S. Department of Labor, 1996.



## **ANNEX II: Core capabilities of the criminal organizations facilitating illegal immigration: four case studies of optimal law enforcement**

The information about the organizational structures of groups that facilitate illegal immigration into the United States and the E.U. is still scattered. According to Zhang<sup>305</sup>, facilitators of illegal immigration towards U.S. do not have a rigid command structure and so are more difficult to identify and count. There are multiple layers of low-level operatives involved in the smuggling process who mutually support to deliver customers to their final destination and collecting the fees. Sources reviewed reveal a substantial lack of comprehensive research on the organizational structures of smuggling networks in Latin America, with the exception of Mexico. Literature on criminal organizations identified a number of core capabilities which are essential for their creation, sustainment and development<sup>306</sup>. These capabilities are common for any criminal organization, since their illegal condition requires a certain level of risk-taking skills under conditions of uncertainty. Criminal enterprises facilitating illegal immigration are fostered by the dynamics based on these capabilities. In this section we describe these core capabilities and provide empirical evidence on their successful disruption through a case study for each capability.

### **Data**

The four cases of criminal organizations dismantled by police agencies are provided by Europol and the Financial Action Task Force/ Groupe d'action financière. A good understanding of the little data available is of vital importance to provide policy makers with the basis needed to develop effective criminal justice responses. It is difficult to

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<sup>305</sup> ZHANG, Sheldon. *Smuggling and Trafficking in Human Beings: All Roads Lead to America*. Westport, Connecticut, Praeger, 2007.

<sup>306</sup> DEAN, Geoff; GOTTSCHALK, Petter; FAHSING, Ivar A. *Organized crime: policing illegal business entrepreneurialism*. Oxford University Press. 2010; GOTTSCHALK, Peter. *Knowledge management in policing: Enforcing law on criminal business enterprises*. Hindawi Publishing Corporation. 2009; PAOLI, Letizia. "The paradoxes of organized crime". *Crime, law and social change*, 2002, 37.1: 51-97.

integrate data from different sources, even though they would complement each other and undoubtedly provide a valuable insight into the crime phenomena in support of the criminal justice response<sup>307</sup>. Reliable cross-national data is important to be able to conduct meaningful in-depth comparative analysis capable of supporting evidence-based policy making and an accurate intelligence activity which can spot the networks of these criminal organizations. Considering the different political priorities and technical capacity between various countries, it comes as no surprise that the most valuable information on organized crime involvement in illegal immigration and human trafficking is found in more developed countries.

### **First capability: Gathering of financial capital**

Start-up capitals are necessary for the establishment of any kind of business, where crime does not make an exception. Capitals give the criminal business the capacity to buy goods and services required for the production of the illegal good/services to be sold. The access to the illegal market involves the discovery and exploit of new opportunities of smuggling, new routes and customers.

For legal businesses, capitals are provided by the balance of different assets such as financial credit or loans. Criminal organizations, moving inside an illegal market, have to find other ways to collect money and merge it into a unique capital to invest. Raising funds through crime and investing them without being intercepted by the authorities is the first entrepreneurial risk the criminal organization has to face to gain access to new markets<sup>308</sup>.

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<sup>308</sup> This includes the use of corruption strategies. Through corruption the criminal organization can incorporate in their structure figures such as policemen or government functionaries which otherwise can harm the illicit activity of the organization itself. See VAN DUYNE, Petrus C.; “Criminal finances and state of the art. Case for concern?”, In: MALJEVIC, A. ; VAN DIJCK, M.; VON LAMPE, K. and HARVEY, J.: *Crime business and crime money in Europe. The dirty linen of illegal enterprise. Nijmegen: Wolf Legal*, 2007. pp. 69-95.

### **Case Study 1: Use of money service capitals to finance the organizations facilitating illegal immigration<sup>309</sup>**

The French police received an alert by the national financial intelligence unit (TRACFIN)<sup>310</sup> about a person (Afghan nationality, located in France) which was **receiving money from different countries** (UK, Afghanistan, Pakistan, Greece), using money remittance services such as Western Union and Moneygram with **small amounts** between EUR 100 and EUR 300.

Further investigations done by the French police led to a **chain of other similar cases** involving more persons (Afghan or Pakistani nationality) which were receiving money from UK, Afghanistan, Pakistan and Greece. Connections were found between some persons involved in those cases and the major recipients were identified.

The analysis of the financial information unit (FIU) allowed the police to link some of their targets. **The funds were then joined to a unique capital and used for financing the criminal organization facilitating illegal immigration (in Sangatte)** between France, UK and other northern countries. The case was forwarded to the judicial authority and the sentence was 2 years imprisonment for the members found guilty of assisting the incoming and stay of illegal migrants.

The case above illustrates the use of the money transfer service business to assist in financing an organization facilitating illegal immigration. The most important feature is the use of small amounts of money in order to avoid the automatic controls made by the police, which are automatic in case of larger money transfers. The operative method to

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<sup>309</sup> FATF/GAFI - Groupe d'action financière. *Money Laundering Risks Arising from Trafficking in Human Beings and Smuggling of Migrants*. FATF Report (July 2011). Available at: <http://www.fatf-gafi.org/media/fatf/documents/reports/Trafficking%20in%20Human%20Beings%20and%20Smuggling%20of%20Migrants.pdf>.

<sup>310</sup> Information on TRACFIN available at: <http://www.economie.gouv.fr/tracfin/accueil-tracfin>.

finance the organizations was the use of small quantities of money sent via international money transfer and the *hawala* system<sup>311</sup>.

The police operation based its success on the efficient collaboration by TRACFIN and the bank which reported suspect, although small, movements of money. In a second stage, the police was able to conduct a capital-tracking investigation which led to further actors and bank accounts which were then linked to a single person. This person finally led to the leaders of the organization. These capitals were employed by the criminal organizations to recruit the local smugglers for the operative level, providing at the same time a first level differentiation of the organization.

## **Second capability: Resilience**

The facilitation of illegal immigration occurs in dynamic environments where the entrepreneurial risk is increased by pressures of both competitors and legal enforcement, which constantly challenge the profits of the criminal organizations<sup>312</sup>. At the same time, a large part of its game is based on fast changes of routes in order to avoid the enforcement<sup>313</sup>. Fast recovery and redirection of the activities underlie the *resilience capability*<sup>314</sup>, which is the ability of an organization to develop the necessary routines to make these changes. Resilience relates to the stability of systems and their ability to absorb disturbance and reorganize while undergoing change so as to retain the same function, structure, identity and feedbacks.

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<sup>311</sup> In the most basic variant of the *hawala* system, money is transferred via a network of *hawala* brokers, or *hawaladars*. It is the transfer of money without actually moving it. In fact, a successful definition of the *hawala* system that is used is ‘money transfer without money movement’.

<sup>312</sup> AYLING, Julie. “Criminal organizations and resilience”. *International Journal of Law, Crime and Justice*, 2009, 37.4: 182-196.

<sup>313</sup> ADAMOLI, Sabrina, DI NICOLA, Andrea; SAVONA, Ernesto U.; ZOFFI, Paola. *Organised crime around the world*. Helsinki: Heuni, (1998); TAILBY Rebecca. *Organised crime and people smuggling/trafficking to Australia*. Australian Institute of Criminology. Trends & issues in crime and criminal justice no. 208, Australian Institute of Criminology 2001. Available at: <http://www.aic.gov.au/publications/current%20series/tandi/201-220/tandi208.html>.

<sup>314</sup> LENGNICK-HALL, Cynthia A. and BECK, Tammy E. “Adaptive fit versus robust transformation: How organizations respond to environmental change”. *Journal of Management*, 2005, 31.5: 738-757.

Differences between legal and illegal organizations have implications for their resilience characteristics. Some of their sources of vulnerability differ, as the final product places certain constraints on how an illegal organization can react to changes in the economic environment compared to a legitimate business<sup>315</sup>. For example, both types of organization are vulnerable to competition and both are also under pressure to service the market efficiently, to satisfy demand and to ‘stay ahead of the game’ through new product provision and technological improvements<sup>316</sup>. On the other hand, criminal organizations find themselves operating in markets where the state can act as simple antagonist through enforcement activities or also as a market competitor.

### **Case Study 2: Multilevel Structure of Criminal organization<sup>317</sup>**

*29 January 2013, a total of 103 persons were arrested throughout Europe as members of a large criminal organization facilitating illegal immigration. 10 European countries and EULEX (European Union Rule of Law Mission in Kosovo) were involved in this joint action, which was supported and coordinated by Europol. In the first hours of the intervention the suspects were arrested in **Croatia, Czech Republic, France, Germany, Greece, Hungary, Poland, Slovak Republic, Turkey and Kosovo region, Switzerland and Austria***

*All the arrested members are suspected of being involved in the facilitation of a large number of illegal immigrants into and within the European Union mainly via Turkey and the Western Balkan region<sup>318</sup>.*

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<sup>315</sup> Traditional-hierarchical criminal organizations featured a lesser degree of resilience and arresting the low-ranked would often lead to the leaders of the organization. See PAOLI, Letizia. “The paradoxes of organized crime”. *Crime, law and social change*, 2002, 37.1: 51-97.

<sup>316</sup> DEAN, Geoff; GOTTSCHALK, Petter; FAHSING, Ivar A. *Organized crime: policing illegal business entrepreneurialism*. Oxford University Press. 2010; GOTTSCHALK, Peter. *Knowledge management in policing: Enforcing law on criminal business enterprises*. Hindawi Publishing Corporation. 2009.

<sup>317</sup> Source: EUROPOL, 2013. Available at: <https://www.europol.europa.E.U./content/major-people-smuggling-criminal-network-dismantled-across-europe-103-suspects-arrested>.

<sup>318</sup> The illegal migrants were recruited mainly in Afghanistan, Iraq, Pakistan, Syria and Turkey by the criminal network, which was using various *modi operandi* to smuggle them into and within the E.U. The migrants were often smuggled in inhuman and dangerous conditions, such as in very small hidden compartments in the floor of buses or trucks, in freight trains or on boats. In some cases falsified travel documents were used by the migrants. Marriages of convenience were also used as a *modus operandi* to regularise their status in the E.U.

*This is one of the largest coordinated actions against people's smugglers made at a European level, involving more than 1,200 police officers.*

*The operation led to **117 house searches and searches of other properties**, where mobile telephones, laptops, bank statements, a semi-automatic rifle and more than 176,500 EUR in cash were seized.*

*In September 2011 Austria and Hungary launched a joint response to the significant increase in illegal immigration into their countries by **establishing the Project FIMATHU** (Facilitated Illegal Immigration Affecting Austria and Hungary). The common goal of the Project FIMATHU is to tackle the facilitators of illegal immigration operating via the Western Balkans as well as in other European countries.*

The wide range of the operation directly relates to the high degree of task division and decentralization of the operations carried out by the criminal organization. This shift permitted the organization to quicker adjust to the different target markets, ensuring at the same time a higher level of resilience to law enforcement<sup>319</sup>. Multilevel modern networks differentiate the operations from the core, counterbalancing successful enforcement actions with a high degree of resilience of the organization, which often results in a simple displacement of the illegal (in this case: smuggling) activities from a place to another. This case also contradicts the studies which argued that illegal immigration was a crime mainly dealt by small scale syndicates<sup>320</sup>. The case proposed features an organization operating in 10 different countries, with more than 100 high specialized members equipped with weapons and modern systems of communication.

The criminal organization was efficiently dismantled by a successful joint enforcement action involving different countries which paralleled their operations to tackle the resilience capability of the criminal organization, narrowing at the same time the possibility for a quick recover. The key features of the operation involved a large

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<sup>319</sup>At the same time, differences in domestic legislation between the countries involved in the smuggling are exploited by smugglers which were moving some of their activities into countries featuring lesser controls.

<sup>320</sup> UNITED NATIONS OFFICE ON DRUGS AND CRIME. *The globalization of crime: A transnational organized crime threat assessment*. United Nations: New York, 2010.



parallel operation involving 10 different countries to weaken as much as possible the organization resilience; the establishment of the FIMATHU project, joining 12 countries to provide mutual assistance to the participant states and coordinating joint operations. The project was able to coordinate more than 1,200 police officers to keep their investigation, information exchange and enforcement parallel.

### **Third capability: Dealing with time pressure**

By raising the probability of apprehension, tighter border enforcement, requires criminal organizations increases the costs for the smugglers, who in turn pass the increase in cost to their clients in the form of a rise of the price for migrating illegally<sup>321</sup>. One possibility to avoid detection is to proceed in such a fast fashion that their routes are not discovered by enforcement agencies. Such time pressure determines their attitude on taking advantage of money making opportunities more quickly than a legal entrepreneur. Shocks in the market may imply economic losses for the criminal organizations but also opportunities to exploit at either the local or global level.

For a criminal enterprise running an illegal business “time” can be a key vulnerability, as both competitors (other criminal organizations operating in the same market) and the police try to take it down. Since a criminal organization has less time to run its business when controls are higher, getting a criminal business going and growing faces a higher time pressure, involving decisions under conditions of entrepreneurial risk that can be subjected to great variations on a daily basis.

### ***Case Study 3: A simultaneous enforcement action to dismantle a human smuggling ring***<sup>322</sup>

***17 February 2012: Six people have been arrested by the local police in France, Greece, Belgium and the UK. The operation, codenamed***

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<sup>321</sup> See *supra*, Fig. 2.4.3, p. 64.

<sup>322</sup>Source: Eurojust, 2012. Available at: <http://eurojust.europa.E.U./press/PressReleases/Pages/2012/2012-02-17.aspx>.

*“Operation Pakoul” was carried on for nearly one year where international police and judicial authorities directed a joint operation against a criminal network smuggling illegal migrants from Afghanistan to Europe.<sup>323</sup>*

*The investigation was initially led by the French Police (Police aux Frontières). Once many links with other Member States were discovered, **investigators from Greece, Belgium, Germany and the UK collaborated on the case.***

*The police operation started on the morning of 14 February 2012 at 07:00 (Central European Time) and resulted in several arrests. During **the simultaneous** operation, two suspects were arrested and interviewed in France, one in Greece, two in Belgium and one in the UK. A large number of searches were conducted at the residences of the main suspects at various locations.*

*A Coordination Centre in The Hague was set up to support the **simultaneous arrests** and subsequent **interviews**, and house searches in the four Member States involved. Two Europol Mobile Offices in Lille and Athens were employed to provide live support during the operation.*

Parallel enforcement actions conducted by joint international police have the best probability of success if undertaken simultaneously, to compromise networks while tackling the criminal organizations resilience. Successful enforcement can often limit the possibility of developing other latent functional connections in a short period of time and thus rebuild most of its original operational potential before long<sup>324</sup>. The case of “Operation Pakoul” shows the importance of the simultaneity of the police intervention which narrowed the organization possibility of a spatial shift or capitals redirections.

Time is a crucial capability for organizations which operate in an illegal market to beat

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<sup>323</sup> The migrants paid on average 10.000 Euros to be transported via Turkey, Greece and France to the UK, or from France via Germany to Scandinavia. The smuggling ring, consisting mainly of Afghan nationals, also employed Kurdish and Lithuanian facilitators with an overall profit of approximately 18 million Euros per year.

<sup>324</sup> KLERKS, Peter. “The network paradigm applied to criminal organizations: Theoretical nitpicking or a relevant doctrine for investigators? Recent developments in the Netherlands”. *Connections*, 2001, 24.3: 53-65.

competitors and evade enforcement. The strategic point of this case is the increased time pressure put on the criminal organization by the joint use of police forces and international cooperation, plus the simultaneous action of arrest and interview. Finally, the live coordination and support of the activities of financial intelligence played a major role by preventing the redirection of capitals to other activities, leading to the dismantle of the criminal organization.

#### **Fourth capability: Profit Maximization**

Criminal organizations focus on the maximization of the safety margin, which is defined by economists as the markup of an organization's actual sales revenue over the costs to be sustained<sup>325</sup>. Since criminal organizations operate in high-risk contexts, the safety margin can also be defined as the minimization of the entrepreneurial risk, which is aided by the development of illicit business strategies.

The shift in production locations closer to target markets suggests that crime organizations have become extremely adaptable in profit-maximization strategies, and criminal organizations can be assumed to behave in a way analogous to legal enterprises. Every interaction between the criminal organization and the smaller nodes of the network can be compared to business-relations aimed at profit maximization<sup>326</sup>. Therefore, parts of the earnings of the criminal organizations are re-invested by purchasing new technologies, hiring new personnel, and/or by further differentiation of its structure to improve productivity and future earnings.

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<sup>325</sup> FELLNER, William. "Average-cost Pricing and the Theory of Uncertainty". *The Journal of Political Economy*, 1948, 56.3: 249-252.

<sup>326</sup> In these relations profit equals revenue minus cost and focuses on maximizing this difference, and this perspective is based on the fact that total profit reaches its maximum point where marginal revenue equals marginal cost. To maximize their profit, the organizations would charge a price for their services (single trips, forge of fake documents which include special offers such as discounts on "full packages") to cover unit cost.

#### **Case Study 4: Illegal immigration in the UK: cash intensive profit maximization strategies<sup>327</sup>**

*In 2005, the UK Police arrested five subjects with charges of conspiracy to facilitate a breach of immigration law and money laundering.*

*The organization was smuggling the illegal immigrants from Turkey into the UK by motor vehicles, trains and light aircrafts. In 2006, the subjects were sentenced to lengthy prison sentences and they later received confiscation orders totaling over GBP 1,260,000. The fee charged per immigrant was ranging from GBP 3,500 for a channel crossing and up to 14,500 EUR from Turkey across Europe, covering the transport cost, the cost of the false documentation to enter UK and the cost of accommodation on arrival. It is estimated that over 20,000 immigrants were smuggled into the UK by this group of individuals. The UK police finally discovered and successfully dismantled the structures employed by the organization to invest the earnings and maximize their profits.*

##### ***Use of legitimate cash generating businesses***

*Kebab shops and takeaway outlets were acquired to launder the criminal funds. These businesses were then operating under Limited Companies that were controlled by third-persons (usually family members). New Limited Companies were created every few years and new company officials were appointed to give the impression of a new business. Large part of the profits by the organizations were by way of cash and therefore not traceable. Assets (such as the kebab shops and take away outlets) were also acquired using cash<sup>328</sup>. Finally, money was transferred by moving small amounts of money through multiple bank accounts using the subjects' names, or alias identities and family members.*

The case above displays the main criminal organizations profit-maximization strategies, as well as the techniques adopted to conceal the flows of money from law enforcement. Here, the safety margin of the organization is re-invested in the opening of limited companies used to launder the criminal funds. This re-investment is realized through the

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<sup>327</sup>Source: FATF/GAFI. Available at: <http://www.fatf-gafi.org/media/fatf/documents/reports/Trafficking%20in%20Human%20Beings%20and%20Smuggling%20of%20Migrants.pdf>

<sup>328</sup> This method makes it difficult to prove that criminal funds were laundered through the business accounts, since the subjects of the criminality appear not to be directly involved in the businesses. It is also difficult to apportion beneficial interest in company assets.

purchase of small assets using cash, such as limited companies, the use of multiple bank accounts, funds layered through various personal, business and family/associate accounts to conceal the source. There is also a wide use of cash, including for purchasing the assets of the businesses to evade controls. The money is also sent by using multiple bank accounts and through money remitters to common recipients in third countries, with frequently repeated cash payments in and out of the account. Front companies are also used.

The key features of the operation which dismantled the criminal organization included an intensive financial intelligence activity which involved the record of suspicious transaction reporting requirements by financial institutions and designated non-financial businesses and professions. This enabled UK authorities to confiscate the proceeds of money laundering, the implementation of customer due diligence (e.g., identity verification), as well as the efficient cooperation with E.U. and Turkey in investigating and prosecuting smugglers.

## **Conclusions**

The traditional way to put an end to a criminal organization was to arrest the leaders, thereby incapacitating the lowest ranks, unable to initiate any substantial criminal activity by themselves. The new criminal enterprise operating in the illegal immigration market has become more difficult to disrupt, due to a higher level of resilience and resistance to disruption, which matches its structural evolution. These renewed organizations feature a quicker-recovering capability, locked in combat with governments that, by contrast, are often hobbled by a variety of legal constraints. Modern criminal organizations react quickly and effectively to measures such as interdiction efforts, in the same way as they react to variations in the market, for example by moving their operations to another venue or finding new modes of concealment and deception.

There are different measures that can be undertaken by governments and law enforcement agencies to respond more effectively to the challenges posed by these

renewed criminal syndicates. Any effective enforcement activity should target the facilitators of illegal immigration with a clear focus on objectives and enhanced intelligence assessments<sup>329</sup>. Effective enforcement actions should concentrate their efforts on the supply of illegal migration, exploiting the key vulnerabilities which have been described in this paper. From the analysis of the case-studies, we can summarize three main areas of intervention which focus on the supply of illegal immigration services:

*i) Tackle the financial capability*

Capitals are of vital importance for the criminal organization placement and development. Thus, capitals are used for the task specialization and the differentiation of the structure of the criminal organization (acquisition of new operative smugglers, decentralization of the activities and shift to new markets), and for its profit-maximization (reinvestments into the licit economy). At the same time, criminal organizations have to conceal their money transfers adopting techniques such as the use of cash, multiple transfers of small amounts of money through remittance services, *hawala systems* and front companies.

An effective enforcement strategy should make the pursuit of new capitals for illicit businesses more difficult<sup>330</sup>. Cases 1 and 4 show how the development of efficient systems of alert and identification of suspect money flows through an efficient collaboration with financial action task forces can help on this regard. Developed methods of chain investigation and capital-tracking are crucial to trace the links to further actors and bank accounts where capitals could be redirected.

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<sup>329</sup> The objectives can range from a general creation of instability in the environment where the network operates to direct attacks on the organizations itself that are aimed at disruption of its activities, displacement of its activities, or even its complete disposal.

<sup>330</sup> This would involve the implementation of methods for monitoring money laundering and counter corruption in the countries of departure involved in migrant smuggling (with a particular attention to the “transit countries”). Bilateral agreements between native and destination countries in order to reduce the possibilities of illegal migration already at the departure, strategies of crime enforcement against crimes such as drug smuggling that usually provide money to criminal organizations also facilitating illegal immigration.

*ii) Increase the time pressure to reduce resilience*

Timing is at the basis of the activities of the criminal organizations, and the better the timing, the more reduced the entrepreneurial risk. Migrant smugglers operate in an illegal market and so they have to maximize their profits (the number of “units” produced, e.g. number of people smuggled) in the smallest amount of time, both to avoid law enforcement and competitors. Less time to operate implies more risks to be taken, which will result in an increase of the price which will have in turn decrease the demand. Hence, the increase of time pressure over criminal organization revealed itself to be one of the most effective strategies in the cases analyzed. Cases 2, 3 and 4 show how the paralleling of the police operations among the different countries led to successful joint enforcement actions which damaged the resilience capability of the criminal organization, narrowing its possibility for a quick recover.

Time pressure also gives less time to a criminal organization to react to potential threats to its stability. Reducing a criminal organization’s resilience may be achieved through the shrinking of its stability domain. For example, offender convergence settings might be identified and disrupted, and the organization’s network could be reduced by effectively addressing the community’s financial and social needs through partnerships between law enforcement and other agencies.

*iii) Parallel and simultaneity of the operations*

The facilitation of illegal immigration has a transnational nature. Thus, all the cases of illegal immigration involve the transfer of human beings from a country to another. Cases 1 and 4 are examples of successful collaboration between financial intelligence and police authorities, which also feature the establishment of international enforcement task-forces, such as the FIMATHU project. For this reason, the importance of international operations targeting criminal networks facilitating illegal immigration through the establishment of joint forces and projects such as the FIMATHU. The objective is to maximize the operational value of information held by the different local

policies and to streamline the delivery of analysis and other operational services. The evidence provided in this thesis confirms the importance of international collaboration, as all the cases provided featured the efficient cooperation between financial intelligence, local police and international enforcement agencies such as Europol (cases 3 and 4). Cooperation between Member States in identifying common information gaps and investigation priorities is essential considering the transnational nature of illegal immigration.

The proposed actions increase the entrepreneurial risk of the criminal organization. Coherently, an increase of entrepreneurial risk corresponds to a diminution of the safety margin earned by the provision of service “illegal border crossing”. However, the benefits of efficient activities of enforcement go well beyond the simple arrest of the organizations members. Thus, an important decrease on the safety margin of a criminal organization could also lower its earnings up to the point of forcing it to exit the market, or to redirect its activities to other illegal sectors or to the licit economy<sup>331</sup>.

However, many steps have still to be undertaken by the governments. Effective enforcement actions should not only target the demand, but also the supply of illegal migration. First of all, an efficient enforcement strategy should make the search for new capitals for illicit businesses more difficult. This would involve the implementation of methods for monitoring money laundering and counter corruption in the countries of departure involved in migrant smuggling (with a particular attention to the “proxy countries”). Bilateral agreements between native and destination countries in order to reduce the possibilities of migrating illegally already at the departure, and enforcement strategies of the crimes which provide capitals to criminal organizations facilitating illegal immigration (such as drug smuggling). The new criminal enterprises operating in the illegal immigration market became more difficult to be disrupted, due to their high level of resilience and resistance to disruption, a product of their structural evolution. The renewed organizations are flexible and quick, locked in combat with governments that, by contrast, are often hobbled by a variety of legal constraints. Horizontal

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<sup>331</sup> ARONOWITZ, Alexis A. “Smuggling and trafficking in human beings: the phenomenon, the markets that drive it and the organisations that promote it”. *European Journal on Criminal Policy and Research* 9.2, 2001: 163-195; RUGGIERO, Vincenzo. “Trafficking in human beings: slaves in contemporary Europe”. *International Journal of the Sociology of Law*, 1997, 25.3: 231-244.



networks react quickly and effectively to measures such as interdiction efforts in the same way they react to variations in the market, for example, moving their operations or find new modes of concealment and deception.

Indeed, different are the measures that can be undertaken by the governments and law enforcement agencies to respond more effectively to the challenges posed by these renewed criminal syndicates. Any effective enforcement activity should begin with a clear focus on objectives and enhanced intelligence assessments. The objectives can range from a general creation of instability in the environment where the network operates to direct attacks on the organizations itself that are aimed at disruption of its activities, displacement of its capabilities, or even its complete disposal. Improved methods of prediction of illegal immigration flows are crucial to improve the activity of intelligence and to increase the time pressure on the criminal organizations. That would certainly make operations more difficult, at the same time leading criminals to errors which can result in arrests of persons involved and a general degradation of their network. Less time to operate would imply more risks to be taken by the criminals, and this would result in an increase of the prices which would have a decreasing effect on the demand. Time pressure also gives less time to a criminal organization to react to potential threats to its stability.

Reducing the degree of stability of a criminal organization is the main focus in order to tackle its resilience. An organization's internal sources of resilience should be identified by police intelligence which can later devise creative responses. The sea transportation skills that certain gang members have, currently directed to the criminal organization's adaptation to the environment, for example, might be encouraged and redirected into legitimate employment.

All the proposed activities are aimed by the general goal of increasing the costs to be sustained to earn profit while decreasing the safety margin of a criminal organization, meaning also an increase of the entrepreneurial risk which has been described in the previous paragraph. At the same time, it is important to focus on the empirical research explaining how criminal organizations facilitating illegal immigration respond to different law enforcement initiatives and to economic cycles, as this thesis has tried.

Finally, when trying to find precise information about the involvement of any organization into illegal immigration, irrefutable evidence is hard to find. A good understanding of the little data available remains of vital importance to provide policy makers with the basis needed to develop effective criminal justice responses. It is difficult to integrate data from different sources, even though they would complement each other and undoubtedly provide a valuable insight into the crime phenomena in support of the criminal justice response. Reliable cross-national data is important to be able to conduct meaningful in-depth comparative analysis capable of supporting evidence-based policy making and an accurate intelligence activity which can spot the networks of these criminal organizations. In addition to poor availability in general, there is a huge geographical imbalance in data availability. Considering the differences in political priorities and technical capacity between various countries, it comes as no surprise that valuable information on organized crime involvement in trafficking in persons or smuggling of migrants is mostly confined to more developed countries.

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