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# FOREIGN INVESTORS FROM EMERGING ECONOMIES: THE GEOGRAPHY OF TURKISH INVESTMENTS IN ROMANIA

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**Abstract**: This study investigates the main characteristics and patterns as well as the geographical distribution of Turkish investments in Romania. The study found that Turkish investors came in three different waves, each with its own characteristics and geographical distribution. Most of the Turkish investments were found to concentrate in the southern part of Romania which is closer to Turkey suggesting the importance of geographical and cultural factors in location decision. The study also found that Turkish investments cluster not only in some more developed counties (such as Bucharest or Ilfov) but also in some counties which may qualify among the poorest in Romania.

**Key words**: FDI, geographical distribution, internationalization theory.

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## INTRODUCTION

The literature on the geography of foreign direct investment (FDI) in the transition countries of Central and Eastern Europe has proliferated over the last 20 years. However, most of the published studies are on the more developed countries from Central Europe, the so-called Visegrad Group, that includes Czechia, Slovakia, Hungary, and Poland (Pavlinek, 1998; Pavlinek and Smith, 1998; Murphy, 1992; Michalak, 1993; van Hastenberg, 1999; Jermakowicz, 1995; among many others) and the countries of the former Soviet Union (Zimin and Rautio, 2012; Bradshaw, 2002, 1997; Johansen et al., 2000) while the study of FDI in Romania has not received adequate attention from geographers (Guran-Nica, 2002.

FDI refers to the situation in which an investor residing in a country acquires at least ten percent of the ordinary shares or voting powers of an enterprise situated in a different country (IMF, 2003). The foreign direct investor plays an active role in the enterprise and has total control of the acquired shares even he does not control the entire company (Jermakowicz, 1995). The FDI that is entering the country is referred to as inward FDI and the FDI that is leaving the country is recorded as outward FDI.

Countries are competing to attract more FDI for the numerous advantages they are supposed to bring to host countries, such as investment capital and jobs (Dicken, 2011). Putting this issue in the context of Central and Eastern Europe, it is argued that attracting FDI could stimulate economic growth in the less developed regions in Central and Eastern Europe (Neuhaus, 2005). Moreover, in the case of Central and Eastern Europe, FDI has also played an important role in the economic, political and social transformation of this region, 'creating deep systemic changes in the fabric of post-socialist lives and geographies' (Pickles and Smith, 2005, 28).

Until 2004, FDI flows to Romania had been limited, especially when compared to other countries in Central Europe. In 2004 annual inward investment exceeded US$3 billion (from less than US$1.3 billion in 2003). This growth continued until 2008 (almost US$6 billion) after which, due to the world economic crisis it started to decrease. In 2012, the total amount of inward FDI was US$3.68 billion (National Trade Register Office, 2013).

**HISTORICAL OVERVIEW**

Before 1980 the organization of the Turkish economy was based on import substitution industrialization. This basically generated a closed economy in which imports were discouraged by high tariff- and non-tariff-barriers (Selekler-Gökşen and Uysal-Tezölmez 2007. After 1980 Turkey has made important steps towards joining the globalization movement (Central Bank of the Republic of Turkey, 2002) and the economy has since become increasingly dependent on foreign trade (Erdilek, 2003). In terms of integrating into the global FDI flows, however, the process has been much slower than in other emerging economies (Erdilek, 2003). Until very recently inward FDI flows lagged behind due to a multitude of economic and non-economic reasons. Among these factors the most important were: excessive bureaucracy and red tape, corruption, high inflation rates, weak and unpredictable legal system, economic instability, problems with the protection of intellectual property rights, the use of internationally unacceptable accounting standards, failures in the privatization process, political instability and internal conflicts, and distrust of foreign economic presence (Erdilek, 2003, 80, 83). However, the situation changed dramatically after the Justice and Development Party has become the sole governing party in 2002 as this party openly favours an increased role of FDI in the economy (Erdilek, 2003, 92).

On the other hand, the same unfavourable economic and political factors that discouraged foreign companies from investing in Turkey are, partly, responsible for the increasing out-migration of the Turkish capital (Kaya, 2009; Erdilek, 2003). Previous studies have found that the entry strategy of Turkish companies is dependent on the level of uncertainty of the host economy and on the cultural differences that exist between the home and the host economies (Anıl Keskin et al., 2012).

At the other end, the changes affecting countries in the former socialist sphere have provided great opportunities for the expansion of Turkish companies. The fact that these Turkish companies have developed during times of great economic and political instability provided them with great ownership specific assets that allowed them to operate successfully in transition economies such as the post-1990 Eastern European and Central Asian countries (Erdilek, 2003; Egresi and Kara, 2015).

Since 1989, Romania has undergone important political and economic changes. More than forty years of Communism had left deep scars on the Romanian economy and society. Private property had been almost completely eliminated and, more importantly, the spirit of entrepreneurship had been lost. Also, like other transition countries in the region, Romania lacked the necessary capital, technology and know-how to restructure its economy. Attracting foreign direct investment was seen as a legitimate way to solve this problem.

However, during the first years of the transition, companies and individuals from the more developed countries in Europe and North America were reluctant to invest in Romania because of political and economic instability and unpredictability. On the other hand, small investors from the Middle East and Turkey were among the few to know how to navigate these 'murky waters' and were willing to take the risk.

Based on primary and secondary data, this study takes a historical view to examine how Turkish foreign direct investment in Romania has evolved over the last 23 years to become one of the most important players in the Romanian economy. The evolution of the Turkish FDI is interpreted in the larger context of international investment flows into Romania. A special attention is also given to the analysis of the geographical distribution of Turkish FDI in Romania. We contend that historical links and cultural and physical proximity play an important role in the location decision of Turkish FDI in Romania.

Most theories on FDI (including Dunning's eclectic theory) are based on empirical evidence of foreign investors from advanced economies and may not adequately account for the experiences of foreign direct investors from developing countries. A number of recent studies have started to shed more light on the motivations and strategies of multinational companies from emerging markets (Kedron and Bagchi-Sen, 2012; 2011; Pradhan, 2011; Wang et al., 2012; Gattai, 2009) but more studies are needed to unpack the motivations and strategies used by these companies when investing in the transition countries of Central and Eastern Europe.

This study is structured as follows. In the next section we will shortly review the existent literature on the motivation for international investment and on the process of FDI expansion focusing on those theories which we believe are more relevant for the particular situation discussed in this study. Following this, we will discuss the methods we used to gather data and information. In the fourth section we will present an overview of Turkish investments in Romania and we'll examine their main characteristics. Finally, in the last section, we will summarize the main findings emphasizing the main contributions of this research and its theoretical implications.

## THEORETICAL FRAMEWORK

The first theories that tried to explain why investors decide to go abroad and how they select the location of their investment were developed in the 1960s (Hymer, 1976; among many others). Hymer (1976) noted that, when investing abroad, foreign companies have to compete with domestic firms in a business environment they are not familiar with and in very different legislative and regulatory conditions. Moreover, there are many other disadvantages when operating in an unfamiliar market such as: lack of knowledge about local traditions and customs, as well as local tastes, differences in the social and business behaviors and added operating costs due to distance. Thus, investing

abroad comes with certain costs and the decision to invest abroad is reached only when the advantages outweigh the costs. These advantages may include the size of the firm, the capacity to generate economies of scale, its market power and marketing skills, technical expertise or access to cheaper sources of finance (Hymer, 1976).

Although largely ignored in neo-classical economic accounts, non-economic factors are seen by some as critical in influencing the flow and direction of FDI. Buckley and Casson (1976) noted that not only geographical distance but also the existence of dissimilar environments leads to an increase in communication costs. By dissimilar environments the authors refer to different social and economic conditions as well as different languages. Due to these economic, cultural and social differences, communication between 'encoders' (those who transmit information) and 'decoders' (those who receive information) is more difficult, with misunderstanding requiring additional firm spending.

In this sense, a number of studies contend that FDI flows are more regional than global (Dicken, 2011) and that a high percentage of FDI actually comes from and flows to neighbouring countries (Lafourcade and Paluzie, 2005). This shows that, while a few large companies have expanded globally, most of the small and medium sized companies look more at the regional rather than global level when time comes to expand. Even within a country, foreign investors may have preferences for certain regions based on the level of familiarity with those regions (O hUallachain and Reid, 1992).

While some of the earlier theories pointed out the disadvantages of operating in a dissimilar environment which had to be overcome by firm-specific advantages they did not capture the reality that most internationalizing companies actually preferred to invest in countries and geographic locations with relatively similar environments where their investment faced fewer risks.

Reducing investment risks was especially relevant for companies investing in post-Communist Central and Eastern Europe. Most theories on internationalization of firms are based on models from the developed world where the change is, in general, slow and the markets are characterized by predictability. The Central and Eastern European markets, especially during their first decade of transition were characterized by quick and unpredictable changes. For this reason they were perceived as riskier than the western markets on which most internationalization models are based (Marinov et al., 2003). Here the human and cultural similarity factor between the company's home and host country or region was often considered more important than the company's ownership advantages.

This is in line with the main argument of the internationalization theory developed by Jan Johanson and collaborators (see, for example, Johanson and Vahlne, 1977) that foreign companies often invest in certain countries due to historical or cultural ties rather than economic efficiency. This model stated that, as a determinant of FDI, physical distance between home and host country is less relevant than psychic distance, which refers to cultural and linguistic communalities between home and host economies. According to this theory, firms start their internationalization in countries that are closest in psychic terms to the country of origin. They may then choose to enter more distant markets as they gather more information about them. The validity of this theory is supported by a great number of empirical studies that have clearly

emphasized the importance of cultural affinities between investors and host countries in determining FDI in Central and Eastern European countries (Altzinger, 1998; Paas and Scannell, 2001; Johansen et al., 2000; Bandelj, 2002; Lu, 2012; Gao, 2005; Meyer, 1998 and others).

Finally, the theory that tried to cover all facets of FDI is the eclectic theory. Formulated by John Dunning (Dunning, 1993; 2000), the eclectic theory is a blend of different theories on FDI circulating in the literature. It refers to the three types of advantages (ownership, location and internalization) that a company must possess, which added together determines whether the company will invest abroad or not[1]. Although earlier versions of the model paid less attention to the importance of psychic distance in explaining FDI location, later studies have incorporated the arguments of the internationalization theory into the model (Dunning and Lundan, 2008). Dunning and Lundan (2008: 93) thought that the internationalization model was "particularly suited to explaining the internationalization of relatively small and inexperienced from developing countries".

**DATA AND METHODOLOGY**

Data on FDI in Romania is collected by ONRC (Oficiul Național al Registrului Comerțului, or, in English, the National Trade Register Office), a governmental organization under the Ministry of Justice. The report received from ONRC was based on the financial data of a number of 4430 companies with Turkish capital of the total number of 11,520 that were registered between December 1990 and January 2010. Unfortunately, the statistical data received from the ONRC is somewhat flawed by the fact that the country of origin for each registered company is based on the origin of the capital. However, as is also the case with other foreign investors, many Turkish companies have invested in Romania through their foreign (especially Dutch) affiliates and therefore were registered as non-Turkish investments. In order to overcome these shortcomings we decided to corroborate the data received from ONRC with another set of data that we received from the Economic Office of the Turkish Embassy in Romania. This second set of data was a compilation of 761 Turkish companies operating in Romania as of October 2011. Benefiting from the input of the Association of Turkish Businessmen in Romania, the list also included those Turkish companies that invested in Romania through a third country. Although these 761 companies represent only 11% of the total active Turkish investments in Romania, they explain more than 97% of the total amount invested by Turkish firms in Romania.

[1] The ownership advantages (or firm specific advantages) are based on the competencies and assets (e.g., technology, brand name, monopolistic advantages) that a company possesses that will allow it to overcome the costs of operating in a different country and to compete successfully with domestic firms. These advantages must allow foreign companies either to earn more at comparable costs or to have the same revenues as domestic firms but at lower costs. Location advantages (or target country specific advantages) can be broken down into three categories: economic, social, and political. The costs of operating in that country (market size, labor costs and quality, transportation costs, etc.) represent the economic advantages. The socio-cultural aspect is more complex and includes: general attitudes of population towards foreigners, language, cultural match between the investor's country and host country, and perceived distance between home and the host country. Political factors refer to central and local government policies that could influence inward FDI flows. Finally, the internalization advantages determine the form through which multinational enterprises decide to venture abroad. This can happen through exports, licensing, franchising, minority joint venture, or wholly owned subsidiaries. The company weighs the benefits and the costs of entering a foreign market through each of these modes and selects the most profitable. The company will choose to internalize its production when this is more advantageous than exporting or licensing.

To supplement the statistical data, we have used a range of secondary sources of data such as newspaper articles, interviews with Turkish businessmen and with the leadership of the Association of Turkish Businessmen in Romania published both in Romanian and Turkish media.

**TURKISH FDI IN ROMANIA**

The National Trade Register Office (2010) has recorded a number of 11,520 Turkish investments in Romania between December 1990 and January 2010. This represents 6.82% of all companies with foreign capital, Turkey ranking third in terms of the number of FDI. Turkish investments in Romania amount officially to over 765.5 million USD which represents approximately 2% of the total amount of FDI in Romania over this period of time. By this criterion Turkey ranks the 13th among the investing countries in Romania. However, other sources contend that, unofficially the total amount of Turkish capital invested in Romania, including the FDI invested through third countries, must be over two billion USD (Voiculescu, 2012).

Turkish investors came to Romania in three distinct waves (Constantin et al., 2010). The first wave arrived immediately after 1990 and was represented by individual investors with modest capital invested into small ventures mainly in the area of retail, restaurants and other services (Constantin et al., 2010). The year when the greatest number of Turkish investments (950) was registered is 1992 (National Trade Register Office, 2010). Turkish investors gained from the first mover advantages as western investors hesitated to invest during the first years of transition due to the high levels of uncertainty that accompanied those economic and political changes. The small Turkish investors were not intimidated by the ever changing legal framework, high levels of bureaucracy or the difficulty to obtain any licenses or permits as they have experienced the same problems in their country and knew how to deal with them (Culpan and Akcaoğlu, 2003). In 1995, more than 35% of the total amount of Turkish investments in Central and Eastern Europe (including the former Soviet Union countries and the Balkans) was in Romania (Culpan and Akcaoğlu, 2003)!

The second wave of Turkish investors arrived to Romania a few years later encouraged by the business success of the first entrepreneurs. These had more previous experience, better access to capital, better connections in the business world and more financial power. They invested in a variety of economic sectors from retail and wholesale to manufacturing and finance (Constantin et al., 2010). Many of these investors possessed considerable experience gained in other developing countries such as the Middle East, Libya and Pakistan and have hired inexpensive, but very talented, western educated managers and engineers (Culpan and Akcaoğlu, 2003).

The third wave of investors started coming to Romania after 2001. This year Turkey was affected by a financial and economic crisis that forced many potential investors from Turkey to postpone or even cancel their investment projects in Romania. After this year a considerable number of Turkish investors arrived from western European countries (Germany, Holland, Luxembourg, France) where a significant number of ethnic Turks has been residing for decades (the so-called Euro-Turks). Having considerable managerial experience and buying power these investors have invested in large projects throughout Romania (Constantin et al., 2010).

While the global financial crisis may have affected the businesses of Turkish investors in Romania very few have withdrawn from the market; on the contrary, many more prepare to come (Voiculescu, 2012; Scărișoreanu, 2012; Berg, 2012).

**GEOGRAPHICAL CHARACTERISTICS OF TURKISH FDI IN ROMANIA**

The main characteristic of Turkish FDI in Romania is related to its geographical distribution. The inward FDI stock is distributed very unevenly across the country with most of it being absorbed by the city of Bucharest (46% or 56% together with the small Ilfov County which surrounds it). This is not surprising as capital cities concentrate an important percentage of the country's population, represent the main economic centre, the main research and education centre and have the largest pool of skilled labour in the country. A significant number of Turkish investors are also found in Constanța County (1504) which has a sizeable Turkish minority (40,734 or 83.7% of the total number of Turks and Tatars in Romania) (figure 1).

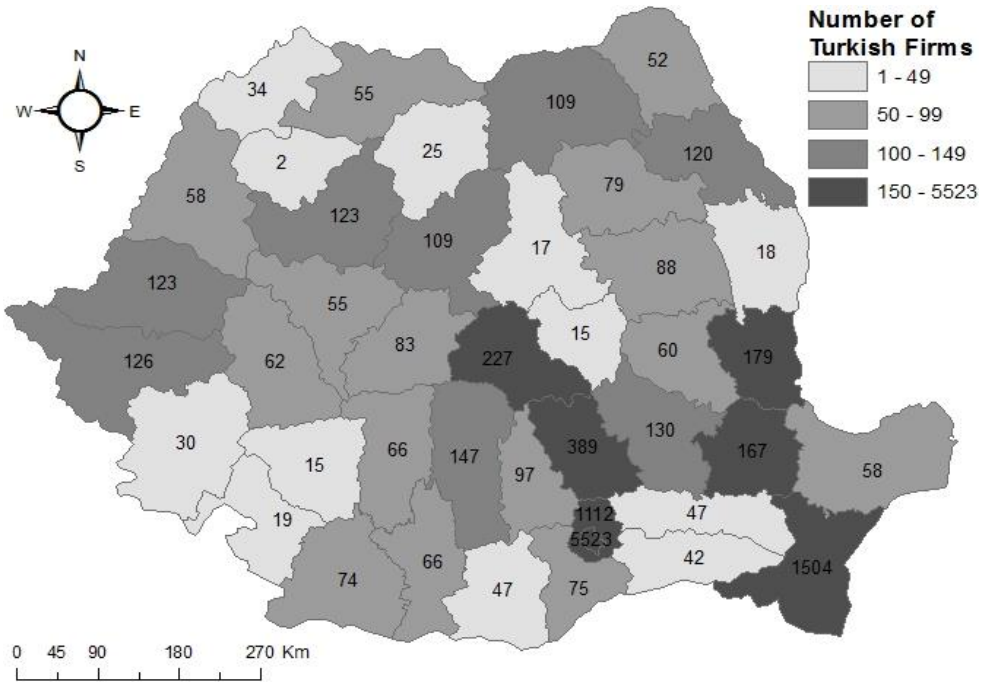


**Figure 1**. Turkish firms in Romania
(Source: National Trade Register Office, 2010)

Turkish-owned firms are present in all counties and regions but are concentrated in the Southern and Eastern counties. This is visible even clearer when we calculate the location quotients[2]. These are highest in Constanța (3.97), Ilfov (3.19), Brăila (3.00) and Tulcea (2.10) counties (all in the south and southeast; see figure 2).

[2] We used the following formula to calculate the location quotient: LQ =(t/i)/(T/I), where *t* represents the number of Turkish investments in the county, *i* is the total number of foreign investments in the county, *T* represents the total number of Turkish investments in Romania and *I* refers to the total number of foreign investments in Romania.

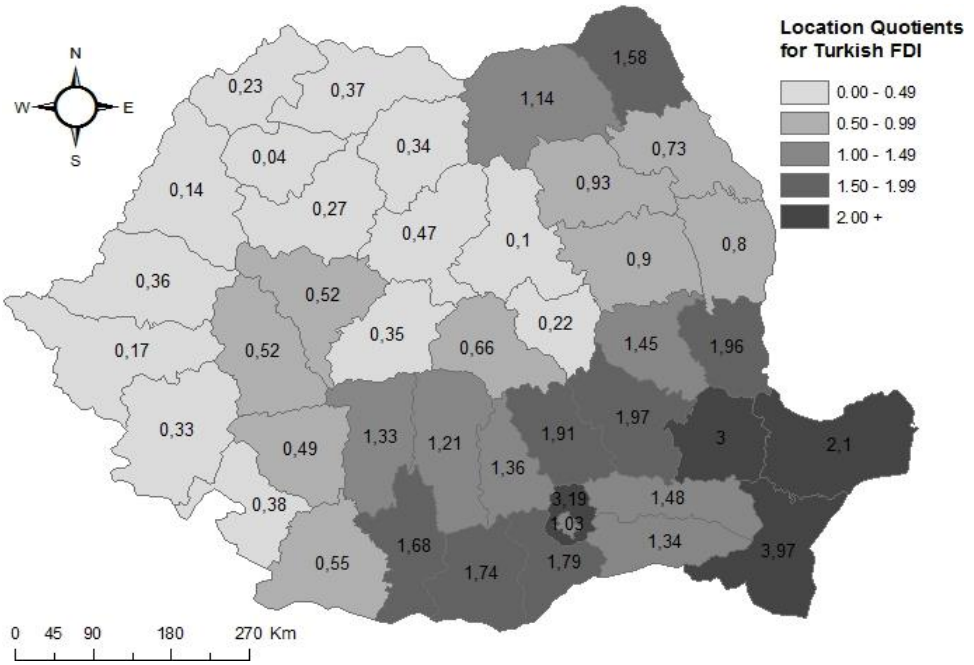


**Figure 2**. Location Quotients for Turkish FDI
(Source: National Trade Register Office, 2010)

We have also hypothesized that the number of Turkish investments in each county is correlated with the number of Romanians of Turkish ethnicity residing there. However, when we tested the relationship between the two using the Pearson correlation coefficient (r) we found no significant correlation (r = .277). Still, Constanța County, which concentrates more than half of the Turkish and Tatar minority population in Romania, has received the highest number of Turkish investments after Bucharest (1504). An important number of Turks and Tatars also live Bucharest (2388 or 4.9% of the total number of Turks and Tatars living in Romania). However, Tulcea County (4.25% of the total Turkish and Tatar population) has received relatively few Turkish investments.

Still, while the correlation may not be statistically significant it is easy to see in figure 2 that the highest LQ are in the counties situated east and south of the Carpathian Mountains which had been under the Ottoman suzerainty for five centuries before becoming independent towards the end of 19th century. On the other hand, the counties in Central and Western Romania, historically associated with Austria-Hungary, display low location quotients for Turkish FDI.

## DISCUSSION, THEORETICAL IMPLICATIONS AND CONCLUSIONS

The purpose of this study was twofold. Firstly, it intended to shed more light on the internationalization process of companies from emerging countries. Secondly, it proposed to examine the dynamics, the geography and the characteristics of those companies in a transition economy. Most theories explaining the reasons behind and the process of internationalization of companies through FDI are based on empirical studies from the developed world because, for many years, only companies from the developed world had the

motivation, the capacity and the means to expand internationally. Yet over the last two decades the share of FDI from the developing countries in the global outward FDI has constantly increased (Dicken, 2011). However, within the developing world a small number of so-called 'emerging economies' concentrate the bulk of the outward FDI.

The classical theories may not be able to fully explain why and how companies from emerging markets internationalize or how they decide where to expand. Considering the very different characteristics of emerging economies it seems plausible to assume that the companies from there may have different motivation for internationalization and display different characteristics. Another situation where the classical FDI theories may not fully work is that involving transition economies. In the early 1990s, after the fall of Communism, these countries were in dire need of foreign direct investment and were offering, in exchange, to the potential investors a market that was virtually free of competition and a labour force that was highly qualified and cheap. Yet, at a time when outward and inward FDI was growing rapidly in the western world, direct investors from developed countries were quite reluctant to invest in an unknown and politically unstable market.

The void was filled by small private and family-run companies from Turkey and the Middle East. They were driven by the difficulty of doing business in their countries where decades of protectionism have led to the creation of very large and powerful business groups which controlled all economic sectors and made the existence of small companies or the start of new ones very difficult. On the other hand their entry to the competition-free Romanian market was very easy as Romania had very low capital requirements for foreign investors and did not require visas to enter the country. The main ownership advantage of these small investors from Turkey was that they knew how to navigate in a politically and economically unstable environment.

After the 2001 financial crisis many Turkish companies have understood that their only chance to survive would be to grow outside the national borders. While the majority has decided to invest in Western Europe and North America in order to gain access to know-how and western brands, the privatization of a series of large state-owned companies in Romania has offered a great opportunity for market expansion at a very reasonable price. Also, the several agreements signed between Romania and Turkey as well as the existence of numerous Turkish- Romanian associations have facilitated cooperation and have enhanced trade and investment.

Moreover, in 2004 Romania joined NATO and was accepted to join the EU. The adoption of the *acquis communautaire* has offered more predictability of the market which attracted some of Turkey's largest companies. By investing in Romania Turkish investors also had the prospect of serving the entire EU from their Romanian base. After 2004 many Turkish investments started to arrive from third countries (mainly from the Netherlands or from another country in the EU).

Also, most of these investments are concentrated in the southern part of Romania which is closer to Turkey. The Southern and Eastern part of Romania had been under Ottoman suzerainty for centuries before independence in 1878 and a small Turkish and Tatar community has survived in two or three counties in the southeast so there are also historical and cultural linkages to consider. The larger investments coming via third countries during later stages are less to display this model.

Another interesting observation is that, contrary to the findings of most studies on Eastern and Central Europe (Pavlinek 2004; Pavlinek 1998; Pavlinek and Smith 1998; Rautio and Tykkylainen 2001), foreign direct investments from Turkey do not seem to correlate with the level of economic development. Turkish investments cluster not only in some more developed counties (such as Bucharest, 57,285 lei GDP/capita, Ilfov with 41,348 lei, Braşov 27,522 lei, Constanța 27,068 lei and Prahova 24,595 lei) but also in some counties which may qualify among the poorest in Romania (Brăila 19,073 lei, Galați 15,893 lei and Buzău 15,893 lei) (RNIS 2010). When the location quotient is considered this situation is made even clearer. The more developed counties in the West (GDP/capita: 25,602 lei), North-West (21,297 lei), and Centre (22,618 lei) display very low location quotients. Even in Bucharest, the LQ is around 1. On the other hand, the poorer counties in the North-East (14,649 lei per capita), Southeast (18,739 lei) and South (19,913 lei) seem to be more important for the Turkish investors. This situation could be explained in two ways. Firstly, for the Turkish investors the non-economic factors may have been more important than the economic factors. Secondly, these counties in the east and the south have been less attractive to foreign investors from elsewhere and even for domestic investors; therefore, Turkish investors faced less competition here.

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# THE ROLE OF SOCIO-DEMOGRAPHIC, ECONOMIC AND ENVIRONMENTAL FACTORS IN PERPETUATING THE CONFLICTS IN YEMEN

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**Abstract:** Lying in a strategic region from the economic point of view, on the Bab al-Mandab Straits, the Republic of Yemen is known for its ancient civilization, but also for the political instability affecting the country for several decades. This situation has largely been influenced by the population's structure and evolution, as well as by the low economic level and the restrictiveness of the natural environment. The population, which is very heterogeneous from the socio-cultural standpoint, experienced a rapid growth in the past half century, putting an increasing pressure on the natural resources (water, soil, biodiversity), which have started to dwindle and get worse in terms of quality. In all this time, the low level of economic development has failed to bring about visible improvements in the quality of life, which remained precarious for most of the people. The inefficiency of governmental policies in solving these problems has been an almost permanent reason for discontent among the population.

**Key words:** conflicts, demographic evolution, environmental restrictiveness

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## INTRODUCTION

The Republic of Yemen is situated in the southwest corner of the Arabian Peninsula, between Oman and Saudi Arabia, stretching along the coast of the Red Sea, the Gulf of Aden and the Arabian Sea. More important, however, is its position to the Bab al-Mandab Straits, one of the most significant in the world from the economic point of view, which explains why many regional and global geopolitic stakholders are interested in its safety. The richer water resources of the mountains lying to the west of the country, in comparison with the excessive aridity of the Arabian Peninsula, has made this region a privileged land, which used to be called Arabia Felix (i.e. Happy Arabia). Inhabited since ancient times, the territory that currently makes up the Republic of Yemen reached a high level

of civilization in Antiquity, with the creation of indigenous kingdoms like Sheba, Qataban or Ma'in. A major role in this development was played by the flourishing trade with spices, especially myrrh and incense (Romano, 2004). Essential for the historical evolution of Yemen was the spread of Islam, in 630, and the creation at the end of the 9th century, by the Zaydi Islamic sect, of an imamate in the north of the country, which lasted for 1000 years (Ram, 2015).

The Ottomans' occupation and influence of the 16th and 19th centuries, as well as the British ones, starting with 1839 (after the conquest of the port of Aden), were the premises that led to Yemen's separation. In 1918, with the dissolution of the Ottoman Empire, Zaydis took over the power in the region that would become later the North Yemen (The Yemen Arab Republic), while the former territories under British protection and the Aden Colony, after the withdrawal of the British troops in 1967, formed the People's Republic of Yemen. As soon as the two states were in place, the region began to experience a pronounced instability. In 1962, after the death of Imam Ahmad bin Yahya, a civil war broke out in the north between royalists and republicans, in which were also involved Saudi Arabia and Egypt. On the other hand, in the south, in 1969, the political power was taken over by Marxists, who made the country move towards the communist bloc (Burrowes, 2010). The political strifes, either internal or between the two Yemenite states, continued over the period 1970-1980, culminating in wars that ruined the country. After unification (May 22, 1990), because of the South Yemenites protests against political and economic marginalization, a new civil war broke up, in 1994. The years 2000 were also marked by numerous protests, clashes and violent conflicts, but also by terrorist attacks staged by Al-Qaeda.

Since September 2014, when the Zaydi Houthi rebels took control over the capital Sana'a, the political situation of Yemen has deteriorated again. Besides, analyzing the historical evolution of Yemen over the past century, we see that political instability has prevailed for most of the time. The present situation is only a stage of the Houthi rebellion, which started in 2004 under the leadership of Hussein Badr al-Din al-Houthi, from whom they derived their name, with the purpose of getting more autonomy for their territory in the Sa'dah province, and also for protecting their religion and their cultural traditions against the Sunni Islamists. After al-Houthi was killed by the Yemenite army at the end of 2004, his family took over control and led five more rebellions before a truce was signed with the government in 2010. In January 2015, the Houthi rebels took over power and president Hadi, recognized by the international community as the legitimate leader of Yemen, had to take refuge in Aden. Consequently, a coalition consisting of five states of the Persian Gulf plus Jordan, Egypt, Morocco and Sudan, led by Saudi Arabia, launched air strikes against the Houthi targets at the end of March 2015 (BBC News, March 26, 2015).

At present, according to Abaad Studies & Research Centre, Yemen is a territory where four large groups are in combat, as follows: Houthi, which is superior in terms of military equipment and which controls much of the country, with the logistic and military support from Iran and Lebanese Hezbollah; AQAP (Al-Qaeda in the Arabian Peninsula; Hirak (Al-Hirak al-Janoubi), which advocates the independence of South Yemen; and the Sunni tribal communities in the south of the country, which do not approve of the Houthi actions. The situation became more complicated at the end of 2014, with the emerging of a branch affiliated to the Islamic State Jihadist Group, which ever since has been

trying to overshadow AQAP. Moreover, since March 2015 this organization has claimed a number of suicide attacks that occurred in Sana'a, in which have lost their lives 137 people, while 350 were injured (BBC News, June 16, 2015).

**METHODOLOGY**

In highlighting the role of socio-demographic, economic and environmental factors that have perpetuated the conflicts in Yemen, we have relied on the analysis of various information coming from Yemenite and international sources (Yemen Central Statistical Organisation, Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, BP Statistical Review of World Energy, US Energy Information Administration and Abaad Studies & Research Centre). At the same time, we have studied thoroughly the specialty literature in this respect. We have also analyzed a number of indicators (population growth, dynamics and structure, economic growth, the level of poverty, economic structure, climate variability, water resources, land use), the correlation of which highlights the fundamental elements underlying population discontent.

**RESULTS AND DISCUSSION**

**Socio-demographic evolution and structure.** Yemen has more than 25 million inhabitants, while the population growth rate is 2.8%. During the past six decades, the population has grown rapidly (in 1950 there were only 4.3 million people – Figure 1), which has resulted in a higher pressure on the country's resources, scarce as they are. This very rapid dynamics can be explained by the fact that birth rate has remained at high levels, of more than 30‰, death rate has dropped (8.1‰ at present in comparison with more than 40‰ over the period 1950-1955), while life expectacy at birth has doubled, reaching 63 years (Table 1). The most populated governorates are Ta'izz, Al-Hudaydah and Ibb, each of them with more than two million people. In the western part of the country are also recorded the highest population densities, reaching in some areas more than 500 inhabitants per square kilometer, while the average value is 55. Young population prevails, as 39% of the people are less than 15 years old, while only 3% exceed 65 years. Fertility is still very high, more than 4 children per women (DESA, 2015, Central Statistical Organization of Yemen, 2015). Most Yemenites live in the countryside, because the degree of urbanization is 34%.

Even though the population is mostly formed by Arabs (there are also small groups of Africans, especially Somalis and south Asians), which speak different dialects of the Arab language, the social structure is predominantly tribal. The tribe is the Yemen's central socio-political, territorial and identity unit. The number of tribes is estimated to be ranging between 74 and 100. The tribe members are loyal to their leaders (shaykh), who also enjoy religious legitimacy. Despite the mountain area, where the two tribal confederations, *Hashid* and *Bakil* (*Baqeel*), have never been completely subdued, the people living in the plain have been more exposed to external invasions and influences. Likewise, the tribes in the east of Yemen, which is less populated, even though they have not been able to design a significant tribal confederation, have never been subdued completely, the political authority of Sana'a capital being conventional (Rabi, 2015). In the first part of the 7$^{th}$ century, the vast majority of the population adopted Islam. But in the following two centuries, the Islam

community cleaved in two big branches, Shiites and Sunnis, which had a crucial importance for the historical evolution of Yemen. In 897, the control of Yemen was taken over by the mountain tribes in nortwest, followers of Zaidism (*zaydiyyah*), a branch of the Shia Islam, named after its founder, Zayd ibn Ali, a nephew of Imam Husayn ibn Ali. This religious faction emerged following the argument related to the line of succession to Yemen's leadership, which broke after the death of the fourth Imam, Ali Zayn al-Abidin, in 713 (Peterson, 2011). The Zaydis claim that only a direct descendent of the Profet can be Imam (community's religious and political leader) and can govern the Islam community. However, in contrast with the Shiites, who form the religious majority, Zaydis are more reasonable, recognizing the legitimacy of the first three caliphs. At present, the Shiites account for less than 35% of the country's population (CIA the World Factbook, 2015).

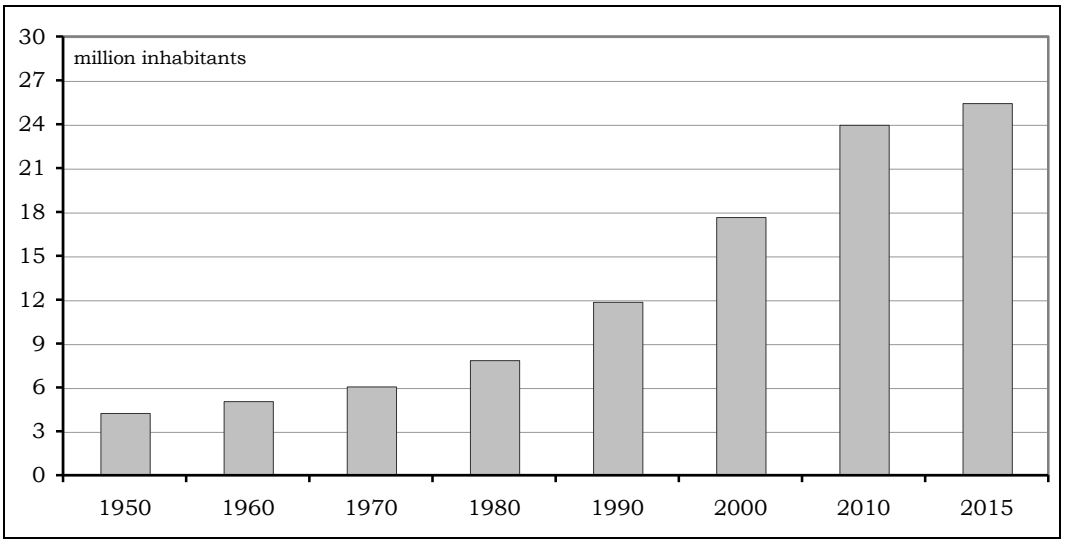


**Figure 1**. The evolution of Yemen's population over the period1950-2015
(Source: Population Division of the Department of Economic and Social Affairs of the UN Secretariat, 2015)

**Table 1**. Yemen – variation of selected demographic indicators
(Source: Central Statistical Organization of Yemen, 2015)

| No. | Demographic indicators | 1994 | 2004 | 2013 |
|---|---|---|---|---|
| 1. | Birth rate (‰) | 47.0 | 39.7 | 35.9 |
| 2. | Death rate (‰) | 11.3 | 8.9 | 8.1 |
| 3. | Infant mortality (‰) | 84.0 | 77.2 | 68.3 |
| 4. | Life expectancy at birth (years) | 57.3 | 61.1 | 63.0 |
| 5. | Mean age of the population (years) | 20.7 | 21.9 | 22.4 |
| 6. | Fertility rate (children/woman) | 7.4 | 6.1 | 4.9 |
| 7. | Population growth rate (%) | 3.7 | 3.1 | 2.78 |

The second largest Islam community in Yemen is represented by the Sunnis, followers of the shafi'i (*shafi'iyyah*) school, who live in the southern part of the country and in the Tihamah Plain. The demarcation line between these two large communities, dissimilar from the religious, cultural and geographical stanpoints, is the Samara pass, south of Yarim City. Thus, the cities of Dhamar, Sana'a and Sa'dah are mostly Zaydi, while Ibb, Ta'izz and Al Hudaydah are

mostly Sunni (Rabi, 2015). For most part of the Yemen's history, the country was led by Zaydis (the Zaydi imamate lasted for more than a millenium, from 897 to 1962), the Sunnis recognizing the political authority of the Imam, but not the religious one. But being marginalized and having no access to key positions in central administration and in the army, many Sunnis decided to move to Aden or leave the country. As a result, they were subjected to foreign influences and ideologies, like the Arab nationalism and socialism, to a greater extent than the Zaydis, who were living in relative isolation.

In this context, the conflict in Yemen is also seen from the outside like a part of the regional fight between the Shiites, suported by Iran, and the Sunnis, backed by Saudi Arabia. Acording to the Abaad Studies & Research Centre, only in 2014 more than 7700 people lost their lives in the Yemeni conflict, of which 1200 were civilians, while 80 thousand were compelled to abandon their dwellings.

According to the Foreign and Commonwealth Office (the United Kingdom), in 2014 the human rights violations occurred on a large scale and manifested through discriminations against women, restrictions imposed on journalists, restrictions of freedom of opinion and assembly, religious persecutions. The country was shattered by killings and bomb attacks against civilians, extrajudicial executions, kidnappings, tortures, and political imprisonments; besides, the military factions used soldier kids. The governmental forces brutally crashed protests launched by civilians, killing and wounding the Houthi people during a demonstration that took place in Sana'a in September 2014.

**The economic factor**. Although the GDP and the GDP per capita have increased during the recent years (Table 2), Yemen is the poorest country in the Middle East and one of the less developed in the world. Beside political and social instability and the poor performance of the government, this can be explained by the scarce natural resources, the poor economic infrastructure and the restrictiveness of the environment. Thus, poverty is at high levels, increasing from 42% of the population in 2009 to 54.5% in 2012 (World Bank, 2015). According to the UNDP, quoted by the United Kingdom: Foreign and Commonwealth Office, in 2014 about 16 million people were in need of humanitarian assistance, 10 million did not have enough food, 13.4 million had no access to drinking water, 12 million were lacking their own sanitary facilities, while 8.4 million did not have access to basic medical assistance. The low quality of life has always been a permanent reason for discontent.

**Table 2.** The evolution of GDP and GDP per capita in Yemen over the period 1990-2013 (Source: The World Bank, 2015)

| | 1990 | 1995 | 2000 | 2005 | 2010 | 2013 |
|---|---|---|---|---|---|---|
| GDP at purchaser's price (current billion US$) (billion) | 5.647 | 4.257 | 9.636 | 16.753 | 30.906 | 35.954 |
| GDP per capita (curent US$) | 472.1 | 279.0 | 541.5 | 817.1 | 1310.1 | 1408.0 |

The Yemen's economy is poorly developed, being dominated by oil and gas industry, which between 2010 and 2012 ensured more than 60% of the governmental revenues and almost 90% of the total export revenues (US Energy Information Administration, 2014). Moreover, the geographical location on the Bab al-Mandab Straits gives Yemen a particular strategic importance in the field

of international oil trade, in 2013 more than 3.4 million barrels of oil passing daily through the straits.

Although Yemen is not a major producer of hydrocarbons, in comparison with other states in the Middle East its oil and gas resources are used both for internal needs and for export. However, because of the internal insecurity, the exploration, production and transport of the energy resources has been difficult. During the period 2012-2013, more than 25 attacks took place against the hydrocarbons pipelines and consequently the exports were seriously disturbed (US Energy Information Administration, 2014). Because of these events, but also because of the natural decline, oil production constantly dropped starting with 2001 (Figure 2), when was reached the maximum level of 440 thousand barrels per day, while the production of 2014 was only 145 barrels per day (BP Statistical Review of World Energy, 2015). The most productive oil fields are Marib-Jawf, in the center of the country, and Masilah, in the east, which are operated by several international companies, as the total reserves are estimated at 3 billion barrels.

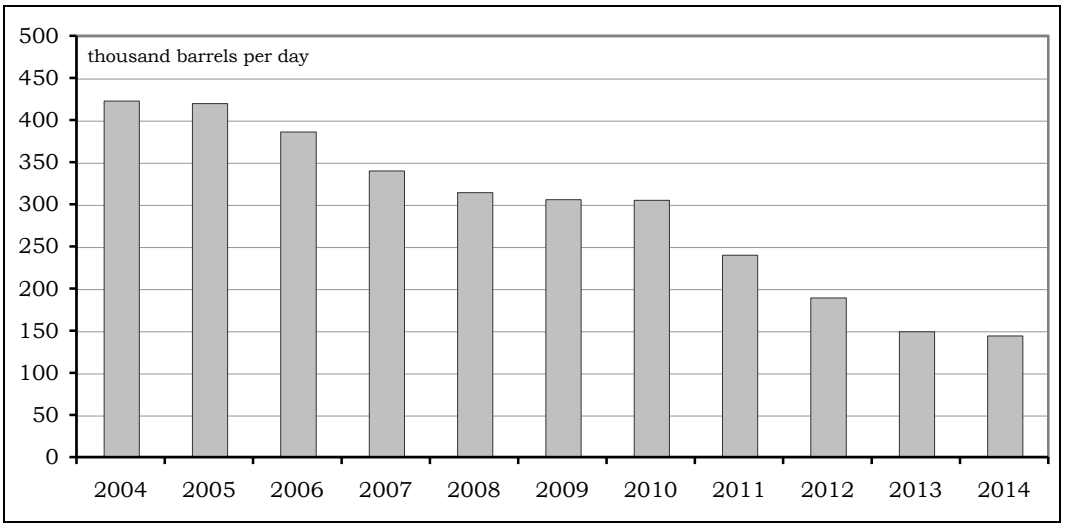


**Figure 2**. The evolution of Yemen's oil production over the period 2004-2014
(Source: BP Statistical Review of World Energy, 2015)

In 2013, Yemen exported 124 thousand barrels of crude oil every day, according to the Lloyd's List Intelligence, cited by the US Energy Information Administration. However, the export operations were affected by the frequent sabotage actions against the most important pipeline, Marib-Ras Isa (oil terminal on the Red Sea coast). As for the domestic oil consumption, this had an increasing trend, reaching 144 barrels per day in 2013. The oil refining capacity of the country is rather low; there are two refineries, one in Aden (with a capacity of 130 thousand barrels per day), and the other at Marib, which is smaller, processing only 10 thousand barrels per day.

As far as the natural gases are concerned, which have been extracted since 2009, the reserves are estimated at 0.3 trillion cubic meters, the most important gas field being Marib-Jawf, which produces 80% of the country's gas. Natural gases, the production of which amounted to 9.6 billion cubic meters in 2014 (Figure 3), are less used on the domestic market. In 2013, 90% of the production was turned into liquefied petroleum gas and was later exported (85% to Asia).

The liquefying plant and the terminal through which the liquefied gas is exported are situated in Balhaf, 200 km southwest of Al Mukalla, a place that is also the end of the pipeline coming from the Marib gas field.

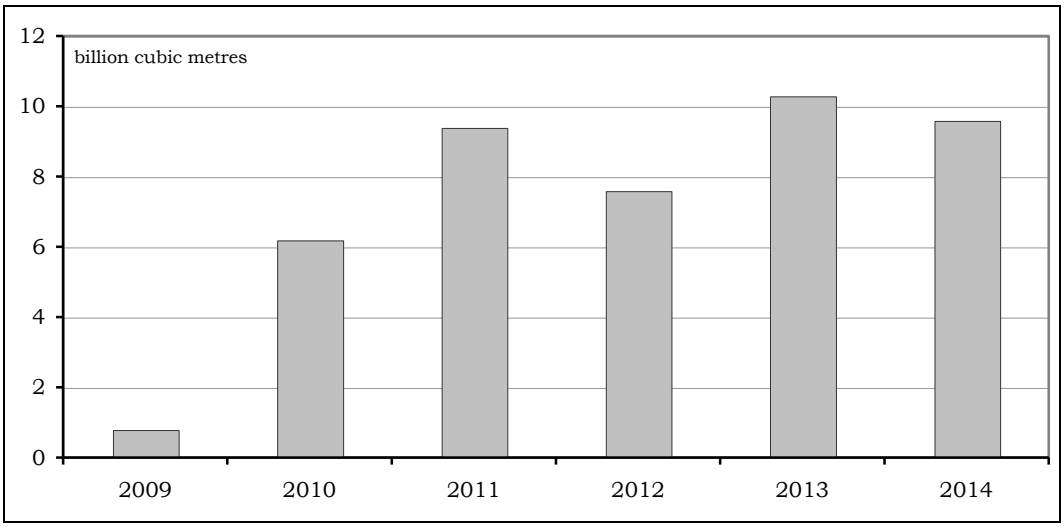


**Figure 3**. The evolution of Yemen's natural gas production over the period 2009-2014 (Source: BP Statistical Review of World Energy, 2015)

With the exception of the hydrocarbons, the other industrial branches are less developed; there are industrial units dealing with metal processing (iron and steel at Aden, Al Hudaydah and Riyan, 50 km north of Al Mukalla, aluminium at Ta'izz), ship repairs, building materials, but especially textile and food factories, as well as craft workshops. Besides, although it has a number of mineral resources (cobalt, copper, gold, nickel, silver, leader, zinc, salt, gypsum, marble, basalt, limestone dolomite, gravel, sand, etc.) these are less exploited (Taib, 2011). As a matter of fact, another great impediment for Yemen's economic development is the very low level of electric power production, because the generating capacity is about 1000 MW, being provided almost entirely by the fossil-fuel power stations. According to the World Bank, in 2012 more than half of the population had no access to electricity.

Despite the fact that cultivated area is very confined, agriculture plays a very important socio-economic part. It accounts for 50% of the country's labor force and represents the main source of livelihood for about two thirds of the populaiton. At the same time, it has a significant contribution to exports and is an important source of income (Almeshreki et al., 2012). The arid climate requires irrigations and the only water available for this purpose is the groundwater. Non-irrigated agriculture is practiced on more than one million hectares, especially on the terraced slopes of the mountains lying in the west; it represents the most important agricultural production system, providing for the subsistence of more than 50% of the country's population (Almeshreki et al., 2012). However, there are numerous environmental problems that hamper the development of this sector, the most serious of them being desertification, soil erosion and water scarcity.

In 2013, cultivated land represented 1.49 million hectares, i.e. about 3.3% of the Yemen's surface area, the largest agricultural fields lying in the western

part of the country. In the east, traditional oasis agriculture is typical, especially in Wadi Hadramaut. Most of the land is cultivated with cereals (857 thousand hectares, i.e. 57%), especially sorghum and wheat, followed by khat (*Catha edulis*, 11%), fodder plants (11%), fruit trees (6%), vegetables (6%), and commercial cultures (6%), including coffee and legumes (3%) (Central Statistical Organisation, 2014). Animal husbandry is practised based on natural pastures and fodder crops. People raise mostly sheep (9.5 million heads in 2013) and goats (9.2 million heads). This traditional activity provides food for the population and raw materials for some industrial activities.

**Environmental restrictiveness**. Yemen is a predominantly mountainous and desert country. To the west, rise the Yemen Mountains (Sarat al-Yemen), consisting mainly of volcanic and sedimentary rocks, being intensly dissected by a vast network of dry valleys (wadi) and reaching 3666 m altitude (*Jabal an-Nabi Shu'ayb*) (Figure 4). The eastern slopes, less inclined in comparison with the western ones, which are very steep, gradually descend to the Ramlat as-Sabatayn desert area, belonging to the Rub al-Khali desert, lying near the border with Saudi Arabia. Along the Red Sea coast, at the mountain foothills, stretches an arid coastal plain (Tihamah Plain), 20-50 km wide and crossed by many dry valleys. In the eastern part of the country, between the Gulf of Aden and Rub al-Khali, lies a tableland (Hadramawt), made up predominantly of Tertiary limestones, which slope down from south, where they have elevations of 1000-1400 m, to north. In the neighborhood of the coast, they end up with steep slopes and further away, there is a narrow coastal plain, low and dry. In general, the tableland is arid and is crossed by many valleys, which most part of the year run dry; the most populated and fertile area in this land is Wadi Hedramawt. On the other hand, Yemen is vulnerable to earthquakes, 318 of them being recorded only in 2013 (National Seismological Observatory Centre, quoted by the Central Statistical Organisation, 2014).

The Yemen's plains and low tablelands have an arid and semi-arid tropical climate. The mean temperatures are approximately $30^0$C, but in the hottest months (June, July and August), they can exceed $40^0$C. Precipitations are highly variable and have a torrential character, recording less than 200 mm/year, or even less than 100 mm/year in some areas lying in the central and eastern parts of the country. The Tihamah Plain is frequently affected by *shamal*, a wind blowing from the northwest, which brings about sandstorms. With the elevation increase, in the mountain areas the climate becomes temperate, with mean temeperatures of about $20^0$C, summer rains, as well as cool and dry winters (mean temperatures less than $15^0$C). During the harsher winters, the high mountain areas are affected by frost and snow. The higher parts of the western cliff, exposed to the flow of the moist air coming from south and southwest, receive the highest amounts of precipitation in the whole country, the values ranging from 700 to 1200 mm/year (Bruggeman, 1997).

Yemen's water resources are scarce, being represented by precipitations and groundwaters, the mountains playing an important part in the formation and distribution of rainfalls. Surface flow is temporary, but the valley network is dense. Over the time, many dams have been built in order to capitalize the meteoric waters; the largest reservoir is Ma'rib, which lies behind the dam bearing the same name, built on Wadi Dhana. The groundwaters are the main water resource for various uses, but in most aquifers water level is on the decline because of overexploitation. If the actual pattern of water consumption is

maintained and the population growth rate continues to be the same, water consumption per inhabitant will drop in the following years to 150 cubic meters, in comparison with 1990, when the value amounted to 1100 cubic meters (Almeshreki et al., 2012).

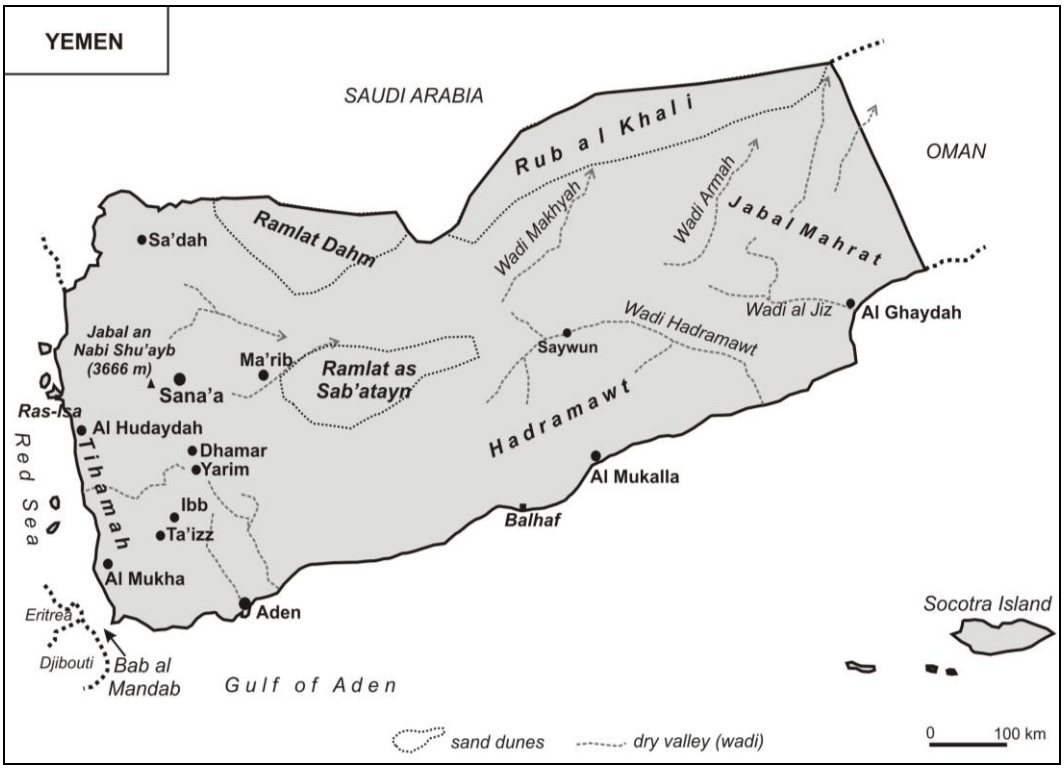


**Figure 4**. Yemen – general map

Being influenced especially by precipitations and soil types, vegetation is rather sparse in most part of the territory. Floristic diversity is higher only on the western cliff of the Yemen Mountains. Moreover, the vegetation has shrinked over the centuries through cuttings and overgrazing. In general, the soil is poor in nutrients and organic matter. According to the Soil and Water Division and Renewable Natural Resources Centre (2002), quoted by the Central Statistical Organisation (Statistical YearBook 2013), 85.4% of the country's area is rocky and sandy, while 12.5% is in various stages of degradation, of which 5.7% experience severe degradation (Table 3).

In order to reduce poveerty and unemployment in the rural areas sustained efforts are needed for desertification control, phenomenon affecting about 30 million hectares, i.e. 66% of the country's area (Almeshreki et al., 2012). The vulnerability to desertification is high, the causes being the following: water and wind erosion, overgrazing, vegetation removal and the changes in agricultural practices. Starting with the 1960s, Yemen's mean annual temperature has grown by $1.8^0$C, with a mean rate of $0.39^0$C per decade (the rate was higher for the summer season, with $0.56^0$C per decade), while the mean precipitations have declined by 9%, with a rate of 1.2 mm per decade (McSweeney et al., 2006).

**Table 3**. Types of lands and the forms of land degradation in Yemen
(Source: Soil and Water Division and Renewable Natural Resources Centre, 2002)

| | **Type of land** | **Area** (thousand hectares) | **Percentage** (%) |
|---|---|---|---|
| 1. | *Waste land* | *38 918* | *85.4* |
| 1.1. | Desert | 4 857 | 10.7 |
| 1.2. | Sand dunes | 5 816 | 12.8 |
| 1.3. | Rocky lands | 28 196 | 61.9 |
| 1.4. | Humid areas (sabkha) | 48.3 | 0.1 |
| 2. | *Degraded lands* | *5 697* | *12.5* |
| 2.1. | Degradation by water | 5 070 | 11.1 |
| 2.2. | Degradation by wind | 578 | 1.3 |
| 2.3. | Saline lands | 37 | 0.1 |
| 2.4. | Physical degradation | 12.7 | 0.03 |
| 3. | *Total area* | *45 550* | *100.0* |

## CONCLUSIONS

Besides the political problems, the socio-demographic, economic and environmental factors have unquestionable played a significant part in triggering and spreading the conflits that have left their mark on this territory over the past decades. From the socio-demographic standpoint, significant have been both the socio-cultural aspects (the tribal and religious structure) and the population dynamics, especially the high population growth, which could not be matched by the economic development. As for the economic factor, this has been an almost permanent reason for discontent among the population, because the level of economic development has stayed low, while poverty has been rather high. Consequently, Yemen has remained one of the poorest countries in the world, with a scant infrastructure and with an economy where agriculture has been the main source of livelihood for about two thirds of the population. The restrictive coditions of the natural environment, namely the predominantly mountainous and desert topography, the arid and semi-arid climate, the scant water resources, and the low fertility soils have hampered the socio-economic development. Moreover, soil degradation has affected the farmers' lifestyle.

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