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The energetical transition of the emerging economies: empirical evidence about the importance of political stability in attracting FDIs.

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CHAPTER 4: CONTRIBUTIONS AND LIMITATIONS

INTRODUCTION

This dissertation concerns the role of the Foreign Direct Investments (FDIs) in facilitating the energy transition of the emerging economies affected by political instability, that negatively impacts the willingness of the investors to put money in risky countries, where their returns might be endangered by the social and political evolutions. Those are countries that are affected both by financial scarcity and technological inadequacy and, because of this, cannot properly enact a passage to green energy sources. This topic is really concerning at this moment in time. The international interest is on environmental issues and people's concern is on the future of the planet. Worldwide citizens have started gathering in groups, that have become then movements, to raise awareness over the issue and, in addition, many academics have recognized the impact of the matter and drafted plenty of articles with regards to the environment. Also, higher attention has been reserved to political instability and, in the literature review that I aim to draft in this thesis, I decided to proceed by steps: I first intend to identify the variables that influence the FDIs in general, and then deepen the focus on the role of political instability in a dedicate section. As I will display in the chapter, there are different opinions: some scholars think that political instability is determinant in the choice of where it is more suitable to locate the investments, while others do not deem it being significant. Although this disparity, I intend to contribute positioning myself with those academics that assert the negative influence that political instability has over foreign investors, that carry out accurate evaluations in order to safeguard their returns. Therefore, I aim to contribute by increasing, through the quantitative and qualitative analyses I will perform, the knowledge over the role of political instability and its effects. Additionally, I would like to bring forward some suggestions that might be beneficial for the countries: I am indeed convinced that behind political controversies, there are hidden but open social and economic issues that need to be addressed before the resolution of the various political risks. I also would like to claim that, although I am still not able to provide a single definition of political risk and thus, to overcome the gap in the literature, there are new problems that must be added to this matter. Indeed, political risk has to concern the cyberattacks that are currently carried out with the new technologies. In the cases of Pakistan and India, as I will display, the wars damaged the political stability of the countries. Nevertheless, nowadays it is very unlikely that material wars are conducted, but rather attacks in the cyber world are very frequently and can paralyze the overall national system, including the energy supply. Therefore, I would suggest to ameliorate the security in general, and specifically the cybersecurity of these countries, especially in the case of those states that are located near famous belligerent countries.

The great part of the developed nations have committed itself in reaching the goals regarding environmental awareness and protection, set by the own governments and the international community. They are capable of doing this because they own the necessary resources, and through cooperation they stimulate each other. The developing ones instead, as I was saying before, are affected by insufficient means. They would need FDIs but due to various motives they are not really able to attract them. Investors need warranties and stability and evaluate the suitability and feasibility of their investments in foreign territories. Nevertheless,

several variables affect the investment environment and thus, disincentive to put money into activities in a risky country. Among these factors there is political instability. As I will display in the first chapter there is not a univocal definition of this phenomenon. It comprehends a series of threats that affect the good governance of the country. Terrorism can be considered above all. In addition, as I just briefly mentioned, in the same section I aim to portray at first, a literature review over the factors that in general influence FDIs, and then, in another subparagraph, I will display how the role of political instability has been previously assessed and what other academics claimed about it.

I will move on to the second chapter in which I will clearly state which is the research question of my work. I will also display the results that I have obtained through the empirical analysis I conduct using EXCEL. I will carry out a correlation test between two datasets. Precisely, one of them concerns the political stability values that have been given by the World Bank to the developing nations from 2015 to 2019, which are the years I intend to cover in my work. The other set of data instead, regards the amount of foreign direct investments that, according to the International Trade Centre, the developing nations have received in the timespan previously indicated. Therefore, I did not use primary data, but secondary ones. They come from reliable sources, like the National Banks of the countries selected. In the same chapter I also outline the two tests I carried out in order to evaluate the correlation between them. I will finally present the results.

In the third chapter I provide a further qualitative analysis using 4 developing countries as case studies. The reasons why I chose Pakistan, Morocco, India and Kenya will be displayed in the same section. For each of them I will provide an evolutionary overview of their political framework and what is the present situation. With regards to this analysis I mainly intend to outline which might be the concerns of the investors and in which way they can be harmed by the political instability that is affecting the nation. Different threats affect the nations; therefore, it will come out that what had been stated in the literature is evident: there is not a univocal definition of political instability. After that, I intend to portray the energy reforms' side of each country and highlight which are their main green energy concerns, their objectives and the plan and strategies used to reach the goals set.

In the fourth and last chapter I aim to identify which are the main contributions of my work to the literature and precisely I decided to portray the results derived from both the analyses. In the same section I intend to give the governments some suggestions for the resolution of the issues, in order to overcome the negative evaluations of the investors and receive the FDIs. I also intend to precisely outline which are the limitations of my work and what others can do to expand my initial work. I will then briefly recall the main highlights of my work in the conclusions.

CHAPTER 1: Literature review

1. Literature review

Before approaching to the literature review regarding the determinants of Foreign Direct Investments (FDIs), I deem useful to better explicate and define the phenomenon. Therefore, a straightforward but effective definition is the one provided by Moron[1]: FDIs occur whenever a company, established in one country, conducts business operations in a foreign nation, either arranging a new wholly-owned subsidiary, or acquiring a pre-existing local firm or finally, creating a joint venture. Still, the presence of foreign direct investments affects the host country's welfare and growth, both positively and negatively. Indeed, the local economy can benefit from the contributions provided by the foreign corporation, although the latter can danger or harm the national welfare, creating threats. Hence, the host authorities have to handle the potential risks generated by the multinational corporation presence, while at the same time enhancing the positive contributions given. Nevertheless, some countries do not have the sufficient technological and financial endowments to achieve their goals, thus needing FDIs from developed countries. This happens for instance in those emerging countries that have decided to undertake a process of transition toward renewable and cleaner energies.

The motivation behind the energy transition has to be addressed looking at the concept of energy security. Indeed, this concept has evolved throughout the decades and multiple definitions have been addressed considering a wide range of parameters, like the risks that could halt the necessary country's energetical supply needs. According to this criterion, for instance, in the 1970s, energy security mainly concerned the oil crisis, that kept characterizing the energetical arena until the 80s and 90s. However, in those years, characterized by the stabilization of the oil prices and the reduction of the political embargoes, the apprehension toward the energy security issue lowered, which then re-increased at the beginning of the new millennium, due to the reduction of gas supplies in Europe and the parallel demand rise in Asia. Furthermore, an urgent shift toward decarbonization was taking place in those decades. Consequently, energy security originally (in the 70s-80s) pertained to the oil supply, that also happened to be affected by threats and embargoes during those years. Later on, between 90s and 2000s, a broader definition of the concept, encompassing many other energetical sources and challenges on the energy supply chain, has been passed. Hence, energy security is now related also to other relevant energy policy problems, such as the climate change's slowdown and the access to modern energy sources. These concerns of ensuring sustainable energy supplies, in order to collaborate in halting the global warming and climate change, have paired that of allowing the citizens to consume the amounts of energy requested. Therefore, this would entail a transition from fossil fuels to hydrogen, wind and all the renewable energetic sources[2]. Nevertheless, as stated before, this is not always possible since not all the

[1] Theodore H Moran, "Foreign Direct Investment and Development" [2012] The Wiley-Blackwell Encyclopedia of Globalization.
[2] Aleh Cherp and Jessica Jewell, "The Concept of Energy Security: Beyond the Four As" (2014) 75 Energy Policy 415.

nations, that decided to contribute to the resolution of the energy problems above mentioned, are equipped with the indispensable resources needed to enact the transition.

In this initial chapter, my intention is to provide a general framework about what previous academics have drafted with regards to the topic of interest, mentioned at the very beginning of the paragraph. Thus, in the first subsection, I will highlight what other scholars, through their studies, have discovered about the factors that investors take into account before making FDIs in emerging countries. Afterwards, since I would like to investigate over and whether the political situation of the host country plays a role in the investment decision process, I will concentrate, in the second section, on the literature related to this aspect. This will allow me to better locate my personal work within the existing literature and to outline in the next chapters what my contribution will be.

1.1. Determinants of FDI

Notwithstanding the necessary and introductory considerations carried out with regards to the definition of FDI and the role of host country, it is of pivotal importance to enlist the factors that the investors themselves take into account before entering a new and emerging market. I deem the International Monetary Fund working paper, drafted by Elif C. Arbatli[3], a good starting point. To begin with, the author introduced which are the benefits that the host country could enjoy from receiving FDIs. Indeed, these allow a productivity increase, that is obtained financing the development and introducing new technologies. Historically, FDIs in the emerging market economies (EMEs)[4] increased since the early 90s, falling when the uncertainty and global risk aversion increased, specifically between 2000 and 2003 and right after 2006. The contribution given by Arbatli has been that of identifying the variables that may affect investment decisions in emerging countries. In particular, she divided them into two classes: global push factors and country specific factors. The former account for capital flows toward the emerging economies, thus affecting domestic policies, and gained momentum during the global economic crisis, that also generated FDIs inflows decline. Precisely, three factors can be identified in this class:

1- **Growth in capital exporting countries**. It refers to G7 countries' real income increase, which is useful to explain how the economic growth of these nations affect their FDIs outflows toward EMEs. Nonetheless, besides the expansionistic effect, this might also have an unforeseen effect. Indeed, the financial surge can promote domestic investments, which can be considered more attractive.
2- **International liquidity.** It allows to analyze whether advanced countries decisions, about FDIs outflows to the emerging economies, can be affected by the domestic credit condition. Specifically, lower real

[3] Elif Arbatli, "Economic Policies and FDI Inflows to Emerging Market Economies" (2011) 11 IMF Working Papers 1.
[4] Algeria, Argentina, Brazil, Bulgaria, Chile, China P.R.: Mainland, Colombia, Costa Rica, Croatia, Czech Republic, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Guatemala, Hungary, India, Indonesia, Israel, Jamaica, Jordan, Kazakhstan, Republic of Korea, Latvia, Lebanon, Lithuania, Malaysia, Mexico, Morocco, Pakistan, Panama, Peru, Philippines, Poland, Romania, Russian Federation, Slovak Republic, South Africa, Sri Lanka, Thailand, Tunisia, Turkey, Ukraine, Uruguay, Venezuela, Rep. Bol.

interest rates are supposed to increase the investments in the EMEs countries, since it would be easier for the investing firms to finance the projects abroad.

3- **Risk environment.** This is commonly regarded, throughout the literature, as a push factor, which affects FDIs in EMEs countries.

Conversely, among the country specific pull factors it is possible to enlist:

1- **Fixed or structural factors**. Specifically, when a country enters an emerging market through FDIs, it aims at obtaining a share in the host market. Therefore, the size of the domestic market is decisive in attracting horizontal FDIs. Furthermore, in this first cluster it is appropriate to also include: the role of the education (average years of school), the role played by the oil sector (the hydrocarbon sector, in some of the EMEs countries considered, is extremely relevant) and, lastly, the location of the countries (Middle East, North Africa, Asia, Latin America, Central and Eastern Europe).

2- **Political environment and institutions**. FDIs can be affected by the quality of the institutional and legal framework, whose its possible inadequacy, can have an impact on the economic perspective of the country and on the safety of the investment. Indeed, the lower the rights' level, which must be intended in terms of legal rights, protection of the investors and contract enforcements, the higher the economic uncertainty that affects the investor's decisions to export capital in a foreign country. Also, political stability (which will be better investigated in the subsequent section) and conflicts, risen as a result of specific events[5], must be mentioned in this category. Nonetheless, the subjectivity of the judgements regarding the political risks, makes difficult to highlight their complex relationship with FDIs.

3- **Macroeconomic environment**. In the analysis, Arbatli considered some indicators such as real GDP growth, inflation, real exchange rates and exports to GDP[6]. These, which have increased steadily in the period in which outflows of FDI to EMEs have surged, can be considered a symptom of confidence in developing markets, which stimulated an attraction of capital in the emerging economies considered.

4- **Economic policies.** The author intended to identify the trade liberalization's degree of the countries examined. Precisely, this evaluation goes under the variable's name "*trade policy".* An analysis over the tariffs imposed on the manufactured goods (considered as an adequate approximation of the phenomenon of interest) has been accomplished. Nonetheless, Arbatli, for the sake of clarity, specified that the tariffs' effect over FDIs is non-univocal and varies according to the orientation of the tariffs themselves, which can either be toward the domestic market or the exports. In the same place, also the *exchange rate*

[5] In this circumstance, also anti-government manifestations, labor strikes, riots, protests generated by FDI inflows, will be considered as conflicts.

[6] Specifically:

- *Real GDP growth* is related with the economy's productivity level. Thus, high levels of this variable, stand for elevated economic productivity.
- *Inflation.* FDI inflows are more substantial in those countries with low inflation rates.
- *Exports to GDP*. It represents the competitiveness of an economy, since, one of the key incentives of FDI inflows is the export orientation of the country
- *Real exchange rate* allows to estimate how competitiveness affects FDIs flows.

classification is considered, since high levels of flexibility and volatility affect FDI inflows. Furthermore, in the economic policies cluster also fall the *restrictions in capital account transactions related to FDI*. Finally, investors also consider the *corporate tax rates*, which have a direct impact on the returns that they will experience after having invested in the host country. Indeed, low levels of corporate taxation attract more FDIs. Ireland, although was not considered in the EMEs countries' sample, in 1999 lowered its corporate tax rate in order to accomplish its FDIs attraction objective.

In the analysis conducted, it came out that the global financial crisis reduced the FDI inflows in the EMEs countries. Instead, the global push factors and the economic policies (listed among the country specific pull factors) contributed to increase the level of FDIs inflows in the emerging market economies considered in the analysis. Indeed, lower corporate tax rates and trade tariffs, stable exchange rates and a lower control on the FDI capital, promoted investment inflows in the EMEs. Finally, political stability and lower levels of conflicts, which can be obtained through economic policies that stimulate an inclusive growth, have a positive effects in encouraging capital outflows from the most advanced countries. In contrast, instability is held responsible for the arrest of the FDI inflows: the politically volatile country may lose the results previously obtained through adequate policies. The FDI inflows' growth has also been attributed to the G7's growth rates decline during 2008-09 and to the higher uncertainty towards future economic perspectives. These results were obtained using a dynamic panel regression, that consisted of a GMM system estimator, which is based on analysis conducted in two steps, and that was originally created by Blundell and Bond[7] in 1998; the model allows to estimate dynamic panel models, in a benchmark where the effects are fixed and the regressors are endogenous.

Moving on with the literature review, it is mandatory to mention the Dunning's Eclectic Paradigm (also called OLI Paradigm), which is considered as a pillar in the analysis of the international capital flows. It states that the value of the activities that a firm carries abroad, is determined by: the "*Ownership advantages"*, i.e., if the company owns one or more unique and sustainable advantage(s); the company's ability to internalize the O advantages, rather than selling them to external firms ("*Internalization advantages"*); lastly, the willingness of the company to use its O advantages in unknown venues ("*Location advantages"*). These three elements generate an analytical point of view, thanks to which the investors can assess both whether they have the necessary control over FDIs and which type of governance they can/should exert over their advantages, in order to be successful if internationally engaged. Dunning, broadening its initial work, borrowed elements from the strategic management theory and divided the Ownership advantages in: asset based (Oa) and transaction based (Ot). This allowed him to identify what factors increase the investors' willingness to invest in a specific location:

1. The possibility to exploit advantages that can be found only in specific markets (*Market-seeking motive*);

[7] Richard Blundell and Stephen Bond, "Initial Conditions and Moment Restrictions in Dynamic Panel Data Models" (1998) 87 Journal of Econometrics 115.

2. The host country's availability of lower production factors costs, economies of scale and scope (*Efficiency-seeking motive*);
3. The country sells the necessary assets to complement new technological bases, in order to avoid an overexploitation of existing ones (*Strategic assets-seeking motive*);
4. Lastly, the available resources in the host country are not available/are more expensive at home (*Resource-seeking motive*).

All of the above-mentioned motives influence the investors' choice about the place in which to carry out FDIs.

The Dunning's Eclectic Paradigm has been recalled and extended in the article written by da Cruz, Floriani and Amal[8]. Precisely, they contributed claiming that in the OLI Paradigm, both the "O" and the "L" advantages are not limited in coverage: the former refers also to the capabilities that the company can either create or acquire from the outside; the latter encompasses an analysis of the host country that goes beyond the country's set of advantages, and is then delved into a supranational, subnational (regional level) and a geographic examination. Nevertheless, according to what the authors have claimed, it can be stated that the location decisions over FDIs, should not be made through a country analysis, rather the investors should come to a conclusion adopting a more specific, i.e., regional point of view: differences can occur within the same nation. Thus, adopting this subnational point of view, they would be able to make more precise decisions, looking beyond the national problems that affect a country (such as political tensions). Indeed, the capital owners can appreciate which are the specific advantages of the region in which they are going to invest, looking also at the relationship between the national and the local institutions (especially in a nation characterized by scarce both institutions and heterogeneity).

Therefore, institutions play a major role in the FDIs determinants framework, enabling to sort out those market failures that hinder the efficiency of the market economic structures. As a result, the institutional landscape impacts the transaction costs that make an investment more or less attractive. For the sake of clarity, with the term "costs" the authors refer to how easy is for the companies to adapt to the context. Also, this concerns which effort it takes to establish a relationship with both formal and informal institutions. This issue is particularly relevant in the emerging economies, where institutional voids or frequent and rapid evolutions in the legal framework thwart the multinational corporations development. In this way it is likely that a country creates barriers to the external investments, encouraging the investors to prefer other locations (in which there is a more favorable institutional structure) for their FDIs. In the traditional literature about institutions, if an MNE does not entails favorable relationships with the institutions of the host countries, the institutional O advantages[9] will be particularly affected: the institutional assets (Oi), that generate the related advantages

[8] Cláudia Beatriz Batschauer da Cruz, Dinorá Eliete Floriani and Mohamed Amal, "The OLI Paradigm as a Comprehensive Model of FDI Determinants: A Sub-National Approach" (2020) ahead-of-print International Journal of Emerging Markets.
[9] The Oi advantages encompass firm's incentives, regulations, standards that affect stakeholders' decision making process and behaviors. Also, the relationships between institutions, the various political players and the goals of the company are included.

should be, in this case, separately analyzed. Indeed, some corporate norms and values are decided within the company itself, whilst others are influenced by the external environment in which they carry on their activity. Therefore, a change in demand both by consumers and by the institutions would lead to a change in the Oa and Oi benefits. It seems like, in this literary strand, the institutional aspect is comprised within the location dimension: the attractiveness of and FDI location is higher in case the government stands with the investors and their choices. Rather, in the Eclectic Paradigm the institutions and their influence on the MNEs activities, perceived as a source either of threat or advantage, influence all the three OLI pillars of the companies, affecting the investors decisions over FDIs location. OLI paradigm considers the institutions as "facilitators […] or modifiers", which are external to the company, easing or hindering the resources and capacities availability or the firm, and/or altering the structure of the firm when its own goals are not acceptable. The institutional influence depends on the level of autonomy of the subnation from national institutions: the outcomes generated by the measures that the government adopts will vary according to this. In sum, the OLI paradigm allows to understand if the institutions can have an impact on the activities of the investors, on their mode of entry (and if it is still convenient to carry out the FDI), and finally if the government can generate transaction costs.

Besides all the considerations outlined above, the article *"The OLI Paradigm as a comprehensive model of FDI determinants: a sub-national approach"* conducted a literature review of 41 articles published between 1999 and 2019. The methodology adopted has been the inductive content analysis, with the specific purpose of understanding whether the OLI paradigm can be used to identify FDI's determinants also on the sub-national level. The results confirmed the main assumptions used throughout the literature: the Eclectic Paradigm, although with a perspective shift, can be used to determine, on a regional level, the FDIs pull factors, especially the institutional ones. Therefore, what the authors suggest is that, when evaluating the location of an MNE's FDIs, the investors should adopt a regional level of analysis, in order to appreciate the locational advantages of that specific zone, whose institutional and economic characteristics may differ from the national ones. Indeed, the enterprise could benefit from regional factors (e.g. political stability of the division), that the investors may not find on the national level. In conclusion, certain FDIs determinants are prerogative of specific regional cultural and political arrangements; the MNE can adjust its strategy and entry mode to enjoy the regional characteristics also at a later stage, evaluating whether possible national constraints affect their capacity to create value in the specific location chosen.

The concept of the institutional influence on FDIs location had already been object of study. Indeed, Justin Paul and Pravin Jadhav in 2019 drafted the article *"Institutional determinants of foreign direct investment inflows: evidence from emerging markets*"[10]. Precisely, with the purpose of identifying the determinants of FDIs inflows, and specifically, to investigate over the decisive role of the institutions in

[10] Justin Paul and Pravin Jadhav, "Institutional Determinants of Foreign Direct Investment Inflows: Evidence from Emerging Markets" (2019) 15 International Journal of Emerging Markets 245.

attracting FDIs, the authors collected data from the International Trade Centre investment map on 24 emerging countries[11] (Pakistan and India will be further analyzed in the section dedicated to case studies). At the beginning of the article, the authors stated that globalization has made emerging markets more attractive, as they are full of untapped business opportunities from which enterprises in developed countries can benefit. Indeed, FDIs allow the expansion of the MNEs operations and a maintenance/increase of their global competitiveness, and, although cultural and customer differences among the nations, there has been a surge in the volume of internationalization activities, such as FDIs. Paul and Jadhav also concentrate on how emerging markets, taking as example Asia, can benefit from FDIs inflows: domestic capital, generally, does not meet the desired level of investment, needed to start initiatives. As a matter of fact, in the host country, in which also new employment opportunities are created, the investors bring both non-debt financial resources and technologies, creating a linkage between the investing and the host countries. Hence, the economic development of the receiving country is facilitated, as well as the financial one, given that the tax paid by the MNE in the host country can be used by the government to create infrastructures, improve productivity, and promote human capital growth through the importation of new managerial practices. The article also indicated which countries achieved the highest share of FDIs between 2002 and 2015: China is above all, and it is followed by Brazil, Russia, Chile and India. Instead, the ones that performed the worst have been Romania, Estonia, Latvia, Pakistan and Lithuania. Furthermore, shifting the focus on the sectors that have received more FDIs in the considered period, the tertiary one dominates over the secondary and the primary, which attracts the lowest portion of external investments. Therefore, the investigation will also be conducted on the sectoral level, aiming to identify whether there is a modification of the FDIs determinants according to the business area to which they are destinated. In this way, both the host country and the MNEs managers can fine-tune their behaviors: the former can formulate more accurate policies to attract higher flows of FDIs; the latter can better plan their strategies. In truth, they recalled and deepened previous works in which the authors investigated over the different FDIs determinants, according to the three sectors above-mentioned. Walsh and Yu in 2010[12] claimed that in the primary sector, economics and institutions do not play an important role in attracting capital from abroad; the tertiary sector instead, is much more impacted by the macroeconomic set up than the secondary one: for instance, a weakening of the real exchange rate reduces the FDIs in the services sector more than in the manufacturing one. Furthermore, when the country experiences either higher flexibility in the labor markets or deeper financial markets, it draws in secondary sector's FDIs; better and more independent infrastructure of the institutional framework attracts tertiary FDIs.

Summing up it can be stated that, generally, a host country attracts more capital when there are favorable policies for the FDIs, and that their extent depends on: government and legal quality, labor costs, lending rate,

[11] China, Brazil, Russia, Chile, India, Indonesia, Colombia, Mexico, Turkey, Peru, Thailand, Malaysia, Hungary, Ukraine, Poland, South Africa, The Philippines, Venezuela, Bulgaria, Romania, Estonia, Latvia, Pakistan, Lithuania.

[12] Jiangyan Yu and James P Walsh, "Determinants of Foreign Direct Investment: A Sectoral and Institutional Approach" (2010) 10 IMF Working Papers 1

human capital, GDP and GDP growth rate, exchange rate, trade openness, market size, financial and institutional framework[13] of the country of interest. Furthermore, the economic development of a country is related with its infrastructural arrangements, and increases when the quality of the facilities improves; this is particularly relevant for the manufacturing sector that requires high-quality factories to reduce the production cost. The tertiary sector FDIs instead, does not really look to the physical infrastructures but to the IT ones. Lastly, natural resources availability determines the extent of the external financial inflows in the primary sector of the receiving country. To methodologically estimate the relationship between the governance quality and the FDIs, Paul and Jadhav[14] used the Generalized method of moment (GMM) based on the Arellano-Bond methodology. Consequently, some of the hypothesis that were stated at the beginning of the analysis have been properly evaluated and some of them were rejected or accepted. Specifically:

- **Primary sector FDIs**: are influenced by the infrastructure quality; negatively influenced by trade costs[15]; have a good connection with corruption (the higher the level of corruption in the emerging market, the higher the level of FDIs inflows). Conversely, the business environment and the quality of the governance do not seem to be significantly impactful on this sector's FDIs.
- **Secondary sector FDIs**: are, as well as the primary ones, positively correlated with a good quality of the infrastructure and trade costs; negatively impacted by inadequate governance and business environments. In this case, the level of corruption does not cover a major role as determinant of FDIs.
- **Tertiary sector FDIs**: are associated with high quality governance; all the other variables that were mentioned above, do not have a significant impact on these FDIs.

Generally speaking, it can be stated that, in the emerging markets, the investors should not assess the adequacy of their investments by looking at national factors. Rather, their analysis should be conducted on the sectoral level, in order to properly appraise the differences between the investment areas, without biasing their assessment. Thus, the economies that aim to receive financial capital from the abroad in a specific sector, having in mind the factors that the investors take into account before funding their operations in host countries, should improve policies that improve the determinants' quality up to an adequate level.

To conclude this initial review about the FDIs influencing factors, I would like to recall one of the first articles that I encountered during my research, specifically the one drafted by Yung-Chih Lien and Igor Filatotchev[16]. They recollected previous works in which it was stated that, in the emerging economies[17] with inefficient and inadequate institutions, the investors of similar companies, tend to locally concentrate their

[13] With the term "institutions", the authors aimed to include: laws, political stability, regulatory quality and the control over corruption.
[14] *Supra note, 10*.
[15] In particular, tariff and non-tariff barriers.
[16] Yung-Chih Lien and Igor Filatotchev, "Ownership Characteristics as Determinants of FDI Location Decisions in Emerging Economies" (2015) 50 Journal of World Business 637.
[17] With the words *"emerging economies"*, the authors refer to those countries that have taken a path of rapid economic development and that are in favor of economic liberalization and free-market systems.

FDIs. This happens because the strategic risks associated with institutional uncertainties and the transactional risks can be mitigated by an agglomeration of FDIs. Nonetheless, some funders prefer to be "lone riders", as they intend to gain the first-mover advantage in unexplored areas: higher returns are expected. Therefore, it is of pivotal importance to understand which are the motives (that the authors call "centrifugal forces") that convince the investors to carry out their financial investments in unknown countries. Specifically, in the article it has been assessed whether and which role the corporate ownership covers in influencing FDIs location decision. Recollecting the agency theory, it has been noted that risk-averse managers tend to avoid investments in hazardous, but more profitable, national frameworks. Thus, the clustering of the investments, since it reduces the perceived investments risks, can, for this reason, be considered as a centrifugal force, hence can be accounted as a funding determinant by the more reluctant managers. Accordingly, the authors decided to investigate if an interconnection between the ownership structure of the MNE, both at the subsidiary and at the parent level, and the FDI location decision, exists. Hence, does the former work as a determinant of the FDIs, as well as other location-related and firm-specific attributes? Indeed, the control exerted by the main firm over the subsidiaries can mitigate the agency problems and help it facing institutional concerns and long-term decisions. Furthermore, higher control enables better monitoring and enforcement of the contractual obligations that the MNE carries out with the local partners, overcoming uncertainties and collaborators' opportunism. In addition, the authors claim that, whenever a company gives up some of its control over the subsidiaries, the institutional investors intervene bringing external capital, thus affecting the firm's long-term strategy decisions, such as promoting riskier and more profitable FDIs. Therefore, the control exercised over the subsidiaries by either the family and non-family owners of the firm, or the institutional investors, can promote the internationalization of the company, working as a determinant of the FDIs.

Nevertheless, the authors claimed that also collaborations with local partners can stimulate investors' decisions towards untraditional area of investments, like the emerging markets. These partnerships can be of different types, and each of these generates different disadvantages and advantages to the main company, promoting or hindering the FDIs location decisions; the most common are: joint venture, strategic alliances, franchising and licensing. Besides the benefits that joint ventures bring to MNEs, the investing firms can be undermined by partners' opportunism, e.g. losing their proprietary assets, or be affected by information asymmetries. All of them generate transaction costs that the firm can overcome only with a high level of control over the subsidiary. On the other side, high levels of control generate high monitoring costs that counterbalance the reduction of the transaction costs, opportunism and information asymmetries. Furthermore, in the emerging countries there is a further increase of the investments costs, since a higher protection of the FDIs is needed. Therefore, the firm managers must properly evaluate this trade-off and to overcome it, the authors suggest to balance the control over the parent firm and the subsidiary. Specifically, when strong governance power is exerted over the subsidiary, lower control should be applied on the parent one, and vice versa.

In order to empirically assess these hypothesis, the authors mainly focused on the Taiwanese[18] companies that conduct projects in China[19] and gathered data about these specific FDIs from the Securities Futures Commission of Taiwan (SFC), which annually collects the reports drafted by the companies enlisted on the Taiwan Stock Exchange (TSE). The information provided also includes where the companies' foreign direct investments are located. From a sample consisting of 237 companies, the authors selected 96 firms, which carried on 314 investment projects in China. To investigate on the factors that could influence Taiwanese companies location decision, Lien and Filatotchev used the binomial logit regression, discovering that the majority of the FDIs tended to be gathered in China's Southern and Middle Coastal areas, confirming that clustering can reduce investment risks. The regression was improved by the further inclusion of the ownership variables, which resulted in a positive correlation between the firm's decision to invest in the unexplored areas of the emerging economies and the ownership of the subsidiary itself. Therefore, the parent's equity owned by family-, non-family and institutional investors can work as a determinant FDI location decision. Indeed, this factors allows a higher monitoring and control over the agency problems, which promote the owners' willingness to invest also in unexplored risky areas, where they can conversely benefit from the first-mover advantage; furthermore, high ownership levels enable the company to overcome partner's opportunism. Additionally, the authors conducted a multilevel regression analysis, which allowed to incorporate multilevel residuals in a single model: the weighted overall riskiness of a province was considered as another dependent variable. Therefore, it has been possible to analyze whether there is a relationship between the environmental riskiness and the firm's FDI location decision, finding that substitutable ownership between the parent and the subsidiary level is effective in controlling emerging country's risks. In conclusion, the authors suggested that firm owners should be more inclined to explore international opportunities in emerging markets, while, at the same time, being more conscious of the risks that this type of investment requires. To cope with them, the managers and the owners should choose the right level of subsidiary's ownership, also in order to properly deal with the transaction costs and uncertainty that FDIs create.

1.1. The role of political instability in affecting FDIs inflows' location decisions.

After having assessed general FDIs determinants from different perspectives, such as firm level, host country level, sectoral level, it is my intention to straightaway recall some previous academics works focused on the contribution that politics gives in influencing FDIs location decision.

Which precise role does politics cover? It is a determinant factor, given that political instability interferes with economic affairs and creates corruption, which in turn lead to an increase of the production costs and

[18] Taiwanese companies are very likely to conduct internationalization strategies in order to achieve economies of scale. Furthermore, these firms are among the most significant investors in China, plus, they are culturally and geographically close to China. This means that it is assumed that Taiwanese investors have a good knowledge of the risks related to investing in that nation, far more than Westerns. In addition, high control is exercised over the subsidiaries.

[19] China has been chosen because: it is the largest emerging market; it is geographically extended: the risk to invest in one province is different from that of investing into another one.

uncertainty. Furthermore, whenever a country is affected by political volatility, the government has to intervene with actions that may disrupt the volume of sales and generate riots. Therefore, the investors might be hesitant to invest into political instable countries, causing an FDI inflows decline. Political factors should be considered, together with the macroeconomic, institutional and country-specific determinants, when the investors evaluate in advance the location of their investments. A general overview of them indeed, allows to check whether the country has undergone development projects, which is the national level of the human capital, the inflation, unemployment and interest rates, real GDP, exchange rate and trade openness, and finally, above all, the extent of the market size and the return of capital degree[20]. The concept of political instability, and its effect over FDIs inflows, has been object of study since the late 70s. Indeed, the scholar Mario Levis in 1979, gave two different definitions[21]:

1- Political stability characterize those countries in which there are no domestic civil conflict and/or violent actions do not take place; this definition was the most common at that time. According to this definition, the societies living in politically stable countries, are eager to abide to the laws, and the socio-political changes do not come out after conflicts or aggressions, rather, are the result of institutionalized processes.
2- Political stability can also be considered as related to the society's acceptance of the political systems and outputs. Therefore, in this case, it is a matter of legitimacy of the regime, that, if constitutionally licit, provides a stable political environment to the nation. Thus, still according to this specific definition, it is not the stable political environment that generates a legitimate regime, but rather, it comes out from a climate of acceptance and support.

In the study that Levis conducted over 25 countries[22], with data collected between 1962 and 1970, he found out, through stepwise regressions, that there is a negative correlation between political instability and FDIs flows, in the developing countries. However, I deem not appropriate to recall other insights provided by author, given that, the period in which the article had been drafted, bore political concepts that have lost their original meaning at the present time (e.g. socialism, Comecon). Hence, some of the findings would not be properly addressed and may deceive the analysis currently conducted. Nevertheless, I assume this being a natural consequence of the political evolutions that occur within and among the nations. Indeed, as will be later analyzed in depth, a country's political risk analysis is influenced by the nation's present political framework and thus, due to the political evolutions that it (taken as a single or in a group of nations) can experience, can vary throughout the decades.

[20] Sadia Bano and others, "Why Did FDI Inflows of Pakistan Decline? From the Perspective of Terrorism, Energy Shortage, Financial Instability, and Political Instability" (2018) 55 Emerging Markets Finance and Trade 90.
[21] Mario Levis, "Does Political Instability in Developing Countries Affect Foreign Investment Flow? An Empirical Examination" (1979) 19 Management International Review 59
[22] Argentina, Bolivia, Brazil, Burma, Chile, Colombia, Ecuador, Egypt, Ghana, Guatemala, Haiti, India, Indonesia, Iraq, Liberia, Libya, Mexico, Morocco, Panama, Peru, Philippines, Sri-Lanka, Syria, Sudan, Venezuela

To begin reviewing the literature concerning politics as a determinant of FDIs, I would like to mention the article published in May 2020 by Phuc Canh, Thanh Binh, Dinh Thanh and Schinckus, which is called "*Determinants of foreign direct investment inflows: The role of economic policy uncertainty*"[23]. This is one of the most recent works in this field, and takes into account contemporary political issues that currently affect FDIs location decision. Precisely, its purpose is to investigate how FDIs are impacted by the domestic economic policy uncertainty (EPU) and the World Uncertainty (WUI), using data from 21 countries[24], which are both developed and developing, between 2003 and 2013. In order to do so, the authors used a two-step system, called "Sequential estimator of linear panel-data model" (SELPDM), counterchecking then their estimation, applying the generalized methods of moment (GMM). As it had been stated in the previous section, also in this study the authors confirmed a positive correlation between FDI inflows and GDP growth, trade openness and institutional quality. However, in addition, it has been assessed that, the countries affected by economic policy uncertainty show a negative correlation with the FDIs, and an EPU increase in the host country generates a reduction of the FDI flows toward it. More precisely the authors estimated that, when EPU increases by 1%, FDIs decrease by 3.845% in the short-run, and by 7.331% in the long-run. Indeed, the higher the political uncertainty of the country, the higher the:

- Time needed to invest, with the probability of postponing or reducing the investments, in order to wait and see the political evolution of the country;
- Probability of deterioration of growth prospects;
- Uncertainty about future political, institutional and legal evolutions of the country, that can lower FDIs inflows.

Instead, according to the WUI variable, the authors found that it has a positive effect on the FDIs toward a nation, which means that the higher the WUI, the higher the FDI inflows in the host country. Specifically, there is a correlation between global uncertainty and FDI of 1% to 1.19% in the short term and a ratio of 1%:2.61% in the long term. Thus, supposing all the other factors remaining constant, when global uncertainty increases, the investments toward a specific country are encouraged, given that the uncertainty related to that specific nation decreases. Afterwards, further examination has been conducted supposing that both WUI and EPU increase: the former still uplifts FDI inflows, while the latter does not have a significant impact. Hence, global uncertainty is far more determining that the economic political uncertainty of the country. This managerially implicates that, when investors cannot locate the uncertainty to a specific country they are more risky conscious and less anxious about their investments, even if the domestic uncertainty might be high; rather, if uncertainty is globally significant, the investors are more nervous.

[23] Nguyen Phuc Canh and others, "Determinants of Foreign Direct Investment Inflows: The Role of Economic Policy Uncertainty" (2020) 161 International Economics 159.
[24] Australia, Chile, France, Ireland, Republic of Korea, Russia, Sweden, Brazil, China, Germany, Italy, Mexico, Singapore, United Kingdom, Canada, Colombia, Greece, Japan, Netherlands, Spain and United States.

The same political focus has been adopted by Erkekoglu and Kilicarslan in 2016[25], whose objective was to investigate the factors that the investors take into consideration when they decide to make foreign direct investments. Among them, the impact of political risks has been assessed through a panel data analysis, and the data collected from 91 countries[26], covering the years between 2002 and 2012. Precisely, political risk has been defined as the possibility that the government of the host country, in which the multinational corporation (MNC) has decided to expand "the manufacturing plant" (*definition of FDI in the article, page 1*), changes national policies in a way that damages MNC's profits. Therefore, analyzing the political risk evolution of the country enables the investors to reduce the uncertainty, predicting the future evolution of their choices and consciously taking decisions about the operations to conduct in the country.

Deepening the analysis focus, it can be stated that political risk is influenced by a lot of factors, such as the regime of the country, the history of the country itself, the contrasts between the various political parties of the country, government crises, wars, terrorism, embargoes, strikes, internal and external limits on imports and exports. All of them can have negative impacts on foreign investors, which may:

- Decide to leave the country;
- Take positions that increase the domestic chaos in the stock exchange;
- Lower the level of investments;
- Damage local investors, which may lose their capital abroad.

Although it might be thought that an obvious and univocal correlation between political risks and foreign direct investments exists, different results have been obtained in the studies that aimed to assess it. Generally, some of them claimed that there is no correlation, others that there is a positive correlation (when political risk increases, foreign direct investments do the same), and finally, some studies stated that political risk's effect varies according to the company. The article by Erkekoglu and Kilicarslan contributed to the pre-existing literature, conducting F test, Breusch-Pagan Lagrange multiplier test and likelihood ratio test, and finding that some factors that influence political risk, do not have a significant impact on FDIs. Specifically, these are: "exportation of goods and services", "population", "logarithms of GDP", "political stability and absence of violence", "the efficacy of administration", "regulatory quality", "inflation", "freedom of expression and transparency", "rule of law", "prevention of corruption". In spite of this, other variables like, "political stability and absence of violence" and "the efficacy of administration" causes the foreign investment to decrease; the

[25] Hatice Erkekoglu and Zerrin Kilicarslan, "DO POLITICAL RISKS AFFECT the FOREIGN DIRECT INVESTMENT INFLOWS to HOST COUNTRIES?" (2016) 5 Journal of Business, Economics and Finance (JBEF) 218.

[26] Albania, Dominican Republic, Japan, Philippines, Algeria, Ecuador, Jordan, Poland, Armenia, Egypt Arab Rep,. Kazakhstan, Portugal, Australia, El Salvador, Kenya, Romania, Austria, Estonia, Korea, Republic Russian Federation, Azerbaijan, Ethiopia Liberia, Senegal, Bahamas, Finland, Luxembourg, Singapore, Bahrain, France, Malaysia, South Africa, Bangladesh, Gabon, Mexico, Spain, Belarus, Germany, Moldova, Sri Lanka, Belgium, Ghana, Mongolia, Sudan, Bolivia, Greece, Morocco, Sweden, Botswana, Guatemala, Mozambique, Switzerland, Brazil, Guinea-Bissau, Netherlands, Tanzania, Bulgaria, Haiti, New Zealand, Thailand, Cameroon, Honduras, Nicaragua, Tunisia, Canada, Hong Kong SAR, China, Niger, Turkey, China, Iceland, Nigeria, Ukraine, Colombia, India, Norway, United Kingdom, Costa Rica, Indonesia, Pakistan, United States, Croatia, Ireland, Panama, Uruguay, Czech Republic, Israel, Paraguay, Vietnam, Denmark, Italy, Peru

surge of the variables "exportation of goods and services", "population", "logarithms of GDP" is related to the foreign direct investment increase. Thus, a miscellaneous and unpredictable effect of political risk on FDIs exists, confirming the diversity of the results obtained in the previous studies.

In accordance to what has been quickly and briefly mentioned in the article analyzed above, Kechagia Polyxeni and Metaxas Theodore[27], in their paper, consider terrorism as one of the variables that influence the political risk of a country. Indeed, according to what is stated in their article, the political conditions of the recipient nation, together with institutional, social and financial current state, influence the international flows of capital investments. In particular, a favorable political and economic framework is more likely to attract FDIs, which can foster the growth of the host country, mainly concerning the developing ones. It is of pivotal importance to clearly state that the national political, financial and social framework, is constantly subjected to technological innovations, evolutions and unexpected events. Hence, a constant observation of the transitional FDI variables (among which political risk) and their impact is required. Terrorism, affecting the national political stability and damaging the socioeconomic conditions, can be detrimental to the absorption of FDIs inflows and can have a role on the location decision that the investors take. Thus, generally speaking, terroristic attacks can harm the productivity of the country and its economic stability, as well as increase the fear of fatalities and injuries that can damage the investors themselves. Therefore, the emerging countries, that need FDIs to boost their economic growth, can be ruined by terrorism, considering that it is a mean for political stability. In order to conduct the empirical analysis, the scholars gathered secondary data from international databases, about 18 developing countries[28] that have experienced terroristic activities between 1970 and 2016. The scholars firstly used a correlation matrix, then the stepwise regression, the Hausman tests, Pagan LM test and the Feasible Generalized Least Squares (FGLS). Another but secondary investigation has been conducted over the role of the 2007-08 financial crisis and the host countries geographical position on FDI inflows reduction, which resulted being positively correlated.

As a result of all the above assessments, it has been observed that terrorism, increasing the host country's investment risk, has a negative influence on the investors, discouraging their FDIs; it has statistical significance in all the dynamic models. Instead, other variables that positively affect investors' location decisions are: GDP, trade openness (with low transaction costs), surge of the exchange rates; despite these, political globalization and FDI lagged, are negative determinants. Specifically, GDP significantly attracts FDIs in the developing countries: the higher the host country's GDP, the higher the likelihood of capital inflows. Furthermore, taking into account the specific countries, the authors found out that East Asia and Pacific, South Asia and North Africa are deemed to be characterized by high political risks, hence being less likely to attract FDI inflows. Therefore, having to choose the right investment location, they tend to shift their action towards the Latin

[27] Kechagia Polyxeni and Metaxas Theodore, "An Empirical Investigation of FDI Inflows in Developing Economies: Terrorism as a Determinant Factor" (2019) 20 The Journal of Economic Asymmetries

[28] Malaysia, Thailand, Philippines India, Pakistan, Argentina, Bolivia, Brazil, Ecuador, Colombia, Mexico, Honduras, Chile, Turkey, Algeria, Tunisia, Ghana, Kenya

American and the Caribbean nations, and the Central Asia and Sub-Saharan ones. The reason behind this discrepancy must be addressed to the financial and political reforms that the countries of the latter group have passed, increasing their attractiveness up to the point of being chosen by foreign investors. Therefore, if the countries aim to receive FDIs, they should enact social, financial, legal and political improvements, in order to set the path toward structural changes, whose objective is to reduce political risk and increase the institutional stability, which are the only means to prevent and defeat terroristic attacks. Specifically, focusing on politics, more democratic and liberal economies tend to more easily attract capital inflows, given that, as it has been said before, trade freedom and stable but flexible exchange rates have a positive influence on FDIs. However, it must be pointed out that it might happen that investors do not collect the right information about the national social, political and financial framework, taking for granted and generalizing those of the neighboring countries; additionally, the situations can vary within the same country, from a region to another. Finally, with all these considerations in mind, it should be noted that Pakistan and India have been recognized in the 2020's top 10 of the countries with the highest level of terroristic attacks (for this reason they will be considered for a specific case study analysis in the next chapters)[29].

In the study conducted by Bano and others[30] it has been assessed the effect of terrorism over the FDIs inflows in Pakistan (I deem useful to present here the effects of terrorism on FDIs). Precisely, the scholars confirmed that a long-term relationship between terrorism and FDI inflows decline exists, and this connection has gained momentum after 2007. This year has been a turning point, since US invasion of Afghanistan led to a surge of terroristic activities, which in turn negatively impacted Pakistani security, thus influencing the risks perceived by the investors. Indeed, until 2007, terrorism has been considered insignificant on FDI inflows, as terroristic attacks sporadically occurred. Furthermore, other adverse situations, like energy shortages, financial and political instability worsened investors' evaluation of the host country, preventing it to receive FDIs and technologies that could have promoted Pakistan's economy and employment. Instead, when the financial crisis globally spread, Pakistan's financial and political situations were considered more stable than before: the FDIs into the country increased. This can be further justified with the findings of the article, mentioned at the beginning of this section, "*Determinants of foreign direct investment inflows: The role of economic policy uncertainty*" by Phuc Canh, Thanh Binh, Dinh Thanh and Schinckus, which showed the trade-off between economic political uncertainty of the country and world uncertainty. An increase of the latter variable promotes international investments, as it seems that the perceived political stability of a single country increases. Although worldwide instability increased, Bano and others stressed that the Pakistani government action plans against terrorism unfortunately resulted being insufficient, thus ineffective in attracting FDIs. Instead, the scholars emphasized the role that poverty reduction, the ban of illegal, extremist and religious groups and a

[29] "Global Terrorism Index 2020: The Ten Countries Most Impacted by Terrorism" (Vision of HumanityNovember 27, 2020)
[30] *Supra note 20.*

higher access to education could have in reducing terrorism. These recommendations (that will be expanded in the case study) will help investors in building confidence about FDIs in Pakistan.

In order to recollect all the insights provided so far, I deem useful to recall the work of the professor from the University of the West Indies, Trinidad and Tobago, Kevin Williams[31]. In its "*Foreign direct investment, economic growth and political instability*", he states that there is a correlation between FDIs and economic growth, given that the former promote and complement the latter. Therefore, the FDIs role in the development of a country is unquestionable; globalization has further boosted the attraction of high levels of FDIs. Indeed, goods, services, labor and international financial capitals can be shipped cross-border. Nevertheless, the scholar points out that, only long-term capital inflows contribute to the economic growth, the short-term ones instead, have generated 90's financial and economic crises in East Asia and then in Mexico. As a matter of fact, whether capital inflows have a short duration, their high speed both in entering and exiting the country generates critical economic and financial shocks that can even worsen the initial situation of the country. Instead, stable and longer FDI inflows really stimulate the growth of the developing countries, increase their productivity and reduce uncertainty. Precisely, a 10% FDI's increase determine a 7.43% growth of the country. However, it cannot be said the reverse: in the study, Williams found out that growth does not affect FDIs. In addition, for the sake of clarity, it must be said that FDIs do not generate growth per se, but technological improvements, economic reforms, enhanced production techniques cooperate to the national development. Finally, FDIs trigger the competition between multinational corporations and local companies; plus, threatening the policy makers to relocate their establishment, force the government to adopt growth stimulating plans. These empirical evidences came out using the three-stage least squares estimator, using a data set composed of developing countries, which were divided into four categories: Sub-Saharan Africa, Latin America and the Caribbean, Asia and North Africa[32].

Williams recall Theodore's study, mentioned above, deepening the analysis over the connections between FDIs and the liberalization of the recipient country: free markets promote more significant capital inflows. Indeed, during the 1990s, characterized by a trend toward liberalization, FDI inflows and growth were generally much higher than the 70s' and 80s', that conversely, had been affected by the oil shock and the debt crisis. Furthermore, using the explanatory factor analysis, the academic highlighted how FDIs and economic growth respond to the political instability of the developing countries. Indeed, it not only affects and discourages economic activities, but generates also ethnic, religious and political repressions, as well as economic inequalities. Political instability generates uncertainty, which, as a consequence, distorts the

[31] Kevin Williams, "FOREIGN DIRECT INVESTMENT, ECONOMIC GROWTH, and POLITICAL INSTABILITY" (2017) 17 JOURNAL OF ECONOMIC DEVELOPMENT

[32] **SSA:** Benin, Botswana, Burkina Faso, Cameroon, Central Africa, Congo, D. Rep. Congo, Rep., Cote d'Ivoire, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Niger, Nigeria, Senegal, Sierra Leone, South Africa, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe; **LAC:** Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad & Tobago, Uruguay, Venezuela; **ASIA:** Bangladesh, China, Indonesia, Malaysia, Nepal, Pakistan, Philippines, South Korea, Sri Lanka, Thailand, India, Papua New Guinea, Singapore; **NA:** Algeria, Egypt, Morocco, Tunisia.

investors' perspectives and the economic growth. Additionally, a politically unstable country is incline to inappropriately allocate its human capital, thus increasing its involvement in corruption and activities that are detrimental to growth. However, as it has been already stated by Hatice Erkekoglu and Zerrin Kilicarslan, mentioned at the beginning of the section, several variables contribute to the creation of political instability. Williams extends these consideration to the economic growth of the country, broadening the previous work focused solely on the FDI inflows. Here the major findings:

- Protests, discouraging potential investors, decrease FDI inflows but do not affect the developing country's economic growth;
- Violence is unrelated with both FDI inflows and economic growth;
- Regime instability, due to the policy inconsistency it generates, halts the nation's economic growth but is insignificant for the FDI flows. Indeed, if the policies, enacted at the time of the investment, do not guide the upcoming ones, the future will be considered uncertain, reducing then the investments in technology and human capital, which prevent the country from exploiting productivity growth.

To conclude this overview, I would like just to make a further final step, recalling an article published by Martijn Burger, Elena Ianchovichina, and Bob Rijkers[33] released by the World Bank Economic Review in 2015, which stated that political instability affects FDIs in way that is different from a sector to another. Their analysis focused on data about the Middle-East and North African (MENA) countries, and collected between 2003 and 2012. Their evidences have been empirically assessed by different methods like, GMM, OLS, LSDV, Han-Philips estimator. Precisely, the scholars affirmed that political risky events determine a reduction of the investment inflows in the non-resource tradable manufacturing and commercial sectors, whereas FDIs in natural resources and non-tradable activities are not affected by these events. However, this study has been limited to a specific mode of entry: greenfield; thus, cannot be generalized to further considerations. Although this limit, it is notorious also from other studies, that the impact of political instability on FDIs varies according to the specific sector toward which they are referred to. Therefore, I would like to orientate this review toward the sector I decided to focus my dissertation on: sustainable energy in the developing countries.

My choice has been taken after careful considerations of the evolutions of the energy market, both in the emerging and developed economies. Indeed, in the former, the energy use has grown at an accelerated path, which is far more stead than that of the domestic energy production. Furthermore, a constant concern over the use of non-renewable energies and a waste of natural resource, harming global warming and increasing environment pollution, is socially shared. Therefore, the societies in the developed and developing countries, have manifested their preoccupation toward the topic, pushing the national governments to adopt renewable

[33] Martijn Burger, Elena Ianchovichina and Bob Rijkers, "Risky Business: Political Instability and Sectoral Greenfield Foreign Direct Investment in the Arab World" (2015) 30 The World Bank Economic Review 306.

energies that allow a sustainable development. Among them, a main role[34] is expected to be covered by hydropower, solar PV, wind, and bio-energy. Nevertheless, the governments are concerned with the satisfaction of their citizens' desires, as well as the containment of the costs, that the shift toward green generates. Indeed, new infrastructures, start-up and operating costs will have to be sustained. As a result, a stable financial system is needed to fund and manage all the costs and the risks that this transition will require. In truth, it has happened that some countries could not achieve their complete transition toward renewable energy because some market failures, like financial scarcity, occurred. It is clear now that also FDIs play a major role in enabling this transition. The article *"Impact of Technological Innovation, Financial Development and Foreign Direct Investment on Renewable Energy, Non-Renewable Energy and the Environment in Belt & Road Initiative Countries",* precisely contributes to assess the correlation between FDIs and energetical transition. The main findings[35] concern an analysis conducted on 69 Belt and Road initiative (BRI) countries, that account the 65% of the global population, whose data have been taken from the World Bank database, between 2000 and 2014. In these nations, 7000 projects are enacted for the completion of the energetical transition. The scholars suggested that there is a negative relationship between FDIs and renewable energy consumption, given that the FDI inflows are not directed toward this sector. To incentivize this channelization, the countries should enact effective policies that attract FDIs in their clean energy sector, which would work as determinants of FDI inflows in the renewable energy sector. Among them, it is possible to enlist fiscal policies (e.g. tax emption on renewable energy sources, subsidized loans). The authors also recommended that, in order to increase the investments in the green energy in the considered countries, it is necessary to adopt: carbon emission strategies; policies that increase the price of the traditional energy; and promote investments in the R&D sector of the renewable energies. All of them would encourage both the financial flows and technological progresses and would also allow a reliable and significant long-term investment plan in these countries. Lastly, the ultimate scholar's finding concerned financial development, which resulted being positively correlated with renewable energy consumption in BRI countries, and thus accelerates economic growth and CO2 emissions reduction.

In conclusion, after having collected all the information needed to enlist the determinants of FDIs and the role of the political instability, I intend to allocate my thesis in the literature reviewed so far. In particular, the aim of my dissertation is that of combining the two analyses conducted until now: the influence of political instability on FDIs, and their role in allowing the energetical transition of the developing country. Therefore, I will conduct an empirical analysis in order to verify whether exists a relationship between the political instability of the country and its receipt of foreign direct investments, aimed to either allow or boost its energetical transition. Specifically, I will focus on the emerging economies that, as has also been stated

[34] Anwar Khan and others, "Impact of Technological Innovation, Financial Development and Foreign Direct Investment on Renewable Energy, Non-Renewable Energy and the Environment in Belt & Road Initiative Countries" (2021) 171 Renewable Energy 479

[35] Obtained through various tests, like panel slope homogeneity, cross-sectional dependence, first and second generation unit root, Westerlund, Kao, Pedroni, Driscoll and Krayy, GMM.

throughout the literature review, have inadequate and insufficient financial and technological resources, and, as such, FDIs from developed countries could be the only mean to either start or achieve the complete transition toward renewable energy resources.

CHAPTER 2: Empirical analysis

2.1. Research question

After having collected all the necessary information with regards to the determinants of FDIs, it is possible to state that investors take into account multiple factors, which can be either internal or external to the company, before funding a business operation into a foreign country. In truth, as it has been suggested by Amal, Floriani and Cruz[36], the analysis should be conducted on a regional level. Nevertheless, since political instability affects basically all the regions of a country, I deem this point of view inappropriate for the kind of examination I want to carry out. Therefore, although I consider the above-mentioned scholars approach suitable in conducting analysis on, for instance, the institutional apparatus and its regional connections, due to the broad effects that political instability can generate throughout a country, my examination will be conducted on a national basis.

Furthermore, all the secondary data collected by the international institutions, and that will be used in this dissertation, refer to the nation per se, without delving into regional diversifications. Additionally, I aim to accomplish a study focused on a very specific activity, thus recalling the sectoral distinction stated by Paul and Jadhav[37] and by Burger, Ianchovichina and Rijkers[38], which identified the different factors that, according to this type of discrimination, influence the FDIs destined to each economic area.

The focal point of this thesis is the energy sector, specifically the area concerning renewable resources. According to the Investment Trade Centre (whose data will also be used to empirically conduct the analysis), that classified the various industries according to the Revision 4 of the International Standard Industrial Classification of all Economic Activities (ISIC Rev.4) drafted by the - United Nations Statistics Division (UNSD)[39], this business area falls into the tertiary sector, which, according to Paul and Jadhav is negatively correlated with scant governances. In this dissertation I will not focus on the other determinants that I reported in the previous chapter. Indeed, I do not deem these being relevant for the analysis I want to carry out, also because, given the novelty and the originality of my work, the data available are scarce. Therefore, I will not contemplate the companies' aggregation variable by Lien and Filatotchev[40], nor the factors enlisted by the OLI paradigm.

I will focus on just one of the variables presented by Arbatli[41], "political environment", which has been identified as a country pull specific factor. The author, already acknowledged the role that a political unstable environment can have in affecting FDIs, even though, due to the non-univocal definition of this risk, she did

[36] *Supra note, 8.*
[37] *Supra note, 10.*
[38] *Supra note, 32.*
[39] Investment Trade Centre, "InvestmentMap" (*www.investmentmap.org*).
[40] *Supra note, 16.*
[41] *Supra note, 3.*

not assess the real effects that the variable can generate. In fact, as it has been stated by Levis[42] in 1979, we can consider political stability in two different ways, even if in this analysis I adhere to the one concerning the absence of conflicts, which partially fits also with the one provided by Erkekoglu and Kilicarslan[43]. As a matter of fact, last scholars identified all the factors that generate political risk (among them they listed wars and terrorism), thus negatively impacting FDIs. In addition, as stated by Polyxeni and Theodore[44] and Bano and others[45], terroristic attacks can be detrimental to the political stability of the nation, also harming the receipt of foreign capital and the productivity of the country itself.

As stated in the previous chapter, Theodore's work has been recalled by Williams[46], who identified the impacts of political instability on economic growth and FDI inflows, finding that the latter are discouraged by protests. Finally, one of the contributions that have inspired me the most, is the one written by Phuc Canh, Thanh Binh, Dinh Thanh and Schinckus[47], which highlighted how, in general, an increase of the economic political uncertainty decreases the FDI inflows toward a country both in the short and in the long run, whilst a growth of the world uncertainty index determines a general raise of them.

Nonetheless, this thesis goes beyond the findings of the scholars, mentioned in the previous chapter, that identified the motives that either encourage or disincentive FDIs. Among them, the role of the political situation of the investee country in influencing FDI's location decisions has been assessed, but, all the studies presented in the section dedicated to this factor, have not covered the topic that will be the main focus of my dissertation. Indeed, with this thesis I aim to investigate whether and in which extent the political instability of the receiving countries affects the FDIs necessary to complete or commence their energy transition. Precisely, I will inquire into the emerging economies, which are those nations that mainly necessitate this kind of financing sources, given their scarcity of adequate financial and technological assets. Therefore the research question that I aim to analyze is:

To what extent is political stability an essential element for the energy transition in emerging countries? In other words, *is political stability a determining factor for FDI inflows about the energy transition of emerging countries?*

2.2. Materials used

The objective of this section is that of explaining how the analysis has been conducted. Hence, I will provide exhaustive clarifications both of the secondary data collected and of the methods used to investigate on the research question just stated.

[42] *Supra note, 21.*
[43] *Supra note, 25.*
[44] *Supra note, 27.*
[45] *Supra note, 16.*
[46] *Supra note, 30.*
[47] *Supra note, 23.*

2.2.1. Data sample

In order to assess if a relationship exists between political instability and FDI inflows in the emerging economies that want to shift to a sustainable energy supply, I had to gather the related secondary data both on the countries that aim to complete the energy transition and on the political risk that affects them. I could not bring primary data to this quantitative analysis, since it would have been almost impossible to ask each nation to disclose the data needed. Therefore, I assumed that it would have been more appropriate to manipulate the data that reliable international institutions previously collected. Commonly, the World Bank is the most accredited source for this kind of data, and indeed, on its website it is possible to obtain precise information on the FDI both as flow and as percentage of the nation's GDP. Thus, this dataset is now used to show the general time pattern of FDI inflows into emerging economies, which, according to the criteria enlisted by the World Bank, were identified as such by the organization itself [48].

In Table n.1, the data are expressed as flows and refer to the developing countries that will be object of study throughout this dissertation[49]. Precisely, *"foreign direct investment refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10 percent or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship. Data are in current U.S. dollars"*[50].

[48] Developing countries are identified using the Gross National Income (GNI) per capita per year, which is calculated using the Atlas method. World Bank, "Developing Countries - ISI" (*www.isi-web.org*)

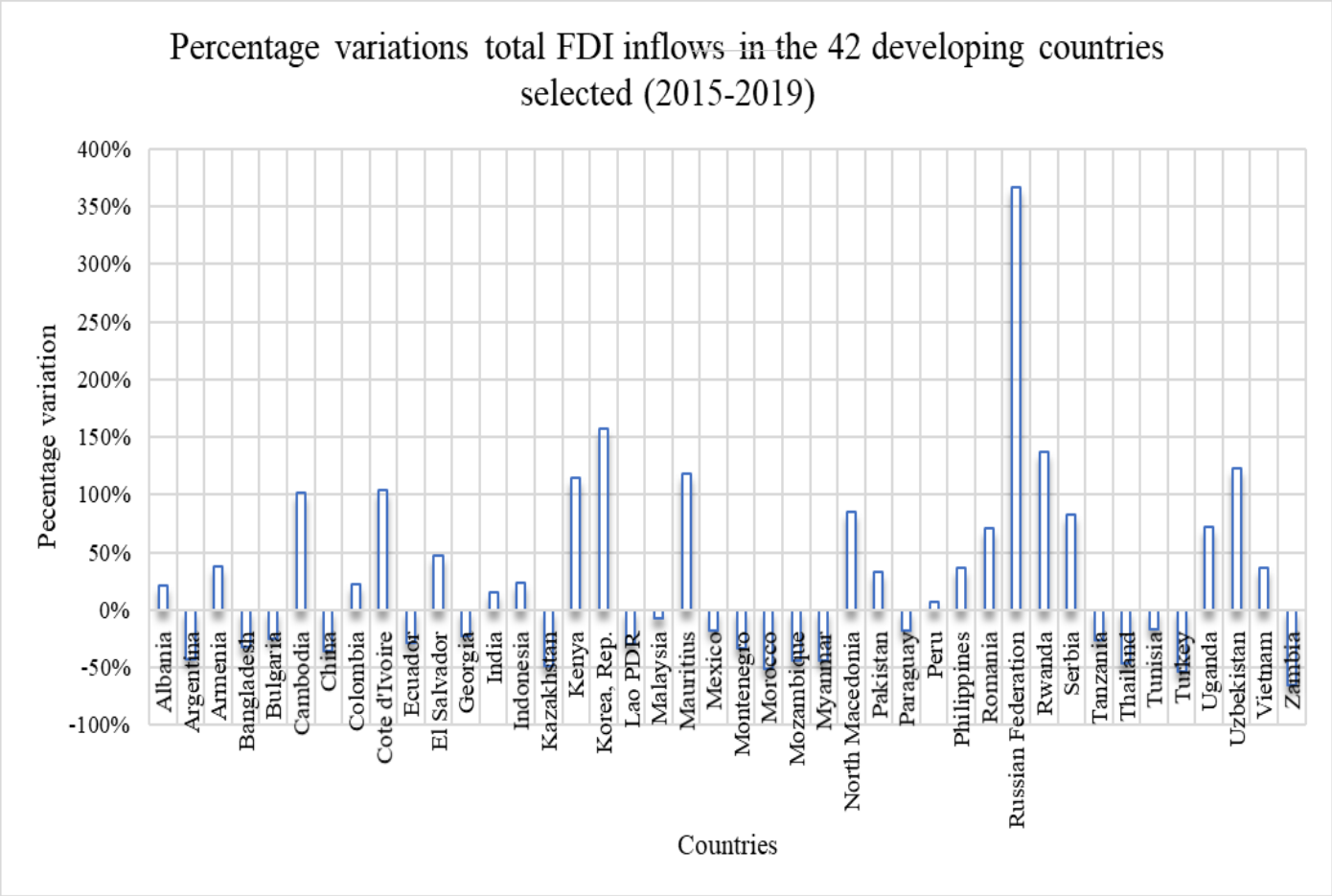
[49] These countries have been selected according to the criteria on which the subsequent dataset is based. Indeed, it refers to the FDIs in the renewable sector in the developing economies, which is the focus of this dissertation. Thus, I deemed appropriate to present here the same nations, in order not to fill this analysis with irrelevant information.

[50] World Bank dataset specifications.

Country Name	2015	2016	2017	2018	2019
Albania	$ 989,578,334.83	$ 1,044,389,554.86	$ 1,022,757,857.07	$ 1,204,383,363.60	$ 1,201,022,154.47
Argentina	$ 11,758,994,011.29	$ 3,260,164,341.77	$ 11,516,861,462.28	$ 11,872,856,662.76	$ 6,663,062,111.96
Armenia	$ 184,127,986.31	$ 333,733,314.10	$ 250,935,110.24	$ 254,146,163.56	$ 254,077,251.67
Bangladesh	$ 2,831,152,765.16	$ 2,332,724,780.71	$ 1,810,395,803.57	$ 2,421,626,238.44	$ 1,908,045,387.03
Bulgaria	$ 2,179,500,000.00	$ 1,476,500,000.00	$ 2,020,340,000.00	$ 1,805,760,000.00	$ 1,643,900,000.00
Cambodia	$ 1,822,804,151.26	$ 2,475,915,853.66	$ 2,788,084,321.66	$ 3,212,633,447.04	$ 3,663,032,999.47
China	$ 242,489,331,627.40	$ 174,749,584,584.05	$ 166,083,755,721.65	$ 235,365,050,036.34	$ 155,815,344,616.66
Colombia	$ 11,723,937,065.53	$ 13,847,802,735.27	$ 13,836,696,227.15	$ 11,535,119,873.13	$ 14,313,721,547.49
Cote d'Ivoire	$ 494,408,755.78	$ 577,871,524.16	$ 975,014,998.80	$ 620,330,654.36	$ 1,008,704,755.35
Ecuador	$ 1,322,701,337.31	$ 756,110,868.12	$ 624,545,412.26	$ 1,388,674,145.24	$ 946,256,269.51
El Salvador	$ 494,541,718.09	$ 479,469,380.71	$ 503,801,415.18	$ 412,743,968.36	$ 724,753,960.84
Georgia	$ 1,735,285,391.90	$ 1,658,403,920.09	$ 1,918,136,481.40	$ 1,259,706,699.36	$ 1,341,122,820.37
India	$ 44,009,492,129.53	$ 44,458,571,545.80	$ 39,966,091,358.74	$ 42,117,450,737.26	$ 50,610,647,353.59
Indonesia	$ 19,779,127,976.96	$ 4,541,713,739.24	$ 20,510,310,832.45	$ 18,909,826,043.51	$ 24,515,536,154.91
Kazakhstan	$ 6,577,824,049.68	$ 17,220,962,547.92	$ 4,712,631,470.53	$ 83,409,074.56	$ 3,369,885,000.68
Kenya	$ 619,719,962.29	$ 678,803,416.95	$ 1,266,137,282.66	$ 1,625,921,130.62	$ 1,332,436,904.48
Korea, Rep.	$ 4,104,100,000.00	$ 12,104,300,000.00	$ 17,912,900,000.00	$ 12,182,600,000.00	$ 10,565,600,000.00
Lao PDR	$ 1,077,759,914.59	$ 935,296,172.78	$ 1,693,080,810.94	$ 1,358,019,506.23	$ 755,524,124.25
Malaysia	$ 9,857,162,111.82	$ 13,470,089,920.81	$ 9,368,469,822.66	$ 8,304,480,741.65	$ 9,101,052,111.36
Mauritius	$ 216,455,188.31	$ 378,764,432.27	$ 479,995,890.26	$ 371,518,185.92	$ 472,302,807.08
Mexico	$ 35,737,808,610.00	$ 38,778,176,276.00	$ 33,016,667,343.00	$ 37,653,019,206.00	$ 29,353,967,205.00
Montenegro	$ 699,855,695.33	$ 226,702,405.90	$ 560,665,419.03	$ 485,653,127.82	$ 462,868,328.52
Morocco	$ 3,252,913,902.36	$ 2,153,363,904.94	$ 2,680,109,856.21	$ 3,544,387,229.28	$ 1,599,761,097.98
Mozambique	$ 3,868,353,884.95	$ 3,128,149,928.70	$ 2,319,071,971.48	$ 2,678,190,543.60	$ 2,180,768,236.14
Myanmar	$ 4,083,839,111.71	$ 3,278,096,409.87	$ 4,733,257,012.40	$ 1,609,776,621.88	$ 2,292,325,391.69
North Macedonia	$ 296,604,200.38	$ 549,371,101.55	$ 380,738,977.54	$ 648,732,424.98	$ 549,500,829.88
Pakistan	$ 1,673,000,000.00	$ 2,576,000,000.00	$ 2,496,000,000.00	$ 1,737,000,000.00	$ 2,218,000,000.00
Paraguay	$ 480,469,114.40	$ 492,762,511.33	$ 603,320,572.23	$ 386,916,058.14	$ 391,823,179.79
Peru	$ 8,313,966,794.52	$ 6,739,051,858.18	$ 6,860,492,819.50	$ 6,487,906,280.72	$ 8,891,912,446.49
Philippines	$ 5,639,155,961.87	$ 8,279,548,274.89	$ 10,256,442,398.88	$ 9,948,598,823.97	$ 7,685,339,333.91
Romania	$ 4,317,731,472.31	$ 6,252,035,766.43	$ 5,952,909,608.10	$ 7,343,560,129.25	$ 7,365,441,773.73
Russian Federation	$ 6,852,970,000.00	$ 32,538,900,000.00	$ 28,557,440,000.00	$ 8,784,850,000.00	$ 31,974,770,000.00
Rwanda	$ 162,083,821.00	$ 279,747,327.60	$ 274,025,990.66	$ 366,192,315.51	$ 384,461,863.63
Serbia	$ 2,343,139,735.75	$ 2,355,214,636.94	$ 2,894,615,965.24	$ 4,071,895,067.82	$ 4,268,709,249.61
Tanzania	$ 1,506,024,896.01	$ 864,040,000.00	$ 937,700,000.00	$ 1,055,991,268.20	$ 1,112,400,000.00
Thailand	$ 8,927,579,182.16	$ 3,486,184,390.30	$ 8,285,169,819.69	$ 13,186,328,517.84	$ 4,816,635,831.58
Tunisia	$ 970,521,888.74	$ 622,569,482.16	$ 810,936,482.84	$ 988,942,901.04	$ 810,173,457.68
Turkey	$ 19,263,000,000.00	$ 13,929,000,000.00	$ 11,099,000,000.00	$ 13,023,000,000.00	$ 9,052,000,000.00
Uganda	$ 737,652,140.15	$ 625,704,361.87	$ 802,704,141.01	$ 1,055,353,352.63	$ 1,266,026,787.78
Uzbekistan	$ 1,041,199,291.09	$ 1,662,586,807.03	$ 1,797,341,435.65	$ 624,686,535.50	$ 2,314,621,446.35
Vietnam	$ 11,800,000,000.00	$ 12,600,000,000.00	$ 14,100,000,000.00	$ 15,500,000,000.00	$ 16,120,000,000.00
Zambia	$ 1,582,666,666.67	$ 662,813,935.42	$ 1,107,519,804.85	$ 408,438,491.70	$ 547,967,909.61

TABLE N.1: World Bank time series displaying total net FDI inflows between 2015 and 2019 in the 42 developing countries selected. Measurement unit: US$. **Source: WORLD BANK, https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD**

It has been possible to assess how the FDIs have evolved throughout the years in the various countries.



GRAPH N.1: Percentage variation, between 2015 and 2019, of the FDI inflows of the 42 developing countries selected. **Source: personal elaboration of data.**

Table n.1 represents total FDIs, not classified by sector, that the 42 sample countries have received in the years from 2015 and 2019. I decided to graphically portray them on graph n.1, in which on the y axis I identified the percentage variations that the FDIs have experienced between 2015 and 2019, thus outlining how the beginning situation has evolved until then. On the x axis instead, I identified all the emerging countries that I aim to analyze.

Firstly, it can be noticed that the greatest percentage variation has been experienced by the Russian Federation, whose FDIs increased by almost 400%. The country is followed by the Republic of Korea, whose variation has been more than 150%. After that, there are all the other countries. In particular, it is possible to identify several clusters. Mauritius, Rwanda, Uzbekistan, Kenya and, even if for a short value, Cote d'Ivoire are comprised into the group whose FDIs varied between the 100% and 150%. The other group is the one composed by North Macedonia, Serbia, Philippines, Romania and Uganda, that could benefit from an increase of their FDIs, even though for lower amounts than that of the previous cluster: their percentages in fact, are below the 100% but higher than 50%. Lastly, among the positive increases, it is possible to mention Albania, Armenia, Colombia, India, Indonesia, Pakistan, Peru and Vietnam. Their growth rates are still positive and are

comprised between 0% and under 50%. Nevertheless, there are countries that could not appreciate positive rises of their FDIs between 2015 and 2019. These can be divided in two main clusters: the one in which the countries' FDIs decreased between the 0% and -50%, and the other in which there has been a decline of more than the -50% but lower than -100%. In the former it is possible to list: Argentina, Bangladesh, Bulgaria, China, Ecuador, Georgia, Kazakhstan, Lao PDR, Malaysia, Mexico, Montenegro, Morocco, Mozambique, Myanmar, Paraguay, Tanzania, Thailand and Tunisia. It is clear that this is the most substantial group. Thus, unfortunately, the greatest part of the countries I have selected for the dissertation, has received lower amounts of total FDIs in 2019 compared to 2015. In the last group finally, it is possible to record only Turkey and Zambia, even if the last country's value is far more negative than that of Turkey.

Nevertheless, to properly accomplish my task, it proved necessary not only to search for the FDI inflows into the various nations, but rather to identify a dataset that provided a classification of them by sector. Hence, to accomplish the main purpose of this thesis, namely to identify the correlation between renewable energy's FDI inflows and political risk, I decided to use the data about the FDIs, expressed as flows (i.e., as transactions), that the Investment Trade Centre (ITC) collected between 2015 and 2019. Consequently, I have further deepened the examination focusing on the ITC's tertiary sector[51], considering that it contains the FDIs belonging to the cluster *"Electricity, gas, steam and air conditioning supply"*, which I deem being the most relevant to the renewable sources. The data the Investment Map gathered come from three main clusters of reliable sources: each country's National institutions (like Central Banks), Regional Organizations (e.g. ASEAN, EUROSTAT), and finally, International Organizations (OECD, IMF, UNCTAD). Nevertheless, ITC prioritized the data collected from the National Institutions, which were further complemented with those coming from the other two categories. Furthermore, although I will be using a dataset with FDI flows, ITC published another set of data which shows the FDIs as stock (positions). The data about the countries changes according to this differentiation, given that the flows and the stock are collected from two different institutions.

I deem the flows one being more consistent with the analysis, given that they calculate the values as the sum of FDI transactions in the four quarters, namely the two semesters:

$$FDIflow^{y}_{x,z,t} = \sum_{i=1}^{4} FDIflow^{y}_{x,z,tQi}$$

x=partner country; t=year; z=economic activity; y=reporting country; Q=quarter of year

Instead, the stock ones highlight the position of the country only at the second semester of the year:

$$FDIstock^{y}_{x,z,t} = FDIstock^{y}_{x,z,tQ4}$$

x=partner country; t=year; z=economic activity; y=reporting country; Q=quarter of year

[51] *Supra note, 37.*

Thus, having chosen the FDI flows, I can now display the time series data collected about the emerging economies (as defined by the World Bank) that have received, between 2015 and 2019, FDIs in the renewable sector, flows, (identified by the ITC's cluster *"Electricity, gas, steam and air conditioning supply"*.

Reporting Country	2015	2016	2017	2018	2019
Albania	$ -	$ 628,50	$ -	$ -	$ -
Argentina	$ 230,69	$ 64,38	$ -	$ -	$ -
Armenia	$ 119,15	$ 8,44	$ -80,93	$ 99,11	$ 88,19
Bangladesh	$ 573,60	$ 434,31	$ 260,37	$ 1.122,56	$ 1.061,27
Bulgaria	$ 50,26	$ 25,24	$ -233,84	$ -	$ -
Cambodia	$ -	$ -	$ -	$ -	$ -
China	$ -	$ -	$ -	$ 2.660,00	$ -
Colombia	$ 274,30	$ 3.660,60	$ 412,55	$ 141,08	$ 316,03
Cote d'Ivoire	$ 37,44	$ 7,49	$ 27,02	$ -	$ -
Ecuador	$ 61,76	$ 1,19	$ 2,13	$ 6,57	$ 6,71
El Salvador	$ -50,61	$ -24,06	$ 108,81	$ 73,89	$ 175,00
Georgia	$ 123,68	$ 145,01	$ 278,98	$ 122,34	$ 261,56
India	$ 1.364,00	$ 1.722,00	$ 1.870,00	$ 2.427,00	$ -
Indonesia	$ -251,04	$ 438,02	$ 1.014,87	$ 83,34	$ 1.500,36
Kazakhstan	$ -50,04	$ -0,32	$ 15,73	$ 130,31	$ 159,27
Kenya	$ 4,55	$ 30,97	$ 31,91	$ -	$ -
Korea, Republic of	$ 7,36	$ 50,00	$ -135,91	$ 159,96	$ -
Lao People's Democratic R	$ 548,40	$ 524,81	$ 678,07	$ -	$ -
Malaysia	$ -	$ -	$ -	$ 39,15	$ 101,48
Mauritius	$ 3,82	$ 2,56	$ 6,32	$ 6,51	$ 0,37
Mexico	$ 1.081,25	$ 1.293,77	$ 2.153,08	$ 4.957,25	$ -
Montenegro	$ 14,31	$ -0,44	$ -	$ -	$ -
Morocco	$ 192,64	$ 1,22	$ 205,94	$ 417,96	$ -
Mozambique	$ 0,43	$ 117,93	$ 94,83	$ 8,31	$ -20,45
Myanmar	$ 28,55	$ 278,05	$ 446,33	$ -	$ -
North Macedonia	$ -	$ 41,40	$ 19,20	$ -	$ -
Pakistan	$ 303,75	$ 1.153,41	$ 716,01	$ 1.179,48	$ -323,90
Paraguay	$ -	$ 0,69	$ -0,98	$ -0,10	$ -
Peru	$ -	$ 471,00	$ 752,00	$ 371,00	$ -
Philippines	$ 9,79	$ -83,10	$ 1.383,71	$ -	$ -
Romania	$ -371,69	$ 483,38	$ 184,93	$ -179,15	$ -
Russian Federation	$ -1.940,46	$ -98,35	$ 1.173,46	$ 695,88	$ 349,62
Rwanda	$ 76,14	$ 21,89	$ 45,76	$ 144,83	$ -
Serbia	$ 13,31	$ 2,21	$ -	$ -	$ -
Tanzania, United Republic	$ -421,45	$ -14,81	$ 29,59	$ -	$ -
Thailand	$ 95,98	$ -115,52	$ 625,37	$ -71,35	$ -611,33
Tunisia	$ 494,64	$ 370,76	$ 334,79	$ 343,80	$ -
Turkey	$ -	$ 607,69	$ -	$ -	$ -
Uganda	$ 68,78	$ 47,47	$ 159,77	$ -	$ -
Uzbekistan	$ -	$ -	$ -	$ 10,45	$ -
Viet Nam	$ 2.799,43	$ 310,43	$ 8.374,07	$ 1.817,43	$ 1.010,65
Zambia	$ 16,70	$ -16,70	$ 59,73	$ -	$ -

TABLE N.2: FDIs in "electricity, gas, steam and air conditioning supply", between 2015 and 2019 in the developing countries selected. **Source: ITC, https://www.investmentmap.org/investment/time-series-by-reporting-country**

Hence, the sample consists of 42 developing countries.

Instead, the data concerning the political risk that affects the nations selected to conduct the analysis, have been collected from the World Bank database. Indeed, even though a lot of websites provide this kind of information, the organization's ones are the most reliable and the most easily accessible by the audience. The data presented cover the years between 2015 and 2019 and are related to the 42 countries chosen for the FDI flows.

Country Name	2015	2016	2017	2018	2019
Albania	0,35	0,34	0,38	0,38	0,12
Argentina	0,01	0,20	0,17	0,02	-0,12
Armenia	-0,25	-0,66	-0,62	-0,44	-0,51
Bangladesh	-1,21	-1,26	-1,26	-0,99	-0,92
Bulgaria	0,02	0,08	0,33	0,46	0,54
Cambodia	0,06	0,21	0,09	0,11	-0,08
China	-0,55	-0,50	-0,23	-0,29	-0,24
Colombia	-1,07	-0,88	-0,77	-0,79	-0,90
Cote d'Ivoire	-0,83	-0,91	-1,09	-0,89	-0,96
Ecuador	-0,14	-0,09	-0,07	-0,08	-0,19
El Salvador	-0,02	-0,10	-0,26	-0,38	-0,13
Georgia	-0,47	-0,31	-0,37	-0,43	-0,45
India	-0,95	-0,95	-0,76	-0,98	-0,70
Indonesia	-0,62	-0,37	-0,50	-0,54	-0,48
Kazakhstan	-0,04	0,01	0,04	-0,03	-0,08
Kenya	-1,24	-1,35	-1,13	-1,17	-1,12
Korea, Rep.	0,16	0,16	0,32	0,60	0,48
Lao PDR	0,54	0,53	0,40	0,42	0,53
Malaysia	0,26	0,14	0,12	0,26	0,11
Mauritius	1,00	1,01	0,97	0,88	0,82
Mexico	-0,80	-0,63	-0,72	-0,57	-0,71
Montenegro	0,14	0,28	-0,06	0,05	0,01
Morocco	-0,34	-0,31	-0,37	-0,34	-0,37
Mozambique	-0,51	-1,09	-0,93	-0,81	-0,75
Myanmar	-1,17	-0,80	-1,08	-1,26	-1,26
North Macedonia	-0,29	-0,35	-0,25	-0,20	-0,05
Pakistan	-2,48	-2,48	-2,41	-2,26	-2,25
Paraguay	0,04	0,14	0,00	-0,07	0,00
Peru	-0,40	-0,20	-0,26	-0,26	-0,14
Philippines	-0,86	-1,38	-1,18	-1,08	-0,88
Romania	0,19	0,28	0,06	0,06	0,53
Russian Federation	-1,03	-0,95	-0,64	-0,53	-0,54
Rwanda	0,01	-0,05	0,09	0,12	0,12
Serbia	0,24	0,14	0,09	0,02	-0,09
Tanzania	-0,42	-0,44	-0,56	-0,56	-0,36
Thailand	-0,99	-0,99	-0,75	-0,79	-0,54
Tunisia	-0,96	-1,14	-1,02	-0,86	-0,83
Turkey	-1,49	-2,01	-1,79	-1,31	-1,34
Uganda	-0,80	-0,72	-0,57	-0,69	-0,65
Uzbekistan	-0,37	-0,27	-0,24	-0,29	-0,27
Vietnam	0,07	0,23	0,29	0,11	0,13
Zambia	0,15	0,14	0,15	0,09	-0,10

TABLE N.3: Political stability index values according to the World Bank definition. **Source: WORLD BANK,** https://info.worldbank.org/governance/wgi/

Data are expressed as decimal numbers in a range varying from +2,5 to -2,5, which represent the top and the lowest[52] level of political stability.

2.2.2. Method

In order to empirically conduct the quantitative analysis, I decided to use the Microsoft Office EXCEL's function: "correlation". Indeed, also in the article by Grech[53], it is stated that the correlation is used to test the strength and the direction of the relationship between two variables, which can also be expressed with independent and different measurement units. It must be said that, although a correlation may exist, this does not necessarily imply that a causation relationship between the variables could be present. Indeed, correlation measures how and to which degree two variables are linearly associated. The value of the correlation varies in the range between -1 and 1, which respectively imply the extreme positive and negative correlation. Specifically, in this case I used the Pearson correlation method, which is also known as linear or product-moment correlation. This kind of test, in fact, allows to make inferences on more than 30 data points. Generally, Pearson's correlation test is used to evaluate the linear relationship between two variables, hence, how proportionally they change together.

I further tested my hypothesis using the Spearman correlation, which is a nonparametric version of the Pearson one. It allows to assess the relationship between two variables that have been previously ranked and to quantify the extent of their connection. This kind of measurement evaluates the monotonic relationship between the values; specifically, the variables may change together but not necessarily at a constant rate. It requires less criteria to be met, compared to Pearson: it is not necessary to know the conjunct probability distribution of the Xs and Ys; variables must be quantitative, ordered and refer to the same observations.

2.3. Empirical Results

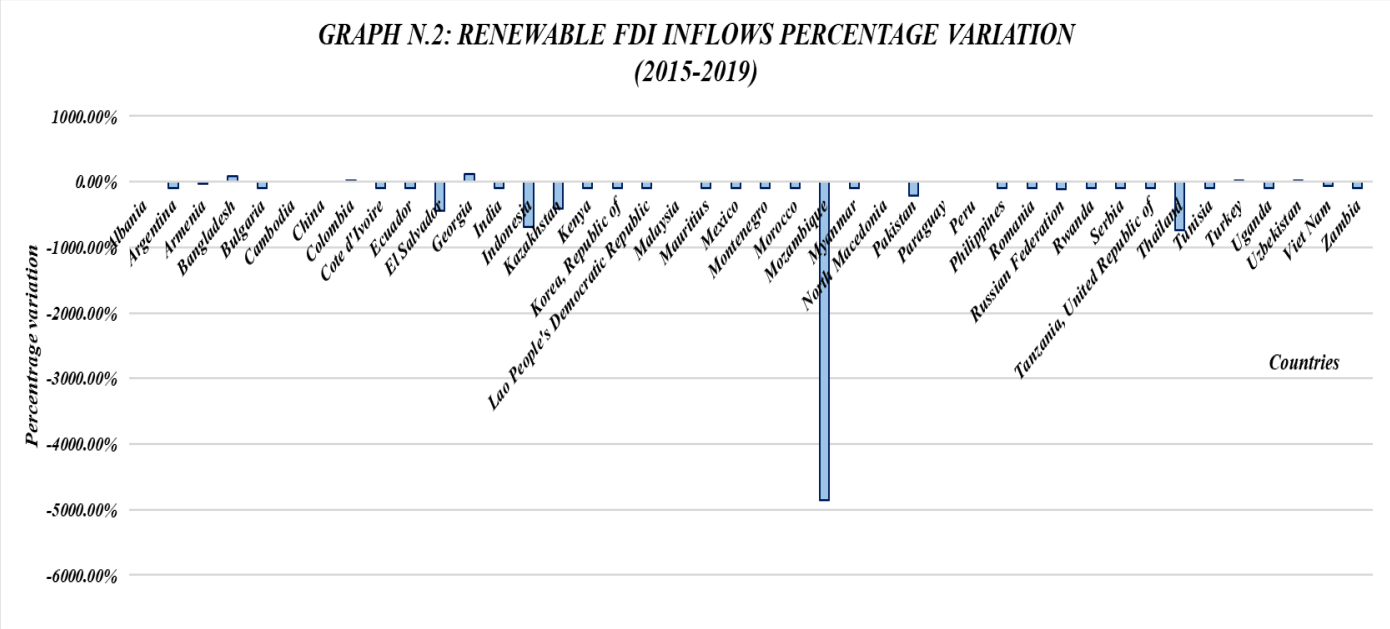
In this section I intend to portray the results I have obtained making inferences, through the methods presented above, on the dataset chosen for this dissertation. I will diversify the two different correlations. Throughout the discussion I aim to briefly introduce the results obtained through the FDIs stock dataset, that, although has not been specifically chosen for this analysis, has produced valuable results that worth mentioning.

2.3.1. Pearson

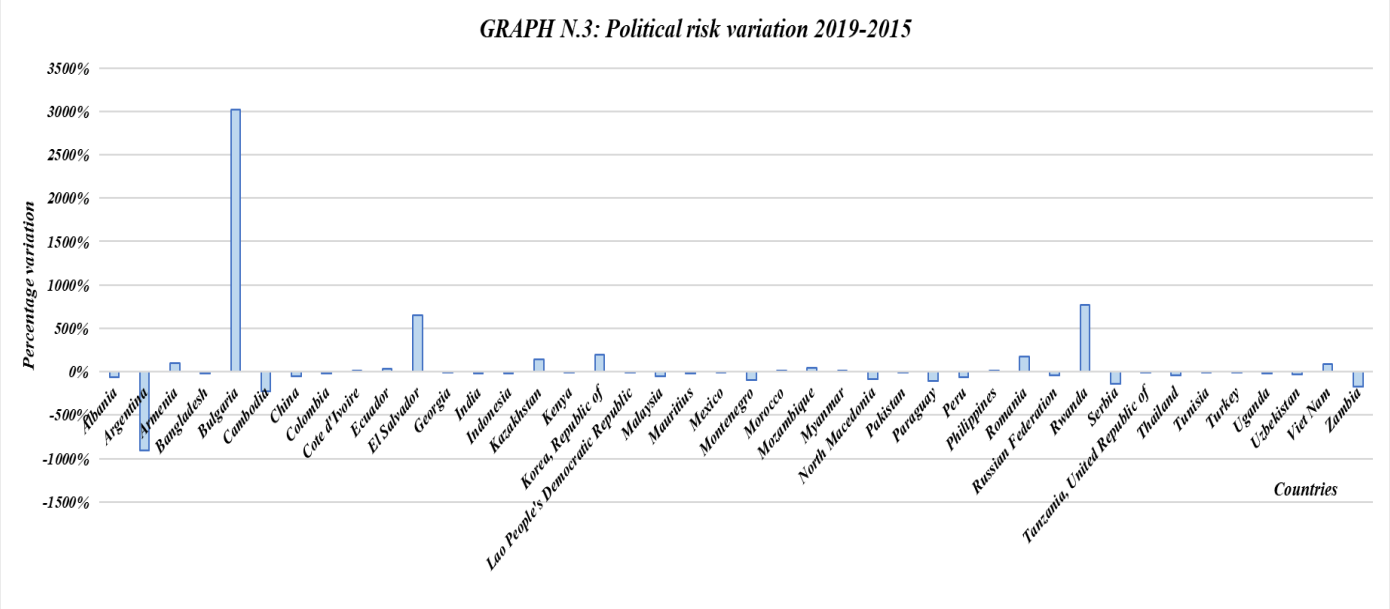
This is the most common and used coefficient that allows to evaluate the linear correlation between two variables. It can be used whenever the two variables satisfy some criteria: they are quantitative; they refer

[52] According to the World Bank.
[53] Grech V, "WASP (Write a Scientific Paper) Using Excel – 13: Correlation and Regression" (2018) 122 Early Human Development 60

to the same observations and finally are normally distributed. Thus, it is considered a parametric test, whose coefficient is generally known as *r*. Pearson's correlation has been applied to the FDI flows dataset, through the command CORRELATION (variable_x; variable_y) on the EXCEL program and resulted being r = -0,07578, which means that the two variables are negatively correlated by the 7.58%. Hence, when the x variables (that I set to the political risk) increases by 1%, renewable energy's FDI inflows in the emerging economies (which is the y, dependent variable of my model) decrease by the 7.58%. Nevertheless, as briefly mentioned at the beginning of this paragraph, a negative correlation does not imply a negative causal relationship, it means that the two variables are negatively associated by the 7.58%.



GRAPH N.2: Renewable energy FDI inflows percentage variation (2015-2019). Source: personal elaboration of data.

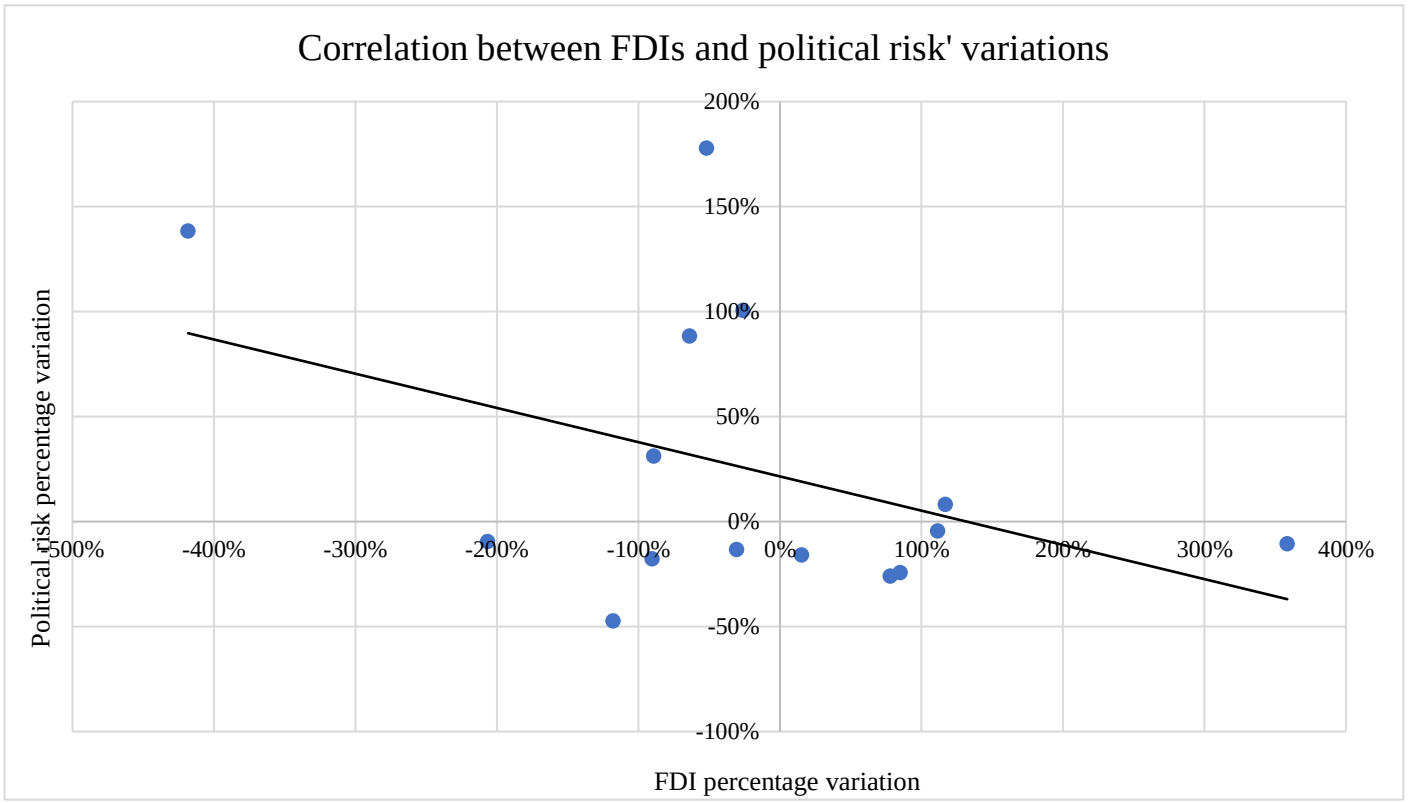


GRAPH N.3: Political risk percentage variation (2015-2019). Source: personal elaboration of data.

In graph n.2, I decided to represent the percentage variations of the FDIs in the renewable sector, that the countries have experience between 2019 and 2015. It can be noticed that, except from a few countries like Georgia, Bangladesh, Turkey and Uzbekistan, all the other countries experienced a decrease or a 0% growth, of their FDIs comprised into the ITC's cluster *Electricity, gas, steam and air conditioning supply".* Mozambique has performed the worst: in table n.2 indeed, in 2019 the country's renewable FDIs were negative[54] by 20, while in 2015 were slightly positive, although between 2016 and 2018 increased. Comparing those data with that of the political risk, it can be noticed that, in Mozambique, the political risk has increased, between the years considered, precisely by 45%. Generally, all the other countries have been affected more or less severely by political risk: Armenia, Bulgaria (whose increase is above all others' level), Cote d'Ivoire, Ecuador, El Salvador, Kazakhstan, Korea, Romania, Rwanda and Viet Nam. In some economies though, the political risk levels have decreased and in particular, Argentina has been the most virtuous in this case. Comparing the political risk's percentage variation and the FDI's one, it can be noticed that graph n.2 and graph n.3 present specular tendencies: the countries that experienced high levels of political risk, have received fewer FDIs. Nevertheless, the correlation is not perfect, since the decreases of the FDIs and the increases of the political risk do not reach the same levels, hence they do not vary proportionally. In fact, as it had been noticed by calculating the Pearson's coefficient, there is a negative correlation, by -7.58%, between the two variables.

For the sake of simplicity and clarity, I preferred to report the political risk and the FDIs data variations in percentages, just highlighting how the beginning situation of 2015 has evolved until 2019. Therefore, the correlation graph n.4 will represent the correlation between these two percentages.

[54] FDI flows with a negative sign (reverse flows) indicate that at least one of the components of the FDI flows (net sales of shares and loans, including non-cash acquisitions made against equipment; manufacturing rights, etc., to the parent company; the parent firm's share of the affiliate's reinvested earnings; total net intra-company loans; short- and long-term, provided by the parent company) is negative and not offset by positive amounts of the remaining components.
Source: ITC, "InvestmentMap" (www.investmentmap.org) https://www.investmentmap.org/glossary



GRAPH n. 4: correlation between FDI flows and political risk percentage variation, between 2015 and 2019. Source: personal elaboration of data.

In graph n.4[55], the x axis represents the FDI percentage variations which are correlated with the political risk's one, whose values are portrayed on the y axis. It is clear that, although some top and lowest results (i.e., outliers), both in the FDIs and in the political risk variations, the 15 developing countries selected from the total group of 42, have generally experienced the same trend. Indeed, the correlation points are agglomerated in the area between the 100% and -200% of the y axis, predominately in the negative part of the graph. Hence, it can be stated that FDIs are negatively correlated with political risk, regardless that the analysis is conducted with either raw data or percentages.

Finally, in order to portray a complete vision of the phenomenon, I must quickly mention the results obtained through the FDIs stock dataset. Although the choice has been explained in the section 2.2.1., and this shift would have implied a change in the developing countries that could be used for the analysis, these data were still relevant to the analysis. In that case, the Pearson coefficient still resulted negative, namely, r = -0,127, and thus whenever the x variable surged by the 1%, the y decreased by more than the 12%.

[55] In graph number 4, I portrayed the correlation between the percentage variations of the FDIs in the renewable energy sector and the political risk's ones. Nevertheless, I identified some outlier countries, whose values, that then I canceled only from the representation of the correlation, either in the political risk or FDIs percentages variations are extreme, thus disturbing the intelligibility of the graph. I carried this evaluation out through the method of quartiles, as I will better explain in the paragraph 4.2, page 74. In addition, I also removed those countries whose variations were either 0% or 100%, because in both the cases either the value of 2015 or 2019 was not available. Those that are not represented in the correlation graph n.4 hence are: **Albania, Argentina, Bulgaria, Cambodia, China, Cote d'Ivoire, El Salvador, Indonesia, Kenya, Korea, Republic of, Lao People's Democratic Republic, Malaysia, Montenegro, Mozambique, Myanmar, North Macedonia, Paraguay, Peru, Philippines, Rwanda, Serbia, Tanzania, United Republic of, Thailand, Turkey, Uganda, Uzbekistan, Zambia.**

2.3.2. Spearman

I secondly double checked the results obtained through the Spearman correlation analysis. This is a non-parametric version of the Pearson's correlation and it is used to verify and quantify the relationship between two quantitative variables. Spearman requires further data elaborations and, indeed, the variables have to be ranked. Hence, the raw data, both those about the FDIs and the political risk, identified for the analysis, were firstly ordered through the appropriate EXCEL's ranking function. Indeed, RANK.AVG(num;ref;ord) allows to identify how a specific observation is put in order within the whole dataset.

For each data set I locked the cells of all the observations, thus identifying them as reference, also at the annual level. After having completed this necessary step, I could move on elaborating the real value of the Spearman correlation, which resulted being rs = -0,188. In order to do so, I used again the CORRELATION function in EXCEL, given that, what differentiates the two correlations, is the ranking of the observations.

The Spearman's value also confirmed the negative result of the previous correlation, but, in this case, whenever the political risk of an emerging country increases by 1%, the FDIs in the renewable sector decrease by 18,19%, which is way higher than the Pearson one. Precisely, the correlation between the ranks is weakly negative.

To conclude this results' presentation, I must mention the ones obtained through the stock dataset, that I calculated with the same reasoning and method of the flows' one. Spearman's coefficient value, in this case, almost coincided with the flows' one, being rs = -0.19. Thus, considering the stock dataset, an increase by the 1% of the political risk is connected with a reduction of the FDIs (stock) in the related emerging economies by the 19%.

Finally, it can be stated that, being r value (Pearson) greater than rs (Spearman), the correlation between the two variables is linear but not monotonic[56].

[56] Paola Pazzolo, "Coefficiente Di Correlazione per Ranghi Di Spearman" (*Paola Pozzolo*April 18, 2020)

CHAPTER 3: Case study analysis

3.1. Case study analysis

I decided to portray a case study analysis of some specific countries that I chose from the dataset in Table n.3: specifically, Pakistan, Kenya, Morocco and India. I will delve into an examination both of their political evolution and the nations' renewable energy decisions, in order also to assess whether any connection between them exists. These countries have been selected because they all have expressed their willingness to commence or ultimate an energy transition, which would allow them to be involved into the international energy arena too. Therefore, it is appropriate to evaluate their current energy state, and compare it to the desired one, also to ultimately highlight their commitment in reaching the goal set. Nonetheless, all the nations selected, are somewhat affected by political risk, and, as it has been assessed in chapter 2, a politically unstable environment can disincentive the foreign direct investments that the developed countries aim to make in their target nations: there is a correlation between them. FDIs, indeed, are a substantial financial and technological source for the developing economies, given that their own endowments are scarce, thus inadequate to achieve a shift toward clean energy.

Another criteria of selection has been the Human Development Reports drafted by the United Nations Development Program. This report contains an index, Human Development Index (HDI), that is calculated taking into account different parameters: life expectancy at birth; expected years of schooling; mean years of schooling; gross national income (GNI) per capita. They all refer to different Sustainable Development Goals (SDGs)[57], and to all of them a different value is given according to each nation's situation. Specifically, all the economies considered, occupy close positions into this ranking: Pakistan rk.154, Kenya rk.143, India rk.131 and Morocco rk.121. Hence, the development level of the countries is similar.

Despite this "common" factor, the political risk level of the countries is not the same. As it had been displayed in Table n.3, in 2019, in a range from +2.5 and -2.5 (top and lowest levels of political stability), Pakistan's political stability value was -2.25; Kenya's -1.12; Morocco's -0,37 and India's -0.70. Therefore, Morocco can be considered the most politically stable country among those selected; Pakistan instead, has one of the world's lowest values.

The chapter is composed by several parts: for each nation I intend to highlight its own political evolution and why it is considered unstable; furthermore, I aim to focus on each nation's energy transition, explaining how they intend to ultimate it, evaluating the projects that they have passed and on which resources they have historically could count on. In the last section, I decided to portray a comparison between the specificities of

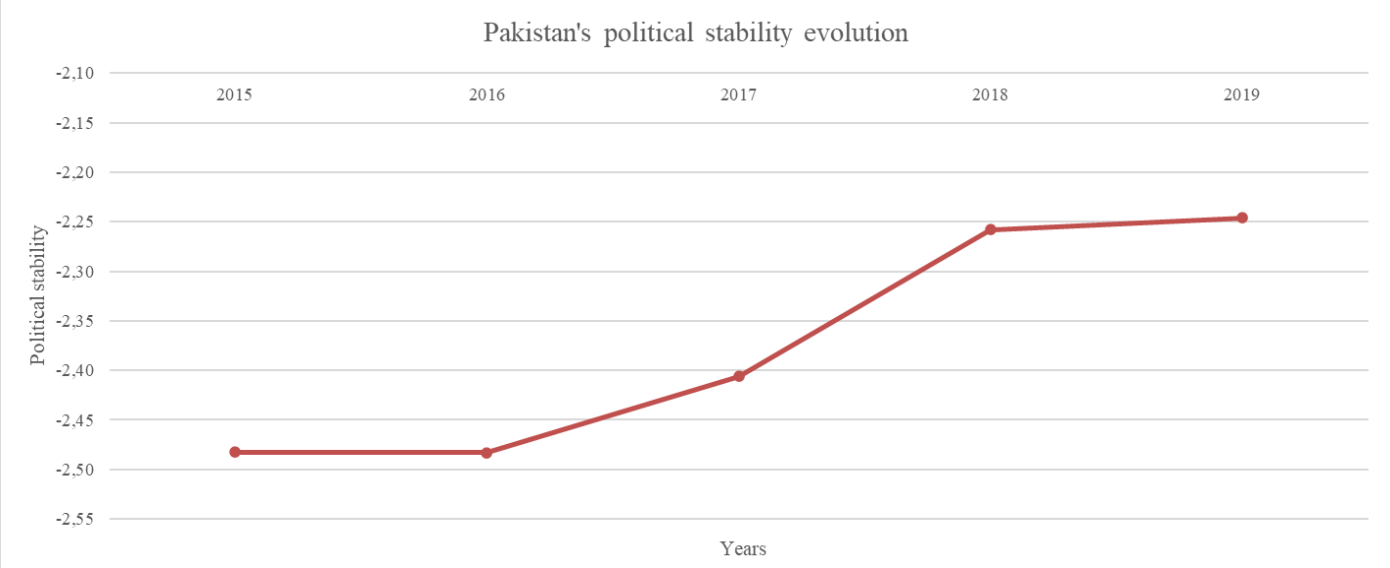
[57] SDGs are at the heart of the 2030 Agenda For Sustainable Development, that outlines the peace and prosperity objectives, that the United Nation Member countries aim to reach. There are 17 SDGs, whose purpose is the international cooperation between all the signatory countries, both developed and developing. Their purpose is the end of poverty and inequalities and the increase of health, education and economic growth. Another main pillar, on which SDG are based on, is the preservation of the forests and the oceans, in order to halt climate change.
Source: United Nations, "The 17 Goals" (*United Nations*2015) <{*HIPERLINK* "https://sdgs. un. org/goals"} >.

each nation, in order to identify the common and different traits that characterize every situation. Starting from this, I will draw my conclusions.

3.1.1. Pakistan

a. Political framework

Pakistan has one of the world's lowest levels of political stability. In the World Bank ranking, in a range from +2.5 to -2.5, which respectively indicate the top and the lowest degrees of political stability, Pakistan's score, in 2020, was -2.25. The country, thus, is heavily affected by political instability and this generates tensions with the foreign investors. Indeed, as it has been assessed in the literature review, political instability is considered as a discouraging investment factor. In the graph below, it is possible to assess the yearly evolution of the political stability index, that the country has experienced in the years considered for the analysis: 2015-2019. From the graph it is evident that in the last five years, the country's political stability has constantly increased, but it still is very negative. The year 2016 has not experienced any improvement from 2015, and 2017 performed relatively better than 2016. Also, 2018 and 2019' political stability indexes were ranked with almost the same value. Generally, speaking it is thus possible to assert that Pakistan has gone through scarce programs of stabilization and it is heavily affected by this negative condition.



Graph n.5: Pakistan's political stability index evolution. Source: personal elaboration of World Bank's data.

Pakistan's economy heavily relies on FDIs for the promotion of its economic growth. The country, indeed, lacks of savings and investments and it is not able to generate enough resources to sustain the economic activities. Therefore, FDIs can bridge the gap between the domestic investments and the economic objectives. Furthermore, FDIs can bring into the nation technologies, managerial skills, reduce unemployment, improve infrastructures and human resources. Hence, they can promote the economic growth of the country, but an obstacle, namely political instability, mainly in the terroristic form, can halt the developing process of the

country. Fighting this vicious problem costs, not only human victims, but also dozens billions of dollars spent in securing the country, which are subtracted to the domestic investments, that would promote national economy. A politically instable scenario disincentives the multinationals' willingness to invest in the country, thus reducing the possibilities of receiving FDIs[58]. The World Bank itself in 2011 claimed in a report that the low levels of FDIs in the private sector were due to the political instability of the country and corruption.

Pakistan has suffered from political instability for over sixty years. Governments dismissals, assassinations of chief executives, military revolutions, changes of the governing body have compromised the implementation of policies and the ability of the authorities to respond to macroeconomic shocks, such as inflation[59]. This continuous shocks have affected the country's economic growth. Pakistan indeed, faced wars, like the 1971's one, that generated political instability and loss of financial and human resources. Later years, until 1988, were characterized by a period of prosperity and growth, promoted by favorable economic policies, which came to an end with the beginning of the Afghan war. Therefore, from 1988s to early 2000s, a political unstable environment, wrong economic and political policies have severely affected Pakistani economic growth. Only after 2000 a positive trend in GDP and growth has been experienced by the nation. The country went through various government forms: for 33 years military regimes led the country, while for other 30, political regimes took the power[60].

As Qureshi, Ali and Khan stated in 2010[61], Pakistan went through intermitting phases of economic growth, that can be identified according to the type of government that was in charge. Therefore, according to the author, after the Independence from Great Britain in 1947, the history of Pakistan can be divided in seven periods, which totally comprehend a period of 63 years:

1. Post-Independence era (1947-1958)
2. Military-led government era. Military intervention by Present Ayub Khan in 1958 (1958-1971).
3. Elected governments era, also called Nationalization Period (1971-1977)
4. Military-led government era (1977-1988)
5. Elected governments era (1988- 1999)
6. Military-led government era (1999- 2008)
7. Elected governments era (2008 to present).

[58] Zeshan Anwar and Talat Afza, "IMPACT of TERRORISM, GAS SHORTAGE and POLITICAL INSTABILITY on FDI INFLOWS in PAKISTAN" (2014) 26 Science International 507

[59] Anwar Khan and others, "Impact of Technological Innovation, Financial Development and Foreign Direct Investment on Renewable Energy, Non-Renewable Energy and the Environment in Belt & Road Initiative Countries" (2021) 171 Renewable Energy 479

[60] Aftab Hussain Tabassam, Shujahat Haider Hashmi and Faiz Ur Rehman, "Nexus between Political Instability and Economic Growth in Pakistan" (2016) 230 Procedia - Social and Behavioral Sciences 325

[61] Muhammad Nadeem Qureshi, Karamat Ali and Imran Rafi Khan, "Political Instability and Economic Development: Pakistan Time-Series Analysis" [2010] International Research Journal of Finance and Economics.

In 9 of the 60 years considered, from 1947 to 1956 of the phase 1 "Post-Independence era", the country was governed by a non-defined political system, and after this first setting up period, the country faced three different military regimes that brought economic prosperity into the country. The problems occurred after the end of each of these phases: Pakistan's economic growth was halted at the end of the periods 2, 4 and 6, in which the country, due to a non-maintenance of the economic conditions laid before, found itself almost near to default. With regards to the second phase, the FDI inflows in Pakistan only decreased between 1961 and 1963, even though the positive trend of the period considered was not reversed by this slight decline. Generally, in the 30 years in which others than military regimes were governing the country, Pakistan's governance fluctuated from presidential democracy to parliamentary democracy, that were constantly disrupted by military coups, happening before the expected end. The Nationalization Period has been one of the darkest periods of Pakistan: firstly, Yahya Khan established its anarchical regime; afterwards, the then-elected Prime Minister Zulfiqar Ali Bhutto faced anarchy, trying to restore confidence. All the largest company of the country, were nationalized until 1974, and this determined a decline of the FDIs, which were discouraged by nationalization. The late 70s instead, were characterized by an initial slowdown of the economic progress, which then was adjusted by the General Zia-ul-Haq, that until 1977 (year of its power cease) promoted an economic development process. Furthermore, from 1978 onwards, Pakistan was characterized by political stability that led to growing FDI inflows. Nevertheless, from 2008, the country has been affected by declining political stability which determined a reduction of the FDIs toward the country[62].

The consequences of such a precarious economic and political settlement have been reflected on the society, which started consuming less, due to lower earning capacity and purchase power. These social effects were determined also by the lower investments that were made into the country, due to discouraging future perspectives. Productivity and savings were hit by the investors' decisions too. On the economic side instead, Pakistan faced higher inflation, unemployment rates, which in turn encouraged mass revolutions, strikes and unrests against both the employers and the government, which was accused of having passed unsatisfactory policies[63]. In Qureshi, Ali and Khan' study above mentioned, it had also been found that political instability affects all the economic areas, delaying the national economic development and affecting it with high volatility. Indeed, the scholars claim that continuous governance changes and political instability affect the decision makers that are in charge of passing developmental reforms. Hence, a stable political framework can contribute not only to the present development of the country, but to a broader future growth of it. Furthermore, a political governance (although not ethical like the military regime) is better than having none. A political system indeed allows the country to flourish, while discontinuities can harm Pakistan's political stability and damage the prosperity of the country in the long term.

[62] Arfan Shahzad and others, "Political Stability and the Foreign Direct Investment Inflows in Pakistan" (2012) 9 British Journal of Arts and Social Sciences.
[63] *Supra note, 3.*

In chapter 1, I introduced the paper by Bano, Zhao, Ahmad, Wang and Liu[64]. After general descriptions about the importance of FDIs for the economic development, they focused on Pakistan. Thus, it is useful to recall here what the scholars have stated. They claimed that Pakistan has a great potential in attracting FDIs that could help its economic development, even if, in the past few decades they did not benefit from this relevant financial source. Indeed, until 2007 FDIs have intensively declined because investors hesitated to fund economic activities in that country. According to them, the main causes of this trend, have to be addressed to country-specific factors, such as terrorism, energy shortage and financial instability, that affect FDI inflows. With regards to the terroristic attacks, MengYun and others[65] outlined how much Pakistan is involved in fighting internal terrorism after the Twin Towers attacks in September 2001. These assaults negatively influenced foreign investments and the stock market which started declining after 2008. This year has been pivotal for the country, because the political instability and the number of killing attacks increased exponentially throughout the country. Numerically, the people died accounted to 35.000 people, destruction of infrastructure, decrease of production, less investment opportunities with higher unemployment rates, and slowdown of economic activities. Furthermore, Pakistan is geographically collocated near Afghanistan, that is torn apart from terroristic attacks from 2009. Therefore, Pakistan, from year 2000, is struggling to cope with these assaults that also require economic resources.

In addition to terrorism, the FDIs that would be directed toward Pakistan, are discouraged by the nation's gas shortages. This situation is strictly connected with the national political instability, given that the Pakistani governments have constantly tried to overcome these energetical shortfalls but, due to the constant changes, the administrations have failed. This has had an impact on all the economic areas of the country, including FDIs: the investors are reluctant to put money into a nation in which it is difficult to carry out activities without gas. Also, continuous governance changes have weakened the already instable international relations[66]. Finally, investors give importance to also the degree to which governments fight corruption and try to restore a certain level of political stability. According to the World Bank, UNCTAD and the Sate Bank of Pakistan, the country, in comparison to India (I chose it because it will be another case study of the dissertation), has also lower control of corruption and is affected by political instability ten times more[67].

b. Renewable energy policies

At the present time, Pakistan still mainly counts on fossil fuels for the production of energy, which are also the main source of environmental degradation for the country. Shifting toward renewable energy resources would contribute to the economic growth of the country, also improving the living standards reducing

[64] *Supra note, 19.*
[65] t MengYun and others, "Impact of Terrorism and Political Instability on Equity Premium: Evidence from Pakistan" (2018) 492 Physica A: Statistical Mechanics and its Applications 1753.
[66] *Supra note, 2.*
[67] *Supra note, 6.*

greenhouse gas emissions and, generally, all the air pollutants[68]. Specifically, the International Trade Administration estimated that Pakistan's 64% of energy comes from fossil fuels, while only the 36% come from renewable sources (divided into hydropower for the 27% and nuclear for the 9%)[69]. According to an analysis conducted by the World Bank[70], the capacity of Pakistan to generate renewable energy is immense. The country's potential is due to its solar and wind sources. The international organization evaluated that, installing photovoltaic panels in just the 0.071% of the Pakistani territory would allow the country to meet the whole national current electricity's demand. Also, the country can benefit from wind corridors, whose average speed, in some of the windiest areas of the country, reaches 7.87 m/s. In addition, also hydropower project could play a part in the Pakistan's transition toward renewable energy.

Historically, Pakistan's opening toward renewable energy dates back to more than 10 years ago. Indeed, until 2008, the 99% of the country's energetical needs were satisfied by oil, gas, hydel and nuclear energy; only the 1% of energy came from micro/mini renewable sources. This scarce interest toward clean energy sources has gone on even though since 1975, the different governments created organizations (like the Pakistan Council of Appropriate Technology, the National institute of Silicon Technology, the Alternate Energy Development Board) that were in charge to facilitate the development and the generation of alternative and renewable sources, that would have encouraged a sustainable economic growth. It was only in 2001 that the NIST and PACT merged into the Pakistan Council of Renewable Energy Technologies, whose two main departments had to implement and execute renewable energy projects. AEDB, has one main objective: to individuate and implement renewable projects, encompassing both the private and the public sectors' aid. It is supported by the Pakistan Council of Renewable Energy Technologies, which acquires and updates the experts' contribution for the promotion of renewable energy technologies that would be used in the solar, micro-hydel and wind fields. Nevertheless, the Council's generation of renewable energy did not even meet the levels of the late 90s, given that, imprecise promotion instruments did not allow to produce more than 3MW of solar and wind energy. In 2005, one of the agencies of the Council was entrusted to satisfy, by 2015, the 10% of the national energetical requirements, through renewable energy[71]. In 2006, the then government of Pakistan passed the "Policy for development of Renewable Energy for power generation", whose objective was that of supplying sustainable energy and natural gas to all Pakistani citizens, also reaching the most rural areas. The timespan of the plan was 5 years, i.e. until 2011, but the policy has been renewed, thus still working at the present time.

Nevertheless, although the country's great capacity, it has not fully exploited it: the infrastructures created to take advantage of sun, water and wind are not able to generate energy at their maximum potential. An

[68] Umar K Mirza and others, "Identifying and Addressing Barriers to Renewable Energy Development in Pakistan" (2009) 13 Renewable and Sustainable Energy Reviews 927.
[69] International Trade Administration, "Renewable Energy | International Trade Administration" (Trade.gov2019)
[70] World Bank, "Expanding Renewable Energy in Pakistan's Electricity Mix" (World BankNovember 10, 2020)
[71] Munawar A Sheikh, "Energy and Renewable Energy Scenario of Pakistan" (2010) 14 Renewable and Sustainable Energy Reviews 354.

analysis drafted by IRENA[72] organization has evaluated a gap between the power demand and production, which varies between the 4 and 6 gigawatts per year. The main causes have to be addressed to the social and economic problems that affect Pakistan, and that the governments have prioritized over the energy transition. This analysis has also to be paired to the considerations regarding the energy shortages that the country faces. As Aized and others stated in their "Energy Security and Renewable Energy Policy Analysis of Pakistan"[73], many national governments have designed adequate energy policies that would have fulfilled the energy demand. Conversely, the administrations did not resolve the gap between supply and demand, thus leading to energy shortages that could be resolved only shifting to renewable sources. Last shortage is not very far in time: in 2016, Pakistan faced an energy shortfall of 5000 megawatts. The demand-supply gap that affects Pakistan is also due to the high pace of the population growth, whose increase is more substantial than that of the energy supply. The ITA organization estimated that the gap (between population and energy supply) grows by 7% each year[74]. Furthermore, another problem that affects Pakistan is that, the national reserves of renewable energy are vast, but a large part of the country has no commercial energy access, which means that it is not able to develop available resources that would prevent the energy shortages.

The commitment of Pakistan in the transition toward renewable energy has been enhanced in these last 5 years. Indeed, after having left 54 million of Pakistani citizens without electricity in 2017, new policies towards renewable energies have been evaluated by the governments: they have acknowledged the importance that this kind of resources can play in closing the energetical deficits. Therefore, the time horizon has been expanded to 25 years and it has been foreseen to satisfy, by 2030, the 20-30% of the whole energy demand through renewable resources. For this reason, since 2014, 18 wind power projects, 6 solar power projects and six bagasse projects have been enacted and have created 1556 MW of renewable energy. Until 2019, the country's engagement in renewable energy increased even more. At that time, indeed, there were 23 private projects for wind power and other 5 were passed in that year, who were mainly created by using United States' manufacture turbines. In addition, Pakistan is a large producer of municipal, animal and agricultural waste, cotton sticks, livestock dung and rice husk, which are used to create energy from 4045 biogas plants. Those allowed to provide power both for consumption and irrigation. In this case, China has been involved in the creation of a 40 MW generation plant, that is able to use solid waste to generate electricity. However, this kind of resource is not fully exploited and Pakistan committed itself to enhance the generation of energy from biogas and also to promote the selling of the derived electricity to the grid. Hydropower instead, is mainly projected to the development of small, mini an micro power plants that will be mainly managed by provincial governments. If

[72] IRENA (2018), Renewables Readiness Assessment: Pakistan, International Renewable Energy Agency (IRENA), Abu Dhabi.
[73] Tauseef Aized and others, "Energy Security and Renewable Energy Policy Analysis of Pakistan" (2018) 84 Renewable and Sustainable Energy Reviews 155.
[74] *Supra note, 13.*

proper hydropower plants will be installed in the country, the 65% of the energetical supply will be provided through green energy by 2030.

Solar energy worth a special mention. Pakistan is sunlit 9.30 hours per day, which means unlimited resources for this sector. Therefore, a solar panel station, namely the Quaid-e-Azam Solar Park, capable of generating 1GW of power has been installed in 2016. Nevertheless, the photovoltaic complex is currently producing just 400 MW which is far below its capacity; the generation capacity will be enhanced through specific plans. Also, solar energy is generated by 24 distinct projects, which account for the creation of 500 MW of power. In support of the solar energy production, also the World Bank has invested more than 100 million of dollars in projects in the Sindh region of Pakistan. In this way, some independent power producers would pass project that would enable more than 200.000 householders to receive 400 MW of energy. The citizens indeed, have understood the immense capacity of solar solution. Hence, they started installing on their house, but also industries and shops' rooftops, photovoltaic panels that would also allow them to overcome the problems of the rising cost of electricity and energy shortages. The government promptly regulated this production, with guidelines passed in 2015[75].

Nevertheless, there are now several possible threats to the energetical transition of Pakistan. Firstly, China has partnered some energy projects in the country: with the China Pakistan Economic Corridor it is foreseen that the new economic giant will contribute to the creation of seven new coal-fired power plants, that would halt the emergence of the renewables, like sun and wind. China aims to invest 45 billions of dollars in Pakistan with this project, and its objective is to create a trade route between the two countries. Secondly, coronavirus pandemic has delayed the implementation of approved renewable policies. Also, the negotiations to resolve some disputes with individual provinces play a part in postponing the enforcement of the plans. However, the federal minister for planning and development, Asad Umar, is confident: the consultations with the provinces might open Pakistan's full potential for renewables. The government is really focused on the future because presently the country's energy consumption mainly derives from oil and gas that are imported from Middle East and Saudi Arabia. Therefore, also the PEDB passed and wrapped up various wind and solar projects that would both close the energy gap and bring to green sustainability.

Foreign investors can contribute in the green energy transition, too. Indeed, one of the main solar and wind energy producers in Pakistan, Zeeshan Ashfaq, claimed that 15 billion dollars into the plan would aid the country's passage toward renewables. The government, though, should play its part: a clear definition of the future uses of the funds should be provided. Furthermore, the country should require more power, but this would be encouraged only by a national industrialization[76]. As stated by Naz and others, the country will attract FDIs only if the government will support the economic policies, financing a less carbon production. In

[75] *Supra note, 13.*
[76] Rina Saeed Khan, "New Pakistani Energy Plan Aims for 30% Renewable Generation by 2030" (*Institute for Energy Economics & Financial Analysis*August 10, 2020)

addition, the national administration should allow a liberalization of both the imports and exports of the technological goods that enable a zero carbon emission energy production. However, given the political instability that is currently affecting the country, Pakistan should promote social policies that would restore a flourishing situation[77]. Keep relying on the national technological endowments means not being able to keep up with the high-tech advancements that promote a substantial transition to renewable energy: through FDIs the country can obtain the updated necessary financial and technological assets that would reduce the dependency on the fossil fuels.

Additionally, it is clear that, losing momentum, Pakistan will keep being affected by energy crises that unable the country to achieve the Sustainable Development Goals of the United Nations. This means that the nation will be left out from the internationalization processes, thus slowing down the overall economic development pathway, that in turn hinders energy security. Obtaining resources from the outside is fundamental, but it might be more long term oriented. Thus to increase accelerate the procedure and boost the energy consumption, derived from renewable energies, Pakistan can promote regional agreements. In south Asia, where Pakistan is located, these deals are already present, but are not very effective: the trade between them is estimated being one third of its potential. This is due to the inappropriate tariffs, the high cost of connection between the nations, and above all the conflict within the countries involved. However, coming up with a solution to these problems would be beneficial for all the southern Asian countries, among which Pakistan[78].

3.1.2. Morocco

a. Political framework

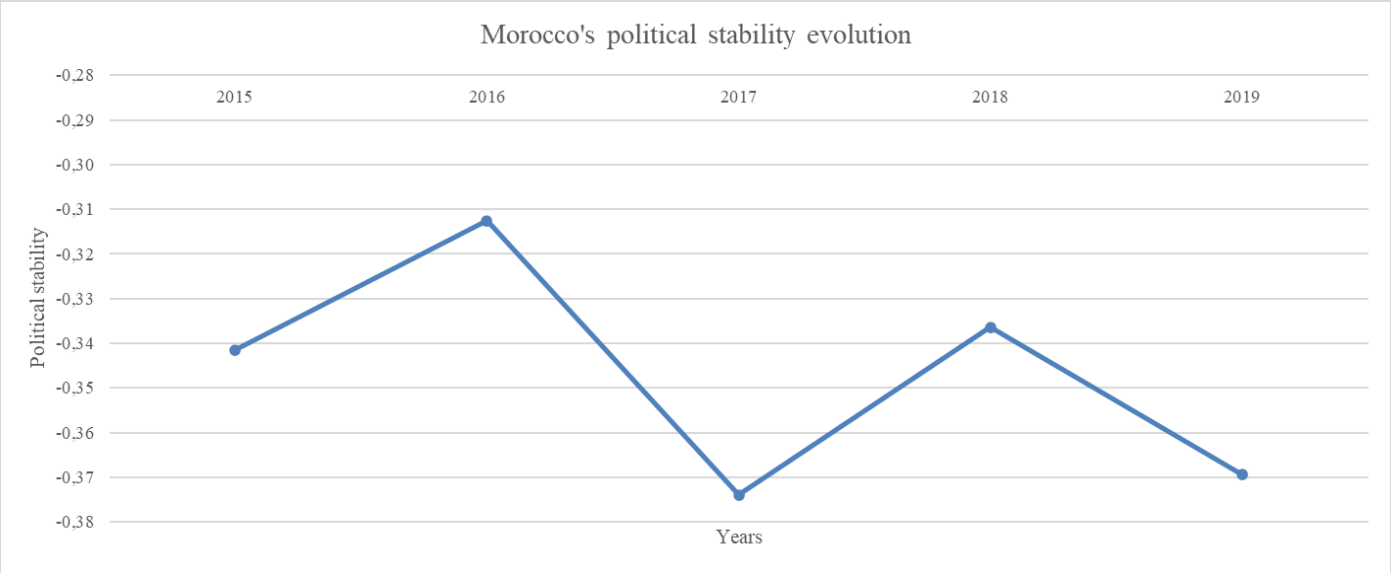
The Kingdom of Morocco is actually governed by a constitutional monarchy, that was established in the first national constitution in 1962. This government form has been confirmed in all the other constitutions, that were later passed. The country is now governed by King Mohammed VI, that was elected in 1999 and has been able to maintain national macro-economic stability and low levels of inflation[79].

At the present time, Morocco is considered as a stable country. Specifically, its political stability level was in 2019, according to the World Bank, -0.37; even though it is negative, it is far more encouraging than the Pakistan's one, which is -2.25, really close to the lowest level of political stability. From the World Bank's dataset, it is possible to state that the country has not very much varied its political stability, given that the values have not varied a lot: 2015 and 2018' values were the same, as well as 2017 and 2019'. Only 2016 experienced a slight different value: -0.31, which was symptom of a higher political stability.

[77] Saiqa Naz and others, "Moderating and Mediating Role of Renewable Energy Consumption, FDI Inflows, and Economic Growth on Carbon Dioxide Emissions: Evidence from Robust Least Square Estimator" (2018) 26 Environmental Science and Pollution Research 2806

[78] Muntasir Murshed, "Can Regional Trade Integration Facilitate Renewable Energy Transition to Ensure Energy Sustainability in South Asia?" (2021) 7 Energy Reports 808

[79] RBC global connect, "Economic and Political Overview of Morocco" (Rbc.com2020)



Graph n.6: Morocco's political stability index evolution. Source: personal elaboration of World Bank's data.

Morocco was one of the first countries in the Arab world to adopt democracy, which was broadly required by the population, that gathered in clusters like the 20th Movement. In truth, embracing democracy was just a prerogative of the monarchy to show people how they could handle the political scene, without losing their prerogatives. However, although the motives behind the shift were not as clear as they seemed to the population, on the international level, the democratization of the country was positively welcomed: the European Union and the US immediately showed support and confidence in the transition[80]. Also according to the scholars Zemni and Bogaert[81], the evolution is not about the type of governance, but on how the authoritarian regime has changed over years.

Morocco has embraced neoliberalism from the early 80s with King Hassan II (father of the present king Mohammed VI), when the International Monetary Fund and the Structural Adjustment Plan (SAP), backed by the World Bank, were introduced and implemented. Precisely, in 1983, SAP introduced a period of radical reformation. For instance, the bureaucracy and the public administration were downsized to allow new neoliberal reforms; public deficit was reduced thanks to market liberalization, deregulation, privatization of industrial activities and introduction of public services. The country, though, already started embracing neoliberalism at the end of the 70s, when the end of the third world debt crisis turned the global tendency from developmentalism to neoliberalism. The economy was heavily reliant on agriculture but, under the King Mohamed VI, the country started focusing on economic development and capital accumulation. Indeed, he wanted its cities to obtain businesses, tourists and investors. One way of doing this, was creating infrastructures in urban areas, that were seen as promoting globalization and financial flows. Presently rural economy keeps being the predominant economic sector, also on the employment side, but the urban economy has become the

[80] Driss Maghraoui, "Constitutional Reforms in Morocco: Between Consensus and Subaltern Politics" (2011) 16 The Journal of North African Studies 679.
[81] Sami Zemni and Koenraad Bogaert, "Urban Renewal and Social Development in Morocco in an Age of Neoliberal Government" (2011) 38 Review of African Political Economy 403.

leader of the national economic growth, producing three-quarters of national GDP. In order to break the relationship with agriculture, the Kings have passed a series of reforms devoted to the urban development and the urban economy. The ultimate purpose is that of introducing Morocco into the global market: this will allow the country to attract foreign investments and stimulate the economic growth. The King Mohammed VI, launched a series of several ambitious urban development programs that he called "mega-projects", to make the country more competitive in a global world. The King acknowledges the importance of attracting capitals, which are the components of the universal economic development strategy, to the major cities. Indeed, in comparison to the other North African countries, the foreign investments directed in Morocco are consistently higher.

The drawback of having made the cities an important investment place, is that that they became as a land of violence, like attacks and bombings (for instance the suicide bombers on May 2003 that killed 40 Moroccans, but also the same events happening again in 2007 and 2011 in Marrakech). These assaults were mainly put in place by people coming from the slums of the cities, which had also gained momentum after the events of the 11th September 2001. The governance of the country addressed then the causes of these events to poverty, which was rising after the 90s, and social and economic exclusion, and decided to approve strategies for the development and the creation of wealth in those areas.

Therefore, politically Morocco is a stable country, given that the kingdom's work has not been disrupted by the social events. Rather, the dynasty of Kings considered, from King Hassan II to King Mohammed VI, kept continuously governing over the country for the last 60 years. They envisaged Morocco as a country completely immersed into globalization, but to assert its position worldwide, FDIs are needed. Thus, to attract their investors, they started a series of reforms, both on the urban and economic level, that ameliorate the social conditions. The cities grew up and the slums, the place of riots and assaults, were reduced in size. Morocco, thanks to its democratization process, can be considered as an example to be emulated by the Arab world, even though the government did not cease any of its prerogatives. This was in turn, beneficial for preserving the political scene from the upheavals coming, for instance from the Arab Spring[82].

Finally, I would like to recall the article written by Al-Tal and Al-Tarawneh[83], that have examined the impact of the quality of governance, in the Middle East North African regions, on energy consumption. They stated, after quantitative analysis, that both political stability and the governance effectiveness positively affect the energy consumed. Hence, it is logical to assume that, a political stable environment, as Morocco is considered, enhances the consumption of energy, and, in order to meet the growing demand, the country needs further foreign investments in order to undertake a complete fulfillment of the energetical requirements. Also, FDIs are useful to bring to an end the energy transition that, under the King Mohammed VI, the country has

[82] *Supra note, 24.*
[83] Raad Al-Tal and Alaaeddin Al-Tarawneh, "The Impact of Government Effectiveness and Political Stability on Energy Consumption in the Selected MENA Economies - ProQuest" (search.proquest.com2021)

commenced. Indeed, still envisaging Morocco as part of the global arena, in order not to be left out, the King started a series of reforms (that will be better explained in the following subsection) that allowed to start a transition toward green energy.

It is clear from the scarce political instability, and the high level of reforms in the green energy sector, that there is a connection between the commitment of the governance, in meeting the fixed objectives, and the national equilibrium. This, eventually, enhances the foreign direct investments that the King aims to attract in order to achieve its goals of internationalization and transition toward renewable energy, that in nowadays world, is one of the main concerns at the global level.

b. Renewable energy policies

Morocco is the only North-African country that cannot count on oil resources, and this has induced the nation to heavily rely on petroleum imports to meet the local demand (oil, coal and gas import accounted for the 96% of country's energetical provision). Therefore, the main energetical challenge that the country faced, in particular 50-40 years ago, has been that of obtaining enough oil to satisfy the national rising needs. Nevertheless, this determined a greater task, that was that of containing the importation costs in order to maintain the trade balance under control, also because of the increasing commodities price that damaged the public finances and increased the deficit. The trade-off between energy needs and costs of import, difficult to be sustained in the long run, stimulated the country's transition toward a sustainable, competitive and sound energy procurement industry, through which the country managed to become semi-sufficient in the production and in the delivery of energy. Indeed, although costly and time consuming, this transition has already fulfilled more than a half of the country's energetical primary necessity and has allowed Morocco to be integrated into the Euro-Mediterranean energy system. Its entrance has been particularly relevant, due to the strategic geographical position of the country, located between the Atlantic Ocean and the Mediterranean Sea.

As well as Pakistan, Morocco faced energy shortages in its 90s, which were determined by the difficult economic and financial problems that the country went through during the 80s. Morocco's electricity sector is managed by the Office National de l'Électricité et de l'Eau Potable (ONEE), that governs the distribution and the transmission of the energy, being also the main retailer supplier. Both the ONEE and the government, in those decades, were unable to sustain the growing energy demand and, at the same time, to provide the necessary investments to satisfy it. At the very beginning the government decided to reform the whole sector, by for instance allowing private investments and giving the chance to independently produce energy. Also the World Bank promoted in 1994 a decree, aimed at liberalizing the Moroccan energy sector, through which the ONEE has been able to enter into agreements with the independent power producers, making competitive the energy prices. This has been further enhanced in 2008, when the Moroccan government enabled the private producers to create their own power plants, whose capacity had to not exceed 50MW, and sell the energy to the nation. This process was then legislated in 2010 with the Renewable Energy Law.

Nevertheless, it was not enough: Morocco needed a diversification of its energy mix; but, even though the real green energy transition was commenced almost 20 years ago, using more coal and natural gas, from 2005, it has been estimated that oil will dominate the energetical arena, for at least the next three decades. This is be particularly true, especially considering the new discoveries of oil reserves, that have been unexplored for all these decades. The production of natural gas, instead, is expected to remain underdeveloped, given that the national deposits are scarce. Therefore, the country should keep being focused on the transportation and the distribution of this energy source. Indeed, the natural gas is shifted from Algeria to Europe, crossing the Moroccan territory until the Strait of Gibraltar, where it enters the European grid. With regards to shale, the Office National des Hydrocarbures et des Mines has been examining the country's shale oil and gas potential, finding that large quantities can be extracted from the national reserves. In addition, thanks to the nation's liberal investment climate (determined by tax exemption and investment incentives), foreign companies have been attracted in the country.

With regards to green energy amendments, in 2009, the Moroccan government enacted the National Energy Strategy[84], through which decided to invest in the electricity sector, mainly on wind and solar sources, but also began to pass favorable reforms to attract private investors. To do so, the country also created two governmental agencies: the Moroccan Agency for Solar Energy (MASEN), supervising the implementation of the Moroccan Solar Plan, and the National Agency for the Development of Renewable Energy and Energy Efficiency (ADEREE)[85]. MASEAN is in charge of developing projects on renewables and has to find the necessary R&D and building capacity in order to create competitiveness and development. A consistent help in the R&D sector is provided also by the Institute for Research in Solar Energy and Renewable Energies (IRESEN). The ultimate aim of the government is to turn Morocco into an independent energetical country, also on the distribution side: a privatization of the related utilities in fact, was enacted. Therefore, in this relationship, the former indicates the objectives and the program of the investments, while the latter have to accomplish the task in the most efficient way, also providing suggestions and recommendations[86].

In 1996, Morocco also passed the Programme d'Electrification Rurale Généralisé, through which it has been possible to bring energy even in the rural area of the country, reaching an electrification of the 98%: more than 3600 villages were provided with photovoltaic panels. Also, as mentioned above the government started reforming the distribution of the electricity, by creating in the 90s the so-called "gestion déléguée", that consists in a form of transferred management. Therefore, a clear division between the private and public sector had been established: the latter, in light of the consumers' needs, had to outline the investment program,

[84] The National Energy Strategy, in 2009, set five objectives:
1. Morocco's energy supply independence
2. Extensive access to energy
3. Control of the demand
4. Investments in innovative research and training
5. Environmental protection through clean energy

[85] Tayeb Amegroud, "Morocco's Power Sector Transition: Achievements and Potential" [2015] IAI working papers.
[86] International Energy Agency, "ENERGY POLICIES beyond IEA COUNTRIES" (2019)

defining clear objectives; the former, instead, had to efficiently manage the public services by making appropriate investments and decisions, providing the adequate expertise, still being focused on the end-consumers. The consumers, indeed, are pivotal in the energy transition. Their energy needs will increase overtime, and thus the costs and the greenhouse gases emissions will rapidly grow. Therefore, a second relevant aim of the country, after providing the essential energetical supplies to the citizens, was to reduce the GHG emissions, which were increasing due to the higher electricity generation. The target was that of producing, under the Moroccan Solar Plan, the 42% of the country's energetical requirement by renewable resources by the end of 2020, installing plants that could exploit the wind, the hydrological and solar capacity, in accurately located sites. According to the analysis drafted by Istituto Affari Internazionali, Morocco has a great potential in the wind energy sector: in vast parts of the country, both in the southern and northern region, the annual average speed is 9 m/s. Through the promotion of wind energy policies, specifically the "Moroccan Integrated Wind Energy Programme", the nation aims to create new sites that would increase the wind energy capacity up to 2GW by 2020. Also, being the country sunlit 3000 hours per year, solar panels can produce abundant quantities of energy. With regards to this latter energy source, in 2010, MASEN promoted public-private partnerships for the creation of the Ouarzazate solar complex, whose objective is the construction of five thermal storages, which allow to meet the evening energy peak requirement. It must be also said that, developing renewable energy improved the Moroccan's energy security and allowed the country to meet the 7th United Nations Sustainable Development Goals (to have affordable, reliable, sustainable and modern energy).

These necessary steps have just initially set the path towards sustainability: the national power system business model configuration is difficult to alter within a short time, and resistance to the change can easily occur. The government is, at times, unable to financially contribute to in the electricity sector, which determine delays in key investments. Other financial problems have been determined by a tariff structure that is not adequate to the operating costs. Furthermore, the country has met problem in collecting payments both from distributors and the public section. ONEE, due to a great debt, burdening on the organization, and generated by the rapid electrification of the country, is also contributing to financial scarcity. This inadequacy, due to a lack of clear guidance on tariffs' establishment, is reflected on the customers and to an improper definition of the production costs.

Therefore, the country has not faced a complete transition toward an energetical system that can fully exploit its potential, it has just initiated the process. The main causes of this slowdown have to be found into the organizational system and in the scarcely coordinated institutional framework, that generate inefficiencies in the management of the sector. For instance, the above-mentioned progressive reforms, should be further implemented in order to enhance the efficiency and continue attracting private investors in the sector. Furthermore, Morocco, with the purpose of creating an open energy market, should favor the creation of an independent transmission system, that should replace the ONEE, which is not very willing to be modified,

though. In addition, the institutional setup of the country does not enable to coordinate the investment plan, especially in the planning and the forecasting of the activities. Hence, all the management of the sector lacks of appropriate guidance and standards to follow. Finally, financial scarcity (about USD 30 billion) affects the capacity of the country to meet its renewable target by 2030. Indeed, having signed the Paris Agreement, Morocco committed itself to reduce, by 2030, the GHG emissions of the 42%, and to increase the share of renewable energy up to 52%. Therefore, international investments can play a major part in Moroccan transition toward green energy: renewable technologies would be brought into the country, overcoming those inadequate that are just costlier and inefficient. Regional integration, when compatible with the national interests, would allow Morocco to be more interconnected with the national power grids and create a common energy market. it would also be beneficial because of the geographic position of the country, which allows a transit of energy from the Atlantic ocean to the Mediterranean sea region. This open market also promotes cooperation and innovation between the policy makers and the people involved in the energy production, which would result in an immediate and successful energy transition. The ultimate purpose of the country must be the creation of a flexible energy system[87].

The clean energy transition of the country has, not only boosted the industrial sector, but has also contributed to the development of the economy and has created more employment. Indeed, Morocco is on the right way to ultimate the energy transition: the energy policies that have already been passed resulted being effective in starting to attract foreign investments. Having created organizations like MASEN, IRESEN and the national regulatory authority has supported the implementation of the National Energy Strategy and have made effective the implementation of energy programs. Morocco's governments acknowledges the importance of international investments, which will ultimately allow the country to become a major player in the Mediterranean region and in Africa. Therefore, to compensate the scarcity of financial, human and technological endowments in order to refine the passage to clean energy that it has undertaken, the government must improve the investment climate, because it is the only way to attract foreign investors into the energy sector. FDIs would ameliorate the energy programs and processes that the government enacted, making efficient, and not just effective, the production of green energy.

As briefly said before, the initial attraction of FDIs has been possible due to the vision of King Mohammed VI that has implemented a new economic development model, which consists of continuous reforms focused on social production and reduction of economic inequalities all along the country. The King continued a process that had already been started by the previous government and that brough prosperity and infrastructures, like ports and railways, into the nation. Indeed, Morocco, in comparison with the other close regions, or more broadly the continent, has obtained substantial funds and has been in the spotlight of international financial institutions. Nevertheless, the country still has to rely on imports of oil, natural gas and

[87] *Supra note, 29.*

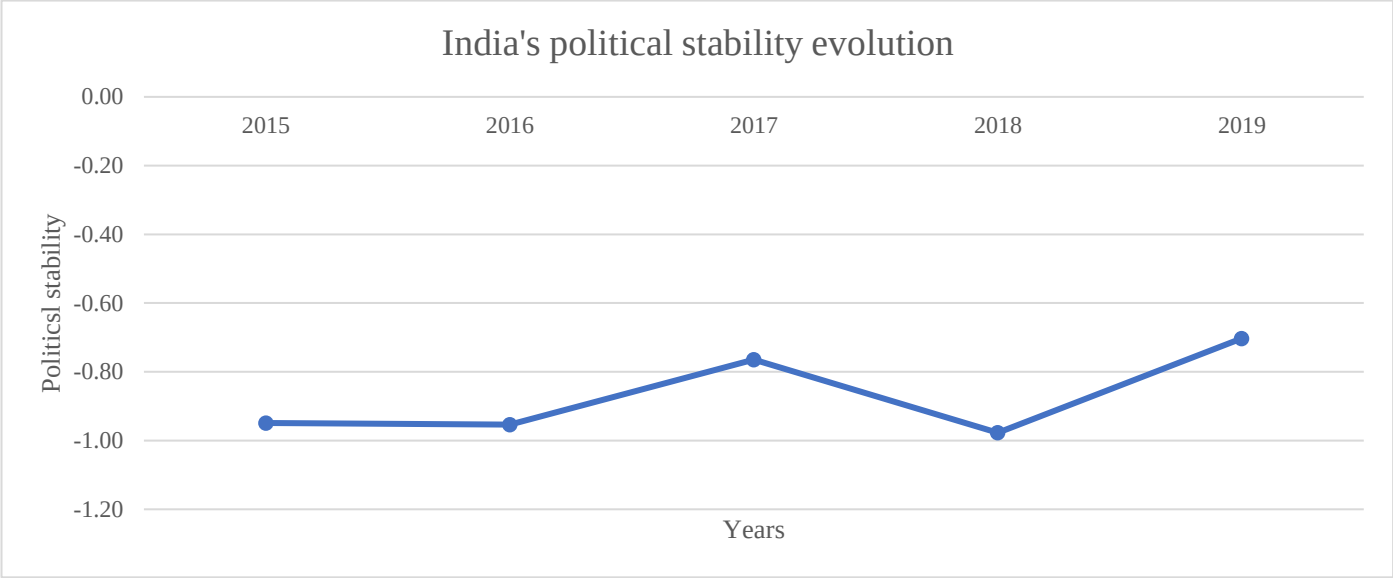
coal, to satisfy its energy requirements. Therefore, in order to reduce this strong reliance nonrenewable sources, the government has launched energy efficiency policies that allows to reduce these imports and obtain FDIs to improve the green energy sector. This is necessary for Morocco, which is a country in continuous growth and, as such, the energy demand rises as a consequence of the economic and social development that the government itself has sustained[88]. Indeed, what lacks to the country's energy transition is facing and meeting the long-term objectives. Thanks to the reforms and the energy subsidies it has been possible to strengthen the role of renewables both at the national and international level, and succeed in the implementation of the National Energy Strategy. Furthermore, the country has been able to save electricity, generate more renewable energy and reduce the emissions, but it still has to achieve financial, energy and climate sustainability in the long run[89].

3.1.3. India

a. Political framework

India's political stability has been experiencing ups and downs in the years from 2015 to 2019. As it is evident from graph n.6, after the first two years, in which the level of stability were almost constant, political stability has substantially surged in 2017, decreasing then in 2018 to even lower levels (compared to 2015). 2019, instead, has been a turning point: the World Bank assigned to India a score of -0.70, which is still negative, but not as much as the 2018's one. Currently the country is governed by a constitutional republic and comprehend a large variety of diverse ethnic groups with hundreds of languages. According to an article written on the website of BBC in 2012[90], the quality of India's politicians has been worsening throughout the decades. The levels of corruption and disinterest in people's needs have been increasing, as well as the number of politicians with criminal records.

[88] *Supra note, 30.*
[89] World Bank Group, "MOROCCO ENERGY POLICY MRV Emission Reductions from Energy Subsidies Reform and Renewable Energy Policy" (2018)
[90] Soutik Biswas, "Is Bad Politics Ruining India?" BBC News (March 29, 2012).



Graph n.7: India's political stability index evolution. Source: personal elaboration of World Bank's data.

India's political history can be divided into four main periods, which determined breaks in the economic policies of the country and in the economic growth rates:

1. **Nehru (1951-1965).** He reigned through a state-centered economic planning, aiming to combat economic stagnation and poverty. He had a top-down approach, thus using state driven policies, which eventually led to stable economic growth. This was possible because he brought India into a period of rapid industrialization, which healed the country from the economic suppression that Britain practiced in the colonial era. Secondly, Nehru implemented a series of programs that created economic coherence and were broadly accepted by the citizens, which could also benefit from the enhancement that he enacted
2. **Shastri and Indira Gandhi (1965-1981).** When Nehru died, the consensus on which the Congress Party was based on, began to diminish and tensions between Indian politicians (that represent different interests and ethnicities) emerged and influenced political order. The order had to be reconciled and, to accomplish this task, financial means were needed. The congress successfully individuated two Prime Ministers, Shastri and then Indira Gandhi, that were not able to create coherence between the macro and micro economy levels. Furthermore, some of the policies that were passed in this period resulted being objected both on the economic and the political level. Policymakers exploited the institutional weakness that was determined by a fictitious national unity, which in turn halted the economic growth. In the period consider, especially under the government of Indira Gandhi, the consensus was very difficult to be built and the economic development suffered from this, becoming extremely volatile. I. Gandhi adopted a top-down approach, that without social consensus resulted being unsustainable. Some of the policies that she passed regarded the constriction of domestic businesses and the expansion of state power, through the control of parts of the national economy. When she returned in charge (after having been replaced by Moraji Desai in 1977, whose government aimed to gather groups of different ideologies and then by Charan Singh) in the early 80s, she started adopting a new economic approach, alternative to the one previously enacted.

She gave businesses the possibility to promulgate their own interests and to carry out their own operations without the involvement of the state, that however kept being at the center of the system.

3. **I. Gandhi and R. Gandhi (1981-1991).** The policy adopted by Indira Gandhi was then emulated by her successor: Rajiv Gandhi. In that period the businesses were oriented to efficiency and focused on the meeting between demand and offering. The state was still present in controlling the capital flows and exercising power on some businesses. Nevertheless, this form of coercion resulted being unsustainable in the early 90s and India fell into a fiscally induced debt crisis, which was then healed by the financial intervention of the International Monetary Fund.
4. **Pamulaparthi Venkata Narasimha Rao (1991-1996).** This prime minister allowed millions of Indians to get out of poverty and create a new middle class. A major separation between the government and the economy was put in place, but certain enterprises remained under the control of the state, which also managed foreign exchanges and productivity through rigid laws. Therefore, the exposure of the country to the global economy was controlled by the national administration.

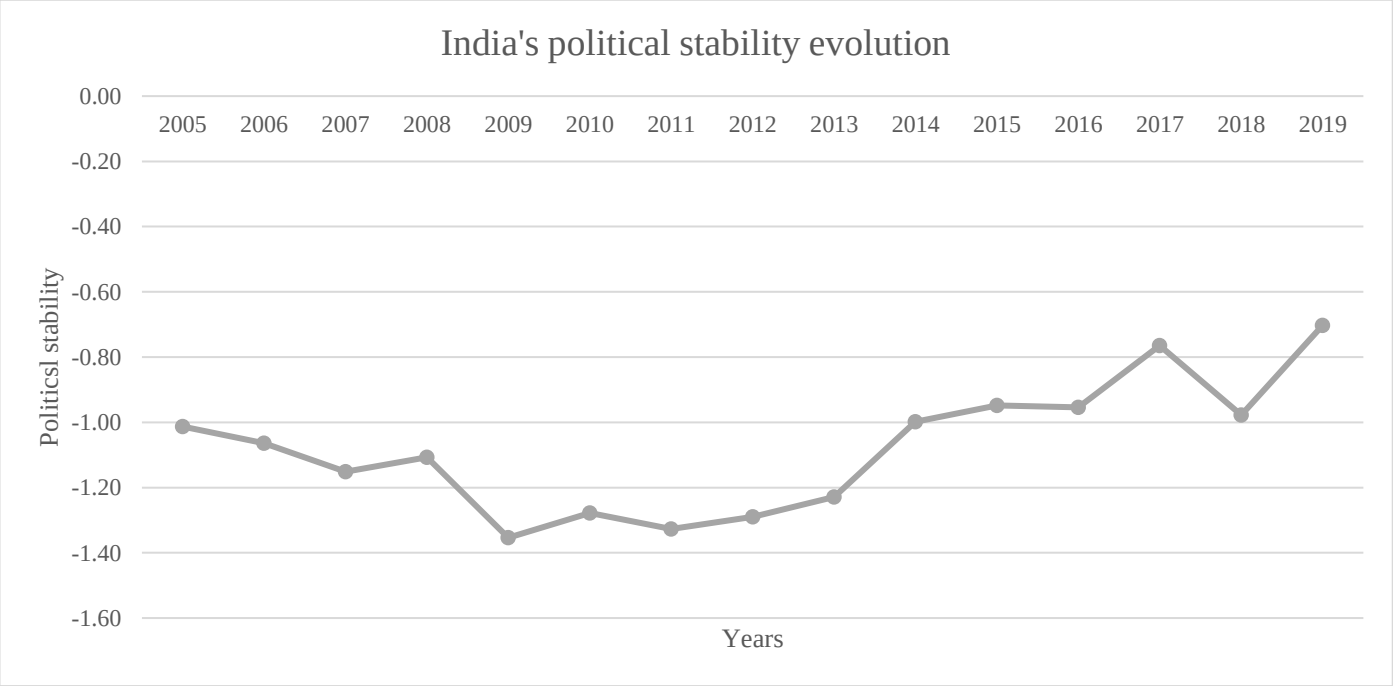
It is clear that the state has played an important role in influencing the economic performance of the country, which was satisfactory when all the stakeholders were aligned toward the same objectives. This happened under Nehru, which based his governance on capitalism and protecting a variety of interests. In phase number two the country turned to an autocratic state; democracy was restored only at the end of this phase: the last two periods were also marked by a lower interference of state in some aspects of the economy. Nevertheless, as long as the state will interfere with the economy (which is a sort of necessary condition in developing countries that are not well equipped in managing liberal economy, though), resource allocation will be inefficient. Also, institutions should welcome the liberalization of the marketplace, which has to be adequately managed, in order to welcome capital flows, too. This would allow the state to be focused on social programs for education and healthcare[91].

On the political stability level during the decades just analyzed, India faced several events that negatively affected it: thus, the government history is not as smooth as it seemed when dividing it into phases. Shastri had to deal with the Indo-Pakistani war in 1965 that caused thousands of victims and a large use of armed forces. The same war was replicated in 1971, but lasted much less than the first one. The Indira Gandhi's years were characterized by high volatility, determined also by her deposition and the subsequent election of Desai, that was itself replaced by Singh, before a re-election of Indira. Although her popularity Indira was shot at the end of 1984 and was replaced by her son Rajiv, that called for a general election that then led to its election. His mandate was characterized by scandals, treacheries and formation of new political parties. His government lasted relatively a short time, and Singh was elected in the 1989 elections, lasting less than a year. Those years were frenetic: after Singh, Shekhar was identified as prime minister, whose support from the Congress was

[91] D Rajeev Sibal, "The Untold Story of India's Economy" [2012] India: The Next Superpower.

withdrawn, leading to other elections. In 1991, when Rao was recognized as prime minister, India fell in bankruptcy, that then led to the liberalization of the economy. This step resulted in an extraordinary development of the country on the economic level. After these 5 years of stability, the country faced a continuous turnover of prime ministers (four in three years), and was punished with sanctions for the underground nuclear explosions. India was then also involved into another war with Pakistan in 1999 and in other elections. Early 2000s were characterized by higher political stability and a greater international involvement of the country, that strengthened its relations with Afghanistan, Russia, United States. However, also these years culminated with some upsetting events: the 12 Mumbai terroristic attacks that caused 174 deaths; scandals of corruption; Singh resignation as prime minister. In the years considered for our analysis, 2015-2019, the prime minister Narendra Modi was two times elected, in 2014 and in 2019[92].

Therefore, it is clear that India faced upheavals. This is clear also from graph n. 7, that represents the overall trend of political stability in the last 24 years. With Modi's government there has been a change of course, and from 2014 political stability raised up to unprecedented levels.



Graph n.8: India's political stability index evolution (1996-2020). Source: personal elaboration of World Bank's data.

Modi also aims to attract investments from worldwide. He wants to reform the country and make it a democratic place, in which diversity is welcomed. On the economic level, he also passed some reforms that eased making businesses reducing regulations, bureaucracy and formal rules[93]. After thirty years of political

[92] "Prime Minister of India - Wikipedia" (*en.m.wikipedia.org*2021)
[93] Zee Media Bureau, "India Political Stability - Bing" (*www.bing.com*September 3AD)

gap, with Modi the country seems to have taken the path of rapid development. The prime minister addresses this fast shift to political stability, which allowed embark on a national path of growth[94]. His plan includes also increasing employment and good returns for the investors, envisaging also a better infrastructural framework that would support exports' boost[95].

b. Renewable energy policy

Since 2014, India is considered one of the most committed countries in the deployment of renewable energy capacity. The reasons behind this green energy choice must be addressed to the economic condition of the country. It is a developing nation that needs to enhance its energy security, thus the imports of energy, and bridge the energy deficit, in order to provide the mass of citizens with the basic lighting devices and cooking systems. Furthermore, besides this reasons common to all the developing countries, India is pursuing its own-identified objectives. The country aims to reduce the share of fossils in her energy supply chain, which currently account for the power grid. This has increased the national level of greenhouse gas emissions, up to the point that India is the 4th largest emitter globally. Finally, a large number of Indians does not, or has little access to electricity. India's GDP national growth rate is estimated of 9% until 2031-2032: a broader access to energy would allow this increase. Therefore, India also needs a higher energy supply, which will have to grow by 5.8%[96].

On the demographic side, it has to be pointed out that Indians are growing at an annual rate of 1.58%, which determine energy shortages. This happens because the government has to sustain both the social and the economic growth that the country is promoting. Therefore, to compensate this deficits, the government is investing billions of dollars in the renewable energy sector[97].

As early as 2003, India had promulgated the Electricity Act, through which it delicensed the generation and distribution sectors, facilitating then the access to power, through markets and energy exchanges. In 2006, the National Tariff Policy aimed to make the tariff and regulatory process more transparent. India has also passed in 2008 the National Acton Plan on Climate Change (NAPCC), according to which, by 2020, 15% of electricity had to be produced by renewable energy, which account for 1100 Billion Units. Also, the country forecasts to increase this amount up to 1900 Billion Units by 2022. Nevertheless, this requires an adequate and costly capital, plus, lower levels of energy generation, given that the availability of resources (solar radiations and wind velocity) is limited, and hence, generating energy is expensive. Therefore, the country is unable to reach economies of scale, which limit the renewable energy projects to few hundred megawatts of

[94] The Economic Times, "Political Stability behind India's Development Strides: PM Narendra Modi" *The Economic Times* (2016)
[95] India Today Web Desk New, "India Has Vibrant Democracy, Political Stability, Skilled Talent Pool: PM Modi's Pitch to Canadian Investors" (*India Today*October 8, 2020)
[96] Sapan Thapar, Seema Sharma and Ashu Verma, "Economic and Environmental Effectiveness of Renewable Energy Policy Instruments: Best Practices from India" (2016) 66 Renewable and Sustainable Energy Reviews 487.
[97] Shantala Samant, Pooja Thakur-Wernz and Donald E Hatfield, "Does the Focus of Renewable Energy Policy Impact the Nature of Innovation? Evidence from Emerging Economies" (2020) 137 Energy Policy 111119.

capacity. In order to ease, promote and enable the implementation of renewable energy programs and long-term targets, India dedicated a specific ministry to green energy: New & Renewable Energy ministry (MNRE).

Although this ambitious program, India, like every developing country is affected by financial scarcity, thus needs the support of foreign governments. The mechanism that those have adopted are feed-in-tariffs (FIT), tax incentives, and tradable green certificates[98], or TGC, and they all reduce the costs of installing renewable energy projects and/or produce it. Also, India has heavily relied on non-financial instruments, like wheeling and banking of power with grid, solar capacity auctions and bundling, citizens buying green bonds and renewable purchase obligations, tradable green certificates, encourage local manufacturing and provision of low cost funds. Other measures aimed to de-carbonize the growth consists in differential electricity pricing and set of efficiency targets for industries and general furniture. India can also count on a large share of natural resources and a skilled workforce, that allows to complete the projects at an adequate cost. The initial targets that India set, concerned meeting the lifeline energy needs of those Indians that lived in rural places, which have inadequate lighting and cooking equipment. The country, also still imports almost all the crude oil needed, being dependent on foreign supply.

India's commitment is profound: renewable energy sector has grown annually by 17%, with a great impetus determined by wind, which accounted for the 63% of the overall renewable production. Private entrepreneurs and independent power producers have been playing the major part in this transition: they promoted the development of the national renewable energy sector. The government has eased this process with enabling policies and giving financial aids, that allowed to bypass the economic constraints in the adoption of green energy technologies. In the years from 2010 to 2015, the solar capacity installed increased by 200%, thanks to long-term policies that fixed the related tariffs for 25 years, the auctions used as a policy tool, and a lower price of the solar modules[99].

The greatest challenge for India it to meet the 7th Sustainable Development Goal, by 2030. Thus, the country wants to ensure energy access to all its citizens (which as seen before, are constantly growing), while at the same time reducing the emissions and improving efficiency. As it has been assessed in the previous paragraph, India has suffered from quite severe political instability, both on the terroristic and government sides. It has been only after a reduction of those types of events (the last two decades, in which there has not been a total disappearance of these episodes, though), that the institutional apparatus could focus more on building the clean energy growth. Indeed, although its environmental performance is scarce, India is one of top ten countries in the Climate Change Performance Index. It is not surprising that it is from 2015, when the political stability index surged thanks to the election of Modi (that brought higher political stability), that a

[98] It was introduced in 2010 by the Central Electricity Regulatory Commission. It is a green tradable certificate which has facilitated the strengthen the obligation of people to meet their Renewable Purchase Obligations, which is a committee authorized by the SERC to make meagre investments in the renewable sector. *Note, 45*.
[99] *Supra note, 40.*

clear definition of the targets has been stated, also identifying the future objectives in the renewable energy field.

At present time, the NAPCC, mentioned at the beginning of this section, is playing a major role in the transition toward renewable energy. According to it, the share of solar energy in the energy mix is going to increase, while, at the same, the use of wind and biomass has to be expanded. The action plan defined eight national policies that paved the path to foreign investments, given that it pursues the easing of both the technical and financial arena, limiting or eliminating the constraints in those fields. Indeed, a large number of key fiscal incentives were introduced[100].

India, in fact, aims to enter the international energy arena: the central government involvement has to be paired with foreign investments. FDIs would bring new technologies, influx of capital and materials at a lower price, which would also create higher efficiency in the capacity already installed. To incentive them, India's government can use a fixed standard national rate, and also reduce the taxation policies, that would improve the fluidity in the sector. It is thus, the only way to drive a national green expansion, which would be used in both the industrial and domestic businesses. Therefore, there is a strong relationship between Indian government and FDIs, which mutually support with one another[101].

3.1.4. Kenya

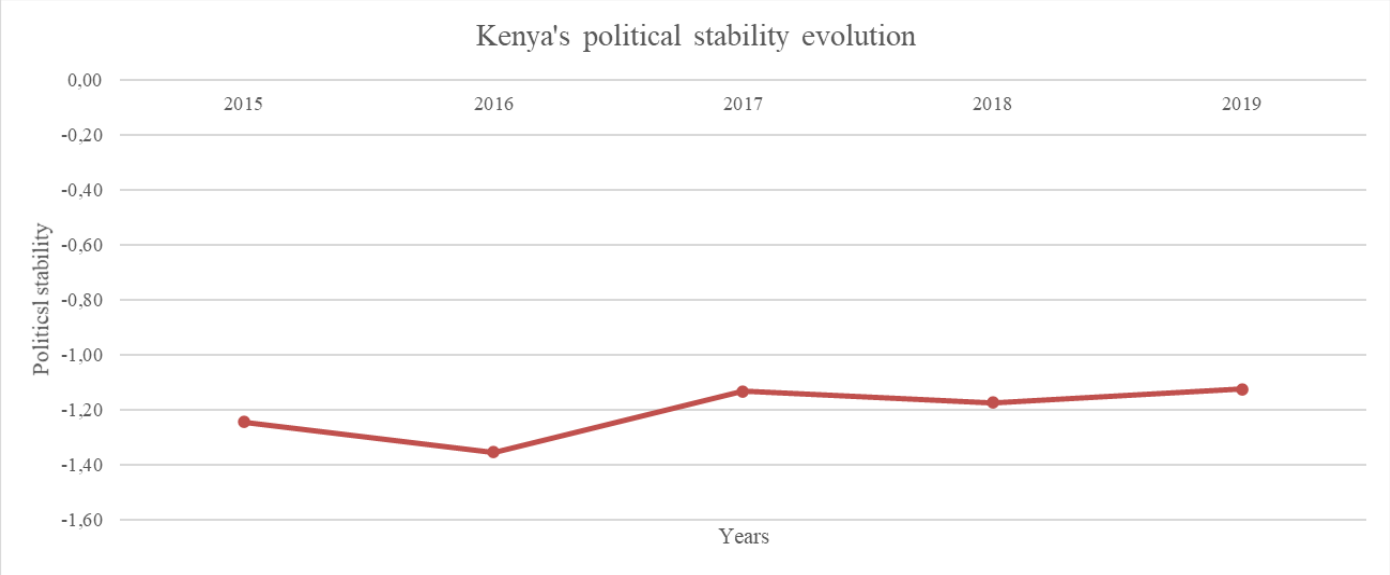
a. Political framework

Kenya is currently a presidential republic. The president is the head of state and government. The country has enacted, in the last decade, significant political and economic reforms that have ameliorate its economic and social conditions. Nevertheless, the country still struggles with poverty, inequality and climate change, which is halted by scarce private investments. The country has gained higher political stability but is still highly affected by internal and external shocks. Kenya introduced a new constitution that in 2010 allowed to institute a more solid political and economic governance.

Through the new constitution it has been possible to held elections in 2013, which was nullified on September 2017 by the Supreme Court. On October 2017 another election has been carried out, and Uhuru Kenyatta was nominated as President of Kenya, with a five-year mandate. Kenyatta has been able to generate economic growth inside the country. The process commenced just a few years earlier: in the period 2015-2019, Kenya's economy grew with an annual rate of 5.7%, which made the nation one of the fastest growing countries of the African continent. The president brought higher stability in the macroeconomic environment, which increased the confidence of private investors[102]. Indeed, president's commitment is on the long run. He

[100] Aparna Sawhney, "Striving towards a Circular Economy: Climate Policy and Renewable Energy in India" (2020) 23 Clean Technologies and Environmental Policy.
[101] Rajvikram Madurai Elavarasan and others, "A Comprehensive Review on Renewable Energy Development, Challenges, and Policies of Leading Indian States with an International Perspective" (2020) 8 IEEE Access 74432.
[102] World Bank, "Overview" (*World Bank*2010)

promoted a blueprint program, called “Vision 2030”, through which he envisioned a “globally competitive and prosperous country with a high quality of life by 2030”. Through this program he aims to industrialize Kenya and make it as a middle income country, in which citizens have a higher quality of life, and can live in a more secure and clean environment. Therefore, the president identified the “Big Four” development pillars: manufacturing, universal healthcare, affordable housing and food security. On the social level, Kenya has, with president Kenyatta, been successful in reducing children mortality and guaranteeing them a primary educational level, narrowing the gender gap. This program has been passed with the ultimate purpose of being considered on the international level[103].



Graph n.9: Kenya’s political stability index. Source: personal elaboration of World Bank’s data.

In the relevant years for the dissertation (2015-2019), political stability has been graded with almost the same values. Only in 2016 there has been a downfall which was then recovered, increasing in the following years. However, the values have always been negative and below -1. The causes must be addressed to the election history of Kenya.

Analyzing backwards Kenya’s political history, it comes out how political stability has been varying in the decades. Until 2007, Kenya was considered as on of the most stable countries in Africa. This was mainly due to tourism, international nongovernmental organization and financial funds. Therefore, the then president Mwai Kibaki was generally acknowledged as the promoter of national economic expansion, that created a contrast between Kenya and Angola Guinea. The latter two African nations in fact, were, at that time, largely dependent from oil. Nevertheless, stability lasted until December 2007, when violence across the country outbroke and hundreds of people were killed. It was feared by international analysts that Kenya would have split on tribal lines, generating quarrels. This event dramatically negatively affected income, expenditures and

[103] “About Vision 2030 | Kenya Vision 2030” (*Vision2030.go.ke*2012)

consumption, especially for the rural population. Many roads and markets were shut down and the emergence state was promulgated. Tensions lasted until February 2008, when a peace agreement was signed[104]. Therefore, the elections held in march 2013, through which Kenyatta was put in charge of governing Kenya, were feared both on the national and international level, of generating new possible waves of ethnic violence. However, 2013's elections were peacefully enough, although the losing candidate Odinga appealed to the Supreme Court.

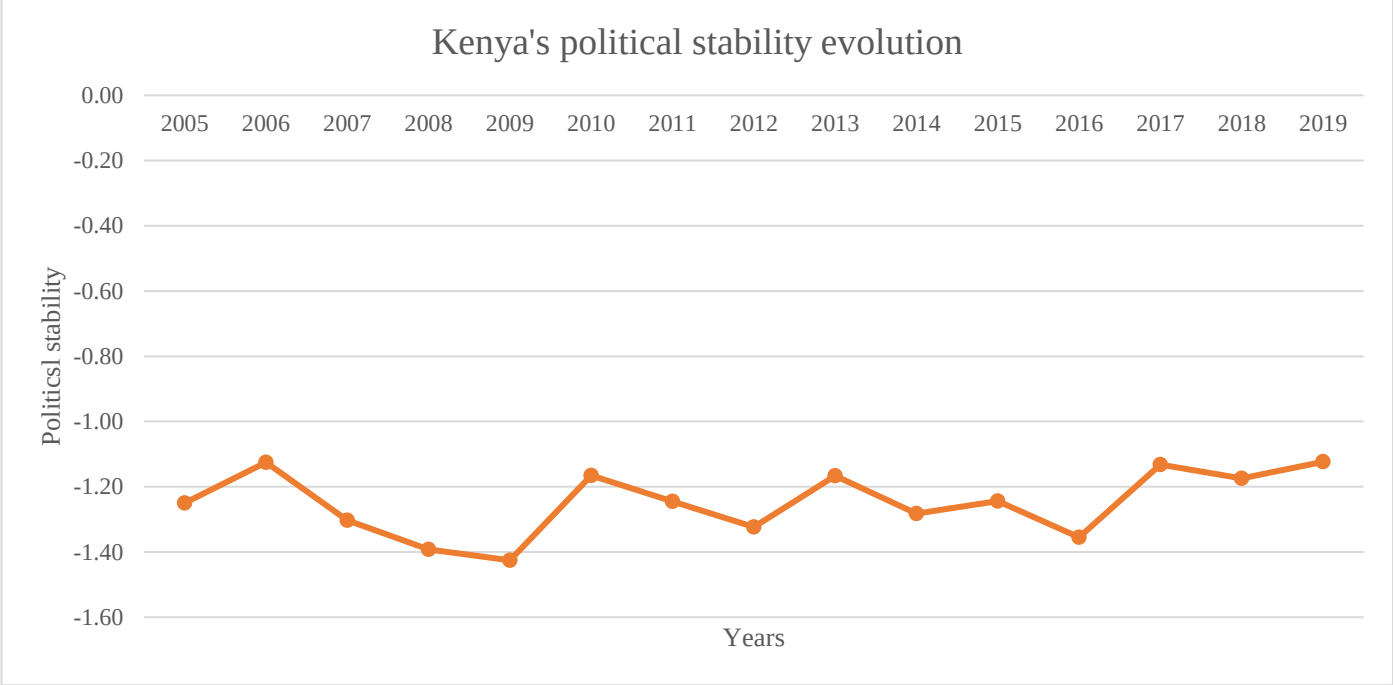
In 1991, Kenya introduced a multiparty-system, that substituted the one in force until 1991, a one-party system. In this way, citizens could freely express their opinion, but also their dissent. It has been since 1992 (the first multiparty election), with the exception of the 2002's elections, that Kenyan polls were conducted with civil unrest, that were under the lens of the international community. In 1992 and 1997 the national elections were preceded by the ethnic mobilizations and violence[105]. These two were related to the difficulties to adapt to a free electoral environment: ethic groups gathered together and competed for political positions. Whoever was declared winner faced a dispute conducted by losers, united by ethnic identity, that eventually turned to violence. In all the following elections (2007, 2013, 2017) the same happened, with quarrels mainly conducted by young people. In 2017, even if the election of President Kenyatta brought prosperity to the country, 70 people were killed in the election-related conflicts, many properties were destroyed and some businesses and public services closed: it was like a civil war between tribes was about to happen. The effects on cities and people were devastating also because of the damages created to the economic activities and social services.

Young people anger has to be addressed to various social problems: exclusion of residents because of their geographical location, social status. Weak religious bonds, determining less attachment to the community and thus exclusion, are also another characteristic of the rebel people. It must be also said that, political institutions are inadequate in facing this problem and have failed in addressing it[106]. Whenever the reasons and the time of these protests (before, during or after the elections) it is clear that those are the failure of the democratization process. Kenya, like many other countries have witnessed colonialism until the early 60s, and it was thought that the passage to democracy would have brought better elections. Electoral violence is the manifestation that something went wrong during the process: the electoral justice system, that would be in charge to avoid discontent during, before and after the elections, is weak. Therefore, the democratic apparatus is failing and erodes public trust in the electoral justice system[107].

In late 2007 and early 2008, almost 1300 people died during the tensions between the rival groups sustaining either the incumbent Moi Kibaki and the challenger Raila Oilinga. Furthermore, those elections

[104] Stephanie Hanson, "Understanding Kenya's Politics" (*Council on Foreign Relations*2018)
[105] Nic Cheeseman, Gabrielle Lynch and Justin Willis, "Democracy and Its Discontents: Understanding Kenya's 2013 Elections" (2014) 8 Journal of Eastern African Studies 2.
[106] Pal Ahluwalia, "The Saga of the 2017 Kenyan Elections: Can They Really Be Free and Fair?" (2017) 15 African Identities 351.
[107] Timi Legend Asuelime, "An Overview of the State of Electoral Justice in Zimbabwe" (2019) S1 African Renaissance 199.

witnessed the escalation of women-related sexual violence. 2010's constitution, one of the most progressive in Africa, was aimed to prevent what happened in 2007 and 2008, and provide free and fair elections. The development programs also provided elements for peacebuilding and conflict prevention[108]. Nevertheless, although the new constitution was passed and an Independent Electoral and Boundaries commission and other institutions to guarantee electoral justice were established, in 2013 and 2017 the same happened[109].



Graph n.10: Kenya's political stability index evolution (1996-2020). Source: personal elaboration of World Bank's data.

Therefore, as it is also represented in graph n.10, it is clear that Kenya's political stability has been falling, with the lowest peak in 2007-2009, which conciliate with the worst quarrels in which over 1000 people died. Since then, political stability never totally recovered. It was only after 2017, with president Kenyatta that the country could benefit from almost constant levels of political stability.

b. Renewable energy policy

Kenya falls into the sub-Saharan part of Africa which, according to Muigua, mainly rely on biomass, unprocessed wood, charcoal, agricultural residues and animal waste, that unfortunately also cause adverse effects to citizens' health. In 2011, Kenya passed the Kenya Sustainable Energy for All Action Plan (SE4All) was launched by the Ministry of Energy and Petroleum that outlined the country's long-term objectives in the energy field. The time horizon is 2015-2030 and Kenya, through the SE4All aims to guarantee 100% universal access to modern energy services, increase energy efficiency and increase to 80% the share of renewable energy in the energy mix, by 2030. Furthermore, people's energy needs are expected to exponentially increase

[108] International Peace Institute, "Elections in Africa: Challenges and Opportunities."
[109] *Supra note, 51.*

by 2037, thus the energy system has to expand. The energy sources considered in sustaining this higher requirements are the geothermal, nuclear, wind, solar, hydropower, coal and natural gas..

Nevertheless, Kenya's energetical framework still faces issues. Indeed, the country still suffers from low electrification rate, high importations of fossil fuels, frequent power shortages, scarce and costly electrification of the rural area, inefficiencies in the transmission systems, inadequate power grids, that do not enable to provide access to energy to all the people that require a connection to power. Besides them, the sustainability of the energy production still remains an open challenge. Indeed, Kenya is a developing country that is facing continuous population growth, environmental pollution (which is increasing because of the rapid industrialization) and is affected by poverty and corruption and the legal framework. Furthermore, Kenya's traditions and cultural perceptions create a barrier to the usage of clean cooking fuels. Thus, the overall situation is currently inadequate to achieve sustainable and clean energy for all.

The country has committed itself also on the international level: Kenya wants to meet by 2030 the 7th SDG. By the same year, Kenya aims not only to ensure a universal access to energy, but to increase the renewable energy share, in order to compensate the open challenge just mentioned. The nation wants to improve its international presence through higher cooperation. Only through a better internationalization it is easier to access clean energy (also cleaner fossil fuel) research and technology and to promote investments in this sector. Furthermore, the country aims to improve energy efficiency and upgrade the infrastructures to supply energy. The concerns over the situation have been manifested also by international authorities. The World Health Organization in 2018, addressed to Kenya's non-renewable energy lots of citizens health issues. Principally, according to the international organization, the household air pollution from inefficient solid fuel combustion (wood, animal dung, charcoal, crop wastes and coal) heavily damage people's health, given that these energy sources pollute cooking and heating plants.

The costs and reliability of energy's transmission and distribution are high because of the monopoly created by the Kenya Electricity Generating Company, that generates about 70% of Kenya's total electricity. On the distribution and transmission side, Kenya Power owns most of the systems needed. Therefore, there is a lack of competition, that generates inefficiencies and high costs. Citizens hoped that with the Energy act in 2019, aimed to consolidate energy laws, promote the production, exploration and commercialization of renewable energy and electricity, president Kenyatta would have reduced Kenya Power monopoly. It was not: the government, that holds a large property share of both the institutions, decided not to give licenses to other companies. Monopoly, added to power shortages, high poverty and unemployment rates, cultural issues, prevent Kenya from transit to clean energy.

The most notably steps made by the country toward renewable energy have been made in June 2016, when the ministry of Finance eliminated the rates over LPG gas and introduced the off-grid Pay-as-you-go solution, that is a smart meter technology, in order to boost its usage by the poorer households. Pay-As-You-Go also

allows to take track of the amount of rural people that are able to exploit the service, the quality of their connection and the availability and diffusion of their product. Furthermore, once the tariff is paid, the funds can be reinvested in improving old infrastructures or creating new ones. This procedure can be mainly implemented with the photovoltaic source. Kenya is also heavily reliant on hydroelectric power which is dependent from the natural conditions of the country. Kenya is affected by unpredictable weather, and this situation has been further worsening with climate change[110]. Especially, during droughts is difficult to manage all the energy accesses given that the hydropower energy supply is scarce, and shutdowns can happen. Geothermal energy has expanded and contributed to increase the renewables' share in the energy mix; the solar and wind sources have developed but not so much to be relevant on the national production level. From 2008, private renewable energy generation has been encouraged with a feed-in mechanism, through which is possible to collect the renewable energy produced and then entered in the national grid, at the prices established by the law. This method is systematically reviewed.

The national goal, stated in the national policy and the Action Agenda supporting the SE4ALL, is to guarantee universal electricity access by 2023. This has to be added to the ones stated in the book *"A national long-term development blueprint to create a globally competitive and prosperous nation with a high quality of life by 2030" (the white book)*, in which it is outlined the desired national conditions by 2030 (a competitive country with high quality of life). The access to energy is in turn considered as an infrastructural pillar to reach the economic and social purposes that Kenya has established. The nation has then launched a rural electrification program, through which aims to give 2 new million electricity connections in order to reach 6 thousands public places, schools and so on and so forth. Another solution enacted concerns the reforestation of the national territory, in order to ameliorate the production of vegetal carbon and the usage of wood stoves, that Kenya aims to ensure by 2030. The white book is renewed every 4 years and each time include higher energy diversification, increasing the wind and solar production. The African Development Bank is also playing its part in financing the Last mile connectivity project, in order to allow Kenya to meet its objectives, which overlap with the 7th SDG.

Kenya is one of the countries that is really progressing in the challenge of universal access to energy. In 2000, only the 8% of the population was able to connect to electricity, while in 2018 it was the 75% with an annual growth rate of 11.4%. Therefore, Kenya's situation is better that that of the other East African and Sub-Saharan countries. Nevertheless, there are some counties, like the Nakuru one, whose situation is completely different from that of other regions of the country. Therefore, although electrification is a national issue and many steps toward the resolution of the problem have been done, the concern also increase when looking at the subnational level. The various regions of the country are very different in terms of electrification and access to energy rates. This is mainly determined because the institutions decide where to invest and through which

[110] Kariuki Muigua, "Delivering Clean and Affordable Energy for All"

strategy. Thus, there is a mismatch between the top-down decision and the actual implementation of the plan. Finally, it is then needed to create a distributed energy network and then connect it nationally. For instance, the creation of private photovoltaic plants, as said before, would be possible only if they are coordinated though national programs and be beneficial also on the social level[111].

Further progresses have been done in 2019 with the installation of the Turkana Wind Power plant, which allowed to produce 310 MW of renewable energy. In this way, the cost of production of fossil fuel has lowered and Kenya's production mix is now provided for the 70% by green, accessible and economic energy[112]. However, the sector needs further developments and the government has real need of FDIs. Many African countries are adopting a free market model, which paves the path for investments in the power generation. Kenya falls in the category of those nations that are really attractive for their clean-energy investment potential[113]. FDIs remain relatively weak considering the size of the economy and the development level; in 2019, FDIs increased to USD 1.3 billion. The Vision 2030 is expected to positively influence the inflow of FDIs, fostering the public-private partnerships and easing the way of doing business. In addition, because of its geographic position, Kenya plays an important role in the East African Community, acting as a regional economic hub, hence investing there means investing in a rapid growing economy. There are several problems that affect investments though: the poor quality of infrastructures, political instability due to terroristic attacks and ethic and social division, corruption and ineffective rule of law[114].

3.2. Discussion

According to what has been analyzed in the case studies, several conclusions can be drafted. Firstly, as had been stated in the previous literature review, under the broad umbrella called "political instability" falls a large number of factors. Indeed, all the countries examined are affected by different threats.

Specifically, Pakistan is the most unstable country among the nations mentioned. Continuous government changes, revolutions and military assaults have deeply affected the capacity of the country to create a safe place for the investments. Furthermore, the country has fought several wars with the narrow India. Pakistan has been experiencing political instability since its declaration of independence and its situation never really improved since then. Conversely, being focused on the resolution of the energy deficits that the population has been experiencing until 2017. From that year, Pakistan has committed itself in making a step toward renewable energies, as a mean to close the energy shortages. Solar energy has been the mainly developed source, with a solar panel station (Quaid-e-Azam Solar Park) that can produce 1GW of power. The World Bank has been funding not only this project, but also the implementation of 24 other projects in this field.

[111] Matteo Leonardi and Samuele Tini, "ENERGIE RINNOVABILI in AFRICA: IL CASO DEL KENYA SPUNTI per LA COOPERAZIONE INTERNAZIONALE" (2020)
[112] Rudi Bressa, "Come Il Kenya è Diventato Leader Nelle Rinnovabili in Africa" (*LifeGate*September 6, 2019)
[113] Business Islamica, "Investing in Africa's Renewable Energy Sector" (*www.zawya.com*January 26, 2017)
[114] Export Entreprises SA, "Foreign Investment in Kenya - Santandertrade.com" (*Santandertrade.com*April 2021) +

Private citizens also contribute to the solar energy production, installing photovoltaic panels on their rooftops. However, the production from the Quaid-e-Azam Solar Park is far below the maximum capacity of the complex and several threats may obstacle the country's energetical transition. China has funded projects in the non-renewable energy field; the provinces have to be consulted, thus delaying the implementation of the policies; the coronavirus pandemic.

As it had been stated in the literature review, political stability influences FDIs. Pakistan really needs them: 15 billion dollars would aid a better implementation of the renewable energy plan. Nevertheless, a good governance of promotion of social and zero-carbon emission policies, liberalization of imports and exports of the technological devices needed for green energy production, is needed. Current government are focused on dealing with instability, thus leaving behind the necessities of improving the renewable energy field. Pakistan's real green energy transition can be implemented only if new and adequate technological endowments can be brought into the nation. Another way to comply with the obtainment of external funds, is that of increment regional trade agreements, which are currently enacted but do not produce the optimal amount of trade. If the situation will not be recovered as soon as possible, Pakistan will not even meet the Sustainable development goals, thus being left out from the internationalization process. This would ultimately hinder the development of the country and the recovery from energy shortages.

Morocco, instead, is different from Pakistan. The governments have not changed: the Kingdom has continued from fathers to sons, until the current King Mohammed VI. He has in mind the creation of a fresh and young nation, bringing novelties and innovations in order to keep up with the developed country and become part of that group. His father, King Hassan II began this process, but it has been with his son that the investors became interested in funding activities and businesses in Morocco. Indeed, he mainly promoted the development of the so-called "mega projects", through which he aimed to make the country more competitive on the international level. This is a clear embracement of neoliberalism, envisioning a country that shifts from his reliance on agriculture to economic development and capital accumulation. Nevertheless, Morocco is still developing also on the social side. Indeed, the development of the cities have also attracted people from the slums that attacked and bombed cities like Marrakech. As it has been stated in chapter n.1 by Polyxeni and Theodore, the social situation of the country influences the FDI inflows. It must be also said that the King Mohammed VI has envisioned a more inclusive nation, promoting social policies for the development of those areas.

On the energy side, Morocco has promoted a series of reforms and plans to implement renewable energy programs. Suffice it to say that Morocco installed the world's largest solar panel complex. The transition toward renewable energy has been enacted still because the King does not want to lose momentum and be left out from the international arena. Moreover, Morocco is the only North-African country that relies on oil, coal and gas importation. The energy demand is increasing and this in the past created energy shortages: the import costs would have to increase to meet the energy needs. Therefore, in order to face also these problems, the

country has decided to enact the transition toward renewable energy and create a competitive, sustainable and sound energy procurement. The role of oil will not be downplayed also because of the new reserves discovered in the nation. It is then clear, that the commitment of the King is profound, but the system is difficult to alter within a short time.

Even though this reliance on oil, the country has created organizations dedicated to renewable energy and has stimulated the foreign investments in this sector. In comparison with the other continent's nations, the country has obtained very high shares of FDIs and keep attracting them would make the country a major player in the African region, holding a predominant position in leading those nations. Furthermore, the energy programs that King Mohammed VI passed are effective but not efficient, hence FDIs would both ameliorate them and reduce the reliance on fossil fuels in the long run.

In this case it is clear that a politically stable environment has encouraged FDIs in the renewable sector. In my opinion, this has been possible because the government is really concerned with obtaining them and it is not "distracted" by other social events, which he is also trying to address through social reforms.

India is a notorious example of political instability. As I have outlined in the dedicated paragraph, India's governments can be divided into main segments. However, in any of them, alteration of the main form of governance have been enacted and disrupted the economic development that the country was going through. However, also in each macro-phase the government passed from more to less interfering forms of administration, thus affecting the economic performance of the country. continuous changes in the government, terrorist attacks, bankruptcy. India had also to deal with various wars with Pakistan, that required the deployment of human and financial resources, that were subtracted to the social and energy sides. As it has been represented in the graph n.7, the situation ameliorated with the two consequent elections of president Modi, that increased the political stability of the country from 2014. This is also the period considered in our analysis, from 2015 to 2019. Modi is seen as a savior, the one that would bring higher stability in the country. India is difficult to be governed, and Modi aims to make it a more democratic place where everyone is accepted and the different needs are highly welcomed. President Modi also passed reforms to ease the legislative framework and the ability to conduct businesses. He created infrastructure and the country seems to finally be on the economic development path. The president in fact, aims to assert the country's position on the international level, in order also to improve the foreign investments inflow.

Since 2014, the country's commitment in the renewable energies has been increasing, up to the point that, with regards to the transition, it is one of the world's most devoted countries. India's population is increasing at a constant rate each year, thus the energy requirements are expected to follow the same path. India is reliant on fossil fuels, and in terms of greenhouse gas emissions it is 4th on the global level. Therefore, to meet citizens' needs, India has decided to shift to self-produced renewable energy, in order also to provide them with safer lighting and cooking systems. In this way, the nation will be able to reduce its reliance on fossil

fuels, and consequently cut out the emissions. Furthermore, as the population grows, their economic production does the same. Since the government has to sustain both the social and the economic sides of the nation, energy shortages have and can occur in the future. To compensate these deficits, the investments in green energy have to increase. And this is expected to happen through the various plans that India has enacted: the renewable energy and electricity shares will constantly grow.

Besides the several actions and plans that have been enacted, India needs new technologies that would reduce the price of production, bringing higher efficiency. FDIs' role then is primary. The role of the government is eventually, that of keep promoting and encouraging the external investments, through national policies, i.e., reduce taxes, fix the national rate. Government and FDIs in India feeds on another.

Kenya, finally, is affected by political instability in the form of electoral quarrels. In 1991, the political system with just one eligible party, has been replace with a multiparty one. Since then, all the elections have been affected by attacks between the supporters of the opposing parts. Those led to violence, tensions, and sometimes to annulment of the election. The problems behind this episodes have to be addressed to the social issues that Kenyan people suffers from, for instance, social status, exclusion, that have not been addressed by the institutions. The escalation of riots brought in 2007 to the death of 1300 people. It was hoped that with the introduction of a new constitution in 2010, the situation would have changed. In 2013 and 2017, the same violent events took place and deeply affected political stability. It was only in 2017, with the election of President Kenyatta that higher stability was established. It is feared now what will take place in Kenya in 2022, when new elections will be called. Many journals have already started writing about this. The alliance between the president Kenyatta and its former opponent (which is considered as his natural heir) is falling. Therefore, he probably will not have the President's support: international analysts are worried that this will bring to other violence waves .

The president Kenyatta elected in 2017 is considered as a good leader by Kenyans, he brought prosperity and economic development: Kenya is one the African countries, whose economy has annually grew at a constant rate. Kenyatta wants Kenya to be competitive at the international level. Nevertheless, to do so, the social problems have to be addressed and it is necessary to keep following the process that he has started. On the energy side the population is still reliant on polluting and unsafe sources, even if the president has passed different plans in order to achieve higher sustainability. It must be said that before anything else, many Kenyans in the rural area do not have access to energy. Therefore, ensuring access to energy (even better if renewable) is the main challenge for the government, also because it is forecasted that the energetical access requirements will also increase.

Comparing the national situation with that of the other countries in the continent, it is clear that Kenya is progressing in reaching its electrification and renewable energy targets. Nevertheless, social problems and economic scarcity halt the prosecution. The latter concern can be overcome with FDIs, that for the country's

energy potential are very low. The Vision 2030 is expected to influence the inflows, but because of the political instability determined by terrorism and social divisions, the investors are reluctant to fund projects there. Therefore, the political and social frameworks have to be quickly improved: the projects that Kenya implemented have started the transition, but to ultimate it FDIs and more adequate technologies are needed.

From the case studies that have been examined in this section, I have shown that political instability, in any form it takes place, negatively affects not only the economic growth of the country that suffers from it, but also the reception of the financial and adequate technology needed to make steps toward renewable energy. The paths are more or less undertaken, but generally, there is inefficiency in the production, distribution and commercialization of green energy, because of the inappropriate endowments. Morocco has been chosen as a positive example of developing country, that is politically stable and thus has really developed a strategy for clean energy and international commitment. All the others still have to ensure a reliable, competitive and sustainable energy supply; for them this is of paramount importance: if the passage to green energy will not happen, the nations will be stuck in the "middle-income trap"[115]. FDIs are the only way escape this trap.

[115] Muntasir Murshed, Kashif Abbass and Seemran Rashid, "Modelling Renewable Energy Adoption across South Asian Economies: Empirical Evidence from Bangladesh, India, Pakistan and Sri Lanka" [2020] International Journal of Finance & Economics.

CHAPTER 4: Contributions and limitations

4.1.Position of the dissertation in the related literature

The literature from which I started drafting my dissertation is vast. I tried to address the main contributions dividing them between the general factors that either encourage or disincentive FDIs, providing then a separate mention to the role of political instability in influencing the countries' commitment in making investments in a foreign country. Political instability is the main focus of my thesis. Many authors have confirmed that a politically unstable situation negatively influence investors' willingness in carrying out activities in a developing country. Indeed, this class of nations is the one that mainly needs financial and adequate technological inflows, given that their original endowment is insufficient and does not allow the nation to enact the transition toward renewable energy. Green energy is one of their main objectives, given that many of these nations have suffered from energy shortages during the decades; their populations are constantly growing, thus the already existing energy supply would not allow to meet both the present and the future demand.

I started from the IMF working paper by Elif C. Arbatli (2011), in which she collocated the political environment among the country specific pull factors. According to her analysis, this factor is associated with conflicts after specific events. Nevertheless, although she claimed that the policies enacted to reduce political instability and the level of conflicts have a positive effect on the above-mentioned inflows, she highlighted how the non-univocal definition of political risk does not allow a full understanding of how they influence FDIs. I decided to adhere with the concept outlined by Mario Levis in the '70s, that identified a political stable country as one in which there are no conflicts and violent actions. I found out that all the nations I decided to investigate as case study were affected by this problem: Kenya and Pakistan above all. Morocco is the only country that, thanks to King Mohammed VI, and its social and economic policies is benefitting from more FDIs in the energy sector. Hence, from the Morocco case it is evident that what has been stated by Arbatli is inevitably true: political instability impacts the willingness of the investors to carry out FDIs and, the policies enacted to ameliorate the social and economic framework in which the country find itself, encourage them.

Furthermore, as I stated in the first chapter, I decided not to adopt the sub-national level approach that the Dunning's Eclectic Paradigm suggested. It would have allowed me to better evaluate the political bounds that the various regions entail with the national institutions, and also the extent to which political tensions and conflicts affect the investors' decisions. Nevertheless, I could not embrace this point of view, because of two reasons: first, given the novelty of my work, I only found general and national data; second, all the countries selected are affected by political problems that determine a national concern over their political stability. However, this did not determine the unfeasibility of my work: rather I could carry out an analysis that would be beneficial for the developing countries that want to receive the FDIs and it is useful to enable them to identify which are their main weakness and, finally, how to improve their situation. Through the external

investments, but also the taxes paid by the MNEs in the country, the countries receive the necessary technological, financial and human resources that are needed to improve the productivity of their activities or to completely start their initiatives.

It must be clear, though, that the FDIs are not only an opportunity for the countries that receive them. They are advantageous for the investors that carry them out, given that these investments allow the multinational enterprise to expand its business. Many of the MNEs focus on developing countries given that these nations have unexploited business opportunities. Therefore, globalization has made the countries of this group more appetible, although these are frequently affected by problems in the social, economic and political spheres. It is up to the governances to overcome the nation's threats, or at least not to create problems to the foreign investors, guaranteeing them the best support. Additionally, many companies, as stated by Lien and Filatotchev (2015), in order to overcome the downturns deriving from the investments in unknown countries, prefer to cluster with other competitors and/or collaborate through various forms with local partners. Nonetheless, this mainly concerns the investors that are less prone to make investments in hazardous situations and that since the beginning acknowledge that this sharing may reduce their returns. One last solution to encourage the investments in problematic countries would be that of exerting a high level of control over the subsidiary, through which the investors are able to monitor and enforce their power, in order to reduce uncertainty and opportunism, and be more confident of their activities. The investors have to consider that, in this case, the costs of management will increase, hence a proper balance between costs and benefits must be precisely portrayed defining then, according to this, the extent of control over the subsidiary.

These considerations should be carried out on the sectoral level, allowing then the countries to better formulate their policies, and the investors to act with a proper strategy. The sector in which I locate my dissertation is the tertiary, given that energy falls in this cluster. As it had been stated by Yu and Wash, the FDIs in this sector are encouraged by a wealthy macroeconomic environment, high quality of governance and good IT infrastructures. Together with them, political instability, interfering with the economic affairs and creating corruption, has to be considered as well. As I was briefly claiming before, the governance must try to reduce the political volatility of a country through a series of policies, that in turn may have the capability to generate partisan dissatisfactions, thus higher levels of instability. The investors have to properly check the political situation of the country in which they are going to put their money, at the national level; it would be even better if the analysis would be carried out at the regional level, in order to appreciate the advantages and the threats that that specific zone may offer.

As I said before, I adopted a national point of view as also other previous academics had already done. In the literature review I drafted, I mentioned the work by Phuc Canh, Thanh Binh, Dinh Thanh and Schinckus, which is called "*Determinants of foreign direct investment inflows: The role of economic policy uncertainty*", in which the authors further backed my choice of looking at the object of my study by a nationwide lens. Indeed, according to these authors, FDIs are impacted by economic policy uncertainty, thus by the national

political instability, that is mitigated only by a higher world uncertainty. It is logical in fact, that when the uncertainty generally affects more than one single country, the investors are likely to blend their negative evaluation over the specific country. In this case, political instability and uncertainty are not just an issue of one nation, it is something concerning more than one of them; therefore, the apprehension toward the instability of one nation is mitigated by the overall worldwide situation. In the article, the authors outlined that, a high level of domestic political instability determines a higher amount of time required to check the future political evolutions of the country, thus increasing also the time needed to invest, with the chance of never making the investment or reducing its amount. Therefore, the national political instability can also lower the FDI inflows.

The investors are able to reduce the uncertainty deriving from domestic political instability, according to Erkekoglu and Kilicarslan, through an analysis of the present situation of the country, and at the same time predicting all the possible evolutionary scenarios of the framework portrayed. According to these predictions and forecasts, the investors can take the decisions more consciously, adapting their actions and expectations in line with them. Polyxeni and Theodore also emphasized how important it is to concentrate on the national political situation of the country, and focused on terrorism as one of the main variables affecting political risk. They stated that this factor is important as well as the financial and institutional current state of the nation, and terrorism can even worsen the evaluations over the risks related to the political stability of the country. Furthermore, it is expected to impact also the socioeconomic current state of the nation, and be detrimental to the country's capacity to obtain FDI inflows. Therefore, the interrelation is clear: terrorism negatively influences political risk, increasing the values assigned to the related risk, and it additionally disincentives the FDI inflows directed to the nation. Hence, the location decision of the investors are disrupted by the threat of losing the returns because of political instability. These last authors advised the financiers, as also Erkekoglu and Kilicarslan stated, to constantly monitor the evolution of the national political situation (including terrorism), in order to assess its impact on the investments. They also outlined the physical damages that the terroristic attacks can create, for instance harming the productivity of a country ruining the infrastructures used to carry out the activity, or infringing the safety of the investors themselves.

It is obvious that political instability does not per se weight as a determining factor of the FDIs directed to the country; the investors' willingness is influenced by a series of variables, including political risk. Furthermore, when we consider developing countries, the main factor the investors look at, according to the article written by Polyxeni and Thedore, is the GDP of the nation. The GDP, though, is affected by political instability and terrorism, given that a part of the nation's financial results has to be devoted to fighting and assessing this problem (the case study of Pakistan, of which I will display the results in the next section, properly exemplify this process). Another factor that, in their analysis, is deemed being decisive for the FDIs, and that is related to political stability is the amount of the nation's financial and political reforms that the country passes to improve the institutional stability of the nation and reduce the risks of suffering from political

volatility and terroristic attacks. They found out that the more liberal and democratic the countries are, the higher the level of FDIs they will receive. Therefore, even though political stability does not solely influences the investors' decisions, it must be recognized that it plays an important part for the internationalization both of the MNCs and the countries that receive them. Indeed, all the other factors previously mentioned are related, by some extent, to the consistency of the political framework that a country has.

In the literature I reviewed a punctual definition of political risk has not been provided, because several factors are considered detrimental to the political stability of a nation. Among them, terrorism is recalled, as I have briefly displayed just before, by many authors. Bano and the other authors of *"Why Did FDI Inflows of Pakistan Decline? From the Perspective of Terrorism, Energy Shortage, Financial Instability, and Political Instability"*, have to be listed in this class. They also suggested the investors to precisely carry out the analysis of the country by themselves and not to rely on generalizations coming from a vague knowledge of the events affecting an indefinite part of the world to which the country is nearby. Pakistan for instance has been affected also by the infamous proximity to Afghanistan, that after the 11th September 2001, has been under the international lens because of the terroristic events. Nevertheless, this kind of attacks were increasing in Pakistan as well, and the governance was criticized because of the insufficient measures taken in those circumstances. To conclude this discussion over the literature review I drafted for my work, I recall the article by Williams in which he stated that protests and violence determine a negative impact over the FDI inflows, while regime instability disincentives the economic growth of the country.

Besides political stability I decided to concentrate my work on renewable energy. The governments have to incentive the FDIs in this specific sector through appropriate strategies and policies (i.e., fiscal policies, tax exemption on renewable energy), otherwise they would not have a significant impact over green consumption. In this way, according to the authors mentioned before and Khan, in his paper in his paper *"Impact of Technological Innovation, Financial Development and Foreign Direct Investment on Renewable Energy, Non-Renewable Energy and the Environment in Belt & Road Initiative Countries",* the financial and technological resources needed for the transition would be brought into the developing nation boundaries. There are various ways through which the investing nations can contribute to the development, for instance through greenfield, which is the type indicated in the article just mentioned. If the entering mode is this, FDIs in the non-resource tradable manufacturing and commercial sector are estimated to be impacted by political events.

Having discussed the literature presented so far, I would like to briefly discuss the position of my dissertation. As I already stated, the approach that I have used into the empirical analysis is nationwide, and I applied it also to the case study analysis. For the reasons outlined before, I did not distinguish between regions, even though this would have been optimal for a more punctual analysis. Furthermore, I truly adhere with the scholars point of view: the higher the political risk, the higher the investors' concern over the investments to carry out. Political risk is affected by many variables, among which terrorism above all, but it in turns impacts other important aspects for a country, like FDIs, socioeconomic development, GDP, and so on and so forth. I

deem also FDIs being an indispensable source of prosperity for the developing countries, given that, regardless of the sector, they bring financial and technological endowments. This is even more valid when focusing on renewable energy, given that it is a delicate sector on which national and international concerns are directed. The developed nations want to meet the interorganizational requirements and be part of the international energy arena; the developing ones need energy to satisfy the citizens' necessities, and keep relying on imports lead to too elevate costs. In addition, if they would not meet the criteria mentioned for the developed nations (like the SDGs), they would be internationally regarded as detrimental for the environment, and this, in a period of high concern for this issue, would not be beneficial for the general economy of the country. Finally, I intend to distinguish my work from that of Khan, even if I have considered it as a pillar for my thesis. Indeed, I do not concentrate on greenfield, joint ventures and other types of entering mode. I do not intend to portray a strategic analysis, but rather to provide both the investors and the developing countries with suggestions coming from the evidences I found out both from the empirical tests I conducted and the case study analysis. Indeed, what other countries have gone through or have enacted to overcome their past situation, can be exemplificative for those that are currently struggling to escape this trap.

4.2. Main findings and contributions

My work has been carried out gathering data from two main international organizations. Firstly, the data about the FDIs in the renewable energy sector, directed to the emerging economies have been collected from the category *"Electricity, gas, steam and air conditioning supply"* in the database of the International Trade Centre, that take into account information deriving from the national banks of the various countries, international institutions like OECD and IMF and regional organizations like ASEAN. I decided to analyze the data as flows and as stock: the former provide the data as a sum of the transactions in the two semesters of an year; the latter instead, identify the position of the country in the second semester of the year. I provided in the section the results of both the Pearson and Spearman tests, using both the flows and the stock datasets. Nevertheless, as I aim to display in this chapter the most relevant outputs, I will recall just the flows results. For the sake of clarity of the representations I have created with the data, I decided to portray just those countries whose data are not considered extreme, namely not the outliers. I identified them through the method of the quartiles. After having done this, from the original dataset of 42 developing countries receiving green energy FDIs, I obtained 17 countries with non-outlier values.

The political stability values, instead, have been gathered by the World Bank and span in a time period from 2015 to 2019. I collected all the information for the 42 initial developing countries in the years I identified. As well as for the renewable energy FDIs I manipulated the political stability dataset: I selected the outliers with the same formulas for the quartiles and the upper and lower bounds and, for this reason from the political stability dataset elaboration I could cancel two countries, thus arriving, for the representation of the correlation, to 15 countries, i.e., ***Armenia, Bangladesh, Colombia, Mauritius, Georgia, India, Kazakhstan, Mauritius, Mexico, Morocco, Pakistan, Romania, Russian Federation, Tunisia, and Viet Nam.*** In addition,

from the original dataset of 42 countries I deemed useless to keep counting on countries whose percentage variations from 2015 to 2019, both in the renewable energy FDIs and political stability values, were 0% or 100%. Indeed, in this last case it meant that the value in 2015 was not available.

Pearson and Spearman correlations are both negative, which means that, when the x variable (political risk) increases the y one (FDI flows in renewable energy) decreases. Precisely, I consider being better to select the Pearson correlation, given that it is the most common parametric test to evaluate correlations and it allows to make inferences on more than 30 observations. It enables to estimate the linear relationship between two variables, thus the proportionality of when they change together. I do not reckon the Spearman test as useless, rather it is commonly defined as a non-parametric version of Pearsons's. Testing the correlation with this coefficient allows to define the monotonic relationship between the variables selected. Comparing the results obtained through these two tests, allowed me to state that the relationship between the two variables is not only negative, but also linear but not monotonic. Nevertheless, I preferred Pearson and I conducted the above mentioned representation and identification of the outliers with this coefficient.

Therefore, according to these considerations and the empirical analysis I carried out with the use of EXCEL, I can state that there is a negative correlation between political stability and the FDIs in the renewable sector. Precisely, this correlation is estimated being -0.076, which means that, whenever the x variable, i.e., political risk, increases by 1%, the y variable, namely FDIs toward developing countries in the renewable sector, decrease by more than 7%.

After having conducted a quantitative empirical analysis, I moved on with the assessment of the case studies. I decided to select this "examples" because I was fascinated by the political history of the risks of which any of them is/was affected but also, I have been interested in deepening my knowledge about the projects in the renewable energy which they committed to. All the countries have a precise story, a different path that brought them to the outset that presently characterize them. I chose Morocco because I have been positively amazed by the number of projects, both on the social and economic level, that have been recently passed. I focused instead on Pakistan due to its troubled and long lasting history of terrorism, wars with India, government dismissals, which still continues at the present time. India grabbed my attention because of the strong interest it has showed in these last years in the renewable energy sector. Indeed, as soon as Modi took the lead as president of the country, he aimed to restore the political stability that the country has not had since the beginning of its independence from Great Britain. President Modi has also showed its interest in renewable energy and has been able to attract investments from foreign nations. Ultimately, I chose Kenya because of its history of so-called electoral violence, which is still lasting at the present time. Kenyan presidential elections have started suffering from this as soon as the multiparty system has been passed in 1991. This problem is very controversial and deeply affects the smoothness of the electoral procedure. Therefore, it is evident from the case studies I have chosen that political stability is not a standard process, rather it is multifaceted and

never the same. According to the different paths that the countries have taken throughout the decades it is possible to draw few highlights.

Morocco is the only country in the case study analysis that has been experiencing continuity and stability with his governance: the kingdom has been passed from fathers to sons, with king Mohammed VI presently in charge. This situation has differentiated Morocco from the other nations that have been highlighted in chapter 3. All the other countries have not had a stable electoral turnover and the elections themselves have not been peacefully carried out, as in the case of Kenya. Being so instable has not allowed the various nations, India, Pakistan and Kenya to pass reforms that could promote the national socioeconomic development.

India has been facing higher stability just with president Modi, that has been reelected two times. He concentrated on bringing the country on the socioeconomic development path, and he has been able to do this. India has been also suffering from energy shortages that have heavily affected the population, which is very numerous and is also estimated to keep growing in the long-term. It would have been impossible for the country keep relying on the old energy supply means, that would not have been able to support the population, let alone the future one, greater than the current. Indians have been suffering from energy shortages and unhealthy energy methods for cooking and heating. Until the election of president Modi the country has not been stable enough to approach an energy transition program. The main problems that affected the country since then, concerned a continuous turnover in the country's administration and, although I portrayed a division of the eras, frequent dismissals occurred, leading to instability. Therefore, the governance forms changed continuously from autocracy, military regimes to democracy and the country could not concentrate on its economic development. This influenced India's economic performance, that faced phases of higher liberalization and times of governance interference, that brought an inefficient resource allocation.

Furthermore, India throughout its political history had also to face the wars with Pakistan in 1965 and 1971 that created high volatility within the country. Also, high levels of violence and corruption characterized the national framework: Indira Gandhi was first deposed as prime minister, and after her reelection was then shot. She was succeeded by his son Rajiv, whose years of administrations were also full of treacheries and scandals, even though he was quickly replaced by Singh. This last president lasted less than a year and many governments took the lead frenetically in the next two years: after Singh there has been Shekhar, who lost the support from the government and, because of this, through new elections Rao became prime minister. After that, the path toward an economic disaster was taken: the country fell in bankruptcy. Nevertheless, the subsequent 5 years were stable and the country's economic development increased. This did not last long and 4 prime ministers in 3 years were changed. Another war with Pakistan exploded in 1999 and new elections were held. From that year on, numerous terroristic attacks took place, damaging the political stability of the country.

President Modi was firstly elected in 2014 and then has been reconfirmed in 2019. Throughout his mandate he expressed his willingness to enact the transition toward renewable energy, in order to ensure a broader access to energy to the growing population. According to its vision, it would have been nearly impossible to keep relying on imports due to their high costs, but at the same time, it would have been detrimental for the citizens to be left with energy shortages. The country suffered from them during the years of political upheavals, but, since the country has taken the path of economic development (GDP growth rate is expected increasing by 9% until 2032), it would be impossible to sustain it without affordable and adequate energy supply. Although some projects started being passed since 2003, it was only with Modi and the higher stability that a clear definition of the long-term targets has been clearly stated. The major objective is that of reaching the 7th Sustainable Development Goal by 2030, which confirms the country's willingness to achieve a place in the international energy panorama. The reforms enacted mainly concerns the use of wind, solar and biomass sources, also introducing fiscal incentives. The green expansion, though, is just commenced: the government does not have all the necessary financial and technological instruments to complete it and to bring efficiency in the production and distribution.

As I previously stated, Pakistan has been frequently involved in the wars with India and Afghanistan. His political stability levels have been some of the lowest throughout the world. Presently it stands around the -2.25, which is very close to -2.5, identified as the lowest political stability value possible and that Pakistan experienced until 2016. After that year the level improved, but not as much as it was hoped. The country has always been facing and struggling with quarrels, terrorism, wars, assassinations of the nation's administrators, that have continuously disturbed Pakistan's economic growth and capacity to face macroeconomic shocks. The country has faced, after the independence, alternating governance forms, from military regimes to some forms of democracy. Stability lasted just a decade, i.e., between the years from 1973 to 1988, when the Afghan war spread out. After that year, the situation never totally recovered until 2000, when GDP positively grew. All the governments ended up before the expected time and that happened violently. The worst period has been that in which the nationalization of the companies (1971-1977) was enacted, which also discouraged the inflow of FDIs. The same had already happened at the beginning of the 60s, and occurred again from 2008.

This economic and political uncertainty framework deeply reduced the consumption of goods by the citizens which earned and purchased less. The social side was disrupted also by high and constantly growing unemployment rates which generated revolutions, protests and strikes. All these social problems contributed to the political instability of the country irremediably damaging the economic development of the country. Indeed, the FDI inflows into the country were disincentivized because the investors feared to put money in such a volatile framework. Furthermore, Pakistan is affected by the influence of Afghanistan, which was directly involved in the 11th September 2001 attacks. After that year, also in Pakistan terroristic activities took place, leading to death dozens of thousands of people, requiring also a lot of financial deployment to overcome this threat and to restore both the infrastructures that were destroyed and the lower production rates.

This situation impacted the energy side which still relies on fossil fuels for its greater part: in 2008, the 99% of the total energy requirements were satisfied by oil, gas and nuclear energy. Renewable energy, although the great capacity of the country, is not very widely utilized by Pakistani people. Some projects have been passed in the last few decades but have not been enough to fill the energy gap (estimated being between the 4 and 6 GW) that affects the population. It has been until 2017 that millions of citizens have been left without electricity. The main target is that of producing the 20-30% of whole energy through green sources. The main plants were built to enlarge the production of wind, solar and bagasse energy but are producing less energy than their maximum capacity. This is because of the inadequate and scarce technological means used by them, and that only the investments from other already developed countries, i.e. FDIs, can overcome. The World Bank has also contributed in financing the creation of the green energy production plants; the international organization has always highlighted the great capacity that Pakistan has in this sector: installing photovoltaic panels in a very tiny portion of the country could be enough to meet the whole national demand of electricity, thanks to the constant exposure of the country to the sun. To overcome this unexploited capacity of solar energy, many citizens have started setting the plants over their rooftops.

In addition to the technological and financial scarcity, Pakistan energy transition has not taken off because of a variety of motives. For instance, the Asiatic giant, namely China, has financed the creation of the China Pakistan Economic Corridor that has contributed to the creation of coal plants, which is completely far from green energy. Even though the alternating governments have drafted some policies with regards to renewable energy they have not enacted them, also because they prioritized the resolution of the socioeconomic problems in the country. For this reason, the energy shortages have kept affecting the citizens, and it has been estimated by the International Trade Agency that, if the country will not resolve this issue, the gap will grow by 7% per year. Except from the above mentioned capacity in solar energy, Pakistan is a large producer of animal and agricultural waste that could be used for generating biogas energy; however, this source is not fully exploited. The same goes for hydropower, that through the aid of proper plants would contribute to the production of the 65% of renewable energy by 2030. Therefore, it is clear that FDIs would help the energy transition of the country, but the funds have to be really directed toward this sector, with the ultimate aim of reaching the 7th SDG (accessible and sustainable energy for all). The government though, has to clearly define the targets of the investments, but this would be possible only if it is stable enough.

Kenya has intrigued me because of its very unique history. As soon as in 1991 a multiparty system has been adopted, the citizens have started fighting whenever an election was about to be held. The situation has degenerated in 2007, when a civil war was about to spread. All the elections have been affected by some problems that made the country reach a really low level of political instability. It was only with the present president Kenyatta that some kind of normality was restored. The first time he was elected in 2013 though, the calls had been annulled by the Supreme Court in 2017, when his mandate was about to expire. He was then reelected the same year and was the only one that brought higher stability into the nation; he also envisaged a

long-term perspective for the country with the aid of the “Vision 2030” program. Thanks to his commitment the country’s economy has grown by 5.7% each year, which made it one of the fastest growing nation in the continent with regards to manufacturing, housing, food security, education and healthcare. But it has not always been so.

The worst event in the series of the election-related conflicts has been that of 2007 with the death of more than a thousand of people; however, also other moments worth a mention. The main “issue” that the various presidents had to face concerned the ethnical division within the country. Each ethnic group supported its own candidate that competed for the political position and, whoever was the loser, its supporting ethnic group willed to generate quarrels. The last election in 2017, although seemed to be the most peaceful, in the sense that the president was not forced to quit off his role, led to the death of 70 people and to the destruction of some properties and businesses. The main assaults were conducted by different tribes whose rebel members were young and not religious. Indeed, behind the elections there are social problems that date back to the independence of Kenya. It was thought and hoped that the passage to democracy would have created a better representation of the people’s interests but, although this is true, the democratic apparatus and the electoral justice system, that are supposed to reduce the political dissatisfactions, did not work effectively. The government also tried to create a sort of normality with the new constitution in 2010, which is one of the most liberal legislations in Africa, to overcome what happened in 2007. It was not the right solution because in 2013 and in 2017 the same assaults happened again. It is feared that the same situation will happen when new elections will be held in 2022 at the end of Kenyatta’s second mandate. Finally, on the social side I have to briefly mention also the high poverty rate and corruption of the legal framework.

On the energy side, Kenya is presently very committed to renewable energies. The 70% of the energy mix is obtained through green sources. Nevertheless, not all the people in the country have access to energy, let alone to the clean and sustainable one. Indeed, many Kenyans still lack of access to electricity, which lead to power shortages, that are expected to worsen because of the continuous increase of the population. There is international concern to the inadequacy of the domestic cooking and heating sources: they generate air pollution and affect the healthiness of the foods cooked. Furthermore, Kenya’s production and distribution of electricity are under two monopolies that generate inefficiencies and high costs because of the inexistence of competition. This factor, added to unemployment, poverty and electricity gap hampers the country’s total transition toward renewable energy. Many measures, like Pay-As-You-Go, have been enacted to fill this gap and some of them resulted being effective in guaranteeing the access to electricity. Nevertheless, there has not been a total coverage with electricity, given that there are some counties, whose conditions are worse than the national.

It must be said that with president Kenyatta the commitment in renewable energy, and energy in general, has increased up to the point that in 2018, 75% of all the people had access to electricity. The interregional gap has to be addressed to the unclear and inadequate investment strategy: institutions autonomously decide

where to invest. Kenya's international investment attractivity is very high, although the unpredictability of the weather. Indeed, the share of the FDIs in the country is very high in comparison to the other African countries. If corruption, election-related conflicts, ethnical and social divisions, terroristic attacks would be resolved through adequate policies, the amount of FDIs would increase and thus, once invested in the energy sector, the number of people having access to energy would grow, ensuring then the achievement of the national objectives and the 7th SDG.

Morocco, in comparison to all the countries above mentioned, has a different history that has brought it to the point of being considered as one of the leaders of North-Africa region. It is not affected by unexpected political upheavals. Indeed, Morocco has been living stability thanks to the monarchy that has been governing it and that is still in charge. Among the countries I chose as case study, it is the most stable one: its level of political stability in 2020 has been -0.37. It was one of the first Arab countries to embrace democracy, although, as I explained in the related section, the monarchy did not lose any of its prerogatives and the international organizations positively welcomed this new setup. Nevertheless, the process toward more favorable reforms for the citizens begun at the end of 1970s, when King Mohamed VI reduced public deficit, increased market liberalization, introduced more liberal reforms, among which the promotion of tourism and investments. Indeed, since then, Morocco mainly relied on agriculture and actually, still is, but the share of investments in the national business has increased because of the promotional activities and the socio-economic reforms that the government has passed. As I stated in the chapter, Morocco aims to enter the global market and be internationally competitive. An example of the programs enacted is the "mega-projects", through which King Mohamed VI created developed cities, in which the investors are encouraged to put the money.

Morocco, though, is not exempted from political instability, because the development that the cities have experienced has made them as a fruitful place for bombings, violence and attacks, like those in 2007 and 2011 in Marrakech. Nonetheless, what has differentiated Morocco from the previous countries is that, having a stable government and administration has allowed the country of not being disrupted by these events but rather, to resolve them. Indeed, several programs for the development of the rural areas have been passed, in order to reduce poverty, social and economic exclusion. Therefore, in this way the King could improve the share of FDIs within the country, deployed to improve the programs enacted.

A developed socioeconomic environment also has a higher need of energy and thus, the investments from abroad are needed in order to meet these requirements. With the purpose of being involved in the international scenario, the country has enacted a process of energy transition, because of the worldwide interest in renewable energy. This consideration must be also paired to the fact that Morocco has heavily relied on fossil fuels importations, which increased the costs of energy. Therefore, it was urgent to find a solution, also because Morocco suffered from energy shortages that, for a country that wanted to embrace the economic development were non-beneficial to achieve it. The government started reforming the organizations that produced and distributed energy, and also promoted the private production of energy. Even though it is expected that oil will

be the predominant energy source, the government has paved the way toward green energy. Solar and wind sources are the main sectors in which the government decided to invest in order to produce electricity. Through appropriate programs and ad-hoc organizations, the national administration has been able to electrify almost all the territory. It has set specific goals for 2030, i.e., reducing GHG emission by 42% and increasing the share of renewable energy up to 52%. But, although the kingdom has envisaged a developed nation and has commenced the energy transition, there still is scarcity of investments. Hence, FDIs are needed also in the case of Morocco, even though the country is less affected by political instability.

Ultimately, several conclusions can be drafted from both the empirical analysis and the case studies, that also mutually confirms each other. The quantitative analysis found out that effectively a negative correlation exists: FDIs in the renewable energy sector in the developed countries are penalized by the political framework that characterize them. The case studies confirmed this finding and also highlighted what had been stated in the literature review, namely that there is not just one type of political instability but many forms of it exists. Another main contribution has been that FDIs have a major role in enabling a total energy transition, even though in the cases like Morocco that commenced it but still need investments to complete it. Therefore, even if political stability has differently characterized the framework of the countries, on the economic side FDIs confirm their primary role in financing developmental activities (in this case the energy transition) that the national funds are unable to totally support.

Therefore, I would like to briefly recommend to the countries to enact a social and political transformation before anything else. Indeed, without being rhetoric, the case of Morocco can be exemplificative: all the nations mentioned have changed governments, for different but serious reasons, that have not given the adequate solidity to the reforms passed. For this reason, all the programs were left without an effective compliance and never really led to progresses in the energy sector. Only in Morocco this happened, with the exception of some parts of Kenya, where this depended on the willingness of the President. Resolving the social side problems would mean not only reducing poverty, non-access to electricity, but also would make people more comfortable in embracing the change and democracy. In this way the government would also find more consensus and enacting the reforms would be way easier and effective. Finally, I would recommend to adopt some policies to increase the security of the countries and to protect the various nations also from the attacks coming from the neighborhood (as in the case of Pakistan near Afghanistan). In an era in which technology has deeply affected people's lives, it would also be beneficial to adopt cybersecurity programs, especially in the case of Morocco that is actually taking the lead of the region in which it is located. Generally, this last suggestion is useful for all the countries that want to be protected from these new generation attacks and prevent the cyberwars, that would further damage the already precarious setup of this category of nations.

4.3. Limitations of the work and future research

My dissertation, it is clear at this point, that is positioned in the literature that affirms that political instability has a negative role on FDIs both at the national and international level. It makes the country less attractive and is a multifaceted phenomenon, because different events, at the social, political or economic level can impact the risks related to the stability of the country. Nonetheless, my thesis, as any research work, has some limits, that can then be used as starting point for future analyses.

The first limit of my thesis is that it concerns an analysis that is developed at the national level. As it has been stated from the beginning of the analysis it would be better if the investors could carry their evaluations out at the subnational level. Further research can take this as starting point for future analysis. This would entail a request to the various national banks to provide specific details about the data of the FDIs directed to the single regions. Nevertheless, not all the countries are able to collect such exact information given the inadequacy of the institutions and organizations aimed at doing this, and for this reason, there is scarcity of information. In the cases that this would be possible, the investors would benefit from more punctual suggestions and their money would be more consciously put in specific locations. Furthermore, if more emphasis would be put to this matter, the responsible bodies would be incentivized to provide this kind of data.

Another limitation concerns the choice of representing just a few countries as case study. I chose them both for personal interest and because I deemed them being a good exemplification of what I wanted to assert. I do not think that having chosen other countries would have changed the results of my research, rather they would have further confirmed them and would have enriched the analysis with different perspectives. The choice of the country for future analysis might be based on specific parameters like: the proximity of the countries, similar levels of GDP, the employment rate, the type of government that is administering the country. Nevertheless, choosing just a sample of countries, as I did in my dissertation, may limit the robustness of the research findings. Indeed, even though Pakistan, India, Morocco and Kenya have four completely different political histories and plans in energy, focusing just on them may be detrimental to the completeness of the analysis.

This thesis is also limited in the factors that can be considered influential in the decision of the investments. Indeed, political stability does not affect the decisions over FDIs per se, it negatively contributes, but does not play a single role. Therefore, in the future analyses the studies can be carried out conjunctly to other parameters that might be relevant, like the growth of the sectors, the macroeconomic environment, the institutional apparatus, the quality of infrastructures and so on and so forth. Indeed, considering just one single element does not provide a full understanding of the factors that not only influence the investment decisions, but that can also affect the political stability itself. For instance, a high unemployment rate can generate dissatisfaction among the labor force of a country, and as such, this can be ultimately turned into quarrels and protests against

the government in order to make it pass adequate policies in the working sector. Therefore, if I had to invest money in a risky country, I would also check the level of the socioeconomic environment and the adequacy of the policies related to the work field.

In conclusion, although my dissertation advances the understanding of the phenomenon of political instability and its effect on the investment decisions, it still is a primordial work that can and must be completed with future research, that take into account more factors and different point of analysis. Furthermore, in a period in which there is constant increasing attention on the environmental issues, it would be natural to keep assessing how the economic transition of the countries can be haltered by such difficult but resolvable problems.

CONCLUSIONS

At the end of this dissertation it is possible to state now the conclusions of this work. I started with a research question through which I aimed to investigate if there is a connection between political instability and the receipt of foreign direct investments by the developing countries. FDIs have been identified as the technological and financial inflows that the nations of the group just mentioned necessitate because of the inadequacy of their national original endowments. FDIs are also an opportunity for a multinational enterprise to expand its business in new unexploited areas and consequently obtain higher financial returns from that. This phenomenon has increased with globalization that has made accessible also the most remote parts of the world, namely the less developed/developing countries, in which there are no enterprises already existing in that business area. Nevertheless, these underdeveloped economies can be affected by high levels of different risks, among which political instability. It does not exist an univocal definition of this phenomenon because it is multifaceted and can be affected by different events. Generally, this circumstance negatively impacts the willingness of the investors to put money in a risky situation.

With these considerations in mind I decided to focus on the renewable energy sectors, which is relevant in nowadays world, because of the growing concern over the matter. Indeed, citizens are asking the governments to be more aware of how much the world is being altered from economic activities and unconscious exploit of the natural resources. Developed nations aim to enact the energy transition toward this kind of sources because there is growing concern over the environment and the matters related to a continuous reliance on fossil fuels. Economically and financially stable nations are equipped with the means that are necessary to the transition toward renewable energy, while the rest of world's countries do not own what is needed to properly accomplish it. Many times, also, it is not a matter of effectiveness of the production, distribution and supply of renewable energy, but rather it is about reaching efficiency, which is feasible only when and if a country is capable to attract the adequate technologies and financial flows from abroad. The investors though, before funding an activity, check the suitability of the environment, in order to predict if their returns might be affected by unexpected negative events. Developing nations are usually damaged by political risk, because of the inadequacy of the social, employment, health policies that generate unsatisfaction and inflate the creation of protests, quarrels, assaults; government dismissals are also usually comprised into the sphere of this risk; I must mention also violence and all the other events that affect the normal conduction of the political life. The investors have to properly assess the overall framework and be conscious of the potential threats. For this reason many of them tend to find solutions to reduce the risks: gather in a location in which there are already other investors; create partnerships with locals; exert a high level of control. All I have stated so far, is what I have discovered through the literature review I drafted in the first chapter of my thesis, in which I also looked for the general determinants of the FDIs. I just would like to stress that it is clear that there is not a defined problem that relates to political risk, rather, there are a series of circumstances that are under the broad umbrella of political instability, and that also, there is not a univocal response to the

resolution of the matter. The investors indeed, consciously carry out evaluations that are focused on what they deem more significant for their investments and as such, they also identify which are the best ways to control the risk. Therefore, this is where, according to my personal opinion, heterogeneity lays; instead, homogeneity mainly concerns the fact that in general political risk negatively affects the evaluations of the investors and the effect that it has: the financiers consciously look at the macroeconomic environment of the country where they decide to invest and evaluate it according to their interests and appraisals.

I would claim that the literature review has laid the basis for the empirical analysis that I have conducted in the second chapter on 42 developing countries. I conducted the Pearson test over the databases from the World Bank (that contains the values for political risk) and the ITC (for the FDIs in the renewable sector) in order to assess if there is a correlation between them. I found out that, whenever political risk increases by 1%, the FDIs in the renewable sector in that nation reduce by more than 7%. For this reason, I previously stated that I want to collocate my work among those that state that political risk damages the reception of FDIs. I decided then to doublecheck my findings, conducting also the Spearman test and using then the stock dataset in order to appraise the solidity of my analysis. All the results are negative. I also portrayed a case study analysis, focusing on just 4 countries from the dataset I selected: Morocco, Pakistan, India and Kenya. In this third chapter I could appreciate what other scholars had already said and that I reported in the literature review: political instability is never the same, there are various events that can create risks and all of them are recognized as political risk. Indeed, all the four countries have different histories and paths that have brought them to the present framework that characterize them, and thus heterogeneity emerges also from the findings of this qualitative analysis. I also decided to highlight the renewable energy policies that the chosen countries have enacted for the energy transition, but highlighting also how FDIs could contribute to complete the passage. In this way, I wanted to state the current state of their actions and the prospected one, directing attention to the international objectives that they set. In fact, especially for Morocco, which from the World Bank dataset is the most stable country, it is of utmost importance to be inserted in the international arena, not only at the energy level. In addition, Pakistan, India and Kenya all commenced the energy transition but they all lack of adequate technologies which would allow also to create efficiency. Therefore, a common trait of the four countries, which can be added to the homogeneity that I identified just before is that, it resulted that all the countries need, for different reasons, the FDIs.

Finally, in the fourth chapter, I recollected all the contributions and findings that I have gathered with my thesis. I also advanced some common suggestions for the resolution of the problem, given that many issues are homogenous between the countries analyzed. Indeed. from previous literature and the case studies, I could understand that the problem under political instability (whatever the form of manifestation it is), derive from social dissatisfactions, that generate tensions in the governments and between the citizens. This leads to government dismissals, coups d'état, assassinations, terrorism and protests in the election period. For this reason I suggested to advance, before anything else, social and economic reforms, in order to guarantee the

citizens, the common access to services. For instance, given that in the 4 countries analyzed there is (with the exception of Morocco) scarce availability of energy, due to low electrification rates, it would be beneficial to allow all the people to be able to have the same possibility of others. Furthermore, what has surprised me is that, many investors rely on inexact information that are mainly derived from the proximity to other risky countries, without delving into punctual analysis. To this matter, I suggested to provide easily accessible and precise information through the institutions, because, in some cases, there is scarcity of them. This is also one of the reasons why I could not approach the problem on the regional level: the developing countries' institutions are not able to furnish such scrupulous data. I also suggested to enact policies to increase the security inside the country, also on the cyber level, given that, in such a technological era, the attacks are conducted also on this ground, which not only paralyze the entire national system, but also generates cyberwars. Ultimately, I recalled the article by Anwar Khan, in which the authors stated that the FDIs in the renewable sector must be channelized through adequate policies and incentives, like the reduction of taxes in the renewable energy sector. In the fourth chapter I highlighted the limitations that my work has, given that, as any research, it is impossible and detrimental to the goodness of the findings, to conduct a broad and undefined analysis.

Finally, my thesis advances the knowledge on the effects of political instability. I focused on the renewable energy sector because the environmental awareness and protection is something that I have at heart. I also provided some general suggestions to the developing countries, in order to encourage the foreign investors to put money and technology in those national projects. Indeed, I think that for these economies it is an unique opportunity also in order not to be left out from the international scenario and to be successful in the renewable energy transition. The world in fact, is mainly damaged by the inadequate heating, cooking and energy supply systems that are mainly located in such underdeveloped nations. The world is one, we have to protect it, and political instability does not contribute to its safeguard. Therefore, it is of ultimate importance to resolve this issue and only then, finally, all the countries and the governments would be able to embrace together the path toward green energy.

BIBLIOGRAPHY

"About Vision 2030 | Kenya Vision 2030" (*Vision2030.go.ke*2012) <https://vision2030.go.ke/about-vision-2030/>

Ahluwalia P, "The Saga of the 2017 Kenyan Elections: Can They Really Be Free and Fair?" (2017) 15 African Identities 351

Aized T and others, "Energy Security and Renewable Energy Policy Analysis of Pakistan" (2018) 84 Renewable and Sustainable Energy Reviews 155

Al-Tal R and Al-Tarawneh A, "The Impact of Government Effectiveness and Political Stability on Energy Consumption in the Selected MENA Economies - ProQuest" (*search.proquest.com*2021) <https://search.proquest.com/openview/affc00c03d101f11ea3a6acf87a23703/1?cbl=816340&pq-origsite=gscholar> accessed May 5, 2021

Amegroud T, "Morocco's Power Sector Transition: Achievements and Potential" [2015] IAI working papers

Anwar Z and Afza T, "IMPACT of TERRORISM, GAS SHORTAGE and POLITICAL INSTABILITY on FDI INFLOWS in PAKISTAN" (2014) 26 Science International 507

Arbatli E, "Economic Policies and FDI Inflows to Emerging Market Economies" (2011) 11 IMF Working Papers 1

Bano S and others, "Why Did FDI Inflows of Pakistan Decline? From the Perspective of Terrorism, Energy Shortage, Financial Instability, and Political Instability" (2018) 55 Emerging Markets Finance and Trade 90

Baraka C, "Kenya's 2022 Elections Have Already Begun" (*Foreign Policy*September 2, 2020) <https://foreignpolicy.com/2020/09/02/kenya-2022-elections-already-begun-cycle-violence-chris-msando/> accessed May 14, 2021

Batschauer da Cruz CB, Eliete Floriani D and Amal M, "The OLI Paradigm as a Comprehensive Model of FDI Determinants: A Sub-National Approach" (2020) ahead-of-print International Journal of Emerging Markets

Biswas S, "Is Bad Politics Ruining India?" *BBC News* (March 29, 2012) <https://www.bbc.com/news/world-asia-india-17537615#:~:text=There%20is%20little%20evidence%20to%20argue%20that%20political> accessed May 6, 2021

Blundell R and Bond S, “Initial Conditions and Moment Restrictions in Dynamic Panel Data Models” (1998) 87 Journal of Econometrics 115 <https://www.ucl.ac.uk/~uctp39a/Blundell-Bond-1998.pdf> accessed April 4, 2019

Bressa R, “Come Il Kenya è Diventato Leader Nelle Rinnovabili in Africa” (*LifeGate*September 6, 2019) <https://www.lifegate.it/keny-leader-rinnovabili-africa> accessed May 13, 2021

Burger M, Ianchovichina E and Rijkers B, “Risky Business: Political Instability and Sectoral Greenfield Foreign Direct Investment in the Arab World” (2015) 30 The World Bank Economic Review 306 <https://www.gtap.agecon.purdue.edu/resources/download/7417.pdf>

Business Islamica, “Investing in Africa’s Renewable Energy Sector” (*www.zawya.com*January 26, 2017) <https://www.zawya.com/mena/en/story/Investing_in_Africas_Renewable_Energy_Sector-ZAWYA20170126104426/>

Canh NP and others, “Determinants of Foreign Direct Investment Inflows: The Role of Economic Policy Uncertainty” (2020) 161 International Economics 159

Cheeseman N, Lynch G and Willis J, “Democracy and Its Discontents: Understanding Kenya’s 2013 Elections” (2014) 8 Journal of Eastern African Studies 2

Cherp A and Jewell J, “The Concept of Energy Security: Beyond the Four As” (2014) 75 Energy Policy 415

Elavarasan RM and others, “A Comprehensive Review on Renewable Energy Development, Challenges, and Policies of Leading Indian States with an International Perspective” (2020) 8 IEEE Access 74432

Erkekoglu H and Kilicarslan Z, “DO POLITICAL RISKS AFFECT the FOREIGN DIRECT INVESTMENT INFLOWS to HOST COUNTRIES?” (2016) 5 Journal of Business, Economics and Finance (JBEF) 218

Export Entreprises SA, “Foreign Investment in Kenya - Santandertrade.com” (*Santandertrade.com*April 2021) <https://santandertrade.com/en/portal/establish-overseas/kenya/investing>

“Global Terrorism Index 2020: The Ten Countries Most Impacted by Terrorism” (*Vision of Humanity*November 27, 2020) <https://www.visionofhumanity.org/global-terrorism-index-2020-the-ten-countries-most-impacted-by-terrorism/>

Grech V, “WASP (Write a Scientific Paper) Using Excel – 13: Correlation and Regression” (2018) 122 Early Human Development 60

Gustafson S and others, “Energy Sustainability in Morocco Worcester Polytechnic Institute Ribat al Fath for Sustainable Development” (2015) <https://web.wpi.edu/Pubs/E-project/Available/E-project-101615-143625/unrestricted/energysustainabilityreport-ribatalfath.pdf> accessed December 29, 2020

Hanson S, “Understanding Kenya’s Politics” (*Council on Foreign Relations*2018) <https://www.cfr.org/backgrounder/understanding-kenyas-politics>

India Today Web Desk New, “India Has Vibrant Democracy, Political Stability, Skilled Talent Pool: PM Modi’s Pitch to Canadian Investors” (*India Today*October 8, 2020) <https://www.indiatoday.in/india/story/india-has-vibrant-democracy-political-stability-skilled-talent-pool-pm-modi-in-pitch-to-canadian-investors-1729727-2020-10-08> accessed May 8, 2021

International Energy Agency, “ENERGY POLICIES beyond IEA COUNTRIES” (2019) <https://www.connaissancedesenergies.org/sites/default/files/pdf-actualites/Energy_Policies_beyond_IEA_Contries_Morocco.pdf> accessed May 30, 2019

International Peace Institute, “Elections in Africa: Challenges and Opportunities”

International Trade Administration, “Renewable Energy | International Trade Administration” (*Trade.gov*2019) <https://www.trade.gov/knowledge-product/pakistan-renewable-energy>

Khan A and others, “Impact of Technological Innovation, Financial Development and Foreign Direct Investment on Renewable Energy, Non-Renewable Energy and the Environment in Belt & Road Initiative Countries” (2021) 171 Renewable Energy 479 <https://www.sciencedirect.com/science/article/pii/S0960148121002500> accessed March 18, 2021

Khan SU and Saqib OF, “Political Instability and Inflation in Pakistan” (2011) 22 Journal of Asian Economics 540 <https://mpra.ub.uni-muenchen.de/13056/1/political_instability_and_inflation.pdf> accessed April 5, 2021

Legend Asuelime T, “An Overview of the State of Electoral Justice in Zimbabwe” (2019) S1 African Renaissance 199

Leonardi M and Tini S, “ENERGIE RINNOVABILI in AFRICA: IL CASO DEL KENYA SPUNTI per LA COOPERAZIONE INTERNAZIONALE” (2020)

Levis M, “Does Political Instability in Developing Countries Affect Foreign Investment Flow? An Empirical Examination” (1979) 19 Management International Review 59 <https://www.jstor.org/stable/40227471?seq=1#metadata_info_tab_contents> accessed March 2, 2021

Lien Y-C and Filatotchev I, “Ownership Characteristics as Determinants of FDI Location Decisions in Emerging Economies” (2015) 50 Journal of World Business 637

Maghraoui D, “Constitutional Reforms in Morocco: Between Consensus and Subaltern Politics” (2011) 16 The Journal of North African Studies 679

MengYun W and others, “Impact of Terrorism and Political Instability on Equity Premium: Evidence from Pakistan” (2018) 492 Physica A: Statistical Mechanics and its Applications 1753

Mirza UK and others, “Identifying and Addressing Barriers to Renewable Energy Development in Pakistan” (2009) 13 Renewable and Sustainable Energy Reviews 927

Moran TH, “Foreign Direct Investment and Development” [2012] The Wiley-Blackwell Encyclopedia of Globalization

Muigua K, “Delivering Clean and Affordable Energy for All Kariuki Muigua Delivering Clean and Affordable Energy for All Delivering Clean and Affordable Energy for All” <http://kmco.co.ke/wp-content/uploads/2021/04/Delivering-Clean-and-Affordable-Energy-for-All-Kariuki-Muigua-Ph.D-24th-April-2021-x.pdf> accessed May 13, 2021

Murshed M, “Can Regional Trade Integration Facilitate Renewable Energy Transition to Ensure Energy Sustainability in South Asia?” (2021) 7 Energy Reports 808

Murshed M, Abbass K and Rashid S, “Modelling Renewable Energy Adoption across South Asian Economies: Empirical Evidence from Bangladesh, India, Pakistan and Sri Lanka” [2020] International Journal of Finance & Economics

Naz S and others, “Moderating and Mediating Role of Renewable Energy Consumption, FDI Inflows, and Economic Growth on Carbon Dioxide Emissions: Evidence from Robust Least Square Estimator” (2018) 26 Environmental Science and Pollution Research 2806 <https://link.springer.com/article/10.1007%2Fs11356-018-3837-6> accessed June 15, 2019

Paul J and Jadhav P, “Institutional Determinants of Foreign Direct Investment Inflows: Evidence from Emerging Markets” (2019) 15 International Journal of Emerging Markets 245

Pazzolo P, “Coefficiente Di Correlazione per Ranghi Di Spearman” (*Paola Pozzolo*April 18, 2020) <https://paolapozzolo.it/coefficiente-correlazione-statistica-spearman/> accessed April 12, 2021

Polyxeni K and Theodore M, “An Empirical Investigation of FDI Inflows in Developing Economies: Terrorism as a Determinant Factor” (2019) 20 The Journal of Economic Asymmetries <https://www.sciencedirect.com/science/article/pii/S1703494919300647> accessed January 12, 2020

“Prime Minister of India - Wikipedia” (*en.m.wikipedia.org*2021) <https://en.m.wikipedia.org/wiki/Prime_Minister_of_India> accessed May 7, 2021

Qureshi MN, Ali K and Khan IR, “Political Instability and Economic Development: Pakistan Time-Series Analysis” [2010] International Research Journal of Finance and Economics

RBC global connect, “Economic and Political Overview of Morocco” (*Rbc.com*2020) <https://rbcglobalconnect.rbc.com/en/resources/explore-new-markets/country-profiles/morocco/political-outline?url_de_la_page=%2Fen%2Fresources%2Fexplore-new-markets%2Fcountry-profiles%2Fmorocco%2Fpolitical-outline&&accepter_cookies=oui> accessed May 4, 2021

Saeed Khan R, “New Pakistani Energy Plan Aims for 30% Renewable Generation by 2030” (*Institute for Energy Economics & Financial Analysis*August 10, 2020) <https://ieefa.org/new-pakistani-energy-plan-aims-for-30-renewable-generation-by-2030/> accessed April 28, 2021

Samant S, Thakur-Wernz P and Hatfield DE, “Does the Focus of Renewable Energy Policy Impact the Nature of Innovation? Evidence from Emerging Economies” (2020) 137 Energy Policy 111119

Sawhney A, “Striving towards a Circular Economy: Climate Policy and Renewable Energy in India” (2020) 23 Clean Technologies and Environmental Policy

Shahzad A and others, “Political Stability and the Foreign Direct Investment Inflows in Pakistan” (2012) 9 British Journal of Arts and Social Sciences

Sheikh MA, “Energy and Renewable Energy Scenario of Pakistan” (2010) 14 Renewable and Sustainable Energy Reviews 354

Sibal DR, “The Untold Story of India’s Economy” [2012] India: The Next Superpower

Tabassam AH, Hashmi SH and Rehman FU, “Nexus between Political Instability and Economic Growth in Pakistan” (2016) 230 Procedia - Social and Behavioral Sciences 325 <https://www.sciencedirect.com/science/article/pii/S1877042816311429>

Thapar S, Sharma S and Verma A, “Economic and Environmental Effectiveness of Renewable Energy Policy Instruments: Best Practices from India” (2016) 66 Renewable and Sustainable Energy Reviews 487

The Economic Times, “Political Stability behind India’s Development Strides: PM Narendra Modi” *The Economic Times* (2016) <https://economictimes.indiatimes.com/news/politics-and-nation/political-stability-behind-indias-development-strides-pm-narendra-modi/articleshow/51665343.cms>

United Nations, “The 17 Goals” (*United Nations*2015) <https://sdgs.un.org/goals>

Veyrassat B, “Industria” (*hls-dhs-dss.ch*May 8AD) <https://hls-dhs-dss.ch/it/articles/013956/2008-05-08/>

Williams K, “FOREIGN DIRECT INVESTMENT, ECONOMIC GROWTH, and POLITICAL INSTABILITY” (2017) 17 JOURNAL OF ECONOMIC DEVELOPMENT <http://jed.or.kr/full-text/42-2/2.pdf> accessed March 17, 2021

World Bank, “Overview” (*World Bank*2010) <https://www.worldbank.org/en/country/kenya/overview#1>

“Expanding Renewable Energy in Pakistan’s Electricity Mix” (*World Bank*November 10, 2020) <https://www.worldbank.org/en/news/feature/2020/11/09/a-renewable-energy-future-for-pakistans-power-system#:~:text=Pakistan%20has%20tremendous%20potential%20to>

World Bank Group, “MOROCCO ENERGY POLICY MRV emission reductions from energy subsidies reform and renewable energy policy” (2018)

Yu J and Walsh JP, “Determinants of Foreign Direct Investment: A Sectoral and Institutional Approach” (2010) 10 IMF Working Papers 1 <https://www.imf.org/external/pubs/ft/wp/2010/wp10187.pdf>

Zee Media Bureau, “India Political Stability - Bing” (*www.bing.com*September 3AD) <https://www.bing.com/search?q=india+political+stability&cvid=688281882e6e4353bae1ecfaf760708c&aqs=edge.0.0j69i57j69i60l3.5355j0j1&pglt=299&FORM=ANNTA1&PC=DCTS> accessed May 8, 2021

Zemni S and Bogaert K, “Urban Renewal and Social Development in Morocco in an Age of Neoliberal Government” (2011) 38 Review of African Political Economy 403

SITOGRAPHY

'Developing Countries - ISI' (Isi-web.org, 2021) <https://www.isi-web.org/capacity-building/developing-countries>

'Foreign Direct Investment, Net Inflows (Bop, Current US$) | Data' (Data.worldbank.org, 2021) <https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD>

'Investmentmap' (Investmentmap.org, 2021) <https://www.investmentmap.org/glossary>

'Investmentmap' (Investmentmap.org, 2021) <https://www.investmentmap.org/industry-classification>

'Investmentmap' (Investmentmap.org, 2021) <https://www.investmentmap.org/investment/time-series-by-reporting-country>

'WGI-Home' (Info.worldbank.org, 2021) <https://info.worldbank.org/governance/wgi/>

SUMMARY OF THE THESIS

I started drafting my thesis from a research question that came to my mind after having followed a course during the last year of my Master's Degree in Global Management and Politics. Indeed, I was curious to understand the role that political instability has on the economic activities of a country. I decided to investigate then over the influence that this phenomenon has on the energy transition of the emerging economies. I focused on this sector because the environment and the commitment of the governments to the renewable energy sector, are something that I have at heart. At the present time, citizens are gathering together because have acknowledged the importance of the matter, and movements have been created in order to raise awareness on a problem that can and must be resolved. In addition, I decided to concentrate on the developing countries because they are comprised into that cluster of nations that do not have the necessary technological and financial means to properly enact the energy transition toward renewables. In fact, this is not something that can be done overnight, it is something that has to be adequately managed by the administrations of the countries, which also have to obtain the adequate endowments, in the form of FDIs, from the other developed countries. The emerging economies, not only do not own effective, and sometimes also efficient, renewable energy production, distribution and supply plants, but it can happen that they also are unable to guarantee total access to energy to all their citizens: some areas of these nations are left without connection and are provided with primordial ways of cooking and heating. Furthermore, underdeveloped/developing nations' governments are not capable to thoroughly and smoothly implement their policies and political actions, including the attraction of the FDIs needed for the transition toward green energy, because the events comprised under the umbrella of political instability interfere with their enactment. Precisely, the research question I aimed to investigate on, has been stated in this way:

To what extent is political stability an essential element for the energy transition in emerging countries? In other words, *is political stability a determining factor for FDI inflows about the energy transition of emerging countries?*

The analysis I conducted is both qualitative and quantitative. I composed it as an academic research work. Indeed, the structure has been: introduction, literature review, quantitative analysis, qualitative analysis, presentation of the main findings and limitations of my work and finally, conclusions.

When I was previously claiming about the events that create political instability, I did not refer, on purpose, to a specific type of actions. Indeed, in all the literature I reviewed at the beginning of my dissertation, the authors did not provide a precise definition of the phenomenon, rather they comprised different circumstances that affect the normal conduction of the political affairs. I decided to insert the analysis of this occurrence into the sphere of the factors that can influence the reception of the foreign direct investments, which, according to the definition that I deemed being the better for my thesis (the one stated by Moron), occur *whenever a company, established in one country, conducts business operations in a foreign nation,*

either arranging a new wholly-owned subsidiary, or acquiring a pre-existing local firm or finally, creating a joint venture. With the exception of the creation of new subsidiaries in a country, the others are methods that are used by the less risk prone investors that tend to find solutions in order to make investments in risky countries but at the same time to find ways in order to protect their returns at their best. Another way to circumvent the risks deriving from financing activities in hazardous places is that of exerting a high level of control over the subsidiaries created. However, this higher level of control must be balanced with the higher costs that this requires. Therefore, it is necessary for the investors to carry out an evaluation of this trade off and check what aspect predominates. These considerations have been presented by Yung-Chih Lien and Igor Filatotchev, in the article "Ownership Characteristics as Determinants of FDI Location Decisions in Emerging Economies", that I reviewed in order to identify which are the general determinants of the FDIs, according to the authors. Indeed, in the first section of the first chapter I recollected the main insights provided by the academics in order to portray a complete framework of which are the elements that the investors look at before funding an activity abroad.

Generally, FDIs are conducted by the investors that want to expand their business and thus benefit from this activities abroad, as it has been stated in the OLI paradigm. It states that the value of the activities that a firm carries abroad, is determined by: the "*Ownership advantages"*, i.e., if the company owns one or more unique and sustainable advantage(s); the company's ability to internalize the O advantages, rather than selling them to external firms ("*Internalization advantages"*); lastly, the willingness of the company to use its O advantages in unknown venues ("*Location advantages"*). These three elements generate an analytical point of view, thanks to which the investors can assess both whether they have the necessary control over FDIs and which type of governance they can/should exert over their advantages, in order to be successful if internationally engaged. Dunning, broadening its initial work, borrowed elements from the strategic management theory and divided the Ownership advantages in: asset based (Oa) and transaction based (Ot). This allowed him to identify what factors increase the investors' willingness to invest in a specific location. At the same time, when the investors' affairs are broadened, they can export to the countries their technologies and financial means that they can exploit to achieve their economic goals. With globalization, as stated by Paul and Jadhav, the most underdeveloped countries became one of the main targets of the expansionistic investors because these nations are full of unexploited and untapped opportunities. Also, these nations, as I was saying before, do not own proper technologies and financial endowments to efficiently carry out their economic activities, and thus aim to attract the FDIs from abroad. This happens also in the green energy sector. Indeed, due to the international commitment to the environmental cause, emerging economies fear to be cut out from the energy arena, and be considered as the "polluters" of the world, because they are stuck to old-fashioned and polluting energetical means.

Nevertheless, as it is notorious, although the investors aim to expand their activities abroad, they carry out precise evaluations of the macroeconomic environment in which they are going to put their money. They

take into account several variables, which are those that I displayed in the first section of chapter one. The various academics adopted different point of views, either on the regional or the national level, and different methodologies. Nevertheless, the factors that have been recurrently listed as determinants of the FDIs have been: macroeconomic environment, economic policies level, political environment and institutions quality, GDP level and growth rate, exchange rate. Some authors considered political instability among these factors, while others do not deem it being very influential on the evaluations of the financers. I decided though, to position my analysis among the articles that value it as a negative factor for the estimates that are conducted by the funders. My affirmation is precisely supported by the findings of my quantitative analysis, that I have portrayed in the second chapter of the dissertation. Some scholars made clear distinctions also on the sectoral levels. This means that, according to their analyses, there are different factors that can encourage or disincentive the inflows of FDIs into a nation, and those are distinguished in accordance to the sector in which the money and the technologies are going to be put. Therefore, given that energy falls into the tertiary sector, according to the Revision 4 of the International Standard Industrial Classification of all Economic Activities (ISIC Rev.4) drafted by the - United Nations Statistics Division (UNSD)the FDIs, according to the academics Paul and Jadhav, the FDIs in this cluster are negatively influenced by low-quality governances. In addition, wealthy macroeconomic environment, high quality of governance and good IT infrastructures, political instability, interfere with the economic affairs and create corruption, which, according to Yu and Wash dissuade the investors of the tertiary sector activities.

I moved on, in the second paragraph of my literature review, to assess which role has political instability in influencing the FDIs location decisions. As I briefly stated before, there are some academics that do not consider it being relevant. This debate goes one from decades, indeed, in the early 70s, Mario Levis started discussing about this. He also provided two definitions of political stability, and I think that the one that mainly suits to the purpose of my thesis is that: *political stability characterize those countries in which there are no domestic civil conflict and/or violent actions do not take place*. Nevertheless, as I was briefly stating before, there is not a univocally accepted definition of political instability; it is rather about events, related to the political sphere, that create risks for the investors in a country and that can damage their returns. One of the worst factors that can be listed as creators of political risk is terrorism, as has been prevalently stated by Kechagia Polyxeni and Metaxas Theodore and Bano and others. Its influence has been largely assessed throughout the literature and, it always resulted being negatively impactful. Instead, among the factors that can soften investors' negative evaluations of the political environment, the world uncertainty index (WUI) can be mentioned. Indeed, to any country can be given a specific value for the political situation it has, but, when it is negative, it can be ameliorated by looking at the conditions of other countries, thus the WUI. Whenever this estimate is equal or worse than the economic policy uncertainty of one single nation, the investors can mitigate their appraisals. Erkekoglu and Kilicarslan defined the negative effects of political instability: it can totally disincentive the investments in a country; the amount invested can be diminished; the

time of investment can be postponed or completely canceled because in the wait, some negative political events might have happened.

The literature review I drafted laid the basis for the quantitative analysis I performed. In the second chapter indeed, I started from the research question I stated before and I decided to investigate on it. At the beginning I decided to portray an evolutionary framework of the FDIs received by the developing countries. I obtained these data from the World Bank online database, in which it is stated that *"foreign direct investment refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10 percent or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship. Data are in current U.S. dollars*. From this dataset I could calculate the percentage variations of the amounts of the FDIs, between 2015 and 2019, and I have been able to appreciate how the countries experienced completely different paths. Precisely, I could notice that the greatest percentage variations have been experienced by Peru, Romania and Bangladesh, whose FDIs increased by more than 200%, between 2015 and 2019. Also other countries, like Uzbekistan, Montenegro, Russian Federation have performed well, even though their FDIs variations have not been as exponential as that of the previous group. Indeed, they all experienced a surge that has been greater than the 100%. Another cluster can be identified by those countries, such as Georgia, Republic of Korea, Kazakhstan, Mauritius, Mexico, whose FDI levels stand slightly below the 100%. A large share of nations though, has registered FDIs' variation levels that are comprised between the 0% and below the 100%. In this case we can mention: China, Albania, Argentina, Ecuador, El Salvador, Malaysia, Pakistan, Thailand, Rwanda and Serbia, whose growths, although not as exponential as that of the groups before, have been positive. Indeed, there is another and last bunch of developing economies, whose FDIs inflows have been negative, thus meaning that in 2019 have received less FDIs than those collected in 2015. The worst one has been Kenya, whose decrease stood far below the 100%, followed by Cambodia, who performed relatively better but still more negatively than the 100%. All the others are comprised between the 0% and -100%. It is possible thus to mention, Armenia, Bulgaria, Colombia, Cote d'Ivoire, India, Indonesia, Lao, Morocco, Mozambique, Myanmar, Macedonia, Paraguay, Philippines, Tanzania, Tunisia, Turkey, Uganda, Vietnam and Zambia. Hence, it can be stated that this latter group is the most numerous: the majority of the developing countries analyzed has received less FDIs in 2019, compared to 2015.

However, I could not rely on general FDIs, because I had to evaluate the impact of political risk on those in the renewable energy sector. What I did has been looking for the datasets that contained both the values of the FDIs received by the developing countries in the activities in the renewable energy sector, and the estimations of the political risk of each country. The first one has been provided by the International Trade Centre while the latter has been recollected from the World Bank's online database. In the former case, I

selected the category *"Electricity, gas, steam and air conditioning supply"*, which falls into the tertiary sector ITC's online database. Indeed, I thought that this cluster is the one that is more narrow to renewable energy. The information synthetized by the ITC, were collected from the national banks of the developing countries, from international organization and regional organizations like MASEAN. From this I could calculate the percentage variation of the FDIs from 2015 to 2019, that then I correlated with the variations of the political risk values. The sample consists of 42 developing countries, which are: **Albania, Argentina, Armenia, Bangladesh, Bulgaria, Cambodia, China, Colombia, Cote d'Ivoire, Ecuador, El Salvador, Georgia, India, Indonesia, Kazakhstan, Kenya, Korea, Republic of, Lao People's Democratic Republic, Malaysia, Mauritius, Mexico, Montenegro, Morocco, Mozambique, Myanmar, North Macedonia, Pakistan, Paraguay, Peru, Philippines, Romania, Russian Federation, Rwanda, Serbia, Tanzania, United Republic of, Thailand, Tunisia, Turkey, Uganda, Uzbekistan, Viet Nam, Zambia**. The values of the FDIs in the cluster chosen were provided as either stock or flows. The former refers to the position of the of the country only at the second semester of the year; the latter instead, refer to the sum of the FDI transactions in the two semesters of a year. Although I deemed this last method more appealing and precise for the analysis, I conducted my evaluations on both of them, even if, among the most relevant results in the fourth chapter I considered only the flows. In addition, shifting to the stock dataset has implied a change of the countries selected, and thus the choice between flows and stock has been of utmost importance.

I conducted my analysis using the Microsoft Office program's EXCEL. Through it, I could calculate the correlation between the percentage variations, between 2015 and 2019, in the "*Electricity, gas, steam and air conditioning supply"* cluster and the political stability values. I calculated both the Pearson and the Spearman tests because previous authors suggested conducting both of them. Indeed, they allows to appreciate different aspects of the correlation: Pearson is the most common and used coefficient that allows to evaluate the linear correlation between two variables. It can be used whenever the two variables satisfy some criteria: they are quantitative; they refer to the same observations and finally are normally distributed. Thus, it is considered a parametric test, whose coefficient is generally known as *r*. Pearson's correlation has been applied to the FDI flows dataset, through the command CORRELATION (variable_x; variable_y) on the EXCEL program; Spearman correlation analysis is a non-parametric version of the Pearson's correlation and is used to verify and quantify the relationship between two quantitative variables. Spearman requires further data elaborations and, indeed, the variables have to be ranked. Hence, the raw data, both those about the FDIs and the political risk, identified for the analysis, were firstly ordered through the appropriate EXCEL's ranking function, RANK.AVG(num;ref;ord), which allows to identify how a specific observation is put in order within the whole dataset. For each data set I locked the cells of all the observations, thus identifying them as reference, also at the annual level. After having completed this necessary step, I could move on elaborating the real value of the Spearman correlation, in the same way I did for Pearson's test, but using the ranked values. I did this procedure both for the flows and the stock data. The results have been:

- **Pearson**: r = -0,07578, which means that the two variables are negatively correlated by the 7.58%. Hence, when the x variables (that I set to the political risk) increases by 1%, renewable energy's FDI inflows in the emerging economies (which is the y, dependent variable of my model) decrease by the 7.58%. Nevertheless, a negative correlation does not imply a negative causal relationship, it means that the two variables are negatively associated by the 7.58%.
- **Spearman:** rs = -0,188. The Spearman's value also confirmed the negative results of the previous correlation, but, in this case, whenever the political risk of an emerging country increases by 1%, the FDIs in the renewable sector decrease by 18,19%, which is way higher than the Pearson one. Precisely, the correlation between the ranks is weakly negative. I must mention the findings obtained through the stock dataset.

It can be stated that, being r value (Pearson) greater than rs (Spearman), the correlation between the two variables is linear but not monotonic.

Additionally, I decided then to identify just those countries whose data are not considered extreme, namely not the outliers. I identified them through the method of the quartiles. Afterwards, all the values I had, have been checked through the OR function of EXCEL, which returns TRUE when at least on the two conditions is true (I set as requisites: being higher than the upper bound or being inferior than the lower bound). After having done this, from the original dataset of 42 developing countries receiving green energy FDIs, I obtained 17 countries with non-outlier values. The political stability values, instead, have been gathered by the World Bank and span in a time period from 2015 to 2019. I collected all the information for the 42 initial developing countries in the years I identified and, as well as for the renewable energy FDIs I manipulated the political stability dataset: I selected the outliers with the same formulas for the quartiles and the upper and lower bounds and, for this reason from the political stability dataset elaboration I could cancel two countries, thus arriving, for the representation of the correlation, to 15 countries, i.e., *Armenia, Bangladesh, Colombia, Mauritius, Georgia, India, Kazakhstan, Mauritius, Mexico, Morocco, Pakistan, Romania, Russian Federation, Tunisia, and Viet Nam*. It is clear that the representation of the correlation without outliers is different from the one in which the 42 countries are all represented. Indeed, the values of the outliers are very extreme, thus heavily affecting the intelligibility of the graph. In addition, from the original dataset of 42 countries I deemed useless to keep counting on countries whose percentage variations from 2015 to 2019, both in the renewable energy FDIs and political stability values, were 0% or 100%. Indeed, in this last case it meant that the value in 2015 was not available.

In the third chapter instead, I provided a qualitative analysis in order to further back my thesis over the negative role of political instability on the reception of the FDIs in the developing countries' renewable energy sector. The aim of this chapter has been that of giving practical and real examples of how political instability works on the foreign direct investments. I chose four countries, namely Pakistan, Morocco, India and Kenya. I selected them for different motives. On of them is the Human Development Reports, drafted by the United

Nations Development Program, that contains an index, Human Development Index (HDI), that is calculated taking into account different parameters: life expectancy at birth; expected years of schooling; mean years of schooling; gross national income (GNI) per capita. They all refer to different Sustainable Development Goals (SDGs), and to each nation's situation a value is assigned. I chose these economies, given that these occupy close positions into the HDI ranking: Pakistan rk.154, Kenya rk.143, India rk.131 and Morocco rk.121. Hence, this means that the development level of the countries is similar. Instead, what differentiate the countries is their political risk levels, which are not similar with one another. In 2019, in a range from +2.5 and -2.5 (top and lowest levels of political stability), Pakistan's political stability value was -2.25; Kenya's -1.12; Morocco's -0,37 and India's -0.70. Therefore, Morocco can be considered the most politically stable country among those selected; Pakistan instead, has one of the world's lowest values. Besides these two objective criteria, I selected these countries because of a personal interest with regards to both their political history and their policies enacted in the renewable energy sector.

For each of these developing nations, after having assessed and explained the present framework of the political history in a dedicate paragraph, I tried to identify the roots from which this kind of risk comes out. Afterwards, I drafted a dedicate section in which for any country I identified which are the main policies that the governments passed with regards to renewable energy. In this way, I could identify which are the objectives set by the administrations, the reforms passed to achieve them, and in which way the FDIs could promote a faster and a complete transition to green energy. In many cases, the policies were either insufficient or unable to make the country achieve the efficiency in the production, distribution and supply of renewable energy. What worsens the energy framework of some of them, is that many countries are not able to provide energy access to the citizens. Therefore, they not only are unable to provide green energy, but leave people with basic heating, cooking and lighting systems, which are also polluting and not safe. Morocco is the only country in the case study analysis that has been experiencing continuity and stability with his governance: the kingdom has been passed from fathers to sons, with king Mohammed VI presently in charge, while all the other countries have not had a stable electoral turnover and the elections themselves have not been peacefully carried out, as in the case of Kenya. Being so instable has not allowed the other nations, India, Pakistan and Kenya to pass reforms that could promote the national socioeconomic development.

In particular, Pakistan has been frequently involved in the wars with India and Afghanistan. His political stability levels have been some of the lowest throughout the world. Presently it stands around the -2.25, which is very close to -2.5, experienced by the country until 2016. After that year the level improved, but the country has kept facing quarrels, terrorism, wars, assassinations of the nation's administrators, that have continuously disturbed Pakistan's economic growth and capacity to face macroeconomic shocks, like inflation. In addition, after the independence, the country experienced alternating governance forms, from military regimes to some forms of democracy, with stability lasting just a decade, i.e., between the years from 1973 to 1988, when the Afghan war spread out. After that year, GDP positively grew but the situation never totally recovered until

2000, given that all the governments violently ended up before the expected time. The worst period has been that in which the nationalization of the companies (1971-1977) was enacted, which also discouraged the inflow of FDIs. The same had already happened at the beginning of the 60s, and occurred again from 2008. The society suffered from this instability and started consuming less because had lower earning and expenditure capacity, increasing inflation and unemployment rates. These conditions created mass protests and revolutions against the governments that were accused of not having passed adequate policies. The investments into the country reduced because of the discouraging return expectations, which were additionally deteriorated by the attacks to the Twin Towers in 2001. Indeed, from that year on, Pakistan faced internal terrorism, that also required financial resources, subtracted to the economic growth of the country, in order to be controlled. In 2008, the attacks led to death dozens of thousands of people, destruction of infrastructure, decrease of production, less investment opportunities with higher unemployment rates, and slowdown of economic activities. Another main problem that affects the investments in Pakistan is that the country has suffered from energy shortages, especially gas, that have affected the capacity of the investors to conduct activities in the country and that have never really been assessed by the administrations of the country. Also, the country lacks of savings and investments and it is not able to generate enough resources to sustain the economic activities. Therefore, FDIs can bridge the gap between the domestic investments and the economic objectives.

On the energy side, it is possible to state that Pakistan has historically mainly relied on fossil fuels, that led to the environmental degradation of the country. In 2008, the country's energy needs were satisfied for the 99%, by oil, gas, hydel and nuclear energy, while only the 1% of energy came from micro/mini green sources. However, Pakistan has an immense capacity of renewable energy production: the country's potential is due to its solar and wind sources. The international organization evaluated that, installing photovoltaic panels in just the 0.071% of the Pakistani territory would allow the country to meet the whole national current electricity's demand. Also, the country can benefit from wind corridors, whose average speed, in some of the windiest areas of the country, reaches 7.87 m/s. In addition, also hydropower project could play a part in the Pakistan's transition toward renewable energy. The governments, although not stable, passed some reforms with regards to this matter and created some national organizations, like the Pakistan Council of Appropriate Technology, the National institute of Silicon Technology, the Alternate Energy Development Board, that were in charge to facilitate the development and the generation of alternative and renewable sources, that would have encouraged a sustainable economic growth. The Council's generation of renewable energy did not even meet the levels of the late 90s, because of imprecise promotion instruments that did not allow to produce more than 3MW of solar and wind energy. In 2006, the then government of Pakistan passed the "Policy for development of Renewable Energy for power generation", whose objective was that of supplying sustainable energy and natural gas to all Pakistani citizens, also reaching the most rural areas. The policy is still working.

What mainly affects the great capacity of renewable energy production is that the infrastructures created to take advantage of sun, water and wind are not able to generate energy at their maximum potential. For this

reason, energy gaps occur. At the present time, IRENA estimated it being between the 4 and 6 GW per year, and that would be resolved with a transition toward renewable energy. The governments drafted adequate policies for enacting the passage, but they were mainly devoted to the resolution of the other problems, including those related to political instability. The commitment of Pakistan in the transition toward renewable energy has been enhanced in these last 5 years, given that 54 million of Pakistanis were left without electricity in 2017. New policies towards renewable energies have been evaluated by the governments and the time horizon has been expanded to 25 years: it has been foreseen to satisfy, by 2030, the 20-30% of the whole energy demand through renewable resources. Since 2014, 18 wind power projects, 6 solar power projects and six bagasse projects have been enacted and have created 1556 MW of renewable energy. Until 2019, the country's engagement in renewable energy increased even more when other 5 private projects for wind power were added to the 23 already existing mainly United States' manufacture turbines. Pakistan is a large producer of municipal, animal and agricultural waste, cotton sticks, livestock dung and rice husk, which are used to create energy from 4045 biogas plants, that involved also China in the creation of a 40 MW generation plant, that is able to use solid waste to generate electricity. Also this kind of resource is not fully exploited and Pakistan committed itself to enhance the generation and selling of energy obtained from biogas. Hydropower instead, is mainly projected to the development of small, mini an micro power plants that if adequate, would provide the 65% of the energetical supply by 2030. Pakistan is sunlit 9.30 hours per day, and this lead to the establishment of The Quaid-e-Azam Solar Park in 2016, capable of generating 1GW. Nevertheless, the photovoltaic complex is currently producing just 400 MW which is far below its capacity. Citizens started installing on their house, but also industries and shops' rooftops, photovoltaic panels that would also allow them to overcome the problems of the rising cost of electricity and energy shortages. The government promptly regulated this production, with guidelines passed in 2015. There threats to the energetical transition of Pakistan are mainly two: China has partnered the creation of the China Pakistan Economic Corridor to create seven new coal-fired power plants, that would halt the emergence of the renewables, like sun and wind; secondly, coronavirus pandemic that has delayed the implementation of approved renewable policies and the negotiations to resolve some disputes with individual provinces. Foreign investors are fundamental to the green energy transition, because as one of the main solar and wind energy producers in Pakistan, Zeeshan Ashfaq, claimed, 15 billion dollars into the plan would aid the country's passage. The government, though, should play its part by defining the future uses of the funds, promoting a national industrialization, supporting economic policies, financing a less carbon production. It should also allow a liberalization of both the imports and exports of the technological goods that enable a zero carbon emission energy production, because keep relying on the national technological endowments means not being able to keep up with the high-tech advancements that promote a real transition to renewable energy. If Pakistan will lose momentum, it will keep being affected by energy crises that prevent it from achieving the SDGs and will leave it out from the internationalization processes, thus slowing down the overall economic development pathway, that also hinders energy security. Thus, obtaining resources from the outside is fundamental, but it might be more long

term oriented and should come after having assessed the political instability that is currently affecting the country, through the promotion of social policies that would restore a flourishing situation.

India, instead has been facing higher stability only with the election of president Modi, that has been confirmed two times. He concentrated on bringing the country on the socioeconomic development path, and succeeded. The country has been suffering from energy shortages that have heavily affected the numerous population, that is also estimated to keep growing in the long-term. It would have been impossible for the country to keep relying on the old energy supply means, that would not have been able to support both the present and future population. Indians have been suffering from energy shortages and unhealthy energy methods for cooking and heating. Until the election of president Modi the country has not been stable enough to approach an energy transition program, because of the continuous turnover in the country's administration. Indeed, although in the third chapter I portrayed a division of the eras, frequent dismissals occurred, leading to instability. Therefore, the governance forms changed continuously from autocracy, military regimes to democracy and the country could not concentrate on its economic development. The economic performances were affected because of the continuous shifts from phases of higher liberalization to times of governance interference, that brought also an inefficient resource allocation. Furthermore, India throughout its political history had also to face the wars with Pakistan in 1965 and 1971 that created high volatility within the country. Also, high levels of violence and corruption characterized the national framework, when, for instance, Indira Gandhi was first deposed as prime minister, and after her reelection was then shot, being then succeeded by his son Rajiv, whose years of administrations were also full of treacheries and scandals. He was quickly replaced by Singh, that lasted less than a year. Many governments took the lead frenetically in the next two years: after Singh there has been Shekhar, who lost the support from the government and Rao became the new prime minister. After that the country fell in bankruptcy. Nevertheless, the subsequent 5 years were stable and the country's economic development increased; this did not last long and 4 prime ministers in 3 years were changed, and another war with Pakistan exploded in 1999. New elections were held. From that year on, numerous terroristic attacks took place, damaging the political stability of the country.

President Modi was firstly elected in 2014 and then has been reconfirmed in 2019, and he always expressed his willingness to enact the transition toward renewable energy, given that the country is the 4th largest GHG emitter. He also aimed to ensure a broader access to energy to the growing population, because, as he stated, it would have been nearly impossible to keep relying on imports due to their high costs. Additionally, he committed itself to resolve the energy shortages, from which the country suffered during the years of political upheavals. Given that the country has taken the path of economic development (GDP growth rate is expected increasing by 9% until 2032), it would be impossible to sustain it without affordable and adequate energy supply. Although some projects started being passed since 2003, like the Electricity Act, the National Tariff Policy, National Acton Plan on Climate Change, it was only with Modi and the higher stability that a clear definition of the long-term targets has been clearly stated. The major objective is that of reaching the 7th

Sustainable Development Goal by 2030, through reforms concerning mainly the use of wind, solar and biomass sources which confirms the country's willingness to achieve a place in the international energy panorama. He also introduced fiscal incentives because the government does not have all the necessary financial and technological instruments to complete the green energy transition and has to obtain them from abroad in order also to bring efficiency in the production and distribution.

The Kingdom of Morocco is actually governed by King Mohammed VI, that was elected in 1999 and has been able to maintain national macro-economic and political stability, whose level was in 2019, according to the World Bank, -0.37. Between 2015 and 2019 the country's political stability levels have not very much varied. Morocco was one of the first countries in the Arab world to adopt democracy, which was strongly required by the population and that was granted by the monarchy in order to show people how they could handle the political scene, without losing their prerogatives. Morocco has embraced neoliberalism from the end of the 70s, when the end of the third world debt crisis turned the global tendency from developmentalism to neoliberalism, and that was held in the 80s by King Hassan II (father of the present king Mohammed VI). In that decade, the International Monetary Fund and the Structural Adjustment Plan (SAP), backed by the World Bank, were introduced and introduced a period of radical reconstruction through new neoliberal reforms in the bureaucracy and public administration, public deficit reduction thanks to market liberalization, deregulation, privatization of industrial activities and introduction of public services. The economy was heavily reliant on agriculture but, under the King Mohamed VI, the country started focusing on economic development and capital accumulation, because he wanted its cities to obtain businesses, tourists and investors, which are the components of the universal economic development strategy. He created infrastructures in urban areas as a way of promoting globalization and financial flows and breaking the relationship with agriculture. Presently rural economy keeps being the predominant economic sector, also on the employment side, but the urban economy has become the leader of the national economic growth, producing three-quarters of national GDP. The ultimate purpose is that of introducing Morocco into the global market, to further attract foreign investments and stimulate the economic growth. The King Mohammed VI, launched a series of several ambitious urban development programs that he called "mega-projects", to make the country more competitive in a global world. Unfortunately, the cities became, not only a relevant investment place, but also a land of violence, attacks and bombings, because poverty, social and economic exclusion started rising after the 90s. The king approved strategies for the development and creation of wealth in those areas. The Kings envisaged Morocco as a country completely immersed into globalization, but to assert its position worldwide, FDIs are needed. These were attracted through reforms, both on the urban and economic level, that ameliorated the social conditions and enhancing cities' conditions, by also reducing the size of the slums.

With regards to the energy side, Morocco is the only North-African country that cannot count on oil resources, and this has induced the nation to heavily rely on petroleum imports to meet the local demand (oil, coal and gas import accounted for the 96% of country's energetical provision). The energetical challenges

changed in the decades: 50-40 years ago, it has been that of obtaining enough oil to satisfy the national rising needs; later on, it became that of containing the importation costs in order to maintain the trade balance under control. This stimulated the country's transition toward a sustainable, competitive and sound energy procurement industry, through which the country managed to become semi-sufficient in the production and in the delivery of energy. In addition, Morocco faced energy shortages in its 90s, which were determined by the difficult economic and financial problems that the country went through during the 80s. The national electricity distribution, transmission and supply is managed by the Office National de l'Électricité et de l'Eau Potable (ONEE). Both the ONEE and the government, in those decades, were unable to sustain the growing energy demand and, at the same time, to provide the necessary investments to satisfy it. Originally, the government decided to reform the whole sector, by for instance allowing private investments and giving the chance to independently produce energy. The World Bank supported it with a decree in 1994, aimed at liberalizing the Moroccan energy sector, through which the ONEE has been able to enter into agreements with the independent power producers, making competitive the energy prices. In addition, the Moroccan government in 2008 enabled the private producers to create their own power plants, whose capacity had to not exceed 50MW, and that had to sell the energy to the nation. This process was also legislated in 2010 with the Renewable Energy Law and thanks to the nation's liberal investment climate (determined by tax exemption and investment incentives), foreign companies have been attracted in the country. Morocco commenced almost 20 years ago its real green energy transition, using more coal and natural gas, from 2005, even if it has been estimated that oil will dominate the energetical arena, for at least the next three decades, because of the new discoveries of oil reserves, that have been unexplored for all these decades. The production of natural gas, instead, is expected to remain underdeveloped, given that the national deposits are scarce: Morocco has to be focused on the shipping of this energy source, given that, in order to have it in Europe, it is necessary to cross the national territory.

With regards to green energy amendments, in 1996, Morocco passed the Programme d'Electrification Rurale Généralisé, through which it has been possible to bring energy even in the rural area of the country, reaching an electrification of the 98%: more than 3600 villages were provided with photovoltaic panels. In 2009, the Moroccan government enacted the National Energy Strategy. The King also created two governmental agencies: the Moroccan Agency for Solar Energy (MASEN), supervising the implementation of the Moroccan Solar Plan, and the National Agency for the Development of Renewable Energy and Energy Efficiency (ADEREE). A consistent help in the R&D sector is provided also by the Institute for Research in Solar Energy and Renewable Energies (IRESEN). The ultimate aim of the government is to turn Morocco into an independent energetical country, also on the distribution side. Through the Moroccan Solar Plan, Morocco aimed to satisfy the 42% of the country's energetical requirement by renewable resources by the end of 2020, installing plants that could exploit the wind, the hydrological and solar capacity, in accurately located sites. Indeed, the capacity of the country is enormous also in the wind energy sector, which was enhanced by the

“Moroccan Integrated Wind Energy Program”. Nevertheless, the country have just initially set the path towards sustainability and has not faced a complete transition toward an energetical system that can fully exploit its potential. There are several problems to the matter: the government is unable to financially contribute to in the electricity sector, which determine delays in key investments; ONEE contributes to the debt and has to be reformed. The country has to keep being focused on its main objectives, like the reduction of the GHG emission by 42% and the increase of the renewable energy share by 52%, also because he signed the Paris Agreement. The country could also rely on regional integrations to be involved in the creation of a common energy market and promote cooperation and innovation. It is clear that for Morocco the FDIs are of pivotal importance for promoting the shift from polluting energy sources.

Kenya has a unique history, that started in 1991 when a multiparty system has been adopted and the citizens started fighting whenever an election was about to be held. The situation degenerated in 2007, when a civil war was about to spread. All the elections have been affected by some problems that made the country reach a really low level of political stability. The worst event in the series of the election-related conflicts has been that of 2007 with the death of more than a thousand of people. The main “issue” that the various presidents had to face concerned the ethnical division within the country: each ethnic group supported its own candidate that competed for the political position and, whoever was the loser, its supporting ethnic group willed to generate quarrels. It was only with the present president Kenyatta that some kind of normality was restored. The first time he was elected in 2013 though, the calls had been annulled by the Supreme Court in 2017, when his mandate was about to expire. He was then reelected the same year and was the only one that brought higher stability into the nation; he also envisaged a long-term perspective for the country with the aid of the “Vision 2030” program, through which the country’s economy has grown by 5.7% each year, one of the fastest growth rates in the continent with regards to manufacturing, housing, food security, education and healthcare. The last election in 2017, although seemed to be the most peaceful, in the sense that the president was not forced to quit off his role, led to the death of 70 people and to the destruction of some properties and businesses. Different tribes whose rebel members were young and not religious conducted the main assaults. It is clear that behind the elections there are social problems that date back to the independence of Kenya: it was thought that with the passage to democracy a better representation of the people’s interests would have been created but, what lacks is the democratic apparatus and the electoral justice system, that are supposed to reduce the political dissatisfactions but do not work effectively. The government also tried to restore a sort of normality with the new constitution in 2010, which is one of the most liberal legislations in Africa, in order also to overcome what happened in 2007. It was not the right solution because in 2013 and in 2017 the same assaults happened again. It is feared that the same situation will happen when new elections will be held in 2022 at the end of Kenyatta’s second mandate. Finally, on the social side I have to briefly mention also the high poverty rate and corruption of the legal framework.

On the energy side, Kenya is presently very committed to renewable energies. The 70% of the energy mix is obtained through green sources. In 2011, Kenya passed the Kenya Sustainable Energy for All Action Plan (SE4All) that was launched by the Ministry of Energy and Petroleum, outlining the country's long-term objectives in the energy field. The time horizon is 2015-2030 and Kenya, through the SE4All aims to guarantee 100% universal access to modern energy services, increase energy efficiency and raise to 80% the share of renewable energy in the energy mix, by 2030. Nevertheless, presently not all the people in the country have access to energy, let alone to the clean and sustainable one. This leads to power shortages, that are expected to worsen because of the continuous increase of the population. There is international concern (also by WHO) to the inadequacy of the domestic cooking and heating sources: they generate air pollution and affect the healthiness of the foods cooked. Furthermore, Kenya's production and distribution of electricity are under two monopolies that generate inefficiencies and high costs because of the inexistence of competition. This factor, added to unemployment, poverty and electricity gap hampers the country's total transition toward renewable energy. Many measures, like Pay-As-You-Go, have been enacted to fill the energy gap and some of them succeeded in guaranteeing the access to electricity. It must be said that with president Kenyatta the commitment in renewable energy, and energy in general, has increased up to the point that in 2018, 75% of all the people had access to electricity. There is though, an interregional gap that has to be addressed to the unclear and inadequate investment strategy, because institutions autonomously decide where to invest. Kenya's international investment attractivity is very high, although the unpredictability of the weather. Indeed, the share of the FDIs in the country is very high in comparison to the other African countries, and would be even higher if corruption, election-related conflicts, ethnical and social divisions, terroristic attacks would be resolved through adequate policies. Once the resources will be invested in the energy sector, the number of people having access to energy would grow, ensuring then the achievement of the national objectives and the 7^{th} SDG.

I ended my thesis providing several conclusions that can be drafted from both the empirical analysis and the case studies. The quantitative analysis found out that effectively a negative correlation exists: FDIs in the renewable energy sector in the developed countries are penalized by the political framework that characterize them. The case studies confirmed this finding and also highlighted what had been stated in the literature review, namely that there is not just one type of political instability but many forms of it exists. Another main contribution has been that FDIs have a major role in enabling a total energy transition, even in the cases like Morocco that commenced it but still need investments to complete it. Therefore, even if political stability has differently characterized the framework of the countries, on the economic side FDIs confirm their primary role in financing the energy transition, that the national funds are unable to totally support. Therefore, I would like to briefly recommend to the countries to enact a social and political transformation before anything else. All the nations mentioned, with the exception of Morocco, have changed governments, for different reasons, that have not given the adequate solidity to the reforms passed. All the programs were left without an effective

compliance and never really led to progresses in the energy sector. Only in Morocco this happened, with the exception of some parts of Kenya, where this depended on the willingness of the President. Resolving the social side problems would mean not only reducing poverty, non-access to electricity, but also would make people more comfortable in embracing the change and democracy. In this way the government would also find more consensus and enacting the reforms would be way easier and effective. Finally, I would recommend to adopt some policies to increase the security of the countries and to protect the various nations also from the attacks coming from the neighborhood (as in the case of Pakistan near Afghanistan). In an era in which technology has deeply affected people's lives, it would also be beneficial to adopt cybersecurity programs, especially in the case of Morocco that is actually taking the lead of the region in which it is located. Generally, this last suggestion is useful for all the countries that want to be protected from these new generation attacks and prevent the cyberwars, that would further damage the already precarious setup of this category of nations. Also, many investors rely on inexact information that are mainly derived from the proximity to other risky countries, without delving into punctual analysis. To this matter, I suggested to provide easily accessible and precise information through the institutions, because there is scarcity of them. This is also one of the reasons why I could not approach the problem on the regional level: the developing countries' institutions are not able to furnish such scrupulous data.

Having drafted the thesis from a national point of view, rather than a regional one, that would have allowed me to provide more specific guidance and address to the issue, is one of the limits of my thesis. I would also add the fact that I represented just a few countries as case studies and I have not been able to provide a univocal definition of political instability. In addition, the role of political instability could be studied conjunctly with other variables, given that per se it is not a decisive factor, but works together with other factors. My thesis, finally, advances the knowledge on this phenomenon and I decided to evaluate the effects that it has on the energy transition of the developing economies. It still is a primordial work and future researcher can expand it, starting from the limitations of my work.