UNCOVERING BEST PRACTICES OF INVESTMENT PROMOTION AGENCIES

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Abstract

In recent years there has been an enormous rise in Foreign Direct Investment (FDI), which has experienced a 3712% global increase from 1980-2016. Thorough research has shown that FDI is a key catalyst in accelerating economic development in recipient countries. Given its importance, Investment Promotion Agencies (IPA) are a recent endeavour used to attract flows of these investments. While literature on determinants of FDI is plentiful, undertakings in describing the effectiveness and best practices of IPAs are much scarcer. Through an extensive literature review, this thesis identifies the existing gaps in the IPA literature, by identifying three hypothesised best practices, which are empirically tested in panel data regressions covering 16 years and 107 widely heterogeneous countries. Differently from previous studies, World Bank's income-based classification is substituted by the Investment Development Path (IDP), which allows a more meaningful discrimination between stages of development. Whilst controlling for theoretically grounded FDI determinants, this thesis discovers that Twitter, as an IPA's promotion platform, can increase inward FDI for countries in earlier stages of development. The findings also demonstrate the beneficial effect on inward FDI of World Association of Investment Promotion Agencies (WAIPA)'s membership for IPAs operating in countries of lesser development. Finally, this thesis finds evidence of a universal positive effect of IPA's websites translations into "relevant" languages on inward FDI, in accord with our own devised lingual index.

Keywords: *FDI, IDP, MNE, OLI, IPA, Best Practices, WAIPA*

0.2 Table of Contents

1 Introduction

In recent years, as globalisation has been on the rise, so has the level of investment between countries that generated an enormous surge in FDIs. From 1980, when the world's FDI stocks stood at 701.96 billion, that number grew by 3712% to 26.72 trillion in 2016[1] (UNCTAD, 2017). These firms engaging in FDI assume the form of a multinational enterprise (MNE) (Peng & Meyer, 2011, p. 166). But more importantly, when a MNE's subsidiary is established, host countries not only receive financial capital but also intermediate products such as technological, managerial, and entrepreneurial knowledge and expertise, embodied in patents and human capital (Hymer, 1976, p. 23). Considering this, FDI represent a vital part of an open and effective economic system and a major catalyst to development (OECD, 2002, p. 7).

Indeed, many studies have demonstrated the benefits accruing from FDIs, especially for developing countries (OECD, 2002, p. 9). First, FDIs can generate economic growth beyond the initial macroeconomic stimulus, since MNEs spur growth by increasing total factor productivity and the resource efficiency in the host economy. Second, FDIs generate technological spill overs, since MNEs are the major source of technological creation. Third, FDIs enhances human capital directly, since MNEs provide training and on-the-job learning, but more importantly, and indirectly, through the host governments' effort to increase educational level, necessary to attract FDI. Fourth, FDIs can foster competition (ibid., pp. 16-20), since MNEs spur local competition, thereby leading to higher productivity and reduced prices.

As the awareness of the overall benefits stemming from FDIs has grown immensely, so has the efforts of countries and regions to attract the investments towards them. To this end, countries have taken a more open, friendlier stance as well as pursued other policies aimed at improving the business climate, creating guarantees for investors, and offering incentives (OECD, 2002, p. 9). Yet, if no effort is made to market themselves to the investor community, countries generally fail to enter the "short list" of companies' potential sites for investment projects (The World Bank Group, 2009, p. 8). To this end, an effective solution is the establishment of national or regional IPAs (Kotler, Jatusripitak, & Maesincee, 1997). With an ever-growing number of countries realising their importance, the investment promotion field has become increasingly competitive in recent years. In fact, globally the number of national and sub-national IPAs operating rose from a handful to above hundreds in two decades (Morriset & Andrews-Johnson, 2004, p. 1; The World Bank Group, 2009, p. 49).

[1] Both numbers are expressed in current USD.

Researchers are agreeing upon the IPAs' effectiveness at attracting FDI, as they have unambiguously demonstrated that IPAs are associated with greater FDI inflows into their host country. And many initiatives, and organisations such as Multilateral Investment Guarantee Agency (MIGA), World Bank, United Nations Conference on Trade and Development (UNCTAD), Ecorys, WAIPA, as well as independent researchers have successfully tried to identify and implement best practices of IPAs. But despite the various organisations' recommendations, it is our conclusion, based on an extensive literature review, that the following areas have not been subject to academic research, and therefore we will attempt to cover this literature gap.

In the case of WAIPA, the organisation aims at building the human resources capacity of its member IPAs by organizing training events alone, or in partnership with organisations like Institut Européen de Coopération et de Développement (IECD), Organisation for Economic Co-operation and Development (OECD) and UNCTAD. However, more relevant for this thesis, WAIPA provides the opportunity for IPAs to network and exchange best practices in investment promotion. We, as researchers, intend to measure the effect of WAIPA membership of the IPA, in relation to the attraction of FDI to the host country.

In addition, we hypothesise that recent economic and technological trends have generated some gaps in investment promotion that need to be addressed. Further, an established online presence is nowadays an indispensable prerequisite for an IPA serious about attracting investors: an agency's website represents an opportunity to display its location in the best possible light. Yet, in our opinion, two aspects of online promotion have been overlooked by the literature. The first is the importance of providing relevant information in several languages. MIGA carried out its assessment only for English translations, disregarding the historical, cultural, or economical rationales behind the educated decision of some IPAs to prioritise other languages (The World Bank Group, 2009, p. 13). The second neglected aspect of online promotion is social media, an area that falls short of empirical research. Indeed, social media are great tools to target specific groups of investors and perform tailored promotional activities (Ecorys, 2013, p. 85).

Considering the aforementioned, the purpose of this thesis is uncovering additional and technological relevant best practices that make some IPAs more successful than their peers. This will require outlining the current academia surrounding effectiveness of IPAs as well as an overview of the known and most important best practices. It is done as a prerequisite to uncovering current gaps in the existing research, which the researchers of this thesis will attempt to cover. Once the hypothesised best practices have been identified through the literature review, we will test their empirical relevance through panel regressions, while controlling for other theoretically and empirically grounded determinants of FDI.

In conclusion, the thesis will be able to reject or accept the hypothesised best practices identified through the deductive reasoning and potentially present managerial recommendations, for consideration of implementation by IPAs.

The next subchapter will first present the problem statement, which branches off into three hypotheses, and subsequently introduce the reader to the thesis outline.

1.1 Problem Statement and Tested Hypotheses

As the motivation of the thesis has been outlined, the following problem statement will be the foundation of the research:

We wish to uncover best practices for investment promotion agencies that can help attracting inward foreign direct investments.

To do so, we will attempt to reject the following null hypothesis (H_o) and accept the corresponding alternative hypothesis (H_1, H_2, H_3)[2]:

$$H_0: WAIPA\ membership\ of\ IPAs\ is\ associated\ with\ no\ larger\ FDI\ inflow$$

$$\boldsymbol{H_1: WAIPA\ membership\ of\ IPAs\ is\ associated\ with\ a\ larger\ FDI\ inflow}$$

$$H_0: A\ larger\ website\ language\ index\ of\ IPAs, means\ no\ larger\ FDI\ inflow$$

$$\boldsymbol{H_2: A\ larger\ website\ language\ index\ of\ IPAs, means\ larger\ FDI\ inflow}$$

$$H_0: Social\ media\ presence\ of\ IPAs\ is\ associated\ with\ no\ larger\ FDI\ inflow$$

$$\boldsymbol{H_3: Social\ media\ presence\ of\ IPAs\ is\ associated\ with\ a\ larger\ FDI\ inflow}$$

1.2 Outline

This thesis is divided into 10 chapters as illustrated in Figure 1. It has begun with the Introduction chapter, where the importance of FDI for the host economies has been presented as well as the role of IPAs in attracting such flows. Next, the chapter has provided the definition of the three core concepts this thesis builds upon.

[2] See section 3.2.3 for hypothesis formulation

FIGURE 1 - OUTLINE OF THE CHAPTERS OF THE THESIS (OWN DEVICE)

In the Methodology chapter we decide on the research philosophy that consequently shape the way that we define and acquire knowledge. Further, we present and elaborate the techniques and procedures through which data has been collected and examined as well as the preconditions that need to be met to obtain a reliable regression analysis.

The Literature Review chapter provides an overview of the existing literature on Foreign Direct Investment and subsequently dives into the Eclectic Paradigm, the theoretical framework bolstering the choice of our control variables. Furthermore, this chapter presents a systematic review of up-to-date research on the IPA's role, the foundation of our research question. Lastly, the IDP theory is introduced as it will serve as the basis for discriminating our sample countries according to different degrees of development.

The Model Specification chapter presents the variables composing our econometric model and provides the expected outcome between each independent variable and the dependent[3]. The inclusion of each variable is further justified by empirically grounded findings from widely-acknowledged authors' works.

The Empirical Findings chapter first demonstrates the fulfilment of the preconditions necessary for a valid analysis. Then, it presents the findings divided according to the different degrees of development and in relation to existing literature, which has been presented in the Literature review. Clearly, a great focus will be placed on IPAs, to answer our three hypotheses. Finally, we present the academical and the managerial implications of our thesis.

[3] Throughout this thesis the authors will use independent, explanatory, control, and predictor variable, interchangeably. The same holds for dependent, explained, response, and predicted variable.

The Statistical Robustness chapter seeks to validate our findings as well to address some of the issues that we have encountered, such as multicollinearity and endogeneity.

The Conclusion chapter succinctly presents a summarisation of the thesis, highlighting the most important findings and considerations on IPA's best practices.

1.3 Definitions

In the following sections, key definitions that represent core concepts of this thesis will be described in detail. First, the difference between FDI and Foreign Portfolio Investment (FPI) will be outlined as well as the distinct types of FDIs and the distinct ways to measure them. Second, the MNE and the distinctive features that differentiate it from other types of organisations also involved in international business will be explained. Lastly, the reader is introduced to the concept of IPAs.

1.3.1 The Foreign Direct Investment

There is no unique definition of Foreign Direct Investment (FDI). The International Monetary Fund (IMF) defines FDI as: "[…] 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" (IMF, 2009, p. 100). OECD describes FDI as: "reflects the objective of establishing a lasting interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor, where the lasting interest implies […] a significant degree of influence on the management of the enterprise" (OECD, 2008, p. 48). To this extent, both organisations have been endeavouring an effort to strengthen the harmonisation of the definitions used (IMF, 2004, p. 2).

The reader can acknowledge that, although yet slightly different, the two definitions rest on the same core concept: the purpose to exert control, or influence, over the direct investment enterprise. Hence, the clear intention to exercising control is the element allowing the discrimination between FDI and Foreign Portfolio Investment (Peng & Meyer, 2011, p. 167; Cavusgil, Knight, & Riesenberg, 2014, p. 423). The latter solely involves the transfer of financial capital, whereas the former entails the transfer of a package of assets or intermediate products, which include financial capital, but also management and organisational expertise, technology, entrepreneurship, as well as values and cultural norms (Dunning & Lundan, 2008, p. 7). We will encounter this distinction again in the literature review section 3.1.2 The Industrial Organisation Approach, where it will prove its importance in the development of the FDI theory.

In more detail, both IMF and OECD "quantify" control as the ownership of shares that entitles to at least 10% of voting power (OECD, 2008, p. 48; IMF, 2009, p. 101). In some cases, an investor may own less than 10%

and yet possess effective control or influence (OECD, 2008, p. 23; IMF, 2009, p. 101). However, to ensure consistency and cross-country comparability of statistics, the two institutions recommend using the set numeric threshold (OECD, 2008, p. 49; IMF, 2009, p. 101).

Nonetheless, an arbitrary figure does not account for all discrepancies in FDI data as the methodology for compiling these data varies between countries. For a given transaction, host country and home country often do not register it in the exact same way, making data not always directly comparable between countries (UNCTAD, 2017a). Following Dunning and Lundan (2008, p. 14): "we accept that there is little that the analyst can easily do about these problems (…) except frequently to remind him- or herself that all estimates (…) may be subject to misleading and injudicious interpretations".

We will use UNCTAD as data source, which offers free access to its data through an interactive database, UNCTADstat (UNCTAD, 2017).

1.3.2 Foreign Direct Investment Categorisation

Having provided a definition of FDI, we will now proceed in explaining the many ways in which these investments are classified. FDI can be differentiated along several dimensions (Peng & Meyer, 2011, p. 166; Cavusgil, Knight, & Riesenberg, 2014, p. 428; Hill, 2014, p. 228). The first is the form. One route involves mergers and acquisitions (M&A) with an already existing foreign firm; acquisition refers to the purchase of an existing company whereas merger, a special type of the former, involves the combination of two already existing firms to form a new and larger entity. Another route, where new operations in a foreign country are established, is defined as green field investment.

The selection of one option over the other depends on several considerations. Firms typically prefer M&As because they are quicker to execute, provide immediate access to existing strategic assets as well as existing customers and suppliers, and to avoid additional capacity in competition-intense industry. On the other hand, firms might be pressured to undertake green field investments by host country governments seeking to create new jobs and benefits from knowledge and technology spill overs. This aspect will be further examined in the next section.

A second classification is by the nature of the ownership, that is, the degree of control retained over the venture (Cavusgil, Knight, & Riesenberg, 2014, p. 429). Control can be either partial or full. Full control is accomplished through a wholly owned direct investment. Through this type of FDI, the investor fully owns the foreign assets and thus secures complete managerial control over the operations.

Partial control can be achieved in two ways. One involves the acquisition of a stake in an already existing

foreign company. The other, labelled as equity joint venture, is a contractual agreement under which two or more businesses pool resources to work together on a specific project for a certain period. This partnership involves the creation of a new firm where a participant may hold a majority, equal, or minority ownership. Joint venture is an attractive option when the foreign environment is remarkably complex, as collaborating with a local partner enhances the foreign entrant's capability to navigate the local market, or when the host country´s government protects some industries.

Finally, a third distinction refers to the level of integration of the new operations, which can take place horizontally or vertically (Cavusgil, Knight, & Riesenberg, 2014, p. 430; Peng & Meyer, 2011, p. 167). Horizontal FDI involves the *replication* of home country-based activities, at the same single stage of the value chain, to better serve the host country's local market. It thus implies an investment in the same industry of operation to expand capacity. Vertical FDI, on the other hand, entails the *relocation* of some home country-based activities to the host country. Specifically, a vertical FDI can take two forms. Upward vertical FDI occurs when a firm engages in an earlier activity of the value chain, hence becoming able to supply inputs to its own production processes. Conversely downward vertical FDI, conversely, involves the performance of a later activity in the value chain, such as marketing and sales, thereby gaining proximity to the final customer. Obviously, nothing stops firms from undertaking both forward and backward integration.

1.3.3 Foreign Direct Investment Measurement and Direction

The FDI measurement is another important concept that requires a clarification. The amount of FDI can be gauged in two manners: by flow and by stock (Peng & Meyer, 2011, p. 167; Hill, 2014, p. 228). The differences between them are important. On the one hand, stocks measure the total level of direct investment at a given point in time, usually the end of a quarter or of a year. On the other hand, flows record the value of cross-border transactions related to direct investment during a given time period, usually a quarter or a year. Essentially, the flow is a snapshot of FDI at a *given point in time* whereas the stock represents the accumulation of such flows *over time*.

In both cases however, with the respect to any given country, these measures can be either inward or outward. The term inward refers to all direct investments by non-residents in the reporting economy, whereas the term outward includes all the investments abroad of the reporting economy (OECD, 2008).

Considering that this thesis' aim is to investigate the role of applied best practices of IPA in attracting foreign investments, we will focus on inward flows, consistent with the literature as shown in subchapter 4.1 Dependent Variable.

1.3.4 The Multinational Enterprise

Not all the firms that engage in international business are MNEs. Non-MNE firms can also do business abroad by engaging in Foreign Portfolio Investment, exporting, and importing, outsourcing, or through licensing and franchising (Peng & Meyer, 2011, p. 169). Only once a firm undertakes a FDI, it becomes a MNE, that is an "[…] enterprise that engages in FDI and owns or, in some way, controls value-added activities in more than one country" (Dunning & Lundan, 2008, p. 3).

An MNE has two near relations. It trades goods and services across national boundaries akin to international trading firm; and like domestic multi-activity firm, it engages in multiple economic activities. However, MNEs possess two distinctive features that differentiate them from other types of organisations also involved in international business (Dunning & Lundan, 2008, p. 5). First, unlike international trading companies, it does not just engage in cross-border transactions but also owns or control production facilities located abroad. Second, unlike multiplant[4] domestic firms, the internalisation of transactions between production units happens transnationally rather than domestically. No other institutions engage in both cross-border production and transaction. As it will be demonstrated in section 3.1.5 The Eclectic Paradigm, the location and the ownership and organisation of these value-added activities are crucial elements.

1.3.5 The Investment Promotion Agency

It would be strange if a country did not perform any kind of investment promotion (Wells & Wint, 2000). Indeed, if no effort is made to market themselves to the investor community, countries generally fail to enter the "short list" of companies' potential sites for investment projects (The World Bank Group, 2009, p. 8). Wells and Wint (1990, p. 8) define investment promotion as a set of marketing activities through which governments seek to attract FDI inflows. These activities encompass, amongst others, advertising, investment seminars and missions, participation in trade shows and exhibitions, facilitating visits of prospective investors, matching prospective investors with local partners, helping investors with obtaining permits and approvals, as well as servicing investors whose projects have already become operational. The literature widely agrees upon their allocation within four major roles, or functions: image-building, investment-generating, investment-service, and policy-advocacy (Wells & Wint, 1990; 2000; Young, Hood, & Wilson, 1994). Subchapter 3.2 Investment Promotion Agencies will explain in detail each of these roles and will provide supporting empirical findings.

[4] Pertaining more than one industrial building or complex.

Normally, promotional activities are executed by an IPA, an organisation whose purpose is to attract investment to a specific location. Wells & Wint (1990, p. 52) distinguish between three types of IPAs along the nature of their affiliation:

1. **Public:** a purely public affiliation entails the government itself carrying out the promotion. Its greatest advantage is the direct tie to decision-makers, useful to speed up investment projects. Yet, a purely public agency often has the disadvantage of struggling to attract the marketing expertise needed, due to the salary constraints that usually within the public sector;
2. **Private:** in such a case, the promotional task has been wholly delegated to the private sector. A positive consequence is the opportunity to overcome the salary constraints afflicting the purely public affiliation. On the other hand, private agencies would often have the disadvantage of not having the attributes to handle more traditional governmental tasks, like acquiring permits or approvals from governmental departments;
3. **Quasi-governmental:** this intermediate mix of public and private type of affiliation is by the authors deemed as the most appropriate. While characterised by close interaction with the government, it is not entangled in the traditional bureaucratic quagmire of the public sector. At the same time, it retains the flexibility to hire the recommended talent-mix from the private sector.

Another important distinction, especially relevant within this thesis, is between national and sub-national IPAs (UNCTAD, 2001, p. 6). Since promoting a particular location requires a solid knowledge of its key strengths that may influence investment decisions, this has often led to the development of networks of sub-national IPAs, which do not promote the country of origin directly, but specific regions, provinces, or states within such a country. Sub-national IPAs are often independent organisations and not subsidiaries of the national agencies, which typically play a coordinating role to avoid unnecessary competition and to direct investors to local agencies (ibid.). Our study will not discriminate between the types of affiliation, as long as the IPA's goal is to attract FDI flows at the country level. To this extent, our study will solely include national IPAs.

Having provided the key definitions that represent core concepts of this thesis, the next chapter will move on by introducing the ways in which our research question will be addressed.

2 Methodology and Methods

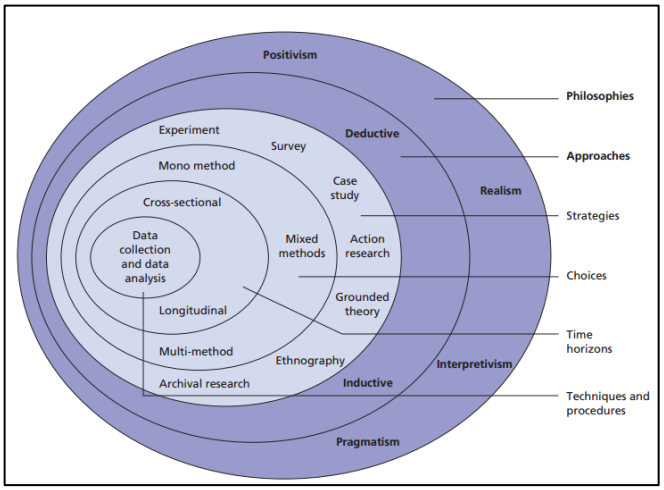
This chapter contains the methodology and methods used for addressing our problem statement and the associated research question in an adequate manner. For this thesis, we have chosen to utilise the 'The Research Onion' framework as illustrated in Figure 2 below (Saunders, Lewis, & Thornhill, 2009, p. 108). Such a framework attempts to guide the researcher in selecting the correct methodology and methods. Indeed, although erroneously used interchangeably in the academia, the two concepts are neatly distinct (Saunders, Lewis, & Thornhill, 2009, p. 3): methodology refers to the philosophical and theoretical assumptions of the research whereas methods refer to the ways utilised to gather the data and perform data analysis. By orderly going through the six layers - philosophies, approaches, strategies, choices, time horizons, and finally techniques and procedures – 'The Research Onion' has served as a roadmap in terms of making the correct choices within the research design while at the same time setting boundaries. This has helped making the research more consistent (ibid., p. 137). However, as the sequence of 'peeling the onion' is restrictive, some liberties have been taken to conserve a more conventional structure of the thesis.

2.1 Philosophies

Research philosophy is the over-arching term for development of knowledge as well as the nature of the knowledge, and it contains the assumptions on how we, as researchers, view the world. (Saunders, Lewis, & Thornhill, 2009, pp. 107-108).

Saunders, Lewis, and Thornhill identify four different research philosophies: positivism, realism, interpretivism, and pragmatism [5]. Here, the appropriateness of the philosophy is dependent on the chosen research question. In addition, it is also important to bear in mind that a research question rarely falls within the framework of only one philosophy (ibid., pp. 107-119).

FIGURE 2 - RESEARCH ONION (SAUNDERS, LEWIS & THORNHILL, 2009, P. 138



For this thesis, *direct realism* posed as the most relevant. This is determined on the basis

[5] For an overview of the different research philosophies, please refer to Appendix A

on how we view the research process through the way we view the ontology and epistemology. The two concepts and how they applied to this thesis will be described in the following two sections.

2.1.1 Ontology

"Ontology is concerned with nature of reality" (Saunders, Lewis, & Thornhill, 2009, p. 110).

Ontology is, in other words, how the researcher views the way the world operates. Through the philosophy of direct realism, the position is that the observable reality is objective, or there is a reality that exists independently of the mind (ibid). With this thesis, we have chosen to analyse events and a reality that are assumed to be observable by quantitative measures.

However, the events and observable reality have been analysed through the chosen theoretical framework, and thus unquantifiable parts of the reality were unavoidable. This is what differentiates the direct realist from the realist. Such a distinction has been accounted through the interpretation of the findings.

2.1.2 Epistemology

"Epistemology concerns what constitutes acceptable knowledge in a field of study" (Saunders, Lewis, & Thornhill, 2009, p. 112).

Direct realists do, to a considerable extent, accept the interpretivist view about objectivity that, while it is not easy to prove the truth of a particular theory, not all theories are equal. For a realist, the world is objective, thus independent of the mind. As such, it is also independent of theory. In continuation, some theories will be better at explaining this reality. Therefore, it is the task of the realist researcher to utilise the theories that are better at explaining the world they attempt to study (Dunne, Kurki, & Smith, 2010).

The epistemology of the direct realist recognises that this thesis is a contribution to this specific field of study. However, the authors also recognise that other research methods like qualitative surveys or interviews could further add to this contribution.

2.2 Approaches

According to Saunders, Lewis, and Thornhill (2009, pp. 124-128) there are two approaches when deciding on how to acquire knowledge: deductive and inductive. The inductive approach dictates selecting the theoretical framework after the data collection. But since for the research of this thesis the selection of the theoretical framework was chosen before commencing the data collection, the authors have thus applied the deductive approach.

To perform a deductive research process, five sequential steps are necessary (Saunders, Lewis, & Thornhill, 2009, pp. 124-125):

1. Deducing a hypothesis from theory;
2. Expressing the hypothesis in operational terms;
3. Testing the operational hypothesis;
4. Examining the specific outcome of the inquiry;
5. If necessary, modify the theory.

All five steps were progressed through in the above order as follows:

Step 1	Deducing a hypothesis from theory	Chapter 3.0 Literature Review
Step 2	Expressing the hypothesis in operational term	Section 3.2.3 Literature Gap and Hypotheses Formulation
Step 3	Testing the operational hypothesis	Chapter 4.0 Data and Model Specification
Step 4	Examining the specific outcome of the inquiry	Chapter 5.0 Empirical Findings
Step 5	If necessary, modify the theory	

2.3 Strategies

In order to choose a research strategy, Saunders, Lewis, and Thornhill stress the importance of deciding on the objective of the research, which can be either exploratory, descriptive, or explanatory. Exploratory research is performed for a problem that has not been studied much yet and represents a very useful way to determine the best research design. Descriptive research is commonly used to describe characteristics of a phenomenon or population (ibid., pp. 138-141). As we already have numerable relevant researches available, and wanted to explain the causal relationship between applying investment promotion best practices and the FDI inflows through quantitative measurements, the objective of the research will be explanatory in nature.

After the research objective is settled, the research then needs a research strategy. The methods vary in effectiveness depending on the objective, but no strategy is superior or inferior to one another; rather, they complement each other (ibid.). To answer our research question, the selected strategies were: experiment, archival research, and structured observation. The experiment research strategy shaped and structured our research procedures whereas both archival research and structured observation strategies served as methods to gather the data (ibid., pp. 141-151). In the following sections, the three strategies and their implementation will be described in detail.

2.3.1 Experiment

The simple experiment intends to uncover causal links between two variables. But in order to answer our research question, we had to study the links between IFDI flows and the application of three best practices, whilst controlling for determinants of FDI with several variables. As we tried to uncover the links between a dependent and several independent variables, our study assumed the classification of a complex experiment, instead of a simple one (Saunders, Lewis, & Thornhill, 2009, pp. 142-144).

2.3.2 Archival Research

Archival research is the use of administrative records and documents as a source of quantitative data. As the data was not collected by us, and for a different purpose than aiding the research of this thesis, the data was secondary in nature. The archival research strategy allowed us to access historical data and monitor the changes of the observed variables, but the strategy restricts in the way that the study needed to establish what data was readily available, and utilise it to the highest degree (Saunders, Lewis, & Thornhill, 2009, p. 150). Finally, archival research also enabled the combination of multiple sources of times series data, from data banks like UNCTAD and World Bank, which is realistically the only way for us to perform a panel data analysis due to time and resource constraints (ibid., p. 262).

2.3.3 Structured Observation

The structured observation strategy is a way to attain quantitative data through observation, whereas the data collected from normal observation techniques are normally more qualitative in nature. As a source of primary data, the research entailed conducting structured observations of IPAs' websites and their Social Media presence. The structured observation allowed the collection of quantitative data that was employed to perform the panel data analysis mentioned in the previous section. The method followed the realist researcher's view, by making the observer take a detached stance from the observed objects. The quantitative stance was kept by observing how *often* a phenomenon takes place, rather than *why* it happens (Saunders, Lewis, & Thornhill, 2009, p. 300).

2.4 Research Choices

The research choice is the explanation of the design of the chosen research subject and the way it is carried out. For this thesis, we decided to perform a multi-method quantitative study, that is, two different methods of data collection of quantitative data were employed. Saunders, Lewis, and Thornhill (2009, pp. 150-153) argue that a multi-method provides better opportunities for answering the chosen research question as well as strengthens the research trustworthiness. As it was discussed earlier in section 2.1.2 Epistemology, the

direct realist recognises that the field of study could be improved if it qualitative data was incorporated in the research as well. Yet, this was beyond the scope of this research.

2.5 Time Horizon

During research planning it is important to clarify the intention of time horizon. Specifically, time horizon refers to whether the research was intended to be a 'snapshot' or rather a representation of events over a given period. Put in technical terms: was it the intention to perform a cross-sectional study or a longitudinal study? (Saunders, Lewis, & Thornhill, 2009, pp. 155-156).

For our thesis, as the intention was to observe the relationship between the application of hypothesised best practices of IPAs and their influence on inward FDI, the longitudinal study was selected. This choice was also made on the basis of a literature review of similar studies, where the same method had been utilised. The advantages of using longitudinal analysis will be covered in the next section.

2.6 Techniques and Procedures

As the researchers had selected the methodology and methods for the research, it was then the time to guide the reader in terms of how the data collection and the subsequent analysis were carried out to answer the research question.

2.6.1 Data Collection

In the following four sections, the selection criteria of the tested sample are defined and afterwards the collection techniques for the data used in the panel regression is explained.

2.6.1.1 Sample Selection

For the selection of our sample population, the goal was to perform analyses on as many countries recognised by the World Bank[6] as possible, so to include an exhaustive population. The removal of a country from the original sample was based on two criteria:

1) The country had to have a national IPA office, as it is the research objective to test the effect of investment promotion hypothesised best practices on IFDI;

[6] Refer to full list at World Bank (2017l)

2) Availability of data for the independent variables had to be satisfactory. This meant, for instance, that economies like the Democratic People's Republic of Korea or Cuba, for which very little economic data is available, were excluded to avoid obtaining not meaningful estimations.

Unfortunately, fulfilling these conditions meant that our sample became non-random. Fortunately, though, the so-called exogenous sample selection still allowed obtaining unbiased OLS estimates (Wooldridge, 2013, p. 315).

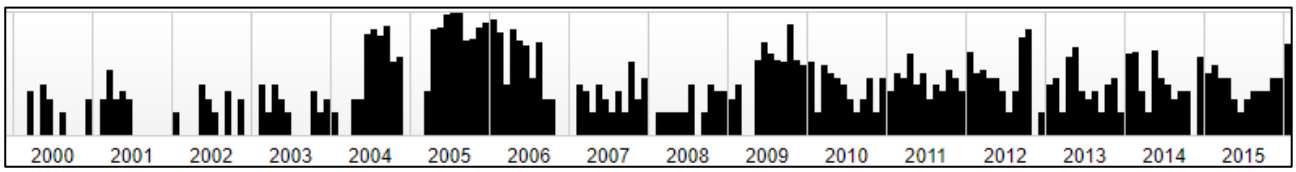
In the end, the overall objective was to have a sample selection comprising countries with a good combination of different economic development levels, varying sizes, and various geographical locations, so to preserve the principle of generalisation, an important characteristic of the deductive reasoning (Saunders, Lewis, & Thornhill, 2009, p. 125).

2.6.1.2 IPA Website Translations

The first hypothesised best practice that we wanted to test was the relevance of language translations of IPAs' websites. As we intended to perform an analysis on historical data, to retrieve it, we employed a tool provided by the non-profit library Internet Archive (2017). The tool, called the *Wayback Machine*, allowed us to browse cached websites[7] starting from 1996 when the organisation began archiving webpages, and specifically we were able to browse the historical versions of IPA websites and observe the available translations in the necessary timeframe.

As an example, Figure 3 provides an overview of the available web caches of the Australian IPA, *Austrade*, for the time period of interest. Each column represents a month in a calendar year, and the height of the column represents the amount of web caches available within that month. To ensure consistency, the data on available translations was collected from the last available cached website for each calendar year.

FIGURE 3 - AVAILABLE CACHED VERSIONS OF THE AUSTRALIAN IPA AUSTRADE FROM 2000 TO 2015. PICTURE FROM INTERNET ARCHIVE (2017).



[7] Web caching is the storage of web documents (Huston, 1999)

During the collection process, a hindrance was the change of IPA's web address within the span of years. For instance, this was the case with Côte d'Ivoire. In 2007, the Ivorian government changed the address for all its governmental websites from *go.ci* to *gouv.ci*, including the one of its IPA. However, the barrier was easily overcome, as the Internet Archive (ibid.) also provides a tool to search for historical websites that have been decommissioned.

Once all the translations were available, we proceeded with the creation of an index. The reasoning behind this is the assumption that as languages are spoken to a different degree worldwide, languages should not be weighed equally in terms of the capability to attract FDI. Further, we have assumed that the choice of adding or removing a language from an IPA's website, say Spanish, is influenced by the quantity of FDI generated from Spanish-speaking countries the year *before*. Hence, its construction required us to collect data for both outward FDI and percentage of each language speakers per country, so to generate the weighs allocated annually – with a one-year lag – to each language. Albeit the precise procedure necessary to create the index is thoroughly explained in Appendix B, we reckon that the following example will give a general, yet clear explanation of its mechanism. Let us consider 2014: during this year, OFDI originated from English-speaking population amounted to 37.6% of the total world's FDI, whereas Mandarin-speaking population accounted for 10.7%. Based on these data, in 2015, a website providing information in both languages would obtain a score of 48.3 in our index.

2.6.1.3 IPA Social Media Usage

The second hypothesised best practice was the usage of social media of the IPAs. Based on data availability, we decided to gather data from two social media networks, namely Twitter and Facebook. The data was collected singularly for each of the two social media platforms, and began from the specific year that the IPA created the respective account. The creation year of the Twitter profiles was readily available at the account pages of the individual IPAs (see Figure 4, which is an excerpt of the Swiss IPA's Twitter profile). To retrieve the creation year of the Facebook account, we checked the date of the first posting of the IPA's Facebook account and noted this as the starting date that the IPA began using this type of social media. Unfortunately, we had to disregard the usage of LinkedIn, that is, one of the most used

FIGURE 4 - TWITTER PROFILE OF S-GE THE SWISS IPA. SOURCE: TWITTER (2017)

social media networks for lead generation of marketing professionals, as the creation date is not publicly available (Nicholls, 2016, p. 81).

2.6.1.4 IPA WAIPA Membership

The third hypothesised best practice was the WAIPA membership of the IPAs. The organisation has gained and lost members since its inception in 1995 (WAIPA, 2017b), therefore we had to compare the annual reports every year within our selected time horizon, as they posted the current member list annually.

2.6.1.5 Determinants of Foreign Direct Investment

For the collection of control variables to proxy for determinants of FDI, the data was collected from various data banks including World Bank, UNCTAD, United States Patent and Trademark Office (USPTO). For a detailed description of the variables and their sources, please refer to chapter 4.0 Data and Model Specification.

2.6.2 Data Analysis

In the following section, the data analysis methods employed for the data collected are explained.

2.6.2.1 Panel Data Regression

In order to test the relationship between our variables of interest and the dependent variable, we employed the panel data regression technique. Specifically, a longitudinal, or panel dataset is one that follows a given sample of cross-section units across time, thereby providing multiple observations on each unit in the sample. Hence, a panel data possesses both a cross-sectional and a time series dimension.

$$Y_{it} = \beta_0 + \beta_1 x_{it1} + \beta_2 x_{it2} \dots + \beta_k x_{itk} + a_i + u_{it}, \qquad t = 1, 2, \dots, T; \;\; i = 1, 2, \dots, k.$$

Where t is time and i are observations.

A panel data presents several advantages over cross-sectional data (Hsiao, 2017). For instance, it provides more accurate inference of model parameters; as panel data usually contains more degrees of freedom and more sample variability than cross-sectional or time series data, econometric estimates are more precise. Further, it enables controlling for the impact of relevant factors excluded from the model; hence, panel data avoid, to a certain extent, obtaining misleading estimates due to ignoring the effect of omitted variables.

Particularly, these omitted variables, or unobserved factors that affect the dependent variable in panel data can be viewed as of two distinct types (Wooldridge, 2013, pp. 443-444). On the one hand, the variable a_i, generically called the unobserved effect or fixed effect, incorporates all the unobserved, time-constant factors. Since in our case the cross-sectional units refer to countries, we call a_i an unobserved country effect

or country fixed effect. Such a country fixed effect captures many different omitted factors (Hsiao, 2017). For one, it includes geographical features such as access to the sea, or the type of climate. Additionally, for historical and colonial reasons, different countries might show different propensity towards FDI. Finally, a_i might include other factors that are not exactly constant, but are typically slow to change; these might refer to certain demographic characteristics of a country's population such as age, gender, race, or religion. On the other hand, the error u_{it} is often called the idiosyncratic error or time-varying error, because it represents the unobserved factors that change over time. Examples include interest rates, inflation, as well as tax rate.

There are two popular statistical models for panel data analysis: the fixed-effects model (FEM) and the random-effects model (REM) (Borenstein, Hedges, Higgins, & Rothstein, 2009, p. 97). In FEM panel data, the goal is to eliminate a_i prior to the estimation, because it is thought to be correlated with one or more of the independent variable.

$$Y_{it} = \beta_1 x_{it1} + \beta_2 x_{it2} \dots + \beta_k x_{itk} + a_i + u_{it}, \qquad t = 1, 2, \dots, T; \; j = 1, 2, \dots, k.$$

On the other hand, when we assume that the a_i in uncorrelated with each of the explanatory variables:

$$Cov(x_{itj}, a_i) = 0, \qquad t = 1, 2, \dots, T; \; j = 1, 2, \dots, k.$$

the FEM "becomes" a REM:

$$Y_{it} = \beta_0 + \beta_1 x_{it1} + \cdots + \beta_k x_{itk} + a_i + u_{it}, \qquad t = 1, 2, \dots, T; \; j = 1, 2, \dots, k.$$

where an intercept is explicitly included to make the assumption that a_i has zero mean, that is, is uncorrelated with our independent variables.

Despite Wooldridge (2013, p. 478) argues that "FEM is always much more convincing than REM for analysis using aggregated data", it is fairly common in academia to select between FEM and REM through a statistical test, the Hausman's (1978) specification test (Wooldridge, 2013, p. 478).

2.6.2.2 Panel Data Preconditions

In order to show that ordinary least squares (OLS) estimators are the best unbiased estimators for the panel dataset, a set of five assumptions, called the Classical Assumptions, must be satisfied. The first three

assumptions are necessary to demonstrate that OLS are unbiased estimators, that is, they provide us with an estimate that is centred around the true population on mean[8].

The first assumption is *linearity* of the parameters $\beta_0, \beta_1, \beta_2, \dots, \beta_k x_{itk}$. Although the regression must be linear in parameters, this assumption is quite flexible as it allows the dependent and independent variables to take on arbitrary functions, such as natural logarithm[9] and squares.

The second assumption refers to *no perfect collinearity*, that is, there is no *exact linear* relationship among the independent variables. It is essential to note that this assumption does allow the independent variables to be correlated: it only rules out perfect correlation between variables. Similarly, *nonlinear* functions of the same variable are also permitted, since they are not exact linear functions. Finally, it is important to keep in mind that multicollinearity is a sample-specific problem (Gujarati & Porter, 2010, p. 254).

The third assumption is the *zero-conditional mean*, that is, the error term u_t is uncorrelated with each of the independent variables for every time period. Such an assumption can fail for several reasons. One is functional form misspecification, that is, the functional relationship between the dependent and independent variables is not correctly specified; for instance, an independent variable enters the model in its level form when it is actually its logarithm that shows up in the true population model. Another motive is omitting an important factor that, at the same time, is correlated with any of the independent variables. Unfortunately, due to data limitations or simply ignorance, this assumption is unrealistic: in any application, some key factors will be excluded from the model, thereby violating this assumption. When assumption three does not hold, for any reason, the independent variable correlated with the error term is defined as *endogenous*.

While fulfilling these three assumptions makes the OLS unbiased, there exist many other unbiased estimators. Hence, assumption number four and five are added to the previous three in order to satisfy the Gauss-Markov Theorem (GMT). Fulfilling all of the five requirements implies that OLS estimators are BLUE[10], that is, have the smallest variance amongst all unbiased *linear* estimators. This condition is fundamental as a smaller variance means more precise estimates (Wooldridge, 2013, p. 324).

[8] Unbiasedness does not imply that the value we would obtain from applying our preferred estimator to our specific sample would be equal to the true population value. Rather, it is the procedure by which OLS are obtained to be unbiased.
[9] Natural logarithm, logarithm, and log will be used interchangeably but referring to the first.
[10] BLUE stands for Best Linear Unbiased Estimator.

The fourth assumption is *homoscedasticity*, that is, given any value of the independent variables, the variance of the error term is equal. If this is not the case, the variance is said to be heteroscedastic. In studies with a cross-sectional nature involving heterogeneous data, that is units with different size, heteroscedasticity appears to be the norm rather than exception (Gujarati & Porter, 2010, p. 283). An example would be the larger variance of household expenditures as the household income increases. Clearly, the larger (smaller) the income, the greater (lesser) the "freedom" in terms of expenditure magnitude.

The fifth assumption is *no autocorrelation*, that is, the errors in two different periods are uncorrelated. However, for the econometric analysis of panel data, assuming that the errors are independently distributed over time is unrealistic (Wooldridge, 2013, p. 433). For instance, let us assume that for a specific reason, we cannot observe interest rates; in such a case, then, interest rates will enter the unobserved factors. Obviously, if a country experienced extremely high interest rate affecting IFDI in, say, 2003, the same country would also be likely to bear above average interest rates for the next period too.

The sixth and last assumption, namely the *normality of residuals*, is included to demonstrate that OLS estimators are not simply the best unbiased estimators within the linear class, but amongst *all* unbiased estimators. Knowing the mean and the variance of the OLS estimators is useful to describe their precision, however, to perform statistical inferences, it is paramount to know the sampling distribution of such estimators. This assumption posits that the unobserved error is normally distributed, thereby implying the normal sampling distribution of the OLS estimators too.

Finally, we would like to stress the importance of trends in panel data context. Recognizing that some variables show the tendency to grow, or diminish over time is paramount. Indeed, ignoring that two, or more, variables are trending in the same or opposite directions can lead to drawing misleading conclusions about their relationship, which have nothing to do with causality.

Having clarified these points, the next subsection will cover more in-depth the consequences of the second assumption failure. Hence, endogeneity, its possible sources, and its remedies will be thoroughly treated.

2.6.2.3 Endogeneity

As the previous subsection has briefly introduced, endogeneity arises when at least one independent variable is correlated with the error term or, put formally, when the error has an expected value different from zero given any values of the independent variables, that is:

$$E[u|x_1, x_2, \dots x_k] \neq 0$$

There exist three possible sources of endogeneity: measurement error, simultaneity and omitted variable bias (OVB). Measurement errors can refer to dependent or independent variables. For the former, such errors do not represent a cause of concern, granted that such mistakes are not correlated with any of the independent variables; hence, if errors in the Y are simply due to reporting, OLS will still be unbiased and consistent (Wooldridge, 2013, p. 308). It is a whole different story when the independent variables are plagued with measurement errors. In this case, OLS estimates will be biased and inconsistent (ibid., p. 311).

Simultaneity bias is the situation in which independent and dependent variables are determined together, that is, not only the former affects the latter but also the other way around. In such a situation, OLS regression cannot determine the direction of causality, and therefore cannot determine whether, and the magnitude of, a change in the independent variable will affect dependent variable.

The last, and perhaps most common source of endogeneity is the OVB. Not surprisingly, it occurs when a relevant variable is excluded from the model (ibid., p. 86). However, in case the omitted variable was not correlated with the independent variables, the OLS estimators would remain unbiased. On the other hand, if the opposite was true, OLS estimator would be biased and the magnitude and the sign of the bias will depend on some conditions. For the magnitude, if the omitted variable is not important in its own right, that is, it is not an important determinant of the dependent variable, the bias will be small and neglectable. Regarding the sign, the bias direction is determined by both the sign of the correlation between the independent variable and the omitted variable and the sign of the correlation between the dependent variable and the omitted variable (ibid., p. 86).

Thus, endogeneity poses a problem since it becomes impossible to estimate the real effect of included explanatory variables on the independent variable, given that the former may be absorbing the effect of omitted factors also influencing the dependent variable. When faced with endogeneity problems, the application of two-stage least squares (2SLS) statistical technique enables overcoming the above-mentioned limitations of OLS estimates. Such a technique uses multiple instrument variables (IVs) to obtain consistent[11] parameter estimates. However, its successful implementation rests on the simultaneous fulfilment of two conditions (ibid., p. 86).

1. Each IV must be uncorrelated with the error term, u, that is, the IV is *exogenous*: $Cov(IV, u) = 0$;

[11] An estimator is considered to be consistent when, as the sample size becomes larger and approaches infinity, the sampling distribution of the parameter would be centred on the true population parameter (Wooldridge, 2013, pp. 758-759).

2. Each IV is correlated with the endogenous variable, x, that is, the IV is *relevant*: $Cov(IV, x) \neq 0$;

Whether these conditions are met or not, it is not difficult to prove (ibid., pp. 512-515). The test of overidentifying restrictions investigates whether the IVs are exogenous; in this case, a rejection of null hypothesis casts doubt on the validity of the instruments. The underidentification test assesses whether the equation is identified, that is, the IVs are relevant; a rejection of the null indicates that the instruments are correlated with the potentially endogenous regressor. In addition, it is extremely important to test for the actual endogeneity of the potentially endogenous independent variable: if this happens not to be case, 2SLS technique should be disregarded for OLS would produce more efficient estimates. In this test, the null hypothesis states that the potentially endogenous regressor can be treated as exogenous.

Finally, a researcher should bear in mind that applying 2SLS in the context of panel data raises the classic concerns about heteroscedasticity and serial correlation, thus requiring responding for their potential presence adequately.

3 Literature Review

Through the deductive approach, the following chapter provides a literature review of relevant themes related to our problem statement. The first part will walk the reader through the main literature of FDI, aimed at identifying its determinants. The second part will offer a review of the main literature related to IPAs, their role and their effectiveness. In the third part, an in-depth explanation of the IDP theory will be provided. Finally, based on the IPA literature review, the last section will uncover the limitations of the current academia on IPA and propose our hypotheses. Such hypotheses will then be operationalised and tested in chapters 4.0 Data and Model Specification and the findings discussed in chapter 5.0 Empirical Findings.

3.1 Theories of Foreign Direct Investment

For this thesis, we have decided to resort to Dunning's eclectic paradigm (1977; 1980; 1988) (2000; 2001) in order to identify the control variables to be inserted in our econometric model. The choice has been prompted by the fact that such a paradigm ambitiously encompasses aspects of different but complementary theories (Dunning, 2000): the industrial organisation approach to FDI, the internalisation theory, and the macroeconomic theory of FDI. Each differs in the choice of the unit of analysis (Dunning & Lundan, 2008, p. 80). The first stream of thought addresses why firms of one nationality are more capable of exploiting foreign markets than indigenous firms; these studies also desire to explain why such firms seek to control value-added activities abroad. The second theoretical strand pivots on Coase (1937) and McManus (1972) to explain MNEs' existence and growth; scholars belonging to the so-called internalisation school of thought consider the MNE an organisational hierarchy that internalises cross-border markets for intermediate products[12]. Finally, the third group of academics utilises neoclassical trade models as departure point and extends them to explain the pattern of, and the reason for international production; with their macroeconomic approach, they are more interested in understanding why firms of different nationalities exhibit diverse inclinations to undertake international trade and FDI activity. In sum, by accommodating these partial micro- and macro theories of international production under a unique "*umbrella*", the eclectic framework provides groups of variables relevant to an explanation of all kinds of FDIs.

The rest of the chapter proceeds as follows. We begin the discussion by digging into the three different schools of thought upon which Dunning constructed his framework. Subsequently, we turn our attention to

[12] Intermediate products include financial capital, technology, entrepreneurship, management and organisational expertise, values and cultural norms, as well as access to markets across national boundaries (Dunning & Lundan, 2008, p. 7)

the specifics of his framework. Finally, after describing its refinements and extensions, as well as its virtues and limits, we argue why it still represents one of the most prominent paradigms within the field of international business for analysing the determinants of FDIs.

3.1.1 Pre-Hymer

It is after World War II that FDIs, and thus MNE, begin to emerge and gradually became significant (Hosseini, 2005). Particularly, the 1960s are widely acknowledged by scholars to represent the inception of the theory of the MNE[13] (Dunning & Rugman, 1985; Pitelis, 2005; Buckley, 2006; Dunning & Lundan, 2008). Prior to these years, a medley of diverse attempts sought to explain the establishment of activities abroad by firms (Dunning & Lundan, 2008, pp. 82-83). Amongst them, the neoclassical financial theory of portfolio flow emerged as the prevailing justification of international capital movements. Portfolio theorists argued that in such a perfectly competitive world, exempt from transaction costs, cross-border capital flows happened in response to differential in interest rates between countries (Iversen, 1936). In their view, capital flew solely from low-profit countries to high-profit countries until the discrepancy in rates of return was removed, at which point an equilibrium in the international distribution of capital prevailed.

By the 1960s, however, evidence on cross-border investments contradicted such a claim (Hymer, 1976, p. 11). First, capital not only tended to move from high-interest to low-interest countries but also flew in both directions at once. Second, some countries were both home bases for many MNEs and hosts to many subsidiaries controlled abroad; third, investments were mainly undertaken by industrial firms and not by banks and financial intermediaries. These events were clearly signalling that interest differential could not adequately explain FDI.

3.1.2 The Industrial Organisation Approach to FDI

Hymer's (1976)[14] doctoral thesis is the first study questioning such a lack of explanatory power. In his ground-breaking contribution, the Canadian economist particularly criticises the merely financial perspective adopted by portfolio theorists. Hymer argues, FDI not only involves the transfer of financial capitals but also the relocation of intermediate products, such as technological and managerial skills, while retaining property

[13] Given that FDI is the means through which a company becomes a MNE, Dunning and Lundan (2008) use the terms theory of MNE and theory of FDI interchangeably. We will follow the same use of terminology.
[14] Although the paper had been completed in 1960, it was not published until 1976.

rights over such assets. With this concept firmly in mind, Hymer claims that "if we wish to explain [foreign] direct investment, we must explain control" (Hymer, 1976, p. 23).

Two major reasons are proposed to explain why an investor pursues control in foreign countries (Hymer, 1976, p. 33). The first rationale is the desire to capitalise on advantages not held by foreign competitors; the second reason is the attempt to reduce, or remove, international competition through collusion. Although Hymer does not emphasise it, the two factors are strongly connected (Casson, 2015, p. 59): if the same competitive advantage is shared among various enterprises, which are owned and controlled by the same entity, home-grown monopoly power can be preserved and extended abroad.

Obviously, the firm could export the commodity in which the advantage is embodied, or license it to a foreign enterprise rather than undertake foreign production. The selected method though, largely depends on the degree of market imperfection. Possible bilateral monopoly situations (Hymer, 1976, p. 49), perils of technological misappropriation (ibid., p. 50), and the costly haggling between licensor and licensee associated with the assessment of the value of the technology may impede the fully appropriation of returns from its utilisation, thus favouring direct control over licensing.

Hymer's departure point is the observation that indigenous firms possess an advantage over foreigners in their domestic market (ibid., p. 34). Local enterprises have superior information of their national environment, a knowledge that foreign firms can only acquire at a cost[15]. To be competitive, therefore, firms running operations abroad must possess some firm-specific advantages (FSAs) created and developed in the home market, which compensate for the disadvantaged position of being a foreigner, and allow non-national firms to compete on equal terms. To justify their existence and exclusivity, Hymer follows Bain's (1956) contribution on barriers to entry, which generate deviations from perfect competitions; economies of scale, knowledge advantages, distribution networks, and product diversification influence the firm's ability to close markets and thereby gaining and sustaining a competitive advantage, which in turn generate rents. In Hymer's perspective thus, MNEs are the result of the existence of structural market failures (Hymer, 1976, p. 42): firms set up foreign production activities solely to extend and exert their monopolistic market power abroad to obtain above-normal profits.

Albeit being the seminal contribution to the theory of the MNE (Pitelis, 2005; Buckley, 2006; Dunning & Lundan, 2008), Hymer's dissertation still represents a partial explanation of international production

[15] Relabeled by Zaheer (1995) as 'liability of foreignness'.

(Dunning & Lundan, 2008, p. 86). One shortcoming is the inadequate treatment of the transaction-cost side of the literature (Dunning & Rugman, 1985; Pitelis, 2005). Transactional imperfections arise naturally and reflect the inability of the market to organise transactions in an optimal way, to which the MNE responds by creating an internal market. Such a process of internalisation improves efficiency without generating any rent for the MNE, and stands in sharp contrast to Hymer's overemphasis on the market-power advantages of MNEs stemming from structural failures (Dunning & Rugman, 1985; Pitelis, 2005). Another notable deficiency is the scant attention dedicated to the choice of MNE's activity location (Dunning & Rugman, 1985, p. 129; Pitelis, 2005, p. 31). By this omission, Hymer neglects the importance of the geographical and spatial dimension of the MNE and the way location-specific factors are determined interdependently with firm-specific factors in the process of FDI.

Despite these limits, scholars award Hymer with two great merits. First, the Canadian economist laid out the foundations for a microeconomic explanation of the MNE; by centring the study of FDIs on the firm, the focus of the international production analysis was shifted from the macro- to the micro-level (Hennart, 2009; Forsgren, 2008). Second, and perhaps more importantly, Hymer brought the analysis of the MNE into the field of industrial organisation, thus breaking out from the "intellectual constraints" of neoclassical approaches[16] (Dunning & Rugman, 1985; Teece, 1985; Forsgren, 2008); this acknowledgment of market failures responsibility in the creation of the MNE became the cornerstone that sparked the development of several future studies during the 1970s and the 1980s (Teece, 1985; Hosseini, 2005; Dunning & Lundan, 2008, p. 85; Forsgren, 2008).

3.1.3 The Internalisation Theory

If the role of transaction costs is neglected by Hymer, it becomes the pillar upon which the internalisation theory is erected (Buckley & Casson, 1976; Hennart, 1982; Rugman, 1982). Such a theory was established independently in two transatlantic locations (Rugman, 1986, p. 102). In North America, Hennart (1982) developed his own comprehensive theory of the MNEs by drawing upon McManus' (1972) work on

[16] In other words: perfect competition.

transaction costs. However, two British scholars, namely Buckley and Casson (1976), were the first to propose an explicit presentation of internalisation theory based upon Coase's (1937) pioneering work.

This theory is concerned with the ways in which economic activities are organised[17]. Within any given business sector, all economic activities are interdependent and linked by flows of intermediate products, which sometimes are semi-finished products but more often are intangibles[18]. Primarily due to the intrinsic nature of such intangible assets, external markets fail to carry out the coordination of economic activities efficiently. Obviously, the more knowledge-intensive the intermediate product is, the more likely the market inefficiency. For instance, the uncertainty and risk associated with marketing or licensing unpatentable knowledge might prompt the seller to internalise the market through forward vertical integration. Thus, the theory postulates that, whenever market failures generate superior costs for inter-firm than for intra-firm transactions, firms will internalise the market to eliminate, or at least reduce, such transaction costs.

Transaction costs arise because market agents possess bounded rationality and are prone to opportunistic behaviours (Williamson, 1975). Bounded rationality, the concept that every individual must make decisions under some constraints such as limited information and time availability, paves the way for the opportunistic behaviour, which refers to the tendency of individuals to act out of self-interest and cheat when such actions improve their position in an economic transaction. In turn, these human factors interact with environmental ones such as uncertainty, the unforeseeable changes in the market, and asset specificity[19].

Firms can in part weaken their effect, for instance by acquiring additional information upon the counterparty or specifying the contract. These efforts, though, are costly and thus favour organisational hierarchy over external markets as a mechanism to coordinate economic activities, but internalising markets bears some costs, too. For instance, the increased flow of information generates larger communication expenses whereas the ability of the management to organise internal transactions mainly affects administrative costs. In addition, the international scenario in which such activities are embedded even intensifies such expenditures. Hence, only if it is more convenient to organise business activities within the same firm rather

[17] Buckley and Casson (1976, p. 33) consider, among others, marketing, R&D, production, and training of the labour force.

[18] In their seminal work, Buckley and Casson (1976, p. 33) define intangibles as technological, managerial, and entrepreneurial knowledge and expertise, embodied in patents and human capital.

[19] Asset specificity refers to assets that are tailored to a particular transaction and cannot be easily redeployed outside the relationship of the parties to the transaction.

than carry them out through transactions between independent firms operating in different markets, an MNE is created.

In sum, MNEs exist because they represent a more efficient alternative to the market as a place in which economic activities are coordinated across borders. This hints at the common elements that the internalisation theory shares with the industrial organisation approach and Transaction Cost Economics (TCE), although with some distinctions (Forsgren, 2008). Similarly, to Hymer, the internalisation theory deems market imperfections to be the rationale behind the existence of MNEs, but the perspective taken varies considerably with respect to him. The internalisation proponents revolve their theory around natural market imperfections, which prevent the market from organizing transactions optimally, whereas Hymer only recognised the existence of structural failures, which give rise to monopoly rents. Hence, the establishment of foreign activities mirrors an efficiency-seeking rather than the rent-seeking behaviour proposed by Hymer. Similarly to TCE, internalisation theory applies the logic that the scale of a firm is set at the margin where the benefits and costs of internalisation are equalised, but in an international context (Cantwell, 1991; Forsgren, 2008; Hennart, 2014; Buckley & Casson, 1985; 1991; Meyer & Wang, 2015). However, a central difference to Williamson's work is that the concept of asset specificity, monumental in TCE, is less central in the internalisation theory (Hennart, 2009; Meyer & Wang, 2015). Foreign expansion can be majorly explained by the *non-specificity* of knowledge transfers, given their public good features, that causes external markets to be inferior to the internal organisation of transactions (Buckley & Casson, 1976, p. 40). Hence, scholars of the internalisation theory postulate that maximising rents from knowledge requires refraining others from its use, unless property rights are legally protected and enforced.

Yet, while it has provided one of the main theoretical rationales for the existence of the MNE (Buckley & Strange, 2011), internalisation theory has not gone unchallenged. The major criticisms state that it is an incomplete theory (Dunning & Lundan, 2008). Apart from short-run profit maximisation, its detractors argue that other reasons that might prompt firms to engage in foreign activities are neglected; many cross-border M&As, for instance, are undertaken to gain market power as well as access new capabilities, markets, or resources (Dunning, 2000, p. 180). A second criticism relates to the growth of a range of inter-firm coalitions that result in de facto internalisation, but without equity ownership; the advent of alliance capitalism, which may be perceived as a variant of hierarchical capitalism, offers opportunities for new inter-firm organisational modalities, the rationale for which internalisation theory can only partly explain. Finally, Hennart (2014) argues that internalisation is essentially a theory of the boundaries of firms, and it needs to be combined with a theory of location in order to provide a comprehensive account of MNEs and FDI.

3.1.4 The Macroeconomic or Factor Endowment Approach to Foreign Direct Investment

As both the industrial organisation approach and the internalisation theory are essentially behavioural explanations of the variables determining the foreign activities of particular firms, the macroeconomic approach to FDI stands at the opposite pole (Dunning & Lundan, 2008). Instead of trying to explain why firms decide to undertake a specific economic activity in a particular country, this strand of theory employs revised traditional trade models to explain *which* activities of firms are best operated in particular countries (ibid.).

The beginning of this chapter has described how the Portfolio Theory, which essentially built upon the neoclassical Heckscher-Ohlin (H-O) model, was the dominant paradigm in international economics until the 1950s (Flanders, 1989). However, the significant technological progress and the remarkable rise of FDI in the 1960s, made clear that the comparative advantage doctrine was incapable to explain such a phenomenon (Morgan & Katsikeas, 1997; Hosseini, 2005). Considering these restraints, many scholars sought to refine and adapt the H-O model to allow the explanation of the pattern of, and the reason for FDI (Dunning & Lundan, 2008)[20].

Vernon (1966) is one of the trailblazers in recognizing that FDI explanation demanded theories of international trade to reflect technological changes (Appleyard, Field, & Cobb, 2010). In the 1960s, although tackling the same matter from a more macro and trade oriented perspective than Hymer's (Dunning, 2009), Vernon proposes the Product Cycle Theory (PCT). By relaxing some assumptions of the neoclassical trade theory, his greatest merit is the intuition to apply a microeconomic concept – the product life cycle – to shed light on a macroeconomic phenomenon – the foreign activities of US enterprises in the post-war period (Dunning & Lundan, 2008). In the PCT, Vernon emphasises how country-specific factors influence both the *origin* of the competitive advantages of firms and the *location* of the FDI arising from them. Notably, the former is determined by the structure of their home country's factor endowments, demand patterns, and market structures, whereas the latter is influenced majorly by labour cost differentials.

The PCT distinguishes three distinct stages in the life cycle of a new product. In the first stage, or new-product stage, the product is manufactured and consumed in the firm's home country and international trade does not occur. The product introduction is characterised by lack of standardisation, where the inputs, the production processes, and the design itself may yet not be clearly set. This uncertainty, Vernon argues, carries

[20] A detailed description is beyond the scope of this thesis. If the reader is interested, please refer to Leamer (1995).

several implications that influence the firm's locational selection stronger than typical factor such as transportation costs. As firms need to familiarise with the product and the market themselves, they necessitate staying close to focal market where communication with the customers is swift and where potential inputs for production are easily available.

In the second stage, or maturity stage, as the demand for a product expands, a certain degree of standardisation usually takes place. The possibility to achieve economies of scale through mass production encourages the commitment to specific sets of products and processes; this PCT feature contrasts with H-O model, in which constant returns to scale are assumed. During this stage, other developments occur too. Stemming particularly from countries with similar structures, product demand begins to appear abroad, and this surge in foreign demand leads to export activities towards other developed countries. Firms, given reduction of uncertainty surrounding production operations, also begin to shift the attention from product characteristics onto production costs. In addition, as the foreign markets expand over time, locating the production abroad becomes even more tempting. In assessing such a possibility, cost considerations are obviously the chief rationale: In the situation where the sum of production and transportation costs is larger than those for production abroad, firms will tend to establish production facilities in the importing countries; Vernon, here, relaxed another assumption of classical and neoclassical trade models, namely the international immobility of production factors. Interestingly, the relocation of production facilities bears some consequences in terms of trade, too. At this point, the export from the home country falls and if labour costs differences are large enough to offset transportation costs, the home country might even begin to import from the foreign subsidiary.

Finally, the last stage is the standardised-product stage. By this time, the product features are familiar to consumers, and manufacturers are aware of the production process characteristics. The introduction of new products in developed countries and the further search for differential in labour costs are likely to push production in developing countries that will eventually become exporters.

In sum, Vernon's contribution is essentially an extension of neoclassical theory of the spatial distribution of factor endowments to embrace intermediate products. Like Hymer though, Vernon offers a theory only partially capable to address the issues surrounding MNE activity (Dunning & Lundan, 2008, p. 86). Nonetheless, the product cycle was the first dynamic interpretation of the determinants of, and relationship

between, international trade and foreign production. Despite a few exceptions[21], from Vernon and onwards, international trade models have mainly ignored or downplayed the significance of firm-specific characteristics (Dunning, 2000) and the fact that firms engage in multiple economic activities (Rugman, 1980, p. 374; Dunning, 1988; 2000; Dunning & Lundan, 2008). These deficiencies highlight the two chief shortcomings of neoclassical models. First, they are locked into perfect competition and its restrictive assumptions; trade models are hence unable to explain trade flows based less on the exploitation of location-specific factors (inter-industry) and more on the need to exploit manifestations of market failures (intra-industry), such as product differentiation and economies of scale. Second, they place their focus exclusively on *final product* markets; firms are assumed to engage only in a single value-added activity, hence neglecting their role as transacting agents of intermediate products. Consequently, these models cannot explain trade in *intermediate products* on the basis of the advantages of common *ownership* and *organisation* of production activities (i.e. market internalisation).

3.1.5 The Eclectic Paradigm

The prior sections have reviewed some of the leading explanations of the existence and growth of MNE. The industrial organisation approach addresses why firms of one nationality are more capable of exploiting foreign markets than indigenous firms. The internalisation theory is directed at explaining why the cross-border transactions of intermediate products are organised by hierarchies rather than determined by market forces. Finally, the macroeconomic approach focuses on why firms of particular nationalities exhibit different propensities to engage in international trade and FDI. The previous literature review has also demonstrated how, although each of these theories adds up to the understanding of the cross-border organisation of economic activity, they can only partially explain such a phenomenon. Indeed, as subsection 3.1.5.2 will present diverse rationales for FDI, it follows that it is not possible to conceive a single, overarching theory capable of explaining all forms of FDIs. Hence, to overcome such a limit, the next subsection will introduce the eclectic paradigm: the most ambitious attempt to integrate each of the main theoretical strands described earlier (Dunning & Lundan, 2008, p. 82). Following this, criticisms of the paradigm will be presented and finally a subsection presenting how institutions has been incorporated into the model.

[21] Notably Markusen (1995)

3.1.5.1 The Eclectic Paradigm Specifics

The reader can recall that a MNE possesses two distinctive features that differentiate it from other organisations also involved in international business. First, it organises and coordinates multiple value-added activities across national borders. Second, it internalises at least some of the cross-border transactions for the intermediate products arising from such activities. Based on these key traits, it appears clear that any attempt at explaining the determinants of FDIs requires the simultaneous analysis of both the *location* of value-added activities and their *ownership* and *configuration*, intrinsically entailing the necessity to integrate different strands of economic thought.

With this concept clearly in mind, the eclectic paradigm was first presented by John Dunning in a lecture related to the Nobel event in 1976. Initially incarnated as the eclectic theory (or OLI) (Dunning, 1977), it rather quickly metamorphosed into a paradigm and underwent several refinements and expansions over time (Dunning, 1988; 2001; Cantwell & Narula, 2001; Tolentino, 2001). Dunning's choice of the word eclectic is not accidental. It reflects the aforementioned idea that a full explanation of cross-border activities of enterprises needs to draw upon several strands of economic theory (Dunning, 1988; 2001): taken separately, neither is capable of offering a comprehensive explanation of MNE activity; taken jointly, they offer a more fully-fledged description of FDIs (Forsgren, 2008, p. 50). In other words, the value of the whole of the OLI variables is greater than the sum of the parts (Dunning, 2000). The paradigm, thus, encompasses the core elements of different but complementary theories (ibid.): the *firm-specific advantage*, *the location-specific advantage*, and the *internalisation advantage*. By considering these factors holistically, the OLI paradigm postulates that an FDI is the most appropriate form of international business exclusively if three conditions are simultaneously satisfied:

1. The firm possesses ownership advantages (O-advantages) that are not available to the host country's firms and can be transferred across borders (Peng & Meyer, 2011). Dunning (1988; 2006) distinguishes distinct types of O-advantages. *Asset-specific advantages* (Oa) arise from the possession of particular intangible assets; the firm can boast, say, excellent product innovation capabilities and/or relevant experience in marketing. *Transaction cost-minimizing advantages* (Ot) stem from the ability of a firm to coordinate geographically dispersed valued-added activities. Some arise from the size of the firm, which offers synergistic economies in production as well as the ability to purchase inputs at terms that are more favourable. Others specifically result from the multinationality of the firm. The wide geographical presence offers the opportunity to obtain better knowledge about international markets and the capability to exploit national differences in factor endowments. *Institutional assets* (Oi) cover a range of formal and informal institutions that govern

the value-added process within firms. Corporate culture, incentive systems, and leadership are among those. Either intangible or tangible (Caves, 1971; Hymer, 1976; Porter, 1985), FSAs generate a competitive advantage that enables the firm to overcome the liability of foreignness.

2. The local context provides some kind of locational advantages (L-advantages), as the spatial distribution of L- advantages is assumed uneven. Operating the O-advantages in a well-endowed foreign location allows the firm to create value otherwise unachievable in the home country. The choice of location may be prompted by the presence of different types of L-advantages (Dunning & Lundan, 2008). Many foreign investors primarily seek to access foreign markets expecting future demand to grow (Market as L-advantage). Other firms try to tap into local resources; it includes natural assets such as raw materials, but also created resources like infrastructure, human capital, and technology (Resources as L-Advantages). Companies also benefit from the clustering of economic activities in certain locations; specialised suppliers, skilled labour force, and knowledge spillovers all attract foreign investments (Agglomeration as L-advantages). Finally, the institutional environment plays a key role too; a clear and functioning legal framework, low corruption levels, and an efficient bureaucracy make a country more appealing to invest in (Institutions as L-advantages). Clearly, the more immobile the endowments that firms need to use jointly with their O-advantages, the more firms will choose to exploit their O-advantage in a foreign location.
3. It must be in the best interests of the enterprise possessing O-advantages to transfer them across national boundaries within their own organisations rather than using market transactions (I-advantages). As markets are imperfect, some transactions can become prohibitively expensive, and the size of these transaction costs is even exacerbated in international environments. Under these circumstances, exporting and licensing are not the most suitable solution to service a foreign market. Rather, it pays to bring interdependent activities under common ownership and organisation to replace cross-border transactions.

Therefore, the eclectic paradigm asserts that the exact form of the resulting international production is a function of ownership, location, and internalisation (OLI) advantages. A firm possessing O- and L-advantages will find it more profitable to manufacture directly abroad rather than produce domestically and export its product. Oppositely, a firm will most likely select to increase its production at home and service a foreign market through exports if its O-advantage can benefit from internationalisation but setting up a unit in the target country does not provide any L-advantage. Finally, in case of absence of I-advantages, the firm will be better off licensing its O-advantage to local firms (Dunning, 1980).

Their significance however, and thus their configuration, is strongly contextual and influenced by three structural variables respectively at macro-, meso-, and micro-level (Dunning & Lundan, 2008). First, it will reflect the economic and political features of the country or region of the investing firms, and of the country or region in which they are seeking to invest. Second, the industry and the nature of the value-added activity in which the firms are engaged, that is, the range and types of products commercialised. Third, the final choice will also depend on the specific characteristics of the individual investing firm, including the underlying managerial strategies in response to the long-term goals.

3.1.5.2 The Four Motives for Foreign Direct Investment

The previous subsection suggested that the eclectic paradigm offers the basis for a general explanation of FDI by providing a cluster of variables capable of doing so. We illustrate this point by referencing to Table 1 - Types of international production (Dunning, 1993, p. 84)

Dunning (1993) describes four main typologies of FDI based on the motive behind the investment from the perspective of the investing firm (Dunning & Lundan, 2008, p. 68). A first motivation is *resource seeking,* where enterprises invest abroad to acquire specific resources at a lower real cost than what could be achieved in the home country, if obtainable at all. The resources coveted are diverse. Some firms, namely those in the primary and manufacturing sectors, seek physical resources such as fossil fuels, metals, and agricultural products; these FDIs are driven by cost minimisation goals or securing a stable source of supplies. Other enterprises chase economical supply of unskilled or semi-skilled labour force; in this case, operations abroad are established in low labour cost locations by both manufacturing and service MNEs based in countries with high labour costs. The labour-intensive output produced in the host country is principally destined for export. Finally, some FDIs are prompted by the need to acquire technological expertise, management expertise, and organisational skills; Firms may benefit from establishing a presence in key industrial clusters since gaining access to such sets of specialised skills and capabilities improve companies' competitive position.

A second motivation is *market seeking*, where firms invest in a specific country with the aim of supplying goods or services to local and regional markets. Usually, these markets have been previously served through export. However, either because of tariff or because of an augmented market size, MNEs perceive that local production has become the best solution to service them.

Apart from market potential and tariff jumping, Dunning and Lundan (2008, p. 70) propose three other motives behind market-seeking investments. One is the necessity to follow a main supplier or customer that has set up manufacturing subsidiaries abroad; for instance, many Japanese suppliers have established

production facilities in the US to purvey American plants of major Japanese automakers. The second rationale is local responsiveness. As consumer preferences vary tremendously around the world, products frequently need to be adapted to specific tastes, preferences, and customs to better cater to local markets, on-site presence significantly increases the ability to understand these differences. Local production may also be prompted by the need to familiarise with the local "rules of the game"; grasping the way of conducting business, effective marketing procedures, legal requirements, and distribution channels help to reduce the competitive disadvantage faced by foreigners. The third reason is distance. Whenever production costs are less than transportation costs, enterprises might decide to manufacture goods near the main centres of consumption; obviously, firms whose home country is located geographically distant from important markets will be more likely to engage in market-seeking FDIs than companies located in neighbouring countries will.

However, the fundamental reasons for market-seeking investment remain the exploitation of promising markets, as well as the host governments' policies (Dunning & Lundan, 2008, p. 71). Because the reason for horizontal FDI is to better serve a local market through local production, market size and market growth of the host economy play important roles, whereas macroeconomic stability, infrastructure development, and openness to FDI, reflect the action of governments.

A third motivation is *efficiency seeking*, which is the attempt to exploit the concentration of production in a limited number of locations from which multiple markets are supplied. Usually, it occurs when resource-based or market-seeking investments have become adequately numerous and important to require some degree of optimisation; such a rationalisation of operations takes place when the firm can achieve gains from the coordination of geographically dispersed activities (Dunning & Lundan, 2008, p. 72).

Efficiency can be of two kinds. Some enterprises seek product efficiency, which aims at exploiting disparities in the availability and cost of the traditional factor endowments in different countries. An example is the division of labour within MNEs in both developed and developing countries. Information- and technology-intense value-added activities are typically concentrated in the former whereas natural resource- and labour-intensive activities in the latter. Process-efficiency FDIs, on the other hand, are undertaken in countries with similar economic structures and income levels. As firms pursue economies of scale and scope, traditional factors endowments play a less crucial role. Rather, the macro policies of host governments, the nature of local demand, and the quality of supporting institutions are the chief factors influencing FDIs.

The fourth and last motivation is *strategic asset seeking*, which is when an MNE engages in FDI to sustain or increase its global competitiveness. By adding complementary physical assets and human competence to their portfolio, firms perceive that their O-advantage will augment. Like the efficiency-seeking MNE, the

strategic asset firm aims at capitalizing on the benefits of common ownership of diversified activities and capabilities, or of similar ones in diverse economic environments.

Before concluding this subsection, some recommendations should be laid out. First, rationales for foreign investments may change over time. Initially, most firms invest abroad their home countries to acquire natural resources or gain access to new markets. As they become experienced investors, though, they may use their foreign activities as a tool through which they may raise their efficiency or access new sources of competitive advantage (Dunning & Lundan, 2008, p. 68). Second, worth bearing in mind is the fact that it is common for large MNEs to pursue multiple objectives and engage in FDI that combines the features of two or more of the following categories (ibid.).

TABLE 1 - TYPES OF INTERNATIONAL PRODUCTION (DUNNING, 1993, P. 84)

Types of motives for international production	Ownership advantages (Why)	Location advantages (Where)	Internalisation advantages (How)
Resource seeking	Capital, technology, access to market, complementary assets, size and negotiations strengths	Natural resources, transport, communication, infrastructure, tax and other incentives	To ensure stability of supplies to competitive price, to control markets
Market seeking	Capital, technology, information, management and organisational skills, R&D, economic of scale, brand loyalty	Material and labour cost, market size and characteristics, government policy/regulation, and investments incentives	A desire to reduce transaction or information costs, buyer ignorance, or uncertainty etc. to protect property rights
Efficiency seeking	As above, but also access to markets, economics of scope, geographical diversification, clustering, and international sourcing of inputs	Economies of products or process specialisation and concentration; low labour costs, incentive to local production	As location advantages, plus economies of common governance; economies of vertical integration/ horizontal diversification
Strategic asset seeking	Any of the above that offer opportunity for synergy with existing assets	Any of the above that offer technology, organisational and other assets	Economies of common governance; improve competitive /strategic advantages; to reduce risks

3.1.5.3 Criticisms

Given its eclectic nature, the OLI has drawn many criticisms that have led to several refinements and extensions throughout the years (Dunning, 1988; 2001; Cantwell & Narula, 2001; Tolentino, 2001). In some of his papers, Dunning (1988; 2001) reviews and comments upon some criticisms of the eclectic paradigm and particularly those put forward in the 1970s and early 1980s.

During this period, internalisation theorists brought up one of the harshest criticisms: these scholars argued that the failure of international intermediate product markets is both a necessary and sufficient condition to explain the existence of MNEs, hence claiming the superfluity of O advantages to explain FDI (Rugman, 1980; Buckley & Casson, 1981; Buckley, 1983). As a response, Dunning makes the first of several accommodations by differentiating the O-advantages into Oa and Ot. In his logic, since some Ot advantages are directly the result of the very act of internalisation, it is appropriate to refer to this benefit as an advantage whilst to internalisation as the modality by which this advantage is realised (Dunning, 1988; 2001). Indeed, the willingness to internalise a market is different from the capability to: O-advantages provide the capability to internalise markets whereas I-advantages provide the willingness. The distinction allows explaining why Ot advantages are exploited by one group of MNEs rather than another, or by MNEs rather than firms indigenous to the country of production (Dunning, 1988). Not satisfied, Dunning actually fires back (ibid., p. 3) and criticises internalisation theory for assuming that market imperfections are always exogenous to the firm (i.e. transactional failures). In Dunning's paradigm, market imperfections can also be endogenous because MNEs can erect barriers to entry and exploit their monopoly power in cross-border markets (i.e. structural failures).

Other critics accused the OLI framework of being merely a "shopping list of variables". In its defence, Dunning (2001, p. 177) claims that each variable identified by the eclectic paradigm is well grounded in economic or organisational theory. Additionally, the British scholar reiterates that the purpose of the eclectic paradigm is not to offer a full explanation of *all* kinds of FDIs but rather to point to a generic set of variables providing a satisfactory explanation of particular types of foreign value-added activity.

Finally, a line of criticism questioned the independence of the OLI variables. Dunning (ibid., p. 178) accepts the logic upholding such a remark and fully acknowledges the ways in which the OLI variables may be linked to one another. FDI based upon the O-advantages of the investing firms may well affect the L-advantages of the host country in a near future; similarly, a firm's response to locational attraction might critically affect the shape of their future O advantages. Such a dynamic relationship between countries and firms is neatly set out in the Investment Development Path (IDP), which will be explained in detail later, Dunning's (2001)

attempt to explain changes over time in the pattern of FDI as a function of a country's economic development.

Despite its progenitor's attempts at improving the OLI, some limitations remain. For one, because of its generality, OLI has only limited power to explain specific kinds of FDIs or the behaviour of certain enterprises (Dunning, 1988; 2001, p. 176) unless someone applies the framework to a predefined specific context. Nevertheless, Dunning's eclectic framework has for many decades remained the dominant analytical framework for the empirical investigation of determinants of FDI (Stoian & Filippaios, 2008; Buckley & Hashai, 2009; Stefanovic & Djukic-Ivanovic, 2008; Pitelis & Teece, 2010; Nayak & Choudhury, 2014).

3.1.5.4 Institutional Incorporation

The previous subsection has shown how, over time, OLI has been modified to address some of its limitations. However, throughout its existence, the eclectic framework has also evolved proactively in response to changes that have taken place in the ways in which international business is conducted (Eden, 2003; Dunning & Lundan, 2008; Narula R. , 2010).

The first extension originates from the mushrooming of cooperative relationships and network. Firms belong to external networks involving suppliers and customers, which elude their ownership boundaries. Hence, a wide range of intermediate contractual methods of coordination such as equity joint ventures, subcontracting, and R&D alliances exist beyond the two polar entry modes, namely external market transactions and internal coordination.

The second addition broadens the country-specific focus on locational factors to embrace other levels of analysis. The presence of the sub-national level reflects the increasing international clustering of high value-added activities, whereas the response to the phenomenon of growing regional integration between countries has generated the enclosure of supra-national level.

The third inclusion arises with the emergence of strategic management as a separate discipline that has lead Dunning to recognise the role played by managers in the dynamic evolution of the MNE. Thus, a firm's internationalisation process is a continuous interaction between the OLI configuration at a particular point in time and the management's strategy in response to such a configuration.

Finally, a fourth expansion incorporates the role of institutions as underpinning the O and I advantage of firms and the L advantages of countries. And of all the extensions integrated into the OLI paradigm, this is what affects our thesis the most. Weak institutions deter investments through two channels: corruption increases the cost of doing business and imperfect enforcement of contracts might increase uncertainty regarding future returns (Daude & Stein, 2007; Walsh & Yu, 2010). Our choice is further bolstered by the

increasingly important role played by institutions as L-advantage, considering the enlarged availability and ease of transfer of many Oa advantages (Dunning & Lundan, 2008): the capability to successfully attract and absorb such advantages rests essentially on the content and quality of L-specific institutions (Dunning, 2006). Hence, the remainder of this subsection will analyse in detail institutions and their role as FDI catalysers.

In his ground-breaking contribution, Nobel prize-winning Douglass North (1991) proposes how countries' divergent economic performances are largely determined by the kind and quality of institutions that support their markets as, together with the standard constraints of economic theory, institutions determine the profitability and feasibility of engaging in economic activity (ibid.). North defines institutions as "the humanly devised constraints that shape human interaction" and distinguishes between formal and informal (ibid., p. 3). Formal constraints, such as constitutions, laws, and property rights, are usually very clearly defined. Informal constraints – such as sanctions, taboos, customs, traditions, and codes of conduct – on the other hand, are much more complex to discern (ibid., p. 36). Despite of the type, institutions major role is reducing uncertainty by providing the "rules of the game in a society" (ibid., p. 5).

The literature is no short of researches confirming the importance of institutions in explaining national-level growth. In a widely cited study, Rodrik, Subramanian and Trebbi (2002) set out to compare three different determinants of economic growth: geographical measures (climate, natural resources, disease burden and transportation costs), the role of economic openness and international trade, and the role of institutions (property rights, the rule of law and social infrastructure). The authors concluded that institutions 'trumped' everything else, or in other words; once institutional quality was controlled for, economic integration had no direct effect on income levels, and geography had weak effects at best. Similarly, Mauro (1995) shows that bureaucracy inefficiency – a factor composed of judiciary system, red tape, and corruption indices – harms economic growth. The Italian academic stresses how, improving a country's level of bureaucracy efficiency would significantly increase investments, thereby generating growth.

Other scholars focus more on the role of institutions as "an important determinant of FDI" (Dunning & Lundan, 2008, p. 138) rather than driver of growth. Gastanaga, Nugent and Pashamova (1998) employ cross-section and time-series data for 49 less-developed countries over 1970-95 to examine the effects of several types of policy and institutional variables. The time series find that lower corruption and nationalisation risk levels, as well as better contract enforcement increase the amount of inwards FDI, contradicting the outcomes of the cross-section analysis. Thus, the authors warn that the different results originated from the different econometrics techniques suggest that unmeasured differences across countries seem to play a role in explaining variations in FDI flows across countries.

Wei (2000), using a panel data on bilateral FDI stocks from 12 OECD countries to 45 recipients, investigates the effect of corruption on IFDI. The academic finds that an increase in the host country's corruption level has an economically significant and negative impact on FDI. Several further studies have also hinged upon panel data on bilateral FDI stocks from OECD countries, albeit including a broader set of institutional variables. One is Daude and Stein's (2007) analysis, whose dataset covers a 21-year period of FDI to 152 recipient countries. These scholars find that the institutional framework has positive effects on FDI, however, not all institutional dimensions bear the same importance: decisions of where to invest appear to be specifically influenced by variables that refer to the predictability and stability of governmental policies. Another work is authored by Bénassy-Quéré, Coupet, and Mayer (2007). Their study points out that institutions matter in attracting foreign investments, especially the quality of bureaucracy and the judicial system, as well as the level of corruption. Nonetheless, the effect of the host countries' institutional quality is minor than the impact of institutional distance between any pair of countries.

Globerman and Shapiro (2002) employ three different indexes on a broad sample of developed and developing countries over 1995–1997. The first, which measures institutional quality, is the first principal component of a series of governance indicators estimated by Kaufmann, Kraay and Zoido-Lobatón (1999) for the World Bank. The second, Human Development Index, allows them to control for both physical infrastructure and human capital. The third, Environmental Sustainability Index, reflects environmental infrastructure in the form of policy choices made by governments. The regression results clearly indicate that governance infrastructure is an important determinant of both FDI inflows and outflows. Investments in governance infrastructure not only attract capital, but also create the conditions under which indigenous firms invest abroad. This holds particularly for developing countries, confirming Dunning and Lundan's (2008, p. 138) claim that countries' institutionally related L-advantages tend to differ considerably between developed and developing countries.

Finally, it is worth mentioning Walsh and Yu (2010), who tackle the issue from a different perspective. Considered the widely heterogeneous nature of investments, the scholars break down FDI data into the sector of destination, discovering interesting insights. The primary sector is solely determined by the location of resources, regardless of macroeconomic and institutional conditions. The secondary, on the other hand, is largely influenced by measures of labour flexibility. Finally, investments in the tertiary sector appear to be attracted mostly by the level of judiciary independence.

Thus far, the reviewed literature has focused on the importance of institutions at national level in attracting FDI. However, Dunning (2006, p. 200) further distinguishes between institutions at firm and country level. His argument is that institutions do not simply impose limitations on firms' actions but may also affect the

managers' cognition, thus swaying the possible behavioural paths that an MNE might pursue. The distinction is hence aimed at including the rules (i.e. formal institutions) and codes of conduct, corporate cultures (i.e. informal institutions) that govern relationships between the MNE and its external stakeholders, and within the MNE itself (Dunning & Lundan, 2008).

To reflect institutions at firm level, Dunning (2006, p. 200) adds the advantages derived from them, labelled as "Oi". Dunning and Lundan (2008) suggest that organisations would need strong and effective institutions to influence how decisions are made in situations when the degree of discretion in decision-making is growing. Significantly contextual, Oi are likely to echo the character of the countries' institutional frameworks in which the MNE operates, as well as the global staffing approach undertaken. These advantages, in turn, influence internalisation (I) choices (Dunning & Lundan, 2008, p. 141); for instance, in some cases, a firm's institutional framework might be inappropriate in countries with very different business cultures or at different stages of development. The optimal choice would then be engaging in some kind of partnership with a local firm, rather than establishing a subsidiary.

Finally, North (1991, p. 51) stresses the importance of considering both formal and informal constraints to investigate the relationship between institutions and economic performance. In fact, although many developing countries have copied the formal institutions that bolster advanced economies, gaps in performance persists. Consistently with North's claim, empirical research has confirmed that countries that perform feebly do so because their informal institutions do not support economic activity in a manner that is aligned with global capitalism (Dunning & Lundan, 2008, p. 130). Unfortunately, detecting the range of informal institutions in a specific country is a difficult task (ibid., p. 138). Aware of such a limitation, we will solely utilise proxies of formal institutions. Further, despite institutions affect the OLI as a whole, given that the scope of this thesis is to investigate the role of IPAs in attracting FDI, their impact will be analysed exclusively from the locational angle.

3.2 Investment Promotion Agencies

Previous sections have shown how many studies have proven repeatedly that certain economic determinants play a crucial role in attracting FDI to a country. Nevertheless, while the literature agrees upon the importance of such economic determinants (Wells & Wint, 1990; UNCTAD, 1998; Lim, 2008), UNCTAD argues that promotional activity has lately become important as well. In this direction, research has demonstrated that a national marketing strategy can create or increase economic activity (Kotler, Jatusripitak, & Maesincee, 1997) as promotion is a way for "invisible" or otherwise unattractive countries to be put on the map (UNCTAD, 1998, p. 99). Said in other words, a country can be marketed in a similar way as a company markets its products and services; this effort would lead to increased movements of inward FDI (Lim, 2008).

The rest of this chapter will continue by first proposing a detailed description of the most relevant literature on the topic of IPA's effectiveness. The second part will draw the reader's attention onto specific best practices that make an IPA excel. Finally, current gaps in the literature will be identified and from that basis, hypothesised but unmeasured best practices will be defined.

3.2.1 IPA's Effectiveness

Although it is a fact that many governments engage in investment promotion activities to attract more inward foreign direct investment, available literature on the topic is scarce (Harding & Javorcik, 2012). The first major piece of research upon the role and effectiveness of IPAs was carried out less than 30 years ago by Wells and Wint (1990). As their findings would later become the basis for most of the future studies, a thorough explanation is worth being undertaken[22].

The study consists of a multi-method research design combining qualitative and quantitative study. For the qualitative part, the data was gathered first hand through interviews with officials of twenty different countries involved in investment promotion directed at the United States. The survey results allowed the selection of the ten most successful IPAs, representing countries at various levels of development, size, and locations (ibid., p. 11), upon which subsequent in-depth and on-site research was performed. Such a thorough examination enabled the authors to investigate and compare the effectiveness of various investment promotion techniques and the structures in use. Three main classifications of IPA roles, and their related activities, were identified:

1. **Image-building activities:** improving the image of a country as a favourable location for investment within the global investment community.
2. **Investment-generating activities:** using promotional techniques to identify and contact investment decision-makers and encourage investment in the host country concerned.
3. **Investment-service activities:** providing services to current and potential investors, including investment counselling, assisting with the processing of applications and permits, and the provision of post-investment services.

[22] For a more extensive literature overview though, the authors advise the reader to check the summary available as Table 3**.**

Wells and Wint (ibid., pp. 26-27) found that governments tend to engage in all types of investment activities to varying degrees. Particularly, a frequently common path begins with promotional techniques aimed at creating a positive country's image in the investment community followed by attempts at generating investments. Albeit acknowledging the goodness of such a sequence, the authors suggest its inappropriateness in particular instances, such as when a country holds a bad reputation for its bureaucracy (ibid., p. 144). In this case, before devoting significant resources to any image-building activity, investment promotion efforts should target service activities, which are the cause of the negative reputation. Regarding the organisational structures chosen by governments to carry out such promotional activities, Wells and Wint (ibid., pp. 149-150) builds a strong case in favour of quasi-government approaches[23]. By being a hybrid between government and private sectors, these IPAs combine the positive aspects and avoid the disadvantages of both. Unlike purely public organisations, quasi-government agencies are not mired in the conventional bureaucratic structures, but at the same time are able to enjoy close contact with the government. Unlike purely private structures, quasi-government agencies do not lack relationship with government officials while retain the flexibility necessary to attract staff with the required marketing expertise from the private sector, whose salary demands will be impossible for the public sector to satisfy.

The quantitative part of the study consisted of running multiple regression analyses on a sample of 50 countries comprehending both developed and developing, which did or did not actively pursue investment promotion, while controlling for other FDI determinants. The regressions show a positive impact of IPA on inward FDI flows, albeit no analysis was performed to assess the individual importance of each single IPA's role. Interestingly, Wells and Wint (ibid., p. 98) discover the existence of a differential in the magnitude of the promotion efficiency depending on the countries' level of economic development. In industrial countries, investment promotion was the most significant of the tested variables. In developing countries, while still being significant, investment promotion was less important than some of the other tested variables, such as market size and political stability.

A few years later Young, Hood and Wilson (1994) suggested another role in addition to the three main activities that Wells and Wint (1990) had already proposed: the *policy advisory*. Within this new function, a priority of an IPA is helping to improve the macroeconomic conditions as well as the legal environment of its country of origin, through active cooperation with the host government in forming policies that affect these

[23] Refer back to definitions section 1.3.3 The Investment Promotion Agency.

two areas. For example, the IPA could encourage the development of the right mix of available skilled and unskilled labour, which potential investors would require.

Finally, without any empirical testing, Young, Hood and Wilson (1994) concluded that the role of policy advisory is the most important amongst the main activities of a promotion agency. Ceteris paribus, an IPA's active role of policy advocacy would lead to increased attraction rate of potential investors. The importance of this new role was also later acknowledged by Wells and Wint (2000, p. 158) in their revised version of "*Marketing a Country"*. Described as an "extremely important activity of promotion agencies" (ibid., p. 158), policy advocacy was incorporated with its original characteristics[24].

Albeit the literature by Wells and Wint (1990; 2000) has indisputably demonstrated a positive relationship between having an IPA and inward FDI flows, one of the authors, Wells (Morriset & Andrews-Johnson, 2004, pp. vii-xi) later pointed out several limitations of their own studies. First, the empirical research was limited in having data from around 1985, when investment promotion was yet to be included as a national policy for many countries. Secondly, the research did not include elasticity coefficients for the relationship between the investment promotion and inward FDI; although the four classifications of investment activities had already become the framework for much of future research, the importance of each singular type of role was not econometrically investigated. This meant that while the rationale behind the existence of investment promotion agencies is empirically grounded, the strategic choice of invested time between individual promotion activities was a bit like fumbling around in the dark (ibid., p. ix).

With Morriset and Andrews-Johnson's (ibid.) research, it is now possible to fill these gaps. Using data from 2001, their cross-sectional study involves 58 countries, heterogeneous in terms of region, income per capita, and investment promotion effort. Interestingly, the authors did find that, on average, a 10% increase in promotion expenditure leads to a 2.5% increase in inward FDI flows (ibid., p. 13). Translated into dollars, promotional expenditure of USD 60.000 will generate an additional inflow of USD 5 million in FDI. However, the effectiveness of IPAs is demonstrated to be dependent on the investment climate as well as the level of development of host country (ibid., p. 25). Countries scoring poorly in both aspects should then concentrate on their improvement rather than spending on promotion.

Another crucial part of Morriset and Andrews-Johnson's research was the test of the effectiveness of IPA with respect to the available budgetary resources and their allocation within the different roles. The analysis

[24] See Appendix C for detailed descriptions of the four primary activities

concluded that budget size mattered; an agency's financial availability should be large enough to carry out basic promotion activities, as scarce resources hinder the IPA's ability to catch the attention of the investment community. Yet, more is not always good: beyond a certain amount of resources, IPAs experience diminishing returns. The authors link such a reduction in effectiveness to the fact that beyond a certain threshold it is unlikely that an agency might be able to contribute to resolve more the issues that prompted its creation (ibid., p. 16).

Regardless of the budget size, resources must be allocated to perform the several activities that compose investment promotion. Table 2 below summarises actual average budgetary allocation on the four activities and the calculated return on expenditures (ROE) for the investigated sample.

TABLE 2 - LIST OF FINANCIAL RESOURCES ALLOCATED AND ELASTICITY COEFFICIENTS SPLIT ACROSS PRIMARY ACTIVITIES (MORRISET & ANDREWS-JOHNSON, 2004, PP. 32-35)

Primary IPA Activities	Budget Resources Allocation	Elasticity Coefficients
Image-building activities	27%	0.25
Investment-generating activities	33%	0.18*
Investment-service activities	32%	0.24
Policy-Advocacy	7%	0.30

*ALL COEFFICIENTS ARE SIGNIFICANT AT A 5% LEVEL, EXCEPT INVESTMENT-GENERATING ACTIVITIES, WHICH IS SIGNIFICANT AT A 10% LEVEL.

As Table 2 demonstrates, there appears to be a misalignment between which activities were prioritised financially and which gave the highest return in terms of increased FDI inflows; most notably, although being the least preferred activity, *Policy-Advocacy* generated the highest ROE. Such a finding is consistent with the authors' previous conclusion on the considerable relevance of the business environment quality (ibid., p. 36). Perhaps even more important, the elasticity coefficients empirically confirms what Young, Hood and Wilson (1994) hypothesised: The *Policy-Advocacy* role bears the greater prominence in investment promotion. It is worth noting that these values are of an average IPA and the ROE would change depending on various factors (Morriset & Andrews-Johnson, 2004).

A final aspect of their research focuses on the organisational structure and reporting mechanisms (ibid., p. 45). The empirical analysis supports Wells and Wint's (1990) claim of superiority of quasi-government agencies. Public agencies with a private participation performed statistically better than the ones without mixed affiliation; the same also holds true for the opposite case, consisting of a private agency with a governmental participation. Moreover, the authors also provide evidence towards agencies reporting to a

specific ministry, performing worse than if they report directly to the prime minister or president's office. (Morriset & Andrews-Johnson, 2004, p. 49).

A more recent paper, authored by Harding and Javorcik (2011), also supports the case of IPAs' effectiveness in attracting IFDI. For their sample of 124 countries, the pair of researchers demonstrate how sectors targeted by IPAs have received, on average, more than twice as much FDI inflows than non-targeted sectors. This holds true for the subset of developing countries, whereas for industrialised countries, investment in promotion is found to be statistically insignificant. Particularly, in countries with huge information asymmetries and great amounts of red tape, IPAs are capable of alleviating their detrimental effect through investor-services (in the short term) and policy-advocacy (in the long term). Hence, investment promotion can be a potent tool for emerging markets desiring to attract FDI inflows.

Before turning our attention to best practices of IPAs, we would like to stress the influence of situational factors in the effectiveness of IPAs. Despite the contradicting results, likely due to the differences in the analysis setup, the literature overview has provided empirical support that the effectiveness of a promotion agency largely depends upon the level of the country's economic development (Morriset & Andrews-Johnson, 2004; Wells & Wint, 1990; Harding & Javorcik, 2011).

Finally, in Table 3 below, an overview of the reviewed literature is given, including the types of IPA roles, the type of empirical test and the major findings of the literature.

TABLE 3 - SUMMARY OF IDENTIFIED IPA ACTIVITIES AND THEIR EFFECTIVENESS. AUTHORS OWN DEVICE AND LIM (2008)

Scholars	Categories of IPA Activities	Empirical methodologies and samples	Empirical or major findings
Wells and Wint (1990)	Image building, investment generating and investment services (pre-investment decision, post-investment service)	Regression analysis using a proxy for the effectiveness of investment promotion as a dichotomous variable 50 cases	Positive relationship between IPA' existence and FDI inflows
Wint (1992)	The same as that of Wells and Wint (1990)	Case study analysis through interviewing 20 investment promotion officials 11 cases	The stand-alone office as overseas network type is more successful in promoting investment
Wint (1993)	After sales or post-approval services	Case study analysis through interviewing government officials in 10 selected countries 10 cases	The most effective post-approval services are provided by powerful investment authorities
Young, Hood and Wilson (1994)	Policy formulation, investment promotion and attraction, investment approvals, providing assistance and monitoring (after-care)	No empirical test	The policy-advisor function is the most important among IPA roles
Head, Ries and Swenson (1999)	Disseminating information to potential investors	Regression analysis using a dummy variable indicating USA states with investment promotion office(s) in Japan 225 cases of investment	The Japan office dummy has a positive sign to FDI and is statistically insignificant
Wells and Wint (2000)	Same as Wells and Wint (1990) but with the addition of policy advocacy	No empirical test	The weight of assigned IPA roles should reflect the task that a country faces in marketing itself to investors
Loewendahl (2001)	Strategy and organisation, lead generation, facilitation, and investment services	No empirical test	To maximise the long-term benefits from inward FDI, after-care activity should form a major component of investment promotion activities
Wint and Williams (2002)	Not mentioned directly	Regression analysis using the four-category scale of investment promotion effectiveness derived from Delphi-type poll of experts 36 cases	The effectiveness of promotional activity records positive sign to FDI flows, but it is statistically insignificant

Scholars	Categories of IPA Activities	Empirical methodologies and samples	Empirical or major findings
Morriset and Andrews-Johnson (2004)	The same as of Wells and Wint (2000)	Regression analysis using IPA budget, IPA staff, and two control variables (e.g., investment climate, GDP per capita) 58 cases	Positive relationship between IPA's promotional spending and FDI inflows
Lim (2008)	The role of a mediator between the FDI environment and FDI-attraction performance of the host country.	Structural equation analysis with maximum-likelihood estimations 68 countries	IPA's has a positive effect on attracting FDI through mediation effects between host country's environment and FDI inflows.
Harding & Javorcik (2011)	As a targeted promoter to a narrow industry specific audience instead of general investment promotion activities	Regression analysis comparing FDI inflow with the occurrence of industry targeting. 124 countries	Positive relationship between industry targeting and FDI inflow for developing economies. Insignificant for industrial economies
Harding and Javorcik (2012)	As an online information provisioner	Regression analysis based on website quality of IPAs in 156 countries	Higher quality of IPA website increases inward FDI
Ecorys (2013)	Distinction between strategic-, tactical-, and operational-level activities.	No empirical test	Ideally, these three levels interact and complement each other and must be aligned to be successful.

3.2.2 Best Practices

The previous section discussed the main literature on IPA. Although different studies proposed differentials in IPA's performance depending on the host country's level of development, there exists shared consensus that IPAs are effective in attracting investment flows. With the proceeding of this chapter, we will introduce more in detail those activities and actions that, if applied, would make an IPA excel: the so-called *best practices*.

A best practice is defined as "a procedure that has been shown by research and experience to produce optimal results and that is established or proposed as a standard suitable for widespread adoption" (Merriam-Webster, 2017). Within the area of IPA's best practices, WAIPA plays a primary role. Created in 1995, WAIPA aims at building the human resources capacity of its member agencies by organizing training events alone, or in partnership with organisations like IECD, OECD and UNCTAD. However, more relevant for this thesis, WAIPA provides the opportunity for IPAs to network and exchange best practices in investment promotion. As of the time of writing this thesis, WAIPA consists of members from 130 different countries (WAIPA, 2017a).

Nevertheless, where do best practices come from? The following sections will introduce the reader to several best practices gathered from some of the most valid global sources.

3.2.2.1 Ecorys' Best Practices

A comprehensive classification is offered by Ecorys (2013), a research-based consultancy firm. To ascertain such practices, Ecorys analyses the behaviour of EU Member States' national and regional IPAs. The best practices identification relied upon the results of semi-structured interviews with IPAs' decision-makers, an online survey questionnaire, a review of the existing literature, as well as the transferability to other Member States. Based on these criteria, the qualitative analysis enabled Ecorys to distinguish the nine best practices and gather them into three groups as seen in Table 4 below.

TABLE 4 - IDENTIFIED BEST PRACTICES BY ECORYS (2013, PP. 60-77)

Category of good practice	**Specific good practice**
Successful targeting of FDI activities	Strategic targeting of specific (sub)sectors and companies *
	Identifying 'missing links' in domestic ecosystems and/or corporate value chains
	Targeting 'upstream' companies
Better cooperation among investment promotion actors	Cooperation in aftercare
	Lead sharing among national and other IPAs
	Aligning strategic, tactical, and operational instruments to attract FDI An endorsed (foreign) investment strategy An unequivocal commitment to existing investors' needs Incentives schemes Branding and media attention
Working methods / internal organisation	Managing and operating the IPA as consultancy-driven services organisation * A top-down imposed change of mind-set from general image building into providing free consultancy services to foreign companies who are treated as clients Introducing performance-based bonuses and other incentives
	Forming (formalized) links with the private sector * Setting up an independent advisory board with private sector representatives as board members Partnering with location consultants and other multipliers to have access to corporate decision makers
	Using tools to measure and evaluate the success of FDI promotion agencies effectively

* THESE BEST PRACTICES HAVE BEEN QUANTITATIVELY TESTED AND PROVEN STATISTICALLY SIGNIFICANT IN INCREASING FDI FLOWS

Unfortunately, in the attempt to quantitatively demonstrate the validity of the identified practices, some issues constrained Ecorys (ibid). Many of the identified best practices had only been practiced for a short

time, making accurate measuring impossible, whereas some IPAs had changed status and undergone high staff turnover, affecting the policies consistency. These restraints limited down the number of best practices available for a further quantitative analysis, and in the end only three were found suitable for analysis:

1. **Strategic targeting of specific (sub) sectors and activities:**
   The empirical analysis showed the positive impact of sector targeting on attracting foreign investments (Ecorys, 2013, p. 81). The finding is in line with Harding and Javorcik´s (2011) work. Interestingly, the effect of investment promotion increased in its magnitude as the time passed.
2. **Forming (formalised) links with the private sector:**
   The regression demonstrated how quasi-governmental status IPAs outperformed agencies that were purely operating as a part of a governmental department (Ecorys, 2013). This result follows the line of thought proposed by Wells and Wint (1990) and later empirically tested by Morriset and Andrews-Johnson (2004).
3. **Managing and operating the IPA as a consultancy-driven services organisation*:***
   The last tested potential best practice involved moving beyond image-building activities towards erecting more interactive relationship with current and potential investors. Thus, listening to what they need and creating value propositions from these learnings. The branding will be much more tailored to individual investors. Ecorys (2013) demonstrated a positive, statistical significant relation between its application and FDI inflows.

The best practices above tested seem to place greater emphasis onto *investment-generation* rather than *image-building activities*, contrarily to Morriset and Andrews-Johnson's (2004, pp. 32-35) findings, exhibiting the larger ROE of image building over investment generation. Considering this, we would like to stress that Ecorys' best practices have been extrapolated from a sample comprising only EU agencies, hence tailored for developed countries with a reduced need to change their image.

It is our claim, supported by the literature, that image building is more relevant in developing than in industrial countries. Morriset and Andrews-Johnson (2004, pp. 102-103) demonstrate that developing countries' IPAs, on average and in percentage terms, spend significantly more on image-building activities than richer countries. In the same vein, Wells and Wint (1990, p. 26) show that IPAs engages in image-building activities to signal the investment community about the host government's new favourable attitude towards FDI.

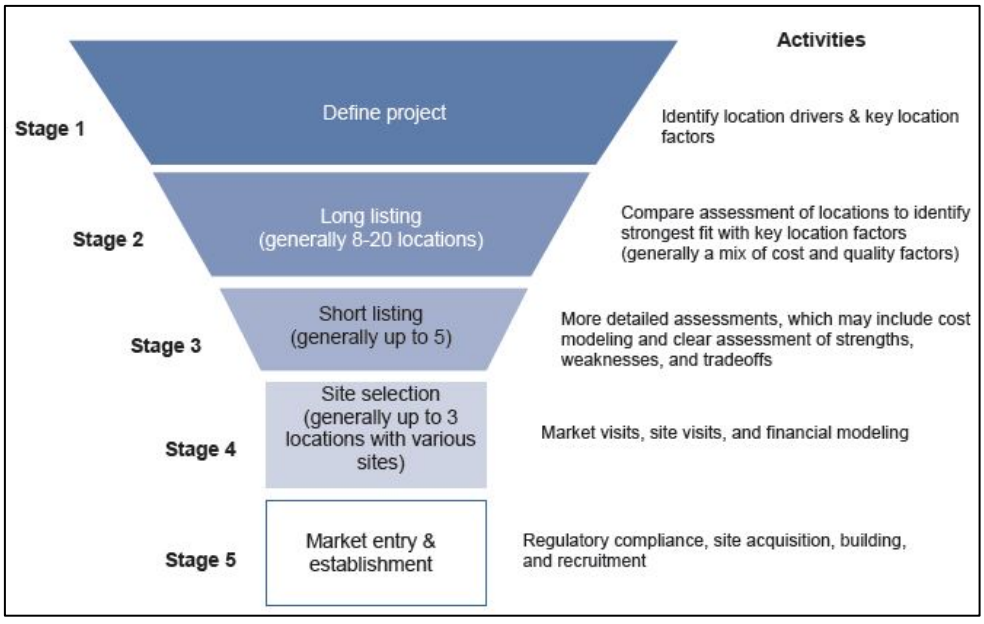
3.2.2.2 MIGA's Best Practices

Another valid source of best practices is the Global Investment Promotion Best Practices (GIPB) project (The World Bank Group, 2006; 2009; 2012), piloted in 2005 by the Multilateral Investment Guarantee Agency (MIGA), which is a subdivision of The World Bank. GIPB was commissioned for the first time in 2006 and covered 96 national economies. The number kept expanding constantly throughout time, until 189 economies were included in the survey (The World Bank Group, 2012, p. 12).

Differently from Ecorys (2013), that covers most of the major aspects of the IPA's functions, MIGA carries out an analysis with a sharper focus. Its emphasis lies upon one of the most critical investment promotion function, information provision, which is broken down into two major, equally weighed, components: *Website Assessment* and *Project Inquiry Handling* (The World Bank Group, 2006; 2009; 2012). Assessed along different dimensions, the sum of their ratings forms the overall GIBP score. The first component rates the quality of the agency's website based on its content, architecture, design and promotional effectiveness; particularly, the assessment criteria judge the website' attractiveness and user-friendliness, the relevance of its contents, and the clarity and credibility of the information presented. The second component focuses on the manner IPAs handle direct project inquiries from investors; the rating aims at capturing the competence and the responsiveness of the agency's staff, as well as timeliness, quality, and credibility of the reply.

MIGA justifies its focus on information provision given its relevance during the first three stages of the investor's decisional process for FDI project location (The World Bank Group, 2006), as summarised in Figure 5.

FIGURE 5 - INVESTORS DECISIONAL PROCESS (THE WORLD BANK GROUP, 2006, P. 12)



At the first stage, before selecting a location, a company develops a list of key location factors, a set of criteria that will be used to compare and assess various location options.

At the second stage, that constitutes the long-listing of an investment project, general location comparisons enable the exclusion of sub-optimal locations and the identification of the sites with the strongest potential. During this phase, investors will conduct research in-house using various databases and the Internet, which means that the information provided through IPA's websites is critical.

Finally, in the third stage, the potential investor will refine the set of location criteria by introducing a greater level of detail into the assessment to create a short list. Companies are more likely to interact directly with an IPA as information available online will be supplemented by direct inquiries from the investor. Such interactions offer the rich opportunity to directly influence company investment decisions.

Considering the aforementioned, insufficient information provision to potential investors can squander previous image-building and investment-building efforts (The World Bank Group, 2009, p. 12).

MIGA outlines its best practices after benchmarking a selection of some of the world's best performing IPAs (The World Bank Group, 2009, pp. 40, 47-48). Regarding online promotion, MIGA suggests considering a website as the primary promotional and facilitation tool. Visiting the website may be investors' first, and perhaps last, interaction with the IPA's location if the site frustrates or does not catch the investor's attention. To avoid the latter, websites must be loaded with relevant, comprehensive, and accurate business data, as well as investor case studies and testimonials exhibiting what the IPA can do for investors. High-quality content is not all, though. Websites must be continuously developed, and data regularly updated for they are not a one-time effort. Further, MIGA stresses that website architecture and design should remain simple and easy for investors to use. Its navigation should swiftly lead users to information with commonly used terminology, e.g. About Us, Contacts – and clear labels, e.g. Key Sectors, Business Costs, and Investor Case Studies. The presentation should be visually compelling but not overly "busy," using graphics and visuals that focus on the location's potential for business.

With respect to the handling of project inquiries, MIGA recommends using business practices that demonstrate professionalism. Staff must be trained to provide branded, well-written, and professional-looking materials; helpful towards such a goal would be the development of a template to ensure a standard and consistent format. Agencies should also possess readily accessible materials on key traits and advantages of their location; these easily available facts, such as labour costs or employment regulations, enable the IPA to meet deadlines, or respond even sooner. However, in case a research for a specific investor takes longer than expected, IPA's staff must inform the investor and propose another date. Finally, some project inquiries

will include questions that can be partially answered with information present on the IPA's website. In this context, MIGA cautions against simply directing inquiring investors to the relevant online webpage. Rather, agencies should provide a customised response based on online information.

These GIBP scores, based on qualitative assessments, also find empirical validity. Aimed at quantitatively measuring whether the information *quality* truly mattered in terms of FDI inflows, Harding and Javorcik (2012) employ the GIBP scores generated by MIGA throughout time (The World Bank Group, 2006; 2009; 2012). The authors discover the existence of a positive and statistically significant relationship between information provision quality and the host country's capability to attract FDI; translated into numbers, a one-unit increase in the GIPB score is associated with a 1.5% increase in FDI inflows. Hence, differentials in service quality explains discrepancies in FDI inflows across countries. These positive findings are also confirmed when the researchers separate the effects of website and inquiry handling, both found statistically significant.

3.2.3 Literature Gap and Hypotheses Formulation

The previous sections have unambiguously demonstrated that IPAs are associated with greater FDI inflows into their host country. However, their degree of effectiveness largely depends upon the fulfilment of certain conditions. Despite these useful recommendations, we deem that recent economic and technological trends have generated some gaps in investment promotion that need to be addressed. The rest of this section will partly try to identify these gaps and operationalise hypotheses for further testing.

The first aspect we deem interesting to investigate is the usefulness of WAIPA memberships. Previous sections have introduced WAIPA, an institution widely recognised as the global reference for IPAs. With its declared goal to promote any country as a destination for investments by dedicating time and effort towards building the human resources capacity of its members as well as providing the opportunity to network and exchange best practices in investment promotion. We as researchers are interested in measuring this effect, which leads us to the following null hypothesis (H_0) with its alternative hypothesis (H_1).

$$H_0: WAIPA\ membership\ of\ IPAs\ is\ associated\ with\ no\ larger\ FDI\ inflow$$

$$\boldsymbol{H_1: WAIPA\ membership\ of\ IPAs\ is\ associated\ with\ a\ larger\ FDI\ inflow}$$

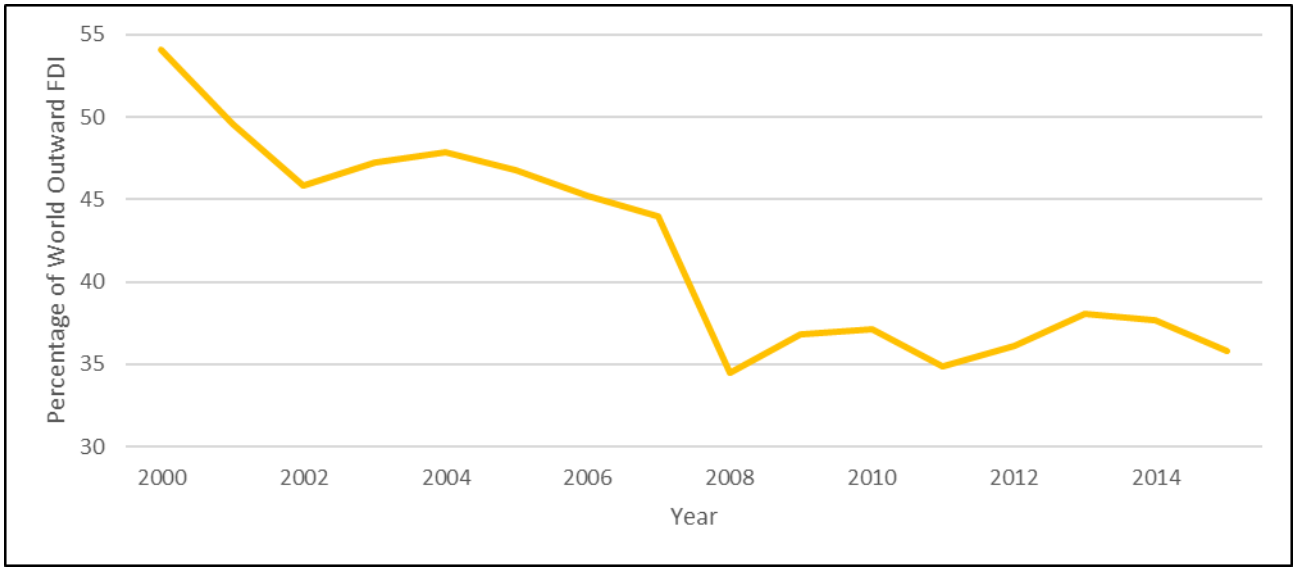
Without any doubt, an established online presence is nowadays an indispensable prerequisite for an IPA serious about attracting investors: an agency's website represents an opportunity to display its location in the best possible light. Yet, in our opinion, two aspects of online promotion have been overlooked by the literature:

The first is the importance of providing relevant information in several languages. MIGA (The World Bank Group, 2009, p. 13) carried out its assessment only in English. However, some countries and regions may

have taken an educated decision to prioritise other idioms because for historical, cultural, or developmental reasons, the host country is more likely to attract investors from non-English-speaking countries. On the other hand, some IPAs might be able to attract English-speaking investors, but their financial resources preclude the creation of a website in English (ibid., p. 58).

Considering this, it would be interesting to test whether other languages also possess the capability to catalyse FDI. This consideration has also been prompted by the fact that the percentage of OFDI stemming from English-speaking countries has been steadily declining over time, as shown in Figure 6.

FIGURE 6 - OUTWARD FDI FROM ENGLISH-SPEAKING COUNTRIES 2000-2014. DATA RETRIEVED FROM UNCTAD (2017) GRAPHICAL REPRESENTATION OF OWN DEVICE



However, as we do not deem all website translations equal in importance, we have created an index to replicate such differentials. Each language recognised to be included was assigned an annual score reflecting the proportion of the OFDI generated by the population speaking that specific language with respect to the world's total OFDI[25]. Hence, fully aware of the still prominent role of English as language of international business, as well as of the fact that a large chunk of FDI is still originated from English-speaking nations, we hypothesise that reaching a larger audience through multiple iterations of the IPA website would lead to an increased inflow of FDI. This lead to the second null hypothesis (H_0) and its alternative hypothesis (H_2):

[25] Please refer back to subsection 2.6.1.2 IPA Website Translations for a detailed explanation of the calculation of the lingual index.

$$H_0: A\ larger\ website\ language\ index\ of\ IPAs, means\ no\ larger\ FDI\ inflow$$

$$\boldsymbol{H_2: The\ larger\ the\ website\ language\ index\ of\ IPAs, the\ larger\ the\ FDI\ inflow}$$

The second neglected aspect of online promotion is social media, an area that falls short of empirical research. As the phenomenon of social media is very recent, to our knowledge there has not been any specific research on the utilisation of social media by IPAs and its effectiveness on attracting inward FDI. Overall, the impression is that online investment promotion requires nothing else than a decent set of programmers and Google optimisation policies. However, as Ecorys states:

"(…) there's no escaping that social media would have still become an important new avenue to reach out and target new investors." (Ecorys, 2013, p. 85)

An expert meeting of IPA representatives discussed and agreed that social media platforms are great tools to target specific groups of investors and perform tailored promotion activities. A best practice example is the IPA of Nantes, France. This subnational agency, despite having only four full-time employees, allocates one full resource to social media management (ibid., p. 85). Which leads us to the following null hypothesis (H_0) with its alternative hypothesis (H_3).

$$H_0: Social\ media\ presence\ of\ IPAs\ is\ associated\ with\ no\ larger\ FDI\ inflow$$

$$\boldsymbol{H_3: Social\ media\ presence\ of\ IPAs\ is\ associated\ with\ a\ larger\ FDI\ inflow}$$

As a part of the deductive reasoning, we will test the three above hypotheses, in an attempt to reject the null hypotheses and accept their alternative hypotheses.

Finally, the reader can recall how, despite showing a consensus regarding the positive effect of investment promotion on FDI inflows, the literature review has proposed contradictory results for developed and developing countries. Some researchers, such as Wells and Wint (1990) and Morriset and Andrews-Johnson (2004), discovered that investment promotion is more important in developed countries than in developing ones. Contrarily, Harding and Javorcik (2011) found investment promotion to be more effective for developing countries where information about business conditions is less readily available and bureaucratic procedures tend to be more burdensome.

All of these studies used World Bank's classification (Harding & Javorcik, 2011, p. 16; Morriset & Andrews-Johnson, 2004, p. 57), where countries are divided according to their income level, measured using gross national income (GNI) (World Bank, 2017n). In our attempt, on the contrary, we will integrate income with other measures in order to obtain a more meaningful discrimination between diverse degrees of

development. To this extent, we will rely on Dunning's (1981) IDP. The next subchapter will provide its comprehensive and detailed description.

3.3 Investment Development Path

It is in 1981 that Dunning develops the IDP theory to offer a dynamic interpretation of FDI (1981). The IDP assumes the existence of a systematic relationship between a country's level of economic development and its net outward investment position (NOIP) - calculated by the difference between outward FDI (OFDI) and inward FDI (IFDI). Hence, as a country evolves, a structural transformation occurs, which is reflected by: changes in the O-advantages of its enterprises relative to those of other nationalities; changes in its L-advantages relative to those of other countries; and changes in the extent to which firms perceive these advantages are best organised internally (I-advantages). Thus, the three legs of the eclectic paradigm can conveniently explain the varying propensity of countries, at various stages of their economic development, to attract or generate FDI (ibid.).

The initial version of the IDP consisted of four stages (ibid.), later extended to five (Dunning, 1988). Countries normally tend to move forward, although backward movements are also possible (Narula & Guímon, 2010, p. 7), but progresses between stages are by no means granted. The first stage (OFDI < IFDI) comprehends countries that face a small, negative NOIP. OFDI is absent, or negligible, because domestic enterprises do not possess the necessary O-advantages as there is little or no indigenous technology accumulation and hence few created assets. If any O-advantage exists, it will be in labour-intensive manufacturing and the primary sector, such as mining and agriculture.

On the other hand, IFDI is present, but scant. Countries in this phase do not offer L-advantages strong enough to prompt the setting up of production facilities by foreign firms, except those well-endowed with natural resources (see section 3.1.5.2 for the natural-resource-seeking motive for FDI). Typically, countries belong to this stage due to the combination of a limited domestic market, reflecting low per capita income, lack of infrastructure, low-skilled labour force, and inappropriate institutions and government policies (Dunning & Narula, 1993). To overcome these hurdles, government intervention is two-fold. First, it will attempt to reduce some of the endemic market failure holding back development, for instance by providing basic infrastructure, and upgrading human capital via education and training. Second, it will engage in a variety of economic and social policies, such as import-substitution and export-promotion plans, which affect the structure of local markets and industries.

In the second stage (OFDI < IFDI), NOIP remains negative and keeps decreasing. Its erosion reflects the larger IFDI growth with respect to OFDI, that although timidly, begin to sprout. At this point, the O-advantages of

indigenous firms have benefitted from the government-induced technology accumulation, generated by the development of support industries clustered around primary ones. These OFDI are chiefly undertaken in neighbouring territories. Some are directed towards countries that are higher in the IDP to acquire foreign technology (see section 3.1.5.2 for the strategic asset-seeking motive for FDI); others, by reaching countries lower in the path, seek to tap into foreign markets (see section 3.1.5.2 for the market-seeking motive for FDI). This trend will strongly be influenced by the host country government's actions, such as export subsidisation.

Similarly, the economic and social policies undertaken in the previous stage have promoted the country's L-advantages, thereby increasing its attractiveness to foreign enterprises. High growth rates, expanding domestic markets in terms of scale and purchasing power, improving transport and communication infrastructure, abundant low-cost labour force, more favourable polices in education and technological transfer, all open the domestic market for inward international investment. Such IFDI will especially be concentrated in primary commodities and natural resources as well as in labour-intensive industries to exploit supplies of relatively inexpensive unskilled and semi-skilled labour.

The third stage of the IDP (OFDI < IFDI) is marked by a still negative, though increasing NOIP, due to the combination of an augmented growth rate of OFDI and a gradual decline in IFDI. In this phase, competition in the domestic market rises as the O-advantages of the foreign investors disseminate through the local industry. As a result, the advantages of local firms will be less based on government-induced actions and more on proprietary assets (Oa), similarly to that of firms from developed countries, except for the most technology-intensive sectors. Thus, equipped with the necessary O-advantages, an ever-larger number of domestic enterprises will not be only able to compete domestically but also to engage in OFDI. These foreign investments will either be directed to lower-stage countries – both as market- and resource-seeking investments – or towards countries in the upper part of the IDP – partly as a market-seeking strategy, but also as strategic asset-seeking investments to upgrade firms' O-advantages.

At the same time, some peculiarities of this stage have an impact on the IFDI. First, the rise of domestic wages deteriorates the host country's comparative advantages in labour-intensive activities. Second, now, enlarged domestic markets and enhanced domestic innovatory capacity offer the possibility to achieve economies of scale. Both features, and their interplay, will prompt inward efficiency-seeking investments. Finally, in industries where domestic firms have a competitive advantage, the host country may experience inbound fluxes of strategic asset-seeking investments.

Even though this stage the O-advantages of local firms are increasingly less dependent on government policies, the role played by the government is still relevant and aimed at reducing structural market

imperfections. Thus, governments may attempt to attract IFDI in those sectors in which local companies do not have competitive advantages, as well as to stimulate domestic firms to exploit their own advantages in new markets.

In the fourth stage (OFDI ≥ IFDI), a country becomes a net outward investor, that is, its direct investment flows exceed or roughly equal the inbound investment flows from foreign enterprises. Although there is an increase in the quantity of both IFDI and OFDI, the latter grows at a faster rate. The positive or neutral NOIP occurs because local firms, now, do not only effectively compete with foreign-owned firms in domestic sectors, but are also able to penetrate foreign markets. These companies' OFDI follow two routes. On the one hand, investments flow towards countries mainly at the same IDP stage to seek strategic assets through M&As and strategic alliances. On the other hand, they are directed towards countries at lower IDP stages to pursue market size and efficiency. This is necessary to bolster their O-advantages, which drift away from proprietary assets (Oa) and tend to be more *transaction-related* (Ot).

Outward efficiency-seeking investments are a direct consequence of the significant changes occurring at the macro level. At this stage, host country's L-advantages, traditionally linked to *natural assets* – which comprise natural endowments such as unskilled labour force and natural resources – begin to rely primarily on *created* assets – such as qualified labour, capital, and technology availability, as well as managerial and entrepreneurial skills[26]. Moving operations to offshore locations to exploit inexpensive labour force is not the only episode signalling the transformation in the country's asset endowment. The shift is also reflected in the employment of capital-intensive production processes, given the lower cost of capital compared with the cost of labour.

The government role is likely to change, too. More emphasis will be placed on reducing transaction costs of economic activity and facilitating markets to operate efficiently. By promoting technological accumulation in infant industries and phasing out declining industries, government actions will pursue a better allocation of the country's resources and capabilities.

In the fifth and last stage (OFDI ≈ IFDI), with permanently high stocks of both IFDI and OFDI, the NOIP revolves around zero, alternating between positive and negative balances. Its fluctuations depend on the short-term evolution of economic factors, such as exchange rates and economic cycles, as well as firms' strategies, given

[26] Dunning and Narula (1993) distinguish between *natural* and *created* assets. The former comprises of natural endowments such as unskilled labour and resource endowments. The latter derive from the upgrading of these natural assets.

that countries belonging to this stage experience a growing similarity between their economic and industrial structures. This convergence implies a two-fold consequence. First, the L-advantages of country will depend less on the availability and price of its natural assets and more on the capability of its firms to acquire and generate created assets. Second, and strictly connected to the former, the firms' O-advantages will be less dependent on their country's natural resources but more on their ability to efficiently organise created assets through cross-border common governance (Ot). In this context, investments will be from firms in the fourth or fifth stage pursuing efficiency, and from strategic-asset seekers located in countries at lower stages of the IDP.

The shrinking differences among countries also augment the importance of the governments, which consider the behaviour of other governments in the formation and execution of their own macro-organisational strategies. The ability of domestic firms to upgrade its assets is not simply a function of the country's natural assets, but also depends on the macro-organisational strategies of their government.

3.3.1 The Investment Development Path Analysis

The applied research on the IDP can be distinguished into two strands (Fonseca, Mendonça, & Passos, 2007). On the one hand, a group of studies examines the evolution of the IDP position for individual countries. These researches aim at analysing changes in O-, L-, and I-advantages *over time* with respect to the various levels of development a specific country undergoes. On the other hand, cross-sectional analyses seek to determine the relationship between the level of development and the volumes of IFDI and OFDI to a set of countries in a given period of time, contrasting with the IDP dynamic nature (Dunning & Narula, 1996). Our thesis will apply neither. Since our goal is to group countries with structural similarities along the different IDP stages at *specific* points in time, rather than determine the effects of the structural transformation on OFDI and IFDI, we will resort to principal component analysis (PCA) and cluster analysis (CA).

This multivariate approach to IDP was originally implemented by Dunning (1981) but considerably improved by Durán and Úbeda (2001; 2005), as acknowledged by Dunning himself (Dunning & Lundan, 2008). The pair of Spanish scholars identified two major limitations. First, they reckoned NOIP to be an incomplete indicator for analysing changes in IFDI and OFDI volume, burdened with significant drawbacks. One shortcoming relates to the ambiguity of NOIP increases, for a positive increment on NOIP does not necessarily signal competitiveness surges of the economy; rather, it might reflect a divestment process in response to a deterioration of a country's investment environment. Another limitation relates to a NOIP around zero, characteristic of countries in both the first and fifth stages of IDP, which could prove inconvenient from a statistical point of view. These two problems were overcome by using IFDI and OFDI stocks separately, in addition to NOIP.

Second, they empirically worked out Dunning and Narula's (1996) proposal that gross domestic product (GDP) per capita is an inadequate indicator of the level of economic development of a nation, since countries exhibit economic structures that are significantly different even at the same level of GDP per capita. Further, countries also differ in terms of specific factors. Certain national idiosyncratic elements, such as resource endowments, market size, and economic orientation, greatly influence the capacity to generate and receive direct investment (ibid.). Therefore, considering GDP per capita, alone, implies the sacrifice of the diversity inherent in each country's economic structure. To this end, Durán and Úbeda (2001) gathered a set of variables reflecting both the degree of economic development and the idiosyncratic dimension of countries.

Given this context, we will follow the path laid out by Durán and Úbeda (2001). A principal component analysis (PCA) will allow us to work with a greater number of structural variables, thus overcoming the limitations of using only GDP per capita. Further, PCA will also offer the opportunity to identify useful variables for the CA to group countries according to their stage in the IDP. A detailed explanation of the variables included in the model, PCA, and CA, and can be found, in Appendix D, Appendix E and Appendix F, respectively.

3.4 Part Conclusion

The literature review chapter has investigated and presented many different theoretical concepts. Hence, we reckon that a summary of the major points would prove useful in helping the reader creating a comprehensive overview before delving into our model and its findings.

The literature review has begun by presenting the three main theoretical streams of thought on international production, upon which Dunning built his Eclectic Paradigm (or OLI). Each place its focus on a different unit of analysis. First, the market imperfection approach addressed why firms of one nationality are more capable of exploiting foreign markets than indigenous firms. Second, the internalisation theory sought to explain why the cross-border transactions of intermediate products are, in some cases, organised by hierarchies rather than determined by market forces. Third, the macroeconomic approach focused on why firms of particular nationalities exhibit different propensities to engage in international trade and FDI.

Albeit each of these theories adds up to the understanding of international production, the literature also stressed their limitations: taken singularly, they can only partially explain such a phenomenon. Indeed, the typology of FDI undertaken by MNEs varies considerably, and so do their rationales. For instance, the motives prompting a Chinese state-owned oil company to seek new reserves in Angola would greatly differ from those pushing a UK bank to establish a call centre facility in India. It follows that it is not possible to conceive a single, overarching theory capable of explaining all forms of FDIs.

Considering the above, Dunning's major merit was to understand that the theory of MNE activity stands at the intersection between the macroeconomic theory of international trade and the microeconomic theory of the firm. His Eclectic Paradigm fills this gap by accommodating the aforementioned partial micro- and macro theories of international production under a unique "umbrella", thus offering sets of variables relevant to an explanation of all kinds of FDIs.

Specifically, the OLI paradigm postulates that an FDI is the most appropriate form of international business exclusively if three conditions are simultaneously satisfied. First, the firm must possess firm-specific advantages (O-advantages) that are not available to the host country's firms and can be transferred across borders. Second, operating the O-advantages in a foreign location well-endowed with locational advantages (L-advantages) allows the firm to create value otherwise unachievable in the home country. Third, it must be in the best interests of the enterprise possessing O-advantages to transfer them across national boundaries within their own organisations rather than using market transactions (I-advantages).

The literature review then displayed the OLI limitations and the revisions it has undergone throughout time to address them. Amongst the several refinements, the inclusion of institutions to acknowledge their role in swaying the O and I advantage of firms and the L advantages of countries is what touches our thesis the most. Despite institutions affecting the OLI as a whole, again, given that the scope of this thesis is to investigate the role of IPAs in attracting FDI, we have analysed their impact exclusively from the locational angle. In the course of reviewing the institutional literature, we have identified a large amount of empirical results that point to the relevance of institutional factors as determinants of FDI. At a macro level, weak institutions deter investments through two channels: corruption increases the cost of doing business and imperfect enforcement of contracts might increase uncertainty regarding future returns. Hence, the capability to successfully attract FDI rests essentially on the content and quality of L-specific institutions (Dunning, 2006).

The next step was a survey of the Investment Promotion literature, the core prerequisite of this thesis. Research findings have unambiguously demonstrated that IPAs are associated with greater FDI inflows into their host country. A first take-away is that each type of promotional activities carried out bears a different ROE, entailing that resources must be devoted to activities that offer the largest return. Second, albeit a correct resource allocation is important, budget size is perhaps even more as a minimal level of financial commitment is required to perform promotional activities efficiently. Third, the organisational setup influences IPA's capability to attract foreign investors for mix of public and private combine the positive aspects and avoid the disadvantages of both. Fourth, the implementation of best practices is critical to improve IPA's performance. Scouring the investment promotion literature not only enabled the authors of this thesis to uncover best practices, but also offered us the opportunity to uncover some missing links that

need to be addressed, which is the focus of this thesis. These represented the basis upon which we have devised our hypotheses, that is meant to be tested in the subsequent chapter.

Finally, we touched upon the IDP. Such a dynamic interpretation of the OLI assumes the existence of a systematic relationship between a country's level of economic development and the amount of investment it receives and generates. As a country evolves, a structural transformation occurs, which is reflected by: changes in the O-advantages of its enterprises relative to those of other nationalities; changes in its L-advantages relative to those of other countries; and changes in the extent to which firms perceive these advantages are best organised internally (I-advantages). Thus, the three legs of the eclectic paradigm can conveniently explain the varying propensity of countries, at different stages of their economic development, to attract or generate FDI.

The importance of the literature review will be fully reflected in the following part of this thesis aimed at identifying the control variables.

4 Data and Model Specification

In the following chapter, the data and model specification that have been created will be described in detail. The choices have been heavily guided by the research design described in chapter 2.0 Methodology and Methods.

Our sample consists of 107 countries and the full list can be found in Table 5. All of our variables cover a time horizon going from years 2000 to 2015. Our dependent variable is FDI, whereas the independent variables can be divided into two groups. On the one hand, there are our three hypothesised best practices: $IdiomWeighted$, $Twitter$ and $Facebook$, and $Waipa$. On the other hand, there is a selection of variables to control for determinants of FDI: $Waipa$, $NaturalResources$, $SkilledLabour$, $SqSkilledLabour$, $PhonePenetration$, $TradeOpenness$, $MarketSize$, $MarketGrowth$, WGI and $Patents$. In addition, we have created the dummy variables IDP_1, IDP_2, IDP_3, IDP_4, and IDP_5 so to investigate potential differences among different degrees of development.

TABLE 5 - SAMPLE OF 107 COUNTRIES

Algeria	Cambodia	France	Kenya	New Zealand	Slovenia
Argentina	Canada	Georgia	Kuwait	Niger	South Africa
Armenia	Central African Republic	Germany	Kyrgyzstan	Nigeria	South Korea
Australia	Chile	Ghana	Latvia	Norway	Spain
Austria	China	Greece	Lebanon	Pakistan	Sri Lanka
Azerbaijan	Colombia	Guatemala	Lithuania	Paraguay	Sweden
Bahrain	Costa Rica	Guyana	Luxembourg	Peru	Switzerland
Bangladesh	Cote d'Ivoire	Honduras	Macedonia	Philippines	Thailand
Barbados	Croatia	Hong Kong	Madagascar	Poland	Togo
Belarus	Cyprus	Hungary	Malawi	Portugal	Tunisia
Belgium	Czech Republic	Iceland	Malaysia	Qatar	Turkey
Belize	Denmark	India	Malta	Romania	Ukraine
Benin	Ecuador	Ireland	Mexico	Russia	United Kingdom
Bolivia	Egypt	Israel	Moldova	Saudi Arabia	United States
Botswana	El Salvador	Italy	Morocco	Senegal	Uruguay
Brazil	Estonia	Jamaica	Mozambique	Seychelles	Yemen
Burkina Faso	Fiji	Japan	Namibia	Singapore	Zimbabwe
Burundi	Finland	Jordan	Netherlands	Slovakia	

The remainder of this chapter will proceed as follows. Subchapters 4.1 and 4.2 will empirically justify the inclusion of each of the above variables, including their transformations, as well as presenting their data sources. Next, subchapter 4.3 will display their detailed overview. Finally, subchapter 4.4 will outline the four econometric equations that serve as the basis of our regressions.

4.1 Dependent Variable

Through the literature review, it has become apparent that there is a myriad of possibilities in selecting the dependent variable for measuring the level of FDI inflows. On the one hand, there are the studies of FDI determinants. Here, some authors like Asiedu (2006), Mohamed and Sidiropoulos (2010), as well as Walsh and Yu (2010) rely upon FDI as a percentage of GDP, for such an expedient allows accounting for market size. However, other scholars prefer another approach and utilise total gross of inward FDI, either in the level form, as Cleeve (2008), or in the log level, as Globerman and Shapiro (2002), Mottaleb and Kalirajan (2010), Jadhav and Katti (2012), and Buchanan, Le and Rishi (2012).

On the other hand, studies focusing on IPAs' effectiveness are more homogenous. Wells and Wint (1990; 2000) used inflow of FDI per capita, which also enabled them to account for market size, whereas Morriset and Andrews-Johnson (2004) selected total gross inflow of FDI likewise Harding and Javorcik (2011; 2012), despite the latter couple used it in log.

In this context, our choice for the dependent variable has fallen upon gross inward FDI flows, transformed into their logarithm. Hence, our dependent variable will be named FDI and its data is retrieved from UNCTAD (2017). The most compelling reason has been the desire to align this research with other IPA-specific studies. Second, it allows the coefficients of the independent variables to explain changes in FDI inflows in percentage terms. Third, as it will be explained later in subsection 4.2.3.2.2, market size is already being accounted for by the selection of independent variables, thus eliminating the need to "purify" FDIs from the country size. Finally, Wooldridge (2013, p. 185) suggests, as a rule of thumb, to take the log when a variable is expressed in dollars. However, the log transformation carries some drawbacks, for negative values are lost. In our sample, it has led to a loss of 63 observations, thereby reducing our initial 1712 observation to 1649.

Ideally, we would have preferred to use sector-specific FDI flows to strengthen the causal relationship with our selection of control variables, but lack of data availability unfortunately refrained us from doing it. This point is further explained in chapter 8.0 Limitations and Future Perspectives.

4.2 Independent Variables

The following sections will further explain the theoretical motivations behind the independent variables selection, as well as provide empirical support justifying their utilisation[27]. Their discussion and selection will

[27] For an extensive literature review we invite the reader to consult the works by Chakrabarti (2001) and Assunção, Forte and Teixeira (2011).

be heavily reliant on the chapter 3.0 Literature Review. First, the hypothesised IPA's best practices will be introduced, as they represent the point of departure of the entire thesis. Then, Dunning's four motives for internationalisation will be operationalised to ascertain the control variables. Next, univariate summary statistics of all variables will be provided in Table 7, Table 8, Table 9 and Table 10. And finally, the expected outcome for each variable will be listed in Table 11.

4.2.1 Best Practices of Investment Promotion Agencies

From the literature review, we have uncovered three hypothetical best practices that might potentially have a significant relationship with inward FDIs. Specifically, the three best practices have been drawn from the discussion found in subchapter 3.2.

4.2.1.1 IPA Website Translations

As stated in section 3.2.2, the literature has so far neglected the potential relevance of translating IPAs' websites into several foreign languages. Up to now, only the availability of English contents has been tested (The World Bank Group, 2006; 2009; 2012; Harding & Javorcik, 2012). Given this context, we have devised an index of our own creation($IdiomWeighted$), aimed at acknowledging the changes in importance of each language with respect to outward FDI: in our opinion, different languages carry different relevance when it comes to catalyse FDI. To obtain it, we have attached a weight to each single language available: calculated annually, the weight attempts to reflect the proportion of the OFDI generated in the previous years by the population speaking a certain language out of the world's total. For a more extensive methodology on the weighting creation, please refer to Appendix B whereas for the actual table of weighting values, please refer to Appendix H.

4.2.1.2 IPA Social Media Usage

Ecorys (2013) highlighted how social media has become more prevalent as a platform for online investment promotion (see section 3.2.2). However, to our knowledge, its effect on inward FDI flows has not been tested yet. To fill in this gap, we have collected the historical social media usage of IPAs within our country sample. Amongst the many available social media, we have selected Twitter and Facebook. Our choice relied on the fact that these platforms, other than LinkedIn, are the most widespread for lead-generation (Nicholls, 2016, p. 81). The collected data is added as the two dummy variables, namely $Facebook$ and $Twitter$, that take the value of 1 if the IPAs have an account for the platforms and 0 if they do not.

Finally, for a detailed description of the data collection method, please refer to subchapter 2.6 Techniques and Procedures.

4.2.1.3 IPA WAIPA Membership

The literature review in section 3.2.2 has introduced WAIPA and its institutional role. By providing IPAs with the opportunity to network and exchange best practices in investment promotion, WAIPA aims at building the human resources capacity of its member agencies (WAIPA, 2017a). In this context, WAIPA membership hypothetically would increase their effectiveness. To test such an assumption empirically, we have created a dummy variable ($Waipa$) that takes value 1 if an agency is a WAIPA member or 0 otherwise. We have retrieved historical data of WAIPA memberships from annual reports, located partly at UNCTAD (2017b) and partly at WAIPA (2017c).

4.2.2 Motives for International Production

The following section will operationalise the motives for internationalisation that prompt firms to undertake FDI, as discussed in subsection 3.1.5.2 The Four Motives for Foreign Direct Investment. The chosen control variables have been placed within each of the respective motives. An overview of the motives and the selected proxies is provided in Table 6.

TABLE 6 - MOTIVES FOR INTERNATIONAL PRODUCTION, LOCATIONAL ADVANTAGES, AND THE EMBEDDED VARIABLES

Types of motivation for international production	**Locational advantages**	**Proxies**
Resource seeking	Natural resources, transport, communication, infrastructure, tax and other incentives	- Ore and fuel % sum of merchandise exported - Mean average years of schooling - Phone penetration (both mobile and landline)
Market seeking	Material and labour cost, market size and characteristics, government policy/regulation, and investments incentives	- Degree of openness - Market size (GDP per capita) - GDP growth
Efficiency seeking	Economies of products or process specialisation and concentration; low labour costs, incentive to local production	- World Governance Index
Strategic asset seeking	Any of the above that offer technology, organisational and other assets	- Patents

4.2.2.1 Resource Seeking Motive Operationalised Variables

The following three variables have been operationalised from the resource-seeking motive. These variables seek to reflect natural resource endowment, the human capital availability, and the infrastructural quality. For reference, see 3.1.5.2 The Four Motives for Foreign Direct Investment.

4.2.2.1.1 NON-RENEWABLE NATURAL RESOURCES EXPORTS

A minority of researchers have chosen to use a dummy variable as proxy for endowments of natural resources, displaying whether a country possessed natural resources endowments or not (Mhlanga, Blalock, & Christy, 2010). Other scholars preferred to employ the share of mineral fuel exports – which include oil, coal, and natural gas – out of total merchandise exports (Asiedu, 2006; Campos & Kinoshita, 2008; Teixeira, Forte, & Assunção, 2017). However, based on empirical findings of the same authors, we have chosen to create our own index by combining the data for both *export of mineral fuel* and *export of ores and metals* (ibid.). In our opinion, this index should provide a more comprehensive proxy for resource endowment. The resultant independent variable has been named $NaturalResources$, and the data necessary for its creation has been retrieved from the World Bank (World Bank, 2017a; World Bank, 2017b).

4.2.2.1.2 DEGREE OF EDUCATIONAL ATTAINMENT

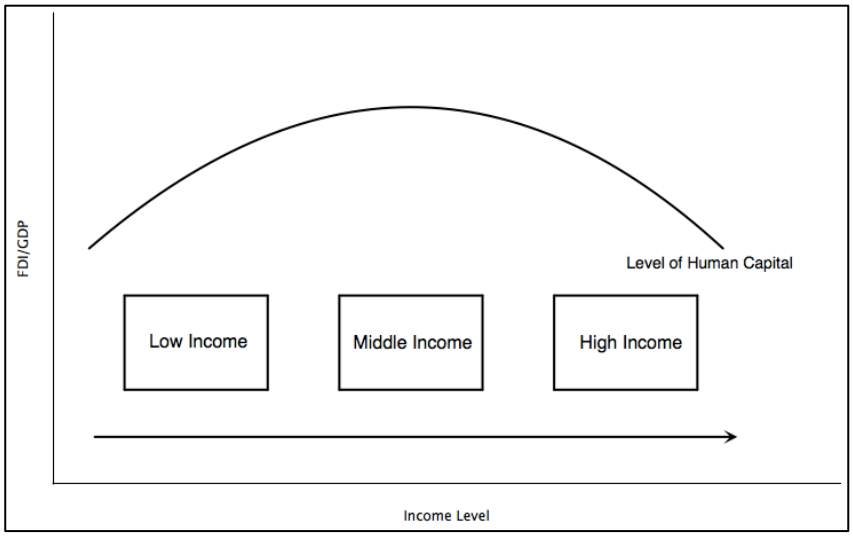
Several studies emphasise that a lack of human capital hinders investment in less developed and developing countries (Dunning, 1998; Teixeira, Forte, & Assunção, 2017). Indeed, achieving a certain minimum educational attainment is of chief importance to shape a country's ability to attract FDIs. In general, a country will attract FDI only if a sufficient supply of labour with relevant skills is available (OECD, 2002, p. 102).

In this vein, it has been hypothesised (Zhang & Markusen, 1999) and measured (Akin & Vlad, 2011) the existence of an inverse U-shaped relationship between human capital and inward FDI (Figure 7). Put differently, even though low-cost and low-skilled employees are a motivation for internationalisation through the resource-seeking motive, a certain degree of skilling in terms of tertiary education will still be needed; however, when workers' skills, and thus wage level, increase excessively, profitability will decrease thereby diverting FDI inflows.

In accordance with Teixeira, Forte, and Assunção (2017), we have chosen mean years of schooling as a proxy for human capital, since it provides an indication of the "stock" of human skills (Archibugi & Coco, 2004). We have taken account of the non-linear relationship by inserting this variable in our model both in linear as well

as in its quadratic form[28]. The independent variables are called $SkilledLabour$ and $SqSkilledLabour$, and the data is derived from UN's Human Development Reports (United Nations, 2017).

FIGURE 7 - INVERSE U-SHAPED RELATIONSHIP BETWEEN HUMAN CAPITAL AND INWARD FDI (AKIN & VLAD, 2011) GRAPHICAL REPRESENTATION OF OWN DEVICE



4.2.2.1.3 PHONE PENETRATION

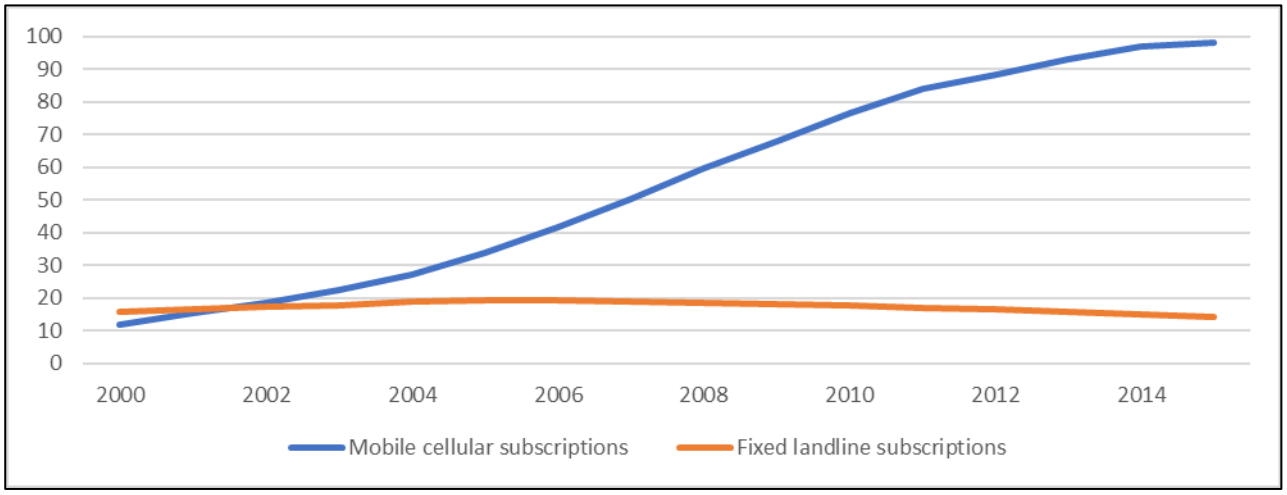
The proxy selected for measuring the quality of infrastructure is an index of our own creation. As our data range is from 2000-2015, we are recognizing the substitution patterns in the telephony infrastructure that happened throughout this period. On the one hand, the industrialised part of the world has increasingly dropped landlines for mobile phones; on the other hand, developing countries have skipped the landline altogether to directly adopt mobile phones (Bauer, 2015). The development of each means of communication, throughout our sample period, is visualised in Figure 8 below.

To reflect this trend, we have chosen to combine the data for landline and mobile phone penetration, both per 100 inhabitants, to devise our own single index ($PhonePenetration$). An equal weight has been assigned to older and newer telephonic components since they share the same function despite incorporating different degrees of technology. Once created, we have decided to transform its original values into their natural logarithm: the use of log creates a threshold above which the capacity of a country is no longer enriched by the increased usage of telephones (Archibugi & Coco, 2004).

[28] Please refer to Gujarati and Porter (2010, pp. 156-158) for the explanation of the benefit of using quadratic terms.

The choice of phone subscriptions is consistent with the literature (Biswas, 2002; Asiedu, 2006; Demirhan & Masca, 2008) and data has been collected from the World Bank Database (World Bank, 2017c; World Bank, 2017d).

FIGURE 8 - GRAPH OF MOBILE AND FIXED LANDLINE SUBSCRIPTIONS IN THE WORLD PER 100 PERSONS (WORLD BANK, 2017C; 2017D) GRAPHICAL REPRESENTATION OF OWN DEVICE



4.2.2.2 Market Seeking Motive Operationalised Variables

Below, we will discuss the three variables that have been operationalised within the market-seeking motive to account for market size and characteristics. For reference, see 3.1.5.2 The Four Motives for Foreign Direct Investment.

4.2.2.2.1 DEGREE OF OPENNESS

The first proxy for the market-seeking motive that has been chosen is the degree of openness of the host economy. Calculated as the share of trade volume to GDP, or $\frac{(exports+imports)}{GDP}$, it is found to be a determinant of inward FDI by Asiedu (2006), Cleeve (2008), and Mhlanga, Blalock and Christy (2010). The data is gathered from the World Bank and the variable has been named $TradeOpenness$ (World Bank, 2017e).

4.2.2.2.2 MARKET SIZE

Literature has demonstrated that GDP is a determinant of FDI, since a bigger market would entail more potential consumers for investors (Schneider & Frey, 1985; Wang & Wong, 2009). Therefore, consistently with Asiedu (2006) and Walsh and Yu (2010), we select the logarithm of GDP per capita as a proxy for market size. Using GDP per capita enables us avoiding some pitfalls. A first one is connected to GDP in absolute terms; indeed, as countries like India and China demonstrate, a large GDP does not necessarily equal being a rich country. Second, we could have considered using population size as a proxy, like Mohamed and Sidiropoulos (2010); however, a large population does not necessarily mean a large market if the population lacks enough

purchasing power. This said, the data is gathered from the World Bank Database and the variable is named $MarketSize$ (World Bank, 2017f).

4.2.2.2.3 MARKET GROWTH

Market growth rate, measured as annual GDP growth percentage, is selected as a proxy for market potential. The logic behind its inclusion rests on the concept that a market with recorded large growth rates is expected to continue such a trend, thereby being more attractive for potential investors. The variable was tested and found significant towards the attraction of FDI by Cleeve (2008), Mohamed and Sidiropoulos (2010) as well as Mottaleb and Kalirajan (2010). The data is gathered from the World Bank Database and the variable is named $MarketGrowth$ (World Bank, 2017g).

4.2.2.3 Efficiency Seeking Motive Operationalised Variables

The reader can recall the definition provided for efficiency-seeking FDI, whose goal is rationalizing the structure of established resource- or market-seeking investment to reach economies of scale and scope (for reference, see 3.1.5.2 The Four Motives for Foreign Direct Investment). Considering what aforementioned, it is complex to separate resource- and market-seeking investments from those seeking efficiency (Dunning & Lundan, 2008, p. 74), Yet, according to Dunning and Lundan (2008, p. 72) "the intention of the efficiency-seeking MNE is to take advantage of different (…) institutional arrangements". Hence, we will consider institutional quality within this motive (ibid., p. 72)[29].

4.2.2.3.1 WORLD GOVERNANCE INDEX

To measure institutions, the literature has relied mostly upon two different sets of variables. On the one hand, some authors used a survey indicator from the International Country Risk Guide (Knack & Keefer, 1995; Hall & Jones, 1999; Acemoglu, Johnson, & Robinson, 2000); on the other hand, a group of scholars used the World Governance Index (WGI) measurements complied by Kaufmann, Kraay and Mastruzzi (2004) for the World Bank (Globerman & Shapiro, 2002; Daude & Stein, 2007; Buchanan, Le, & Rishi, 2012). We implement the latter given its large-scale covering allows us to encompass fully our sample as well as because its

[29] In consideration of the importance of institutional quality regarding attraction of FDI, please refer to subsection 3.1.5.4 Institutional Incorporation.

measurements originate from thirty different sources (World Bank, 2017h), thereby providing more accurate estimates. Specifically, the WGI includes six institutional dimensions (World Bank, 2017h):

1) **Voice and Accountability**: captures the perception of the extent that people can select their government and other areas like freedom of press, freedom of association and so on;
2) **Political Stability and Absence of Violence/Terrorism:** captures the perception of the level of violence and political instability;
3) **Government Effectiveness:** captures the perception of quality of the public sector and civil service and their independence from political pressure;
4) **Regulatory Quality:** captures the perception of the ability of the government to formulate and implement thorough policies and regulations;
5) **Rule of Law:** captures the perception of if citizens have confidence and abide by the rules of society;
6) **Control of Corruption:** captures the perception of the extent that public power is exercised for private gain.

These six variables have been combined into a unique index[30], a variable named WGI. Mathematically, its creation is simple: a country's score for a specific year is the simple average of the six variables for that country in that specific year. Logically, the index creation is motivated by three rationales. First, the singular variables are highly correlated with each other; for one, corrupted officials may voluntarily burden the bureaucracy with additional requirements and obstacles so to receive bribes (Mauro, 1995). Second, and related to the first, from an econometric point of view their joint utilisation would generate a severe problem of multicollinearity. Third, their combination allows us to account for a concise, yet fuller picture of the institutional quality of each country, given that, singularly, the six variables cover various aspects.

4.2.2.3.1.1 INSTITUTIONS AND ENDOGENEITY

Albeit the FDI literature has widely demonstrated the relevance of institutions as FDI catalyser, its inclusion in our econometric model raises a flag as a potential generator of endogeneity. First, in terms of simultaneity bias; once invested in a country, foreign companies might start lobbying to improve institutional conditions, which, if achieved, might lead to a larger proportion of inbound investments in the successive years, and so on. Second, as a measurement bias. The variables composing the WGI summarise the views on the institutional quality provided by a large number of companies, citizens, and expert survey respondents

[30]Method proposed by Daude and Stein (2007, p. 8). Originally, the idea of multicollinearity between such variables was proposed by (Globerman & Shapiro, 2002, p. 1902), who implemented a factor analysis to obviate to the problem.

(World Bank, 2017h); hence, they are clearly an *ex-post* outcome measure since they are based on subjective perceptions. In this context, an increase in IFDI might be perceived by an interviewee as an improvement of the institutional environment, although not necessarily being the result of it (Glaser, LaPorta, López-de-Silanes, & Shleifer, 2004).

Despite several studies on the relationship between FDI and institutions have implemented IVs to overcome the issue of endogeneity (Bénassy-Quéré, Coupet, & Mayer, 2007; Daude & Stein, 2007; Walsh & Yu, 2010; Buchanan, Le, & Rishi, 2012), the utilisation of IVs in lieu of institutional variables originates from the economic growth literature[31]. Hence, we will select our instrumental variables from the key instruments in economic growth theory, which are based either on geography (distance from equator) or colonial and pre-colonial history (settler mortality, legal origin, ethnic and linguistic composition, precolonial population density, state antiquity) (Pande & Udry, 2005, p. 5).

Mauro (1995) is the first that recognises the risk of endogeneity and instrument for corruption through an index of ethnolinguistic fractionalisation of the population[32]. His reasoning rests on the concept that the presence of many different ethnolinguistic groups is significantly associated with corruption, since bureaucrats may favour citizens belonging to their same group. Hall and Jones (1999) use latitude as an instrument, since they recognise that economies closer to the equator are less successful in terms of per capita income; the logic is that tempered zones enjoy larger agricultural productivity and healthier climate, thereby enabling countries to develop their economies along with their institutions. The pair of scholars also aim at "exploiting" the expansion of Western European influence around the world happened from sixteenth through nineteenth centuries. To this end, the extent to which primary languages of Western Europe, namely English, French, German, Portuguese, and Spanish, are spoken as first languages today is considered as an instrument. Such a Western-European-influence-based approach has since become the base for the creation of further instruments. Indeed, in the same vein, LaPorta, Lopez-de-Silanes, Shleifer and Vishny (1999) look at legal transplantation of European law systems; their justification for using such an instrument is that coloniser transferred their own legal systems into their colonies, thus affecting their subsequent development.

[31] For an extensive survey of the IVs used in the economic growth literature, we advise the reader to consult the work of Pande and Udry (2005).

[32] It measures the probability that two persons drawn at random from a country's population will not belong to the same ethnolinguistic group (Mauro, 1995).

However, it is with Acemoglu, Johnson, and Robinson (2000; 2002) that this line of research achieves substantial results. These authors argue that understanding a country's institutional environment requires examining whether European colonisers settled in the particular colony, rather than the origin of the legal code they introduced. In their first paper (Acemoglu, Johnson, & Robinson, 2000), the authors focus on the mortality rate of European colonisers as the determinant that shaped settlement decisions. Not settling involved the creation of systems of arbitrary rules and expropriation of local populations, whereas the settlement involved bringing along the effective European institutions and their constraints on the rulers.

In their second paper (Acemoglu, Johnson, & Robinson, 2002), the scholars further argue that the density of non-European populations influenced Europeans' settlement decisions too. Scarcely urbanised areas by indigenous population fostered European settlement, which brought along effective institutions and the connected long-term growth, whereas already densely urbanised areas entailed the non-European settlement, thereby creating exploitative institutions. The results of this pair of papers originated, respectively, the settler mortality rate and the log of indigenous population density in 1500 as instruments.

A last, fascinating instrument, is state antiquity, proposed by Bockstette, Chanda, and Putterman (2002). According to these scholars, a longer history of statehood might prove favourable to economic development for several reasons. For one, it supports the development of attitudes consistent with bureaucratic discipline and hierarchical control, making for larger state effectiveness. Another motive is that nationhood fosters linguistic unity, together prompting a sense of common identity; such a shared identity may be helpful for the avoidance of political instability that has wrecking impacts on many economies.

Of these valid instrumental variables, in our context, a couple raise a potential concern for they may affect the influx of FDI through channels other than institutions. In other words, these instruments may be correlated with the error term, thus violating one of the paramount conditions presented in subsection 2.6.2.3. First, the legal origin may affect FDI via salary level, a factor not included in our model, since different legal systems contemplate different levels of protection for worker rights, such as national minimum wage salaries. Second, the extent to which primary languages Western European languages are spoken at birth may influence FDI through cultural distance; clearly, sharing a common language would definitely ease the feasibility of FDI projects. Given these reasons, the aforementioned instruments will be disregarded. Finally, we are somewhat "forced" to abandon the mortality rate of European colonial settlers since this variable is specific to former colonies, and would thus reduce our sample.

In sum, our instruments, and their respective online database sources, will be: Latitude (College of Urban & Public Affairs, 2017), Ethnic Fractionalisation (Fearon & David, 2017), Log of Indigenous Population Density in 1500 (Acemoglu, 2017), and State Antiquity (Putterman, 2017).

4.2.2.4 Strategic Asset Seeking Motive Operational Variable

The following variable has been operationalised from the strategic asset-seeking motive discussed in subsection 3.1.5.2 The Four Motives for Foreign Direct Investment.

4.2.2.4.1 PATENTS

The number of patents registered in the US, both by local and foreign firms as well as individuals, can be deemed as a good proxy for commercially exploitable inventions. The historical data is collected from USPTO's website (U.S. Patent and Trademark Office, 2015). We have preferred USPTO to World Bank's database (2017j) since the latter gathers data from different national patent offices, thus significantly reducing data comparability. Indeed, the procedure to receive a patent and the protection accorded to such an invention vary considerably across countries (WIPO, 2017). Hence, in order to have an internationally patent-based reliable indicator, it is preferable to consider the patents registered by all countries in a specific patent institution. We believe that USPTO is the institution that best serves our purpose, since the USA is the largest and most technologically developed market in the world. To further reinforce our choice, all of the major measures of national technological capabilities, namely WEF, UNIDO, ArCo, and RAND, also utilise patents granted at USPTO (Archibugi & Coco, 2005).

As mentioned, the data is collected from USPTO, and the variable has been named $Patents$. Once created, we have decided to transform its original values into their natural logarithm[33]: the use of log creates a threshold above which the technological capacity of a country is no longer enriched by the registration of more patents (Archibugi & Coco, 2004). Further, using the log will reduce the wide variation between countries observed for $Patents$ in its original form, as well as the U.S.A overrepresentation in their national office, thus making OLS estimates less sensitive to extreme values (Wooldridge, 2013, p. 185).

4.2.3 Time Trend

Subsection 2.6.2.2 Panel Data Preconditions has already stressed that recognising the tendency of some variables to grow, or diminish over time is paramount in panel data context. Indeed, ignoring that two, or more, variables are trending in the same or opposite directions can lead to drawing misleading conclusions about their relationship, which have nothing to do with causality. Fortunately, the problem connected to such spurious relationships can be solved by controlling for *time trends* in the equation. With specificity to

[33] For the few countries that did not register any patent, the original value of 0 was substituted with 0,1, so to not lose those observations after the log transformation.

our time horizon, we suspect that the Great Recession might lead to trend-encouraged correlation. To account for this potential risk, we create and include in the regression model a trend variable, namely $Trend$, to allow for de-trending.

4.2.4 Investment Development Path

Section 3.2.3 Literature Gap and Hypotheses Formulation has showed how previous studies on the effectiveness of IPAs discriminated between developed and developing countries on the basis of World Bank's income grouping (World Bank, 2017k). However, as described in subchapter 3.3 Investment Development Path, countries exhibit different economic structures in terms of market size, created assets, infrastructures, human skills, and institutions even at the same level of GDP per capita. Further, also certain national-specific elements, such as resource endowments, market size, and economic orientation, influence the capacity to generate and receive direct investment. Hence, considering GDP per capita, alone, implies the sacrifice of the diversity inherent in each country's economic structure.

A striking example is Italy. After 2009, the country receded from stage 4 to 3, largely due, among other things, to the steadily decrease of its WGI score from 0.83 in 2000 to 0.46 in 2015. Clearly, this event would have not been captured by the income-based grouping of the World Bank. Considering that labelling Italy as a developing country would sound somewhat strange, we will discard the World Bank's nomenclature for a more appropriate that will refer to each stage as a reflection of different degrees of development, spanning from least to most developed. As already mentioned in section 3.2.3 Literature Gap and Hypotheses Formulation, since we seek to obtain a more meaningful discrimination between degrees of development and thereby increase the relevance of the grouping criterion, our classification of economic development will be based on the five IDP stages[34]. Thus, five different dummy variables, namely IDP_1, IDP_2, IDP_3, IDP_4, and IDP_5, will reflect the position of each country along the IDP throughout our time horizon. These variables will also allow us to investigate the interaction between a country's degree of development and our hypothesised IPA's variables.

Despite offering a more meaningful discrimination of countries' development level, the IDP classification still carries along some potential issues. Indeed, the vast majority of variables utilised to perform it are largely exposed to the effect of macroeconomic fluctuations. Specifically, we have observed multiple cases of countries moving back and forth from one year to another. Hence, to prevent noise from disturbing our

[34] Please refer to subchapter 3.3 Investment Development Path for the theoretical foundation and Appendix D, Appendix E, and Appendix F for factor and cluster analyses.

classification, we have taken a few precautions. First, a country's new IDP stage has only been accepted if the very same stage has been maintained for, at least four years in a row; when this was not the case, the "suspicious" IDP stage value was manually aligned to the value observed for the prior "unsuspicious" year. Second, in case the stage obtained for the first and/or last year of our time horizon did not corresponded to, respectively, the second and second-last year, the former were left untouched; the rationale behind this choice is that we do not have any possibility to check whether the discrepancy is simply due to noise or it is actually the end, or the beginning of, an improvement or a deterioration of the development level. Appendix G, reports the IDP stages of each country for each year, as well as flags the values that have been manually adjusted in accordance with our criteria.

4.3 Summarisation of Variables

Below you will find an overview of the variables in Table 8, their detailed univariate statistics summary according to our samples respectively in Table 7, Table 8, Table 9, and Table 10 and finally the expected outcome for each variable in Table 11.

TABLE 7 - OVERVIEW OF VARIABLES, RANGE, UNIT AND SOURCE

Variable	Range	Unit	Source
$\ln(FDI)$	[-3.854-12.761]	Log (of inward FDI)	UNCTAD (2017)
$Waipa$	[0-1]	Dummy	Own data collection, see subsection 2.6.1.4
$IdiomWeighted$	[0-85.513]	Percentage point (of its index value)	Own data collection, see subsection 2.6.1.2
$Facebook$	[0-1]	Dummy	Own data collection, see subsection 2.6.1.3
$Twitter$	[0-1]	Dummy	Own data collection, see subsection 2.6.1.3
$NaturalResources$	[0-99.669]	Percentage point (of Merchandise Exports)	(World Bank, 2017a; World Bank, 2017b)
$SkilledLabour$	[0-13.4]	Years (of schooling)	United Nations (2017)
$SqSkilledLabour$	[0-179.56]	Square Years (of schooling)	United Nations (2017)
$\ln(PhonePenetration)$	[-1.603-5.694]	Percentage (of subscriptions per 100 people)	World Bank (2017c; 2017d)
$TradeOpenness$	[19.789-442.62]	Percentage point (of trade to GDP)	World Bank (2017e)
$\ln(MarketSize)$	[4.726-11.6883]	Log of USD	World Bank (2017f)
$MarketGrowth$	[-36.7-34.5]	Percentage point (of GDP Growth)	World Bank (2017g)
WGI	[-1.702-1.985]	Standard Deviation	World Bank (2017h)
$\ln(Patents)$	[0-11.882]	Percentage (of Patents)	U.S. Patent and Trademark Office (2015)

TABLE 8 - DETAILED DATA SUMMARY OF DATA SET VARIABLES FOR IDP STAGES 1-5

Variable	Variation	Mean	Std. Dev.	Min	Max	Observations	
$ln(FDI)$	overall	7.4204	2.2876	-3.8537	12.7611	N =	1649
	between		2.0767	-0.2667	12.0657	n =	107
	within		0.9784	2.3435	11.5386	T-bar =	15.4112
$Waipa$	overall	0.8137	0.3895	0	1	N =	1712
	between		0.2829	0	1	n =	107
	within		0.2690	-0.1238	1.7512	T =	16
$IdiomsWeighted$	overall	37.1758	24.0176	0	85.5132	N =	1712
	between		17.3928	0	73.7914	n =	107
	within		16.6429	-29.47	88.3643	T =	16
$Facebook$	overall	0.1139	0.3178	0	1	N =	1712
	between		0.1370	0	0.4375	n =	107
	within		0.2870	-0.3236	1.0514	T =	16
$Twitter$	overall	0.1887	0.3914	0	1	N =	1712
	between		0.1629	0	0.4375	n =	107
	within		0.3562	-0.2488	1.1262	T =	16
$NaturalRessources$	overall	22.8738	26.1762	0.0005	99.6693	N =	1712
	between		25.2521	0.1361	97.3840	n =	107
	within		7.2879	-60.9071	56.1127	T =	16
$SkilledLabour$	overall	8.5395	3.1449	0	13.4	N =	1712
	between		3.0546	0.9375	12.9125	n =	107
	within		0.8008	2.3707	11.7707	T =	16
$SqSkilledLabour$	overall	82.8072	48.7336	0	179.56	N =	1712
	between		47.6179	1.28	166.7625	n =	107
	within		11.2860	27.3266	122.4447	T =	16
$ln(PhonePenetration)$	overall	4.2256	1.1567	-1.6064	5.6936	N =	1712
	between		0.8628	1.6748	5.3572	n =	107
	within		0.7746	0.685	6.3886	T =	16
$TradeOpenness$	overall	93.0872	60.6088	19.7981	442.62	N =	1712
	between		58.9705	25.6866	381.1852	n =	107
	within		15.0465	-20.3181	196.4170	T =	16
$\ln(MarketSize)$	overall	8.6444	1.6029	4.7261	11.6883	N =	1712
	between		1.5581	5.2344	11.3687	n =	107
	within		0.4036	7.1908	9.6795	T =	16
$MarketGrowth$	overall	3.6419	4.2615	-36.7	34.5	N =	1712
	between		2.0372	-0.0159	10.9468	n =	107
	within		3.7479	-33.0481	29.8367	T =	16
WGI	overall	0.2181	0.9062	-1.7023	1.9854	N =	1712
	between		0.9024	-1.4263	1.8858	n =	107
	within		0.1189	-0.5158	0.8538	T =	16
$ln(Patents)$	overall	2.6582	2.9546	0	11.8819	N =	1712
	between		2.8637	0	11.4841	n =	107
	within		0.7754	-2.0834	4.2703	T =	16

TABLE 9 - DETAILED DATA SUMMARY OF DATA SET VARIABLES FOR IDP STAGES 1-3

Variable	Variation	Mean	Std. Dev.	Min	Max	Observations	
$ln(FDI)$	overall	6.8212	2.0988	-3.8537	11.8175	N =	1288
	between		1.8633	-0.2667	11.3316	n =	84
	within		1.0085	2.2605	10.9394	T-bar =	15.3333
$Waipa$	overall	0.8433	0.3637	0	1	N =	1321
	between		0.2667	0	1	n =	84
	within		0.2474	-0.0942	1.7808	T =	15.7262
$IdiomsWeighted$	overall	33.3078	22.7851	0	84.731	N =	1321
	between		14.9978	0	72.0462	n =	84
	within		17.1366	-14.4811	84.4962	T =	15.7262
$Facebook$	overall	0.1173	0.3219	0	1	N =	1321
	between		0.1302	0	0.4375	n =	84
	within		0.2945	-0.3202	1.0548	T =	15.7262
$Twitter$	overall	0.1567	0.3637	0	1	N =	1321
	between		0.1692	0	0.8571	n =	84
	within		0.3272	-0.7004	1.0942	T =	15.7262
$NaturalRessources$	overall	25.1763	27.6148	0.0005	99.6693	N =	1321
	between		26.7268	0.1361	97.384	n =	84
	within		7.9751	-58.6047	58.4152	T =	15.7262
$SkilledLabour$	overall	7.6685	3.0135	0	13.1	N =	1321
	between		2.8935	0.9375	12.6563	n =	84
	within		0.8478	1.4998	10.8998	T =	15.7262
$SqSkilledLabour$	overall	67.8801	43.5493	0	171.61	N =	1321
	between		42.2638	1.2800	160.2769	n =	84
	within		10.4818	12.3994	107.5176	T =	15.7262
$ln(PhonePenetration)$	overall	3.989	1.2164	-1.6064	5.5019	N =	1321
	between		0.8488	1.6748	5.1818	n =	84
	within		0.8786	0.4484	6.1519	T =	15.7262
$TradeOpenness$	overall	87.0064	42.4473	20.9641	327.0551	N =	1321
	between		40.2325	25.6866	265.6803	n =	84
	within		13.6151	29.5834	148.3812	T =	15.7262
$\ln(MarketSize)$	overall	8.0645	1.3436	4.7261	11.3262	N =	1321
	between		1.3035	5.2344	10.7667	n =	84
	within		0.435	6.6109	9.0997	T =	15.7262
$MarketGrowth$	overall	3.9999	4.5104	-36.7	34.5	N =	1321
	between		2.1923	-0.0159	12.6162	n =	84
	within		3.9949	-32.6901	30.1947	T =	15.7262
WGI	overall	-0.1463	0.666	-1.7023	1.3099	N =	1321
	between		0.6606	-1.4263	1.1847	n =	84
	within		0.1278	-0.8803	0.4893	T =	15.7262
$ln(Patents)$	overall	1.4697	1.8973	0	8.6021	N =	1321
	between		1.8423	0	7.2919	n =	84
	within		0.6605	-2.5162	3.0819	T =	15.7262

TABLE 10 - DETAILED DATA SUMMARY OF DATA SET VARIABLES FOR IDP STAGES 4-5

Variable	Variation	Mean	Std. Dev.	Min	Max	Observations	
$ln(FDI)$	overall	9.5582	1.5296	4.3665	12.7611	N =	361
	between		1.3361	6.3473	12.0657	n =	26
	within		0.8559	5.0441	12.1179	T-bar =	13.8846
$Waipa$	overall	0.7136	0.4527	0	1	N =	391
	between		0.3130	0	1	n =	26
	within		0.3294	-0.2239	1.2136	T =	15.0385
$IdiomsWeighted$	overall	50.2443	23.4876	0	85.5132	N =	391
	between		19.4571	0	73.7914	n =	26
	within		14.4896	-16.4016	96.8148	T =	15.0385
$Facebook$	overall	0.1023	0.3034	0	1	N =	391
	between		0.1564	0	0.4375	n =	26
	within		0.2601	-0.3352	0.9148	T =	15.0385
$Twitter$	overall	0.2967	0.4574	0	1	N =	391
	between		0.2167	0	1	n =	26
	within		0.422	-0.1408	1.2342	T =	15.0385
$NaturalRessources$	overall	15.0948	18.6121	0.6325	93.3413	N =	391
	between		21.7008	1.4294	88.9351	n =	26
	within		4.2017	-0.6081	28.9628	T =	15.0385
$SkilledLabour$	overall	11.4821	1.1849	8.5	13.4	N =	391
	between		1.1472	8.9111	12.9125	n =	26
	within		0.6054	9.6071	13.1071	T =	15.0385
$SqSkilledLabour$	overall	133.239	26.3759	72.25	179.56	N =	391
	between		25.2524	79.5178	166.7625	n =	26
	within		13.4904	89.8515	169.4477	T =	15.0385
$ln(PhonePenetration)$	overall	5.025	0.1770	4.4708	5.6936	N =	391
	between		0.1198	4.7624	5.3572	n =	26
	within		0.1300	4.5887	5.3614	T =	15.0385
$TradeOpenness$	overall	113.6312	97.3103	19.7981	442.6200	N =	391
	between		94.9122	26.8732	381.1852	n =	26
	within		19.0957	0.2260	216.9610	T =	15.0385
$\ln(MarketSize)$	overall	10.6034	0.4186	9.3284	11.6883	N =	391
	between		0.3473	9.8605	11.3687	n =	26
	within		0.2673	9.8843	11.1458	T =	15.0385
$MarketGrowth$	overall	2.4324	2.9860	-8.2690	26.2761	N =	391
	between		1.4566	0.1835	6.0005	n =	26
	within		2.6807	-7.3289	24.0112	T =	15.0385
WGI	overall	1.4495	0.3631	0.4784	1.9854	N =	391
	between		0.3905	0.5921	1.8858	n =	26
	within		0.0783	1.0846	1.6759	T =	15.0385
$ln(Patents)$	overall	6.6734	2.2734	0	11.8819	N =	391
	between		2.2004	0.9308	11.4841	n =	26
	within		1.0632	1.9319	7.6886	T =	15.0385

TABLE 11 - SUMMARY OF EXPECTED OUTCOME FOR EACH VARIABLE ON INWARD FDI % OF GDP

Variable	Expected outcome	Expected sign	Scholars
$Waipa$	IPAs who are members of WAIPA are expected to attract more inward FDI to the host country	+	No empirical tests, our hypothesis
$IdiomWeighted$	IPAs who have a higher amount of website translations are expected to attract more inward FDI to the host country	+	No empirical tests, our hypothesis
$Facebook$	IPAs who employ Facebook are expected to attract a higher amount of inward FDI	+	No empirical tests, our hypothesis
$Twitter$	IPAs who employ Twitter are expected to attract a higher amount of inward FDI	+	No empirical tests, our hypothesis
$NaturalResources$	High percentage exports of natural resources are expected to increase inward FDI	+	(Teixeira, Forte, & Assunção, 2017; Asiedu, 2006)
$SkilledLabour$	Inverse U-shaped relationship between educational attainment and attraction of FDI	+	(Cleeve, 2008; Schneider & Frey, 1985; Akin & Vlad, 2011)
$SqSkilledLabour$		-	(Akin & Vlad, 2011)
$\ln(PhonePenetration)$	High penetration of phones is expected to attract more inward FDI	+	(Asiedu, 2006; Biswas, 2002; Mottaleb & Kalirajan, 2010)
$TradeOpenness$	High degree of openness is expected to attract higher inwards FDI	+	(Cleeve, 2008; Asiedu, 2006; Mhlanga, Blalock, & Christy, 2010)
$\ln(MarketSize)$	Bigger countries are expected to attract higher inward FDI	+	(Teixeira, Forte, & Assunção, 2017)
$MarketGrowth$	Countries with high growth rate, are expected to attract higher inward FDI	+	(Mohamed & Sidiropoulos, 2010; Cleeve, 2008; Mottaleb & Kalirajan, 2010)
WGI	Countries with a good institutional environment are expected to attract more FDI	+	(Daude & Stein, 2007; Wei, 2000; Bénassy-Quéré, Coupet, & Mayer, 2007)
$\ln(Patents)$	Countries with a high number of patents are expected to attract more inward FDI	+	(Dees, 1998)

4.4 Regressions

The time dimension of our regressions spans 16 years, from 2000 to 2015. Each equation from (1) to (3) includes one of the three hypothesised best practice at the time, whereas equation (4) includes all three best practices in unison. Equations are as follows:

Equation 1 yields:

$$Ln(FDI_i) = \beta + \beta_2 Waipa_i + \beta_3 NaturalResources_i + \beta_4 SkilledLabour_i + \beta_5 SqSkilledResources_i + \beta_6 Ln(PhonePenetration)_i + \beta_7 TradeOpenness_i + \beta_8 Ln(MarketSize)_i + \beta_9 MarketGrowth_i + \beta_{10} WGI_i + \beta_{11} Patents_i + a_i + u_t$$

Equation 2 yields:

$$Ln(FDI_i) = \beta + \beta_2 IdiomsWeighed_i + \beta_3 NaturalResources_i + \beta_4 SkilledLabour_i + \beta_5 SqSkilledResources_i + \beta_6 Ln(PhonePenetration)_i + \beta_7 TradeOpenness_i + \beta_8 Ln(MarketSize)_i + \beta_9 MarketGrowth_i + \beta_{10} WGI_i + \beta_{11} Patents_i + a_i + u_t$$

Equation 3 yields:

$$Ln(FDI_i) = \beta + \beta_2 Twitter_i + \beta_3 Facebook_i + \beta_4 NaturalResources_i + \beta_5 SkilledLabour_i + \beta_6 SqSkilledResources_i + \beta_7 Ln(PhonePenetration)_i + \beta_8 TradeOpenness_i + \beta_9 Ln(MarketSize)_i + \beta_{10} MarketGrowth_i + \beta_{11} WGI_i + \beta_{12} Patents_i + a_i + u_t$$

Equation 4 yields:

$$Ln(FDI_i) = \beta + \beta_2 Waipa_i + \beta_3 IdiomsWeighed_i + \beta_4 Twitter_i + \beta_5 Facebook_i + \beta_6 NaturalResources_i + \beta_7 SkilledLabour_i + \beta_8 SqSkilledResources_i + \beta_9 Ln(PhonePenetration)_i + \beta_{10} TradeOpenness_i + \beta_{11} Ln(MarketSize)_i + \beta_{12} MarketGrowth_i + \beta_{13} WGI_i + \beta_{14} Patents_i + a_i + u_t$$

In addition to the full sample regressions, in order to provide a more meaningful analysis, it has been chosen to run the same equations also for two subsamples, comprising respectively countries within IDP stages 1-3 and 4-5. Further, when deemed necessary, models with interaction terms between IDP stages and hypothesised best practices will be run.

5 Empirical Findings

The following chapter will first practically demonstrate the fulfilment of the preconditions needed to run reliable panel regressions in subchapter 5.1. Next, the regression outcomes and their implications on our hypotheses will be discussed, respectively in subchapters 5.2 and 5.3. Finally, the managerial recommendations will be presented in subchapter 5.4.

5.1 Preconditions for Regressions

Prior to running the regressions, we have performed some tests in order to make sure that the necessary preconditions to run OLS are fulfilled[35]. The actual outputs of such tests can be found in Appendix I Preconditions for Regressions and will be discussed below:

The first assumption, which is linearity of the parameters, is satisfied and can be easily checked by looking at our equations in subchapter 4.4 Regressions: all of the parameters are linear.

The second assumption is the exact specification of the model at hand, that is, the functional relationship between the dependent and independent variables is correctly specified and all the factors explaining the dependent variable are included in the model. However, due to data limitations or simply ignorance, this assumption is unrealistic: in any application some key factors will be excluded from the model, thereby violating this assumption (Wooldridge, 2013, p. 83). Unfortunately, this assumption is likely to fail also for our models.

To test for the third assumption, multicollinearity, one of the usual ways is creating the multicollinearity matrix: if it is observed that, there is no bivariate correlation greater than 0.8, then multicollinearity is not extremely severe (Gujarati & Porter, 2010, p. 254). In accordance with the matrix for the full sample in Appendix I, severe multicollinearity is observed for the pair of variables WGI and $MarketSize$ at 0.83, which is also observed by Daude and Stein (2007, p. 24) and Buchanan, Le, and Rishi (2012). By dropping either of the variables, the multicollinearity might reduce to acceptable levels. However, in accordance with the literature review, both variables are deemed too relevant to be excluded from the model: if one were removed, we would commit a specification error and the consequent failure of the second assumption. Thus, we follow the "do nothing" approach and the severe multicollinearity will be tolerated and treated as a limitation to the research (Gujarati & Porter, 2010, p. 262). The same problem appears to persist for the

[35] Please refer to subsection 2.6.2.2 Panel Data Preconditions for detailed descriptions of the assumptions.

sample of less developed countries, whereas it does not represent a concern in the group of most advanced countries.

The fourth and fifth assumption, holding in case of homoscedasticity and no autocorrelation respectively, are violated as expected in the subsection 2.6.2.2. The Breusch and Pagan test shows the presence of heteroscedasticity in our dataset for all the samples, whereas the Wooldridge test displays the problem of serial correlation only for the whole sample and the sample of lesser developed countries. To address such issues, Stata 14 offers the opportunity to obtain standard errors that are robust to both heteroscedasticity and autocorrelation.

Next, we proceed with testing the sixth assumption. To check for the normality of the residuals, a histogram of residuals is produced. Residuals appears to be normally distributed for all the samples, thus the assumption is not violated: OLS are BLUE.

Finally, an important decision to be made before running our models is whether to apply a FEM or REM. To this extent, in accordance with the Hausman's test results, a FEM is deemed the most appropriate solution for the whole sample as well as for both subsamples.

5.2 Regression Outputs and their Discussion

In the following three subchapters, the regression outputs[36] of all our models will be presented throughout and the empirical findings discussed with an explanatory approach as well as compared to the relevant literature on a best-effort basis. Section 5.2.1 will start by looking at the full sample (IDP stages 1-5) to provide a general overview. Then in sections 5.2.2 and 5.2.3, to obtain a more meaningful analysis, the sample will be split into two groups, according to the different IDP stages (respectively IDP stages 1-3 and 4-5). These two models will require an additional, deeper level of analysis; the reasoning for such a choice, results and the following discussion will be explained throughout.

The pattern followed for each model will be the same. First, before delving into the discussion of the empirical findings, we will test the actual presence of endogeneity as well the goodness of the IVs[37]; indeed, as subsection 2.6.2.3 showed, if these conditions are not fulfilled, 2SLS technique should be disregarded for OLS

[36] Regressions were performed in Stata 14.
[37] Please refer to section 6.3.2 Endogeneity for the explanation of the different tests meaning, as well as their null hypotheses.

would produce more efficient estimates. Second, our variable of interests will be analysed separately. Finally, we will introduce them altogether to test their joint effect on FDIs.

5.2.1 Regression Outputs – IDP Stages 1-5

Table 12 shows that our concerns about endogeneity were grounded, and we have hence tackled it with the choice of appropriate IVs. Its first three columns present our estimate of equation (1), (2), and (3), where our variables of interest, respectively $Waipa$, $Facebook$, $Twitter$, and $IdiomWeighted$ are analysed separately.

Notably, the results of the control variables are consistent for all equations. $PhonePenetration$ is statistically insignificant and appears with a coefficient sign that contradicts what was theoretically expected, in line with Cleeve (2008) and Mohamed & Sidiropoulos (2010). All of the other control variables, though, are statistically significant. In particular, $TradeOpenness$, $MarketSize$, $MarketGrowth$ and $Patents$ present the expected sign, whereas the coefficient signs of $NaturalResources$, $Skilledlabour$, $SqSkilledlabour$ and WGI[38] go against prior expectations. Finally, $Trend$ is negative, suggesting an overall FDI tendency to decrease throughout the time horizon of this study.

Among our control variables, the coefficient of WGI is worth being discussed. A one standard deviation increase in the institutional quality reduce inward FDIs by roughly 100%. Regardless of the sign, the magnitude of its effect appear excessive. Yet, it should be kept in mind that a one standard deviation improvement in WGI implies a substantial change in the institutional environment. Or, put in concrete terms, in 2008, a standard deviation increase would have meant moving from the institutional level of Botswana to Iceland, that is, from 0.69 to 1.69, whereas in 2012 the same improvement would have lead from Namibia to Belgium, or from 0.34 to 1.34. Though, despite the great impact that a one standard deviation increase would entail, we are still convinced of the suspiciousness of the value.

With respect to our variables of interests, only $Twitter$ and $IdiomWeighted$ are significant and present the expected sign. On average, an agency interacting with potential investors through Twitter would receive 300 percent more FDI inflows than those who do not[39], whereas increasing our language index by one percentage point, would generate additional investments by 2%. For $IdiomWeighted$, however, it is important to

[38] Daude and Stein (2007) also experience the same problem. For the sake of precision though, these authors obtain the expected sign for their institutional variable but a negative sign for market size.
[39] To calculate the *exact* effect of a predictor in level form on a dependent variable expressed in log, the formula is: 100*(EXP(β_I)-1).

TABLE 12 - REGRESSION RESULTS FOR THE FOUR EQUATIONS FOR IDP STAGE 1-5

Variable		Models: IDP stage 1-5			
		Model 1	Model 2	Model 3	Model 4
$Waipa$		-1.17 (0.806)			-1.198 (0.686)*
$IdiomWeighted$			0.017 (0.005)***		0.022 (0.008)***
IPA social media usage	$Facebook$			-0.542 (0.429)	-0.68 (0.494)
	$Twitter$			1.384 (0.558)**	1.404 (0.619)**
$NaturalResources$		-0.065 (0.034)*	-0.04 (0.017)**	-0.052 (0.021)**	-0.051 (0.024)**
$SkilledLabour$		-1.24 (0.695)*	-0.872 (0.408)**	-1.098 (0.508)**	-1.052 (0.529)**
$SqSkilledLabour$		0.09 (0.05)*	0.061 (0.028)**	0.076 (0.035)**	0.075 0.038)**
$PhonePenetration$		-0.63 (0.556)	-0.39 (0.338)	-0.334 (0.337)	-0.332 0.401)
$TradeOpenness$		0.011 (0.005)**	0.008 (0.003)***	0.01 (0.003)***	0.008 (0.003)***
$MarketSize$		5.405 (2.377)**	3.76 (1.197)***	4.391 (1.464)***	4.463 (1.683)***
$MarketGrowth$		0.102 (0.034)***	0.087 0.023)***	0.097 (0.027)***	0.095 (0.028)***
WGI		-10.473 (4.792)**	-7.252 (2.413)***	-8.676 (3.005)***	-8.967 3.499***
$Patents$		0.556 (0.076)***	0.531 (0.056)***	0.574 (0.066)***	0.526 0.065***
$Trend$		-0.223 (0.113)**	-0.124 (0.069)*	-0.2 (0.099)**	-0.223 (0.113)**
N		1649	1649	1649	1649
R^2		0.69	0.83	0.79	0.77
Underidentification test		5.574**	11.027***	9.917***	7.321**
Hansen J statistic		0.18	0.222	0.119	0.025
Endogeneity test		59.337***	57.441***	63.554***	56.63***
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to both heteroscedasticity and autocorrelation. IVs are State Antiquity and Ethnic.					

consider that computing its actual effect requires the weights carried out by the different languages: for instance, an IPA's website featuring German in 2008, which carried out a weight of 11 for that year, received, on average, 22 percent more investments than countries who did not.

On the contrary, $Waipa$ and $Facebook$ are negative and not statistically significant. However, to consider the joint effect on FDI of all our variables of interest, in column four we present the results from their mutual inclusion. Results in terms of sign do not change, whereas the coefficients magnitude only slightly. Interestingly, despite remaining negative, $Waipa$ becomes significant, perhaps hinting at a previous model underspecification. According to equation (4) then, a WAIPA member received, on average, 230% less FDI investments than a non-member IPA.

However, before drawing any hastened and misleading conclusion on our estimates, three fundamental points must be kept in mind. First, the precondition analysis has shown that these estimates have been extrapolated in a sample plagued by severe multicollinearity, where practical consequences are obtaining the wrong sings as well as difficulties in assessing the real individual effect of correlated variables on the predicted variable[40] (Gujarati & Porter, 2010, p. 253). Second, the empirical results presented until now account for extremely heterogeneous countries with striking dissimilarities in terms of economic development; therefore, the results for the "average country" could be influenced by extreme values at both ends of the development spectrum. Third, it is widely acknowledged that factors attracting FDIs into economies of lesser development likely differ from the determinants luring FDIs to most advanced countries (Walsh & Yu, 2010); for instance, firms investing in less developed economies are willing to trade off, say, better institutional conditions and a better educated labour force in exchange for lower wages.

In light of what aforementioned, to account for countries' broad heterogeneity, we have decided to divide our sample according to different degrees of development. Section 3.2.3 has already introduced how, studies on effectiveness of IPAs (Harding & Javorcik, 2011, p. 16; Morriset & Andrews-Johnson, 2004, p. 57), use the income groups provided by the World Bank as a threshold. In the same section, we also claimed that for our thesis we are taking a different stance: country discrimination will be based upon the IDP theory in order to provide a fuller picture of the different characteristics that define countries' level of development. To this extent, in line with Fonseca, Mendonça and Passos (2007), we have chosen to gather countries from stages 1 to 3 together, and countries at stages 4 and 5 in another single group. Again, we reiterate that our classification has little to share with the World Bank's distinction between developing and developed countries, as the IDP classification consists of a number of various determinants, rather than just GNI thresholds. Thus, the first three stages of development are classified as countries of lesser development and

[40] Recall the suspicious coefficient of WGI, given its severe correlation with $MarketSize$.

last two stages consist of countries of higher development, in accordance with the IDP theory. The next two sections will provide more accurate estimations by implementing such a classification.

5.2.2 Regression Outputs – IDP Stages 1-3

In Table 13 below, the regression results are presented for countries at stages 1-3 of the IDP. The table follows the same logic of the full sample. For this subsample too, the risk of endogeneity for WGI is concrete, as demonstrated by the endogeneity test. Again, the IVs used meet all the necessary requirements, thereby enabling us to obtain more precise estimates with 2SLS than OLS.

With the respect to our full sample, four control variables maintained statistical significance. $MarketSize$ loses some of its magnitude; for IDP stages 1-3, a one percent increase in GDP per capita, on average, entailed attracting roughly 1.2% more FDI, less than the 5.4% for the whole sample. The same holds for $MarketGrowth$: if GDP grows by one percentage point in countries belonging to one of the first three stages, ceteris paribus, inward FDIs would augment by 8.5%, compared to 10.2% in the full sample. Future growth potential appears to be appreciated by foreign investors. Our technological proxy, $Patents$, not only maintains its statistical significance and sign but also its scant magnitude: for both samples, a one percent increase in the technological endowment would lure 0.5% more FDI.

Interestingly, WGI largely decreases its magnitude, signalling the above-mentioned "concern" of heterogeneity among countries in our sample. Yet, its effect is still negative, hinting at a still existing multicollinearity problem. Finally, $PhonePenetration$, acquires the theoretically expected sign. Improving infrastructural quality by one percentage point, ceteris paribus, would attract roughly 0.3% more FDIs. Thus, statistical significance is not accompanied by economical meaningfulness.

On the other hand, the remaining control variables have become both statistically and economically insignificant. $TradeOpenness$ coefficients equal zero in all equations, therefore making the discussion of expected sign trivial. Wheeler and Mody (1992), examining the same relationship, also found insignificant results. $NaturalResources$ sign belies our expectations. However, it is consistent with Poelhekke and van der Ploeg's (2010) as well as Asiedu's (2013) findings that natural resources exert a negative impact on aggregate FDI despite wielding a positive influence on primary FDI. Their conclusions reflect the so-called "natural resources curse", for which, countries with a large share of primary exports to GDP experience bad growth records and high inequality, especially if institutional quality is scarce (van der Ploeg, 2011).

Regarding $Skilledlabour$ and $SqSkilledlabour$, other scholars found no significance between educational attainment and inward FDI (Schneider & Frey, 1985; Cleeve, 2008). Here again, it is interesting to study the sign of the coefficients. The two variables depict a U-shaped relationship between FDIs and educational

TABLE 13 - REGRESSION RESULTS FOR THE FOUR EQUATIONS FOR IDP STAGES 1-3

Variable		Models: IDP stage 1-3			
		Equation 1	Equation 2	Equation 3	Equation 4
$Waipa$		0.44 (0.204)**			0.337 (0.209)
$IdiomWeighted$			0.013 (0.003)***		0.012 (0.002)***
IPA social media usage	$Facebook$			-0.152 (0.24)	-0.137 (0.23)
	$Twitter$			0.732 (0.284)**	0.697 (0.285)**
$NaturalResources$		-0.011 (0.008)	-0.011 (0.008)	-0.013 0.008)	-0.011 (0.008)
$SkilledLabour$		-0.082 (0.139)	-0.107 (0.15)	-0.118 (0.152)	-0.143 (0.156)
$SqSkilledLabour$		0.002 (0.01)	0.005 (0.005)	0.005 (0.01)	0.006 (0.01)
$PhonePenetration$		0.27 0.143)**	0.248 (0.152)	0.354 (0.149)**	0.309 0.144)**
$TradeOpenness$		0.0 (0.003)	0 (0.002)	0 (0.003)	0.0 0.003)
$MarketSize$		1.23 (0.46)***	1.325 (0.471)***	1.314 (0.456)***	1.262 (0.466)***
$MarketGrowth$		0.085 (0.014)***	0.083 (0.014)***	0.09 0.014)***	0.085 (0.014***
WGI		-2.354 (1.062)**	-2.64 (1.084)**	-2.682 (1.08)**	-2.65 (1.097)**
$Patents$		0.539 (0.031)***	0.526 (0.034)***	0.547 (0.032)	0.536 (0.33)***
$Trend$		0.003 (0.03)	-0.02 (0.03)	-0.04 (0.037)	-0.048 (0.038)
N		1279	1279	1279	1279
R^2		0.94	0.94	0.94	0.94
Underidentification test		14.02***	14.222***	14.492***	14.331***
Hansen J statistic		0.039	0.126	0.164	0.101
Endogeneity test		10.868***	13.138***	13.881***	13.862***
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to both heteroscedasticity and autocorrelation. IVs are Ethnic Fractionalisation and Latitude.					

attainment, contrarily to our prior expectations of a parabolic, or inverse U-shape. Thus, it seems that foreign investors either seek extremely low-skilled, inexpensive labour force or desire to tap into labour pools with high skill levels, yet cost convenient. In this subsample, the first type of FDIs is represented by countries in our stage 1 such as, Pakistan, Bangladesh, Morocco, and India, well-known locations for the establishment

of manufacturing activities. On the other hand, some Eastern European countries at stage 3, such as Czech Republic, Estonia, Slovenia, boast mean years of schooling close to our sample of most advanced countries, possibly attracting strategic-asset-seeking FDIs (UNCTAD, 2005, p. 86). More academically though, a solution to shed light on this relationship is found in Akin and Vlad (2011). The pair of scholars, when empirically investigated such an inverse U-shape, observed that the Zhang-Markusen's theory was not empirically founded for most education levels, besides higher education. Clearly, as we do not distinguish between education levels, but rather implement the mean years of overall schooling in a widely heterogeneous sample in terms of educational attainment, confusing results should not be surprising.

Now, the analysis focus switches to our variables of interest. $Waipa$ remains statistically significant, except for equation (4), and more importantly its coefficient becomes positive, thus aligning with our prior expectations. On average, an IPA operating in a country within IDP stages 1 to 3, received 55% more FDIs than countries with non-member IPAs, indicating that WAIPA's services can be lucrative for this subset of countries.

The importance of $IdiomWeighted$ is confirmed too. Our language index maintains its significance, despite diminishing in magnitude: now, a one percentage point increase in the index, ceteris paribus, would equal a 1.3% increase in FDI. Again, we resort to our previous example to compute the real impact of adding an available translation: thus, an IPA's website featuring German in 2008, received on average roughly 14% more investments than countries whose IPAs did not. We propose that such a significance lies in the investors' decisional process exposed in subsection 3.2.2.2 MIGA's Best Practices. In fact, during its first phases, investors rely heavily on the Internet to retrieve data necessary to longlist potential investment sites, making the information provided through IPA's websites extremely critical. Hence, in this context, translations of important information into "relevant" languages can help catching the investor's attention and allow the country to be shortlisted.

Regarding our social media variables, $Facebook$ remains negative and statistically insignificant. We speculate that its negative effect might depend on unmeasured factors like the perceived usefulness of that particular platform. Yet, it remains a mere speculation. On the other hand, $Twitter$ still presents a positive coefficient and carries a large statistical significance. All else equal, countries whose IPAs utilise Twitter to communicate with potential investors, all else equal, attract 114% more FDIs compared to their peers which do not. Although it might seem odd at first glance, we prompt the reader to recall the importance of performing image-building activities in countries with a not-so-good reputation. Thus, we propose that "tweeting" to advertise the IPA's home country's upgraded business conditions, opener stance on FDIs, and

any improvement in general, might have a positive impact on FDIs, given the huge audience reachable through social media channels.

Finally, when the variables of interests are tested jointly, the coefficient estimate are altered to a small degree and only $Waipa$ loses significance. Overall, the loss of magnitude for all the variables signals the wide heterogeneity between countries of the full sample, hence empirically bolsters our decision to split the original sample. Yet, despite more meaningful, we deem adding another layer of differentiation necessary. Indeed, even countries belonging to this subsample still present widely different level of development. Hence, to better investigate the role of our best practices in attracting FDIs, we will create interaction terms between our variables of interests and the IDP stage dummies. The values of the interaction terms are found in Table 14[41].

TABLE 14 - INTERACTION TERM OUTPUT FOR HYPOTHESIZED BEST PRACTICES FOR EQUATION 4 FOR IDP: 1-3 (SOURCE: APPENDIX J)

Variable	Coef.	Std. Err.	Significance Level
$Waipa$	0.937	0.344	***
$Waipa\_2$	-0.874	0.391	**
$Waipa\_3$	-1.282	0.464	***
$IdiomWeighted$	0.021	0.005	***
$IdiomWeighted\_2$	-0.011	0.006	
$IdiomWeighted\_3$	-0.011	0.007	
$Facebook$	1.07	0.712	
$Facebook\_2$	-1.49	0.732	**
$Facebook\_3$	-1.148	0.807	
$Twitter$	-1.401	0.787	*
$Twitter\_2$	1.825	0.797	**
$Twitter\_3$	2.415	0.832	***
IDP_2	0.713	0.470	
IDP_3	1.581	0.521	***
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to both heteroscedasticity and autocorrelation			

Control variables do maintain their significance, just changing slightly their coefficients. Most likely this is the result of the introduction of IDP stage dummies. Countries in stage 2 and 3, respectively, received on average roughly 103 and 400% more investments than countries at stage 1, which represent our benchmark group. For the sake of precision, despite carrying out an important economic significance, the difference between the first two stages is not statistically significant. Yet, considering such a difference truly statistically

[41] See Appendix J for the full output. There is not a change in control variables being significant, therefore indicating robustness of model, and it allows to observe coefficient values for all four variables for IDP stage 1.3 separately.

insignificant would be a serious error, and Wooldridge (2013, p. 233) clarifies why: the statistical insignificance of a dummy might depend on the presence of its interaction terms, since their correlation generate less precise estimates (Wooldridge, 2013, p. 233).

Among our core variables, $Waipa$ presents perhaps the most interesting results. The effect of being a WAIPA member is significant, both statistically and economically, for all three stages. On average, countries in stages 1, 2, and 3, whose IPAs possess a membership, respectively benefitted from about 155%, 117% and 244% more investments than their peers not enjoying WAIPA's services[42]. Even more fascinatingly, "returns to membership" largely diminish as a country progresses along the IDP[43]. In particular, IPAs in stage 2 obtain a "return to membership" smaller by 147 percentage points compared to IPAs in stage 1. The differential is even larger compared to IPAs in stage 3, whose return is about 182 percentage points less than an analogous agency at stage 1.

Yet, this should not surprise the reader. The literature review has already demonstrated that the effectiveness of IPAs depends on the level of development of host country. Such a positive correlation rests on two rationales. First, the improvement of business environment conditions; clearly, it is easier to attract investments in a positive business environment as those of most developed countries, or, as Morriset and Andrews-Johnson perfectly explains: "it is easier to promote a good rather than a bad product" (Morriset & Andrews-Johnson, 2004, p. 27). Second, the levels of service and expertise provided by IPAs; a World Bank's (2006, p. 53) study revealed that a significant number of IPAs in lesser developed economies are not yet able to provide investors with adequate service level and relevant information that investors actually expect, both in terms of website quality and inquiry handling. In this context, WAIPA might serve a great role, since it assists IPAs in advising their respective governments on the formulation of appropriate investment promotion policies (i.e. policy advocacy), as well as facilitates access to technical assistance and promotes training of IPAs (WAIPA, 2017a). Hence, we suggest that the lower a country's degree of development, the larger the room for IPAs improvements, thus the greater the effect of a WAIPA membership.

$IdiomWeighted$ remains statistically significant and its effect on FDIs remains pretty much similar for countries in stage 2 and 3. A one percentage point increase in the index would generate additional

[42] To calculate the effect of an interaction term on the dependent variable the formula is the following: $\beta_1 X_1 + \beta_2 X_2 + \beta_3 X_1 X_2$, where X_2 is a dummy.

[43] To calculate the return on a specific variable, the formula is the following: $\beta_1 - (\beta_2 + \beta_3)$, where the estimated coefficients are obtained from the following formula: $\beta_1 X_1 + \beta_2 X_2 + \beta_3 X_1 X_2$, where X_2 is a dummy.

investments by 0.1%. Resorting to our old example, an IPA in either of these two stages, providing information in German in 2008, received, ceteris paribus, about 11% more investments than its peers not doing it. However, the index magnitude increases for countries situated in stage 1, since an index increase would lead to 0.2% more inflows. Providing information in German in 2008, then, would have generated a flow of FDIs 26% larger than comparable countries without. Despite the interaction terms are not statistically significant, the economical differential between stages can be logically explained. To do so, we prompt the reader to imagine a potential German investor looking for relevant business information about Burkina Faso, located in stage 1, and Brazil, located in stage 3. In the first case, we would expect to not find information in abundance, and if available, most likely in French. In the second case, despite the majority of information would be in Portuguese, we would expect Brazil to be already well-known and regularly tracked by international investors as well as media, thereby increasing the amount of information available in other languages. Clearly then, if Burkina Faso's IPA were to provide information in German, this would make a greater difference than if Brazil's IPA did the same, all else equal.

Finally, our social media variables align with the previous findings. Despite becoming positive for countries at stage 1, $Facebook$ remains statistically insignificant. The same holds for stages 2 and 3, but with a negative coefficient. On the contrary, $Twitter$ maintains its positive and statistical significance for stage 2 and 3. Respectively, an IPA interacting with potential investors through such a platform, all else equal, would receive 211% and 1018% more investments than their counterparty. Again, the coefficients appear suspiciously high, but for the reasons explained before, the values thus seem plausible. Yet, stage 1 presents a negative sign: on average, an IPA utilising Twitter to interact with its potential investors attracted about 75 percent less direct investments from abroad. We deem that two major rationales might be to blame for such a negative effect. First, budget constraints. Morriset and Andrews-Johnson (2004, p. 14) find that IPAs effectiveness is influenced by the size of their annual budgets. In their sample, the authors identify that average budget for less developed countries is less than 40% of what an average IPA in an industrialised country enjoys per year. Second, the number of human resources devoted to promotion. The same authors (ibid., p. 14) also discover that staff is correlated with the level of home country's income. In their sample, about one-third of IPAs in developing countries had fewer than 5 professionals, compared to 30 for the average IPA in industrialised countries. In this context, we then expect that devoting time to social media would reduce the already scant available resources, in terms of personnel and finances. For countries at stage 1, with bad institutional quality, resources should be devoted to perform more relevant activity in relation to their situation, such as

policy advocacy and investment-service activities[44]. As IPA's scholars claim, when a country holds a poor reputation for, say, bureaucracy, devoting significant resources to any image-building activity would be a waste. Rather, investment promotion efforts should target service activities, or macroeconomic conditions, which are the cause of the negative reputation (Wells & Wint, 2000, p. 144; Morriset & Andrews-Johnson, 2004, p. 25).

In sum, except for $Facebook$, despite carrying different magnitudes along the different IDP stages, our hypothesised best practices do matter for countries of lesser development. Noteworthy, our empirical results contradict Wells and Wint (2000, p. 98), who find that, for less developed countries, other FDI determinants carry a larger impact on inward FDIs than investment-promotion-related variables. The next subsection will shift the analysis focus onto the subsample of countries within IDP stages 4-5.

5.2.3 Regression Outputs – IDP Stages 4-5

Appendix K shows that endogeneity does not represent an issue in this subsample. This result should not surprise, as this subsample includes countries with high WGI scores. Hence, the feared simultaneity effect might not happen as companies do not have the need to lobby for better institutional conditions. Nor the the risk of subjective bias of survey respondents: any FDI increase is less likely to be perceived as the result of improved institutional environment, given its already satisfactory level, thereby less likely to affect experts' opinion. Considering this, the regressions will be run with OLS method, and the empirical results are displayed in Table 15.

Compared to IDP stages 3-5, $MarketSize$ and $MarketGrowth$ retain the theoretical expected sign and significance, as with previous IDP groupings. Important to note is that $MarketSize$ increases its magnitude, albeit slightly: a one percent increase in GDP per capita in this subsample would attract 1.7% more investments, all else equal. On the other hand, $MarketGrowth$ coefficient diminishes by almost half of its value, reducing to 5.8%; apparently, market potential is less relevant in most advanced economies. Compared to lesser developed countries, $NaturalResources$ acquires significance, and carries, for the first time, the theoretically expected sign throughout all four equations. This finding is the exception to the "*resource curse".* Indeed, resource-rich countries characterised by openness to trade and good institutional quality, such as Norway, Australia, and Canada in our subsample, are able to exploit the benefits of their natural resource wealth (van der Ploeg, 2011). Yet, its practical significance is not truly impacting; for

[44] Refer to section 3.2.1

TABLE 15 - REGRESSION RESULTS FOR THE FOUR EQUATIONS FOR IDP STAGE 4-5

Variable		Models: IDP stages 4-5			
		Equation 1	Equation 2	Equation 3	Equation 4
$Waipa$		0.049 (0.178)			-0.032 (0.176)
$IdiomWeighted$			0.01 (0.004)**		0.01 (0.004)**
IPA social media usage	$Facebook$			0.102 (0.266)	0.056 (0.278)
	$Twitter$			-0.16 (0.210)	-0.062 (0.197)
$NaturalResources$		0.028 (0.014)*	0.033 (0.014)**	0.03 (0.014)**	0.034 (0.015)**
$SkilledLabour$		1.924 (0.899)**	2.094 (1.08)*	1.685 (1.043)	1.962 (0.938)**
$SqSkilledLabour$		-0.097 (0.045)**	-0.104 (0.055)*	-0.087 (0.052)	-0.098 (0.047)**
$PhonePenetration$		0.219 (0.896)	-0.445 (0.777)	0.303 (0.895)	-0.382 (0.815)
$TradeOpenness$		0.005 (0.003)	0.005 (0.003)	0.005 (0.003)	0.005 (0.003)
$MarketSize$		1.712 (0.387)***	1.805 (0.365)***	1.672 (0.379)***	1.785 (0.375)***
$MarketGrowth$		0.057 (0.025)**	0.051 (0.025)**	0.057 (0.025)**	0.051 (0.025)**
WGI		0.263 (0.439)	0.539 (0.399)	0.373 (0.499)	0.567 (0.468)
$Patents$		-0.097 (0.067)	-0.106 (0.06)*	-0.094 (0.062)	-0.104 (0.063
$Trend$		-0.063 (0.047)	-0.064 (0.042)	-0.053 (0.048)	-0.06 (0.05)
N		361	361	361	361
R^2: within		0.1786	0.2059	0.1808	0.2064
R^2: between		0.1362	0.1286	0.1292	0.1251
R^2: overall		0.0178	0.0155	0.0167	0.0147
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to heteroscedasticity.					

instance, a discovery of a new oil deposit increasing a country's resource endowment by one percentage point, would have attracted about 2.8% more FDI.

Similarly, $SkilledLabour$ and $SqSkilledLabour$ now present theoretically expected signs as well as statistical significance. Therefore, the hypothesised parabolic relationship described before is finally observed (Zhang & Markusen, 1999). The reason might be the very low standard deviation of $SkilledLabour$,

that is, such a subsample includes only countries with a high mean of years of schooling. Thus, $SkilledLabour$ might actually reflect the tertiary enrolment level, demonstrated by Akin and Vlad (2011) to have such a relationship with inward FDI. Translated into numbers, at about 9.9 mean years of schooling, "return to education" becomes zero[45]. Thus, moving from 8.5 years to 8.6, the lowest value for this subsample, corresponding to the average educational attainment for a Spaniard in 2001 and 2002 respectively, increased FDI inflows to Spain by about 27%[46]. On the other hand, an increase from 13 to 13.1, respectively the value for Canada in 2013 and 2014, reduced foreign investment in the North American country by about 60%.

The other control variables lose significance though, which can likely be explained by the small variance in the subsample. As with the lesser developed economies, *TradeOpenness* has the theoretical expected sign, but it is not statistically significant and carries an effect almost equal to zero, again confirming the research by other scholars (Wheeler & Mody, 1992). $PhonePenetration$ sign varies depending on the equation, yet it never has statistical nor practical significance. Unlike the previous IDP groupings, $Patents$ becomes insignificant, besides in equation (3), and the sign is now against theoretical expectations. When other researchers analysed similar relationships, contrasting results were also found in terms of significance and coefficient sign (Alexiou, Nellis, & Papageorgiadis, 2016). Yet, letting aside the sign direction, its impact would be almost equal to zero. Finally, worth of mention is the fact that, for the first time, WGI carries a positive coefficient, in line with theory. By checking the correlation matrix in Appendix I, it can be noted that multicollinearity has reduced to an acceptable level. Hence, the unexpected sign for WGI in the previous two samples might be very likely due to severe multicollinearity. However, WGI becomes insignificant, and we deem that, once again, it depends on the small difference between countries in this subsample. For instance, in 2011, a one-unit standard deviation increase would have entailed moving from the level of South Korea to Sweden. Despite being the same one unit increase that would have enabled jumping from Namibia's to Belgium's level in 2012, in practice South Korea's institutional improvement would have made a smaller difference since the Asian country already presented a satisfactory institutional quality.

[45] To calculate the turning point of the non-linear relationship the formula is $X^* = \left|\frac{\beta_1}{2\beta_2}\right|$, where the equation is: $\beta_1 X_1 + \beta_2 X_1^2$

[46] To calculate the effect of a non-linear relationship on the dependent variable the formula is $100\{[\beta_1 + 2\,(\beta_2)]X_1\}$, where the equation is: $\beta_1 X_1 + \beta_2 X_1^2$

Considering the regression output for the hypothesised best practices, the results depict their scant relevance, if compared to IDP stages 1-3, except for $IdiomsWeighted$. Similarly to previous samples, $Facebook$ remains insignificant, whereas $Waipa$ and $Twitter$ become both statistically and economically not significant for every equation.

To explain $Waipa$ insignificance, it should be considered that countries comprised in this subsample can boast IPAs well-endowed with resources as well as staff (Morriset & Andrews-Johnson, 2004, p. 14) that already largely implement MIGA's best practices (Ecorys, 2013, p. 33). Thus, we hypothesise that a WAIPA membership does not provide any additional learning, capable of enhancing an IPA's performance. Regarding $Twitter$, considering the countries included in this subsample, its insignificance does not come as a surprise. In fact, when home countries already possess a favourable image among investors, promotional activities do not add any value, thus, the focus should be placed upon investment-generating activities (Wells & Wint, 2000, pp. 144-147).

$IdiomsWeighted$, as in all the other samples, maintains the hypothesised sign and stays significant in all models. Specifically, for the most advanced countries, a one percentage point increase in the idiom index generated additional investment by 1%. In more practical terms, on average, an IPA's website featuring information in German in 2008 would have been capable of attracting 11% more FDIs than a comparable agency's website without such information available. Apparently, providing information in "relevant" languages does have an impact at every degree of development.

Again, to test any potential difference between different stages of development, we have produced a regression output with the use of interaction terms (please see Table 16[47]).

TABLE 16 - INTERACTION TERM OUTPUT FOR $IdiomWeighted$ FOR EQUATION 4 FOR IDP: 4-5 (SOURCE: APPENDIX K)

Variable	Coef.	Robust Std. Err.	Significance Level
$IdiomWeighted$	0.017	0.005	***
$IdiomWeighted\_5$	-0.011	0.005	*
IDP_5	0.892	0.415	**
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to heteroscedasticity.			

[47] See Appendix J for output. There is not a change in variables being significant, therefore indicating robustness of model, and it allows to observe coefficient values for the variable $IdiomsWeighted$ for both IDP stage 4 and 5 separately.

All our control variables do not change neither in significance nor in sign. Interestingly, countries at stage 5 received, on average, about 143% more FDI inflows than countries at stage 4, which represent our benchmark group. This finding contradicts Durán and Úbeda's (2005) claim that there are no statistically significant differences in the capacity to attract FDI between these two stages.

With respect to our variables of interest, nothing changes too. $Waipa$, $Facebook$, and $Twitter$ remain statistically insignificant, whereas $IdiomsWeighted$ keeps its significance also for its interaction term[48]. Hence, the effect of a one percentage point increase in the index proves to carry different economic effects on FDIs for IPAs at stage 4 and 5. All else equal, IPAs at stage 4 offering website information in German in 2008 attracted about 20% more inflows than their similar not providing it, whereas for IPAs at stage 5 the differential between equalled about 7%. The same index increase not only bore a larger intra-stage differential for IPAs operating at stage 4, but also an inter-stage discrepancy. Indeed, the former benefitted slightly more than their peers at stage 5, with a "return to translations" larger by 3 percentage points.

In sum, despite translating website into "relevant" languages has proven to be important at any stage of development, most advanced countries do not statistically benefit from the application of the other best practices in investment promotion. Again, our empirical results contradict Wells and Wint's (2000, p. 98) finding that, for more developed countries, FDI determinants generate a larger inflow of FDIs than investment promotion activities.

5.3 Hypotheses Testing

In accordance with the deductive approach, we will now assess the hypotheses from the basis of our empirical findings. If we have found a statistically significant relationship ($p < 0.05$) with respect to our chosen alternative hypotheses, then we will reject our null hypothesis (H_0) and accept our alternative hypotheses (H_1, H_2 and H_3) (Saunders, Lewis, & Thornhill, 2009, p. 450). In Table 17 below, the empirical findings are displayed in accordance to if we are able to reject H_0 and respectively accept H_1, H_2, and H_3 (coloured as green) or if we fail to reject H_0 (coloured as red).

For WAIPA membership for countries in IDP stage 1-3, we have observed a statistically significant increase of inward FDI, therefore we are able to reject the null hypothesis and accept the alternative (H_1). In the case of the full model (IDP 1-5) and more developed countries (IDP 4-5), we are unable to reject the null hypothesis.

[48] At 10 percent level of significance.

TABLE 17 - HYPOTHESES REJECTION OVERVIEW

H_0: *WAIPA membership of IPAs is associated with no larger FDI inflow* H_1: *WAIPA membership of IPAs is associated with a larger FDI inflow*		
IDP stage 1-5	We fail to reject H_0	
IDP stage 1-3	We reject H_0 and **accept H_1**	
IDP stage 4-5	We fail to reject H_0	
H_0: *A larger website language index of IPAs, means no larger FDI inflow* H_2: *A larger website language index of IPAs, means larger FDI inflow*		
IDP stage 1-5	We reject H_0 and **accept H_2**	
IDP stage 1-3	We reject H_0 and **accept H_2**	
IDP stage 4-5	We reject H_0 and **accept H_2**	
H_0: *Social media presence of IPAs is associated with no larger FDI inflow* H_3: *Social media presence of IPAs is associated with a larger FDI inflow*		
	Facebook	Twitter
IDP stage 1-5	We fail to reject H_0	We reject H_0 and **accept H_3**
IDP stage 1-3	We fail to reject H_0	We reject H_0 and **accept H_3**
IDP stage 4-5	We fail to reject H_0	We fail to reject H_0

For the second hypothesis concerning translations of IPA website, we are able to reject the null hypothesis for all three models and accept the alternative hypothesis (H_2) in all three instances. This was because we observed a statistically significant relationship between a higher score of the language index for IPA websites and increased inward FDI.

For the third hypothesis, concerning social media usage by IPAs of Twitter and Facebook, the results were less concurrent. For the usage of Facebook, we did not observe a statistically significant relationship with attracting increased inward FDI, therefore we are unable to reject the null hypothesis. It is the same case for usage of Twitter for countries in the full model (IDP 1-5) and more developed countries (IDP 4-5). On the other hand, for countries of lesser development (IDP 1-3), we were able to observe a statistically significant relationship between usage of Twitter, and increased inward FDI, therefore we can reject the null hypothesis and accept the alternative hypothesis (H_3).

Hence, since we have been able to accept several of our hypotheses, we have satisfactorily answered our problem statement. The next section will work these hypotheses out from a managerial perspective, in order to offer IPAs' management some practical useful advice.

5.4 Managerial Recommendations

Based on the empirical findings described in previous the chapter, this subchapter will present our managerial recommendations aimed towards the IPAs´ management. Before starting, an important note of caution is due: the interpretation of our results applies for the average agency within the different IDP stages. Therefore, recommendations should not mechanistically applied, but rather adapted to specific features of each agency and the host country they operate in.

The first set of suggestions targets IPAs operating in countries at stages 1-3 of the IDP. The most important one is that utilising Twitter for investment promotion makes a difference. Results indisputably demonstrated the greater impact on inward FDIs, compared to our other best practices, that such a social media carries. Its possibility to reach a large audience renders it an extraordinary tool for image-building activities. Yet, such an effect works only for countries at stages 2 and 3. On the other hand, IPAs in the least developed countries should avoid creating a Twitter account, and more in general undertaking image-building activities, given the typical budget constraints they are subjected to. Rather, these resources should be devoted to more relevant activities for this stage, such as policy advocacy and investment-service activities, so to solve the actual causes of the country's negative reputation.

A second major takeaway from our findings is that their management should consider becoming WAIPA members. By providing training as well as supporting IPAs in advising their respective governments on the formulation of appropriate investment promotion policies (i.e. policy advocacy), it appears that WAIPA serves as a great help. Specifically, this encouragement is even stronger for least developed countries, which are statistically demonstrated to benefit the most.

Third, despite its effect is smaller than the aforementioned best practices, website translations do matter for any IPA within stages 1 to 3. Providing relevant information in the "right" languages helps in the first phases of the investor's location selection. When long-listing potential investment sites, investors rely heavily on the Internet to retrieve data, making the information provided through IPA's websites extremely critical. Hence, in this context, translations of important information into "relevant" business languages can help catching the investor's attention and allow the country being shortlisted. As stated before though, these reccomendations cannot be blindly applied, as additional considerations need to be made. For instance, if the host country is of no interest to, say, Chinese investors for any reason, then the effect of translating the local IPA website into Mandarin might be negligible. Yet, our index might prove as a useful tool for prioritising which additional languages to translate the website into.

Finally, regarding most advanced countries' IPAs, recommendations are honestly scarce. Generally, these agencies already implement many best practices, and actually most of them represent the benchmarks for IPA-specific studies, thus making WAIPA memberships somewhat unnecessary. Further, social media do not have proven to make the difference. Most advanced countries already possess a favourable image among investors, hence IPAs do not need to devote significant resources to image building activities but rather concentrate on investment-generating activities. Obviously, we are far from claiming to avoid online media presence, or abandon their Twitter account, but the IPAs should consider using more specific platforms to target potential investors with promotional techniques that involve a personal and tailored approach, instead of social media aimed at attracting a large bunch of investors simultaneously (Wells & Wint, 2000, p. 147). Lastly, our findings have proven that providing website information in the "right" languages play a significant role in attracting FDIs for these agencies too, especially for IPAs located in countries at stage 4.

6 Statistical Robustness

In this chapter we seek to corroborate the soundness of our results as well as try to uncover the possible reasons that might have caused the appearance of some unexpected relationships between the explanatory and the dependent variables. To this extent, first, in subchapter 6.1 we will test whether slight changes in our econometric models entail a significant alteration of the outcomes. Second, in subchapter 6.2 we will argue for the replicability of our findings. Finally, subchapter 6.3 will address some potential issues that might have biased the econometric results, namely proxy selection, endogeneity, and multicollinearity.

6.1 Sensitivity Analysis

A first test involves using different combinations of IVs to prove the soundness of regression outcomes. As Appendix L shows, some slight changes happen to IDP stages 1-3 and IDP stages 4-5. For the first subsample, $Twitter$ loses significance despite its interaction terms with IDP stage 1 and 2 both maintain it. Yet, as Wooldridge (2013, p. 233) suggests, a dummy may not have statistical significance despite its interaction terms do, for their joint presence involve multicollinearity and thus their less precise estimates. For the second subsample, the H_0 of endogeneity test is significant at 10% level. However, to have the certainty that endogeneity is present, endogeneity test must be rejected only at very small level of significance (Wooldridge, 2013, p. 513). Overall, then, our model specifications appear to be robust, meaning that WGI endogeneity concerns were well grounded.

6.2 Reliability

Reliability refers to the extent to which data collection techniques and analysis procedures will yield consistent findings (Saunders, Lewis, & Thornhill, 2009, p. 600). Since the data used in the quantitative

analysis is secondary and includes no subjective variables, the same results should be reached on all occasions, thus indicating a high level of reliability. Objective criteria were followed in the categorisation of the data and choice of methods, which could easily be repeated by others. Furthermore, to make data collection and processing as transparent as possible, all measures and procedures have been described thoroughly either in the methodology or in the appendices.

However, some concerns arise for the cluster and factor analyses, necessary to allocate countries along the different IDP stages. Despite we have kept an internal consistency during their application for each year, as the respective appendices deeply explain, such statistical techniques involve many subjective decisions. Thus, if other researchers were to make such choices differently, the outcomes might very likely be different.

6.3 Validity

Validity refers to the credibility of the results, that is, whether the findings are about what they intended to measure (Saunders, Lewis, & Thornhill, 2009, p. 603). Our sample comprises 107 countries for which all data deemed necessary to run our models was available. Despite we do not make any claim of completeness, by including countries spanning widely different degrees of development, the sample is considered to be largely representative. Thus, the results of the quantitative analysis present a good generalisability.

Yet, several potential issues might threaten the validity of our results, and the rest of this subchapter will explain them. First, the influence of proxy availability and selection will be discussed. Second, the risk of endogeneity is brought forward. Finally, the concerns linked to multicollinearity are exposed.

6.3.1 Proxy Availability and Selection

The accuracy of our explanatory variables in reflecting the respective factor of interest poses a potential risk. First, the reader should keep in mind that the independent variables used in the regression analyses are simply proxies for factors that could not be directly observed; hence, despite we have chosen proxies well-grounded in the literature, so to accurately reflect the underlying variables, some of them might not be as precise as desired. Second, in some cases, proxy selection has been “forced” upon us by data restraints; clearly, disregarding a more suitable proxy, due to lack of availability, for a second-best choice might have reduced the accuracy.

For one, think of $Patents$. Clearly, this is not a perfect proxy. We are aware that the propensity to patent in a foreign country varies from nation to nation depending on a variety of factors that include the intensity of commercial relations, the similarities among the legal systems, and the linguistic diversity. Additionally, we would also expect least developed countries to show a lesser propensity in registering inventions, entailing that the true technological endowment of such countries might be somewhat downsized. Another potentially

problematic variable might be $SkilledLabour$. Based on the mean years of schooling, its proxy rests on an implicit assumption that educational quality is comparable across countries. On the contrary, we are fully aware that the quality and successful completion of education are subject to great variation across our country sample.

Additionally, the use of other proxies could yield different results. For instance, if data had been available for our whole sample, we could have implemented the expenditure on R&D as a percentage of GDP to proxy for technological endowment instead of $Patents$. In our opinion, the former would have been a more complete proxy for technological endowment since such an indicator not only accounts for the private sector efforts to obtain competitive advantage in science and technology, but also includes government spending in that regard (World Bank, 2017i). Similarly, breaking down education into different level of educational attainment could lead to different results. If we had enjoyed the opportunity to use primary, secondary, and tertiary enrolment rates, we could have been capable of better differentiating between FDI seeking cheap labour costs (primary) and those coveting managerial skills (tertiary). Indeed, the relevance of different levels of educational attainment varies according to the type of FDI undertaken (OECD, 2002, p. 110).

6.3.2 Endogeneity

Endogeneity, from a theoretical perspective, is thoroughly treated and explained in subsection 2.6.2.3. Hence, the following three subsections will analyse the possible sources of endogeneity with specific respect to our econometric model.

6.3.2.1 Omitted Variables

Excluding relevant variables can bias the coefficients on the included variables. In other words, the reported estimates are systematically higher or lower than the actual values due to an omitted variable bias. Fortunately, in this context, applying FEM can help eliminate, or at least mitigate, the bias in case of suspected omitted time-constant variables bias. However, it does not solve the problem of endogenous time-varying explanatory variables (Wooldridge, 2013, p. 490). For instance, countries' wage level and tax rates should have been included in our model[49], but the scant availability of data forced us to exclude them. If it is of any consolation, we can at least estimate the direction of the bias; this will allow us stating that the reported coefficients are either upper or lower bounds on the actual effects. For instance, a problematic

[49] Schneider and Frey (1985) found a negative effect between inward FDI and increased labour costs and Mohamed and Sidiropoulos (2010) found a negative effect between inward FDI and increased corporate taxation.

variable could be $MarketSize$, since its proxy, GDP per capita, is an implicit measure of wage level as well as tax rates. Thus, by expecting wage level to be negatively correlated with our dependent variables whereas positively correlated with GDP per capita, we can speculate that our estimate of the latter might suffer from a downward bias. The exact same reasoning applies for tax rate, thus enlarging the downward bias of $MarketSize$.

Further, there is an abundance of different and unobservable factors influencing a company's decision to undertake FDIs, and these not only lie at macro-level. Some of them can also be traced back at meso- and micro-level (Dunning & Lundan, 2008, p. 103). For instance, host countries might offer heavy industry-specific facilitations; or some home countries' industries might be extremely competitive, thereby local companies decision to undertake an FDI is pushed by home country's conditions rather than pulled by the host country's characteristics. Finally, even the single decision-maker plays a great role in shaping decisions on foreign investments; indeed, the process of internationalisation is influenced, if not determined, by the personal characteristics of the underlying management, such as attitude towards risk, age, cultural background and so on (Dunning & Lundan, 2008, p. 107).

Hence, being fully aware that it is impossible to acknowledge all of the factors that affect the dependent variable, as well as obtain data on all the factors deemed worth being included, we cannot rule out that our model might likely suffer from OVB.

6.3.2.2 Measurement Errors

A measurement error bias assumes that a variable included in the model is correctly identified, but the values it takes on do not reflect reality. Several sources of measurement errors are identified that might give rise to the discussion of endogeneity presence. Firstly, although we collected our secondary empirics from reliable sources, some doubts might be cast on data trustworthiness. Given that the majority of our sample is composed by lesser developed economies, it should not be excluded that some countries might have less than satisfactory reporting standards and unrealistic numbers. Further, as section 1.3.1 indicated, despite the conjunct effort of IMF and OECD to ensure cross-country comparability, discrepancies in FDI data still remain as the methodology for compiling these data varies between countries; for a given transaction, host country and home country often do not register it in the exact same way, making data not always directly comparable between countries (UNCTAD, 2017a). Secondly, our own errors cannot be ruled out either; despite we put our utmost attention when preparing the huge Excel dataset propaedeutic for the final analysis in Stata, its correct compilation might have been prejudiced by deficit of attention or simply clumsiness. Having considered these aspects, then, measurement errors are still considered a potential

source of endogeneity in our model. Nevertheless, it is considered out of scope of this thesis to conduct primary research to validate all observations through primary sources.

6.3.2.3 Simultaneity

Finally, simultaneity indicates that at least one independent variable is jointly determined with the independent variables. In line with theory, we have successfully tackled the endogeneity generated by institutional factors. Yet, our dataset presents other variables that might be suspected of simultaneity. One is $IdiomWeighted$, despite simultaneity, here, depends on how the process of language inclusion is considered to happen. On the one hand, if a specific language were added for any consequence *other* than a surge of IFDI from countries speaking that specific idiom, then simultaneity would not pose as a problem. Think of an IPA's website including a Danish version because its home country's Ministry of Economic Affairs deems crucial to attract companies operating in the pharmaceutical industry for the country's development. In such a case, the potential larger inflow of investments from Danish companies would not affect $IdiomWeighted$, for Danish being already featured in the website.

On the other hand, if the creation of, say, a Portuguese website version of the Japanese IPA were influenced by the quantity of FDI generated from, say, Portuguese-speaking countries the year before, then, simultaneity could be an issue. However, such an effect would be extremely limited in time; once the inflow of Portuguese-speaking FDIs has spurred the Japanese IPA to translate its website into Portuguese, and lead to a subsequent attraction of a larger chunk of them, the effect of inward FDIs on $IdiomWeighted$ terminates there. Indeed, the year after, even an astonishing increase of inward Portuguese-speaking FDIs to Japan will not produce simultaneity again, since the Portuguese is already included in the IPA's website. Hence, despite we cannot fully rule out simultaneity between $IdiomWeighted$ and FDI, its effect, if ever present, can actually be neglected considering that simultaneity happens only for one year out of the 16 covered by our panel dataset.

Further, we also suspect $MarketSize$, $MarketGrowth$, and $Patents$ to potentially suffer from simultaneity. Proxied by GDP per capita, the first variable might likely increase from the establishment of new economic activities through FDI; consequently, its increase might attract a larger share of market-seeking FDIs (Li & Liu, 2005). The same above logic can hence be applied for $MarketGrowth$ too: FDIs spur economic growth, which in turn could attract other FDIs lured by the country's future potential. Finally, simultaneity also runs between $Patents$ and FDIs. The internationalisation of R&D through FDI not only brings the technology itself but a rather a "complete package" (OECD, 2002, p. 97); indeed, FDIs carry along also complementary resources such as managerial and entrepreneurial skills, which are paramount to spur R&D. Such an enlarged

technological endowment, then, might prompt other inward FDIs aimed at exploiting the so-called economies of agglomeration (OECD, 2002, p. 103).

Since FDIs carry a larger impact the lesser the degree of economic development (OECD, 2002, p. 9), we expect simultaneity to hold true especially for our sample comprising countries from IDP stages 1 to 3. Overall, therefore, simultaneity of such variables might represent a problem for the analysis. However, it is difficult to find fitting IVs, and then this thesis encourages other researchers to address the question of simultaneity for these variables.

6.3.3 Multicollinearity

First of all, it is important to keep in mind that multicollinearity is a sample-specific problem (Gujarati & Porter, 2010, p. 254). The preconditions analyses, presented in Appendix I, confirmed it by demonstrating a worrying degree of collinearity between WGI and $MarketSize$ only for the full sample and countries from stage 1 to 3. Considering this problem, chapter 3.0 Literature Review has provided sound reasons to maintain both variables in our model, despite dropping either variable might have significantly reduced multicollinearity. However, this means bearing the several potential consequences of such a decision: the unexpected signs obtained for several variables, most notably WGI itself. As a further proof, in our sample comprising most advanced country, where correlation between $MarketSize$ and WGI dropped to acceptable levels, the latter presented the expected sing.

7 Conclusion

As the awareness of the overall benefits stemming from FDIs has grown immensely, so has the efforts of countries and regions to attract the investments towards them. To this end, an effective solution is the establishment of national or regional IPAs. With an ever-growing number of countries realising their importance, the investment promotion field has become increasingly competitive in recent years. In such a context, our thesis aimed at uncovering best practices that can help IPAs attracting IFDIs. Specifically, our research question branched off into three hypotheses. The first examined the effect of WAIPA membership on the IPA's capability to attract foreign investments. The second explored the relationship between providing website information in "relevant" languages and FDI inflows. The third investigated the role of social media, namely Facebook and Twitter, as a means to catalyse FDIs in such a technological era.

To address these hypotheses, and thus our research question, we followed a deductive reasoning approach that took the research through multiple sequential steps. First, to devise our hypotheses, the deductive approach brought us performing an extensive literature review on two major topics. The initial subject was the determinants of FDI. Here, we decided to resort to Dunning's eclectic paradigm (or OLI) to identify the control variables to be inserted in our econometric model. The choice was driven by the fact that such a paradigm ambitiously encompasses aspects of different but complementary theories, hence offering an ample explanation of the rationales prompting FDI. The subsequent topic involved our core focus, the IPA. The surveyed literature extensively higlighted its key roles as well as existing best practices that make an IPA excel. Yet, despite findings converged on confirming the IPAs' effectiveness in absolute terms, contradicting results surfaced depending on the development level of IPAs' home countries. To obtain a more meaningful discrimination between levels of development, we disregarded the World Bank's income-based based country classification, upon which previous IPA-specific studies relied, and decided to statistically apply Dunning's IDP theory.

The second step involved specifying the econometrical equations deemed necessary to test the above-mentioned hypotheses. To proxy for the FDI determinants, we gathered data through secondary empirics, whereas the operationalisation of our hypothesised best practices required conducting primary data collection. Finally, in accordance with data availability, we concluded that the most satisfactory econometric technique should have been a panel analysis covering 107 countries for 16 years, specifically from 2000 to 2015.

Third, before running any panel regression we made sure that necessary preconditions were fulfilled, for OLS to be the BLUE. If not, we reacted accordingly, so to overcome any problem potentially arising. The regression outcomes proved robust to different specifications, thus strengthening our findings. Yet, the effectiveness of

some hypothesised best practices varied depending on the development stage of the IPA's home country under investigation. With respect to the first hypothesis, the findings indicated the impact of WAIPA membership only for IPAs operating in countries of minor development; by assisting IPAs in advising their respective governments on the formulation of appropriate investment promotion policies (i.e. policy advocacy), as well as facilitating their access to technical assistance and training, WAIPA provides a great help to IPAs with financial and human resources constraints. With respect to the second hypothesis, the findings indicated the universality of the positive effect of website translations on inward FDIs; regardless of the development level, providing information in "relevant" languages attract a larger share of investments, since investors rely heavily on the Internet to retrieve data necessary to longlist potential investment sites, making IPA's websites extremely critical. With respect to the third hypothesis, social media, Twitter proved useful for lesser developed countries with a mediocre institutional quality; with their huge reach, social media enable their IPAs to perform image-building activities on a very large scale. Nevertheless, the effect turned negative for countries with awful institutional quality and disappeared for countries with good institutions.

In conclusion, despite limitations concerning the methodological and statistical parts of this thesis, our research generates valuable contributions to the understanding of how to make an IPA successful. Even though not applicable blindly, our findings allowed us to form the following managerial recommendations.

The first set of recommendations are concerning IPAs which operate within countries belonging to IDP stages 1-3. Using Twitter as a promotional platform makes a difference for IPAs at IDP stages 2 and 3. Contrarily, IPAs operating in countries at stage 1 should actually devote resources to perform more relevant activities in relation to their situation, such as policy advocacy and investment-service activities. A second major takeaway from our findings is that their management should consider becoming WAIPA members. Specifically, this encouragement is even stronger for least developed countries, which are statistically demonstrated to benefit the most. The third takeaway is that the languages that the IPAs translate their website into, do matter. Translations of information into relevant "business" languages can help catching the investor's attention and allow the country being shortlisted. In this context, our idiom index provides a valuable tool to help prioritising translation efforts.

The second set of recommendations concern IPAs which operate within the more developed IDP stages 4-5. Generally, these IPAs possess large financial budgets and are equipped with a large number of professionals, which indicates that WAIPA membership could be superfluous. In addition, it is worth considering that most developed countries might already have a favourable image amongst investors. For these IPAs, purely promotional activities might prove redundant. Thus, rather, than aiming at attracting a large bunch of investors simultaneously, these IPAs should consider using specific platforms to target potential investors

with promotional techniques that involve a personal and tailored approach. Finally, even for IPAs operating in most developed countries, the available translations of IPA websites proved significant in attracting higher levels of inward FDI to their home country. Again, as with lesser developed countries, our language index could prove useful in prioritizing the efforts of translations undertaken.

Finally, albeit beyond our hypotheses, our statistically significant investment-promotion variables generally have higher coefficients than the control variables, in accord with other quantitative research on IPAs. This underlines the potential value of implementing such best practices.

The following chapter will present some methodological limitations to our research and provide suggestions for future research.

8 Limitations and Future Perspectives

Besides the statistical limitations described in chapter 6 that might have biased our estimations, we deem that our work still presents room for improvements.

The major limitations all centre on the focus of our thesis, the IPA. First, for simplicity, we have only chosen national agencies. Yet, promotion also happens at a sub-national level (UNCTAD, 2001, p. 6), since a wide variety of private, such as chambers of commerce, as well as public entities typically share the goal of attracting FDIs. For instance, Turkey boasts 20 regional IPAs (WAIPA, 2017b). Hence, it would require a large effort to disentangle the effect of IPAs at national level.

Second, another limitation involves the analysis of social media. The variables for Twitter and Facebook merely reflect the IPA's presence on the social platform, regardless of the nature of the usage. Simply put, we do not make a distinction between a very active social media presence with a lot of user interaction and simply having a social media account that is collecting dust. To obtain more meaningful and relevant estimates, hence, these variables should be created differently, by aiming to measure the level of the service provided. To this end, we suggest other researchers to consider observed factors like the number of posts per year and public interactions with users as this would offer a better overview in terms of the quality of social media usage. Ideally though, the best solution would be interacting with the IPA's accounts; in this case, researchers should assess the competence and responsiveness of the agency's staff, including swiftness, quality, and credibility of informational content. This follows a similar methodology of what is measured in the GIPB component of *Project Inquiry Handling*, where the researchers posing as potential investor enquired IPA's websites, and measured the agility and quality of the response. We have been limited to forego this method for one major reason: time constraints. Devising a suitable questionnaire with appropriate weights, and subsequently evaluate the responses for 107 IPA offices would have been a daunting task, given the time availability.

Further, we also deem our social media investigation incomplete for we could not obtain data for LinkedIn. This platform, unfortunately does not provide publicly the profile's creation date. It is also worth noting that we did not account for the nature of the social network, as in the perceived intended usage by investment professionals, since one platform might prove more usable for image-building and another for contacting potential investors. Overall there are some indications that LinkedIn is perceived as the primary source for American investment professionals (DCI, 2014). So here lies another opportunity for future research.

Third, despite being a rough estimate of language importance, by considering also FDI stocks, our idiom index presents a better estimate than using simply the number of speakers per language. Overall, thus, we believe

that we have increased the sophistication of IPAs' website translation measurement by weighting the importance of languages in terms of OFDIs. Yet, we see opportunities for further improvement. First, we are not assessing the *quality* of information provided, whilst providing relevant and meaningful information to potential investor is crucial. Here again, GIBP scores come as an inspiration; other researchers could implement a similar methodology to *Website Assessment*, where an agency's website was evaluated according to its attractiveness and user-friendliness, the relevance of its contents, and the clarity and credibility of the information presented. Second, the variable $IdiomWeighted$ does not factor in geographic, cultural, and psychic distance, whereas IPA management is still required to consider these factors in order to prioritise which languages to translate their websites into. This poses as an opportunity for researchers to further improve the index, by accounting for colonial ties, shared language, and different types of distances, thereby exploiting its application in gravity models of FDI.

Fourth, we did not seek to retrieve data on budget size, since we expected that such an enquiry would have tremendously reduced our sample size. Disclosing such sensible figures could have let the IPAs feel under scrutiny. Yet, IPA's size does matter for attracting FDIs (Morriset & Andrews-Johnson, 2004, p. 15). Image-building activities such as advertising campaigns in international newspapers, promotional trips, and participation in specific fairs can be largely expensive, thereby hindering small agencies' performance. In light of this, we would encourage other researchers to collect these data, as they would enable a more meaningful analysis in terms of "real" effectiveness of an IPA's performance.

Finally, a limitation refers to our dependent variable. Since FDI flows are far from homogeneous, a breakdown of FDIs into sectors of destination would enable more accurate causal relationships between the control variables and FDIs (Walsh & Yu, 2010). But more importantly, we would recommend other researchers to discriminate FDI among sectors as this could prove interesting for the investigation of our hypothesised best practices. For instance, we would not aspect IPAs to be effective in attracting investments into the primary sector since, promotional aspects of strategic sectors such as infrastructure and natural resources exploitation, are often under the direct control of ministries (Morriset & Andrews-Johnson, 2004, p. 14).

9 Bibliography

Acemoglu, D. (2017, 11). *Summary Statistics*. Retrieved from Massachusetts Institute of Technology: http://economics.mit.edu/files/4964

Acemoglu, D., Johnson, S., & Robinson, J. (2000). *The Colonial Origins of Comparative Development: An Empirical Investigation.* Cambridge: National Bureau of Economic Research.

Acemoglu, D., Johnson, S., & Robinson, J. (2002). Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution. *The Quarterly Journal of Economics, 117*(4), 1231-1294.

Akin, M., & Vlad, V. (2011). The Relationship Between Education and Foreign Direct Investment: Testing the Inverse U Shape. *European Journal of Economic and Political Studies, 4*(1), 27-46.

Alexiou, C., Nellis, J., & Papageorgiadis, N. (2016). The Effect of Patent Enforcement Strength and FDI on Economic Growth. *Multinational Business Review, 24*(4), 334-353.

Appleyard, D., Field, A., & Cobb, S. (2010). *International Economics.* New York: McGraw-Hill Irwin.

Archibugi, D., & Coco, A. (2004). A New Indicator of Technological Capabilities for Developed and Developing Countries (Arco). *World Development, 32*(4), 629-654.

Archibugi, D., & Coco, A. (2005). Measuring Technological Capabilities at the Country Level: A Survey and a Menu for Choice. *Research Policy 34*, 175-194.

Asiedu, E. (2006). Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability. *World Economy, 29*(1), 63-77.

Asiedu, E. (2013). *Foreign Direct Investment, Natural Resources and Institutions.* IGC.

Assunção, S., Forte, R., & Teixeira, A. (2011). *Location: Determinants of FDI: A Literature Review.* Porto: FEP Working Papers.

Bain, J. (1956). *Barriers to New Competition.* Cambridge: Harvard University Press.

Bauer, R. (2015). *Can Developing Countries Skip the Landline?* World Economic Forum.

Bénassy-Quéré, A., Coupet, M., & Mayer, T. (2007). Institutional Determinants of Foreign Direct Investment. *World Economy, 30*(5), 764-782.

Biswas, R. (2002). Determinants of Foreign Direct Investment. *Review of Development Economies*, 492-504.

Bockstette, V., Chanda, A., & Putterman, L. (2002). States and Markets: The Advantage for an Early Start. *Journal of Economic Growth, 7*(4), 347-369.

Borenstein, M., Hedges, L., Higgins, J., & Rothstein, H. (2009). *Introduction to Meta-Analysis.* Chichester: John Wiley & Sons, Ltd.

Buchanan, B., Le, Q., & Rishi, M. (2012). Foreign Direct Investment and Institutional Quality: Some Empirical Evidence. *International Review of Financial Analysis, 21*(C), 81-89.

Buckley, P. (1983). Macroeconomic Versus International Business Approach to Direct Foreign Investment : A Comment on Professor Kojima's Interpretation. *Hitotsubashi Journal of Economics, 24*, 95-100.

Buckley, P. (2006). Stephen Hymer: Three Phases, One Approach? *International Business Review, 15*, 140-147.

Buckley, P., & Casson, M. (1976). *The Future of the Multinational Enterprise.* Macmillan.

Buckley, P., & Casson, M. (1981). The Optimal Timing of a Foreign Direct Investment. *The Economic Journal, 91*(361), 75-87.

Buckley, P., & Casson, M. (1985). *The Economic Theory of the Multinational Enterprise: Selected Papers.* London: Macmillan.

Buckley, P., & Casson, M. (1991). *Multinationals in Less Developed Countries: Cultural and Economic Interactions.* London: Macmillan.

Buckley, P., & Hashai, N. (2009). Formalizing Internationalization in the Eclectic Paradigm. *Journal of International Business Studies, 40*, 58-70.

Buckley, P., & Strange, R. (2011). The Governance of the Multinational Enterprise: Insights from Internalization Theory. *Journal of Management Studies, 48*(2), 461-470.

Campos, N., & Kinoshita, Y. (2008). Foreign Direct Investment and Structural Reforms: Evidence from Eastern Europe and Latin America. *IMF Working Paper*.

Cantwell, J. (1991). Intra-Industry Direct Investment in the European Community, Oligopolistic Rivalry and Technological Competition: Proceedings of the 17th Annual Conference 1991, Copenhagen Denmark. *An Enlarged Europe in the Global Economy, 2*, 765-789.

Cantwell, J., & Narula, R. (2001). The Electic Paradigm in the Global Economy. *International Journal of the Economics of Business, 8*(2), 155-172.

Casson, M. (2015). Coase and International Business: the Origin and Development of Internalisation Theory. *Managerial and Decision Economics, 36*(1), 55-66.

Caves, R. (1971). A Contribution to the General Equilibrium Theory of Preferential Trading. *Journal of International Economics, 1*(2), 255-257.

Cavusgil, T. S., Knight, G., & Riesenberg, J. R. (2014). *International Business.* Harlow, Essex, England: Pearson.

Chakrabarti, A. (2001). The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions. *KYKLOS, 54*(1), 89-114.

CIA. (2017, 10). *The World Factbook*. Retrieved from Central Intelligence Agency Web site: https://www.cia.gov/library/publications/the-world-factbook/fields/2098.html

Cleeve, E. (2008). How Effective are Fiscal Incentives to Attract FDI to Sub-Saharan Africa? *Journal of Developing Areas*, 135-153.

Coase, R. H. (1937). The Nature of the Firm. *Economica, New Series, 4*(16), 386-405.

College of Urban & Public Affairs. (2017, 11). *Country Geography Data - Physical Geography*. Retrieved from Portland State University: https://www.pdx.edu/econ/country-geography-data

Daude, C., & Stein, E. (2007). The Quality for Institutions and Foreign Direct Investment. *Economics & Politics 19*, 317-344.

DCI. (2014). *Winning Strategies In Economic Development Marketing.* DVI.

Dees, S. (1998). Foreign Direct Investment in China: Determinants. *Economics of Planning, 31*, 175-194.

Demirhan, E., & Masca, M. (2008). Determinants of Foreign Direct Investment Flows to Developing Countries: A Cross-Sectional Analysis. *Prague Economic Papers, 17*(4), 356-369.

Dunne, T., Kurki, M., & Smith, S. (2010). *International Relations Theories: Discipline And Diversity.* Oxford: Oxford University.

Dunning, J. (1977). Trade, Location of Economic Activity and the Multinational Enterprise: A Search for an Eclectic Approach. University of Reading.

Dunning, J. (1980). Toward an Electic Theory of International Production: Some Empirical Test. *Journal of International Business Studies*, 9-31.

Dunning, J. (1981). Explaining the International Direct Investment Position of Countries: Towards a Dynamic or Development Approach. *Weltwirtschaftliches Archiv, 117*(1), 30-64.

Dunning, J. (1988). The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions. *Journal of International Business Studies*, 1-31.

Dunning, J. (1993). *Multinational Enterprises and the Global Economy.* Harlow: Addison-Wesley.

Dunning, J. (1998). Location and the Multinational Enterprise: A Neglected Factor? *Journal of International Business Studies, 29*(1), 45-66.

Dunning, J. (2000). The Eclectic Paradigm as an Envelope of Economic and Business Theories of MNE activity. *International Business Review*, 163-190.

Dunning, J. (2001). The Eclectic (OLI) Paradigm of International Production: Past, Present and Future. *International Journal of Economics and Business Research*, 173-190.

Dunning, J. (2006). Towards a New Paradigm of Development: Implications for the Determinants of International Business Activity. *Transnational Corporations, 15*, 173-228.

Dunning, J. (2009). The Key Litterature on IB Activities: 1960-2006. In A. M. Rugman, *The Oxford handbook of international business* (pp. 39-71). Oxford: Oxford University Press.

Dunning, J., & Lundan, S. (2008). *Multinational Enterprises and the Global Economy.* Cheltenham Glos: Edward Elgar Publishing.

Dunning, J., & Narula, R. (1993). *Transpacific Foreign Direct Investment and the Investment Development Path: the Record Assessed.* Maastricht: University of Limburg.

Dunning, J., & Narula, R. (1996). *Foreign Direct Investment and Governments: Catalysts for Economic Restructuring.* London: Routledge.

Dunning, J., & Rugman, A. (1985). The Influence of Hymer's Dissertation on the Theory of Foreign Direct Investment. *American Economic Review: Papers and Proceedings, 75*(2), 228-260.

Durán, J., & Úbeda, F. (2001). The Investment Development Path: A New Empirical Approach and Some Theoretical Issues. *Transnational Corporation, 10*(2), 1-34.

Durán, J., & Úbeda, F. (2005). The Investment Development Path of Newly Developed Countries. *International Journal of the Economics of Business, 12*(1), 123-137.

Ecorys. (2013). *Exchange of Good Practice in Foreign Direct Investment Promotion.* Rotterdam: Ecorys.

Eden, L. (2003). A Critical Reflection and Some Conclusions on OLI. In J. Cantwell, & R. Narula, *International Business and the Electic Paradigm: Developing the OLI Framework.* London: Routledge.

Ethnologue. (2017, 10). *Summary by Language Size*. Retrieved from Ethnologue Web site: https://www.ethnologue.com/statistics/size

Fearon, J., & David, D. (2017, 11). *Replication Data*. Retrieved from Stanford University Web site: https://web.stanford.edu/group/ethnic/publicdata/publicdata.html

Ferreira, L., & Hitchcock, D. B. (2009). A Comparison of Hierachical Methods for Clustering Functional Data. *Communications in Statistics - Simulation and Computation*, 1925-1949.

Flanders, M. (1989). *Internationa Monetary Economics 1870-1960.* Cambridge: Cambridge University Press.

Fonseca, M., Mendonça, A., & Passos, J. (2007). *The Investment Development Path Hypothesis: Evidence from the Portuguese Case - A Panel Data Analysis.* Lisbon: Technical University of Lisbon.

Forsgren, M. (2008). *Theories of the Multinational Firm: A Multidimensional Creature in the Global Economy.* Massachusetts: Edward Elgar.

G20. (2017, 10). *Members and Participants*. Retrieved from G20 Web site: https://www.g20.org/Webs/G20/EN/G20/Participants/participants_node.html

Gastanaga, V., Nugent, J., & Pashamova, B. (1998). Host Country Reforms and FDI Inflows: How Much Difference Do They Make? *World Development, 26*(7), 1299-1314.

Glaser, E., LaPorta, R., López-de-Silanes, F., & Shleifer, A. (2004). Do Institutions Cause Growth? *Journal of Economic Growth, 9*(3), 271-303.

Globerman, S., & Shapiro, D. (2002). Global Foreign Direc Investment Flows: The Role of Governance Infrastructure. *World Development, 30*(11), 1899-1919.

Gujarati, D., & Porter, D. (2010). *Essentials of Econometrics.* McGraw-Hill Irwin.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis.* Upper Saddle River, New Jersey, United States of America: Prentice Hall.

Hall, R., & Jones, C. (1999). Why do Some Countries Produce so Much More Output per Worker than Others? *The Quarterly Journal of Economics, 114*(1), 83-116.

Harding, T., & Javorcik, B. (2011). Roll Out the Red Carpet and They Will Come: Investment Promotion and FDI Inflows. *The Economic Journal*, 1445-1476.

Harding, T., & Javorcik, B. (2012). *Investment Promotion and FDI Inflows: Quality Matters.* Oxford: University of Oxford.

Hausman, J. (1978). Specification Tests in Econometrics. *Econometrica, 46*(6), 1251-1271.

Head, C., Ries, J., & Swenson, D. (1999). Attracting Foreign Manufacturing: Investment Promotion. *Regional Science and Urban Economics*(29), 197-218.

Hennart, J. (1982). *A Theory of Multinational Enterprise.* Ann Arbor: University of Michigan Press.

Hennart, J. (2009). Down with MNE-centric Theories! Market Entry and Expansion as the Bundling of MNE and Local Assets, 40(9). *Journal of International Business Studies, 40*(9), 1432-1591.

Hennart, J. (2014). The Accidental Internationalists: A Theory of Born Globals. *Entrepreneurship Theory and Practice, 38*(1), 117-135.

Hill, C. W. (2014). *International Business: Competing in the Global Marketplace.* Maidenhead, Berkshire, England: McGraw-Hill Education.

Hosseini, H. (2005). An Economic Theory of FDI: a Behavioral Economics and Historical Approach. *Journal of Socio-Economics, 34*, 528-541.

Hsiao, C. (2017). Panel Data Analysis - Advantages and Challenges. *Test*(16), 1-22.

Huston, G. (1999). Web Caching. *The Internet Protocol Journal*. Retrieved from The Internet .

Hymer, S. (1976). *The International Operation of National Firms: a Study of Foreign Direct Investment.* Cambridge: Massachusetts Institute of Technology.

IMF. (2004). *Definition of Foreign Direct Investment (FDI) Terms.* IMF.

IMF. (2009). *Balance of Payments and International Investment Position Manual.* Washington D.C.: IMF.

Internet Archive. (2017, August). *About the Internet Archive*. Retrieved from Internet Archive Web site: https://archive.org/about/

Iversen, C. (1936). *Aspects of the Theory of International Capital Movements.* Taylor & Francis.

Jadhav, P., & Katti, V. (2012). Institutional and Political Determinants of Foreign Direct Investment: Evidence From BRICS Economies. *Poverty & Public Policy, 4*(3), 49-57.

Jensen, J. (1989). On the Mutual Intelligibility of Spanish and Portuguese. *Hispania, 72*(4), 848-852.

Kaufmann, D., Kraay, & Zoido-Lobatón, P. (1999). *Aggregating Governance Indicators.* Washington: The World Bank.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2004). *Governance Matters III: Governance Indicators for 1996-2002* . The World Bank.

Knack, S., & Keefer, P. (1995). Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures. *Economics & Politics, 7*(3), 207-227.

Kotler, P., Jatusripitak, P., & Maesincee, S. (1997). *The Marketing of Nations.* New York: The Free Press.

LaPorta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1999). The Quality of Government. *Journal of Law, Economics and Organization, 15*(1), 222-279.

Leamer, E. (1995). *The Heckscher-Ohlin Model in Theory and Practice.* Princeton: Princeton University.

Li, X., & Liu, X. (2005). Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship. *World Development, 33*(3), 393-407.

Lim, S. (2008). How Investment Promotion Affects Attracting Foreign Direct Investment: Analytical Argument and Empirical Analyses. *International Business Review, 17*(1), 39-53.

Loewendahl, H. (2001). A Framework for FDI Promotion. *Transnational Corporations, 10*(1), 1-42.

Markusen, J. (1995). The Boundaries of Multinational Enterprises and Theory of International Trade. *Journal of Economic Perspectives, 9*(2), 169-189.

Mauro, P. (1995). Corruption and Growth. *The Quarterly Journal of Economics, 110*(3), 681-712.

McManus, J. (1972). The Theory of the International Firm. *The Multinational Firm and the Nation State*, 66-93.

Merriam-Webster. (2017, 09 13). *Dictionary*. Retrieved from Merriam-Webster: https://www.merriam-webster.com/dictionary/best%20practice

Meyer, K., & Wang, Y. (2015). Transaction Cost Perspectives on Alliances and Joint Ventures: Explanatory Power and Empirical Limitations. In J. Larimo, N. Nummela, & T. Mainela, *Handbook on International Alliance and Network Research* (pp. 87-136). Elgar.

Mhlanga, N., Blalock, G., & Christy, R. (2010). Understanding Foreign Direct Investment in the Southern African Development Community: An Analysis Based on Project Level Data. *Agric. Econ., 41*(3-4), 337-347.

Mohamed, S., & Sidiropoulos, M. (2010). Another Look at the Determinants of Foreign Direct Investment in MENA countries: An Emperical Investigation. *Journal of Economic Development 35, 35*(2), 75-95.

Morgan, R. E., & Katsikeas, C. S. (1997). Theories of International Trade, Foreign Direct Investment and Firm Internationalization: a Critique. *Management Decision, 35*(1), 68-78.

Morriset, J., & Andrews-Johnson, K. (2004). *The Effectiveness of Promotion Agencies at Attracting Foreign Direct Investment.* Washington, DC: The World Bank.

Mottaleb, K., & Kalirajan, K. (2010). Determinants of Foreign Direct Investment in Developing Countries: A Comparative Analysis. *ASARC Working Paper*.

Narula, R. (2010). Keeping the Eclectic Paradigm Simple: a Brief Commentary and Implications for Ownership Advantages. *Multinational Business Review, 18*, 35-50.

Narula, R., & Guímon, J. (2010). The Investment Development Path in a Globalised World: Implications for Eastern Europe. *Eastern Journal of European Studies, 1*(2), 5-19.

Nayak, D., & Choudhury, R. (2014). A Selective Review of Foreign Direct Investment Theories. *ARTNeT Working Paper Series, 143*.

Nicholls, D. (2016). *Foreign Direct Investment: Smart Approaches to Differentiation and Engagement.* Routledge.

North, D. (1991). Insitutions. *Journal of Economic Perspectives, 5*(1), 97-112.

OECD. (2002). *Foreign Direct Investment for Development. Maximising Benefits, Minimising Costs.* Paris, France: Organisation for Economic Co-operation and Development.

OECD. (2008). *Benchmark Definition of Foreign Direct Investment.* OECD. Retrieved from https://www.oecd.org/daf/inv/investmentstatisticsandanalysis/40193734.pdf

Pande, R., & Udry, C. (2005). *Institutions and Development: A View From Below.* New Haven: Yale University.

Peng, M., & Meyer, K. (2011). *International Business.* Cengage Learning Emea.

Pitelis, C. (2005). Stephen Hymer, the Multinational Firm and 'Multinational Corporate Capital'. University of Athens and Cambridge University.

Pitelis, C., & Teece, D. (2010). Cross-Border Market Co-Creation, Dynamic Capabilities and the Entrepreneurial Theory of the Multinational Enterprise. *Industrial and Corporate Change, 19*(4), 1247-1270.

Porter, M. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance.* New York: Free Press.

Putterman, L. (2017, 10). *State Antiquity Index (Statehist)*. (Brown University) Retrieved from Brown University Web site: http://www.brown.edu/Departments/Economics/Faculty/Louis_Putterman/antiquity%20index.htm

Rodrik, D., Subramanian, A., & Trebbi, F. (2002). Institutions Rule: THe Primacy of Institutions over Geography and Integration in Economic Development. *Jurnal of Economic Growth*, 131-165.

Rugman, A. (1980). Internalization as a General Theory of Foreign Direct Investment: a Re-Appraisal of the Literature. *Review of World Economics, 116*(2), 365-379.

Rugman, A. (1982). *Inside the Multinationals: the Economies of Internal Markets.* London: Croom Helm.

Rugman, A. (1986). New Theories of the Multinational Enterprise: An Assessment of Internalization Theory. *Bulletin of Economic Research, 38*(2), 101-118.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students* (5th ed.). Harlow: Pearson Education Limited.

Schneider, F., & Frey, B. (1985). Economic and Political Determinants of Foreign Direct Investment. *World Development, 13*(2), 161-175.

Scimago. (2017, 10). *Country Rankings*. Retrieved from Scimago Web site: www.scimagojr.com/countryrank.php

Stata. (2017, 10). *Cluster — Introduction to Cluster-Analysis Commands*. Retrieved from Stata Web site: https://www.stata.com/manuals14/mvcluster.pdf

Stefanovic, S., & Djukic-Ivanovic, M. (2008). *Influence of Location-Related Factors on the Foreign Investors' Market-Entry Strategies: the Case of Serbia.* Vienna: University of Vienna.

Stoian, C., & Filippaios, F. (2008). Dunning's Eclectic Paradigm: A Holistic, Yet Context Specific Framework for Analysing the Determinants of Outward FDI: Evidence from International Greek Investments. *International Business Review, 17*(3), 349-367.

Teece, D. (1985). Multinational Enterprise, Internal Governance, and Industrial Organization. *The American Economic Review, 75*(2), 233-238.

Teixeira, A., Forte, R., & Assunção, S. (2017). Do Countries' Endowments of Non-Renewable Energy Resources Matter for FDI Attraction? a Panel Data Analysis of 125 Countries over the Period 1995-2012. *International Economics*, 57-71.

The World Bank Group. (2006). *Investment Promotion Agency Performance Review 2006.* Washington DC: The World Bank.

The World Bank Group. (2009). *Global Investment Promotion Benchmarking 2009.* Washington DC: The World Bank.

The World Bank Group. (2012). *Global Investment Promotion Benchmarking 2012.* Washington DC: The World Bank.

Tolentino, P. (2001). From a Theory to a Paradigm: Examining the Eclectic Paradigm as a Framework in International Economics. *International Journal of the Economics of Business, 8*(2), 191-209.

Twitter. (2017, 10). *S-GE Twitter Page*. Retrieved from Twitter: https://twitter.com/SGE

U.S. Patent and Trademark Office. (2015). *Extended Year Set - All Technologies (Utility Patents) Report*. Retrieved from U.S. Patent and Trademark Office Web site: https://www.uspto.gov/web/offices/ac/ido/oeip/taf/h_at.htm

UNCTAD. (1998). *World Investment Report 1998: Trends and Determinants.* Geneva: United Nations Publication.

UNCTAD. (2001). *The World Of Investment Promotion At A Glance - A Survey of Investment Promotion Practices.* New York and Geneva: United Nations.

UNCTAD. (2005). *World Investment Report.* New York and Geneva: United Nations.

UNCTAD. (2017). *UNCTADstat*. Retrieved from UNCTADstat Web site: http://unctadstat.unctad.org/EN/

UNCTAD. (2017a). *Why Don´t Data on Global FDI Inflows and Outflows Match with Each Other?* Retrieved from UNCTAD Web site: http://unctad.org/en/Pages/DIAE/Frequently%20Asked%20Questions/Why-dont-data-on-global-FDI-inflows-and-outflows-match-with-each-other.aspx

UNCTAD. (2017b, 09). *WAIPA Reports*. Retrieved from UNCTAD Web site: http://unctad.org/SearchCenter/Pages/Results.aspx?k=waipa

UNCTAD. (2017c). *World Investment Report 2017: Investment and the Digital Economy.* Geneva: United Nations Publication.

United Nations. (2017). *Human Development Reports*. Retrieved from United Nations Development Programme: http://hdr.undp.org/en/data

van der Ploeg, F. (2011). Natural Resources: Curse or Blessing? *Journal of Economic Literature, 49*(2), 366-420.

van der Ploeg, F., & Poelhekke, S. (2010). The Pungent Smell of "Red Herrings": Subsoil Assets, Rents, Volatility and the Resource Curse. *Journal of Environmental Economics and Management, 60*(1), 44-55.

Vernon, R. (1966). International Investment and International Trade in the Product Cycle. *The Quarterly Journal of Economics, 80*(2), 190-207.

WAIPA. (2017a, 09 10). *Why WAIPA*. Retrieved from WAIPA Web site: http://www.waipa.org/why-waipa/

WAIPA. (2017b). *Members List*. Retrieved from WAIPA Web site.

WAIPA. (2017c, 09). *Reports*. Retrieved from WAIPA Web site: http://www.waipa.org/report/

Walsh, J., & Yu, J. (2010). Determinants of Foreign Direct Investment: A Sectoral and Institutional Approach. *IMF Working Paper 10/187*.

Wang, M., & Wong, M. (2009). Foreign Direct Investment and Economic Growth: The Growth Accounting Perspective. *Economic Enquiry, 47*(4), 701-710.

Wei, S. (2000). How Taxing Is Corruption to International Investors? *Review of Economics and Statitics*, 1-11.

Wells, L., & Wint, A. (1990). *Marketing a Country - Promotion as a Tool for Attracting Foreign Investment.* Washington, DC: The World Bank.

Wells, L., & Wint, A. (2000). *Marketing a Country - Promotion as a Tool for Attracting Foreign Investment.* Washington, DC: The World Bank.

Wheeler, D., & Mody, A. (1992). International Investment Location Cecisions. *Journal of International Economics, 33*, 57-76.

Williamson, O. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications: a Study in the Economics of Internal Organization.* Berkeley: University of California.

Wint, A. (1992). Public Marketing of Foreign Investment: Successful International Offices Stand Alone. *International Journal of Public Sector Management, 5*(5), 29-39.

Wint, A. (1993). Promoting National Investment: Organizing to Service Approved Investors. *Transnational Corporations, 2*(1), 71-90.

Wint, A., & Williams, D. (2002). Attracting FDI to Developing Countries: A Changing Role for Government? *The International Journal of Public Sector Management, 15*(5), 361-374.

WIPO. (2017, 09 2017). *WIPO Web site*. Retrieved from Economic Development and Patents: http://www.wipo.int/patent-law/en/developments/economic.html

Wooldridge, J. (2013). *Introductory Econometrics: A Modern Approach* (5th ed.). Mason: Cengage Learning.

World Bank. (2017a). *Fuel Exports (% of Merchandise Exports)*. Retrieved from The World Bank Web site: https://data.worldbank.org/indicator/TX.VAL.FUEL.ZS.UN

World Bank. (2017b). *Ores and Metals Exports (% of Merchandise Exports)*. Retrieved from The World Bank Web site: https://data.worldbank.org/indicator/TX.VAL.MMTL.ZS.UN

World Bank. (2017c). *Fixed Telephone Subscriptions (per 100 People)*. Retrieved from The World Bank Web site: https://data.worldbank.org/indicator/IT.MLT.MAIN.P2

World Bank. (2017d). *Mobile Cellular Subscriptions (per 100 People)*. Retrieved from The World Bank Web site: https://data.worldbank.org/indicator/IT.CEL.SETS.P2

World Bank. (2017e, 09). *Trade (% of GDP)*. Retrieved from World Bank Web site: https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS

World Bank. (2017f). *GDP per Capita (Current US$)*. Retrieved from The World Bank Web site: https://data.worldbank.org/indicator/NY.GDP.PCAP.CD

World Bank. (2017g). *GDP Growth (Annual %)*. Retrieved from The World Bank Web site: https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG

World Bank. (2017h). *Worldwide Governance Indicators*. Retrieved from The World Bank Web site: http://info.worldbank.org/governance/wgi/#home

World Bank. (2017i, 10). *Research and Development Expenditure (% of GDP)*. Retrieved from World Bank Web site: https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS

World Bank. (2017j, 09). *Patent applications, residents*. Retrieved from World Bank Web site: https://data.worldbank.org/indicator/IP.PAT.RESD

World Bank. (2017k, 10). *World Bank Country and Lending Groups*. Retrieved from World Bank Web site: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

World Bank. (2017l, 10). *Countries and Economies*. Retrieved from World Bank Web site: https://data.worldbank.org/country

World Bank. (2017m). *Individuals Using the Internet (% of Population)*. Retrieved from The World Bank Web site: https://data.worldbank.org/indicator/IT.NET.USER.ZS

World Bank. (2017n, 10). *How Does the World Bank Classify Countries?* Retrieved from The World Bank: (https://datahelpdesk.worldbank.org/knowledgebase/articles/378834-how-does-the-world-bank-classify-countries

World Bank. (2017o, 10). *Rural Population (% of Total Population)*. Retrieved from World Bank Web site: https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS

World Bank. (2017p, 10). *Health Expenditure, Total (% of GDP)*. Retrieved from World Bank Web site: https://data.worldbank.org/indicator/SH.XPD.TOTL.ZS

World Bank. (2017q, 10). *Household Final Consumption Expenditure, etc. (% of GDP)*. Retrieved from World Bank Web site: https://data.worldbank.org/indicator/NE.CON.PETC.ZS

World Bank. (2017r, 10). *High-Technology Exports (Current US$)*. Retrieved from World Bank Web site: https://data.worldbank.org/indicator/TX.VAL.TECH.CD

World Bank. (2017s, 10). *High-Technology Exports (% of Manufactured Exports)*. Retrieved from World Bank Web site: https://data.worldbank.org/indicator/TX.VAL.TECH.MF.ZS

Young, S., Hood, N., & Wilson, A. (1994). Targeting Policy as a Competitive Strategy for European Inward Investment Agencies. *European Urban and Regional Studies*, 143-159.

Zaheer, S. (1995). Overcoming the Liability of Foreignness. *The Academy of Management Journal, 38*(2), 341-363.

Zhang, H., & Markusen, J. (1999). Vertical Multinationals and Host-country Characteristics. *Journal of Development Economics, 59*, 233-252.

10 Appendices

Appendix A Comparison of Four Research Philosophies in Management Research

FIGURE 9 - COMPARISON OF RESEARCH PHILOSOPHIES

Table 4.1 Comparison of four research philosophies in management research

	Positivism	Realism	Interpretivism	Pragmatism
Ontology: *the researcher's view of the nature of reality or being*	External, objective and independent of social actors	Is objective. Exists independently of human thoughts and beliefs or knowledge of their existence (realist), but is interpreted through social conditioning (critical realist)	Socially constructed, subjective, may change, multiple	External, multiple, view chosen to best enable answering of research question
Epistemology: *the researcher's view regarding what constitutes acceptable knowledge*	Only observable phenomena can provide credible data, facts. Focus on causality and law like generalisations, reducing phenomena to simplest elements	Observable phenomena provide credible data, facts. Insufficient data means inaccuracies in sensations (direct realism). Alternatively, phenomena create sensations which are open to misinterpretation (critical realism). Focus on explaining within a context or contexts	Subjective meanings and social phenomena. Focus upon the details of situation, a reality behind these details, subjective meanings motivating actions	Either or both observable phenomena and subjective meanings can provide acceptable knowledge dependent upon the research question. Focus on practical applied research, integrating different perspectives to help interpret the data
Axiology: *the researcher's view of the role of values in research*	Research is undertaken in a value-free way, the researcher is independent of the data and maintains an objective stance	Research is value laden; the researcher is biased by world views, cultural experiences and upbringing. These will impact on the research	Research is value bound, the researcher is part of what is being researched, cannot be separated and so will be subjective	Values play a large role in interpreting results, the researcher adopting both objective and subjective points of view
Data collection techniques most often used	Highly structured, large samples, measurement, quantitative, but can use qualitative	Methods chosen must fit the subject matter, quantitative or qualitative	Small samples, in-depth investigations, qualitative	Mixed or multiple method designs, quantitative and qualitative

(Saunders, Lewis, & Thornhill, 2009, p. 119)

Appendix B Method for Creation of Idiom Index

Our index includes the official or, if not available, the most spoken languages in the G20[50] countries. The choice to consider only the G20 members' idioms hinges upon a few motives. First, G20 is the "largest (…) source of global FDI among all existing and prospective economic groups" (UNCTAD, 2017c, p. 10); therefore, these idioms cover a significant chunk of the global OFDIs. Second, G20 languages all rank within the top 20 most spoken languages – except for Dutch and Bahasa (Ethnologue, 2017) – hence allowing also the inclusion of non-member countries. These selection criteria enabled us to exclude widely spoken languages that carry only a scant relevance in terms of OFDIs, as for instance Bengali and Lahnda, respectively spoken in Bangladesh and Pakistan (ibid.).

To create the index, we assumed that the choice of adding or removing a language from an IPA's website, say Spanish, is influenced by the quantity of outward FDI generated from Spanish-speaking countries the year before. Hence, its construction required to collect data for both OFDIs and languages. For the former, our choice fell upon the FDI stocks in absolute terms. By also including the flows, they do not simply exhibit year-on-year changes, but also provide an insight on past trends that might have contributed in influencing language choices. Coherently with the whole thesis, we relied upon the database UNCTADstat to collect FDI data (UNCTAD, 2017). For languages, we assigned each country the estimate of the population percentage that spoke one or more G20 languages. To this end, we resorted to CIA World factbook data (CIA, 2017): Specifically, percentage allocation followed the below listed criteria:

- If only one G20 language was official, then 100% of the country's population was assumed to speak such a language, thereby scoring 1;
- If more than one G20 language were official, the country's population was split proportionally and allocated to each. For instance, if in a country four G20 languages coexisted, each was assigned the 25%, or 0.25, of the total;
- If the percentages of speakers were clearly stated, such figures were employed.

Once these weights were created, we were able to start the actual calculation of an annual language score reflecting the OFDI generated by each G20 language. The score seeks to reflect the proportion of the OFDIs generated by the population speaking a certain language out of the world's total FDIs. The computation

[50] The members of the G20 are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, and the United States (G20, 2017).

consisted of two steps. In the first, the weight carried by each G20 language for a specific country was multiplied by the same country's total OFDIs. The results obtained for each country were then summed to obtain the yearly total OFDI generated by a specific-language-speaking population.

The second step involved calculating the language percentage relative to the world total OFDIs for that year, simply obtained by dividing the total OFDIs of each language by the world's total. The difference between the global amount and the sum of G20 languages was labelled "Other". This percentage was left unassigned. Although it could have seemed natural allocating it to English, given its role as the business language, we did not feel to assume that a potential investor, not finding her native language in an IPA's website, would retrieve information in English. In our opinion, this would have represented an excessive stretch of the importance of English.

This claim is backed up by languages such as Spanish and Portuguese, for instance. Both belonging to the family of Romance languages, these idioms are mutually intelligible (Jensen, 1989), meaning that speakers of either one can readily understand each other without prior familiarity or special effort. In this light, a potential Portuguese-speaking investor discovering that the IPA's website is not translated into her native language might prefer to consult the Spanish translation rather than the English one. Similarly, former French colonies' investors might opt for French if online information could not be accessed in their native idiom. Or, if faced with the same problem, former members of the USSR might favour Russian over English.

Finally, it is important to keep in mind that the score for, say, 2015 is actually computed using data from 2014. The idea behind it is to mirror the lag between the acknowledgment of a language importance and its actual presence in an IPA's website. With the following example, we try to clarify its mechanism. In 2014, for instance, OFDI originated from English-speaking population amounted to 37.6% of the total world's FDI, whereas Mandarin-speaking population accounted for 10.7%. Based on these data, in 2015, a website providing its information in both languages would obtain a score of 48.3 in our index. The results of the weighting are found in Appendix H.

Appendix C Detailed Description of IPA Main Activities

Below the identified four main groupings of IPA activities are listed (Morriset & Andrews-Johnson, 2004, p. 33).

Image Building:

Creates the perception of a country as an attractive site for international investment.

Tasks include:

- Advertising in general financial media;
- Participating in investment exhibitions;
- Advertising in industry- or sector-specific media;
- Conducting general investment missions from source country to host country or viceversa;
- Conducting general information seminars on investment opportunities.

Investment Generation:

Entails targeting specific sectors and companies with a view to creating investment leads.

Tasks include:

- Engaging in direct mail or telemarketing campaigns;
- Conducting industry- or sector-specific investment missions from source country to host country or vice versa;
- Conducting industry- or sector-specific information seminars;
- Engaging in firm-specific research followed by sales presentations.

Investor Services:

Refer to the range of services provided in a host country that can assist an investor in analysing investment decisions, establishing a business, and maintaining it in good standing.

Tasks include:

- Providing investment counselling services;
- Expediting the processing of applications and permits;
- Providing post-investment services.

Policy Advocacy:

Consists of the activities through which the agency supports initiatives to improve the quality of the investment climate and identifies the views of the private sector on that matter.

Tasks include:

- Participating in policy task forces;
- Developing lobbying activities;
- Drafting laws or policy recommendations;
- Reporting investors' perceptions.

Appendix D Variables for the Principal Component Factor Analysis

As the quality and the meaning of the obtained factors reflect the conceptual underpinnings of the variables included in the analysis (Hair, Anderson, Tatham, & Black, 1998, p. 97), our multivariate analysis will hinge upon the improvements provided by Dúran and Úbeda (2001)[51]. Hence, the use of $IFDI$ and $OFDI$ stocks will help us overcome the limitations of NOIP, whereas GDP per capita will be complemented by two sets of variables replicating, respectively, structural and country-specific elements. However, constraints on data availability as well as theoretical considerations have led us to work with somewhat different variables[52]. Table 18 clearly summarises such changes and Table 19 presents the variable sources.

The first set of variables relates to the country's level of development. The reader can recall that the development occurring during the IDP evolution entails several structural transformations involving the market, created assets, infrastructures, human skills, and institutions. To reflect such changes, Duran and Úbeda (ibid.) assemble these variables within five groups: market transformation, technological capabilities, infrastructure, human capital, and government.

We have decided to proxy transformation with $GDP\ growth$ and $Rural\ Population$. In line with Dúran and Úbeda (ibid.). On the other hand, we deem GDP per capita not appropriate to measure market transformation. This is also consistent with the literature that largely supports its use as a proxy for market size (cf. subsection 4.2.2.2.2). Rather, in our opinion, GDP growth better reveals such an evolution as demonstrated by the astonishing growth rates of developing economies that tend to flatten once the country becomes developed.

Regarding created assets, infrastructures, and human skills, we largely draw upon Archibugi and Coco's (2004) work. In the creation of their indicator of technological capabilities (ArCo), the scholars considered these three components as interlaced. To proxy for technology creation, the pair of researchers selected Resident Patents and the number of Scientific Papers per country. Also, part of Dúran and Úbeda's (2001) work, patents are a measure accounting for the technological innovations generated for commercial purposes; they represent a form of codified knowledge generated by profit-seeking firms and organisations. Scientific literature is another important source of codified knowledge; although the private sector also

[51] Proof of the theoretical soundness of the variables already implemented by Dúran and Úbeda (2001) can be found in their work.

[52] If not explicitly stated that changes are based on theoretical considerations, then changes are due to lack of data availability.

publishes a significant share of scientific articles, scientific papers still mostly represent the knowledge generated in the public sector, and most notably in universities and other publicly funded research centres. $ScientificPapers$ was not included by Dúran and Úbeda (ibid.)

Technology creation, though, demands basic infrastructures – not necessarily connected to industrial capabilities – as production of knowledge is strongly associated to their availability and diffusion. Such infrastructures are summarised by the natural logarithm of Internet penetration and natural logarithm of Telephone penetration. Telephony is a fundamental infrastructure for business purposes as it allows tracing populations with human skills and acquiring technical information, whereas the Internet is a vital infrastructure not only for business purposes, but also to access knowledge. The utilisation of $Phone\ Penetration$ required a more elaborated construction, since it is a combination of both landline and mobile phones. Subsection 4.2.2.1.3, however, provides a detailed explanation of the process.

However, technological capabilities – as measured by patents and scientific literature – and technological infrastructures – as measured by Phone and Internet penetration – have little value unless used by experienced people. Hence, technology exploitation necessitates human skills development. Unfortunately, we have found severe restrictions here in terms of proxy availability, which has lead us to disregard all of the Dúran and Úbeda's (ibid.) variables. Our choice then has fallen upon the mean years of schooling. Although this indicator does not consider differences in the quality of teaching, it gives an indication of the ''stock'' of human skills (Archibugi & Coco, 2004).

Finally, to account for the role of government, we have not only retained Health Expenditures, in line with the Spanish scholars, but we have also included the institutional quality given its evolution as countries progress along the IDP. Its proxy is the same used for the panel regressions (cf. subsection 4.2.2.3.1).

Although there are general structural similarities between countries within the same IDP stages, some idiosyncratic factors actually influence significantly the path followed by each of them (Dunning and Narula, 2006, p. 25). Specifically, these discrepancies relate to Natural Resource endowments, Market Size, and Strategy of Economic Development.

Regarding Natural Resource endowment, we align with Durán and Úbeda's (2001) choice by utilising $Export\ of\ primary\ commodities$. Once again, the variable has been used in the panel regression thesis too; hence, subsection 4.2.2.1.1 clearly presents its creation. With respect to the domestic Market Size, we maintain *Private Consumption*. Yet, differently from the Spanish scholars, we have decided to use $GDP\ per\ capita$ instead of $GDP\ growth$, for the same above-mentioned theoretical reasons. Further, we

disregard the number of $Patents\ of\ non-resident$, since we do not consider it a good proxy for market size. Lastly, to proxy for the Strategy of Economic Development, we retain exactly the same variables.

TABLE 18 - COMPARISON OF VARIABLES USED FOR PCA AND CA OF IDP STAGES

		Variable	Thesis	Duran and Úbeda
Structural	IDP	$Inward\ FDI\ per\ capita$	x	x
		$Outward\ FDI\ per\ capita$	x	x
		$Inward\ FDI\ stock$	x	x
		$Outward\ FDI\ stock$	x	x
	Market Transformation	$Rural\ Population$	x	x
		$GDP\ Growth$	x	
		$GDP\ per\ Capita$		x
	Infrastructure	$Gross\ Domestic\ Fixed\ Investment$		x
		$Internet\ Penetration$	x	
		$Phone\ Penetration$	x	
	Technological Capacities	$Number\ of\ Patents\ of\ resident$	x	x
		$Number\ of\ Scientific\ Papers\ of\ resident$	x	
		$Royalty\ and\ license\ fees\ receipts\ per\ capita$		x
		$Royalty\ and\ license\ fees\ receipts$		x
		$R\&D/GDP$		x
	Human Capital	$Mean\ Years\ of\ Schooling$	x	
		$Secondary\ schooling$		x
		$University$		x
		$Adult\ illiteracy$		x
		$Scientists\ and\ Engineers\ in\ R\&D$		x
	Government	$Taxes\ on\ International\ Trade$		x
		$Tax\ Revenues$		x
		$Health\ Expenditures$	x	x
		WGI	x	
Idiosyncratic	Natural Resources	$Export\ of\ primary\ commodities$	x	x
	Market Size	$Private\ Consumption$	x	x
		$Patents\ of\ non-resident$		x
		$GDP\ Growth$		x
		$GDP\ per\ Capita$	x	
	Strategy of economic development	$Degree\ of\ Openness$	x	x
		$High-Technology\ Exports$	x	x
		$High-Technology\ Exports\ percent\ of\ export$	x	x

TABLE 19 - SOURCES OF VARIABLES USED IN PCA AND CA

		Variable	Sources
Structural	IDP	Inward FDI per capita	(UNCTAD, 2017)
		Outward FDI per capita	(ibid.)
		Inward FDI stock	(ibid.)
		Outward FDI stock	(ibid.)
	Market Transformation	Rural Population	(World Bank, 2017o)
		GDP Growth	(World Bank, 2017g)
	Infrastructure	Internet Penetration	(World Bank, 2017m)
		Phone Penetration	See subsection 4.2.2.1.3
	Technological Capacities	Number of Patents of resident	(U.S. Patent and Trademark Office, 2015)
		Number of Scientific Papers of resident	(Scimago, 2017)
	Human Capital	Mean Years of Schooling	(United Nations, 2017)
	Government	Health Expenditures	(World Bank, 2017p)
		WGI	See subsection 4.2.2.3.1
Idiosyncratic	Natural Resources	Export of primary commodities	See subsection 4.2.2.1.1
	Market Size	Private Consumption	(World Bank, 2017q)
		GDP per Capita	(World Bank, 2017f)
	Strategy of economic development	Degree of Openness	(World Bank, 2017e)
		High-Technology Exports	(World Bank, 2017r)
		High-Technology Exports percent of export	(World Bank, 2017s)

Appendix E Principal Component Factor Analysis

In order to discover the variables that best explain the relationship between a country's economic development and its IFDI and OFDI stocks, a principal component factor analysis (PCA) was conducted. Provided that such a relationship is the essence of the IDP, the use of PCA will allow the identification of the most suitable variables to group countries along different IDP stages through a subsequent cluster analysis (CA). The core idea of PCA is to reduce the dimensionality of a dataset in which there are a large number of interrelated variables, while retaining as much as possible of the variation present in the dataset. Put differently, its general purpose is to summarise the information contained in a number of original variables into a smaller set, with a minimum loss of information.

Before delving into the details of PCA, a premise is deemed necessary: the reader must bear firmly in mind that factor analysis "is much more an art than a science" (Hair, Anderson, Tatham, & Black, 1998, p. 428). As such, the lack of a definitive set of guidelines on how to perform it makes its results somewhat subjective. This said, we will use the year 2000 as a benchmark to explain it[53].

One of the first decisions involved the variables to include. They need to be theoretically grounded, as the quality of the results reflects the conceptual basis for the inclusion of the variables. The previous appendix (Appendix D) has fully justified this point.

A second topic regarded the sample size. In general, a factor analysis should not be performed if a sample is smaller than 50 observations, with the preferred sample size of 100 or more. With our 107 countries, then, we satisfy this requirement. Since the goal of PCA is finding patterns among groups of similar variables, a reasonable number should then be included. To this extent, another general rule would be to have, at least, a 5:1 ratio between observations and variables (ibid., p 373). However, overfitting the analysis with an excessive number of

FIGURE 10 – KMO MEASURE OF SAMPLING ADEQUACY

Kaiser-Meyer-Olkin measure of sampling adequacy

Variable	kmo
std_inward~c	0.6484
std_outwar~c	0.7310
std_outwar~s	0.7723
std_inward~s	0.8131
std_gdpgro~h	0.6682
std_ruralpop	0.9150
std_log_ph~e	0.8690
std_log_in~t	0.8512
institutions	0.8574
std_school~g	0.8990
std_health~p	0.8955
std_scient~s	0.7966
std_patents	0.7717
std_rdgdp	0.7806
std_natura~s	0.4191
std_gdpper~a	0.8216
std_privat~a	0.7422
std_degree~s	0.6980
std_highte~t	0.8371
std_highte~s	0.8934
Overall	0.8037

[53] The procedure has remained the same throughout all years.

FIGURE 11 - FACTOR EXTRACTION OUTPUT

Factor analysis/correlation — Number of obs = 107
Method: principal-component factors — Retained factors = 5
Rotation: (unrotated) — Number of params = 90

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	8.42214	4.28860	0.4211	0.4211
Factor2	4.13354	2.37333	0.2067	0.6278
Factor3	1.76021	0.47115	0.0880	0.7158
Factor4	1.28905	0.12973	0.0645	0.7802
Factor5	1.15932	0.47311	0.0580	0.8382
Factor6	0.68621	0.04807	0.0343	0.8725
Factor7	0.63814	0.24487	0.0319	0.9044
Factor8	0.39327	0.04574	0.0197	0.9241
Factor9	0.34753	0.05878	0.0174	0.9415
Factor10	0.28875	0.01796	0.0144	0.9559
Factor11	0.27079	0.09808	0.0135	0.9694
Factor12	0.17271	0.04462	0.0086	0.9781
Factor13	0.12809	0.03049	0.0064	0.9845
Factor14	0.09760	0.02488	0.0049	0.9894
Factor15	0.07272	0.00758	0.0036	0.9930
Factor16	0.06514	0.02691	0.0033	0.9963
Factor17	0.03823	0.01727	0.0019	0.9982
Factor18	0.02096	0.00924	0.0010	0.9992
Factor19	0.01172	0.00784	0.0006	0.9998
Factor20	0.00388	.	0.0002	1.0000

LR test: independent vs. saturated: chi2(190) = 2931.78 Prob>chi2 = 0.0000

variables is not recommended either. In our case, we have 107 observations and 20 variables, perfectly matching the aforementioned ratio.

Subsequently, to evaluate the appropriateness of PCA, we employed the measure of sampling adequacy (MSA), as shown in Figure 10. This index ranges from 0 to 1, reaching one when the model is perfectly suitable. The MSA can also extended to assess the appropriateness of the single variables, and thereby exclude those falling within the unacceptable range (ibid., p.374). Variables scoring less than 0.5 are considered to be unacceptable. However, for our thesis we set a higher threshold, being 0.7 were considered.

Another important choice dealt with the number of factors to be retained. The factor analysis extracts first the largest and best combinations of variables and subsequently proceeds to the extraction of the lesser ones (ibid., p. 377). Coherently with research (ibid., p. 379), we have used different criteria to determine the number of factors to be extracted. Initially, we have implemented the latent root criterion as a cut-off technique (ibid., p. 377); the logic behind it is that any individual factor should account for the variance of at least a single variable. Since each variable contributes a value of 1 to the total latent root value, then only the factors having the latent root value greater than 1 are worth being retained. As a method, it is most

reliable when the number of factor is between 20 and 50. Figure 11 shows that 5 factors, accounting for roughly 84% of the sample variation, were deemed to be retained for the next stage, factor rotation.

The goal of performing factor rotation is simplifying the interpretation of factors. Unrotated factor solutions allow reducing the dataset, but typically, they do not provide the most meaningful interpretation of the variables under study. Hence, at this point, a rotational method is implemented to obtain theoretically more meaningful factors. There are several available orthogonal or oblique rotational techniques and no compelling analytical reason exists to favour one or the other (ibid., p. 384). However, for data reduction, orthogonal solutions are generally preferred, hence, we used Stata's orthogonal varimax method.

Factor rotation is useful to undergo re-specifications of the factor model, thereby deleting unnecessary variable(s) from the model. Figure 12 shows that some factors are actually composed of a scant number of variables. Stata reports the factor loadings, that is, the correlation of each variables and its factor; for a sample size of roughly 100 observations, a factor loading of at least 0.55 is demanded for a factor significance. Stata also reports the uniqueness value, that is, the variance that is 'unique' to the variable and not shared

FIGURE 12 – FACTOR ROTATION OUTPUT

Factor analysis/correlation — Number of obs = 107
Method: principal-component factors — Retained factors = 5
Rotation: orthogonal varimax (Kaiser off) — Number of params = 90

Factor	Variance	Difference	Proportion	Cumulative
Factor1	5.90367	0.51731	0.2952	0.2952
Factor2	5.38636	2.81096	0.2693	0.5645
Factor3	2.57541	0.97373	0.1288	0.6933
Factor4	1.60168	0.30454	0.0801	0.7734
Factor5	1.29714	.	0.0649	0.8382

LR test: independent vs. saturated: chi2(190) = 2931.78 Prob>chi2 = 0.0000

Rotated factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Uniqueness
std_inward~c			0.9299			0.0733
std_outwar~c			0.8948			0.0990
std_outwar~s	0.9481					0.0596
std_inward~s	0.9421					0.0842
std_gdpgro~h				0.7350		0.3548
std_ruralpop		-0.8230				0.2165
std_log_ph~e		0.9229				0.1040
std_log_in~t		0.9153				0.0821
institutions		0.7909				0.1789
std_school~g		0.8136				0.2840
std_health~p						0.2539
std_scient~s	0.9743					0.0199
std_patents	0.9607					0.0676
std_rdgdp		0.7098				0.3321
std_natura~s					-0.9278	0.1184
std_gdpper~a		0.6785				0.1637
std_privat~a	0.9813					0.0231
std_degree~s			0.5858			0.2745
std_highte~t				0.6086		0.3188
std_highte~s	0.8691					0.1272

with other variables. Thus, the greater 'uniqueness' the lower the relevance of the variable in the factor model.

Given that the factor analyst should always seek to keep the most representative and parsimonious set of factors possible (ibid., p. 379), we decided to eliminate those factors composed of just a few variables. The process has been done progressively, by removing one variable at the time. After several model re-specifications, we ended up with a factor model composed of two factors, explaining about 86% of the total sample variation (Figure 13). The first factor shows the relationship between FDI, both inward and outward, technological development as well as the market size; further, considered the correlation between technology and market size, the market itself can be considered not only as a location factor, but also as an enhancer in created-asset generation. The second factor includes the variables related to economic development.

FIGURE 13 – LAST FACTOR ROTATION OUTPUT

```
Factor analysis/correlation                    Number of obs    =        107
    Method: principal-component factors        Retained factors =          2
    Rotation: orthogonal varimax (Kaiser off)  Number of params =         21

    --------------------------------------------------------------------------
        Factor  |   Variance   Difference        Proportion   Cumulative
    ------------+-------------------------------------------------------------
        Factor1 |      4.85520    0.23481            0.4414       0.4414
        Factor2 |      4.62039          .            0.4200       0.8614
    --------------------------------------------------------------------------
    LR test: independent vs. saturated:  chi2(55) = 2023.63 Prob>chi2 = 0.0000

Rotated factor loadings (pattern matrix) and unique variances

    -------------------------------------------------
        Variable |  Factor1   Factor2   Uniqueness
    -------------+-----------------------------------
    std_outwar~s |   0.9591             0.0517
    std_inward~s |   0.9577             0.0662
    std_ruralpop |            -0.8500   0.2730
    std_log_ph~e |             0.9466   0.0959
    std_log_in~t |             0.9561   0.0669
    institutions |             0.8639   0.2210
    std_school~g |             0.8070   0.3269
    std_scient~s |   0.9724             0.0275
     std_patents |   0.9603             0.0705
    std_gdpper~a |             0.7743   0.2951
    std_privat~a |   0.9793             0.0299
    -------------------------------------------------
```

To sum up, the factor analysis clearly signals that countries in our sample differ along two major aspects. First, according to their level of economic development. Second, with respect to their level of technological endowment. The variables composing these two factors have then been used to perform our cluster analysis. Finally, Figure 14 demonstrates the goodness of the included variables, and the model as a whole.

FIGURE 14 - KMO MEASURE OF SAMPLING ADEQUACY

Kaiser-Meyer-Olkin measure of sampling adequacy

Variable	kmo
std_outwar~s	0.8114
std_inward~s	0.8411
std_ruralpop	0.9005
std_log_ph~e	0.8388
std_log_in~t	0.8213
institutions	0.8079
std_school~g	0.8540
std_scient~s	0.7776
std_patents	0.7603
std_gdpper~a	0.8542
std_privat~a	0.7172
Overall	0.8086

Appendix F Cluster Analysis

In order to group our sample countries along the different IDP stages a cluster analysis (CA) was conducted. Its purpose is to cluster, within the same group, homogenous observations that are unrelated to observations in another groups. Hence, the concept behind it is minimizing intra-cluster variation while maximizing inter-cluster variation.

Similarly, to factor analysis, cluster analysis lacks a definitive set of guidelines on how to perform it (Hair, Anderson, Tatham, & Black, 1998, p. 428). Hence, performing a cluster analysis involves making several choices that influence the results, and unfortunately, no general rules exist for preferring one option over the other (ibid., p. 428).

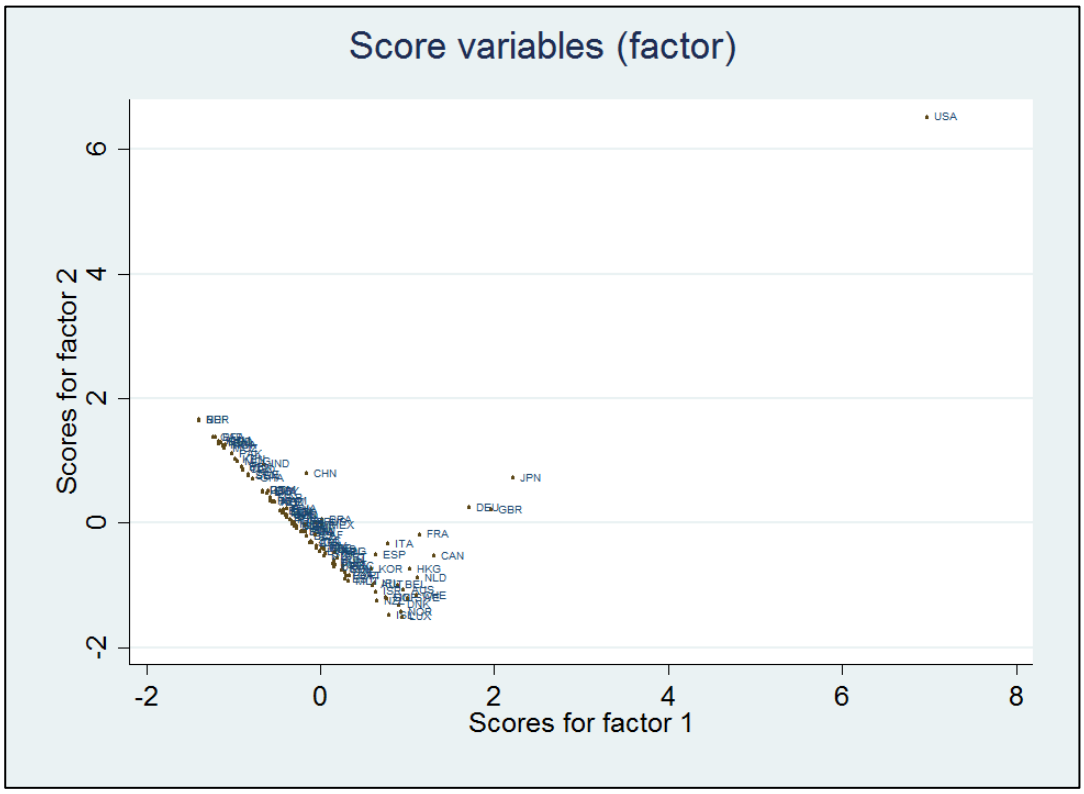
Having clarified this crucial point, a first decision referred to the clustering procedure to use, that is, the way in which clusters are formed. To this end, there exists numerous clustering techniques and we resorted to hierarchical clustering methods. Hierarchical clustering can be distinguished into agglomerative or divisive. In the former, at the beginning, each observation is considered as a separate group; at successive steps, similar pairs of clusters are merged and, theoretically, this process would continue until all observations belong to the same group. On the other hand, the divisive technique proceeds in the opposite direction; starting from one large clusters containing all observations, the most dissimilar are separated and gathered into small clusters until, in theory, each observation constitutes a cluster itself. The choice between the two was "forced" upon us, given that Stata 14 does not offer divisive hierarchical clustering commands (Stata, 2017, p. 6).

Second, we had to choose the linkage method, that is, the method used to merge similar pair of clusters at successive steps. Amongst the main hierarchical agglomerative linkage methods, we have decided to use Ward's methods, which has proved to be the best performer in identifying clustering structures (Ferreira & Hitchcock, 2009).

A third selection involved choosing the similarity measure to determine, it is obvious, how similar two observations are. Amongst the wide array available for continuous data, our choice was the Squared Euclidean distance. What prompt us is the fact that its usage is recommended with Ward's linkage (Hair, Anderson, Tatham, & Black, 1998, p. 432). The formula used to compute Squared Euclidean distance is the following:

$$\sum_{a=1}^{p} (x_{i^a} - x_{j^a})^2$$

FIGURE 15 – FACTOR SCATTERPLOT



where:

p denotes the number of variables; $x_i{}^a$ denotes the value of observation i for variable v $x_j{}^a$ denotes the value of observation j for variable v

The final decision required us to define the number of clusters in which allocate our countries. This was the easiest choice as corresponded to the five IDP stages.

Eventually, some data transformation was required too. First, variables where standardised so that all contributed equally to the distance or similarity between cases. This gimmick prevented variables with high variability from dominating the cluster analysis (ibid., p. 435). Standardisation though did not avoid an outlier – namely the United States, which generated its own cluster – from affecting our results, as depicted in Figure 15[54]. Albeit eliminating outliers is always a risky procedure, it is actually suggested in cases where the derived clusters are unrepresentative of the true population (ibid., p. 429). To this end, United States were removed

[54] Despite referring to year 2000, this event happened for every year.

from the sample and logically assigned to the fifth IDP stage, but only after having performed another cluster analysis freed from United States' unduly influence.

Appendix G Clustering Data – IDP Stages

Green cell indicates that value has manually been adjusted upwards, yellow indicates manual adjustment downwards.

TABLE 20 - OUTPUT OF IDP STAGES AND INDICATION OF MANUAL CHANGES

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Argentina	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Armenia	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Australia	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5
Austria	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Azerbaijan	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Bahrain	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Bangladesh	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Barbados	2	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2
Belarus	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3
Belgium	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	4
Belize	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Benin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bolivia	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Botswana	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Brazil	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Burkina Faso	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Burundi	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cambodia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Canada	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5
Central African Republic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Chile	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
China	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Colombia	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3
Costa Rica	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Cote d'Ivoire	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2
Croatia	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Cyprus	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Czech Republic	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Denmark	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Ecuador	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Egypt	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
El Salvador	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Estonia	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Fiji	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Finland	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
France	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Georgia	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Germany	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Ghana	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
Greece	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Guatemala	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Guyana	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Honduras	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Hong Kong	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5
Hungary	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Iceland	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
India	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
Ireland	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5
Israel	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Italy	3	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3
Jamaica	2	2	2	2	2	2	2	2	2	2	3	3	2	2	2	2
Japan	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Jordan	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Kenya	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
Kuwait	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Kyrgyzstan	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Latvia	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Lebanon	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Lithuania	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Luxembourg	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5
Macedonia	2	2	3	3	3	3	3	3	3	3	3	3	2	2	2	2
Madagascar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Malawi	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Malaysia	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Malta	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Mexico	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Moldova	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Morocco	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mozambique	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Namibia	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Netherlands	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5
New Zealand	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Niger	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nigeria	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
Norway	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5
Pakistan	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1
Paraguay	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Peru	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3
Philippines	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Poland	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Portugal	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Qatar	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4
Romania	2	2	2	2	2	2	3	3	3	3	3	3	2	2	2	2
Russia	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Saudi Arabia	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Senegal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Seychelles	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2
Singapore	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5
Slovakia	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Slovenia	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
South Africa	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
South Korea	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Spain	3	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3
Sri Lanka	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Sweden	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Switzerland	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5
Thailand	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Togo	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tunisia	2	2	2	2	2	2	3	3	3	3	3	3	2	2	2	2
Turkey	2	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3
Ukraine	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
United Kingdom	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
United States	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Uruguay	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yemen	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Zimbabwe	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1

Appendix H Weight Distribution of Idioms

TABLE 21 - WEIGHTING DISTRIBUTION

Year	Arabic	Bahasa	Dutch	English	French	German	Hindi	Italian	Japanese	Korean	Mandarin	Portuguese	Russian	Spanish	Turkish	Others	World Total
1999	1,0	0,1	4,9	53,2	12,7	7,7	0,0	2,7	3,5	0,3	5,5	0,9	0,1	2,0	0,0	5,3	100
2000	1,5	0,1	5,5	54,1	7,3	8,7	0,0	2,5	3,7	0,3	6,0	0,9	0,3	2,4	0,0	5,3	100
2001	2,1	0,0	5,9	49,6	7,9	10,0	0,0	2,5	4,0	0,3	6,1	0,9	0,6	3,0	0,1	5,8	100
2002	2,5	0,0	6,7	45,9	8,2	11,1	0,0	2,5	4,0	0,3	5,6	0,9	0,8	3,4	0,1	6,3	100
2003	2,3	0,0	7,6	47,2	8,0	10,4	0,0	2,4	3,5	0,3	5,0	0,9	0,9	3,3	0,1	7,2	100
2004	2,4	0,0	7,5	47,9	7,9	9,8	0,0	2,3	3,2	0,3	5,0	1,0	0,9	3,4	0,1	7,7	100
2005	2,5	0,0	7,6	46,8	7,8	9,4	0,0	2,3	3,2	0,3	5,4	1,0	1,2	3,6	0,1	8,2	100
2006	2,5	0,0	7,7	45,2	7,8	9,5	0,1	2,4	2,9	0,3	6,0	1,0	1,5	3,9	0,1	8,4	100
2007	2,6	0,0	7,0	43,9	7,7	9,6	0,1	2,5	2,9	0,4	7,0	1,0	1,9	4,0	0,1	8,7	100
2008	3,7	0,0	8,5	34,5	7,9	11,0	0,2	3,1	4,2	0,6	7,0	1,2	1,2	4,7	0,1	9,0	100
2009	4,0	0,0	7,8	36,8	8,2	10,4	0,2	2,8	3,8	0,6	6,7	1,0	1,5	4,3	0,1	10,2	100
2010	4,2	0,0	7,2	37,1	8,0	10,3	0,2	2,7	3,9	0,7	7,1	1,0	1,6	4,3	0,1	11,1	100
2011	4,5	0,0	7,3	34,8	8,1	10,6	0,2	2,8	4,4	0,8	7,9	1,0	1,5	4,3	0,1	11,8	100
2012	4,9	0,1	5,4	36,1	7,9	10,8	0,2	2,7	4,4	0,9	8,6	1,2	1,5	4,1	0,1	11,6	100
2013	5,5	0,1	5,7	38,1	7,6	9,8	0,2	2,5	4,4	0,9	8,9	1,1	1,6	3,6	0,1	11,4	100
2014	6,2	0,1	5,2	37,6	7,4	9,0	0,2	2,3	4,5	1,0	10,7	1,0	1,4	3,5	0,2	10,9	100

Appendix I Preconditions for Regressions

IDP stages 1-5

FIGURE 16 - CORRELATION MATRIX (CF. MULTICOLLINEARITY)

	FDI	Market~e	Market~h	TradeO~s	Natura~s	Skille~r	SqSkil~r	PhoneP~n	WGI	Patents	Trend	GreatR~n	Waipa	Twitter	Facebook	IdiomW~d
FDI	1.0000															
MarketSize	0.6522	1.0000														
MarketGrowth	0.0211	-0.1751	1.0000													
TradeOpenn~s	0.1194	0.2750	0.0469	1.0000												
NaturalRes~s	-0.0170	-0.0151	0.1356	-0.1281	1.0000											
SkilledLab~r	0.4938	0.7479	-0.1307	0.2637	-0.0894	1.0000										
SqSkilledL~r	0.4792	0.7361	-0.1431	0.2458	-0.1003	0.9754	1.0000									
PhonePenet~n	0.5938	0.7837	-0.1009	0.2641	-0.0391	0.6651	0.6177	1.0000								
WGI	0.5233	0.8334	-0.1644	0.2989	-0.2372	0.6523	0.6765	0.5476	1.0000							
Patents	0.7070	0.6417	-0.1402	-0.0081	-0.1756	0.5292	0.5542	0.4133	0.6297	1.0000						
Trend	0.1960	0.2080	-0.0890	0.0663	0.0789	0.1694	0.1727	0.5022	-0.0080	-0.0782	1.0000					
GreatReces~n	0.1654	0.1846	-0.1897	0.0566	0.0805	0.1465	0.1504	0.4462	-0.0107	-0.0439	0.8680	1.0000				
Waipa	0.1237	0.1016	0.0061	-0.0949	0.0415	0.1547	0.1181	0.1946	-0.0359	-0.0065	0.1273	0.1114	1.0000			
Twitter	0.1862	0.2818	-0.1241	0.0889	-0.0072	0.2519	0.2602	0.3000	0.1989	0.0444	0.5630	0.4850	0.0713	1.0000		
Facebook	0.0711	0.1016	-0.0541	0.0679	0.0002	0.0978	0.0912	0.1955	0.0045	-0.0840	0.4468	0.3594	-0.0259	0.4957	1.0000	
IdiomWeigh~d	0.3857	0.3806	-0.0373	0.2188	-0.1626	0.2896	0.2810	0.3968	0.3435	0.2783	0.2489	0.1882	0.1700	0.2131	0.0948	1.0000

FIGURE 17 – BREUCH-PAGAN (CF. HETEROSCEDASTICITY)

```
Breusch-Pagan LM statistic:  892.1097  Chi-sq(15)  P-value =  2.e-180
```

FIGURE 18 - WOOLRIDGE TEST (CF. AUTOCORRELATION)

```
Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
     F(  1,      106) =      11.893
           Prob > F =       0.0008
```

FIGURE 19 - RESIDUAL DISTRIBUTION (CF. NORMALITY)

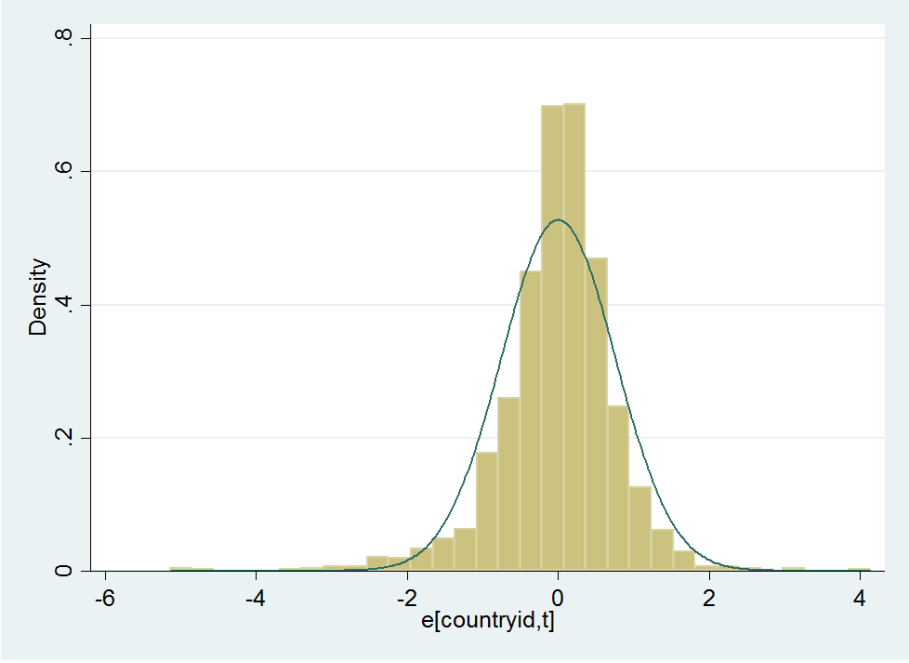


FIGURE 20 - HAUSMAN TEST (FIXED EFFECT VS. RANDOM EFFECT)

```
    Test:  Ho:  difference in coefficients not systematic

                 chi2(15) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       113.86
                Prob>chi2 =       0.0000
                (V_b-V_B is not positive definite)
```

IDP stages 1-3

FIGURE 21 - CORRELATION MATRIX (CF. MULTICOLLINEARITY)

	FDI	Market~e	Market~h	TradeO~s	Natura~s	Skille~r	SqSkil~r	PhoneP~n	WGI	Patents	GreatR~n	Trend	Waipa	Twitter	Facebook	IdiomW~d
FDI	1.0000															
MarketSize	0.5402	1.0000														
MarketGrowth	0.1258	-0.0890	1.0000													
TradeOpenn~s	-0.0192	0.3016	0.0174	1.0000												
NaturalRes~s	0.0971	0.0974	0.1266	-0.1183	1.0000											
SkilledLab~r	0.3403	0.6490	-0.0504	0.3814	-0.0312	1.0000										
SqSkilledL~r	0.2906	0.6067	-0.0538	0.3821	-0.0441	0.9725	1.0000									
PhonePenet~n	0.5463	0.7798	-0.0437	0.2961	0.0205	0.6085	0.5584	1.0000								
WGI	0.3122	0.7019	-0.0634	0.3471	-0.2268	0.5027	0.5028	0.4561	1.0000							
Patents	0.6362	0.4040	0.0001	-0.1140	-0.0547	0.3033	0.2792	0.2814	0.2902	1.0000						
GreatReces~n	0.2336	0.2470	-0.1786	0.0482	0.0578	0.1544	0.1488	0.5280	-0.0061	-0.0020	1.0000					
Trend	0.2672	0.2731	-0.0832	0.0622	0.0548	0.1775	0.1693	0.5933	-0.0041	-0.0430	0.8674	1.0000				
Waipa	0.3007	0.3229	0.0013	0.1047	0.0634	0.3178	0.2941	0.3085	0.1694	0.1614	0.0667	0.0759	1.0000			
Twitter	0.1629	0.2552	-0.1187	0.0537	-0.0221	0.2075	0.2014	0.3007	0.1594	-0.0334	0.4314	0.5223	0.0576	1.0000		
Facebook	0.1053	0.1470	-0.0590	0.0221	-0.0186	0.1299	0.1278	0.2375	0.0260	-0.0689	0.3628	0.4643	0.0106	0.5401	1.0000	
IdiomWeigh~d	0.3314	0.3048	0.0117	0.1878	-0.1019	0.2085	0.1906	0.3639	0.2147	0.1324	0.2166	0.2877	0.1937	0.1908	0.1422	1.0000

FIGURE 22 - BREUCH-PAGAN (CF. HETEROSCEDASTICITY)

```
    Breusch-Pagan LM statistic:  881.5304  Chi-sq(15)  P-value =  3.e-178
```

FIGURE 23 - WOOLRIDGE TEST (CF. AUTOCORRELATION)

```
Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
    F(  1,       83) =     11.525
           Prob > F =      0.0011
```

FIGURE 24 - RESIDUAL DISTRIBUTION (CF. NORMALITY)

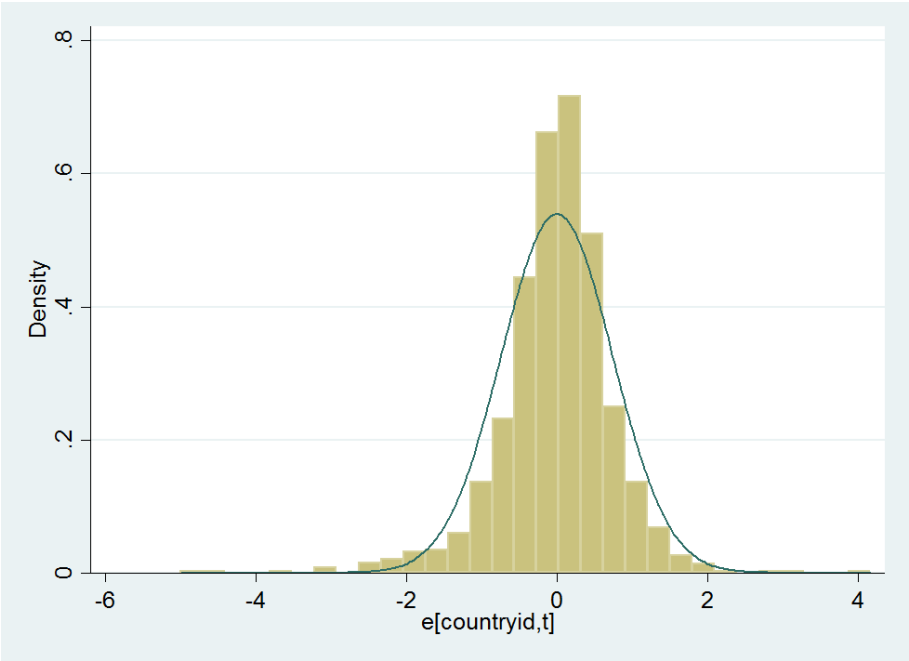


FIGURE 25 - HAUSMAN TEST (FIXED EFFECT VS. RANDOM EFFECT)

```
Test:  Ho:  difference in coefficients not systematic

             chi2(14) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =       220.57
            Prob>chi2 =       0.0000
            (V_b-V_B is not positive definite)
```

IDP stages 4-5

FIGURE 26 - CORRELATION MATRIX (CF. MULTICOLLINEARITY)

	FDI	Market~e	Market~h	TradeO~s	Natura~s	Skille~r	SqSkil~r	PhoneP~n	WGI	Patents	GreatR~n	Trend	Waipa	Twitter	Facebook	IdiomW~d
FDI	1.0000															
MarketSize	0.0262	1.0000														
MarketGrowth	0.0770	-0.1345	1.0000													
TradeOpenn~s	0.1484	0.1304	0.2566	1.0000												
NaturalRes~s	-0.1533	0.3915	0.0217	-0.1237	1.0000											
SkilledLab~r	0.2039	0.4118	-0.1355	-0.2209	0.1679	1.0000										
SqSkilledL~r	0.2103	0.4157	-0.1331	-0.2298	0.1744	0.9981	1.0000									
PhonePenet~n	0.0116	0.4328	-0.1054	0.4514	-0.0602	0.1907	0.1874	1.0000								
WGI	-0.0851	0.4311	-0.0823	0.1404	0.1481	0.1709	0.1651	0.0409	1.0000							
Patents	0.4164	-0.3376	-0.1554	-0.3868	-0.3002	0.1834	0.1864	-0.3294	-0.2689	1.0000						
GreatReces~n	0.0169	0.5005	-0.2795	0.0896	0.1998	0.4225	0.4266	0.5136	-0.0066	-0.2154	1.0000					
Trend	0.0541	0.5806	-0.1364	0.0936	0.2070	0.4730	0.4782	0.5853	-0.0114	-0.3051	0.8702	1.0000				
Waipa	-0.0593	-0.0890	-0.0925	-0.2950	-0.1509	0.0171	0.0224	0.2311	-0.2507	0.0904	0.2411	0.2774	1.0000			
Twitter	0.0080	0.3659	-0.0462	0.0774	0.1755	0.3044	0.3061	0.3589	0.0024	-0.2686	0.6743	0.7175	0.1786	1.0000		
Facebook	0.0240	0.2838	-0.0532	0.1721	0.0865	0.1034	0.0935	0.1673	0.0236	-0.2223	0.3465	0.3819	-0.1480	0.4144	1.0000	
IdiomWeigh~d	0.1248	0.0265	0.0041	0.1922	-0.2589	-0.0345	-0.0444	0.2137	0.1778	0.0244	0.1382	0.1719	0.2990	0.1475	-0.0354	1.0000

FIGURE 27- BREUCH-PAGAN (CF. HETEROSCEDASTICITY)

```
Breusch-Pagan LM statistic:  75.24042  Chi-sq(15)  P-value =  5.1e-10
```

FIGURE 28 - WOOLRIDGE TEST (CF. AUTOCORRELATION)

```
Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
    F(  1,      25) =      1.464
           Prob > F =      0.2376
```

FIGURE 29 - RESIDUAL DISTRIBUTION (CF. NORMALITY)

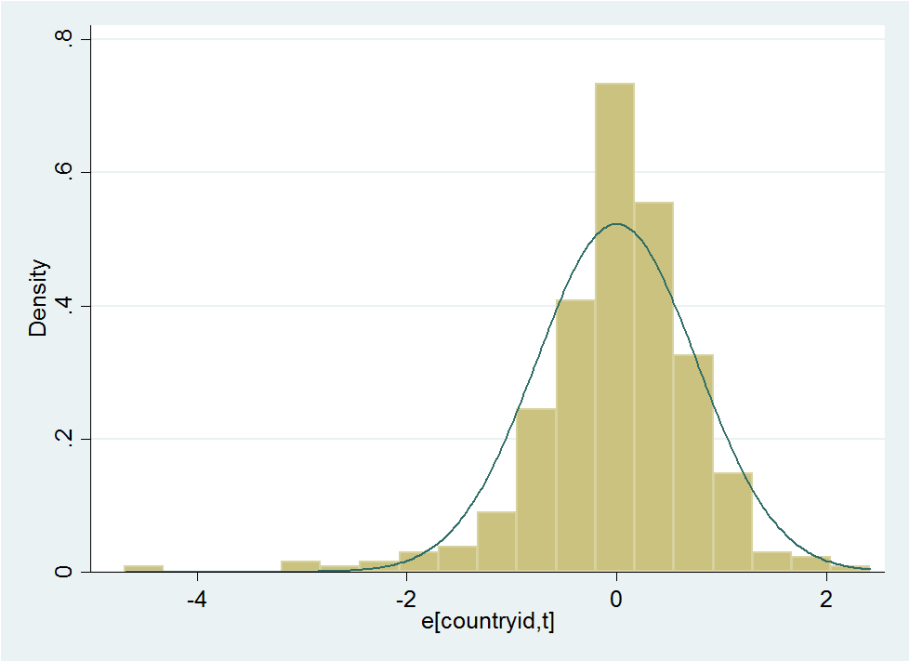


FIGURE 30 - HAUSMAN TEST (FIXED EFFECT VS. RANDOM EFFECT)

```
Test:  Ho:  difference in coefficients not systematic

             chi2(14) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =       73.54
            Prob>chi2 =      0.0000
            (V_b-V_B is not positive definite)
```

Appendix J Regression Outputs with Interactions Terms

TABLE 22 - REGRESSION OUTPUT FOR IDP 1-3 WITH INTERACTION TERMS

FDI	Coef.	Robust Std. Err.	Significance Level
Waipa	0.9378771	0.3442843	***
Waipa_2	-0.8742609	0.3911015	**
Waipa_3	-1.282704	0.4644433	***
IdiomWeighted	0.021268	0.0057915	***
IdiomWeighted_2	-0.0111311	0.0068434	
IdiomWeighted_3	-0.0119405	0.007407	
Facebook	1.079824	0.7123461	
Facebook_2	-1.499836	0.7329123	**
Facebook_3	-1.148688	0.8074189	
Twitter	-1.401964	0.7878473	*
Twitter_2	1.825935	0.7977528	**
Twitter_3	2.415534	0.8324432	***
idp_2	0.7138811	0.4708434	
idp_3	1.581063	0.5216371	***
NaturalResources	-0.0090959	0.0071086	
SkilledLabour	-0.0852504	0.1262677	
SqSkilledLabour	0.0035532	0.0087399	
PhonePenetration	0.3347581	0.1296348	**
TradeOpenness	-0.0002194	0.0024635	
MarketSize	1.009215	0.4179988	**
MarketGrowth	0.0871897	0.0139794	***
WGI	-2.425581	0.9674453	**
Patents	0.5197133	0.0325538	***
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to both heteroscedasticity and autocorrelation. IVs are Ethnic Fractionalisation and Latitude.			
Underidentification test (Kleibergen-Paap rk LM statistic): 12.135 Chi-sq(2) P-val = 0.0023 ***			
Hansen J statistic (overidentification test of all instruments): 1.054 Chi-sq(1) P-val = 0.3046			
Endogeneity test of endogenous regressors: 15.750 Chi-sq(1) P-val = 0.0001 ***			

TABLE 23 - REGRESSION OUTPUT FOR IDP 4-5 WITH INTERACTION TERMS

FDI	Coef.	Robust Std. Err.	Significance Level
Waipa	0.0385212	0.3214472	
Waipa_5	0.007904	0.3420117	
IdiomWeighted	0.0169884	0.0057374	***
IdiomWeighted_5	-0.011024	0.0058877	*
Facebook	0.215041	0.3388126	
Facebook_5	-0.3552626	0.3569937	
Twitter	-0.0129243	0.2392882	
Twitter_5	-0.1291665	0.2253161	
idp_5	0.8920122	0.4151592	**
NaturalResources	0.0320653	0.013388	**
SkilledLabour	2.09837	0.9418639	**
SqSkilledLabour	-0.1032389	0.0465382	**
PhonePenetration	-0.3652608	0.8284683	
TradeOpenness	0.0038476	0.0026472	
MarketSize	1.553838	0.4612927	***
MarketGrowth	0.0519242	0.0251769	**
WGI	0.4684263	0.5006827	
Patents	-0.0898537	0.0623165	
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to heteroscedasticity.			

Appendix K Test of Endogeneity for IDP 4-5

TABLE 24 - TEST OF ENDOGENEITY FOR IDP 4-5

FDI	Coef.	Significance Level
WGI	-0.51249	
MarketSize	0.579701	
MarketGrowth	0.041636	
TradeOpenness	0.006328	***
NaturalResources	-0.00256	
SkilledLabour	-2.45964	**
SqSkilledLabour	0.119398	**
PhonePenetration	-1.19788	*
Patents	0.371638	***
Trend	0.031443	
Waipa	-0.10008	
Twitter	-0.06114	
Facebook	0.197534	
IdiomWeighted	0.00618	
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to heteroscedasticity. IVs are State Antiquity and Latitude.		
Underidentification test (Kleibergen-Paap rk LM statistic): 21.138 Chi-sq(2) P-val = 0.0000 ***		
Hansen J statistic (overidentification test of all instruments): 0.192 Chi-sq(1) P-val = 0.6617		
Endogeneity test of endogenous regressors: 0.159 Chi-sq(1) P-val = 0.6905		

Appendix L Sensitivity Analysis

TABLE 25 - SENSITIVITY ANALYSIS FOR IDP 1-5

FDI	Coef.	Significance Level
WGI	-8.43066	***
MarketSize	4.199207	***
MarketGrowth	0.092709	***
TradeOpenness	0.0079	***
NaturalResources	-0.04566	**
SkilledLabour	-1.033	**
SqSkilledLabour	0.072877	**
PhonePenetration	-0.28051	
Patents	0.524721	***
Trend	-0.21174	**
Waipa	-1.0754	*
Twitter	1.336371	**
Facebook	-0.61522	
IdiomWeighted	0.02153	***
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to both heteroscedasticity and autocorrelation. IVs are Ethnic Fractionalisation and State Antiquity		
Underidentification test (Kleibergen-Paap rk LM statistic): 8.372 Chi-sq(2) P-val = 0.0152 **		
Hansen J statistic (overidentification test of all instruments): 1.341 Chi-sq(1) P-val = 0.2468		
Endogeneity test of endogenous regressors: 51.106 Chi-sq(1) P-val = 0.0000 ***		

TABLE 26 - IDP 1-3 WITH INTERACTION TERMS

FDI	Coef.	Significance Level
WGI	-3.56353	**
MarketSize	1.486423	**
MarketGrowth	0.093299	***
TradeOpenness	0.003766	
NaturalResources	-0.01815	
SkilledLabour	-0.09123	
SqSkilledLabour	0.004051	

PhonePenetration	0.321949	**
Patents	0.485276	***
Trend	-0.072	
idp_2	0.338789	
idp_3	1.427994	**
Waipa	0.906671	**
Waipa_2	-0.82043	*
Waipa_3	-1.3395	**
Twitter	-1.28862	
Twitter_2	2.043276	**
Twitter_3	2.433102	**
Facebook	1.151064	
Facebook_2	-1.67983	*
Facebook_3	-1.28438	
IdiomWeighted	0.020037	***
IdiomWeighted_2	-0.00897	
IdiomWeighted_3	-0.01049	
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to both heteroscedasticity and autocorrelation. IVs are Logarithm of Indigenous Population Density in 1500s and Ethnic Fractionalisation.		
Underidentification test (Kleibergen-Paap rk LM statistic): 12.135 Chi-sq(2) P-val = 0.0023 ***		
Hansen J statistic (overidentification test of all instruments): 1.054 Chi-sq(1) P-val = 0.3046		
Endogeneity test of endogenous regressors: 15.750 Chi-sq(1) P-val = 0.0001 ***		

TABLE 27 - SENSITIVITY ANALYSIS FOR IDP 4-5

FDI	Coef.	Significance Level
WGI	-1.63387	*
MarketSize	1.100732	**
MarketGrowth	0.022077	
TradeOpenness	0.006586	***
NaturalResources	-0.0036	
SkilledLabour	-2.41139	**

SqSkilledLabour	0.122112	**
PhonePenetration	-1.52554	**
Patents	0.303498	***
Trend	-0.01868	
Waipa	-0.18718	
Twitter	-0.01354	
Facebook	0.142539	
IdiomWeighted	0.011594	**
Notes: Significance level: * p<0.1; ** p<0.05; *** p<0.01. Numbers in parentheses are Standard Errors. Standard errors are robust to heteroscedasticity. IVs are State Antiquity and Ethnic Fractionalisation.		
Underidentification test (Kleibergen-Paap rk LM statistic): 13.237 Chi-sq(2) P-val = 0.0013 ***		
Hansen J statistic (overidentification test of all instruments): 0.865 Chi-sq(1) P-val = 0.3523		
Endogeneity test of endogenous regressors: 3.052 Chi-sq(1) P-val = 0.0806 *		