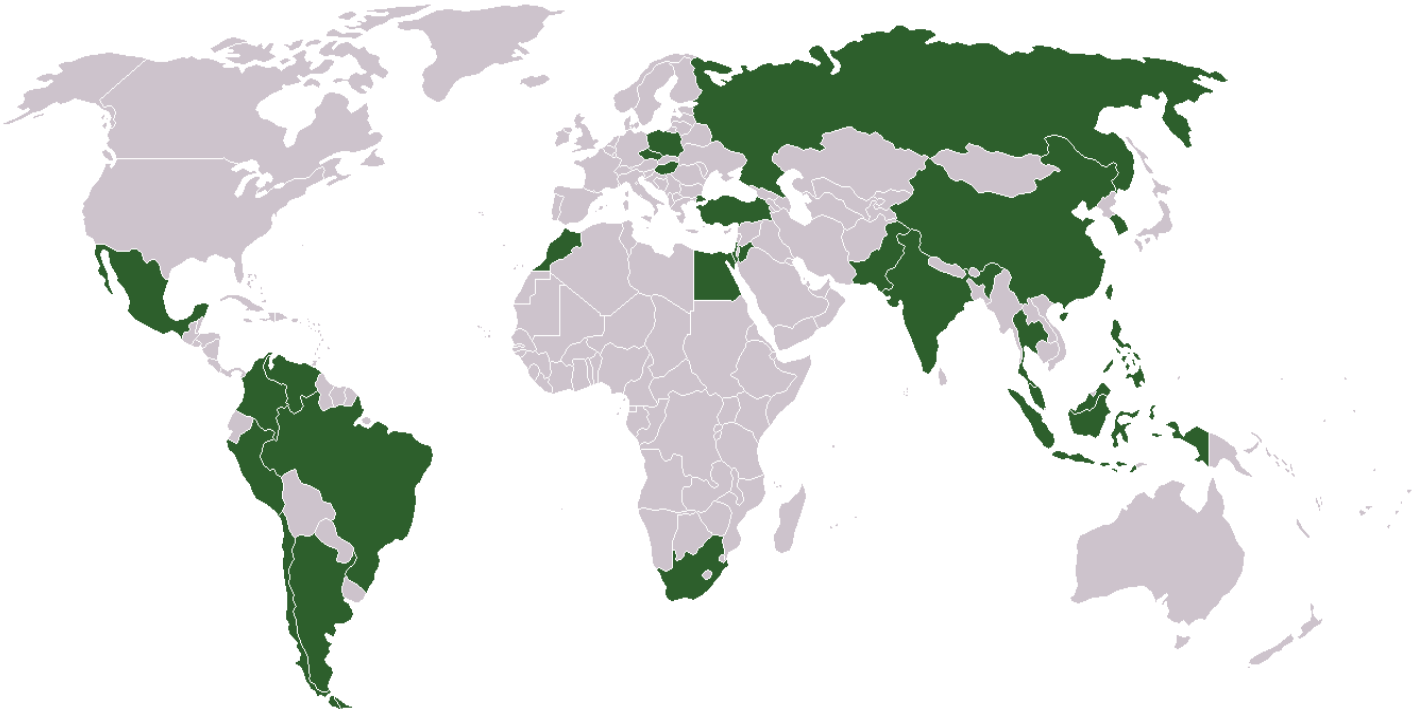
Venture capital and private equity investments

An analysis and statistical modeling of returns generated by VC and PE funds investing in emerging markets.



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Executive summary

This dissertation examines how country-specific factors influence returns on investments generated by venture capital and private equity funds investing in operating companies in emerging markets. Even though proportionally more funds have been investing in emerging markets in the past decade, the funds are utilizing existing knowledge and frameworks tailored for Western market conditions to evaluate the investment opportunities. The objective of the dissertation is consequently to examine how country-specific factors in emerging markets affect the returns of the venture capital and private equity funds, and further to statistically model the relationship.

In order to examine which country-specific factors might influence the returns, the dissertation reviews existing literature on economic growth. The literature review identifies 17 growth facilitators. To generate data on prior investment results a survey is distributed to funds that have previously invested in operating companies in emerging markets resulting in 456 valid responses. With the intention of testing how the theoretical variables affect the returns of the funds empirically, the paper performs a multiple regression analysis. The regression analysis tests how the growth facilitators affect the returns generated by venture capital and private equity funds. By excluding the statistical insignificant variables, the remaining parameters are accordingly helping to explain the variability in the returns.

The dissertation finds ultimately that 59.3% of the variability in the returns of the funds can be explained by the following parameters: debt to GDP, productivity level, school enrollment, unemployment level, leveled and squared exchange rate, and the level of credit in the country provided by banks. Having excluded the insignificant independent variables, the country-specific factors determine a notably proportion of the returns of the funds. Furthermore, the paper finds that when including intercept country dummy variables to capture country-specific events not encapsulated in the regression equation, the explanatory power of the model improves to 69.3%.

Normatively, the paper addresses how investment officers of venture capital and private equity funds can utilize the regression model as an investment tool. The investment tool can help to determine which emerging market to invest in by focusing on the country-specific factors of the country of interest. The paper argues that the regression equation can be used supplementary to traditional financial models due to the fact that it instead of evaluating P&L statements and capital structures, it focuses on the framework conditions of the emerging market.

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1.0 Introduction

For years Western governments, corporations, business reporters, management consultants and economic scholars have been focused on the power change happening within the world economies. During the past decades the Tiger Economies in Asia and the BRICS countries consisting of Brazil, Russia, India, China and South Africa have delivered impressive growth rates and challenged the traditional global economic landscape. The change from a primarily Western dominated economic agenda to a global outlook have modified the business models of many corporations, since production costs are cheaper in many emerging markets, and the fact that consumers in those markets are getting wealthier.

However, up until ten years ago the venture capital (VC) and private equity (PE) funds predominantly operated in North America and Europe. The institution of VC and PE funds has existed for nearly 60 years (DeMarzo & Berk, 2011). Initially, the VC and PE funds invested primarily in the U.S. and Canada, however, during the 1980s the business model thoroughly spread to Europe (ibid.). Up until the millennium more than 90% of all VC and PE investments were still focused in the mature markets in Europe and North America (Yamakawa et al., 2010). Nevertheless, since 2008 when the financial crisis stroke the mature markets, more of the VC and PE funds have been investing in emerging markets (Mohanty & Turner, 2010). The reason is that the emerging markets are experiencing rapid growth, while mature economies have stagnated or even shrunk (ibid.).

In 2010 Credit Suisse published "Credit Suisse Global Investment Returns Yearbook", which examined the trend in returns on stock markets globally (Credit Suisse, 2010). The graph below is based on the numbers from the report. The graph shows the trend in the global market capitalization. The model is divided into four regions, where the three are representing developed economies, while the blue part depicts emerging markets.

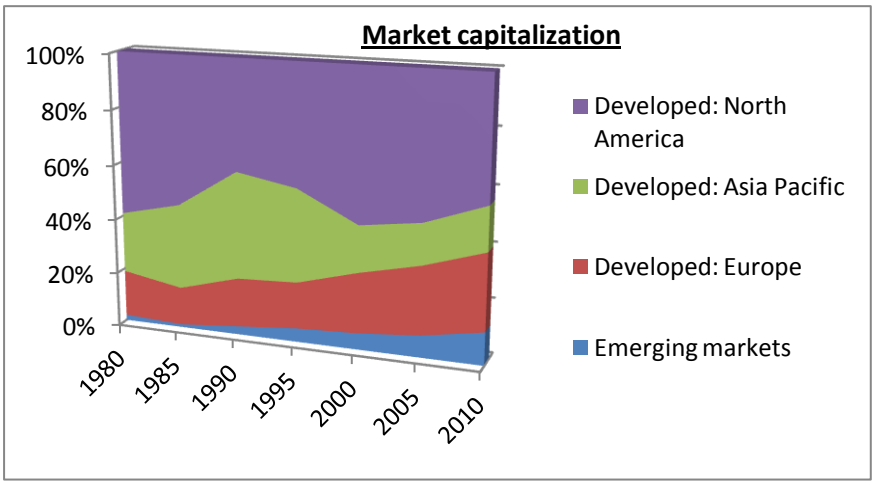

Figure 1: Global market capitalization

Given that the overall market capitalization of the world has been increasing throughout the time period, and noting from the graph that the emerging markets have increased their proportion of the global market to 12%, the market capitalization of the emerging markets has increased significantly.

The model of the increasing market capitalization in the emerging markets is important for the VC and PE funds due to the fact that the business models of those funds are based on acquiring shareholding rights and selling the stocks, when having increased the shareholder value by making the organization more efficient or developed the business model of the operating company.

1.1 Problem area

VC and PE funds are accordingly investing more frequently in emerging markets (DeMarzo & Berk, 2011). The reason being that the operating companies are more likely to achieve impressive growth rates and thereby deliver solid financial returns to the shareholders, because of the economic growth in the emerging markets combined with the increased level of market capitalization, which necessitates a sustainable demand for selling shareholder rights (Brealey et al., 2008).

Previously the majority of VC and PE investments focused on operating companies in Europe and North America, and the contemporary financial models developed with the purpose of evaluating operating companies focused on internal factors. A commonly applied model used by financial analysts to evaluate the value of a company is Tobin's Q which predominantly focuses on the assets of the company (Moffett et al., 2008). Another frequently used valuation method is the discounted cash flow model, which simply discounts future projected cash flows to present value in order to evaluate the potential of the investment. The last example of an existing financial model evaluating the value of an operating company is the weighted average cost of capital model. This model analyzes the current capital structure of a company based on cost of debt and equity, and compares the capital structure to the competitors in the industry (Sahlman, 1990). Common for these three examples are that they focus on the operating companies, and competitors, but do not include country-specific factors. The reasoning is presumably that these financial models are developed based on theoretical and empirical knowledge of the mature markets, since the majority of investments have been conducted in the North America and Europe up until the millennium. Thus, the financial models focusing only on internal factors for the operating company are adequate due to the relatively stable market conditions in these regions.

Nevertheless, given that more VC and PE funds are investing in emerging markets, it is relevant to critically challenge the relevance of the financial models used today. I assume that the returns on investments generated by VC and PE funds in emerging markets are more likely to be affected more severely by country-specific factors than in mature markets. Yet, there exists a gap in the academic and normative literature, since none contemporary financial models analyze how country-specific factors affect the returns of the VC and PE funds. It is problematic that the funds have little knowledge and normative models to rely on in

regards to evaluate the attractiveness of the country where they want to invest, especially, since more investments focus on emerging markets.

Hence, the dissertation aims at examining the relationship between the returns on investments for the VC and PE funds, and the country-specific factors in the emerging markets. Furthermore, the objective is to create a model, which can help the funds to predict returns. The idea is to create a model, which focuses on external factors in order for the VC and PE funds to use as a supplement to the traditional financial models focusing on internal factors.

1.1.1 Research question

Based on the rapid increase in VC and PE investments in emerging markets, I have narrowed the focus of the dissertation down to the following research question:

How do country-specific factors influence the returns on investments for venture capital and private equity funds investing in emerging markets, and how can the relationship, between the returns and country-specific factors, be modeled?

The research question of the dissertation is, consequently, initially examining how country-specific factors affect the returns generated by the VC and PE funds, when investing in operating companies in emerging markets. Hereafter, the relationship between the rate of returns and the specific factors in the country of investment is modeled statistically. The model will be applicable for the VC and PE funds as a complementary tool to the existing investment models, if the model shows statistically significant results and has explanatory power. The identified change in market dynamics and enhanced focus on emerging markets justifies the existence of this dissertation.

1.2 Definitions

The key terms used in this paper are explicitly defined in this section.

1.2.1 Emerging markets

The term emerging market is used frequently, but is defined differently across the literature. The common perception is that an emerging market is a country, which experiences a high industrialization rate and rapid

economic growth. The general understanding seems to be that it is a developing country in transition to obtaining developed status (Credit Suisse, 2010). FTSE International, the world leader in provision of global indices, found in the latest report that according to their definitions existed 24 emerging markets in 2011 (FTSE, 2011). FTSE assess this by GDP per capita. According to FTSE the boundary between being categorized as an emerging market and developed market is 25,000 U.S. dollars per capita. This highly tangible and applicable measure defined by FTSE is used by many investment banks such as Credit Suisse, however, it is also used by academics, and the largest industry association for VC and PE funds worldwide, namely EMPEA (EMPEA, 2009).

This well-acknowledged definition is consequently used in this paper.

1.2.2 Country-specific factors

The aim of the paper is to examine how country-specific factors influence the returns of the VC and PE funds that invest in emerging markets.

Country-specific factors in the context of this dissertation are aspects that relate to all corporations in the emerging market of interest. Hence, it is not internal factors in the operating company, yet, factors that influence the business environment. These factors consist of everything from political institutions, macroeconomic parameters, social characteristics and technological stage of development. The country-specific factors are pertinent for all businesses in country.

1.2.3 Operating company

In the context of this paper, the operating company is the company that the VC and PE funds acquire stocks in. Hence, it is the company that the funds invest in for a time period, before selling its shareholding rights to earn a profit. The term operating company does not apply to a certain industry, yet, only reflects that it is partially or fully owned by the VC or PE fund.

1.3 Demarcation of dissertation

The dissertation is divided into nine chapters and is structured as follows:

Figure 2: Structure of dissertation

Chapter 1 is the introduction to the dissertation where the problem of interest is introduced and the specific research question is defined.

Chapter 2 defines VC and PE funds, and classifies the business model of their operations.

Chapter 3 provides the methodology, illustrates how the data is collected and what theory is used in the paper.

Chapter 4 presents a literature review on economic growth theories. This section categorizes the theoretical arguments on economic growth and additionally quantifies the arguments made by academic scholars.

Chapter 5 supplies the results of the data analysis and the descriptive statistics.

Chapter 6 is the second part of the analysis. This part discusses the results and country-specific factors. Furthermore, the chapter analyzes the applicability and usefulness of the developed model for VC and PE funds investing in emerging markets.

Chapter 7 provides a discussion. The topic of the discussion is whether country dummy variables can improve the performance of the regression equation.

Chapter 8 presents the concluding remarks.

Chapter 9 ends the dissertation by presenting a suggestion for future research.

2.0 Venture capital and private equity

The purpose of the following section is to initially define VC and PE funds and how they operate. Furthermore, I describe the business model of the funds and discuss how returns on investments for the funds are correlated to economic growth.

2.1 Venture capital and private equity funds

Throughout the dissertation, I do not distinguish between VC and PE funds, nonetheless, they typically operate in different ways. PE funds generally own equity securities in operating companies that are not publicly traded on stock exchanges (DeMarzo & Berk, 2011). PE funds operate with different investment strategies depending on what developing stage the operating company is in and their leverage buyout strategy is typically tailored for mature companies. Oppositely, VC investment is predominately a PE strategy for operating companies in early-stage growth and start-up companies (Benninga, 1998). Hence, VC is a subset of PE, but not all PE investments can be characterized as being VC. My reasoning for not distinguishing between VC and PE is the overall business model and investment horizon is similar and the dataset will consequently be comparable. By including VC and PE, I enhance the potential amount of responses from my survey, since industry associations in the emerging markets generally represent VC and PE combined. I describe this consideration in detail in the methodology section (cd. 3.4.1.1).

VC and PE funds provide financial capital to companies while receiving equity in exchange (Sahlman, 1990). VC and PE funds are especially essential and appropriate in countries where credit markets are limited, since they can provide finances to companies with high potential if debt-financing is not an option. Furthermore, by receiving equity in the operating companies, the VC and PE funds get ownership in companies and can through their knowledge and capabilities influence the companies (ibid.).

VC and PE funds make fewer and often larger investments than investment funds, and therefore spend more time on each investment (Brealey et al., 2008). The funds do not just act as stockholders, but is typically also involved in the daily management. Due to the fact that the funds act as owners and management, they reduce the agency problem and thereby the risk. The agency problem typically exists between the management and shareholders, where the manager acts as agent for the principals, namely the shareholders, and the manager acts with the interest of maximizing his own wealth (ibid.). When the funds own a large stake and at the same time set the strategy for the company, they decrease the risk of an agency problem.

2.1.1 Business model

VC and PE are a structured form of investment where a VC or PE firm set up a fund, and the fund operates as the financial link between a limited group of investors and the operating company (Jensen, 1998). The VC or PE fund is the legal entity where the investors place their capital, which can then be used to acquire operating companies. The fund is typically controlled by the VC or PE firm, and the firm councils and administrates the fund (ibid.). Additionally, the firm is involved in the management of the operating company in order to manage the company according to the strategy.

As stated above, VC and PE companies obtain equity securities in the operating companies they invest in as major shareholder. Typically, VC and PE funds operate with an investment horizon of 4-7 years, where the overall goal is to maximize shareholder value (Brealey et al., 2008). After the investment period, where the fund has influenced and developed the operating company through the capital injection and active ownership involvement, the fund generates its return through a realization event predictably via trade sale or initial public offering (Black & Gilson, 1998). Due to the fact that the business model is based on owning equity for a period of time, the VC and PE funds are motivated to maximize the shareholder value, since the return is based on the market value of the equity (DeMarzo & Berk, 2011). Additionally, given that VC and PE investments are comprehensive in terms of size, length, concentration and involvement of investment, the funds expect high returns (ibid.).

Historically, a high level of leverage has been an important parameter of the business model of VC and PE funds. The high gearing reduces the level of tax payment due to the deductable interest expenses (Jensen, 1998). However, the focus of this dissertation is on returns on investments for funds before tax, hence, tax reductions are not a part of the analysis.

2.2 Economic growth and shareholder value creation

The returns for the VC and PE funds are determined by the creation of shareholder value, since they buy and sell equity in operating companies. The fact that the returns on investments and the shareholder value are related is important for the approach of the dissertation and further the research design of my methodology (cd. 3.2). The reason for the importance is that both practitioners and academics throughout the past decades empirically have found that the economic growth of a country is strongly correlated to the stock performance of companies. The relationship between economic growth and stock performance allows the paper to examine whether the trend in economic growth also affects the returns on investments for VC and PE funds.

The correlation between economic growth and shareholder value creation allow the dissertation to examine existing literature on what factors that influence economic growth, and analyze how these factors empirically affect the returns of the VC and PE funds. Given how important the correlation between economic growth and stock performance is to the research design of my dissertation, I explore and discuss how academics and practitioners argue for the relationship.

2.2.1 Academics: Relation between economic growth and shareholder value creation

Researchers in the academic world have identified a strong correlation between the economic growth of a country and the stock performance of companies operating in the country (Kunt, 1996; Beck, 2002; Harvey et al., 1994; Levine & Zervos, 1996; Arestis et al., 2001). The argument is quite intuitive; economic growth generally increases revenues and profits of companies, which additionally increases the market value of the corporations. In regards to public finances, economic growth increases the tax income and thereby provides a favorable investment climate for the governments, which again stimulates growth and confidence. Additionally, the academics argue that economic growth initiates higher living standards and employment rates, hence, increasing the consumption level in the country and thereby the sales records of the companies (Beck, 2002; Harvey et al., 1994). The positive spiral shows how economic growth influences the stock prices of the companies.

Economic growth has according to Levine & Zervos and Arestis showed to be a leading indicator of stock performance (Levine & Zervos, 1996; Arestis et al., 2001). Furthermore, Harvey has done an extensive analysis on forecasting international equity correlations, and states in his findings that there exists a correlation between economic growth and stock performance (Harvey et al., 1994). However, it is important to note that the authors listed in this paragraphs state that economic growth generally is a positive element, yet, the growth rates need to be reasonable and not excessively rapid, otherwise, the economy could over-heat and lead to high inflation. Nevertheless, in this dissertation the focus is emerging markets, and the academics state that these markets can sustain higher growth rates than mature markets without the risk of over-heating.

2.2.2 Practitioners: Relation between economic growth and shareholder value creation

This section is based on the "Credit Suisse Global Investment Returns Yearbook 2010" (Credit Suisse, 2010). In the publication, the analysts use a dataset of returns for the past 100 years, and compare the returns to the economic growth in the particular country (ibid.). The purpose of the statistical exercise is to determine if there exists an empirical correlation between economic growth and stock performance. Initially

they examine mature markets in North America and Europe, and find a notable relationship. Hereafter the investment report focuses on investments in emerging markets (Credit Suisse, 2010). The report finds a continuous positive correlation between long-term GDP growth and the stock returns in the emerging markets (ibid.). This correlation is stronger in the emerging markets than the mature markets and it gives an indication of how country-specific factors influence the returns on investments for the VE and PE funds.

Previously other prominent practitioners and investment strategists have suggested that given the hypothesis of the efficient market, the market would already have taking into account that emerging markets most likely would experience high growth rates, hence, the current stock price has already taken the future expectations into account (Fama & French, 1992). Credit Suisse addresses this statement in their publication and argue in their statistical analysis they have not found evidence backing up the argument. On the contrary, Credit Suisse finds a tendency for stock prices to increase, when the national banks and government officials have announced economic growth figures (Credit Suisse, 2010). This indicates that economic growth is highly beneficial for operating companies and therefore the returns for the VC and PE funds.

2.3 Partial conclusion

I have described VC and PE funds, and further characterized their business models of buying equity in operating companies while earning a profit from creating shareholder value. Based on the business model of the funds, I noted the relation between returns on investments and stock performance, since the funds own equity in the operating companies. Additionally, I have outlined the arguments for academics and practitioners, who have found that stock performance of a company is highly correlated to economic growth in the country. The relationship between economic growth, stock performance and return on investment is essential for the structure of my research design and overall methodology presented in the following chapter.

3.0 Methodology

This chapter presents the methodology and how I aim to answer the research question of the dissertation. The section discusses the philosophy of science in the paper, the research design applied, the selection of theory and lastly the method of collecting viable empirical material.

3.1 Philosophy of science

The problem area and the research question determine the methodological approach of the paper (Kuhn, 1962). The purpose of the paper is to examine the relationship between the returns on investments of VC and PE funds and country-specific factors in the emerging market of interest, and ultimately develop a model with the power to predict future returns for the funds.

Given the objective of examining how country-specific factors affect the returns of the funds, I imply that such country-specific factors exist and that I by investigating relevant and applicable knowledge can detect these factors. Thus, by initially looking at established knowledge and theories and hereafter analyzing the correlation to the returns on investments of the VC and PE funds, I accept the premises of a deductive methodological approach (Johnson & Turner, 2007). By examining existing theory, I develop a framework, which I can test empirically. This is the foundation and prerequisite of the dissertation.

However, the second part of the research question involves creating a generic model based on the empirical results. The aim of the generic model is that the VC and PE funds precisely can asses a potential investment in an emerging market. The intention is to use the empirical data material to develop a model applicable across borders. Hence, by inferring from a limited sample of the total population to a generality, the dissertation creates a model based on inductive reasoning.

I aim at developing the model based on measurable and reckonable circumstances, thus I operate with an objectivistic ontology (Latour & Woolgar, 1986). Given that I explore the relation between country-specific factors and returns on investments in those markets, my pre-understanding is that there exists an objective reality and I can measure the correlation by accumulation of increased information on the topic (Kuhn, 1962). In view of the fact that the reality exists and is measureable, the epistemological approach is then to address how we know the reality we explore is the accurate authenticity (ibid.). Since the aim of the dissertation is to develop a generic model based on existing knowledge and then testing the model empirically, I assume that I through a structured and planned methodology can have access to the authenticity.

The observations above suggest that the methodological approach of this dissertation is characterized by being a part of the positivistic paradigm. The common belief in positivism is that authentic knowledge can only be discovered through positive verification. Several different variances of schools of thought within the paradigm exist (Blaikie, 1993). Classic positivists practiced science by induction, however, Karl Popper changed the classical approach of positivistic science to an empirical falsification process, meaning a hypothesis can be contradicted by a single false outcome of an experiment (ibid.). Popper operated with a methodology of exclusive deduction instead of induction (Popper & Notturno, 1994). In the aim of answering the research question of the paper, I operate with a joint methodology of induction and deduction, and acknowledge the allegiance of the paper to the logical positivism.

3.1.1 Logical positivism

Originally, logical positivism emerged in the Vienna Circle in the 1920s (Hollis, 1994). The new doctrine represented by philosophers such as Moritz Schlick and Rudolf Carnap used formal logic to emphasize and underline the knowledge of the empirical and testable reality (Carnap, 1931). They combined the ideals of empiricism and the inductive approach where the observational data is the reality, and the rationalist thoughts and deductive method where our prior knowledge formed by empirical observations can frame the reality we aim at measuring (Johnson & Turner, 2007).

Traditional positivism as presented by Auguste Comte met the philosophical challenge of demonstrating that induction led to knowledge of the reality (Hollis, 1994). It was David Hume who distant himself from an a priori cognition about authenticity and the prediction about the future based on knowledge from the past (Kuhn, 1962). He challenged the positivistic paradigm by creating the skepticism contrast, where he argued that even though the sun had risen today, we cannot know whether it will do it again tomorrow.

The logical positivistic doctrine claimed they solved the problem of induction. They argued that if the empirical data material is certain, and all theoretical statements are deductive to assertions of the empirical data, then the deductive assertions are verified scientific propositions (Hollis, 1994). Hence, when we have verified the certainty of our empirical statements, then the truth value of the theoretical proposition can be determined. This verification principle claims that it is possible to determine all certainties of theoretical statements.

Linking the approach of the logical positivists to the core issue of this dissertation, namely, creating a model based on empirical observations, which can be used to predict returns in emerging markets in the future, it will from this point of view be possible to determine the truth value of my model. The doctrine allows the

researcher to create a methodology based upon both deductive and inductive dogmas, and furthermore test the applicability and certainty of the model afterwards.

3.2 Research design

As mentioned in the section above, the dissertation applies both deductive and inductive approaches to answer the research question. This section explains how the research design of this paper is structured.

Firstly, I examine the literature on economic growth. The aim of the literature review is to organize the thoughts and arguments of the academic world on economic growth, and hereby structure the consensus on topics related to growth. The structured topics and arguments on country-specific factors are representatives of the independent variables. I quantify the parameters identified in the literature to make them applicable for statistical tests.

Secondly, I collect data on previous returns on investments from VC and PE funds. The aim of the data collection is to gather empirical material in order to test the country-specific factors identified in the literature review. The return on investment is the dependent variable in my statistical analysis.

Thirdly, by running multiple regressions on the data material, I exclude insignificant country-specific factors from the literature, and create a model. Thus, I use the empirical data to create new knowledge for VC and PE funds to apply when evaluating investment possibilities in emerging markets.

3.3 Theory for literature review

The foundation of the dissertation is, as mentioned above, the literature review. The objective of finding and analyzing the country-specific factors, that affect to the returns on investments of the VC and PE funds, is based on a comprehensive literature review, where the knowledge and arguments of respective scholars are presented. The analysis of the country-specific factors is nevertheless only relevant if the literature review is conducted in a structured and well-researched manner.

The literature review is researching the literature on which factors that are influencing the economic growth of a country. As argued, I focus on country-specific factors that facilitate economic growth, since economic growth and maximization of shareholder value in emerging markets are strongly correlated (cd. 2.2.1). Thus, the literature review examines the literature on economic growth and economic development theories. The purpose of a literature is to convey what knowledge and ideas that have been determined on a specific topic

(Giddens, 1979). The literature review does not just to summarize the literature in a descriptive manner, but categorize and classify the arguments of the academic scholars.

Selecting the relevant literature for the review is crucial for a trustworthy and valid analysis (Latsis, 1981). Hence, it is important to select the relevant classic and contemporary articles from respected studies in the literature. During my master studies I have had two classes on economic growth in emerging markets, and I therefore begin the research of relevant literature by examining the curriculum of those courses. This enables me to identify important scholars and get an overview of the paradigms in the theory. Henceforth I explore the references that the scholars use in their articles. Hereby I extend my scope on the literature and get an impression on the different schools of thought in economic growth theory and further an indication of the most acknowledged scholars in the field. Lastly, I do an extensive electronic search on Business Sources Complete, ScienceDirect, JSTOR and Google Scholar, and focus on articles published in respectable journals. I end my search when the same journals and scholars start to refer to the arguments of the other papers I have already analyzed. In this manner the point of saturation is reached (Johnson & Turner, 2007). It is further important to note that I include articles represented from different schools of thought and paradigms.

The next methodological step is to extract and evaluate the information from the scientific papers (Latsis, 1981). To structure the arguments of the research I make a spread-sheet and use a way to structure the theoretical arguments (Appendix 5). The purpose for this action is to organize the categorizing of the literature, since another person should arrive at the same classification of the consensus in the literature. In the spreadsheet I highlight the key arguments of the articles.

Additionally, it is important to note that I include many country-specific arguments in the literature review. The reason why I include many arguments, also from different schools of thought, is that the purpose of the literature review is to include all possible explanatory country-specific factors. Thus, the literature section is quite inclusive, yet, the statistical analysis later excludes non-significant factors.

3.4 Data material

In this section, I explain how I gather the data material I apply in the statistical analysis and how the limitation of material affect the final findings.

3.4.1 Dependent variable

In order to empirically test how the country-specific factors influence the returns for the VC and PE funds, I need data on previous returns of funds that have invested in emerging markets. Yet, looking in the large traditional databases as Bloomberg, in the specific databases with focus on emerging markets like Emerald Emerging Markets or ISI Emerging Markets, and in databases for VC and PE funds such as Capital IQ, I did not find relevant data on returns. Hence, instead of utilizing existing data in databases, I need to create my own dataset by distributing a survey.

3.4.1.1 The structure of the survey

Given that the main aim of the quantitative survey is to generate knowledge of previous returns of VC and PE funds and the results are to be tested statistically, the questions are closed-ended. The closed questions and response categories are further facilitating uniformity in the results. The consistency and standardization of the results make the data processing easier and additionally reduce sources of errors (Johnson & Turner, 2007). Furthermore, it reduces the time it takes for the respondents to complete the survey since they do not have to formulate qualitative answers. The closed-ended questions predictability increases the amount of answers due to the fact that the respondents of my survey presumably have busy schedules (ibid.).

The survey has eight separate closed questions (Appendix 1). The initial questions are related to geographical location and size in terms of annual turnover of the VC and PE fund, and are therefore not specifically linked to the investment. However, the two factual questions are relevant to establish where the funds are located and how large they are. Additionally, by asking simple questions initially studies show that it motivates the respondent to continue completing the survey (Kvale, 1995). Next, the survey asks in what emerging market the investment took place, which is highly important given that the return as the dependent variable is tested against the country-specific factors of the country of investment. The fourth question ascertain in what industry the fund invested, where the fifth and sixth questions determine the initial year of investment and the year where the fund received its return from selling its shareholding rights (Appendix 1). These three questions are to be answered by a drop-down menu in order to make it convenient for the respondent. The seventh and eighth questions are determining how much the fund invested for in US dollars, and how much they got in return. Hence, all questions are factual and therefore comparable.

The survey is distributed by e-mail with a link to Survey-Monkey, which is an online service that enables electronic distribution of surveys. The survey is anonymous due to the fact that the funds predictably would not answer the questions otherwise. Additionally, the survey is formatted in a way that enables the same ip-

addresses to answer the survey more than once. Accordingly a fund can complete the survey more than once, if they have invested in emerging markets several times.

3.4.1.2 Data collection

The requirement of the respondent is that they need to represent a VC or PE fund that has previously invested in a company in an emerging market. Furthermore, since the questions in the survey are relatively specific in regards to the size and return of the investment, it is important that I distribute the survey to a relevant employee. Lastly, the aim is to conduct a statistical analysis and therefore I need a solid dataset with numerous of answers.

EMPEA is a global membership organization for VC and PE industry associations (EMPEA, 2012). The vision of EMPEA is to facilitate a knowledge sharing forum for the VC and PE funds with the aim of the funds to generate solid returns to their shareholders while creating value for local economies and communities (ibid.). The organization is an umbrella organization for all VC and PE industry associations on a global scale.

On the webpage of EMPEA they have listed all industry organizations for the funds in emerging markets. The industry associations are represented in the following countries, continents and regions: Africa, Argentina, Brazil, China, Czech Republic, Hungary, India, Indonesia, South Korea, Latin America, Latvia, Malaysia, Middle East & North Africa, Mexico, Philippines, Poland, Russia, Slovakia, South Africa, Taiwan, Thailand, Tunisia and Turkey (EMPEA, 2012). Naturally, there are other emerging markets where VC or PE funds have invested, however, these are the only industry associations represented in emerging markets.

To facilitate a large dataset I need a large distribution list, hence, I contact each of the industry associations listed above. The intention of contacting these organizations is that they have a list of their VC and PE members that have invested in an emerging market. Furthermore, they have the contact details of the relevant employees in the organization.

Instead of asking the industry associations for their member lists, I ask them to distribute my survey that I forward to them. The purpose is to legitimize the e-mail and therefore increase the numbers of relevant answers. I assume that the respondents would be more likely to answer a survey which has been sent from their industry association instead of master student from Denmark. Only the industry associations of Slovakia and Taiwan refused to distribute my survey, while the other organizations listed above agreed to forward the link to the survey to the relevant respondents of the VC and PE funds.

3.4.1.3 Validity and reliability of survey

The validity of the results from the survey is essential, since the aim of creating a model for the VC and PE funds is based on the answers. Validity of data means that the survey is convincing and legitimate, and it can be solved by asking understandable questions without complicated terms (Bhaskar, 1989). The questions in the survey are all short and uses only terms related to VC and PE investments, hence, the survey measures what it aims at measuring (Appendix 1). A ubiquitous concern when conducting surveys is the apprehension of the respondents trying to look better than they are (Saunders et al., 2007). I try to solve this issue by underlining that the answers are anonymous and further promise to send my findings after I have finished my analysis, and the analysis naturally is more usable for the funds if the data is based on accurate numbers. These incentives are enhancing the validity of the survey. The last factor in regards to validity of the data concerns the coverage of the data in relation to the population it represents. Given that the industry associations distribute the survey to the respondents, I do not know the rate of replies, since that I do not know how many members they distribute the survey to. Hence, I cannot analyze how many percent of the potential respondents that replied, and further do not know how large the sample is in comparison to the overall data population. Yet, I have assessed the two scenarios and decided still to distribute the survey through the associations, since a higher rate of replies is more important in this case than knowing what percentage that answered the survey.

Reliability focuses on how trustworthy the results are and more specifically, if the results would be identical if we were to conduct the survey again. Furthermore, it evaluates how representative the results are. The survey is distributed to highly different VC and PE funds in terms of size and geographical locations (Appendix 2). Looking through the dataset we note that the respondents are representing both large European and American and smaller regional funds (ibid.). Thus, it represents the various types of funds. However, in order to have a representative and un-skewed data material, I advance the criterion that I only include answers from countries where I have gotten more than 50 answers. This criterion reduces the risk of having deceiving and misleading responses (Bhaskar, 1989). All together, I have got 456 answers from eight different emerging markets, and estimate the answers from the survey to a high validity and reliability, and the data is therefore useful for the further analysis. In addition to the 456 answers, I received answers from four additional countries, nevertheless, the response ratio was low and therefore excluded from the dataset.

3.4.2 Independent variables

In the literature review I identify the country-specific factors that the scholars have found influences the economic growth and thereby the returns on investments for VC and PE funds. Yet, to empirically test these factors I quantify the parameters. These parameters are the independent variables for analysis.

The criteria for the data collection of the independent variables are that they are comparable across countries, accountable and trustworthy. Hence, for the majority of the data I have utilized the online data library of the World Bank (World Bank Library, 2012). This data library has comprehensive statistic material on several topics and key economic indicators from most countries and further has data traced back to 1980 (ibid.).

Nevertheless, a few of the identified country-specific factors are not accessible in the library of the World Bank. Hence, for measuring the level of corruption in the relevant countries I incorporate data from Transparency International (Transparency International, 2012). Transparency International has developed a corruption index where they quantify corruption in countries across the globe. They promote transparency and aim at stopping corruption (ibid.). The reason why I integrate the data from Transparency International is that academics such as Stiglitz, Cuervo-Cazurra and Arbache also utilize the data from this index (Stiglitz, 1996; Cuervo-Cazurra, 2006; Arbache et al., 2008). Thus, they acknowledge the trustworthiness of the data from the organization.

For the quantification of productivity, I include data from the United Nations Industrial Development Organization (UN Industrial Development Organization, 2012). They have published a productivity performance index across countries. The organization is a specialized agency in the United Nations organization with the formal objective of promoting industrial development through enhanced productivity (ibid.). I include this data material since Krugman utilizes and refers to the data from the index in his analysis and further that the organization is body in the United Nations (Krugman, 1994).

For the quantification of barriers of trading, I include data from the World Trade Organization. They have an online data list of the numbers of tariffs each country has on traded goods and services (WTO, 2012). Given the status of the World Trade Organization, I accept the validity of the data.

All the independent variables for the eight countries of interest from 1980 to 2010 are included as appendix (Appendix 3).

3.5 Statistical method and regression analysis

In order to determine how the independent variables affect the dependent variable, I test the relationship through a multiple regression analysis.

3.5.1 Transforming data

Before performing the statistical analyses, the cross-sectional data needs to be transformed and organized for the software program. As mentioned in the previous section, the explanatory variables are the country-specific factors identified in the literature review, and it is represented by the quantified data gathered from the World Bank and other data sources. Likewise, the dependent variable is the return on investment I get from the survey.

From the survey I get the information on the size of the initial investments and the returns the funds got when they sold their shareholder rights. In order to compare these dependent variables, I calculate the return on investment by simply dividing the gain from investment subtracted with the cost of investment by the cost of investment: $ROI = \frac{(Gain\ from\ investment - Cost\ of\ investment)}{Cost\ of\ investment}$. Hence, the dependent variable in the analysis is a performance ratio evaluating the efficiency of the investment. Yet, it is a highly simplified model of return on investment since I do not include the costs of for instance financing, but exclusively the cost of purchasing the shareholding rights. However, asking for the weighted average costs of capital and would most likely have decreased the number of respondents significantly due to the effort needed to fill out this information.

In the survey I have information on when VC and PE funds bought the shareholding rights and when they sold them, and additionally in what emerging market the investment took place. Given that the return on investment is calculated over the years of investment, consequently, the independent variables need to be adjusted to fit the format of the dependent variable. In order to compare the independent variables for the returns, I take the average of independent variables in the years of investment in the country of interest. Hence, the independent variables for the time period are the average of the quantified values in the period of the investment.

3.5.2 Multiple regression analysis

In the regression analysis I test whether the independent variables identified in the literature review has any explanatory power on the return on investment examined, and further how much the independent variables can explain of the variation in the dependent variable (Holt, 1986). Since the aim is to examine how different independent variables affect the returns of the funds, I perform a multiple regression analysis. The multiple regression model is stated as follows: $y = \propto + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} \ldots \beta_n X_{ni} + \epsilon_i$, where *i* represents the number of observations and *n* the number of explanatory variables. Furthermore, y is the dependent

variable, X is the independent variable, α represents the estimated intercept, ε is the normal distributed error term and β is the estimated parameter (Agresiti & Finlay, 2009). The reason why I include the error term, in addition to the independent variables, is that I acknowledge that the regression function is never an exact description of the relationship between explanatory and dependent variable (ibid.). There will always be a part of the variation in the dependent variable in form of the return on investment that the country-specific factors cannot explain.

To evaluate the statistical significance of the estimated coefficients in the output of a multiple regression, I analyze the t-statistic and p-value (Agresiti & Finlay, 2009). The t-statistic is calculated as the estimated coefficient divided by its own standard error (ibid.). This statistic is relevant to analyze because it clarifies whether the independent variable belongs in the model by measuring how many standard deviations the coefficient is from zero (Holt, 1986). Thus, it tests the hypothesis that the value of the coefficient is different from zero, and if so, the independent variable is relevant for my model. The p-value is related to the t-statistic and represents the probability of achieving a t-statistic as a minimum as extreme like the one actually observed if the null hypothesis is true. If I reject the null hypothesis when performing the analysis, it is due to a low p-value and the independent variable is therefore statistically significant (ibid.). Both the t-statistic and p-value therefore measure the reliability of the parameters and whether they are significant.

When examining the multiple regression model it is relevant to analyze the proportion of the variance of the dependent variable that can be explained by the independent variables. To assess how the model fits, the statistical theory introduces R^2. R^2 measures the explanatory power of the model, hence, how much of the variation of the dependent variable the model can explain, where zero means that the independent variables explain none of the variation in the dependent variable and one represents an exact relationship (Gurajarti & Porter, 2009). The problem with R^2 is that the value keeps increasing when adding more independent variables to the model even though they do not have an actual relationship to the dependent variable. This is naturally a problem in this dissertation due to the fact that I presumably include a lot of country-specific factors in the model. Hence, in my analysis I do not focus on R^2, instead I include adjusted R^2. Adjusted R^2 penalizes for having a lot of independent variables and therefore few degrees of freedom, thus, if I include an extra independent variable with little explanatory power the adjusted R^2 decreases.

Lastly, it is important not to uncritically accept the results of the regression analysis, since the statistical relationship does not purely guarantee causation, (Gurajarti & Porter, 2009). Instead, it is important to, besides acknowledging the statistically significant correlation, also understand the rational explanation following the relationship (ibid.). Yet, given that the regression analysis is anchored in the observations made by academic scholars, the logical relationship is likely to be satisfied, nonetheless, I assess the independent variables critically in the analysis to avoid the risk of including unfortunate parameters.

3.5.3 Practical approach

There are different methods on how to compute the unknown coefficients from the given sample, yet, the most frequently used method is named ordinary least squares (OLS). The reason why OLS is repeatedly used is primarily because it is highly simple and straightforward to use, since many software programs have the method programmed (Lind et al., 2008). OLS estimates the coefficients by minimizing the sum of squared residuals. By making the residuals small, the predicted values will be as close to the truth as possible (ibid.). The way OLS minimizes the sum of squared residuals look as follows: $\sum_{i=1}^{n} e^2{}_i = \sum_{i=1}^{n} (Y_i - \hat{Y}_i)^2$. Additionally the OLS estimates are unbiased (Agresiti & Finlay, 2009).

Nevertheless, before applying the OLS method there exists assumptions that need to be evaluated (Lind et al., 2008). If the assumptions are not met, the OLS technique is not applicable and the results are not meaningful. Hence, it is important to examine if the assumptions are fulfilled. The assumptions can be summed up as; best linear unbiased estimator (BLUE). In the analysis I examine closely whether the assumptions of OLS are met with a keen focus on multicollinearity, heteroskedasticity and autocorrelation, since they are the most critical assumptions (Gurajarti & Porter, 2009). Multicollinearity occurs when two independent variables included in the multiple regressions are highly correlated. Even though it does not lower the explanatory power of the model, it affects the respective independent variables (ibid.). Heteroskedasticity transpires when sub-parts of the statistical sample vary differently from the others. The problem with the different variances of the random variables is serious and can overthrow the predictive power of the model (ibid.). Autocorrelation or serial correlation happens when the error terms of the observations are correlated (Lind et al., 2008). Lastly, it is important to examine whether the error term is normally distributed. If the assumptions are fulfilled then the results are incredibly strong and useful as a predictor (ibid.). In the analysis I test whether the assumptions are violated.

On a tangible and concrete level, I initiate the multiple regression analysis by pooling all independent variables and test their significance by focusing on the t-statistics and p-values, and exclude the independent variables that are not statistically significant. Hereafter I analyze the goodness of the fit of the model, and whether I violate the assumptions of the OLS.

Furthermore, due to the fact that the certain economic arguments are relative arguments, I additionally examine and test for non-linear effects. In economic theory, particular phenomena only exist within a certain range. Hence, when I have excluded the insignificant explanatory variables I square each existing parameter to examine whether the level of the variable affect the returns for the funds.

Lastly, in the discussion section, I incorporate country dummy variables to determine if there are country-specific effects beyond the variables included in the regression equation that can explain the variability in the returns of the VC and PE funds investing in emerging markets. In the discussion I include respectively intercept and slope dummies, and hereafter discuss the significance of the parameters. Dummies take form of zero or one and indicate either the absence or presence of a categorical effect, which in this scenario is the effect by the respective countries. By including dummy variables, I am able to examine how qualitative factors influence the returns of the funds. In order to avoid perfect collinearity I include only seven dummy variables, even though I have data from eight different countries. If I include eight dummies the sum of all variables would add up to one giving an inaccurate answer, which is the concept of the dummy variable trap (Gurajarti & Porter, 2009).

3.6 Criticism of methodology

The paper has its fundamental based in the in logical positivism (cd. 3.1.1). The advantage of using a positivistic approach is the ability to explain a phenomenon by empirically testing it. However, during the past three decades, the majority of scholars researching in social science have to a large degree abandoned the positivistic paradigm (Johnson & Turner, 2007). The dissociation from positivism in social science has predominantly been due to a critique of the paradigm being naïve by applying narrow methodological approaches that only recognize testable and measureable hypotheses (Habermas, 2003). Hence, the approach of positivism which originally was formed with the purpose of exploring natural science does not acknowledge that social science is a different domain. Additionally, the critics of positivism argue that a positivistic approach cannot understand phenomena and their occurrences, thus, the paradigm lacks the possibility of critical distance, since the measurements are based on traditional knowledge and experiences.

Nevertheless, the critique of positivism in regards to applicability for studying social science is primarily pointed towards traditional positivism, and not logical positivism. Logical positivism acknowledges that traditional positivism has a too narrow understanding of methodology, and therefore allows scholars to design the methodology for the specific area of research (Johnson & Turner, 2007). However, my analysis is based on existing knowledge, and therefore the findings of the analysis are related to previous knowledge. Thus, from a critical approach, the model I am developing is only new knowledge within the arena of existing measurements (ibid.). It is therefore important to acknowledge that the findings of this dissertation is based on previous knowledge and thereby biases from the existing literature.

Another critical element of this paper is that I examine how country-specific factors affect the returns on VC and PE funds in emerging markets, however, I only use data from eight different countries. According to FTSE International 24 of the countries in the world are emerging markets (FTSE, 2011). Hence, it can be

discussed how representative the data from my sample is. Nevertheless, the eight countries are located on four different continents with notably different country specifics in terms of the macroeconomic environment and political history.

Lastly, the conversion from the important country-specific factors related to economic growth examined in the literature to the quantification of the parameters is important. Naturally, some of the country-specific factors are relatively easy to convert, yet, some of the parameters are likely to be difficult to quantify and further find relevant data on. The risk is that the quantified measures possibly do not represent the arguments from literature precisely, and therefore there is a chance that the model excludes relevant parameters due to a wrong method of quantification. Yet, I include a section where I explain my method of quantification carefully, and thereby the reader has the opportunity to address the findings of the paper critically.

4.0 Literature review

This chapter categorizes and structures the arguments presented by scholars on economic growth. The literature review starts out by discussing the shift in paradigms that has occurred in economic growth theory, before categorizing the arguments on country-specific factors presented by academics. Lastly, the country-specific factors are quantified.

4.1 From neoclassic to institutional economic growth paradigm

The theory discusses what factors which influence the economic growth of a country, where economic growth is measured as the annual rate of increase in real GDP. This knowledge is highly important for governments, corporations, investors and individuals. The individuals experience a higher standard of living, the government receives a larger budget for spending due to a larger tax income, the corporations experience a higher revenue stream and investors generate higher returns. Hence, due to the benefits of economic growth many academic scholars have focused on how to facilitate growth.

For more than 60 years, economic growth has been intensively studied by academics, yet, throughout the years the way of understanding the facilitors of economic growth has changed. By examining the literature, I have identified a shift in paradigms from the pioneering American economist Robert Solow's first generic growth model in 1956 until today (Solow, 1956). During the 1960s, 70s and 80s the consensus among scholars was that economic development could be projected based on input factors, and even today many scholars still forcefully argue for this proposition (Mankim et al., 1992; Barro, 1991; Romer, 1994; Hall & Jones, 1999; Krugman; 1994). They argue that economic growth, and consequently a suitable environment for shareholder value maximization, can be determined by an accumulation of input factors consisting of labor, capital and productivity.

The growth model was originally developed by Solow, and has since the development in 1956 been applied by many scholars and practitioners. The growth model and the way of thinking about the input factors as determinants of the overall economic development in a country can be classified as neoclassic (Latsis, 1981). Neoclassical economists have had a strong influence on the literature. The assumptions of the neoclassical growth model is that countries automatically utilize their resources in the most efficient and economical way. The assumption is needed in order to analytically model economic growth, nevertheless, this assumption is quite assertive.

During the past two decades there has been a change in the way scholars study economic growth patterns. Several scholars have by focusing on the development of the economies in East Asia discovered that the

accumulation of labor, capital and productivity exclusively could not explain the rapid growth rates (Stiglitz, 1996; Page, 1994; Kokko, 2006; Kim & Lau, 1993; Naseem, 2003, Amsden, 1994). Inspired by this discovery other scholars have hereafter studied the correlation between the estimation of growth determined by the neoclassical growth model and the actual growth in Africa, Eastern Europe and South America, and have found that the traditional input factors cannot determine the growth in real economy autonomously (Moss et al., 2007; Dollar, 2008; Arbache et al., 2008; Dunning et al.; 2006; Sanfiso, 2007). Common for these scholars is that they emphasize that government intervention can establish functional institutions in the country that increase the efficiency of resource allocation for instance in form of infrastructure improvements. Additionally, they focus on how there exist a correlation between stable exchange rate systems and economic growth, since the domestic markets of most countries cannot drive the economic development independently. Hence, this way of considering institutions in the country and relate it to the economic development is characterized as institutionalism (North, 1991; Mirowski, 1987). This paradigm focuses on how institutions are incorporated in the society and how the institutions affect the overall development of the country (North, 1991). The paradigm acknowledges that input factors matter, however, institutionalism does not agree with the underlying assumption of the growth model, namely that the government automatically utilizes the resources in the most efficient manner. Instead, the paradigm recognizes that countries with same input factors in history have shown highly different growth rates, and therefore it investigates what institutions contribute to economic growth of a country.

Hence, there has been a shift of paradigms in economic growth theories from neoclassic theory which focuses on the growth model developed by Solow, and to a more nuanced institutional paradigm. It is important to note that institutionalism in this perspective does not ignore the underlying principles of economic development stated the neoclassical paradigm, however, institutionalism adds to the principles of productivity, labor and capital growth by also focusing on how institutions can allocate resources efficiently.

In the following section, I concentrate on identifying relevant and empirical validated country-specific factors. I focus both on the neoclassical factors like labor, capital and productivity, and the institutional factors like infrastructure and stable exchange rates, hence, I apply a hybrid of the neoclassical and institutional paradigms (Dugger, 1979).

4.2 Country-specific factors

In this section, I divide and categorize the literature on economic development and conditions for investments. The categorization has been constructed by systematically writing down the arguments one by one in a spread-sheet (Appendix 5).

4.2.1 Macroeconomics

Within macroeconomics, economists and academics agree on how to measure economic growth, however, there is considerable lower consensus on how macroeconomic factors can facilitate and predict future growth. Exogenous growth theory, initially represented by Solow, argues that economic growth is determined by input factors, and explicitly states that macroeconomic factors are not the main facilitators of economic growth (Solow, 1956). The exogenous neoclassic school of thought argues that the given amount of input factors determines the economic growth, and this consequently influence the macroeconomic climate of the country. Hence, the macro economy is determined by the economic growth rates facilitated by the input factors, and macro economy is therefore the lagging indicator, whereas the input factors are the leading indicators (Barro, 1991; Romer, 1994).

However, endogenous growth theory considers macroeconomic factors to be critical, when evaluating economic growth of a country (Page, 1994; Krugman, 1994; Gabaix, 2008). In the institutional paradigm there exists consensus among scholars that three main factors in regards to macroeconomics influence economic growth. Firstly, academics focus on the financial condition of the government by examining investments, savings and debt level (Kokko, 2006; Stiglitz, 1996). Secondly, economic growth is related to the inflation level of a country (Barnes et al., 1999; Li, 2006, Arbache et al., 2008). Thirdly, the distribution of wealth in the country affects the growth level (Radelet, 2006; Dollar, 2008; Stiglitz, 1996; Dunning et al.; 2006).

As mentioned, the literature review explores arguments from different schools of thought, and presents all arguments on economic growth. Only the institutional academics focus on how macroeconomic factors can influence the economic growth of a country, thus, these arguments are presented here, even though neoclassic school of thought do not agree. Nevertheless, in the statistical analysis, the insignificant variables are excluded, hence, every academic argument on economic growth is presented in this part of the dissertation.

4.2.1.1 Debt, savings and investments

Correlation and causation between public debt and economic growth have been discussed intensively by economists for many decades. Paul Krugman has continuously been arguing that there does not exist a correlation between public debt and economic growth, and his main argument has been that the U.S. has delivered economic growth in most years for the past two decades even though the public debt is more than

100% of its GDP. However, the consensus among most scholars has been that there is a difference between developed and emerging markets (Reinhart & Rogoff., 2003; Schclarek, 2004). Hence, developed countries can deliver economic growth even though they have a notable public debt, however, a lower debt level for emerging markets indicate higher economic growth: *"For developing countries, I find that lower total debt levels of the country are associated with higher growth rates."* (Schclarek, 2004:13). The study conducted by Schclarek determines that emerging markets deliver higher economic growth when public debt is low. Acknowledging the costs implicated when borrowing money, an excessively large debt can influence the development of the economy in a country. Emerging markets borrow money to finance investments, yet, if the level of debt compared to the GDP is too large, the country will spend its finances on interest payments instead of investing in growth (Reinhart & Rogoff, 2003). Stiglitz provides an explanation of why lower debt for emerging markets is important. He has examined interest rates for treasury bills globally and has non-surprisingly found that the cost of borrowing is larger in the emerging markets (Stiglitz, 1996). The reasoning behind this is that investors believe the risk of default is higher in emerging than mature markets, hence, they expect a larger return (ibid.). Thus, the public debt of the emerging market is a relevant variable to examine in the statistical analysis.

In addition to the public debt of a country, savings and investments of a country is according to institutional academics relevant for economic growth (Gutierrez & Solimano, 2007; Kokko, 2006; Amsden, 1994). Savings are closely related to investments given that if the government does not spend all income from taxes, they can instead invest in productivity enhancing activities in the country without adding additional debt to the public budget. In order to experience an economic development firstly there is a need for savings, which can later be large enough for investments. Investments provide capital and often place of employments, which again helps the overall economic development (ibid.).

4.2.1.2 Inflation

From a neoclassic perspective, a higher inflation level does not affect economic growth and consequently the returns on investments for the VC and PE funds. According to the neoclassical Fisher hypothesis, a higher inflation rate does not affect the economic growth of a country, and further the real returns of investors and companies (Barnes et al., 1999). The explanation is that the inflation on the expenses such as wages, interests, raw material and so forth theoretically should rise correspondently to prices, and given a constant quantity of demand, the growth rates would rise with the factor of the inflation (ibid.). Hence, in an efficient market with rational investors, they would be able to identify the nominal increase in corporate earnings, and that the real return would be unaffected by the inflation. Therefore, the theoretical argument was that inflation would not influence investors.

Yet, during the past decades, the consensus among the majority of institutional scholars has been that a high level of inflation obstructs and hampers economic growth (Moss & Standley, 2007; Amsden, 1994; Stiglitz, 1996). Empirically it has been established that inflation causes real returns on stocks decline. Furthermore, a high level of inflation dilutes the value of savings and investments in a country and further reduces the standard of living for the inhabitants (Moffett et al., 2008). From the point of view of the VC and PE funds, the inflation level needs to be under control; otherwise the real value of their investment erodes (Brealey et al., 2008). Emerging markets with a high growth rates do consequently often have higher inflation levels than mature markets, nonetheless, the level of the inflation should be relatively low in order to continue the rapid growth rate and attract foreign direct investments (Moss & Standley, 2007; Amsden, 1994). Hence, given this argument, the inflation rates are tested against the returns in investments of the VC and PE funds.

4.2.1.3 Distribution of wealth

During the paradigm shift in the literature from neoclassic theory to institutionalism, the focus on wealth distribution has increased (Kokko, 2006; Moss et al., 2007; Dollar, 2008; Arbache et al., 2008; Page, 1994). The reason is that academics have demonstrated that the investment climate is restricted if the inequality in the country is excessively large (Dollar, 2008; Kokko; 2006). It is relevant to examine the resource allocation and wealth distribution in a country, since distribution of income play a key role in sustainable growth (Rodriguez, 2000; Stiglitz, 1996; Kokko, 2006). However, it is essential to distinguish between developed and emerging markets. For developed countries where the standard of living is proportionally higher, scholars have found that some inequality in a society is necessary for continuous development. Yet, for emerging markets, where inequality generally is higher, it is crucial that the inequality does not exceed a certain level, because the poorest part of the population ought to have an incentive to climb up the income ladder in the society (Kokko, 2006; Dollar, 2008). If the divergence is too large there exists a risk of getting a society where the poorest cannot emerge the poverty, which can restrict the rate of development of the country (ibid.). Therefore it is relevant to examine the relationship between inequality of a country and the returns of the VC and PE funds.

4.2.2 Labor

Both the neoclassical and the institutional paradigm acknowledge that labor is a facilitator and predictor of economic growth. Neoclassic economic growth theory focuses on labor as an input factor, and focus on how the population grow or decline (Solow, 1956; Swan, 1956). Hence, the focus is on core tangible demographics and whether the labor participation rate increases or decline (ibid.). The idea is that an

increase in labor participation of a country has a positive correlation to economic growth. Additionally, in regards to the contribution labor provides on economic growth, neoclassic exogenous growth theory focuses on productivity level of the country. Productivity is a measure of efficiency of production in a country, and the workers in a country affect the productivity level, thus, neoclassical economists focus on productivity in regards to the workforce as well (ibid.).

Institutional academics acknowledge that labor participation and productivity are relevant determinants of economic growth. However, in addition to these matters, the academics in this paradigm also examine how the educational level of the workforce affects the growth rate of the country (Kim & Lau, 1993; Page, 1996; Naseem, 2003). Thereby the labor force is not exclusively viewed as an input factor that can be measured in demographics, but as a resource for creating growth in a country. Page and Kim & Lau have in their respective studies found that the higher education level the labor force of a country has, the higher economic growth it can obtain (Page, 1996; Kim & Lau, 1993).

Therefore, this section is categorized into separate labor-specific areas that both neoclassic and institutional academics argue for influence the economic growth of countries.

4.2.2.1 Labor participation and unemployment

A continuous increase in the work force in a country generally leads to economic growth (Kothare, 1999; Swan, 1956; Solow, 1956). The argument goes that a larger labor force generates larger tax incomes and consumption in the country, and this further lead to higher investment levels (ibid.). Furthermore, the financial burden of senior citizens is less influential as long as the workforce increases in size and the labor participation rate is high (Fengler, 2010). Even though the majority of scholars investigating the statistical relationship between labor participation and economic growth are neoclassic academics, the institutional scholars acknowledge the importance of this factor. For instance Page's paper on the economic growth in South East Asian explores the relation between labor force and growth, and concludes that an increasing labor force is even more important in the developing countries (Page, 1994).

Unemployment is closely related to labor participation. The relationship between unemployment and economic growth is a popular topic for researchers and scholars (Calmfors & Holmlund, 2000; Manning, 1992; Choi, 2007; Lindbeck, 1996; Pissarides, 1990). Most scholars agree that there exist a strong relationship between employment and economic growth, however, there is a divergence whether it is the economic growth or the employment growth that is the leading indicator (Manning, 1992; Lindbeck, 1996). It is a known fact that high employment leads to more income taxes and less transfer payments, which enhance the economic environment in the country (ibid.). Yet, a low unemployment close to the structural

unemployment rate damages the economic growth possibilities due to the fact that it leads to higher wages and thereby harm the competitiveness of the country (Moffett et al., 2008). Nevertheless, relating it to emerging markets, there is a tendency to have low wages in most countries and a relatively high level of unemployment (Choi, 2007). Hence, in this case, a lower unemployment rate is generally a positive sign (Manning, 1992).

Labor participation and unemployment are different parameters, however, the variables are statistically related given that the underlying numbers that the ratios are calculated from are identical. Therefore, in the statistical analysis of the relationship between country-specific factors and returns for the VC and PE funds, there is a risk that the variables will move together. Nevertheless, the purpose of the literature review is to include all potentially relevant factors, thus, the consideration of two closely related independent variables is analyzed when running the statistical analysis.

4.2.2.2 Productivity

Both within the neoclassical and institutional paradigm, scholars consider productivity highly important for the economic growth of a country (Romer, 1994; Mankim et al.; 1992; Hall & Jones, 1999; Krugman, 1994; Stiglitz, 1996). There are two ways to increase productivity in a country either by increasing the output faster than increasing the input, or lowering the input while maintaining the level of output. By lowering the input faster than lowering the output, the productivity gain implies that the country has lowered labor, material and energy costs, and still maintained a proportionally higher output (Jajri & Ismail, 2010). The alternative is to increase the output due to a higher demand for goods and services, and keeping the increase of inputs proportionally lower by benefitting from economies of scale (ibid.). In emerging markets the cost of input is generally lower than in developed markets due to lower costs of wages. Thus, Stiglitz argues that in order to generate a higher productivity, the countries need to focus on automatic processes and production-enhancing innovations (Stiglitz, 1996).

According to both schools of thought, the overall productivity level of a country influence the economic development of a country. Thus, in the analysis I test how the productivity in the country affects the returns on investments for the funds.

4.2.2.3 Education

Besides focusing on the work force as an input factor measured on size of labor participation, academics from the institutional paradigm examines how the educational level of a country affects the economic growth

(Walter & Rubinson, 1983; Stevens & Weale, 2003; Page, 1994). The scholars argue that there exists a strong correlation between increase of educational level and economic growth in a country (ibid.). Page states that it is beneficial for governments in emerging markets to invest in public primary and secondary education: *"Education policies that focused on primary and secondary education generated rapid increases in labor force skills"* (Page, 1994: 234). Page argues that by increasing investment in education, the skills of the workers enhance (ibid.). Consequently, the increased skills of the workers cause economic growth in the emerging market (Stevens & Weale, 2003).

The initial reason for testing the relationship between educational level and economic growth was that the strong correlation between income of an individual and their educational level, hence, academics supposed the same argument also would be applicable for countries (Walter & Rubinson, 1983). Accordingly it was verified that countries spending on investments in education experienced economic growth (Stevens & Weale, 2003). In this context it is important to underline that I have found in the articles focusing on South America, Africa and Asia that investment in education is even more relevant here, because of the lower starting point. Merely relatively small investments radically improve the skills and the literary levels in these countries (Arbache et al., 1998; Dollar, 2008; Moss et al., 2007). Hence, it is relevant to examine how much the governments focus on education in order to determine the attractiveness of the investment climate for the VC and PE funds.

4.2.3 Export

During the past decade the focus on exports in developing economies has intensified (Kokko, 2006; Naseem, 2003; Dollar, 2008). Institutional academics who have studied the rapid growth rates in East Asia in the 1990s have found that the impressive growth partly was facilitated by export (Dunning et al., 2006; Lin & Li, 2009; Kokko, 2006). In the majority of the Tiger Economies, the governments had had notably trading barriers in the 1970s and 80s, however, in the 90s they reduced the tariffs and thereby initiated export-led growth strategies (ibid.). The export-led growth strategies opened the domestic markets for foreign competition and additionally initiated market access to other countries. Besides receiving foreign direct investment and thereby creating jobs, the countries had the opportunity to export goods (Dunning et al., 2006). Furthermore, the countries in East Asia focused on having low and stable exchange rates in order to facilitate a competitive export climate, where the exchange rates in the majority of the counties had had highly fluctuating exchange rates in the 1970s and 80s (Lin & Li, 2009). Export is for emerging markets a highly effective way for fast industrialization and impressive economic growth. For emerging markets export is remarkably important due to the fact that the domestic markets do not have the required demand to facilitate sustainable and rapid growth rates (Dunning et al., 2006; Lin & Li, 2009).

4.2.3.1 Exchange rate

In regards to competitive export facilitation, naturally, the real exchange rate matters given that it affects how much the price of the exported goods can be purchased for in other countries (Brealey et al., 2008; Moffett et al., 2008). Institutional academic scholars argue that the most important element of the exchange rate is its stability towards main currencies in relevant export markets, since it provides companies with long-term information which they can utilize in their strategic planning (Balassa, 1978; Dollar, 2008).

In the Tiger Economies, the majority of the countries changed their exchange rate management from a fixed rate strategy to a floating exchange rate (Lin & Li, 2009). However, during the 1990s with the impressive growth rates, the exchange rate managed to stay relatively stable (ibid.). Yet, given the massive surplus on their current account annually, the exchange rate of the economies appreciated gradually against major economies as the U.S., nonetheless, the appreciation was relatively small (ibid.). Thus, the institutional academics have after studying the growth of Tiger Economies found that having a relatively stable exchange rate is beneficial for generating economic growth.

The exchange rate of the country, where the VC or PE funds decide to invest, matters in two ways. Firstly, a relative low exchange rate makes the goods of the operating companies more competitive. Secondly, the majority of the headquarters of the VC and PE funds are located in mature markets and the exchange rate towards the Euro or the U.S. dollar matters since it affects the returns on investments when converting back to the currency the fund apply. However, it is beyond the scope of this paper to analyze currency trading, hence, the focus on exchange rate is on export-oriented issues. In the survey I have asked the respondents to provide me with the original investment and the return in the same currency to avoid the aspect of gain or loss on currency trading.

4.2.3.2 Barriers of trading

The advantages and disadvantages of liberalization of trade have been discussed intensively by academics for the past decades. An advantage of operating with protectionist policies is that domestic companies experience less competition, and therefore gain larger domestic market shares, which potentially trigger them to hire more local employees and consequently causes consumer spending to rise, because of the increase in income (Edwards, 1993). However, the advocates of liberalization of trade argue that the lack of competition causes prices to increase in the country, and furthermore the government costs of imposing and collecting tariffs are larger than the benefits for the country (Rodriguez, 2011; Dollar 2008).

During the past two decades, the majority of academics argue for liberalization of trade. Especially for emerging markets it is beneficial to change from a protectionist view towards openness to trade: *"... for developing countries, a great majority of the empirical studies concluded that there exists a significant and negative relationship between trade restrictions and growth"* (Yanikkaya, 2003:84). Yanikkaya finds in his empirical cross-country analysis that the negative correlation between trade barriers and growth is significant for emerging markets. In addition to the study of Yanikkaya, Dollar and Rodriguez have independently done excessive analyses showing that the effect on trade liberalization and lower tariffs is tremendously evident in emerging markets (Dollar, 2008; Rodriguez, 2011). Rodriguez argues in his article that the significant correlation presumably is due to the fact that the majority of emerging markets have a relative high number of tariffs, hence, when the emerging markets decrease the number of tariffs the effect is highly notable.

Due to the positive association between low export tariffs and sustainable growth in emerging markets examined in the literature, the relation between low tariffs and the returns on investments for the VC and PE funds is tested in the analysis.

4.2.4 Institutions

After the paradigm shift from neoclassic thinking to institutionalism, economists consider the theoretical and empirical relationship between institutions and economic growth (North, 1989; Knack & Keefer, 1995; Gabaix, 2008). The foundation of institutional theory in regards to economic growth is that institutions provide the fundamentals needed for growth (ibid.). The examination of the relationship between institutions and growth started when neoclassic development economics could not explain why the Soviet Union, Africa and East Asian countries in the 1980s had disappointing growth rates even though the traditional input factors of labor and capital were increasing. Hence, instead of only explaining economic growth based on input factors, the institutional paradigm initiated studies on how institutions in form of political establishments, credit markets and infrastructure influenced the growth rates of the countries examined (ibid.).

4.2.4.1 Political stability and corruption

Political stability in a country is important for economic growth (Arbache et al., 2008; Aron, 2000; North, 1989). However, it is important to note that thus far there is no evidence that democracy leads to faster economic growth, thus, I do not consider democracy a necessity in the analysis, since the singular purpose of the analysis is identifying growth factors which can lead to increased shareholder value. Instead, the stability of the institutions is important because it provides the companies with an opportunity to plan ahead.

Another factor which is related to political stability is corruption. Cuervo-Cazurra has in his article from 2006 determined that corruption creates obstacles for investors operating abroad (Cuervo-Cazurra, 2006). The disadvantages of corruption are increased costs of operating abroad, higher uncertainty and added risk (ibid.). Given that risk is already a major factor for VC and PE funds operating in emerging markets, high corruption is problematic. Economists have argued that corruption can help increasing productivity for major companies, since they would be prioritized if they pay the right individuals, however, recent studies have shown that there is no relationship between performance of international companies in emerging markets and a high corruption level. Thus, in my analysis I accept the premise that lower corruption increases economic growth.

4.2.4.2 Credit and capital markets

The effect of liberal credit markets on economic growth has been a highly discussed topic in the literature since Schumpeter published his book on economic development in 1912 (Schumpeter, 1912). Schumpeter argues that liberal credit markets provide a fundament for economic growth, because capital is needed for investments (ibid.). Oppositely, the argument has been that a liberal credit market results in imperfect markets, where the mechanisms enhance the inequality of the country, which consequently over time could limit the possibilities of economic growth (Murinde, 2012; Galor, 2009; Banerjee, 2001). However, even though some scholars have argued against a highly liberal credit market, the majority of economists still support the argument presented by Schumpeter, namely, that liberal credit markets can create a foundation for economic growth. King & Levine have found in their study that liberal credit markets improve the probability of successful innovation, and thereby accelerate economic growth (King & Levine, 1993). Furthermore, Levine found in his own study that: *"Although conclusions must be stated hesitantly and with ample qualifications, the preponderance of theoretical reasoning and empirical evidence suggests a positive, first-order relationship between a financial development and economic growth."* (Levine, 1997:688). Hence, despite that there exist different opinions on a liberal credit market I test the relationship between credit markets and returns on the investments for the VC and PE funds.

In addition to the credit markets, academics also argue that of the stock markets can enhance the platform for economic growth (Levine & Zervos, 1998; Sanfiso, 2007; Radelet, 2006). The argument goes that a liquid stock market can provide capital funding for investments, which consequently lead to enhanced productivity and economic growth (ibid.). The correlation between the stock markets in developing countries and the level of economic growth has been empirically tested in India and China by respectively Deb & Mukherjee and Chang (Deb & Mukherjee, 2008; Chang, 2002). China and India have experienced a tremendous development of their financial sectors and the market capitalization rates in both countries have increased

rapidly throughout the past 15 years (ibid.). Chang found in his examination of China that a large market capitalization had a positive direct affect on the economic growth in the country given that the extra capital increased the investment level considerably (Chang, 2002). In the study of India by Deb & Mukherjee they found that there exist a causal relationship between real GDP growth rate and a real market capitalization ratio. Hence, it is relevant to test the relationship between the market capitalization and the returns of the funds. Also due to the fact that a liquid stock market further makes the realization event for the VC and PE funds in form of a trade sale or initial public offering easier, when the investment period is over.

4.2.4.3 Infrastructure

Infrastructure is seen as an important factor to determine what development stage a country is in (Holtz-Eakin & Schwartz, 1995). The physical constructions in form of roads, ports, airports and railroads provide the foundation of operating a country, and the technological connectivity in form of connection of internet and phone systems provide productivity enhancements (Fengler, 2010). Institutional scholars have found a relation between the level of infrastructure and the economic growth in a country. Canning & Pedroni has investigated the effect of infrastructure on long run economic growth (Canning & Pedroni, 2004). They conclude in their article: *"Our results provide clear evidence that in vast majority of cases infrastructure does induce long run growth effects."* (Canning & Pedroni, 2004:22). Furthermore, they find that the largest effect on enhanced infrastructure level on the economic growth of a country is in emerging markets (ibid.). Hence, given that infrastructure is fundamental for emerging markets I examine how the relationship is between the returns on the funds and the level of infrastructure.

4.3 Quantification of country-specific factors

In order to statistically test the correlation between the country-specific factors identified in the literature review above and the returns of the funds, I need to quantify the arguments made by the academic scholars. The criteria for quantifying the parameters are firstly that the measures need to be comparable across the dataset of the emerging markets. Secondly, the measures need to be accessible through a trustworthy data-source. Thirdly, the quantification needs to fit the arguments identified in the theory. I present my quantitative measures in the same structure as presented above, namely; macroeconomics, labor, export and institutions.

4.3.1 Macroeconomics

I have in the table below included the theoretical topics noted by the academics in the left column, the quantitative measure I have chosen to implement in the middle column and the data source in the right column:

Theoretical topic	Measure	Data source
Government debt	Central government debt as % of GDP. It includes domestic and foreign liabilities.	World Bank
Government savings	Gross savings as % of GDP.	World Bank
Government investments	Government investments as % of GDP.	World Bank
Inflation	Consumer Price Index (CPI). Annual % change in cost for consumers buying same goods or services.	World Bank
Distribution of wealth	Gini Coefficient. It measures distribution of income. Gini of zero represents perfect equality, and 100 equals perfect inequality.	World Bank

Figure 3: Quantification of macroeconomic factors

The measures I have chosen for analyzing government debt, savings, investments and inflation, are all relatively straight-forward.

The "Gini Coefficient" is a measure of distribution of wealth and measures the inequality in levels of income, where 100 expresses maximal inequality and zero means perfect distribution of wealth. The Gini Coefficient is frequently used in development economics, and I am able to generate comparable data for countries of interest through the library of the World Bank.

4.3.2 Labor

The objective is to quantify the theoretical arguments made by the academics:

Theoretical topic	Measure	Data source
Labor force	Labor participation rate. % of the population above 15 years old.	World Bank
Productivity	Productivity performance. An index where one is full productivity, and zero is non-productive.	United Nations Industrial Development Organization
Education	Adult Literacy Rate. For population above 15 years old.	World Bank
Education	School Enrollment: Secondary. Secondary enrollment includes final stage of compulsory education.	World Bank
Unemployment	Unemployment as % of total work force.	World Bank

Figure 4: Quantification of labor factors

The measures chosen for labor force and unemployment rate are standard measures.

For productivity, I have implemented a quantitative measure from United Nations Industrial Development Organisation, where they note full productivity as one, and zero represents no productivity at all. They have calculated the measure by focusing on manufacturing export per capita, industrialization intensity, value adding in dollars and the total population.

As stated earlier, scholars have identified a positive correlation between of education and economic growth (cd. 2.1.1). However, in order to quantify education, I have had to include two different measures, since independently they did not cover the whole theoretical argument. Thus, both literacy rate and school enrollment in the secondary education are included as parameters.

4.3.3 Export

The measures I implement to examine the effect of export on economic growth are:

Theoretical topic	Measure	Data source
Exchange rate	Real effective exchange rate. Index numbers where 2005 is 100.	World Bank
Barriers of trading	Tariffs. A count of the tariffs on traded goods and services.	World Trade Organization
Barriers of trading	Export of goods and services as % of GDP.	World Bank

Figure 5: Quantification of export factors

In order to quantify stable exchange rate, I utilize a measure from the World Bank, where they apply the year 2005 as the base with a 100. They then calculate the real effective exchange rate as a measure of the value of a currency against a weighted average of several foreign currencies annually, hence, making it comparable across countries.

To evaluate barriers of trading, I have included two parameters, namely, tariffs and export as % of GDP. For the tariffs, WTO has calculated the simple mean of tariffs for all traded goods and services in the country annually.

4.3.4 Institutions

Quantification of theoretical arguments by scholars:

Theoretical topic	Measure	Data source
Corruption	Corruption Index on how corrupt the country is on a scale of 0-10. 0 is totally corrupt, where 10 is not corrupt.	Transparency International
Credit markets	Credit provided by the banking sector as % of GDP.	World Bank
Capital markets	Market capitalization of listed companies as % of GDP.	World Bank
Infrastructure	Road sector energy consumption as % of total energy consumption in the country.	World Bank

Figure 6: Quantification of institutional factors

As seen in the table above, I apply the corruption index from Transparency International to measure the corruption level in the countries of interest. In regards to credit and capital markets, I utilize measures from the World Bank that by measuring the credit and capital markets as % of GDP make it comparable across countries.

Lastly, for infrastructure, I use a measure of how much the energy consumption of the road sector is as % of total energy consumption in the country. This measure is slightly imprecise, yet, it is the most accurate and suitable quantification of infrastructure I have been able generate.

4.4 Partial conclusion

I have in the literature review identified a paradigm shift in the economic growth literature from a neoclassic focus on input factors to institutionalism, which includes other factors that determines the economic growth in country. By reviewing the literature, I have categorized four main factors which the academics argue determines the growth rate of country, namely; macroeconomics, labor, export and institutions. Each category is subdivided into further groupings. These categories identified in the literature have further been quantified in order in the next chapter to statistically test the correlation between the returns on investments and the country-specific factors.

5.0 Empirical findings

The dissertation continues with a presentation of the empirical findings of the survey, and further how the independent variables categorized in the literature affect the returns on investments generated by the VC and PE funds. The chapter presents the data selection process, the independent variables, the model summary and finally discusses whether the model fulfills the assumptions of ordinary least squares (OLS).

5.1 Data selection and descriptive statistics

The dataset for the analysis consists of the dependent and independent variables. The dependent variable, specifically the returns on investments for the VC and PE funds, has been collected through the survey distributed by industry associations in emerging markets (cd. 3.4.1.2). As mentioned in the methodology section, the answers from the survey are only included from the countries, where I obtained more than 50 answers given that it enhances the validity of dataset (ibid.). Given this premise, I achieved enough answers from eight countries, namely; South Africa, South Korea, Thailand, India, Poland, Brazil, Turkey and Argentina (Appendix 4). Hence, the eight countries are located in four different continents, and are currently at different development stages while still being categorized as emerging, hence, the countries are representative of emerging markets.

In appendix 2, the extraction of the data from survey is included (Appendix 2). Looking at the data, we note a general pattern throughout the different countries. In each country the majority of the VC and PE funds are North American or European, and these funds operate with large investment budgets. Furthermore, a common trend in the dataset is that in each country there are smaller local funds investing in operating companies. Lastly, examining the trend in the answers, we note that some of funds are presented more than once (Appendix 2). The respondents in the survey are anonymous, however, looking at the answers it is obvious that some of the funds have been investing in more than one operating company, and often across the emerging markets (ibid.). The reason why we can observe this trend is that the respondents have filled out both the location of their headquarter and annual turnover of the fund.

In total, the survey generated 456 results from the respondents who have invested in the eight emerging markets. However, when combining the 456 returns with the independent variables represented by the data generated, the size of the total dataset is reduced to 418. The reason why the number decreased is that it was not possible to generate trustworthy data on the independent variables for those 38 cases. Nevertheless, the total of 418 data points with dependent and explanatory variables is large enough to run a meaningful regression analysis. The descriptive statistics of the regression analysis looks as follow:

Descriptive Statistics

	Mean	Std. Deviation	N
ROI	,181749	,1514924	418
Debt	45,0642	25,17576	418
Productivity	,34665	,145984	418
School enrollment	74,455	16,5265	418
Unemployment	10,7166	11,99663	418
Exchange rate	99,8775	15,24286	418
Squared exchange rate	10207,29662	2644,462600	418
Credit banks	78,2511	44,27228	418

Figure 7: Descriptive statistics of regression model

From the table, we further note that the mean of the 418 returns on investments is 18.17% with a standard deviation of 0.151. The relatively high standard deviation seems reasonable, since 418 investments are likely to be spread out from negative to quite high returns.

5.2 Practical and empirical approach

On a practical level I initially transform and format the data in Microsoft Excel. Using functions and formulas in Excel, I position the returns of the funds in one column and the corresponding average of the independent variables in the subsequent columns in order to make the data applicable for SPSS. Hence, I have the dependent variable and the independent variables matched according to countries and years of investments (Appendix 4). Hereafter I import the data to SPSS, and run multiple regressions by using the ordinary least squares (OLS) approach. SPSS is a widely acknowledged software program and is useful since it easily performs statistical analyses such as linear regressions.

Initially I run the regression in SPSS by including all explanatory variables identified in the literature, and then exclude the insignificant variables in order to create a statistical significant model. The way I decide whether the estimated coefficients are significant is by examining the test statistics and p-values as explained in the methodology (cd. 3.5.3). In this case the significance level of the coefficient is determined by a t-statistic above 2 or below -2, and a p-value below 0.05. Hence, when performing the linear regression analysis, I exclude insignificant independent variables, and start by excluding the variables with the largest p-value (Appendix 11). Hereafter I do the linear regression analysis again without the excluded variable and perform the same procedure. This process ends when all independent variables are significant, and the modeling thereby is finished.

Lastly, when I have excluded the insignificant independent variables, I test for possible non-linear effect given that the regression analysis only considers linear relationships. Yet, as argued for in the literature review for instance an excessively low level of unemployment can potentially be negative for economic growth, which is why I test for possible non-linear relationships by squaring each independent variable when all insignificant variables have been excluded (Appendix 12). I include both the squared term along with the leveled term in the model, if the squared parameters are significant with low p-values.

5.3 Model and OLS assumptions

In this section, I initially present the model summary, however, I do not analyze the model and the specific coefficients yet. Instead I analyze how well the model is specified, and whether it fulfills the assumptions of OLS. The analysis of the model itself is not relevant before I have clarified whether the estimates are valid.

5.3.1 Model summary

After having excluded the insignificant parameters, the model summary generated from SPSS looks as follows:

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,775[a]	,600	,593	,0966089

a. Predictors: (Constant), Credit banks, Squared exchange rate, Unemployment, Debt, School enrollment, Productivity, Exchange rate

b. Dependent Variable: ROI

Figure 8: Model summary

The model consists of six low term explanatory variables, and one additional squared term. The model has an adjusted R^2 of 0.593, and can thereby explain 59.3% of the variability in the returns on investments. However, before analyzing the results from the model, I test the goodness of fit of the model, and whether it fulfills the assumptions of OLS.

5.3.2 Goodness of fit and specification of model

When estimating a regression model, one makes important choices on what independent variables to include and what functional forms the regression should take (Agresiti & Finlay, 2009). In order to write down the

model of returns on investments for VC and PE funds in emerging markets I use economic theory. The explanatory variables in the model are country-specific factors and I therefore deliberately exclude variables specifically related to the operating company that the VC and PE funds acquire. Hence, it is important to test how well the goodness of fit of the model is and further whether the model is well specified in order to understand the applicability and usefulness of the model.

Given that the statistical model is only an attempt to model the reality, it is relevant to analyze how well the model fits the actuality (Holt, 1986). To analyze how well the developed model fits the reality I apply Akaike's Information Criterion (AIC) as a test of the goodness of fit. Normally, AIC is applied to compare to different models, and examine which model fits the reality the best (ibid.). However, AIC also tests the tradeoff between accuracy and complexity of the model, and is therefore applicable in this scenario, since I try to model the reality in a simple yet precise way in order for the VC and PE funds to utilize the model in the future. The AIC calculation is represented as follows: AIC = n*ln(RSS/n)+2k, where *k* is the number of parameters fitted in the model including the intercept and error term, *n* is the number of observations and *RSS* is the residual sum of squares. The value of *k* is consequently 9, I have 418 observations, and *RSS* is 3.871, hence, AIC is -1924.03. It is normal to get a negative AIC value when having a dependent variable which primarily is varying between zero and one as in this model (Agresiti & Finlay, 2009). Furthermore, -1924.03 is significant low, and I conclude that the developed model is quite close to the actual true model (ibid.).

In the model developed, the independent variables are all country-specific factors. Thus, the model itself can merely explain part of the return that the VC and PE funds obtain, since it does not take specific factors of the operating companies that the funds acquire into account. Even though the choice of leaving out variables related to the operating companies is deliberate, it is important to analyze whether the omitted variables create a bias in the model and also if I have included irrelevant parameters. To test for specification errors, I apply the Ramsey Regression Equation Specification Error Test (RESET). The RESET test examines how non-linear combinations of the integrated variables help explaining the dependent variable. Hence, if the non-linear combinations of the independent variables can explain part of the independent variables, then the model is wrongly specified, and therefore I would need to rebuild the model.

The omnibus RESET test operates as a hypothesis test. If the p-value is below 0.05, I can reject the null hypothesis that the model is correctly specified, and if the p-value is above 0.20, then I cannot reject the null hypothesis. By running the test, I obtain a p-value of 0.371. Since the p-value is notably higher than 0.20, I cannot reject the null hypothesis and even though that I have omitted independent variables with the intention of explaining the returns of funds based on country-specific factors, the omitted variables do not create a bias in the model. Thus, the model does not compensate for the omitted variables, and the model is therefore well-specified.

Concluding on this section, we note that the model achieves a fine goodness of fit, and further is well-specified. Hence, I do not have to remodel.

5.3.3 Violations of assumptions

The method used when estimating the unknown parameters in the developed linear regression model is OLS. As explained in the methodology section, OLS is often preferred due to the fact that it is efficient and applicable in most cases (cd. 3.5.2). Yet, in order for OLS to be a appropriate there exist six classical and one additional assumption that have to be fulfilled (Gujarati & Porter, 2009). The Gauss-Markov Theorem states the best linear unbiased estimator (BLUE) of the coefficients is specified by the OLS estimator, if the error terms have expectation of zero, are uncorrelated and have equal variances.

In the following sections, I test whether the assumptions are fulfilled. The focus is primarily on multicollinearity, heteroskedasticity and serial correlation, since a violation of these assumptions would reject the developed model, however, I also analyze the remaining classical assumptions.

5.3.3.1 Test of multicollinearity

Multicollinearity in a linear regression model occurs when two or more independent variables are strongly related (Gujarati & Porter, 2009). Multicollinearity relatively often transpires when the modeling is based on economic parameters, since everything is related in economics (ibid.). Therefore, it is essential to test whether I violate the assumption of multicollinearity in the developed model.

There are consequences of having multicollinearity in the model, even though the least estimates are remaining unbiased. Firstly, the estimates have significant standard errors when having multicollinearity. This is problematic when trying to measure the effect of an independent variable on the dependent variable holding all other explanatory variables stable, since the independent variables that experience multicollinearity are moving together. Consequently, as the standard errors are very large, the estimation is likely to be imprecise. Secondly, having multicollinearity, the t-statistics are low and insignificant, and therefore it is problematic to reject any null hypothesis, which naturally limits the usefulness of the model. Lastly, if having multicollinearity in the model, an added or deleted independent variable lead to significant changes in the parameter estimates.

In order to test whether I violate the assumption of multicollinearity, I apply the test of Variance Inflation Factors (VIF). VIF quantifies the seriousness of the multicollinearity in the OLS regression and measures

how much the coefficients are increasing due to collinearity (Agresiti & Finlay, 2009). On a practical level I regress each independent variable on the remaining independent variables, and if (X_i) > 5, then we have multicollinearity.

Yet, as seen in appendix 9, neither of the VIF tests show higher values than 1.993 (Appendix 9). Therefore, I conclude that this model does not suffer from multicollinearity.

5.3.3.2 Test of heteroskedasticity

Another critical assumption in the classical linear regression model is that all errors should have the same variance, and if this assumption is violated, the model is heteroskedastic (Gujarati & Porter, 2009). Heteroskedasticity often occurs when sub-populations have different variabilities than others.

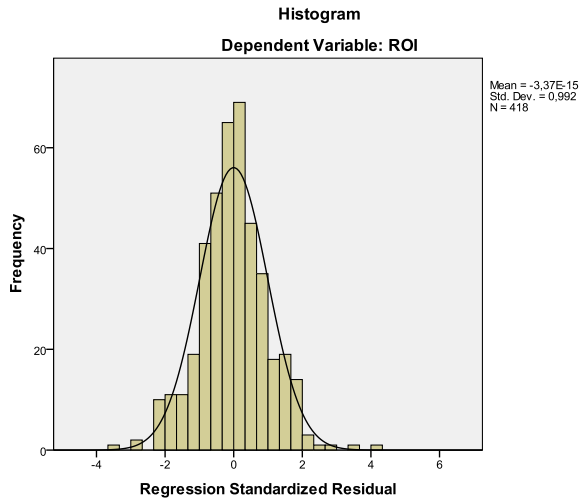

Figure 9: Histogram of residuals

Heteroskedasticity violates the classical assumptions, and therefore the OLS is not BLUE, nevertheless, the estimates remain unbiased. The problem of having heteroskedasticity is that the OLS might instigate a systematic variation in the correlation between the dependent and independent variables due to the error term.

Looking at the histogram, we note that the residuals are following a normal distrubtion. The residuals are not skewed, and do not seem like following a trend. Hence, it indicates that the errors terms have the same variances. Nonetheless, a histogram does only provide an indication, thus, I apply the Breusch-Pagan test in order to test in a statistical significant way that we do not vialoate the assumption of the error terms having the same variance.

The Breusch-Pagan test is a chi-squared test examining whether the variance of the error terms from the regression is dependent on the value of the independent variables (Gujarati & Porter, 2009). I calculate the test in SPSS by using syntax and integrating a macro. The t-statistic is 13.262, and the significance represented by the p-value is 0.194. Given that 0.194 is higher than the significance level of 0.05, I do not reject the null hypothesis, and the errors are therefore not heteroskedastic.

5.3.3.3 Serial correlation

The last critical assumption is that the error term of one observation is should not be correlated with the error term of another observation (Gujarati & Porter, 2009). If the correlation between the error terms of the different observations occurs, it is called serial correlation (ibid.). If serial correlation occurs, then OLS is not the best linear unbiased estimator, and the errors are under these circumstances to a certain degree predictable.

In order to test for serial correlation I utilize the Durbin-Watson test, since it the most well-known and applicable test (Gujarati & Porter, 2009). The Durbin-Watson test examines whether the residuals from the multiple regressions are independent or correlated. I calculate the test in SPSS, and the model gives a value of 1.724 (Appendix 10). Values far from two indicates that a serial correlation is present, and since 1.724 is close to two, and further that the distribution of the residual follows a normal distribution without any trends, the model is not violating the assumption of serial correlation.

5.3.3.4 The remaining assumptions

In addition to the assumptions regarding multicollinearity, heteroskedasticity and serial correlation, there remain three classical assumptions (Holt, 1986). The reason why I have chosen to integrate the remaining assumptions in one section is that they are less comprehensive and controlling than the previous three assumptions.

The initial assumption is that the developed model is linear in the coefficients, has an error term and is correctly specified. The first two parts of the assumption, namely, that the model is linear in the parameters and further has an additive error term, are fulfilled. Furthermore, in the RESET test performed, we note that the model is correctly specified (cd. 5.3.2). Hence, the overall assumption is not violated.

The next assumption states that the error term has zero population mean, hence, there is no expected error in the regression function. Thus, if we can predict or at least expect the error value and part of the error term is predictable, then we have to add it to the model instead. However, during the processes of pooling all independent variables and hereafter excluding the insignificant independent variables, I have determined the factors that are relevant for the model (Appendix 11). Thereby this weak assumption is fulfilled in this case.

The last classical assumption states that all the explanatory variables are uncorrelated with the error term. If the assumption is violated and the independent variables are correlated with the error term, then the independent variable is endogenous. This is problematic due to the fact that I would not be able to explain the variation in the dependent variable based on the independent variable, because the variation actually

derives from the variation in the error term. There do not exists any formally accepted tests to estimate whether the assumption is fulfilled, yet, given that the model is based on economic theory, I assume that the independent variables are uncorrelated with the error term.

These three assumptions listed above are all related to unbiasedness. Given that all three assumptions are satisfied, then the OLS estimation of the regression coefficients is unbiased. This means that we would get the correct estimate on an average basis if we continue to sample infinitely.

In addition to the six classical assumptions in the Gauss-Markov Theorem there is a seventh assumption. This assumption states that the error term is normally distributed with the mean zero and variance of σ^2. This is however not essential in order to be able to perform the OLS analysis, since OLS is as analyzed already BLUE. Furthermore, the histogram showed that the error terms seem to follow a normal distribution (cd. 5.3.3.2).

5.4 Sum-up

The tests of the goodness of fit, correct specification and the assumptions for the classical linear regression model have shown that the model is well-specified, has an excellent goodness of fit, and fulfills the required assumptions in order to perform an OLS analysis. Therefore I can continue with the actual analysis of the results.

6.0 Analysis

In this chapter the model is analyzed and each independent variable in the model is discussed. Hereafter the applicability of the developed regression equation is analyzed, and finally I incorporate traditional financial models to discuss how complimentary the approaches are.

6.1 Analysis of the model

The specification of the best fitting regression equation finishes when all insignificant independent variables are excluded from the model. The exclusion of the irrelevant parameters is based on the criteria of having a lower p-value than 0.05. The process of specifying the model is attached in appendix 11 and 12 (Appendix 11 & 12).

After having excluded the insignificant parameters, the remaining coefficients are the following: debt to GDP, productivity level, school enrollment, unemployment level, leveled and squared exchange rate, and the level of credit in the country provided by banks. These independent variables and the dependent variable in form of the returns on investments for the VC and PE funds in the emerging markets have the following characteristic:

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,775[a]	,600	,593	,0966089

a. Predictors: (Constant), Credit banks, Squared exchange rate, Unemployment, Debt, School enrollment, Productivity, Exchange rate

b. Dependent Variable: ROI

Figure 10: Model summary

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5,743	7	,820	87,911	,000[a]
	Residual	3,827	410	,009		
	Total	9,570	417			

a. Predictors: (Constant), Credit banks, Squared exchange rate, Unemployment, Debt, School enrollment, Productivity, Exchange rate

b. Dependent Variable: ROI

Figure 11: Anova model

The F-value is considerable high, and the p-value is 0.000, hence, the adjusted R^2 is statistically significant meaning that the developed model is highly unlikely to have occurred due to chance.

Therefore the model can, based on seven independent variables, explain 59.3% of the variation in returns on investments for the VC and PE funds. This is a quite notable explanatory level of a model, when it has been deliberately decided only to focus on country-specific factors.

The unstandardized coefficients generated from SPSS are listed below. The unstandardized coefficients tell how much the dependent variable changes, if the independent variable increases by one holding all other independent variables constant. Having the data on the coefficients I can list the regression equation of the model created:

Coefficients[a]

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	-,050	,059
	Debt	-,001	,000
	Productivity	,182	,048
	School enrollment	,001	,000
	Unemployment	-,003	,000
	Exchange rate	-,002	,001
	Squared exchange rate	3,009E-5	,000
	Credit banks	,001	,000

a. Dependent Variable: ROI

Figure 12: Model of coefficients

Regression equation:

$$ROI = -0.05 - 0.001_{Debt} + 0.182_{Productivity} + 0.001_{School\ enroll.} - 0.003_{Unemployment} - 0.002_{Exchange\ rate} + 3.009E - 5_{Squared\ Exchange\ rate} + 0.001_{Credit\ banks} + \epsilon_i$$

By adding the respective values into the regression equation, it can predict 59.3% of the variance in return on investment for the VC and PE funds.

In the regression equation we note that the majority of the coefficients are relatively small numbers. The reason for these small numbers is that the dependent variable, namely the return on investment for the VC and PE funds, is a decimal. Hence, even small changes in the dependent variable can consequently mean a lot for the shareholders of the funds.

6.2 Analysis of independent variables

The following section is an interpretation and analysis of the respective independent variables. The aim is to analyzing how statistical significant the parameters are and whether the theoretical arguments from the literature corresponds to the empirical data, which the model is based on. Throughout this part I continuously refer to appendix 6, where the t-statistic and p-value of the independent variables are listed (Appendix 6).

6.2.1 Debt to GDP

The first listed explanatory variable in the model is debt. Debt in this scenario is the debt of the government in the country including domestic and foreign liabilities, and the central government debt is calculated as a percentage of GDP. The data used for the analysis is facilitated from the online library of the World Bank and formatted to fit the data of the dependent variable.

We note in the literature review that the academic scholars argue that the level of debt of a government influences the economic growth of a country (Reinhart & Rogoff, 2003; Page 1994). The scholars argue that a high debt level for a government, especially in emerging markets, restricts and hampers the economic growth of a country (Stiglitz, 1996). The reason why this effect is more obvious in emerging markets is due to the fact that the markets are less likely to finance high debt due to the fact that the emerging country more easily could go bankrupt and thereby leave the investors empty-handed (Benninga, 1998). Additionally, the scholars argue that paying off loans for governments in emerging markets are more difficult because of relatively higher borrowing costs, which leave less capital to financing growth in the country through for instance expansionary fiscal policy.

Hence, given the argument of the scholars that lower debt to GDP is beneficial for a government in an emerging market I expect observing an inverse relationship between the return on investment for the VC and PE funds and the debt to GDP of the central governments.

The data analysis shows that the unstandardized coefficient of debt of GDP is -0.001 (cd. 6.1). The t-statistic it is -3.408, and the p-value is 0.001, thus the coefficient is statistically significant (Appendix 6). The size of the coefficient, namely -0.001, gives the size of the effect that the debt level has on the return on investment. Initially, we note that the sign on the coefficient is negative signaling that the debt to GDP of the country has an inverse relationship to the return on investment, thus, a higher debt level corresponds to a lower return on investment for the funds. This observation is compatible with the economic theory. In regards to the size of the effect, the debt coefficient shows that when the debt to GDP goes up by one percentage point, then the

return on investment decreases by 0.001, hence, 0.1 percentage point, holding all other independent variables stable. Instantaneously, even though that the debt to GDP correlation with the return on investment is significant, the effect seems low. However, although one percentage point change in debt to GDP only affects the return on investment by 0.1 percentage point, the relation has to be viewed in the perspective that the effect might not be highly different between having a debt of 56% or 57% of GDP, however, a difference between for example countries with 20% debt and 80% debt does in fact influence the return on investment for the VC and PE funds.

Hence, the negative correlation between debt to GDP and the returns of the funds is compatible with the arguments of the academic scholars.

6.2.2 Productivity

The second explanatory variable in the regression equation is productivity. Productivity in this context is a productivity index for a country, where one represents full productivity and zero represents that the country is not in any way productive. The quantitative data index is gathered from the United Nations Industrial Development Organization.

In the academic literature, the overall consensus, across different schools of thought, is that a high productivity level enhances the economic growth in a country, and consequently the shareholder value of the companies (cd. 4.2.2.2). An increase in productivity represents either a greater output or a lower input to generate the same output (Krugman, 1994; Kim & Lau, 1993; Kokko, 2006). Furthermore, scholars argue that an increase in productivity is one of the best facilitators for economic growth (Hall & Jones, 1999; Swan, 1956; Jajri & Ismail, 2010). Hence, I expect that high productivity measures correspond to high returns on investments for the VC and PE funds.

The unstandardized coefficient of the productivity variable is 0.182 (cd. 6.1). Additionally, the t-statistic of the parameter is 3.836, and the p-value is 0.000, thus, the coefficient is significant (Appendix 6). The coefficient is positive and signals that a higher productivity level responses to a higher return on investment, which is harmonious with the argument presented by the scholars. The coefficient value of 0.182 means that if the productivity level increases by a factor of one, then the return on investment would increase by a level of 0.182 or 18.2% percentage points, if we hold all other independent variables stable.

However, in the productivity index provided by the United Nations Industrial Development Organization the maximum change would be one, since the index goes from zero to one. A change this large is therefore highly unlikely to occur in datasets. Looking at the data on the independent variables for the different countries, we note that the largest change in productivity level occurs in South Korea, where the level

changes from 0.476 in 1993 to 0.613 in 2010 (Appendix 3). Hence, it took 17 years to deliver an increase in productivity of 0.137, and this rise only relates to 2-3 percentage points increase in return on investment.

Yet, as seen in the section examining descriptive statistics of the model, the average of on investment for the 418 observations is 18.2% (cd. 5.1). Furthermore, the productivity level is only a part of the explanation of the variation of the dependent variable. Hence, in this perspective, the productivity level is important in regards to the return on investment.

Thus, the empirical findings show that an increase in productivity is positively related to the returns of the funds as we expected based on the arguments in the literature.

6.2.3 School enrollment

The third independent variable included in the regression equation is school enrollment. The quantification of school enrollment is a ratio of children in the certain age group who are enrolled in secondary school. The data is gathered from the electronic library of the World Bank.

In the literature review we note that the institutional academics argue that there exists a positive correlation between the educational level and economic growth rates in a country (cd. 4.2.2.3). The majority of scholars in this field of research have concentrated on how investments in education enhance the economic growth of a country (Page, 1994; Dollar, 2008; Stevens & Weale, 2003). Thus, when the population of a country has a basic foundation in math, science and languages, the economic growth increases. Given the arguments of the academics I expect a positive correlation between the school enrollment, and the returns of the funds.

The unstandardized coefficient of school enrollment is 0.001, and the t-statistic of 3.467 and p-value of 0.001 which shows that the coefficient is statistically significant (Appendix 6). Firstly, since the coefficient is positive, the relationship between school enrollment and return on investment is positive as the scholars argued. Secondly, when the explanatory variable increases by one, the return on investment increases by 0.001. The explanatory variable is a percentage showing how many percent of the total population of children in the age group is enrolled in secondary enrollment. Thus, one percentage point change in secondary enrollment only affects the returns of the VC and PE funds by 0.1% percentage point. However, Thailand have managed to increase the ratio by 12 percentage points in 11 years, Turkey by 24 percentage points in 12 years and Brazil by 18 percentage points over 13 years, which shows that this effect can actually affect the return on investment significantly, especially given that most of the VC and PE investments have a time period of 4-7 years (Appendix 3).

Thus, there exists a positive correlation between the secondary school enrollment and the returns of investments of the funds, as we would expect after having studied the literature.

6.2.4 Unemployment

The fourth independent variable included in the regression equation is unemployment. Unemployment is calculated as a ratio of the share of the population that is without work while seeking employment. The data on the variable is collected from the library of the World Bank.

Generally speaking the literature reasons that a low unemployment rate and economic growth are strongly related (cd. 4.2.2.1). Nevertheless, some scholars argue that an unemployment rate around structural unemployment is destructive and detrimental to economic growth, because it impedes the competitive edge of the corporations given that it provides the workers and labor unions with too large bargaining power due to the demand for workers is higher than the supply (Manning, 1992; Choi, 2007). Yet, this tendency has primarily been identified in Western countries (ibid.). The reason is that commonly the unemployment rates are higher in emerging markets than the structural unemployment, hence, the workers are still willing to work for lower salaries. Furthermore, even though the unemployment generally is low in emerging markets, the wealth of the individuals is also still low, and this provides an incentive for the workers to be productive and hereby preserve the competitive level of the economy (Lindbeck, 1996). Hence, I expect to experience a negative correlation between high unemployment and the return on investment for the VC and PE funds.

The unstandardized coefficient of the unemployment variable is -0.003, while the t-statistic is -6.152 and the p-value is 0.000, hence, the independent variable is statistically significant (Appendix 6). The negative coefficient demonstrates that an increase in the unemployment rate results in lower returns. Additionally, the value of -0.003 insinuates that when the unemployment rate rises by one percentage point in the country of interest, the return on investment for the VC and PE funds falls by -0.003, or -0.3 percentage point, if all other independent variables are constant.

Intuitively, -0.3 percentage point change in the returns for the VC and PE funds might not seem dramatic. However, the sizes of the investments of the large funds are massive, thus, a small change impact the shareholders tremendously. For instance, examining the Canadian fund that invested in the health care industry in South Africa in 2003 and sold its shareholder rights in 2009, we note that they generated a return on investment of 34.0% of their 50.4 million US dollar investment, hence, a return on 17.1 million dollars (Appendix 2). If, holding all other explanatory variables constant, the unemployment rate had increased by one percentage point in South Africa, the Canadian fund would have had a return on investment of 33.7% instead of 34%. Hence, the return of investment would have been 16.9 million dollars, which is 200,000 U.S.

dollars less than what they actually generated. It is important to notice that this only was a change of one percentage point in the unemployment rate and yet resulted in a notably lower return for the shareholders.

The negative correlation between increase in unemployment and return on investment for the funds corresponds to the arguments presented in the literature.

6.2.5 Leveled and squared exchange rate

The fifth explanatory variable in the model is the real effective exchange rate. The real effective exchange rate is a measure of the currency of the country weighted against several relevant foreign currencies divided by a price deflator. The data has been gathered from the World Bank.

A stable and constructive export climate is essential for economic growth, especially in the emerging markets where the domestic market is particularly limited in terms of size (cd. 4.2.3.1). In regarding to providing a stable export climate, academics argue that a stable real exchange rate is beneficial for economic growth in the country (Dollar, 2008; Kokko, 2006). A stable real exchange rate towards the primary trade partners benefits export companies and make long-term strategic planning achievable (ibid.). The data from the World Bank is index numbers using 2005 as the base number of a 100. Hence, a stable real exchange rate would result in an almost non-existing positive or negative correlation between the exchange rate and the return on investment.

As explained in the methodology and empirical findings section, I square each significant independent variable to test for a possible non-linear relationship (Appendix 12). The theory on statistic methods recommends keeping both variables in the regression since they both affect the dependent variable, if the squared variable is significant (Agresiti & Finlay, 2009). The unstandardized coefficient of the leveled exchange rate variable is -0.002, while the t-statistic is -2.041 and a p-value of 0.042. The coefficient of the squared exchange rate is 3.009E-5 with a t-statistic of 4.390 and a p-value of 0.000 (Appendix 6).

Given that both the leveled and squared values of -0.002 and 3.009E-5 are affected by the level of exchange rates I examine how the two variables in combination affect the return. In order to grasp how the level of exchange rate affects the returns, I calculate the influence in Excel. In the graph below, I have visualized how the level of the exchange rate is correlated to the returns generated by the funds as scatter plots. Looking at the graph we note that the higher the level of exchange rate, the higher the return for the funds. Hence, there is a positive relation between exchange rate and the return on investment. This means that an appreciation of the exchange rate weighted against the currencies of the main trading partners corresponds to an increase of the returns on investments for the VC and PE funds.

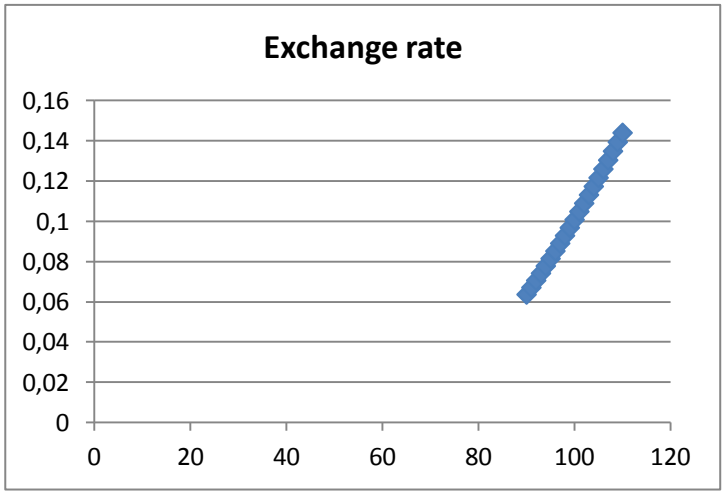

Figure 13: Exchange rate factor

An increase of one in the exchange rate holding all other explanatory variables constant corresponds to an increase of 0.004 or 0.4 percentage point for the return on investment.

The fact that a slight appreciation in the real exchange rate is advantageous for the returns is compatible to the arguments presented by some academics (Lin & Li, 2009). A favorable export climate is positive for emerging markets, and due to the fact that many of the emerging markets have implemented floating exchange rates, a constant and considerable positive current account will cause the exchange rate to appreciate slightly (Brealey et al., 2008; Moffett et al., 2008).

Thus, since the majority of emerging markets are export-oriented countries, a slight increase in the real exchange rate is beneficial for the return of the VC and PE funds.

6.2.6 Credit from banks

The final independent variable in the regression equation is credit provided by banks. The domestic credit provided by the bank sector as a ratio of GDP. The data is collected from the World Bank.

The literature argues that a liberal and effective credit market is essential for economic growth (cd. 4.2.4.2). The measure utilized by the World Bank is suitable due to the fact that it measures how much of the total lending of capital in the country that has been facilitated by banks. A liberal credit market open to entrepreneurs, investors, businesses and private households provide a platform for investments and consequently for growth (Schumpeter, 1912; Sanfiso, 2007; Page, 1994; Radelet, 2006). Hence, I expect a positive relationship between credit provided by banks as a percent of GDP and the returns on investments for the VC and PE funds.

The unstandardized coefficient of the variable is 0.001 with a t-statistic of 7.376 and a p-value of 0.000. The positive coefficient shows that if the credit provided by banks increases, the returns increase as well. The level of 0.001 signals that when the credit provided by banks of GDP increases by one percentage point, holding all other explanatory variables stable, then the return on investment will increase by 0.001, or 0.1 percentage point. Looking at the data from the World Bank, we note that credit provided by banks as percent

of GDP has increased radically in South Africa, South Korea, Thailand, India and Brazil (Appendix 3). The countries have in a ten years period experienced increases of more than 20 percentage points. Given that one percentage point increase will result in an increase of 0.1 percentage point on the return on investment, the positive correlation between credit provided by banks and return on investment is important to acknowledge for the VC and PE funds.

Thus, the empirical findings show a positive correlation between the credit provided by banks in the emerging market and the returns on investments for the funds, as expected given the arguments presented by the scholars.

6.3 Excluded independent variables

The aim of modeling the significant independent variables is to explain the variation of in the return on investment for the funds based on the country-specific factors of the emerging market of interest. Initially, I started out with 17 individual independent variables, however, 11 of these parameters were not statistically significant and consequently they were excluded from the final model (Appendix 11). These 11 factors are: government savings, government investments, inflation level, distribution of wealth, labor force, literacy rate, tariffs, export of goods and services, corruption level, capital markets and infrastructure. Intuitively, excluding 11 out of 17 independent variables seems relatively dramatic. Yet, the process of pooling all independent variables and hereafter excluding the insignificant explanatory variables based on having a p-value below 0.05 is commonly used as a methodological approach in economics (Agresitti & Finlay, 2009).

There are different explanations for why these excluded parameters were not statistically significant. An explanation could be that some the theoretical arguments are not applicable to the case of returns for VC and PE funds in emerging markets. The literature review is, as earlier mentioned, based on theory on economic growth, and therefore not directly linked to returns on investments. Therefore some of the theoretical arguments that are valid for economic growth simply are not related to the returns of the funds investing in emerging markets.

Furthermore, some of the theoretical arguments presented in the literature review are difficult to quantify. For instance, the academics argue that a solid infrastructure system in the country will increase the economic potential for growth (cd. 4.2.4.3). Nevertheless, the level of infrastructure is reasonably complicated to quantify in a feasible way with the perspective of getting a reliable data source. In this scenario a measure from the World Bank of the road sector energy consumption as percent of the total energy consumption in the country was applied. This measure is highly indirect, and is dependent on factors separate from

infrastructure like general energy consumption in country. Therefore I potentially have excluded significant independent variables due to a incorrect quantification method.

However, the purpose of the analysis is to examine the relationship between country-specific factors and the returns on investments for the VC and PE funds, and further to create a model with capabilities of predicting returns. Thus, given that the adjusted R^2 of the model is 59.3%, the model has the properties of explaining a noteworthy part of the variability in the return of the funds. The fact that the 11 independent variables have been excluded does therefore not reduce the reliability and validity of the model.

6.4 Applicability of model

In addition to explaining the variability, the regression model can also help the funds to predict part of the returns they are to generate if they invest in a particular emerging market. In this section I discuss how the funds by using the developed model complimentary to traditional financial models can enhance their chance of making a profitable investment.

6.4.1 Complementary approach

VC and PE investments in emerging markets differ from investments in mature markets given that country-specific factors determine a notable part of the returns. The model accentuated demonstrates that country-specific factors can explain 59.3% of the variability in the returns on investments for the funds investing in emerging markets. Given that the model has 59.3% explanatory power, it would be advantageous and constructive for the funds to initially examine the countries of interests. For instance, if the fund considers investing in the South East Asian region, then the model has the potential of narrowing down the scope to a single country. Hence, the model gives an indication of where the best possible investment of for the funds would be.

By initially applying the regression equation and thereby decide on one country of interests it reduces the workload for the analysts. The process of identifying relevant operating companies to invest in is now more manageable due to the fact that the VC and PE funds only has to focus on one country. This is a considerable advantage given that the analysts do not need to analyze different legal obligations, tax laws and political situations for more than one country.

After having decided on an emerging market there is a need to incorporate traditional financial models, since the developed regression equation cannot evaluate what operating company to invest in. The process of the valuation of potential operating companies is done by applying financial models. These acknowledged

models and frameworks can evaluate the financial potential of the company, and thereby these models add value to the regression equation.

Given that the regression equation narrows down the focus to a single emerging market, and the traditional financial models can perform valuation of the operating companies, the frameworks are compatible and complimentary. Thus, by utilizing the supplementary approaches, the investment officers in the VC and PE funds expand their financial toolbox.

6.4.2 Evaluation of company

The initial step for the VC and PE funds is to evaluate what emerging market to invest in. In order to make a valid projection concerning where to invest, the investment officers are to examine the best investment climate based on the regression equation developed. To exemplify how to perform the analysis I have randomly chosen four emerging markets, namely; Egypt, Indonesia, Russia and Chile, and can hereby estimate what country to focus on. In order to perform the calculation, I generate the data on the factors from the World Bank, and insert them into the regression equation:

$$ROI = -0.05 - 0.001_{Debt} + 0.182_{Productivity} + 0.001_{School\ enroll.} - 0.003_{Unemployment} - 0.002_{Exchange\ rate} + 3.009E-5_{Squared\ Exchange\ rate} + 0.001_{Credit\ banks} + \epsilon_i$$

In the table below, I have the data from the four emerging markets, and calculated the return. However, note that the return is only an estimation, and the regression equation only has an prediction power of 59.3%.

	Egypt	Indonesia	Russia	Chile
Debt to GDP	85.8	26.1	9.4	62.7
Productivity	0.302	0.413	0.387	0.272
School enrollment	83	77	91	88
Unemployment	10.4	7.1	7.5	8.1
Exchange rate	109.3	108.8	125.9	108.4
Squared exchange rate	11946.5	11837.4	15850.8	11750.6
Credit banks	69.4	36.5	38.6	90.3
Result	*0.167*	*0.138*	*0.222*	*0.121*
ROI %	*16.7%*	*13.8%*	*22.2%*	*12.1%*

Figure 14: Returns in four emerging markets

Looking at the table, we note that the VC and PE funds investing in Egypt could expect a return on investment around 16.7%, 13.8% in Indonesia, 22.2% in Russia, and 12.1% in Chile. Hence, it would be advantageous and valuable to focus on operating companies in Russia. Naturally, the regression equation is based on an average, however, it does provide the VC and PE funds with a concrete tool to evaluate the

attractiveness of the countries and by excluding some possibilities reducing the needed resources to perform a thorough analysis. The return of 22.2% for Russia is established on the average of an investment period of approximately 6.1 years, since this was the average time of investment in the empirical data from the 418 survey answers (Appendix 4).

6.4.3 Evaluation of operating company

Based on the results of the evaluation of the four potential emerging markets, the VC and PE funds now focus on Russia. However, in order to perform a valuation and strategic analysis of the operating companies in the emerging markets, they need to apply supplementary traditional financial models.

The valuation of the target for the acquisition is highly important, since offering the right price for the shares strongly affect the overall return for the fund (Sudarsanam, 2010). To facilitate a meaningful financial analysis the funds require an overview of the incremental cash flows and earnings (Young, 2009). Yet, what financial model to apply depends on what financial information that is available. For the prospects for VC and PE funds investing in emerging markets, some of the operating companies of interest are likely to be private, thus, they have no benchmark valuation provided by the stock market oppositely to the public companies.

A commonly used valuation method applied by funds when evaluating public companies is price/earnings ratio (Spliid, 2007). This ratio expresses the relation between the earnings for equity of the firm, and its equity market capitalization: $PE\ ratio = \frac{Market\ value\ of\ equity}{Earnings\ for\ equity}$. The P/E method gives an indication of whether the operating company is expensively or cheaply valued, yet, it is mostly meaningful if compared to the competitors in the industry. Another acknowledged and widely used valuation method is Tobin's Q, which is an asset-based valuation: $Tobin's\ Q = \frac{Market\ value\ of\ firm}{Replacement\ cost\ of\ its\ assets}$. The replacement cost of an asset is the cost of acquiring an identical asset (Spliid, 2007). Hence, if Tobin's Q exceeds one, then the excess value probably is due to the fact that the stock market incorporates the value of growth opportunities. Lastly, when comparing equivalent operating companies VC and PE funds frequently apply either internal rate of return (IRR) or net present value (NPV) analyses in order to calculate what company that would generate the highest possible return for their shareholders. These models discount future cash flows and incorporate a discount factor to facilitate comparable results, and the fund consequently invests in the company with the largest possible return (Young, 2009).

For private companies, the investment analysts of the funds do not have the possibilities of applying financial models where market values are a part of the equation given that the companies are not valued by the stock

market. A widespread approach used is the cost of capital method, where the analysts estimate the weighted average cost of capital (WACC). This balance sheet method provides a concrete estimation of the risk profile of the company, and shows how the company has financed its operations (Sudarsanam, 2010). The WACC model is especially meaningful if it is combined with an analysis of the earnings before interest, taxes, depreciation and amortization (EBITDA), because it shows how the growth rates has been funded. In addition to the financial valuation models, the VC and PE analysts perform methodical and comprehensive due diligences of respectively the commercial market potential, legal barriers and opportunities, and tax-related local laws (Spliid, 2007).

Thus, by using the regression equation developed complimentary to the traditional financial models, the VC and PE funds have the opportunity to evaluate the attractiveness of the emerging market, and to perform a valuation of the potential operating companies.

7.0 Discussion

In this chapter I discuss whether there are other country-specific effects than the ones captured in the regression model as independent variables that are relevant for determining the level of returns for the VC and PE funds. I analyze this by incorporating dummy variables.

7.1 Country dummy variables

In the regression equation in the analysis section, the independent variables could explain 59.3% of the variability of the returns of the funds investing in emerging markets. The independent variables are generic and applicable, nevertheless, given that the eight emerging markets are contextual different I expect that there are country-related effects influencing the returns of the funds, which the model cannot capture. Hence, I examine and discuss whether other country-specific factors can increase the explanatory power of the regression equation.

To facilitate this test, I include intercept dummy variables to indicate the presence or absence of country-specific effects beyond the variables included in the analysis. Additionally, I include slope dummies to test whether the effects of the independent variables in the regression equation differ across countries. In order to avoid the dummy variable trap I include country dummy variables for South Africa, South Korea, Thailand, India, Poland, Brazil and Turkey, however, not for Argentina. Thus, each dummy coefficient is the effect of the respective country related to Argentina that thereby becomes the control category.

7.1.1 Intercept dummies

Firstly I examine if intercept dummies would improve the overall regression performance by using SPSS:

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,838[a]	,703	,693	,0839892

a. Predictors: (Constant), Turkey, Squared exchange rate, Poland, Unemployment, Brazil, India, Thailand, Debt, South Africa, Credit banks, Productivity, School enrollment, South Korea, Exchange rate

b. Dependent Variable: ROI

Figure 15: Model summary including intercept dummies

As seen in the model, the adjusted R^2 has increased to 0.693, hence, the model can explain 69.3% of the variability in the returns of the funds investing in emerging markets. Furthermore, the annova table shows that the model is significant:

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6,727	14	,481	68,119	,000[a]
	Residual	2,843	403	,007		
	Total	9,570	417			

a. Predictors: (Constant), Turkey, Squared exchange rate, Poland, Unemployment, Brazil, India, Thailand, Debt, South Africa, Credit banks, Productivity, School enrollment, South Korea, Exchange rate

b. Dependent Variable: ROI

Figure 16: Anova including intercept dummies

The value of significance is 0.000 and it can be concluded that the model is statistically significant. The model including intercept dummies has a greater explanatory power than the model in the analysis section, hence, the independent variables cannot capture all country-specific effects.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,107	,059		-1,816	,070
	Debt	-,002	,000	-,276	-7,036	,000
	Productivity	,332	,045	,320	7,304	,000
	School enrollment	,002	,000	,232	4,877	,000
	Unemployment	-,001	,000	-,119	-3,373	,001
	Exchange rate	-,001	,001	-,144	-1,352	,177
	Squared exchange rate	2,071E-5	,000	,362	3,367	,001
	Credit banks	,001	,000	,326	8,045	,000
	South Africa	-,073	,022	-,171	-3,318	,001
	South Korea	-,185	,021	-,440	-8,968	,000
	Thailand	-,066	,023	-,142	-2,901	,004
	India	,025	,020	,055	1,283	,200
	Poland	-,038	,019	-,079	-1,966	,050
	Brazil	-,027	,018	-,057	-1,441	,150
	Turkey	,013	,018	,027	,706	,480

Figure 17: Coefficients including intercept dummies

Examining the coefficients in the regression model we note that some of the country dummy variables are more significant than others. Especially South Africa, South Korea and Thailand are significant with considerably low p-values.

However, where Poland is close to significant, Brazil, India and Turkey are not. Furthermore, Argentina, as the omitted dummy, is represented as the constant if all other dummy variables are zero, and thereby is not significant with a value of 0.070.

7.1.2 Slope dummies

In addition to examining country-specific effects beyond the independent variables in the model, it is further relevant to determine whether the effects of the parameters differ between countries. For instance the level of debt to GDP might have a larger effect on the returns in Argentina than Turkey. In order to test this I multiple the country dummies to each independent variable, while maintaining the intercept dummies in the model.

However, when including the slope dummy variables in the regression, the performance of the regression model does not improve. The significance level is a little smaller, and the explanatory power is 68.1% compared to 69.3% when excluding the slope dummies (Appendix 8). Furthermore, looking at the independent variables, none of the parameters have significant levels (ibid.). Hence, due to the deterioration in the regression performance, and the insignificant independent variables, I conclude that the effects of the parameters do not differ notably across the tested emerging markets.

7.1.3 Country-related events

The two previous sections have shown that even though the effects of the specific independent variables do not differ across the dataset, the independent variables cannot capture all country-related effects. Hence, I discuss what factors and events that have influenced the returns. The purpose is to determine what kind of factors that have this influence in order for the investment officers of the funds to identify comparable events in the future.

In the discussion I focus on the countries that have significant coefficients, namely, South Africa, South Korea and Thailand, and additionally I qualitatively evaluate Argentina due to the fact that it is the dummy control group.

7.2 Discussion of countries

In this qualitative section I discuss what context specific factors in the countries that the model could not capture. The discussion is based on thorough examinations of the economic history of the respective countries.

7.2.1 Argentina

The Argentine country dummy variable is in the regression model presented as the constant. The intercept is -0.107, if all other country variables are represented as zero. It is relevant to examine what events in the country that causes the intercept to be negative after controlling for the country-specific factors in the regression equation.

The economy of Argentina was according to the IMF one of the fastest growing economies from 2006 to 2011 (IMF, 2012). Argentina is highly rich on natural resources such as petroleum, zinc, cobber and tin, has a well-educated population, a beneficial export climate and a diversified industrial base (Zhang, 2001). Nevertheless, the negative intercept signals that the economy has experienced problematic country-specific events in the past three decades, which is the time period the dataset covers.

From 1975 to 1990 the economic growth rates of Argentina were highly volatile as seen in the graph below, which is based on numbers from the World Bank (World Bank, 2012). The reason for the fluctuating growth rates, despite the favorable premises in terms of natural resources and an educated population, was a constant balance of payment crisis (Paolera & Taylor, 2003). The balance of payment problems occurred due to extremely high foreign debt interest payments, tax avoidance by corporations and private households, and because of capital flight (ibid.). The excessive inflation levels between 120 and 3,000%, and the fluctuating exchange rate caused the capital flight and consequently the crisis with the balance of payments, because both domestic and foreign investors categorized the investment climate as too risky (Zhang, 2001).

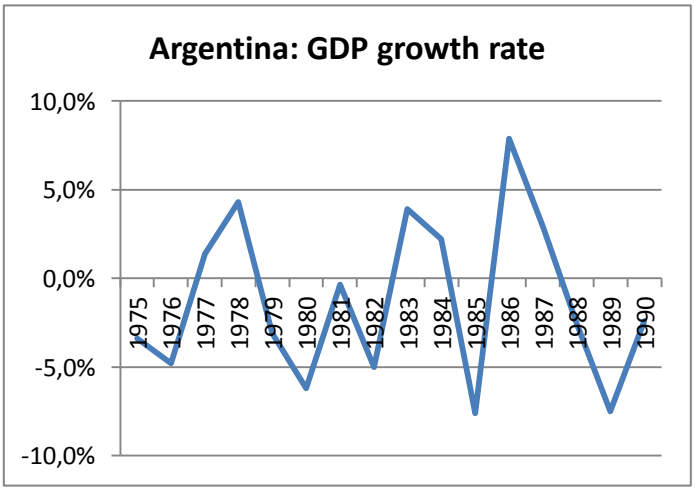

Figure 18: GDP growth rate of Argentina

In order to restrain the excessive inflation level and control the volatile exchange rate, the Argentine government pegged the local currency, peso, to the U.S. dollar in 1991 (Paolera & Taylor, 2003). The fixed

exchange rate caused the peso to be more stable towards the major export markets, and furthermore, it made the monetary policy disciplined, and thereby limited the money supply dramatically, which triggered the inflation level to decrease. The fixed exchange rate additionally lowered the interest rates in Argentina, stimulated investments and regained investors trust in the peso (ibid.).

Argentina has since 1991 predominantly experienced favorable economic growth despite recessions in 1999 caused by the huge devaluation of the currency in Brazil, which by far is the largest trading partner of Argentina, and in 2001 due to the global financial crisis triggered by the bubble in the information and technology sector (Radelet, 2006). From 2003 the growth rates of Argentina has been highly impressive.

Hence, even though the economic growth of Argentina in the past nine years has been high, the negative impact by excessive inflation and balance of payment crisis until 1991 cause the intercept of the country dummy to be negative.

7.2.2 South Africa

In the regression model the intercept is -0.107, while the South African coefficient is -0.073 (cd. 7.1.1). In this case when the South African country dummy variable is present, the coefficient of South Africa is the additional effect on top of the control group variable of Argentina: -0.107-0.073 = -0.180. Hence, if all the independent variables in the regression equation are zero, the investment in South Africa would be lower than the investment in Argentina. It is therefore relevant to analyze what factors or events beyond the explanatory variables of the model that have influenced the returns for the VC and PE funds investing in South Africa.

Looking at the economic history of South Africa there has been one predominant event that has determined the economic growth of the country over the past two decades namely the democratic transition in 1994. South Africa experienced negative growth rates in the majority of the years from 1982-1993 even though the population size increased (Plessis & Smit, 2006). The reason for the decline was primarily due to the strict race-based policy known as apartheid, where the difference between the privileged white community and the impoverished black population intensified (ibid.). The apartheid system caused the international community to sanction South Africa in the beginning of the 1980s, and the trade and financial sanctions initiated a negative economic growth trend.

Yet, in 1994 South Africa held its first multi-racial election which marked the end of apartheid, and Nelson Mandel, the as leader of the African National Congress, was elected president four years after he was released from prison (Jones & Inggs, 2003). The election changed the economic situation of South Africa notably due to the follow-on effects it instigated.

The GDP growth rate of South Africa has from 1994 until 2009 been positive every year (World Bank, 2012). Examining the graph on the left, which is based on numbers from the World Bank, we note there was a recession from 1990 until 1993, but after the election of Mandela in 1994, the economic growth of South Africa strengthened (ibid.). After the election in 1994, the trade and financial sanctions from the international community ended (Plessis & Smit, 2006). The capital inflow to South Africa increased rapidly in the late 1990s due an increase in foreign direct investments (FDIs) primarily from the US and Western Europe (Dowrick & DeLong, 2005). Furthermore, the private investments in machineries in South Africa grew radically and improved the competitiveness of the domestic companies (Plessis & Smit, 2006). The FDIs and the national investments combined with the open economy consequently led to an increase in export. South Africa's numerous natural resources and the open economy in combination with the enhanced productivity facilitated a good export climate for commodities (ibid.).

Figure 19: GDP growth rate of South Africa

Nonetheless, even though South Africa has experienced economic growth in 14 out of the past 15 years, the growth rates are well below the growth rates Argentina has had since 2003 (World Bank, 2012). The growth of South Africa has been sustainable, however, not as rapid as Argentina. Furthermore, until the election in 1994 where South Africa reclaimed legitimacy from the international community and the financial and trade sanctions were removed, the country had had more than a decade of low economic growth and years of deep recession. The regression model is based on a dataset that goes back to the beginning of the 1980s, hence, the years until 1994 in South Africa with poor economic growth has caused the intercept to be more negative than Argentina (Appendix 7).

Overall, the trade and financial sanctions of South Africa before 1994 and the reclaimed legitimacy from the international community have affected the economic growth of the country and consequently the returns on investments for the VC and PE funds investing there. Yet, the country-specific event of the multi-racial election in 1994 could not be captured by the regression model developed in the analysis section.

7.2.3 South Korea

Where Argentina as the base category is represented with an intercept of -0.107 South Korea has an intercept of -0.185 (cd. 7.1.1). Hence, the starting point of South Korea is -0.292, which is notably lower than Argentina and also South Africa. In the discussion I therefore focus on what factors and events have caused South Korea to have lower economic growth than what the independent variables can explain.

After the Korean War ended the South Korean economy experienced rapid hyperinflation, yet, the economy stabilized after the US provided massive financial aid over a five-year time period. Hereafter South Korea experienced excessive growth rates in the 1960s, 70s and 80s, where the country became an industrialized country with a large manufacturing sector (Cho et al., 2007). The most notable factor for the industrialization of South Korea was the export-oriented strategy formulated in the 60s (Song, 2003). In 1988 export accounted for 40% of the South Korean GDP which is extremely high (ibid.). For comparison, the export of the neighbor country Japan accounted at the same time for 15% of their GDP. Additionally, the parliament decreased tax levels tremendously, hence, the tax income for the government accounted for less than 20% of the GDP. Nevertheless, due to the liberalized economy and the international trust in the South Korean economy, the government could borrow at low interest rates.

However, after three decades of rapid economic growth, South Korea experienced a dramatic decline in their growth rates in 1997. In 1997 the Asian Financial Crisis stroke the majority of the East Asian countries and Tiger Economies, and South Korea was the country with the most dramatic decrease in economic growth (Kwon, 2010). In the graph on the left, we note that the GDP growth rate decreased from 3.7% in 1996 to 1.3% in 1997 and -6.5% in 1998 (World Bank, 2012). There were two main reasons why South Korea was hit radically. Firstly, the countries, where the majority of the South Korean export was generated from, also experienced a crisis and therefore imported less which resulted in a current account deficit in 1998 for the first time in eleven years (Cho et al., 2007). Secondly, the financial sector in South Korea experienced a massive credit crisis which caused one-third of the merchant banks to liquidate (Kwon, 2010).

Figure 20: GDP growth rate of South Korea

The crisis in South Korea was a liquidity crisis, and the country needed a rapid infusion of hard currency reserves. The IMF and other institutional investors offered 58.4 billion U.S. dollars to bail out the country

(Cho et al., 2007). The requirements from the IMF were that South Korea had to save their financial sector and improve regulations in order to avoid a similar situation.

Looking at the data on the independent variables, we note that in 1997, 1998 and 1999, the productivity level increased, while the debt to GDP in addition the unemployment level was still very low (Appendix 3). Hence, the independent variables in the regression model from the analysis cannot capture how the financial crisis hit South Korea and thereby decreased the economic growth of the country, yet, this event is depicted by the country dummy variable.

7.2.4 Thailand

The intercept value of the Thailand dummy variable coefficient is -0.066, and given the constant of -0.107, the intercept for Thailand is -0.173. Hence, the starting point is lower than Argentina, however, higher than South Africa and South Korea. I discuss what qualitative factors in Thailand that the independent variables of the regression model cannot capture.

From 1985 to 1996 Thailand got defined as a Tiger Economy due to the impressive average annual economic growth rate at 10.4% (Leturque & Wiggins, 2010). The impressive growth record occurred after Thailand opened and liberalized its economy in 1984 (ibid.). Since this period Thailand has experienced two notable recessions namely during the Asian Financial Crisis in 1997 and during the international financial crisis in 2009. However, in both recessions, Thailand managed to quickly recover the economy (ibid.).

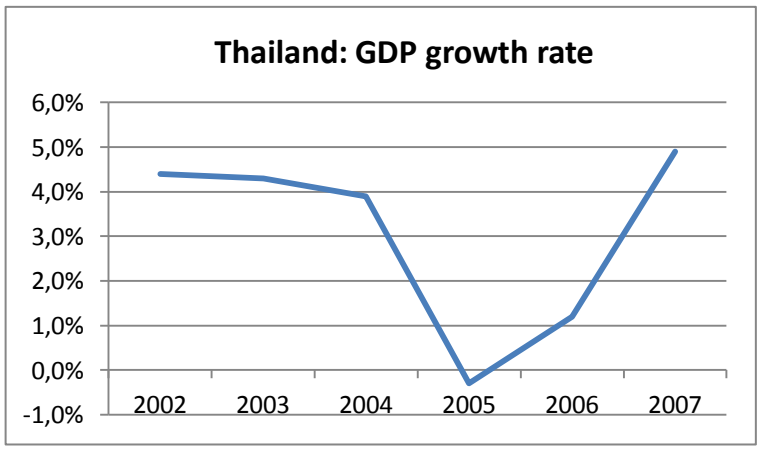

Figure 21: GDP growth rate of Thailand

The main country-specific factor that cannot be captured in the regression model is tourism. Tourism accounts for a larger part of the GDP of the economy of Thailand than any other Asian nation (IMF, 2011). In 1998 the tourism industry in Thailand started to grow tremendously and already in 2000 tourism accounted for almost 6% of the GDP (Brickshawana, 2003). The major effect that tourism has on the economic growth can be observed in the graph (World Bank, 2012). In December of 2004 one of the worst natural disasters ever experienced in Thailand occurred when a major tsunami stroke the West coast. Due to the disaster that killed thousands of people, significantly fewer tourists visited Thailand in 2005. Looking at the graph we note that from an

economic growth rate of approximately 4% in 2004, the growth rate of 2005 was negative. The growth rate did increase in 2006 to 1.3%, nevertheless, the economic growth of Thailand was affected by the fewer tourists visiting in 2005 and 2006 due to the tsunami disaster.

Thailand has during the past 12 years been successfully and rationally exploiting the tourism resources. The country has managed to capitalize on their favorable climate, relatively stable political situation despite the military coup in 2006, and the cheap currency for Westerners. The tourism sector has been contributing to the economic growth of Thailand (Dritsakis, 2004). Firstly, the high level of tourists has decreased the unemployment rate of the country. Secondly, the growing industry has contributed to an expansion in industrial and agricultural production in order to meet the demand from the tourists. Thirdly, the increase in business activity has helped domestic suppliers of for instance transportation, telecommunications and travel agents. Hence, the increasing tourism industry has beneficially influenced the aggregate income of Thailand. However, the intercept of Thailand is still negative. The reason is that the dataset tracks investments from the beginning of the 1980s, and the economic effect of tourism in Thailand did not take off until the millennium.

The tourism industry in Thailand is contributing to the economic growth in Thailand. Nevertheless, the country-specific effect is not captured in the regression equation by the independent variables.

7.3 Qualitative considerations and improvement of regression equation

In the sections above, we note that South Korea has a lower intercept than Argentina, South Africa and Thailand. However that is not synonymous with a lower return on investment in South Korea. In this section I discuss how the intercept and the independent variables determine the returns.

The levels of the coefficients of the independent variables in regression equation has changed slightly after having incorporated the country dummies, nevertheless, the positive and negative sign in front of the parameters are identical to the ones in the regression equation in the analysis section. The regression equation, when the scenario is absence of all categorical country dummies, looks as follows:

$$ROI = -0.107 - 0.002_{Debt} + 0.332_{Productivity} + 0.002_{School\ enroll} - 0.001_{Unemployment} - 0.001_{Exchange\ rate} + 2.071E-5_{Squared\ Exchange\ rate} + 0.001_{Credit\ banks}$$

Hence, the intercept naturally depends on the country of interest. I have based on the regression equation estimated the returns for the funds in Argentina, South Africa, South Korea and Thailand in 2000, 2005 and 2010 in order to discuss how much the starting point of the intercept of the four countries influence the returns (Appendix 3):

	Argentina	South Africa	South Korea	Thailand
2000	14.2%	19.1%	38.3%	13.8%
2005	24.5%	21.8%	36.4%	17.9%
2010	27.1%	25.2%	41.6%	19.3%

Figure 22: Returns of Argentina, South Africa, South Korea and Thailand

The table shows that in 2000, 2005 and 2010 the return would be considerably larger if investing in South Korea than in Argentina, South Africa or Thailand, even though the starting point for the equation is lower. Hence, the general framework conditions in South Korea were in 2000, 2005 and 2010 more favorable. Even though that the country dummies improve the performance of the regression model notably, the independent variables are still explaining the majority of the return for the funds.

However, as seen the graphs of GDP growth in the four sections on Argentina, South Africa, South Korea and Thailand, country-specific events can affect the economic growth of a country significantly in certain periods. If a VC or PE fund for instance had invested in South Korea in year 1996 before the Asian Financial Crisis, they would have experienced four years of recession, which naturally would have influenced the return of the fund negatively, especially due to the fact that the investment period of the funds traditionally is between four and seven years.

Therefore it is highly important for the VC and PE investment officers to not only consider the quantitative factors from the regression equation, but also to examining qualitatively whether certain events in the country of interest can affect the economic growth within the next couple of years. As seen in the sections above, a fixed monetary exchange rate system disciplined the financial policy of Argentina from 1991 and improved the economic growth, political stability and international legitimacy improved the growth rates of South Africa from 1994, the large exposure to the export market and weak financial institutions caused South Korea to experience years in recession, and finally a natural catastrophe affected the growth rates of Thailand due to its exposure to tourism.

Therefore the VC and PE funds should qualitatively consider how future country-specific events will affect the economic growth in addition to estimating the returns based on the quantitative regression model,.

8.0 Conclusion

VC and PE funds are investing more frequently in operating companies located in emerging markets than a decade ago, and this dissertation shows that the returns the funds generate are highly influenced by country-specific factors. The country-specific factors are influencing the economic growth of the emerging markets and consequently the returns of the funds.

The analysis of the dissertation concludes that one squared and six leveled independent variables are statistically significant and affect the returns on investments. The explanatory parameters are: debt to GDP, productivity level, school enrollment, unemployment level, leveled and squared exchange rate, and the level of credit in the country provided by banks. The study of effect shows that the regression model explains 59.3% of the variability in the returns of the funds investing in emerging markets. The independent variables are identified in the literature review that examines theories on economic growth, since economic growth evidently influences the returns of the funds. The behaviors of the independent variables are all according to a priori expectations based on economic arguments.

In the discussion section the dissertation concludes that other country-specific events, than the ones captured by the explanatory variables, influence the returns of the VC and PE funds. By including intercept country dummy variables in the regression model, the explanatory performance of the model improves radically. The regression equation including the dummies can explain 69.3% of the variability in the returns. Besides the country-specific factors represented by the independent variables, it can therefore be concluded that additional country-related events influence the returns of the funds. Hence, the funds need to evaluate qualitative events of the country in addition to the quantitative measures of the regression equation.

The dissertation concludes that VC and PE funds can utilize the regression model developed as an investment evaluation tool establishing what emerging market to focus the investment on. After having determined the country of interest, the investment officers can apply traditional financial models such as the NPV or WACC to evaluate the value of the operating company. The dissertation therefore concludes that the regression equation developed can assist VC and PE funds to assess the potential of investing in emerging markets, if used supplementary to conventional financial models.

9.0 Suggestion for future research

One main topic has come to attention while performing the analysis of the dissertation and that is industry of investment. The perspective of the developed regression equation is on factors on a country level, while the traditional financial models focus on parameters on a company level. Hence, the industry level might be favorable to explore to sophisticate the investment toolbox for the VC and PE officers.

The analysis does not distinguish between different industries, when estimating the relationship between the growth facilitators and the returns of the funds. However, the profitability of the industry of investment could potentially be highly important for the VC and PE funds due to the fact that profitability of the operating company and the return of the funds are closely correlated.

Profitability in industries is determined by factors such as the intensity of competition, the value of the product for the customers and the costs of the materials from suppliers. Furthermore, business cycles affect industries dissimilarly, for instance the pharmaceutical industry is by far less influenced by fluctuations than the motor vehicle industry. Different performances and characteristics indicate that industries might therefore be influencing the returns of the funds as well.

In the data generated from the survey each respondent has filled out in what industry their investment took place (Appendix 2). Hence, future research could focus on how the industry of the operating company in the emerging market affects the returns of the funds by utilizing the already existing dataset. If the industry coefficient is statistically significant, the industry model could build an academic and normative bridge between the regression model consisting of country-specific parameters and the traditional financial models analyzing internal factors. By capturing the essence of the level between the country and corporation, it might improve the evaluation tool.

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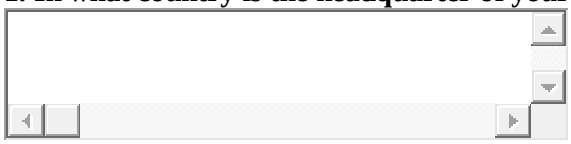
Appendix 1: Survey questions

1. In what country is the headquarter of your organization located?



2. What is the annual turnover of your company in U.S. dollars?

3. In what country (emerging market) did the investment take place?

4. In what industry did the company you invested in operate?

5. What was the initial year of investment?

6. What year did you receive your return from selling shareholding rights?

7. How much did your company invest in U.S. dollars?

8. How much did your company get in return in U.S. dollars?

Appendix 2: Survey results

South Africa – Survey answers in current US dollars

Location of headquarter	Annual turnover of VC or PE fund	Industry of investment	Initial year of investment	Year of selling shareholding rights	Size of investment	Return
Johannesburg, South Africa	4,300,000	Transportation	1988	1996	998,700	1,127,750
London, UK	113,750,000	Other	2005	2009	25,400,000	31,780,100
London, UK	113,750,000	Technology	1999	2005	2,045,000	2,215,300
Singapore, SI	75,600,000	Mining & Raw Materials	2001	2006	5,490,000	7,137,000
Cape Town, South Afria	18,500,000	Entertainment & Leisure	2004	2010	4,370,000	5,124,400
Johannesburg, South Africa	5,600,000	Other	2000	2005	1,300,400	1,835,000
Cape Town, South Afria	7,250,000	Other	1999	2004	2,891,500	3,890,100
New York, USA	175,000,000	Manufacturing	2001	2006	26,305,000	39,140,000
Johannesburg, South Africa	11,400,000	Manufacturing	1996	2004	3,409,000	3,135,300
Greenwich, USA	75,800,000	Mining & Raw Materials	2002	2005	19,850,000	23,450,000
Singapore, SI	31,000,000	Consumer Products	2005	2008	3,130,000	3,875,000
Toronto, Canada	190,600,000	Health Care	2003	2009	50,400,000	67,540,000
Johannesburg, South Africa	3,000,000	Transportation	2006	2009	543,000	715,750
Singapore, SI	1,275,000,000	Technology	1995	1999	245,300,000	269,570,000
Cape Town, South Afria	9,800,000	Technology	2001	2007	2,453,900	3,125,100
New York, USA	67,500,000	Financial Services	2004	2008	10,150,300	12,872,700
Cape Town, South Afria	98,000,000	Transportation	1987	1990	24,340,000	21,850,000
Moscow, Russia	1,650,000,000	Mining & Raw Materials	2003	2008	128,125,000	168,900,000
Zürich, Switcherland	123,400,000	Retail & Wholesale	2000	2008	17,400,000	24,875,000
London, UK	25,660,000	Financial Services	1992	1998	3,460,000	2,987,300
Los Angeles, USA	150,000,000	Mining & Raw Materials	2005	2009	23,750,000	24,560,000
Cape Town, South Afria	7,600,000	Transportation	1983	1990	1,385,000	1,394,500
Cape Town, South Afria	7,600,000	Technology	2004	2008	196,800	235,400
Paris, France	436,350,000	Technology	2001	2009	85,125,000	98,950,000
Durban, South Africa	6,760,000	Entertainment & Leisure	2000	2007	1,300,500	1,519,400
Johannesburg, South Africa	8,980,000	Financial Services	1985	1990	2,450,000	3,150,000
Hong Kong, SAR	123,900,00	Mining & Raw Materials	2003	2008	43,710,000	55,650,000
Frankfurt, Germany	29,800,000	Retail & Wholesale	2003	2008	9,300,000	11,690,900
Cape Town, South Africa	16,700,000	Entertainment & Leisure	2005	2009	10,380,100	11,576,000
London, UK	9,000,000	Media	1988	1994	920,910	876,500
Johannesburg, South Africa	10,400,000	Other	2004	2007	3,438,500	4,156,300
Johannesburg, South Africa	10,400,000	Other	1998	2002	1,175,000	1,465,250
Chicago, USA	766,460,000	Manufacturing	1995	1999	76,300,000	63,450,100
Paris, France	76,000,000	Mining & Raw Materials	2001	2008	13,240,000	16,540,000
Cape Town, South Africa	5,980,000	Media	2005	2009	1,930,500	2,325,600
London, UK	1,450,000,000	Financial Services	1987	1993	196,570,000	172,150,800
Dubai, UAE	912,000,000	Mining & Raw Materials	2001	2006	98,300,000	117,690,000

Rustenburg, South Africa	2,300,000	Other	1994	1999	1,450,000	1,250,400
Cairo, Eqypt	54,900,000	Energy	2004	2009	6,780,500	8,125,000
Johannesburg, South Africa	12,340,000	Retail & Wholesale	1998	2001	2,942,100	3,150,300
Paris, France	392,900,000	Media	2006	2010	19,090,000	22,867,300
Frankfurt, Germany	98,600,000	Financial Services	2000	2006	15,673,000	17,105,000
Stockholm, Sweden	63,000,000	Energy	2002	2007	7,650,000	10,215,000
Port Elizabeth, South Africa	3,230,000	Consumer Products	2007	2009	272,100	340,700
Durban, South Africa	4,750,000	Energy	1992	1999	2,340,700	2,670,000
Johannesburg, South Africa	8,900,000	Manufacturing	1999	2004	4,350,000	4,420,500
Fort Worth, USA	325,400,000	Mining & Raw Materials	2000	2005	35,760,000	31,250,000
Zürich, Switcherland	1,110,000,000	Entertainment & Leisure	2007	2010	230,450,000	283,451,000
Johannesburg, South Africa	14,500,000	Mining & Raw Materials	2005	2010	1,340,000	1,745,250
New York, USA	1,986,000,000	Retail & Wholesale	1999	2005	345,400,000	441,525,000
Cape Town, South Africa	8,750,000	Technology	2001	2007	1,350,000	1,430,000
Cairo, Eqypt	746,550,000	Mining & Raw Materials	2005	2009	72,380,000	87,560,000
Johannesburg, South Africa	23,500,000	Financial Services	1993	1998	2,405,500	2,451,600
Johannesburg, South Africa	23,500,000	Transportation	1984	1989	1,992,000	2,195,000
Paris, France	545,000,000	Consumer Products	2005	2010	5,450,600	6,100,000
Lusambo, Congo	56,400,000	Technology	2000	2006	4,660,000	4,250,000
Cape Town, South Africa	43,600,000	Mining & Raw Materials	2004	2008	3,550,100	2,985,000
Dallas, USA	367,000,000	Other	2003	2009	37,500,000	48,950,000
Cape Town, South Africa	8,750,000	Health Care	2005	2010	1,270,000	1,430,000
Dubai, UAE	500,000,000	Other	2004	2010	47,700,000	60,090,000
Johannesburg, South Africa	4,300,000	Retail & Wholesale	1984	1990	1,259,300	1,350,300
Toronto, Canada	381,150,000	Media	2007	2010	23,980,100	25,340,750
New York, USA	112,350,000	Technology	2000	2006	5,460,000	6,486,300
Port Elizabeth, South Africa	3,950,000	Transportation	2004	2009	898,900	1,102,500
Los Angeles, USA	360,000,000	Health Care	2004	2008	5,670,000	6,157,000
Cape Town, South Africa	12,345,000	Mining & Raw Materials	1992	1998	4,550,000	4,765,900
Johannesburg, South Africa	17,800,000	Other	1997	2000	3,460,000	3,650,200
Johannesburg, South Africa	13,450,000	Transportation	1999	2005	5,640,000	5,885,000
Cape Town, South Afria	10,500,000	Transportation	2007	2010	1,230,000	1,675,100
Kuwait City, Kuwait	895,000,000	Mining & Raw Materials	2006	2010	65,300,500	82,350,000

South Korea – Survey answers in current US dollars

Location of headquarter	Annual turnover of VC or PE fund	Industry of investment	Initial year of investment	Year of selling shareholding rights	Size of investment	Return
Bangalore, India	135,400,000	Technology	2003	2010	24,552,500	31,240,000
Seoul, South Korea	16,350,000	Transportation	2002	2009	2,350,000	2,145,000
Seoul, South Korea	16,350,000	Energy	2006	2010	4,800,000	6,485,000
London, UK	70,200,000	Financial Services	1999	2004	8,650,100	10,811,200

Tokyo, Japan	19,400,000	Consumer Products	2005	2009	1,964,000	2,258,600
New York, USA	20,005,000	Technology	1995	2002	1,950,100	2,115,000
Seoul, South Korea	5,670,000	Other	2000	2007	643,200	702,100
Frankfurt, Germany	65,350,100	Financial Services	1993	1999	12,350,000	13,585,000
Dubai, UAE	153,500,000	Technology	2005	2010	29,760,000	41,583,300
Paris, France	76,000,000	Transportation	2003	2009	9,450,000	13,240,000
Paris, France	76,000,000	Other	2000	2008	3,782,500	4,712,300
Hong Kong, SAR	121,250,000	Consumer Products	2002	2007	12,650,000	10,093,200
Amsterdam, Holland	29,300,000	Manufacturing	1994	1999	4,114,500	3,940,400
New York, USA	340,500,000	Transportation	2001	2008	74,640,000	98,243,500
Brussels, Belgium	12,475,000	Retail & Wholesale	1995	2002	1,985,250	2,025,900
Tokyo, Japan	17,210,000	Technology	2007	2010	4,182,600	5,462,400
Seoul, South Korea	29,450,000	Other	2003	2009	3,250,000	3,895,100
Dubai, UAE	912,000,000	Entertainment & Leisure	2008	2010	98,500,000	136,450,000
London, UK	109,800,000	Entertainment & Leisure	2002	2007	8,675,200	6,505,000
Busan, South Korea	5,435,000	Other	2000	2006	1,235,000	1,482,000
Seoul, South Korea	87,550,000	Health Care	1984	1990	6,990,000	7,240,000
Tokyo, Japan	132,475,000	Retail & Wholesale	1997	2002	27,300,000	28,940,000
Singapore, SI	25,000,000	Media	2005	2008	1,050,200	1,360,000
London, UK	1,450,000,000	Other	2001	2007	223,450,000	278,600,000
Bangalore, India	97,800,000	Consumer Products	2006	2010	20,500,000	31,250,000
New York, USA	129,100,000	Manufacturing	2006	2009	30,050,000	39,165,000
Dubai, UAE	91,345,000	Media	2000	2007	12,435,750	14,450,100
Busan, South Korea	2,300,000	Technology	2005	2009	156,800	210,600
Amsterdam, Holland	19,930,800	Other	1992	1998	3,150,000	3,610,000
Hong Kong, SAR	54,500,000	Manufacturing	1994	1999	2,575,100	2,763,200
Hong Kong, SAR	54,500,000	Consumer Products	2007	2010	4,200,000	5,965,000
London, UK	138,000,000	Retail & Wholesale	2005	2009	19,675,800	25,520,000
Tokyo, Japan	28,460,000	Media	1996	2002	3,680,000	4,240,000
New York, USA	43,510,000	Entertainment & Leisure	2007	2010	6,875,000	9,281,250
Chicago, USA	76,000,000	Retail & Wholesale	1995	2001	7,325,100	8,784,500
Singapore, SI	109,900,000	Technology	2005	2009	6,210,000	8,694,500
Brussels, Belgium	25,700,500	Transportation	2006	2010	2,345,100	3,295,000
Seoul, South Korea	7,750,000	Energy	1983	1989	136,400	132,100
Luxembourg, LU	28,000,000	Energy	1996	2002	6,298,400	6,740,100
Osaka, Japan	8,250,900	Consumer Products	2001	2008	1,062,300	1,374,400
Busan, South Korea	7,294,100	Media	2006	2010	324,870	453,600
Zürich, Switcherland	349,600,000	Financial Services	2004	2008	72,350,000	69,430,000
Zürich, Switcherland	349,600,000	Technology	2003	2009	11,500,000	13,625,000
Washington, USA	91,300,000	Financial Services	2005	2010	11,342,800	15,345,200
Bangalore, India	17,300,000	Technology	2001	2009	3,630,000	5,241,100
Seoul, South Korea	25,450,000	Other	1999	2003	2,122,400	1,725,300
Paris, France	436,350,000	Other	2002	2006	56,450,000	73,320,000
Singapore, SI	1,275,000,000	Retail & Wholesale	2007	2010	119,600,000	163,440,000

Delhi, India	156,400,500	Manufacturing	1999	2006	24,500,000	29,195,000
Hong Kong, SAR	123,900,000	Technology	2004	2009	18,950,000	2,478,5000
Stockholm, Sweden	15,400,000	Technology	1996	2002	980,250	1,140,000
Yokohama, Japan	47,000,000	Energy	2000	2006	8,774,900	10,528,800
New York, USA	32,850,000	Other	2005	2010	1,650,300	2,014,300
Daegu, South Korea	11,250,300	Consumer Products	2001	2006	576,300	634,600
Delhi, India	218,390,000	Media	2001	2007	18,325,300	17,230,000
Kuwait City, Kuwait	895,000,000	Consumer Products	2006	2009	100,500,000	135,675,000
Tokyo, Japan	34,740,000	Technology	1998	2001	1,982,100	2,376,200
Seoul, South Korea	130,430,000	Entertainment & Leisure	2007	2010	15,652,100	20,980,000
London, UK	245,300,000	Other	2000	2005	22,350,000	26,763,200
Osaka, Japan	19,830,000	Energy	1998	2004	2,410,000	2,540,000
Amsterdam, Holland	98,600,000	Technology	2006	2009	8,336,750	11,662,100
Delhi, India	76,450,200	Technology	2004	2008	3,500,000	3,120,000
Luxembourg, LU	28,000,000	Other	2007	2010	1,445,000	2,090,800
Bangalore, India	122,900,000	Energy	2002	2006	14,335,000	12,948,000
London, UK	9,000,000	Technology	1995	2000	1,308,100	1,659,000
Daegu, South Korea	3,450,000	Manufacturing	2001	2008	212,300	266,200

Thailand – Survey answers in current US dollars

Location of headquarter	Annual turnover of VC or PE fund	Industry of investment	Initial year of investment	Year of selling shareholding rights	Size of investment	Return
London, UK	109,800,000	Manufacturing	2005	2010	17,600,000	22,150,000
Kuala Lumpur, Malaysia	24,758,300	Health Care	1994	1998	1,987,500	2,035,000
Zürich, Switcherland	29,300,000	Manufacturing	2002	2007	1,785,000	2,274,500
New York, USA	1,986,000,000	Financial Services	2006	2010	156,950,000	216,350,000
Paris, France	20,340,000	Manufacturing	1998	2003	1,982,800	2,009,400
Boston, USA	42,800,000	Media	2003	2008	2,225,600	1,895,200
Bangalore, India	97,259,200	Technology	1990	1992	7,450,000	7,635,000
Kuala Lumpur, Malaysia	29,280,000	Other	1995	2006	1,166,300	1,626,600
Cairo, Eqypt	746,550,000	Energy	2001	2009	78,450,000	109,210,00
Zürich, Switcherland	163,398,100	Transportation	2007	2010	23,580,100	33,370,200
London, UK	1,450,000,000	Other	1999	2006	72,365,250	89,681,900
Bangkok, Thailand	85,235,100	Mining & Raw Materials	2004	2008	7,650,100	9,880,100
Bangkok, Thailand	85,235,100	Manufacturing	2008	2010	6,330,000	8,910,000
Dubai, UAE	912,000,000	Consumer Products	2000	2009	136,500,000	166,320,000
Osaka, Japan	19,830,000	Consumer Products	2002	2008	2,350,000	2,980,000
Kuwait City, Kuwait	895,000,000	Energy	2007	2010	45,764,300	63,982,200
Delhi, India	19,700,000	Manufacturing	2001	2009	1,366,800	1,782,500
Bangkok, Thailand	9,820,000	Manufacturing	1992	1999	1,325,000	1,397,100
Zürich, Switcherland	349,600,000	Financial Services	2006	2010	44,870,000	59,320,000

Washington, USA	91,300,000	Retail & Wholesale	2000	2005	10,250,000	12,890,000
Hong Kong, SAR	123,900,000	Technology	2005	2009	8,477,600	11,245,000
Hong Kong, SAR	123,900,000	Other	2003	2009	9,145,000	11,431,500
Bangkok, Thailand	87,295,000	Manufacturing	1994	2002	12,125,000	13,420,400
Dubai, UAE	29,400,200	Consumer Products	2001	2007	1,990,000	2,348,800
Fort Worth, USA	345,500,000	Other	2005	2010	48,422,800	67,762,100
Cape Town, South Africa	12,345,000	Mining & Raw Materials	2001	2008	10,250,000	13,387,100
Singapore, SI	138,200,000	Retail & Wholesale	2004	2009	9,942,300	12,360,800
London, UK	56,840,000	Entertain & Leisure	1998	2002	3,332,000	3,547,000
Bangalore, India	135,400,000	Consumer Products	2000	2006	10,400,000	9,320,000
Kuala Lumpur, Malaysia	9,200,000	Manufacturing	1993	2000	847,500	931,230
Dubai, UAE	912,000,000	Energy	2002	2005	87,758,200	102,340,100
Delhi, India	156,400,500	Media	1987	1990	18,776,100	21,230,800
Delhi, India	156,400,500	Mining & Raw Materials	2000	2007	13,400,000	16,870,000
Boston, USA	29,500,000	Transportation	2004	2010	3,965,000	5,350,000
Bangkok, Thailand	11,270,000	Other	1990	1995	987,600	910,500
London, UK	33,290,000	Entertain & Leisure	2005	2010	2,475,900	3,354,500
Tokyo, Japan	17,210,000	Manufacturing	1998	2005	1,250,000	1,437,500
Hong Kong, SAR	123,900,00	Other	2003	2009	19,863,300	23,786,100
Tokyo, Japan	132,475,000	Other	2005	2010	18,745,900	24,140,200
Chiang Mai, Thailand	6,800,500	Technology	2001	2007	485,350	442,200
Amsterdam, Holland	29,300,000	Manufacturing	2002	2008	3,880,000	4,233,200
London, UK	98,420,000	Financial Services	2007	2010	26,210,000	35,440,000
Kuala Lumpur, Malaysia	19,250,000	Manufacturing	1999	2007	1,487,200	1,672,700
Bangkok, Thailand	9,849,900	Consumer Products	1988	1994	1,335,000	1,104,900
Luxembourg, LU	28,000,000	Other	2001	2010	1,985,400	3,180,000
Yokohama, Japan	47,000,000	Transportation	1994	1999	1,600,000	1,832,200
Hong Kong, SAR	40,200,000	Manufacturing	2000	2004	4,478,750	5,361,000
Brussels, Belgium	25,700,500	Mining & Raw Materials	2006	2010	2,565,200	3,720,400
Frankfurt, Germany	35,480,000	Other	1998	2002	2,650,000	2,915,000
Washington, USA	224,200,000	Manufacturing	2007	2010	26,680,200	37,125,000
Washington, USA	224,200,000	Manufacturing	1992	1996	12,870,000	14,875,000
Chiang Mai, Thailand	3,210,000	Other	2001	2008	786,250	943,450
Frankfurt, Germany	43,500,100	Manufacturing	2000	2009	2,550,000	2,872,000
Bangkok, Thailand	19,450,000	Transportation	2003	2008	1,005,000	1,172,000
New York, USA	95,300,000	Technology	2007	2010	6,850,000	9,325,300
Luxembourg, LU	58,500,400	Mining & Raw Materials	1994	2000	4,331,200	4,120,000
Singapore, SI	109,900,000	Manufacturing	1990	1994	11,360,000	13,356,100

India – Survey answers in current US dollars

Location of headquarter	Annual turnover of VC or PE fund	Industry of investment	Initial year of investment	Year of selling shareholding rights	Size of investment	Return
New York, USA	173,500,000	Technology	2001	2006	22,150,000	26,585,000
Bangalore, India	4,391,400	Health Care	2004	2009	774,300	1,044,500
Riyadh, Saudi Arabia	247,350,000	Media	1999	2005	16,570,300	19,200,000
Riyadh, Saudi Arabia	247,350,000	Media	2002	2007	23,480,000	28,560,000
Mumbai, India	2,340,000	Manufacturing	2005	2010	648,200	882,600
Frankfurt, Germany	175,600,000	Retail & Wholesale	2005	2009	19,300,000	23,720,000
Delhi, India	19,340,800	Transportation	2000	2007	1,005,300	1,247,000
London, UK	83,400,000	Technology	2002	2006	8,115,300	10,125,000
Kuala Lumpur, Malaysia	9,200,000	Technology	1995	1999	542,750	623,800
Singapore, SI	34,650,000	Media	2001	2009	2,650,100	4,145,000
London, UK	1,450,000,000	Mining & Raw Materials	1998	2002	165,150,000	160,240,000
Delhi, India	19,700,000	Transportation	2004	2008	3,695,400	4,428,000
Chennai, India	18,320,700	Consumer Products	2000	2006	1,320,000	1,452,000
Paris, France	20,340,000	Technology	1996	2001	1,410,000	1,497,000
Dubai, UAE	912,000,000	Entertainment & Leisure	1994	1999	74,750,000	82,315,000
Sydney, Australia	103,290,000	Transportation	2004	2007	13,445,000	15,425,300
Mumbai, India	43,830,000	Technology	2003	2008	1,045,200	1,215,400
Washington, USA	224,200,000	Technology	2007	2010	34,876,500	32,962,100
Riyadh, Saudi Arabia	94,600,000	Transportation	1997	2002	7,202,100	6,982,100
Delhi, India	2,950,300	Health Care	1990	1996	432,500	435,900
Singapore, SI	138,200,000	Consumer Products	2002	2009	12,110,000	15,102,500
Chicago, USA	766,460,000	Retail & Wholesale	2003	2009	84,124,300	96,660,100
Bangalore, India	9,230,000	Mining & Raw Materials	2000	2004	436,100	457,800
Zürich, Switcherland	1,110,000,000	Financial Services	1993	1998	102,785,000	109,158,100
Ho Chi Minh City, Vietnam	72,300,100	Consumer Products	2005	2010	2,560,000	3,142,500
Kuwait City, Kuwait	211,450,000	Mining & Raw Materials	2006	2009	26,332,500	34,231,000
Delhi, India	18,300,000	Transportation	2008	2010	2,002,000	2,395,800
London, UK	76,400,000	Financial Services	2003	2008	5,560,000	5,121,400
Sydney, Australia	56,349,100	Manufacturing	2000	2005	3,320,900	3,540,000
Bangkok, Thailand	29,890,000	Media	2004	2009	1,785,000	2,142,000
Chennai, India	2,450,100	Manufacturing	1998	2004	195,250	189,600
Hong Kong, SAR	123,900,000	Health Care	2001	2006	17,487,600	19,400,000
Tokyo, Japan	132,475,000	Media	1997	2002	9,030,000	9,543,500
London, UK	98,420,000	Financial Services	2006	2010	9,630,000	12,470,900
Kuwait City, Kuwait	895,000,000	Consumer Products	2005	2009	65,300,000	86,155,000
Los Angeles, USA	423,400,000	Entertainment & Leisure	2001	2008	41,362,300	46,147,000
Mumbai, India	5,630,400	Other	1989	1994	784,350	813,200
Kuala Lumpur, Malaysia	29,280,000	Other	2005	2009	2,110,000	2,180,500
Dubai, UAE	912,000,000	Consumer Products	2006	2010	103,540,000	128,780,500
Dubai, UAE	912,000,000	Health Care	2001	2007	14,745,100	16,387,200
Cairo, Eqypt	54,900,000	Consumer Products	2003	2008	3,325,000	3,823,750

Chennai, India	8,340,100	Other	2004	2009	369,100	402,000
Singapore, SI	138,200,000	Technology	1993	1999	16,345,000	17,128,000
London, UK	82,340,000	Manufacturing	1989	1994	7,778,500	7,854,400
New York, USA	73,490,000	Financial Services	2006	2010	9,770,000	11,725,000
Bangkok, Thailand	85,235,100	Manufacturing	2002	2007	6,785,750	7,998,200
Riyadh, Saudi Arabia	9,850,000	Consumer Products	2001	2008	778,600	920,150
Bangalore, India	135,400,000	Entertainment & Leisure	1994	1999	36,470,000	34,305,000
Bangalore, India	135,400,000	Manufacturing	2006	2010	133,410,100	186,850,000
Zürich, Switcherland	163,398,100	Transportation	2001	2007	12,125,000	14,510,100
Sao Paulo, Brazil	290,200,000	Mining & Raw Materials	1992	1998	12,950,000	14,120,000
Sao Paulo, Brazil	290,200,000	Other	2007	2010	23,872,300	36,580,200
Los Angeles, USA	360,000,000	Technology	1998	2002	31,050,000	34,568,500
Kolkata, India	39,200,000	Manufacturing	2004	2007	2,887,300	3,175,700
Kolkata, India	39,200,000	Other	2000	2005	5,780,000	6,936,500
London, UK	25,375,900	Technology	2002	2008	1,264,100	1,521,300

Poland – Survey answers in current US dollars

Location of headquarter	Annual turnover of VC or PE fund	Industry of investment	Initial year of investment	Year of selling shareholding rights	Size of investment	Return
Krakow, Poland	3,450,000	Health Care	1999	2004	875,100	962,300
Berlin, Germany	125,400,000	Manufacturing	2003	2007	12,654,300	15,250,100
Berlin, Germany	125,400,000	Manufacturing	2007	2010	7,213,250	9,325,000
Vienna, Austria	134,900,500	Other	2004	2009	24,740,000	28,457,600
Warsaw, Poland	12,304,000	Entertainment & Leisure	2008	2010	3,100,000	4,108,200
Amsterdam, Holland	475,500,000	Manufacturing	1998	2002	2,145,100	1,925,000
Toronto, Canada	190,600,000	Transportation	1992	1998	13,206,200	14,150,000
Krakow, Poland	3,204,100	Health Care	2000	2003	748,550	862,400
Stockholm, Sweden	56,400,000	Consumer Products	2001	2010	3,245,000	4,056,200
Athens, Greece	148,480,900	Retail & Wholesale	2001	2006	18,125,000	19,985,000
Zürich, Switcherland	1,110,000,000	Technology	2005	2009	43,552,500	50,650,000
St. Petersburg, Russia	303,450,000	Financial Services	1993	1999	74,885,000	70,150,000
Prague, Czech Republic	18,390,000	Other	2002	2006	1,002,000	1,505,400
Washington, USA	224,200,000	Manufacturing	2003	2008	36,148,000	39,650,400
Brussels, Belgium	12,475,000	Consumer Products	2004	2009	986,120	1,120,800
Krakow, Poland	9,380,000	Transportation	2000	2004	348,000	382,800
Rome, Italy	32,910,800	Other	2001	2009	3,331,000	3,972.200
Warsaw, Poland	76,400,000	Other	2005	2010	3,241,400	4,489,500
Warsaw, Poland	73,400,000	Entertainment & Leisure	1990	1996	4,120,100	3,804,000
Toronta, Canada	190,600,000	Media	1997	2002	17,140,000	17,820,400
Moscow, Russia	563,300,000	Consumer Products	2000	2007	78,115,000	99,812,400
Zürich, Switcherland	73,600,000	Financial Services	1994	2000	1,015,000	1,035,000

Bucharest, Romania	14,377,600	Other	1993	1997	996,000	1,005,100
Athens, Greece	23,400,000	Media	2001	2008	3,145,000	3,521,000
London, UK	27,380,000	Financial Services	2004	2010	1,114,300	1,485,200
Münich, Germany	236,290,000	Entertainment & Leisure	2002	2005	30,140,000	32,560,800
Münich, Germany	236,290,000	Entertainment & Leisure	2005	2009	9,078,500	11,980,000
Moscow, Russia	283,050,000	Manufacturing	2002	2009	64,100,000	87,965,300
Cairo, Eqypt	54,900,000	Mining & Raw Materials	2000	2006	1,984,900	2,384,000
Luxumbourg, LU	28,000,000	Other	2004	2009	3,151,300	4,056,100
Paris, France	24,335,500	Transportation	2003	2008	3,650,000	3,710,000
St. Petersburg, Russia	450,100,000	Consumer Products	1990	1994	67,395,200	65,332,500
New York, USA	657,000,000	Other	2007	2010	87,980,000	109,145,000
Barcelona, Spain	83,300,000	Consumer Products	2002	2009	14,443,000	15,230,100
Berlin, Germany	67,318,000	Manufacturing	2006	2010	2,215,000	3,100,000
Krakow, Poland	6,421,000	Technology	1990	1995	251,300	245,800
Paris, France	24,335,500	Manufacturing	2000	2008	1,679,250	2,005,400
Istanbul, Turkey	87,370,900	Entertainment & Leisure	1993	1999	8,225,000	8,340,000
Istanbul, Turkey	87,370,900	Retail & Wholesale	2004	2009	3,415,100	4,991,000
London, UK	98,420,000	Manufacturing	2002	2006	11,478,000	12,973,100
Frankfurt, Germany	35,480,000	Financial Services	2001	2008	2,151,750	2,581,200
Frankfurt, Germany	35,480,000	Manufacturing	2008	2010	3,658,000	5,225,000
London, UK	76,400,000	Financial Services	2003	2008	9,100,000	11,745,000
Warsaw, Poland	23,810,350	Other	1991	1999	3,470,200	3,587,300
Madrid, Spain	82,300,000	Manufacturing	2007	2010	4,740,000	5,540,600
Moscow, Russia	1,650,000,000	Retail & Wholesale	2000	2006	184,450,000	190,230,000
Moscow, Russia	1,650,000,000	Consumer Products	1993	2000	90,100,000	92,340,500
St. Petersburg, Russia	20,230,000	Entertainment & Leisure	1998	2006	745,850	633,200
London, UK	17,367,200	Manufacturing	2005	2010	1,287,500	1,870,200
Frankfurt, Germany	43,500,100	Manufacturing	2003	2009	2,165,200	2,484,000
New York, USA	73,490,000	Media	2008	2010	4,120,000	5,752,100
Warsaw, Poland	6,450,000	Other	1999	2003	387,700	425,000
Krakow, Poland	5,450,200	Consumer Products	2004	2008	264,100	330,100

Brazil – Survey answers in current US dollars

Location of headquarter	Annual turnover of VC or PE fund	Industry of investment	Initial year of investment	Year of selling shareholding rights	Size of investment	Return
Rio de Janeiro, Brazil	432,620,000	Health Care	2003	2007	39,785,000	50,745,000
London, UK	25,660,000	Mining & Raw Materials	1999	2004	1,489,250	1,562,300
Sao Paulo, Brazil	194,200,000	Other	2004	2009	14,475,000	17,860,000
Sao Paulo, Brazil	194,200,000	Other	2005	2009	20,568,000	28,750,000
Buenos Aires, Argentina	38,489,200	Mining & Raw Materials	1996	2002	2,789,100	2,880,100
Salvador, Brazil	23,680,000	Transportation	1990	1999	1,336,800	1,389,000

Tokyo, Japan	93,980,100	Financial Services	2004	2007	3,100,000	4,345,100
Mexico City, Mexico	140,300,000	Manufacturing	2003	2009	14,548,300	17,369,600
Los Angeles, USA	78,209,250	Mining & Raw Materials	2007	2010	4,025,000	5,500,000
Brasilia, Brazil	5,673,700	Other	1988	1994	785,100	654,300
Bangkok, Thailand	19,450,000	Mining & Raw Materials	2008	2010	1,234,450	1,708,000
Hong Kong, SAR	121,250,000	Consumer Products	2001	2006	10,325,000	11,872,500
London, UK	76,400,000	Mining & Raw Materials	2004	2009	2,400,000	3,150,500
Lisbon, Portugal	112,790,000	Other	2000	2008	9,775,000	11,250,000
Rio de Janeiro, Brazil	19,972,500	Retail & Wholesale	1998	2002	2,310,000	2,450,300
Delhi, India	320,309,100	Transportation	2002	2008	24,695,200	28,840,000
Madrid, Spain	21,340,100	Consumer Products	2003	2008	1,150,100	982,100
Zürich, Switcherland	73,600,000	Other	2000	2006	3,122,500	3,875,000
Washington, USA	224,200,000	Manufacturing	1998	2003	16,445,000	17,251,200
Washington, USA	224,200,000	Entertainment & Leisure	2001	2007	23,500,000	25,356,100
Riyadh, Saudi Arabia	94,600,000	Media	2005	2009	6,145,700	7,240,000
Zürich, Switcherland	349,600,000	Retail & Wholesale	2008	2010	28,175,000	36,470,000
New York, USA	87,399,000	Financial Services	2001	2005	11,254,000	12,185,000
Singapore, SI	138,200,000	Other	2007	2010	26,412,500	36,795,000
Salvador, Brazil	10,340,000	Health Care	1983	1988	1,113,400	837,900
Chicago, USA	76,000,000	Consumer Products	1994	1998	3,005,100	3,090,000
Moscow, Russia	1,650,000,000	Mining & Raw Materials	2001	2006	140,300,000	168,840,000
Paris, France	276,300,000	Manufacturing	1998	2003	43,843,200	44,050,000
Los Angeles, USA	423,400,000	Technology	2004	2009	21,750,000	25,525,000
Dubai, UAE	912,000,000	Mining & Raw Materials	2003	2008	84,540,000	89,450,100
Dubai, UAE	912,000,000	Other	2004	2010	24,153,600	28,879,200
Mexico City, Mexico	1,480,400,000	Entertainment & Leisure	2008	2010	134,682,500	167,510,000
Moscow, Russia	1,650,000,000	Transportation	1998	2002	78,846,300	80,500,000
Rio de Janeiro, Brazil	21,080,000	Manufacturing	1993	1998	3,500,000	3,354,800
Kuwait City, Kuwait	895,000,000	Mining & Raw Materials	2000	2006	63,140,000	68,154,100
Tokyo, Japan	28,460,000	Health Care	2001	2005	3,166,400	3,284,700
Boston, USA	99,300,000	Consumer Products	1993	1997	4,650,000	4,257,400
Riyadh, Saudi Arabia	97,230,000	Retail & Wholesale	2007	2010	4,476,200	6,985,200
Sao Paulo, Brazil	9,133,400	Technology	2003	2007	423,500	440,850
Lima, Peru	36,450,300	Financial Services	2002	2009	1,476,200	1,504,000
Lisbon, Portugal	72,815,000	Other	2005	2010	4,400,000	6,015,000
Berlin, Germany	125,400,000	Mining & Raw Materials	2000	2005	4,350,000	5,085,100
Dublin, Ireland	420,900,000	Retail & Wholesale	2003	2009	62,879,500	78,980,000
Barcelona, Spain	543,300,000	Other	2001	2008	48,100,000	55,236,800
Toronto, Canada	190,600,000	Mining & Raw Materials	2002	2009	16,478,300	19,687,200
Cape Town, South Africa	238,800,000	Other	1999	2004	21,178,000	22,155,000
Paris, France	436,350,000	Health Care	2003	2009	12,145,500	14,463,100
Bangalore, India	135,400,000	Mining & Raw Materials	1996	2000	2,471,800	2,875,000
Dubai, UAE	70,980,000	Financial Services	2002	2006	3,100,000	3,317,250
Madrid, Spain	64,928,300	Transportation	2006	2010	8,487,600	10,922,000

Singapore, SI	138,200,000	Manufacturing	2001	2007	10,500,000	15,754,000
Sao Paulo, Brazil	8,019,000	Consumer Products	1989	1995	472,100	450,300

Turkey – Survey answers in current US dollars

Location of headquarter	Annual turnover of VC or PE fund	Industry of investment	Initial year of investment	Year of selling shareholding rights	Size of investment	Return
Istanbul, Turkey	87,370,900	Health Care	1989	1994	4,456,200	4,132,100
Dubai, UAE	128,300,000	Media	2004	2008	4,150,600	4,495,000
Kuwait City, Kuwait	211,450,000	Mining & Raw Materials	2002	2005	38,145,000	43,980,000
London, UK	98,420,000	Financial Services	2006	2010	6,140,500	8,846,700
Riyadh, Saudi Arabia	247,350,000	Other	2000	2006	19,475,000	22,874,100
Ankara, Turkey	6,509,200	Transportation	1997	2000	425,150	430,200
Dublin, Ireland	420,900,000	Manufacturing	2001	2006	35,842,100	40,245,000
Dubai, UAE	912,000,000	Entertainment & Leisure	2000	2008	8,475,000	11,348,500
Moscow, Russia	563,300,000	Transportation	2002	2006	87,450,000	113,850,000
London, UK	28,303,000	Financial Services	2005	2010	905,000	1,272,500
Cairo, Eqypt	54,900,000	Consumer Products	1993	1998	2,285,900	2,350,100
Frankfurt, Germany	98,600,000	Retail & Wholesale	2005	2010	4,788,300	6,597,800
Tokyo, Japan	28,460,000	Technology	2002	2008	1,450,000	1,885,250
Kuala Lumpur, Malaysia	19,250,000	Mining & Raw Materials	1998	2002	2,045,100	2,235,800
Singapore, SI	1,275,000,000	Consumer Products	2001	2005	169,450,000	185,000,000
New York, USA	73,490,000	Mining & Raw Materials	2004	2009	4,122,300	4,982,100
Delhi, India	135,970,000	Technology	1999	2004	19,415,000	20,090,000
Oslo, Norway	43,104,900	Other	2005	2010	4,650,000	6,240,000
Ankara, Turkey	8,290,200	Retail & Wholesale	2006	2010	750,000	872,800
Berlin, Germany	125,400,000	Transportation	2006	2009	2,471,400	2,889,100
Tblisi, Georgia	9,630,000	Consumer Products	2000	2004	1,250,000	1,325,400
St. Petersburg, Russia	450,100,000	Manufacturing	1995	1999	39,641,800	39,981,200
Dublin, Ireland	34,573,200	Other	2000	2005	2,565,950	2,985,200
Hong Kong, SAR	20,490,000	Financial Services	1992	1999	1,300,000	1,120,000
London, UK	43,120,200	Financial Services	1994	1998	6,150,000	6,200,000
Rome, Italy	32,910,800	Media	2000	2006	1,782,100	2,009,100
Istanbul, Turkey	18,920,000	Entertainment & Leisure	1984	1988	1,122,000	1,195,000
Cairo, Eqypt	194,390,000	Retail & Wholesale	2001	2005	20,550,000	21,730,000
Hong Kong, SAR	30,450,000	Financial Services	1997	2002	2,400,000	2,350,500
Bagdad, Iraq	19,187,000	Technology	2006	2010	3,120,000	4,115,200
Stockholm, Sweden	56,400,000	Manufacturing	2005	2010	2,366,250	2,834,100
Cairo, Eqypt	32,230,000	Retail & Wholesale	1999	2004	1,861,400	1,982,100
Moscow, Russia	1,650,000,000	Health Care	2007	2010	241,500,000	361,725,000
Barcelona, Spain	83,300,000	Consumer Products	2006	2009	4,456,200	5,785,000
Barcelona, Spain	83,300,000	Other	2006	2009	2,478,500	3,265,200

Riyadh, Saudi Arabia	452,490,000	Consumer Products	2008	2010	135,440,000	197,854,100
Bagdad, Iraq	31,380,000	Other	1993	2000	7,495,000	7,684,500
Istanbul, Turkey	9,240,830	Health Care	2000	2005	1,548,300	1,658,000
Paris, France	39,332,000	Financial Services	2002	2009	3,210,000	3,845,000
Cairo, Eqypt	28,190,000	Technology	2006	2010	3,152,800	4,277,200
Amsterdam, Holland	25,310,000	Media	1999	2004	3,684,600	3,978,100
Boston, USA	99,300,000	Consumer Products	2002	2008	23,250,000	26,843,000
Ankara, Turkey	10,240,600	Transportation	1990	1997	1,275,000	1,425,000
Vienna, Austria	134,900,500	Retail & Wholesale	1997	2003	20,095,000	19,357,100
Los Angeles, USA	213,040,000	Other	2005	2010	19,478,700	22,849,300
Singapore, SI	73,900,000	Entertainment & Leisure	2006	2010	6,500,000	9,515,000
Fort Worth, USA	325,400,000	Consumer Products	2003	2008	65,482,800	78,450,000
Istanbul, Turkey	4,530,200	Other	2000	2005	786,300	878,450
Brussels, Belgium	19,303,400	Consumer Products	1999	2006	985,650	1,153,200
St. Petersburg, Russia	20,230,000	Mining & Raw Materials	2004	2009	6,412,300	8,964,500
Dubai, UAE	983,200,000	Media	2005	2010	43,250,000	51,680,000

Argentina – Survey answers in current US dollars

Headquarter of organization	Annual turnover of VC or PE fund	Industry of investment	Initial year of investment	Year of selling shareholding rights	Size of investment	Return
Paris, France	276,300,000	Mining & Raw Materials	2002	2006	11,800,000	12,230,000
Los Angeles, USA	423,400,000	Other	2004	2008	49,154,200	56,850,000
Buenos Aires, Argentina	38,489,200	Other	1989	1994	6,400,000	5,415,000
Zürich, Switcherland	349,600,000	Retail & Wholesale	2003	2009	29,188,000	33,480,100
London, UK	76,400,000	Financial Services	2005	2010	2,162,000	2,612,250
Mexico City, Mexico	210,850,000	Manufacturing	2001	2006	37,430,120	41,600,000
Rosaio, Argentina	9,249,100	Media	1992	1998	862,200	892,100
Sao Paulo, Brazil	194,200,000	Transportation	2000	2005	3,477,100	4,085,000
Sao Paulo, Brazil	194,200,000	Transportation	2002	2008	6,980,000	7,590,000
New York, USA	1,150,000,000	Financial Services	1998	2005	164,150,000	171,368,100
Washington, USA	224,200,000	Other	2007	2010	19,400,000	26,250,000
Mexico City, Mexico	1,480,400,000	Consumer Products	2005	2009	215,665,250	292,478,000
Toronto, Canada	190,600,000	Health Care	2003	2007	6,245,000	6,417,400
Hong Kong, SAR	121,250,000	Media	2000	2006	17,187,600	18,400,000
Dubai, UAE	912,000,000	Financial Services	1999	2004	97,500,000	101,734,500
Berlin, Germany	125,400,000	Technology	2007	2010	7,443,100	10,367,100
Buenos Aires, Argentina	23,400,000	Health Care	1995	2000	1,475,000	1,245,300
Madrid, Spain	21,340,100	Other	2005	2010	3,140,500	2,875,000
Hong Kong, SAR	121,250,000	Entertainment & Leisure	2004	2008	10,175,000	11,786,100
Zürich, Switcherland	349,600,000	Mining & Raw Materials	2007	2010	10,700,000	12,840,000
Paris, France	32,408,000	Media	2001	2008	1,125,000	1,344,500

Rio de Janeiro, Brazil	432,620,000	Manufacturing	1998	2002	38,453,900	37,687,500
Boston, USA	99,300,000	Financial Services	2002	2007	5,150,000	5,874,500
St. Petersburg, Russia	450,100,000	Other	2003	2008	98,475,000	117,480,000
Cordabo, Argentina	10,510,000	Manufacturing	2007	2010	875,000	1,015,000
Toronto, Canada	64,300,000	Health Care	1996	2001	37,820,100	38,248,900
London, UK	43,120,200	Entertainment & Leisure	2002	2008	6,100,000	6,780,000
Vienna, Austria	134,900,500	Transportation	2004	2009	18,458,200	22,247,200
Rio de Janeiro, Brazil	432,620,000	Other	2007	2010	36,780,000	47,781,200
Washington, USA	224,200,000	Technology	2001	2009	27,994,300	32,478,600
Rosaio, Argentina	6,320,000	Transportation	1988	1994	548,400	482,200
Zürich, Switcherland	73,600,000	Mining & Raw Materials	1999	2004	4,450,000	5,785,200
Moscow, Russia	563,300,000	Financial Services	2001	2008	48,473,500	57,173,800
Buenos Aires, Argentina	19,329,200	Other	2000	2006	932,000	1,050,000
Delhi, India	135,970,000	Transportation	2005	2010	8,245,200	11,276,100
Frankfurt, Germany	175,600,000	Manufacturing	2003	2008	7,780,000	8,100,000
Tokyo, Japan	93,980,100	Other	1998	2002	6,450,000	7,045,000
Salvador, Brazil	23,680,000	Mining & Raw Materials	1990	1998	1,015,000	1,027,500
Kuwait City, Kuwait	211,450,000	Financial Services	2004	2009	16,743,200	20,175,000
Buenos Aires, Argentina	7,261,900	Consumer Products	2008	2010	465,250	514,550
Los Angeles, USA	423,400,000	Retail & Wholesale	2001	2007	60,500,000	66,475,000
Cordabo, Argentina	13,240,200	Technology	1985	1990	758,100	643,500
London, UK	28,303,000	Other	2002	2006	1,065,100	1,178,400
Singapore, SI	73,982,100	Entertainment & Leisure	2001	2007	6,488,800	7,035,000
Lima, Peru	36,450,300	Retail & Wholesale	1995	2000	2,175,000	2,378,100
New York, USA	73,400,000	Other	2005	2010	2,488,300	2,490,500
Chicago, USA	76,000,000	Manufacturing	2003	2009	4,400,000	5,178,000
Kuala Lumpur, Malaysia	23,398,200	Consumer Products	1998	2004	1,415,000	1,325,750
Buenos Aires, Argentina	8,432,900	Technology	1990	1996	647,300	630,400
Riyadh, Saudi Arabia	97,230,000	Mining & Raw Materials	2004	2009	6,472,100	7,687,200
Barcelona, Spain	83,300,000	Other	2001	2008	4,475,000	4,875,100

Appendix 3: Independent variables

South Africa

Year	Debt as % of GDP	Savings as % of GDP	Government spending as % of GDP	Inflation, CPI	Gini Coefficient, 0-100	Labor participartion rate	Productivity performance	Literacy rate as % of population
1980	-	34	14	13.7	-	47	-	-
1981	-	27	15	15.3	-	47	-	-
1982	-	21	16	14.6	-	47	-	-
1983	-	24	16	12.3	-	47	-	-
1984	-	23	18	11.5	-	47	-	-
1985	-	25	18	16.3	-	48	-	-
1986	-	23	19	18.7	-	48	-	-
1987	-	22	19	16.2	-	48	-	-
1988	-	23	19	12.8	-	48	-	-
1989	-	22	19	14.7	-	48	-	-
1990	-	19	20	14.3	-	48	-	-
1991	-	19	20	15.3	-	49	-	-
1992	-	16	20	13.9	-	49	-	-
1993	-	16	20	9.7	-	50	0.254	-
1994	-	17	20	8.9	-	50	0.252	-
1995	-	17	18	8.7	-	51	0.255	-
1996	33.7	16	19	7.4	59.3	51	0.276	-
1997	30.4	15	19	8.6	58.2	51	0.278	-
1998	24.6	15	19	6.9	56.6	52	0.282	-
1999	24.1	16	18	5.2	57.8	52	0.280	83
2000	23.9	16	18	5.3	59.2	52	0.286	84
2001	24.8	16	18	5.7	62.4	53	0.285	86
2002	25.0	17	19	9.2	67.5	53	0.286	86
2003	25.2	16	19	5.9	67.6	53	0.289	87
2004	25.4	15	19	1.4	67.4	53	0.296	87
2005	26.7	14	19	3.4	66.8	54	0.301	88
2006	26.3	14	20	4.6	66.2	54	0.298	88
2007	27.4	14	19	7.1	65.1	54	0.298	89
2008	26.7	15	19	11.5	63.8	55	0.302	89
2009	30.9	15	21	7.1	63.2	55	0.299	89
2010	35.7	16	20	4.3	64.8	55	0.299	90

Year	School enrollment: Secondary	Unemployment, % of total work force	Exchange rate index, 2005=100	Tariffs	Export as % of GDP	Corruption level, 0-10	Credit by banks as % of GDP	Market capitalization as % of GDP	Infrastructure
1980	-	-	-	-	35.1	-	76.4	-	-

1981	-	-	-	-	28.9	-	82.2	-	-
1982	-	-	-	-	26.7	-	83.7	-	-
1983	-	-	-	-	26.4	-	88.1	-	-
1984	-	-	-	-	25.6	-	90.4	-	-
1985	-	-	-	-	31.3	-	96.8	-	-
1986	-	-	-	-	31.5	-	94.9	-	-
1987	-	-	119.3	-	30.0	-	93.5	-	-
1988	-	-	112.7	-	29.6	-	94.4	109.9	-
1989	-	-	113.2	-	27.7	-	93.6	104.9	-
1990	-	-	116.3	-	24.3	-	97.8	123.2	-
1991	-	-	121.1	-	22.8	-	101.4	139.7	-
1992	-	-	125.1	-	21.3	-	119.8	79.7	-
1993	-	-	122.8	-	22.4	-	129.0	131.9	-
1994	-	20.0	117.5	-	22.6	-	135.5	166.4	-
1995	-	16.9	114.2	-	24.8	-	139.8	185.6	9
1996	-	21.0	105.2	-	25.2	5.4	139.6	168.1	9
1997	-	22.9	110.9	-	25.4	4.9	137.9	155.9	9
1998	62	25.0	101.9	10	26.9	5.2	139.1	126.8	10
1999	61	25.4	96.3	10	25.7	5.0	153.3	197.1	10
2000	61	26.7	93.3	9	28.2	5.0	152.5	154.2	10
2001	62	29.5	82.3	9	30.2	4.8	184.3	118.0	10
2002	62	30.5	70.5	9	33.9	4.8	159.8	166.2	11
2003	64	31.2	91.4	8	28.3	4.4	163.1	159.2	11
2004	64	26.2	99.7	8	26.4	4.6	169.6	207.9	11
2005	64	26.7	100.0	8	26.4	4.5	178.5	228.9	11
2006	66	25.5	96.1	7	30.8	4.6	192.9	273.9	10
2007	66	23.0	90.4	7	31.2	5.1	195.3	291.3	11
2008	67	22.9	80.4	8	36.0	4.9	172.9	178.5	11
2009	68	23.8	87.6	8	27.3	4.7	184.4	249.3	11
2010	68	24.7	101.2	7	26.1	4.5	182.2	278.4	12

South Korea

Year	Debt as % of GDP	Savings as % of GDP	Government spending as % of GDP	Inflation, CPI	Gini Coefficient, 0-100	Labor participartion rate	Productivity performance	Literacy rate as % of population
1980	-	23	12	28.7	-	59	-	-
1981	-	23	12	21.3	-	60	-	-
1982	-	25	12	7.2	-	59	-	-
1983	-	27	12	3.4	-	58	-	-
1984	-	29	11	2.3	-	57	-	-
1985	-	29	11	2.5	-	57	-	-
1986	-	33	11	2.8	-	58	-	-

1987	-	37	11	3.0	-	59	-	-	
1988	-	39	11	7.1	-	59	-	-	
1989	-	36	12	5.7	-	60	-	-	
1990	-	37	12	8.6	-	60	-	-	
1991	-	37	12	9.3	-	60	-	-	
1992	-	36	12	6.3	-	61	-	-	
1993	-	36	12	4.7	-	61	0.476	-	
1994	-	36	11	6.3	-	61	0.451	-	
1995	-	36	11	4.5	-	62	0.464	-	
1996	-	35	12	4.9	36.0	62	0.492	-	
1997	10.5	35	12	4.4	36.5	63	0.507	-	
1998	10.7	37	13	7.5	36.4	63	0.514	-	
1999	11.4	35	12	0.8	37.9	61	0.510	98	
2000	12.9	33	12	2.3	37.6	62	0.525	99	
2001	13.7	31	13	4.1	35.2	61	0.539	99	
2002	16.1	30	13	2.8	34.2	61	0.578	99	
2003	15.5	32	13	3.5	34.5	62	0.581	99	
2004	15.6	34	13	3.6	33.4	61	0.579	100	
2005	19.4	32	14	2.8	33.1	61	0.589	100	
2006	22.4	31	15	2.2	33.1	62	0.594	100	
2007	25.0	31	15	2.5	33.0	61	0.597	100	
2008	25.3	31	15	4.7	32.7	61	0.597	99	
2009	27.9	30	16	2.8	32.2	61	0.599	100	
2010	27.4	32	15	2.9	32.2	62	0.613	100	

Year	School enrollment: Secondary	Unemployment, % of total work force	Exchange rate index, 2005=100	Tariffs	Export as % of GDP	Corruption level, 0-10	Credit by banks as % of GDP	Market capitalization as % of GDP	Infrastructure
1980	-	5.2	-	-	32.7	-	43.4	-	-
1981	-	4.5	-	-	34.2	-	45.4	-	-
1982	-	4.4	-	-	33.3	-	49.5	-	-
1983	-	4.1	-	-	33.5	-	48.7	-	-
1984	-	3.8	-	-	33.8	-	48.1	-	-
1985	-	4.0	-	-	32.2	-	50.8	-	-
1986	-	3.8	-	-	36.9	-	49.8	-	-
1987	-	3.1	-	-	38.2	-	49.2	-	-
1988	-	2.5	-	-	36.8	-	45.8	-	-
1989	-	2.6	-	-	31.0	-	49.9	61.2	-
1990	-	2.5	-	-	28.9	-	51.9	42.1	-
1991	-	2.4	-	-	26.4	-	52.3	31.3	-
1992	-	2.5	-	-	27.2	-	51.2	32.4	-
1993	-	2.9	-	-	27.6	-	51.0	38.4	-
1994	-	2.5	-	-	27.5	-	51.6	45.3	-
1995	-	2.1	-	-	29.7	-	50.2	35.2	13

1996	-	2.0	-	-	28.5	5.1	53.6	24.9	13
1997	-	2.6	-	9	32.4	4.2	59.3	8.9	13
1998	98	7.0	75.3	9	46.5	4.2	67.0	35.1	12
1999	97	6.3	88.7	10	39.2	3.8	72.2	88.8	12
2000	96	4.4	95.7	12	39.9	4.0	74.9	32.2	12
2001	95	4.0	91.4	12	36.4	4.2	79.3	43.6	12
2002	94	3.3	98.7	13	33.1	4.5	86.0	43.3	13
2003	95	3.6	105.8	13	35.8	4.3	88.7	51.2	13
2004	95	3.7	101.1	13	41.5	4.5	84.6	59.4	13
2005	96	3.7	100.0	12	39.5	5.0	88.3	85.0	13
2006	95	3.4	104.6	12	40.7	5.1	96.4	87.8	13
2007	95	3.2	108.4	12	42.0	5.1	98.4	107.1	13
2008	96	3.2	118.0	12	53.4	5.6	109.4	53.1	13
2009	96	3.6	119.8	12	50.9	5.5	109.4	100.3	13
2010	97	3.5	123.2	12	52.8	5.4	103.2	107.4	12

Thailand

Year	Debt as % of GDP	Savings as % of GDP	Government spending as % of GDP	Inflation, CPI	Gini Coefficient, 0-100	Labor participartion rate	Productivity performance	Literacy rate as % of population
1980	-	23	12	19.7	-	82	-	-
1981	-	22	13	12.7	-	81	-	-
1982	-	24	13	5.3	-	82	-	-
1983	-	24	13	3.7	-	82	-	-
1984	-	23	13	0.9	-	82	-	-
1985	-	24	14	2.4	-	82	-	-
1986	-	24	13	1.8	-	81	-	-
1987	-	26	11	2.5	-	81	-	-
1988	-	27	10	3.8	-	81	-	-
1989	-	30	10	5.4	-	82	-	-
1990	-	32	9	5.9	-	81	-	-
1991	-	33	9	5.7	-	79	-	-
1992	-	35	10	4.1	-	78	-	-
1993	-	35	10	3.3	-	76	0.320	-
1994	-	35	10	5.0	47.9	74	0.332	-
1995	-	34	10	5.8	46.2	75	0.341	-
1996	-	34	10	5.8	43.5	75	0.348	-
1997	-	33	10	5.6	42.9	74	0.356	-
1998	49.5	33	11	8.0	41.5	74	0.388	90
1999	50.1	31	11	0.3	43.1	73	0.389	91
2000	47.0	30	11	1.6	42.8	74	0.397	90
2001	42.9	29	11	1.6	42.3	74	0.393	92
2002	38.2	28	11	0.7	42.2	74	0.401	92

2003	35.9	28	11	1.8	42.3	73	0.407	93	
2004	34.6	28	11	2.8	42.6	73	0.409	93	
2005	35.2	27	12	4.5	42.3	73	0.410	94	
2006	38.4	29	12	4.6	42.4	73	0.414	93	
2007	37.3	33	12	2.3	41.2	73	0.410	93	
2008	44.3	30	12	5.4	40.5	73	0.411	93	
2009	45.2	30	13	- 0.9	40.0	73	0.415	94	
2010	43.1	31	13	3.3	40.4	72	0.420	93	

Year	School enrollment: Secondary	Unemployment, % of total work force	Exchange rate index, 2005=100	Tariffs	Export as % of GDP	Corruption level, 0-10	Credit by banks as % of GDP	Market capitalization as % of GDP	Infrastructure
1980	-	-	-	-	24.7	-	60.3	-	-
1981	-	-	-	-	24.2	-	61.2	-	-
1982	-	2.5	-	-	23.1	-	67.4	-	-
1983	-	2.9	-	-	20.6	-	76.0	-	-
1984	-	4.8	-	-	22.5	-	82.5	-	-
1985	-	3.7	-	-	23.9	-	84.5	-	-
1986	-	3.5	-	-	26.8	-	85.3	-	-
1987	-	5.8	-	-	29.4	-	86.2	-	-
1988	-	3.0	-	-	33.7	-	84.1	14.3	-
1989	-	1.4	-	-	35.8	-	86.7	35.4	-
1990	-	2.2	-	-	34.1	-	94.1	28.0	-
1991	-	2.7	-	-	36.3	-	96.2	36.4	-
1992	-	1.4	-	-	37.1	-	103.6	52.3	-
1993	-	1.5	-	-	38.3	-	116.0	104.8	-
1994	-	1.3	-	-	39.4	-	130.7	90.8	-
1995	-	1.1	-	-	42.4	-	141.3	84.2	22
1996	-	1.1	-	21	39.7	3.2	146.4	54.9	22
1997	-	0.9	-	18	48.1	3.1	177.6	15.6	22
1998	-	3.4	79.8	18	59.7	3.0	176.7	31.2	19
1999	61	3.0	87.3	18	58.4	3.2	155.8	47.6	19
2000	64	2.4	90.0	16	67.2	3.2	138.3	24.0	20
2001	63	2.6	97.2	16	66.6	3.2	128.6	31.5	20
2002	63	1.8	107.2	15	64.5	3.2	127.8	36.4	19
2003	65	1.5	98.4	15	66.0	3.3	130.7	85.0	19
2004	65	1.5	93.6	13	71.2	3.6	124.5	72.3	19
2005	67	1.3	100.0	11	74.8	3.8	119.2	70.8	19
2006	67	1.2	104.8	11	74.4	3.6	109.0	68.1	18
2007	70	1.2	109.8	9	73.8	3.3	131.6	79.4	16
2008	71	1.2	111.3	9	76.5	3.5	130.5	37.6	17
2009	71	1.2	99.4	10	68.1	3.4	137.0	52.4	17
2010	73	1.2	103.5	10	71.7	3.5	135.5	87.1	16

India

Year	Debt as % of GDP	Savings as % of GDP	Government spending as % of GDP	Inflation, CPI	Gini Coefficient, 0-100	Labor participartion rate	Productivity performance	Literacy rate as % of population
1980	-	17	10	11.4	-	61	-	-
1981	-	21	10	13.1	-	61	-	-
1982	-	20	11	7.9	-	60	-	-
1983	-	18	10	11.9	-	60	-	-
1984	-	21	11	8.3	-	60	-	-
1985	-	22	11	5.6	-	60	-	-
1986	-	22	12	8.7	-	61	-	-
1987	-	21	12	8.8	-	60	-	-
1988	-	22	12	9.4	-	60	-	-
1989	-	22	12	3.3	-	60	-	-
1990	-	22	12	9.0	-	61	-	-
1991	-	22	11	13.9	-	60	-	-
1992	74.2	23	11	11.8	-	60	-	-
1993	74.4	22	11	6.4	-	61	0.273	-
1994	71.3	24	11	10.2	40.2	60	0.273	-
1995	67.7	27	11	10.2	41.9	60	0.279	-
1996	64.6	23	11	9.0	45.2	60	0.280	-
1997	65.2	25	11	7.2	46.5	59	0.281	-
1998	65.7	23	12	13.2	47.2	59	0.282	59
1999	68.0	26	13	4.7	51.3	59	0.283	60
2000	71.8	25	13	4.0	48.6	58	0.281	60
2001	76.2	25	12	3.7	48.2	58	0.270	60
2002	80.5	27	12	4.4	48.0	58	0.271	62
2003	81.6	28	11	3.8	47.2	58	0.271	63
2004	78.6	33	11	3.8	47.1	58	0.279	65
2005	75.4	34	11	4.2	47.2	59	0.282	65
2006	72.7	35	10	6.1	46.5	58	0.288	68
2007	73.1	37	10	6.4	46.1	58	0.293	70
2008	69.4	33	11	8.4	45.7	58	0.300	73
2009	66.8	34	12	10.9	45.8	58	0.306	73
2010	64.1	34	12	12.0	45.6	58	0.311	74

Year	School enrollment: Secondary	Unemployment, % of total work force	Exchange rate index, 2005=100	Tariffs	Export as % of GDP	Corruption level, 0-10	Credit by banks as % of GDP	Market capitalization as % of GDP	Infrastructure
1980	-	-	-	-	6.1	-	38.1	-	-

1981	-	-	-	-	6.3	-	39.5	-	-
1982	-	-	-	-	6.6	-	42.9	-	-
1983	-	-	-	-	6.7	-	42.8	-	-
1984	-	-	-	-	6.2	-	46.1	-	-
1985	-	-	-	-	5.2	-	48.0	-	-
1986	-	-	-	-	5.5	-	50.9	-	-
1987	-	-	-	-	6.7	-	51.5	-	-
1988	-	-	-	-	6.9	-	51.2	8.1	-
1989	-	-	-	-	7.4	-	52.9	9.3	-
1990	-	-	-	-	7.7	-	49.9	12.2	-
1991	-	-	-	-	9.2	-	51.4	17.8	-
1992	-	-	-	-	9.8	-	51.1	26.5	-
1993	-	-	-	-	10.3	-	50.0	35.5	-
1994	-	3.7	-	-	10.7	-	49.3	39.6	-
1995	-	2.2	-	-	11.6	-	47.3	35.7	6
1996	-	2.1	-	-	11.3	2.6	44.1	31.6	6
1997	-	2.6	53.0	-	11.0	2.8	45.7	31.3	5
1998	54	3.6	69.3	35	11.1	2.9	46.5	25.3	6
1999	53	4.0	72.1	34	12.7	2.9	49.2	41.0	6
2000	53	4.3	89.5	34	13.6	2.8	53.0	32.2	6
2001	56	4.6	71.3	34	13.4	2.7	54.7	23.1	5
2002	55	4.7	87.1	32	14.8	2.7	58.9	25.8	6
2003	56	4.4	94.4	30	15.3	2.8	57.4	46.6	6
2004	58	4.4	98.9	25	18.4	2.8	57.6	53.8	6
2005	58	5.6	100.0	22	19.6	2.9	58.4	66.3	6
2006	60	4.9	110.1	19	21.9	3.3	60.9	86.1	6
2007	62	5.4	121.6	17	20.0	3.5	60.8	146.4	6
2008	62	5.3	134.8	14	24.3	3.4	68.2	53.2	6
2009	62	5.1	130.8	14	20.8	3.4	69.4	85.4	7
2010	64	4.6	125.7	15	22.1	3.3	71.1	93.5	7

Poland

Year	Debt as % of GDP	Savings as % of GDP	Government spending as % of GDP	Inflation, CPI	Gini Coefficient, 0-100	Labor participartion rate	Productivity performance	Literacy rate as % of population
1980	-	-	-	9.7	-	65	-	-
1981	-	-	-	19.1	-	65	-	-
1982	-	-	-	55.6	-	66	-	-
1983	-	-	-	103.6	-	66	-	-
1984	-	-	-	25.5	-	65	-	-
1985	-	-	-	15.4	-	66	-	-
1986	-	-	-	11.5	-	66	-	-
1987	-	-	-	16.5	-	66	-	-

1988	-	-	-	58.7	-	65	-	-	
1989	-	-	22	244.6	-	64	-	-	
1990	-	14	21	555.4	-	63	-	-	
1991	-	14	24	76.7	-	62	-	-	
1992	-	12	23	45.3	-	61	-	-	
1993	-	13	22	36.9	26.7	61	0.270	-	
1994	-	19	19	33.3	29.8	60	0.272	-	
1995	-	20	19	28.1	31.4	59	0.276	-	
1996	-	20	18	19.8	32.3	58	0.279	-	
1997	-	20	18	15.1	32.7	57	0.310	-	
1998	35.3	21	17	11.7	32.9	56	0.318	-	
1999	35.8	20	17	7.3	33.1	56	0.321	97	
2000	36.8	19	17	10.1	32.9	56	0.328	97	
2001	37.6	18	18	5.5	32.8	57	0.331	98	
2002	42.3	15	19	1.9	34.1	55	0.331	98	
2003	47.2	16	18	0.8	35.2	55	0.332	99	
2004	45.6	15	18	3.6	35.9	54	0.333	99	
2005	47.1	17	18	2.1	34.9	55	0.337	99	
2006	47.7	18	18	1.1	34.1	54	0.338	99	
2007	45.0	19	18	2.4	34.0	54	0.339	100	
2008	47.1	19	19	4.3	34.2	55	0.346	99	
2009	50.7	17	18	3.8	34.1	54	0.351	100	
2010	54.9	17	19	2.7	34.2	54	0.342	100	

Year	School enrollment: Secondary	Unemployment, % of total work force	Exchange rate index, 2005=100	Tariffs	Export as % of GDP	Corruption level, 0-10	Credit by banks as % of GDP	Market capitalization as % of GDP	Infrastructure
1980	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	58.1	-	-
1986	-	-	-	-	20.4	-	54.9	-	-
1987	-	-	-	-	22.9	-	49.7	-	-
1988	-	-	42.0	-	23.0	-	41.7	-	-
1989	-	-	47.1	-	25.8	-	33.1	-	-
1990	-	-	37.5	-	26.4	-	18.8	-	-
1991	-	-	59.1	-	22.1	-	32.8	0.2	-
1992	-	13.3	62.6	-	22.8	-	35.6	0.3	-
1993	-	14.0	66.7	-	21.6	-	37.8	3.2	-
1994	-	14.4	68.0	-	22.4	-	34.1	3.1	-
1995	-	13.3	73.6	-	23.9	-	30.1	3.3	9

1996	-	12.4	79.9	-	22.4	5.3	31.5	5.4	9
1997	-	11.2	82.5	7	23.9	5.1	32.4	7.7	9
1998	-	10.7	87.2	7	26.5	4.6	33.7	11.8	10
1999	-	12.5	85.0	7	24.3	4.2	36.3	17.6	10
2000	91	16.1	93.4	6	27.8	4.1	34.4	18.3	11
2001	91	18.2	105.3	6	27.2	4.1	37.0	13.7	10
2002	92	19.9	100.9	6	29.7	4.0	37.2	14.5	10
2003	92	19.6	89.9	6	33.3	3.6	38.4	17.1	10
2004	91	19.0	89.6	6	37.0	3.5	37.6	28.1	12
2005	93	17.7	100.0	5	37.3	3.4	37.4	30.9	12
2006	93	13.8	102.0	5	40.2	3.7	42.0	43.6	13
2007	93	9.6	105.7	5	31.7	4.2	46.3	48.7	14
2008	92	7.1	115.9	5	40.6	4.6	59.7	17.0	14
2009	91	8.2	98.5	5	39.5	5.0	61.5	31.4	15
2010	92	8.5	104.7	4	42.2	5.3	63.6	40.6	15

Brazil

Year	Debt as % of GDP	Savings as % of GDP	Government spending as % of GDP	Inflation, CPI	Gini Coefficient, 0-100	Labor participartion rate	Productivity performance	Literacy rate as % of population
1980	-	18	9	-	-	62	-	-
1981	-	19	9	101.7	-	62	-	-
1982	-	15	10	100.5	57.9	62	-	-
1983	-	13	10	135.0	58.4	63	-	-
1984	-	16	8	192.1	59.0	63	-	-
1985	-	19	10	226.0	58.4	63	-	-
1986	-	17	11	147.1	55.6	63	-	-
1987	-	22	12	228.3	58.4	65	-	-
1988	-	24	13	629.1	59.7	65	-	-
1989	-	36	15	1,430.7	61.4	65	-	-
1990	-	19	19	2,945.7	63.3	65	-	-
1991	-	19	18	432.8	61.0	67	-	-
1992	-	20	17	951.6	61.2	68	-	-
1993	-	20	18	1,928.0	61.5	68	0.343	-
1994	-	21	18	2,075.0	60.9	69	0.347	-
1995	-	16	21	66.0	62.3	69	0.341	-
1996	63.9	14	20	15.8	61.2	67	0.329	-
1997	62.8	14	20	6.9	60.5	68	0.318	86
1998	64.5	13	21	3.2	60.4	68	0.313	86
1999	66.7	12	20	4.9	59.8	69	0.310	87
2000	70.2	14	19	7.0	60.0	68	0.311	87
2001	79.8	14	20	6.8	60.1	68	0.308	87
2002	74.7	15	21	8.5	59.4	69	0.302	89

2003	70.6	16	19	14.7	58.8	69	0.291	90
2004	69.1	18	19	6.6	57.7	69	0.290	89
2005	66.7	17	20	6.9	57.4	70	0.299	89
2006	65.2	18	20	4.2	56.8	70	0.305	89
2007	70.7	18	20	3.6	55.9	71	0.309	90
2008	67.9	19	20	5.7	55.1	71	0.311	90
2009	66.1	15	22	4.9	54.7	71	0.318	90
2010	66.8	17	21	5.0	54.8	71	0.322	90

Year	School enrollment: Secondary	Unemployment, % of total work force	Exchange rate index, 2005=100	Tariffs	Export as % of GDP	Corruption level, 0-10	Credit by banks as % of GDP	Market capitalization as % of GDP	Infrastructure
1980	-	-	-	-	9.3	-	43.3	-	-
1981	-	4.3	-	-	9.9	-	45.9	-	-
1982	-	3.9	-	-	8.8	-	49.1	-	-
1983	-	4.9	-	-	11.7	-	48.4	-	-
1984	-	4.3	-	-	14.3	-	57.2	-	-
1985	-	3.4	-	-	12.2	-	50.8	-	-
1986	-	2.4	-	-	9.8	-	50.9	-	-
1987	-	3.6	-	-	9.7	-	78.8	-	-
1988	-	3.8	-	-	11.3	-	165.5	9.7	-
1989	-	3.0	-	-	9.0	-	212.9	10.4	-
1990	-	3.7	-	-	8.8	-	87.6	3.6	-
1991	-	4.5	-	-	9.4	-	87.9	10.5	-
1992	-	6.4	-	-	11.7	-	129.8	11.6	-
1993	-	6.0	-	-	11.6	-	180.0	22.7	-
1994	-	5.8	-	-	10.8	-	86.4	34.6	-
1995	-	6.0	-	-	7.4	-	56.1	19.2	20
1996	-	6.8	-	16	7.7	3.2	57.1	25.8	20
1997	65	7.7	69.3	15	7.9	3.6	59.4	29.3	20
1998	66	8.9	74.3	15	7.6	4.0	66.8	19.1	20
1999	69	9.6	70.2	14	9.8	4.1	70.9	38.8	20
2000	69	9.4	87.3	14	10.5	3.9	71.9	35.1	20
2001	71	9.3	82.4	13	12.3	4.0	72.5	33.6	21
2002	75	9.1	99.8	13	14.6	4.0	74.5	24.6	21
2003	76	9.7	96.7	13	15.0	3.9	74.0	42.5	21
2004	78	8.9	105.8	13	16.8	3.9	72.6	49.8	21
2005	79	9.3	100.0	12	15.4	3.7	74.5	53.8	22
2006	78	8.4	102.3	12	14.8	3.3	86.6	65.3	22
2007	80	8.1	105.7	12	13.7	3.5	92.2	100.3	22
2008	82	7.1	108.7	13	14.6	3.5	96.9	35.7	22
2009	82	8.3	120.7	13	11.9	3.7	97.5	73.2	23
2010	83	7.8	115.9	13	11.2	3.7	97.8	74.0	23

Turkey

Year	Debt as % of GDP	Savings as % of GDP	Government spending as % of GDP	Inflation, CPI	Gini Coefficient, 0-100	Labor participartion rate	Productivity performance	Literacy rate as % of population
1980	-	13	12	110.2	-	59	-	-
1981	-	15	10	36.6	-	58	-	-
1982	-	15	10	30.8	-	58	-	-
1983	-	13	9	31.4	-	58	-	-
1984	-	13	8	48.4	-	57	-	-
1985	-	14	8	45.0	-	58	-	-
1986	-	16	8	34.6	-	58	-	-
1987	-	24	8	38.8	-	57	-	-
1988	-	26	8	73.7	-	58	-	-
1989	-	23	9	63.3	-	59	-	-
1990	-	22	11	60.3	-	58	-	-
1991	-	21	12	66.0	-	58	-	-
1992	-	21	13	70.1	-	57	-	-
1993	-	21	13	66.1	-	53	0.256	-
1994	-	22	12	106.3	-	55	0.259	-
1995	-	22	11	88.1	42.8	0	0.265	-
1996	52.2	19	12	80.3	41.5	54	0.261	-
1997	51.3	20	12	85.7	42.8	53	0.267	-
1998	55.8	24	10	84.6	43.2	53	0.270	-
1999	76.3	20	12	64.9	43.4	53	0.266	86
2000	104.4	18	12	54.9	43.5	50	0.265	85
2001	93.0	18	12	54.4	43.0	50	0.271	85
2002	85.1	18	13	45.0	42.7	50	0.269	87
2003	59.2	15	12	25.3	43.4	48	0.274	87
2004	52.3	16	12	10.6	42.7	49	0.272	88
2005	46.1	16	12	10.1	42.6	49	0.269	88
2006	39.4	16	12	10.5	40.3	47	0.270	88
2007	39.5	16	13	8.8	39.3	47	0.276	89
2008	45.4	17	13	10.4	39.2	48	0.277	90
2009	41.7	13	15	6.3	39.0	47	0.281	90
2010	42.2	14	14	8.6	38.8	47	0.280	91

Year	School enrollment: Secondary	Unemployment, % of total work force	Exchange rate index, 2005=100	Tariffs	Export as % of GDP	Corruption level, 0-10	Credit by banks as % of GDP	Market capitalization as % of GDP	Infrastructure
1980	-	-	-	-	5.2	-	30.9	-	-

1981	-	-	-	-	8.7	-	30.5	-	-
1982	-	-	-	-	12.4	-	31.5	-	-
1983	-	-	-	-	12.0	-	33.9	-	-
1984	-	-	-	-	16.8	-	35.1	-	-
1985	-	-	-	-	16.1	-	39.6	-	-
1986	-	11.2	-	-	13.2	-	39.9	-	-
1987	-	10.0	-	-	16.9	-	29.8	-	-
1988	-	8.4	-	-	19.5	-	29.7	1.3	-
1989	-	8.6	-	-	16.4	-	23.4	6.3	-
1990	-	8.0	-	-	13.2	-	21.0	12.7	-
1991	-	8.2	-	-	14.9	-	19.5	10.4	-
1992	-	8.5	-	-	14.4	-	22.5	6.2	-
1993	-	9.0	-	-	14.0	-	24.9	20.8	-
1994	-	8.6	-	-	21.5	-	26.4	16.5	-
1995	-	7.6	-	-	20.7	-	25.6	12.3	13
1996	-	6.6	-	-	22.4	3.3	27.8	16.5	13
1997	-	6.8	-	11	25.2	3.2	34.1	32.2	13
1998	51	6.9	-	11	21.3	3.4	27.5	12.5	13
1999	56	7.7	74.5	11	19.4	3.6	36.8	45.1	13
2000	63	6.5	80.9	10	20.7	3.8	37.9	26.1	14
2001	69	8.4	83.7	10	27.8	3.6	52.9	24.1	14
2002	71	10.4	88.2	10	25.0	3.2	47.5	14.6	13
2003	71	10.5	99.0	10	23.1	3.1	42.8	22.6	13
2004	73	10.8	102.1	10	24.6	3.2	41.4	25.1	13
2005	75	10.6	100.0	10	22.7	3.5	45.6	33.4	13
2006	77	10.2	106.8	9	23.3	3.8	45.8	30.6	14
2007	78	10.3	115.8	10	22.2	4.1	49.3	44.3	14
2008	77	11.0	119.1	9	24.9	4.6	52.5	16.1	14
2009	74	14.0	125.7	9	23.0	4.4	63.0	36.7	14
2010	75	13.3	133.7	10	21.3	4.4	69.3	41.7	14

Argentina

Year	Debt as % of GDP	Savings as % of GDP	Government spending as % of GDP	Inflation, CPI	Gini Coefficient, 0-100	Labor participartion rate	Productivity performance	Literacy rate as % of population
1980	-	23	-	100.8	-	58	-	-
1981	-	20	-	104.5	-	59	-	-
1982	-	18	-	164.8	-	59	-	-
1983	-	19	-	343.8	42.8	58	-	-
1984	-	18	-	626.7	45.3	59	-	-
1985	-	18	-	672.2	46.5	59	-	-
1986	-	15	-	90.1	48.7	58	-	-
1987	-	15	5	131.3	54.0	59	-	-

1988	-	18	4	343.0	60.8	59	-	-	
1989	-	14	4	3,079.8	60.3	60	-	-	
1990	-	16	3	2,314.0	60.2	60	-	-	
1991	-	14	3	171.7	60.6	59	-	-	
1992	-	14	3	24.9	45.5	58	-	-	
1993	-	16	14	10.6	44.9	58	0.271	-	
1994	-	16	13	4.2	46.0	58	0.269	-	
1995	-	16	13	3.4	48.9	58	0.268	-	
1996	-	16	13	0.2	49.5	59	0.277	-	
1997	45.1	15	12	0.5	49.1	59	0.280	-	
1998	53.7	15	12	0.9	50.7	60	0.284	-	
1999	124.5	14	14	-1.2	49.8	60	0.273	95	
2000	167.2	13	14	-0.9	51.1	61	0.262	96	
2001	172.3	13	14	-1.1	53.4	62	0.249	96	
2002	135.9	20	12	25.9	53.8	62	0.240	96	
2003	125.8	20	11	13.4	54.7	63	0.233	95	
2004	85.5	21	11	4.4	50.2	63	0.231	96	
2005	76.4	24	12	9.6	49.3	64	0.231	96	
2006	67.7	26	12	10.9	47.7	65	0.236	96	
2007	58.1	27	13	8.8	47.4	64	0.239	97	
2008	57.6	25	13	8.6	46.3	64	0.241	98	
2009	47.8	23	15	6.3	46.1	65	0.244	98	
2010	49.1	22	15	10.8	44.5	65	0.242	98	

Year	School enrollment: Secondary	Unemployment, % of total work force	Exchange rate index, 2005=100	Tariffs	Export as % of GDP	Corruption level, 0-10	Credit by banks as % of GDP	Market capitalization as % of GDP	Infrastructure
1980	-	2.3	-	-	5.4	-	33.0	-	-
1981	-	4.5	-	-	7.8	-	48.4	-	-
1982	-	4.8	-	-	9.2	-	46.0	-	-
1983	-	4.2	-	-	9.7	-	46.2	-	-
1984	-	3.8	-	-	8.3	-	41.7	-	-
1985	-	5.3	-	-	12.0	-	32.6	-	-
1986	-	4.4	-	-	8.9	-	32.9	-	-
1987	-	5.3	-	-	8.3	-	47.6	-	-
1988	-	6.0	-	-	10.6	-	42.7	1.6	-
1989	-	7.3	-	-	13.9	-	80.1	5.5	-
1990	-	7.3	-	-	10.1	-	32.4	2.3	-
1991	-	5.8	-	-	8.3	-	22.8	9.8	-
1992	-	6.7	-	-	7.2	-	22.5	8.1	-
1993	-	10.1	-	-	7.0	-	26.0	18.6	-
1994	-	12.1	-	-	8.8	-	26.6	14.3	19
1995	-	18.8	-	-	10.5	-	27.9	14.6	19

1996	-	17.2	-	-	10.7	3.1	28.2	16.4	19
1997	-	14.9	-	15	11.2	2.8	30.4	20.2	19
1998	74	12.8	79.1	15	10.6	3.0	32.5	15.2	18
1999	76	14.1	82.2	15	10.3	3.0	35.5	29.6	19
2000	76	15.0	91.3	15	12.4	3.5	34.5	58.4	21
2001	78	18.3	90.0	12	16.7	3.5	37.2	71.6	19
2002	79	17.9	96.4	13	28.1	2.8	62.4	101.4	17
2003	79	16.1	104.2	12	25.3	2.5	50.6	30.0	18
2004	79	12.6	97.8	12	25.5	2.5	45.4	30.3	18
2005	78	10.6	100.0	11	25.8	2.8	38.3	33.6	19
2006	79	10.1	109.7	11	25.0	2.9	30.8	37.2	19
2007	79	8.5	110.8	11	25.9	2.9	28.5	33.2	18
2008	80	7.8	118.1	10	24.1	2.9	24.4	16.0	18
2009	80	8.6	122.9	12	21.4	2.9	28.0	15.9	19
2010	79	8.9	129.7	13	22.3	2.9	29.2	17.3	19

Appendix 4: Formatted for statistical analysis

Emerging market of investment	Initial year of investment	Year of selling shareholding rights	ROI	Average: Debt as % of GDP	Average: Savings as % of GDP	Average: Government spending as % of GDP	Average: Inflation, CPI	Average: Gini Coefficient, 0-100	Average: Labor participation rate
South Africa	1988	1996	0.129	33.7	18.3	19.4	11.7	59.3	49.3
South Africa	2005	2009	0.251	27.6	14.4	19.6	6.74	64.2	54.4
South Africa	1999	2005	0.083	25.1	15.7	18.6	5.2	64.	52.8
South Africa	2001	2006	0.302	25.5	15.3	19	5.1	66.3	53.3
South Africa	2004	2010	0.172	28.4	14.7	19.6	5.6	65.3	54.2
South Africa	2000	2005	0.411	25.1	15.7	18.7	5.1	65.2	53.0
South Africa	1999	2004	0.345	24.7	16.0	18.5	5.5	63.7	52.7
South Africa	2001	2006	0.488	25.6	15.3	19.0	5.1	66.3	53.3
South Africa	1996	2004	-0.081	26.3	15.8	18.7	6.2	61.8	52.2
South Africa	2002	2005	0.181	25.5	11.5	19.0	4.9	67.3	53.3
South Africa	2005	2008	0.238	26.8	14.3	19.2	6.6	65.5	54.3
South Africa	2003	2009	0.340	26.3	14.7	19.4	5.9	65.7	54.0
South Africa	2006	2009	0.318	27.8	14.5	19.8	7.6	64.6	54.5
South Africa	1995	1999	0.098	28.2	15.8	18.6	7.3	57.9	51.4
South Africa	2001	2007	0.273	25.8	15.1	19.0	5.3	66.1	53.4
South Africa	2004	2008	0.268	26.5	14.4	19.2	5.6	65.9	54.0
South Africa	1987	1990	-0.102	-	21.5	19.3	14.5	-	48.0
South Africa	2003	2008	0.313	26.2	14.7	19.2	5.7	6.2	53.8
South Africa	2000	2008	0.429	25.7	15.2	18.9	6.0	65.1	53.4
South Africa	1992	1998	-0.136	29.6	16.0	19.3	9.1	58.0	50.6
South Africa	2005	2009	0.034	27.6	14.4	19.6	6.74	64.2	54.4
South Africa	1983	1990	0.007	-	22.6	18.5	14.6	-	47.8
South Africa	2004	2008	0.196	26.5	14.4	19.2	5.6	65.9	54.0
South Africa	2001	2009	0.162	26.4	15.1	19.2	6.2	65.6	53.8
South Africa	2000	2007	0.168	25.6	15.3	18.9	5.3	65.2	53.3
South Africa	1985	1990	0.286	-	22.3	19.0	15.5	-	48.0
South Africa	2003	2008	0.273	26.3	14.7	19.2	5.7	6.2	53.8
South Africa	2003	2008	0.257	26.3	14.7	19.2	5.7	6.2	53.8
South Africa	2005	2009	0.115	27.6	14.4	19.6	6.74	64.2	54.4
South Africa	1988	1994	-0.471	-	18.9	19.7	12.8	-	48.9
South Africa	2004	2007	0.209	26.4	14.3	19.3	4.1	66.4	53.8
South Africa	1998	2002	0.247	24.5	16.0	18.4	6.46	60.7	52.4
South Africa	1995	1999	-0.169	28.2	15.8	18.6	7.36	57.9	51.4
South Africa	2001	2008	0.249	25.9	15.1	19.0	6.1	65.9	53.6
South Africa	2005	2009	0.205	27.6	14.4	19.6	6.74	64.2	54.4
South Africa	1987	1993	-0.121	-	19.6	19.5	13.8	-	48.6
South Africa	2001	2006	0.194	25.6	15.3	19	5.1	66.3	53.3
South Africa	1994	1999	-0.137	28.2	21.2	11.5	85.0	42.7	44.7

South Africa	2004	2009	0.198	27.2	15.7	12.8	9.5	40.5	47.8
South Africa	1998	2001	0.071	24.3	20.0	11.5	64.7	43.3	51.5
South Africa	2006	2010	0.198	29.4	15.2	13.4	8.9	39.3	47.2
South Africa	2000	2006	0.093	25.1	16.7	12.1	30.1	42.6	49.0
South Africa	2002	2007	0.035	26.1	16.2	12.3	18.4	41.8	48.3
South Africa	2007	2009	0.252	28.3	15.3	13.7	8.5	39.2	47.3
South Africa	1992	1999	0.14	28.2	21.1	11.9	80.8	42.7	47.3
South Africa	1999	2004	0.016	24.7	17.5	12.2	42.5	43.1	50.0
South Africa	2000	2005	-0.126	25,2	15.7	18.7	5.1	65.2	53.0
South Africa	2007	2010	0.23	30,2	15.0	13.8	8.5	39.1	47.2
South Africa	2005	2010	0.302	29.0	15.3	13.2	9.1	39.9	47.5
South Africa	1999	2005	0.278	25.1	17.3	12.1	37.9	43.0	49.8
South Africa	2001	2007	0.059	25.8	16.4	12.2	23.5	41.9	48.6
South Africa	2005	2009	0.21	27.6	14.4	19.6	6.74	64.2	54.4
South Africa	1993	1998	0.019	29.6	21.3	11.7	85.1	42.6	44.6
South Africa	1984	1989	0.102	-	19.3	8.2	50.6	-	57.8
South Africa	2005	2010	0.119	29.0	15.3	13.2	9.1	39.9	47.5
South Africa	2000	2006	-0.088	25.3	16.7	12.1	30.1	42.6	49.0
South Africa	2004	2008	-0.159	27.2	14.4	19.2	5.6	65.9	54.0
South Africa	2003	2009	0.305	26.9	15.6	12.7	11.7	40.9	47.8
South Africa	2005	2010	0.126	29.0	15.3	13.2	9.1	39.9	47.5
South Africa	2004	2010	0.260	28.4	14.7	19.6	5.6	65.3	54.2
South Africa	1984	1990	0.072	-	19.7	8.6	52.0	-	57.8
South Africa	2007	2010	0.057	30.2	15.0	13.8	8.5	39.1	47.2
South Africa	2000	2006	0.188	25.3	16.7	12.1	30.1	42.6	49.0
South Africa	2004	2009	0.226	27.2	15.7	12.8	9.5	40.5	47.8
South Africa	2004	2008	0.085	27.2	14.4	19.2	5.6	65.9	54.0
South Africa	1992	1998	0.047	29,6	16.0	19.3	9.1	58.0	50.6
South Africa	1997	2000	0.055	25.8	20.5	11.5	72.5	43.2	52.2
South Africa	1999	2005	0.043	25.0	17.3	12.1	37.9	43.0	49.8
South Africa	2007	2010	0.361	30.2	15.0	13.8	8.5	39.1	47.2
South Africa	2006	2010	0.026	29.4	15.2	13.4	8.9	39.3	47.2
South Korea	2003	2010	0.272	22.3	31.6	14.5	3.1	33.0	61.4
South Korea	2002	2009	-0.081	20.9	31.4	14.3	3.1	33.2	61.2
South Korea	2006	2010	0.352	25.6	31.0	15.2	3.1	32.6	61.4
South Korea	1999	2004	0.255	14.2	32.5	12.7	2.9	35.5	61.3
South Korea	2005	2009	0.152	24.0	31.0	15.0	3.1	32.8	61.2
South Korea	1995	2002	0.084	12.6	34.0	12.3	3.9	36.3	61.9
South Korea	2000	2007	0.093	17.6	31.8	13.5	2.9	34.2	61.4
South Korea	1993	1999	0.112	10.9	35.7	11.9	4.7	36.7	61.8
South Korea	2005	2010	0.372	24.6	31.2	15.0	2.9	32.7	61.3
South Korea	2003	2009	0.404	21.6	31.6	14.4	3.2	33.1	61.2
South Korea	2000	2008	0.245	18.4	31.7	13.7	3.2	34.1	61.3
South Korea	2002	2007	-0.202	19.0	31.7	13.8	2.9	33.6	61.3

South Korea	1994	1999	-0.004	10.9	35.7	11.8	4.7	36.7	62.0
South Korea	2001	2008	0.324	19.1	31.5	13.9	3.3	33.7	61.3
South Korea	1995	2002	0.021	12,6	34.0	12.3	3.9	36.3	61.9
South Korea	2007	2010	0.306	26.4	31.0	15.3	3.3	32.5	61.2
South Korea	2003	2009	0.198	21.6	31.6	14.4	3.2	33.1	61.2
South Korea	2008	2010	0.387	26.9	31.0	15.3	3.5	32.3	61.3
South Korea	2002	2007	-0.251	19.0	31.7	13.8	2.9	33.6	61.3
South Korea	2000	2006	0.201	16.5	31.8	13.2	3.1	34.4	61.4
South Korea	1984	1990	0.036	-	34.2	11.3	4.6	-	58.6
South Korea	1997	2002	0.06	12.6	33.5	12.5	3.7	36.3	61.8
South Korea	2005	2008	0.295	23.0	31.2	14.8	3.1	32.9	61.3
South Korea	2001	2007	0.246	18.2	31.6	13.7	3.1	33.8	61.3
South Korea	2006	2010	0.524	25.6	31.0	15.2	3.1	32.6	61.4
South Korea	2006	2009	0.303	25.1	30.8	15.3	3.1	32.8	61.2
South Korea	2000	2007	0.162	17.6	31.8	13.5	2.9	34.2	61.4
South Korea	2005	2009	0.257	24.0	31.0	15.0	3.1	32.8	61.2
South Korea	1992	1998	0.146	10.6	35.9	11.8	5.5	36.3	61.9
South Korea	1994	1999	0.073	10.9	35.6	11.8	4.7	36.7	62.0
South Korea	2007	2010	0.42	26.4	31.0	15.3	3.3	32.5	61.2
South Korea	2005	2009	0.297	24.0	31.0	15.0	3.1	32.8	61.2
South Korea	1996	2002	0.152	12.6	33.7	12.4	3.8	36.3	61.9
South Korea	2007	2010	0.351	26.4	31.0	15.3	3.3	32.5	61.2
South Korea	1995	2001	0.199	11.8	34.6	12.1	4.1	36.6	62.0
South Korea	2005	2009	0.401	24.0	31.0	15.0	3.1	32.8	61.2
South Korea	2006	2010	0.405	25.6	31.0	15.2	3.1	32.6	61.4
South Korea	1983	1989	-0.029	-	32.9	11.3	3.8	-	58.3
South Korea	1996	2002	0.072	12.6	33.7	12.4	3.8	36.3	61.9
South Korea	2001	2008	0.252	19.1	31.5	13.9	3.3	33.7	61.3
South Korea	2006	2010	0.398	25.6	31.0	15.2	3.1	32.6	61.4
South Korea	2004	2008	-0.040	21.6	31.8	14.4	3.2	33.1	61.2
South Korea	2003	2009	0.183	25.5	31.6	14.4	3.2	33.1	61.2
South Korea	2005	2010	0.353	24.6	31.2	15.0	2.9	32.7	61.3
South Korea	2001	2009	0.493	20.2	31.3	14.1	3.2	33.4	61.2
South Korea	1999	2003	-0.187	13.9	32.2	12.6	2.7	35.9	61.4
South Korea	2002	2006	0.289	17.8	31.8	13.6	2.9	33.7	61.4
South Korea	2007	2010	0.366	26.4	31.0	15.3	3.3	32.5	61.2
South Korea	1999	2006	0.119	15.9	32.3	13.1	2.8	38.9	61.3
South Korea	2004	2009	0.308	22.6	31.5	14.7	3.1	32.9	61.2
South Korea	1996	2002	0.163	12.6	33.7	12.4	3.8	36.3	61.9
South Korea	2000	2006	0.199	16.5	31.8	13.2	3.1	34.4	61.4
South Korea	2005	2010	0.221	24.6	31.2	15.0	2.9	32.7	61.3
South Korea	2001	2006	0.101	17.1	33.7	13.5	3.2	33.9	61.3
South Korea	2001	2007	-0.059	18.2	31.6	13.7	3.1	33.8	61.3
South Korea	2006	2009	0.350	25.1	30.8	15.3	3.1	32.8	61.2

South Korea	1998	2001	0.199	12.2	34.0	12.5	3.6	36.7	61.7
South Korea	2007	2010	0.340	26.4	31.0	15.3	3.3	32.5	61.2
South Korea	2000	2005	0.197	15.5	32.0	13.0	3.2	34.6	61.3
South Korea	1998	2004	0.054	13.7	33.1	12.7	3.5	35.6	61.5
South Korea	2006	2009	0.399	25.1	30.8	15.3	3.1	32.8	61.2
South Korea	2004	2008	-0.109	21.6	31.8	14.4	3.2	33.1	61.2
South Korea	2007	2010	0.447	26.4	31.0	15.3	3.3	32.5	61.2
South Korea	2002	2006	-0.096	17.8	31.8	13.6	2.9	33.7	61.4
South Korea	1995	2000	0.268	11.4	35.2	12.0	4.1	36.8	62.2
South Korea	2001	2008	0.254	19.1	31.5	13.9	3.3	33.7	61.3
Thailand	2005	2010	0.259	40.6	30.0	12.3	3.2	41.1	72.8
Thailand	1994	1998	0.024	49.5	33.8	10.2	6.0	44.4	74.4
Thailand	2002	2007	0.274	36.6	28.9	11.5	2.8	42.2	73.1
Thailand	2006	2010	0.378	41.7	30.6	12.4	2.9	40.9	72.8
Thailand	1998	2003	0.013	43.9	29.8	11.0	2.3	42.4	73.6
Thailand	2003	2008	-0.148	37.6	29.1	11.6	3.6	41.8	73.0
Thailand	1990	1992	0.025	-	33.3	9.4	5.2	-	79.9
Thailand	1995	2006	0.322	41.3	30.3	10.9	3.6	42.8	73.7
Thailand	2001	2009	0.397	39.1	29.1	11.7	2.5	41.7	73.2
Thailand	2007	2010	0.415	42.5	31.0	12.5	2.4	40.5	72.8
Thailand	1999	2006	0.236	40.3	29.2	11.3	2.8	42.4	73.4
Thailand	2004	2008	0.291	38.0	29.4	11.8	3.9	41.8	73.0
Thailand	2008	2010	0.407	44.2	30.3	12.7	2.6	40.3	72.6
Thailand	2000	2009	0.221	39.9	29.2	11.6	2.4	41.8	73.3
Thailand	2002	2008	0.268	37.7	29.0	11.6	3.2	41.9	73.1
Thailand	2007	2010	0.398	42.5	31.0	12.5	2.4	40.5	72.8
Thailand	2001	2009	0.304	39.1	29.1	11.7	2.5	41.7	73.2
Thailand	1992	1999	0.054	49.8	33.8	10.2	4.7	44.2	74.9
Thailand	2006	2010	0.332	41.7	30.6	12.4	2.9	40.9	72.8
Thailand	2000	2005	0.258	38.9	28.3	11.2	2.1	42.4	73.5
Thailand	2005	2009	0.343	40.1	29.8	12.2	3.2	41.3	73.0
Thailand	2003	2009	0.250	38.7	29.3	11.9	2.9	41.6	73.0
Thailand	1994	2002	0.107	45.6	31.9	10.6	3.8	43.6	74.1
Thailand	2001	2007	0.180	37.5	28.9	11.4	2.6	42.1	73.2
Thailand	2005	2010	0.399	40.6	30.0	12.3	3.2	41.1	72.8
Thailand	2001	2008	0.306	38.3	29.0	11.5	2.9	41.9	73.3
Thailand	2004	2009	0.243	39.1	29.5	12.0	3.1	41.5	73.0
Thailand	1998	2002	0.645	45.6	30.2	11.0	2.4	42.3	73.8
Thailand	2000	2006	-0.104	38.9	28.8	11.2	2.3	42.5	73.4
Thailand	1993	2000	0.009	48.9	33.1	10.4	4.4	44.0	74.4
Thailand	2002	2005	0.166	36.0	27.8	11.2	2.5	42.3	73.3
Thailand	1987	1990	0.131	-	28.8	10.0	4.4	-	81.2
Thailand	2000	2007	0.259	38.9	29.0	11.3	2.4	42.3	73.4
Thailand	2004	2010	0.349	39.7	29.7	12.1	3.1	41.3	72.8

Thailand	1990	1995	-0.069	-	34.0	9.7	4.9	47.1	77.2
Thailand	2005	2010	0.355	40.6	30.0	12.3	3.2	41.1	72.8
Thailand	1998	2005	0.152	41.7	29.3	11.1	2.7	42.4	73.5
Thailand	2003	2009	0.197	38.7	29.3	11.9	2.9	41.6	73.0
Thailand	2005	2010	0.288	40.6	30.0	12.3	3.2	41.1	72.8
Thailand	2001	2007	0.097	37.5	28.9	11.4	2.6	42.2	73.3
Thailand	2002	2008	0.091	37.7	29.0	11.6	3.2	41.9	73.1
Thailand	2007	2010	0.352	42.5	31.0	12.5	2.4	40.5	72.8
Thailand	1999	2007	0.125	40.0	29.2	11.3	2.3	42.4	73.3
Thailand	1988	1994	-0.172	-	32.4	9.7	4.7	47.9	78.7
Thailand	2001	2010	0.631	39.5	29.3	11.8	2.6	41.6	73.1
Thailand	1994	1999	0.145	49.9	33.3	10.3	5.1	44.2	74.1
Thailand	2000	2004	0.197	39.7	28.6	11.0	1.7	42.4	73.6
Thailand	2006	2010	0.452	41.7	30.6	12.4	2.9	40.9	72.8
Thailand	1998	2002	0.112	45.6	30.2	11.0	2.4	42.3	73.8
Thailand	2007	2010	0.391	42.5	31.0	12.5	2.4	40.5	72.8
Thailand	1992	1996	0.156	-	34.6	10.0	4.8	45.9	75.6
Thailand	2001	2008	0.199	38.3	29.0	11.5	2.9	41.9	73.3
Thailand	2000	2009	0.121	39.9	29.2	11.6	2.4	41.8	73.3
Thailand	2003	2008	0.166	37.6	29.1	11.6	3.6	41.8	73.0
Thailand	2007	2010	0.361	42.5	31.0	12.5	2.4	40.5	72.8
Thailand	1994	2000	-0.049	48,9	32.8	10.4	4.6	43.9	74.4
Thailand	1990	1994	0.172	-	34.0	9.6	4.8	47.9	77.6
India	2001	2006	0.201	77.5	30.3	11.1	4.3	47.4	58.2
India	2004	2009	0.363	72.7	34.3	10.8	6.6	46.4	58.2
India	1999	2005	0.159	68.0	28.3	11.9	4.1	48.2	58.3
India	2002	2007	0.216	76.9	32.3	10.8	4.7	47.0	58.2
India	2005	2010	0.361	70.2	34.5	11.0	8.2	46.1	58.2
India	2005	2009	0.229	71.4	34.6	10.8	7.2	46.3	58.2
India	2000	2007	0.240	76.2	30.5	11.2	4.6	47.3	58.1
India	2002	2006	0.248	77.8	31.4	11.0	4.4	47.2	58.2
India	1995	1999	0.149	69.1	24.8	11.6	8.9	46.4	59.4
India	2001	2009	0.564	74.9	31.8	11.1	5.7	46.9	58.1
India	1998	2002	-0.031	72.4	25.2	12.4	6.0	48.7	58.4
India	2004	2008	0.198	73.8	34.4	10.6	5.8	46.5	58.2
India	2000	2006	0.101	76.7	29.6	11.4	4.3	47.6	58.2
India	1996	2001	0.062	68.6	24.5	12.0	6.9	47.8	58.8
India	1994	1999	0.102	67.1	24.7	11.5	9.1	45.3	59.5
India	2004	2007	0.147	75.0	34.8	10.5	5.1	46.6	58.3
India	2003	2008	0.163	75.1	33.3	10.7	5.4	46.6	58.1
India	2007	2010	-0.055	68.3	34.5	11.3	9.4	45.8	58.0
India	1997	2002	-0.031	71.2	25.1	12.3	6.2	48.3	58.5
India	1990	1996	0.006	70,4	23.2	11.1	10.0	42.4	60.3
India	2002	2009	0.248	74.8	32.6	11.0	6.2	46.7	58.1

India	2003	2009	0.149	73.9	33.4	10.9	6.2	46.5	58.1
India	2000	2004	0.048	77.7	27.6	11.8	3.9	47.8	58.0
India	1993	1998	0.062	68.1	24.0	11.1	9.3	43.4	59.8
India	2005	2010	0.228	70.2	34.5	11.0	8.2	46.1	58.2
India	2006	2009	0.299	70.5	34.8	10.7	7.9	46.1	58.0
India	2008	2010	0.197	66.7	33.7	11.6	10.4	45.7	58.0
India	2003	2008	-0.078	75.1	33.3	10.7	5.4	46.6	58.1
India	2000	2005	0.066	77,3	28.7	11.8	3.9	47.7	58.1
India	2004	2009	0.202	72.7	34.3	10.8	6.6	46.4	58.2
India	1998	2004	0.199	74.6	26.7	12.0	5.3	48.2	58.3
India	2001	2006	0.109	77.5	30.3	11.1	4.3	47.4	58.2
India	1997	2002	0.057	71.2	25.1	12.3	6.2	48.3	58.5
India	2006	2010	0.295	69.2	34.6	11.0	8.7	45.9	58.0
India	2005	2009	0.319	71.4	34.6	10.8	7.2	46.3	58.2
India	2001	2008	0.016	75.9	31.5	11.0	5.1	47.0	58.1
India	1989	1994	0.036	73.3	22.5	11.3	9.1	40.2	60.3
India	2005	2009	0.033	71.4	34.6	10.8	7.2	46.3	58.2
India	2006	2010	0.244	69.2	34.6	11.0	8.7	45.9	58.0
India	2001	2007	0.111	76.8	31.3	11.0	4.6	47.2	58.1
India	2003	2008	0.151	75.1	33.3	10.7	5.4	46.6	58.1
India	2004	2009	0.098	72.7	34.3	10.8	6.6	46.4	58.2
India	1993	1999	0.048	68.1	24.2	11.4	8.7	45.1	59.7
India	1989	1994	0.011	73.3	22.5	11.3	9.1	40.2	60.3
India	2006	2010	0.202	69.2	34.6	11.0	8.7	45.9	58.0
India	2002	2007	0.179	76.9	32.3	10.8	4.7	47.0	58.2
India	2001	2008	0.183	75.9	31.5	11.0	5.1	47.0	58.1
India	1994	1999	-0.059	67.1	24.7	11.5	9.1	45.3	59.5
India	2006	2010	0.401	69.2	34.6	11.0	8.7	45.9	58.0
India	2001	2007	0.197	76.8	31.3	11.0	4.6	47.2	58.1
India	1992	1998	0.089	69.0	23.8	11.1	9.7	44.2	59.8
India	2007	2010	0.532	68.3	34.5	11.3	9.4	45.8	58.0
India	1998	2002	0.113	72.4	25.2	12.4	6.0	48.7	58.4
India	2004	2007	0.099	75.0	34.8	10.5	5.1	46.6	58.3
India	2000	2005	0.201	77,3	28.7	11.8	3.9	47.7	58.1
India	2002	2008	0.203	75.9	32.4	10.9	5.3	46.8	58.1
Poland	1999	2004	0.099	40.8	17.5	18.1	2.9	34.6	54.3
Poland	2003	2007	0.205	46.5	17.0	18.0	2.1	35.2	54.4
Poland	2007	2010	0.293	49.9	18.0	18.5	3.3	34.1	54.2
Poland	2004	2009	0.151	47.1	17.5	18.1	2.9	34.6	54.3
Poland	2008	2010	0.325	50.9	18.3	18.4	3.5	34.1	54.3
Poland	1998	2002	-0.123	37.6	18.6	17.6	7.3	33.1	56.0
Poland	1992	1998	0.071	35.3	17.9	19.4	27.1	30.9	58.8
Poland	2000	2003	0.152	40.9	17.0	18.0	4.6	33.8	55.7
Poland	2001	2010	0.249	46.5	17.1	18.3	2.8	34.3	54.7

Poland	2001	2006	0.103	44.6	16.5	18.1	2.5	34.5	55.0
Poland	2005	2009	0.163	47.5	18.3	18.2	2.4	34.3	54.5
Poland	1993	1999	0.163	35.6	19.0	18.6	21.7	31.3	58.1
Poland	2002	2006	0.502	46.0	16.2	18.2	1.9	34.8	54.6
Poland	2003	2008	0.097	46.0	17.3	18.1	2.4	34.8	54.5
Poland	2004	2009	0.136	47.1	17.5	18.1	2.9	34.6	54.3
Poland	2000	2004	0.097	41.9	16.6	18.0	4.3	34.2	55.4
Poland	2001	2009	0.192	45.6	17.1	18.2	2.8	34.4	54.7
Poland	2005	2010	0.385	48.9	17.8	18.3	2.7	34.3	54.3
Poland	1990	1996	-0.077	-	16.0	20.9	113.6	30.1	60.6
Poland	1997	2002	0.041	37.6	18.8	17.6	8.6	33.1	56.2
Poland	2000	2007	0.278	43.7	17.1	18.0	3.4	34.2	55.0
Poland	1994	2000	0.021	36.0	19.9	17.8	17.9	32.1	57.4
Poland	1993	1997	0.009	-	18.4	19.2	26.6	30.5	59.0
Poland	2001	2008	0.119	44.9	17.1	18.3	2.7	34.4	54.9
Poland	2004	2010	0.333	48.3	17.4	18.3	2.9	34.4	54.3
Poland	2002	2005	0.081	45.6	15.8	18.3	2.1	35.0	54.8
Poland	2005	2009	0.322	47.5	18.3	18.2	2.4	34.3	54.5
Poland	2002	2009	0.373	46.6	17.0	18.3	2.5	34.6	54.5
Poland	2000	2006	0.201	43.4	16.9	18.0	3.6	34.2	55.1
Poland	2004	2009	0.287	47.1	17.5	18.1	2.9	34.6	54.3
Poland	2003	2008	0.345	46.0	17.3	18.1	2.4	34.8	54.5
Poland	1990	1994	-0.031	-	14.4	21.8	149.5	28.3	61.4
Poland	2007	2010	0.241	49.9	18.0	18.5	3.3	34.1	54.2
Poland	2002	2009	0.054	46.7	17.0	18.3	2.5	34.6	54.5
Poland	2006	2010	0.399	49.1	18.0	18.4	2.9	34.1	54.2
Poland	1990	1995	-0.231	-	15.3	21.4	129.3	29.3	61.0
Poland	2000	2008	0.194	44.0	17.3	18.1	3.5	34.2	55.0
Poland	1993	1999	0.014	35.4	19.0	18.6	21.7	31.3	58.1
Poland	2004	2009	0.111	47.1	17.5	18.1	2.9	34.6	54.3
Poland	2002	2006	0.132	46.0	16.2	18.2	1.9	34.8	54.6
Poland	2001	2008	0.202	44.9	17.1	18.3	2.7	34.4	54.9
Poland	2008	2010	0.428	50.9	18.3	18.4	3.5	34.1	54.3
Poland	2003	2008	0.291	46.0	17.3	18.1	2.4	34.8	54.5
Poland	1991	1999	0.034	35.4	17.4	20.0	33.4	30.7	59.3
Poland	2007	2010	0.169	49.9	18.0	18.5	3.3	34.1	54.2
Poland	2000	2006	0.031	43.4	16.9	18.0	3.6	34.2	55.1
Poland	1993	2000	0.025	36.0	19.0	18.3	20.2	31.4	57.8
Poland	1998	2006	-0.161	41.7	17.7	17.8	4.9	34.0	55.3
Poland	2005	2010	0.453	48.9	17.8	18.3	2.7	34.3	54.3
Poland	2003	2009	0.147	46.6	17.3	18.1	2.6	36.2	54.4
Poland	2008	2010	0.396	50.9	18.3	18.4	3.5	34.1	54.3
Poland	1999	2003	-0.089	39.9	17.6	18.2	2.7	34.6	54.4
Poland	2004	2008	0.261	46.5	17.6	18.2	2.7	34.6	54.4

Brazil	2003	2007	0.275	68.4	17.4	19.6	7.2	57.3	69.8
Brazil	1999	2004	0.049	71.8	14.8	19.7	8.1	59.3	68.6
Brazil	2004	2009	0.234	67.6	17.5	20.1	5.3	56.2	70.3
Brazil	2005	2009	0.398	67.3	17.4	20.4	5.1	56.0	70.6
Brazil	1996	2002	0.033	68.9	13.7	20.1	7.6	60.2	68.1
Brazil	1990	1999	0.039	64.5	16.8	19.2	842.9	61.2	67.8
Brazil	2004	2007	0.402	67.9	17.8	19.7	5.3	57.0	70.0
Brazil	2003	2009	0.194	68.0	17.3	20.0	6.7	56.6	70.1
Brazil	2007	2010	0.366	67.8	17.3	20.8	4.8	55.1	71.0
Brazil	1988	1994	-0.166	-	22.7	16.9	1484.3	61.2	66.7
Brazil	2008	2010	0.384	66.9	17.0	21.0	5.2	54.9	71.0
Brazil	2001	2006	0.150	71.0	16.3	19.8	7.9	58.3	69.1
Brazil	2004	2009	0.313	67.6	17.5	20.1	5.3	56.2	70.3
Brazil	2000	2008	0.151	70.5	16.6	19.7	7.1	57.9	69.4
Brazil	1998	2002	0.061	72.2	13.6	20.2	6.1	59.9	68.4
Brazil	2002	2008	0.168	69.3	17.2	19.9	7.1	57.3	69.9
Brazil	2003	2008	0.171	68.4	17.7	19.6	6.9	57.0	70.0
Brazil	2000	2006	0.241	70.9	16.0	19.7	7.8	58.6	69.0
Brazil	1998	2003	0.049	71.1	14.0	20.2	7.5	59.8	68.5
Brazil	2001	2007	0.079	70.9	16.6	19.8	7.3	58.0	69.4
Brazil	2005	2009	0.178	67.3	17.4	20.4	5.1	56.0	70.6
Brazil	2008	2010	0.294	66.9	17.0	21.0	5.2	54.9	71.0
Brazil	2001	2005	0.083	72.2	16.0	19.8	8.7	58.68	69.0
Brazil	2007	2010	0.393	67.8	17.3	20.8	4.8	55.1	71.0
Brazil	1983	1988	0.328	-	18.5	10.7	259.6	58.2	63.7
Brazil	1994	1998	0.028	63.7	15.6	20.0	433.8	61.1	68.2
Brazil	2001	2006	0.203	71.0	16.3	19.8	7.9	58.3	69.1
Brazil	1998	2003	0.005	71.1	14.2	20.0	13.7	59.8	68.5
Brazil	2004	2009	0.174	67.6	17.5	20.1	5.3	56.2	70.3
Brazil	2003	2008	0.058	68.4	17.7	19.6	6.9	57.0	70.0
Brazil	2004	2010	0.196	67.5	17.4	20.3	5.2	56.1	70.4
Brazil	2008	2010	0.244	66.9	17.0	21.0	5.2	54.9	71.0
Brazil	1998	2002	0.021	72.2	13.6	20.2	6.1	59.9	68.4
Brazil	1993	1998	-0.041	63.7	16.3	19.7	682.5	61.1	68.2
Brazil	2000	2006	0.079	70.9	16.0	19.7	7.8	58.6	69.0
Brazil	2001	2005	0.037	72.2	16.0	19.8	8.7	58.68	69.0
Brazil	1993	1997	-0.084	63.3	17.0	19.4	818.3	61.2	68.2
Brazil	2007	2010	0.561	67.8	17.3	20.8	4.8	55.1	71.0
Brazil	2003	2007	-0.041	68.4	17.4	19.6	7.2	57.3	69.8
Brazil	2002	2009	0.019	68.9	17.0	20.1	6.7	56.9	70.0
Brazil	2005	2010	0.367	67.2	17.3	20.5	5.1	55.8	70.6
Brazil	2000	2005	0.169	71.8	15.7	19.6	8.4	58.9	68.8
Brazil	2003	2009	0.256	68.0	17.3	20.0	6.7	56.6	70.1
Brazil	2001	2008	0.148	70.6	16.9	19.9	7.1	57.7	69.6

Brazil	2002	2009	0.195	68.9	17.0	20.1	6.7	56.9	70.0
Brazil	1999	2004	0.046	71.8	14.8	19.7	8.1	59.3	68.6
Brazil	2003	2009	0.191	68.0	17.3	20.0	6.7	56.6	70.1
Brazil	1996	2000	0.163	65.6	13.4	20.0	7.6	60.4	68.0
Brazil	2002	2006	0.071	69.3	16.8	19.8	8.2	58.1	69..4
Brazil	2006	2010	0.287	67,3	17.4	20.6	4.7	55.5	70.8
Brazil	2001	2007	0.501	70.9	16.6	19.8	7.3	58.0	69.4
Brazil	1989	1995	-0.047	-	21.6	18.0	1403.8	61.7	67.3
Turkey	1989	1994	-0.073	-	21.7	11.6	72.1	-	56.7
Turkey	2004	2008	0.083	44.5	16.2	12.4	10.1	40.8	48.0
Turkey	2002	2005	0.153	60.7	16.3	12.2	22.8	42.9	49.0
Turkey	2006	2010	0.441	41.6	15.2	13.4	8.9	39.3	47.2
Turkey	2000	2006	0.175	68.5	16.7	12.1	30.1	42.6	49.0
Turkey	1997	2000	0.011	72.0	20.5	11.5	72.6	43.2	52.3
Turkey	2001	2006	0.123	62.5	16.5	12.1	25.9	42.4	48.8
Turkey	2000	2008	0.033	62.7	16.7	12.3	25.6	41.8	48.6
Turkey	2002	2006	0.302	56.4	16.2	12.2	20.3	42.3	48.6
Turkey	2005	2010	0.405	42.4	15.3	13.1	9.1	39.9	47.5
Turkey	1993	1998	0.028	53.1	21.3	11.7	85.2	42.6	44.7
Turkey	2005	2010	0.378	42.4	15.3	13.1	9.1	39.9	47.5
Turkey	2002	2008	0.301	52.4	16.3	12.4	17.3	41.4	48.3
Turkey	1998	2002	0.093	82.9	19.6	11.8	60.8	43.1	51.2
Turkey	2001	2005	0.092	67.1	16.6	12.2	29.1	42.8	49.2
Turkey	2004	2009	0.209	44.1	15.7	12.8	9.4	40.5	47.8
Turkey	1999	2004	0.035	78.4	17.5	12.1	42.5	43.1	50.0
Turkey	2005	2010	0.342	42.4	15.3	13.1	9.1	39.9	47.5
Turkey	2006	2010	0.163	41.6	15.2	13.4	8.9	39.3	47.2
Turkey	2006	2009	0.169	41.5	15.5	13.2	9.0	39.4	47.2
Turkey	2000	2004	0.061	78.8	17.0	12.2	38.1	43.0	49.4
Turkey	1995	1999	0.009	58.9	21.0	11.4	80.7	42.8	42.6
Turkey	2000	2005	0.163	73.3	16.8	12.1	33.4	42.9	49.3
Turkey	1992	1999	-0.138	58.9	21.1	11.9	80.7	42.8	47.2
Turkey	1994	1998	0.008	53.1	21.4	11.4	89.0	42.6	43.0
Turkey	2000	2006	0.127	68.5	16.7	12.1	30.1	42.6	49.0
Turkey	1984	1988	0.065	-	18.6	8.0	48.1	-	57.6
Turkey	2001	2005	0.057	67.1	16.6	12.2	29.1	42.8	49.2
Turkey	1997	2002	-0.021	77.7	19.7	11.8	64.9	43.1	51.5
Turkey	2006	2010	0.319	41.6	15.2	13.4	8.9	39.3	47.2
Turkey	2005	2010	0.197	42.4	15.3	13.1	9.1	39.9	47.5
Turkey	1999	2004	0.065	78.4	17.5	12.1	42.5	43.1	50.0
Turkey	2007	2010	0.498	42.2	15.0	13.8	8.5	39.1	47.3
Turkey	2006	2009	0.298	41.5	15.5	13.2	9.0	39.4	47.2
Turkey	2006	2009	0.317	41.5	15.5	13.2	9.0	39.4	47.2
Turkey	2008	2010	0.461	43.1	14.7	14.0	8.4	39.0	47.3

Turkey	1993	2000	0.025	68.0	20.8	11.8	78.8	42.7	46.3
Turkey	2000	2005	0.071	73.3	16.8	12.1	33.4	42.9	49.3
Turkey	2002	2009	0.198	51.1	15.9	12.8	16.8	41.1	48.2
Turkey	2006	2010	0.357	41.6	15.2	13.4	8.9	39.3	47.2
Turkey	1999	2004	0.081	78.4	17.5	12.1	42.5	43.1	50.0
Turkey	2002	2008	0.155	52.4	16.3	12.4	17.3	41.4	48.3
Turkey	1990	1997	0.118	51.8	21.1	12.3	77.8	42.3	48.5
Turkey	1997	2003	-0.037	75.1	19.0	11.9	59.2	43.1	51.0
Turkey	2005	2010	0.173	42.4	15.3	13.1	9.1	39.9	47.5
Turkey	2006	2010	0.464	41.6	15.2	13.4	8.9	39.3	47.2
Turkey	2003	2008	0.198	46.9	16.0	12.3	12.6	41.3	48.0
Turkey	2000	2005	0.117	73.3	16.8	12.1	33.4	42.9	49.3
Turkey	1999	2006	0.198	69.5	17.1	12.2	34.4	42.7	49.5
Turkey	2004	2009	0.398	44.1	15.7	12.8	9.4	40.5	47.8
Turkey	2005	2010	0.195	42.4	15.3	13.1	9.1	39.9	47.5
Argentina	2002	2006	0.036	98.26	22.2	11.6	12.8	51.1	63.4
Argentina	2004	2008	0.157	69.1	24.6	12.2	8.4	48.2	64.0
Argentina	1989	1994	-0.154	-	15.0	6.7	934.1	52.9	58.8
Argentina	2003	2009	0.147	74.1	23.7	12.4	8.9	48.8	64.0
Argentina	2005	2010	0.208	59.5	24.5	13.3	9.2	46.8	64.5
Argentina	2001	2006	0.111	110,6	20.7	12.0	10.5	51.6	63.1
Argentina	1992	1998	0.034	49.4	15.4	11.4	6.3	47.8	58.6
Argentina	2000	2005	0.174	127.2	18.5	12.3	8.6	52.1	62.5
Argentina	2002	2008	0.087	86.7	23.3	12.0	11.7	49.9	63.6
Argentina	1998	2005	0.044	117.7	17.5	12.4	6.4	51.6	61.9
Argentina	2007	2010	0.353	53.2	24.3	14.0	8.6	46.1	64.5
Argentina	2005	2009	0.356	61.5	25.2	13.0	8.8	47.3	64.4
Argentina	2003	2007	0.028	82.7	23.6	11.8	9.4	49.8	63.8
Argentina	2000	2006	0.071	118.7	19.6	12.3	8.9	51.5	62.8
Argentina	1999	2004	0.043	135.2	16.8	12.7	6.8	52.1	61.8
Argentina	2007	2010	0.393	53.2	24.3	14.0	8.6	46.1	64.5
Argentina	1995	2000	-0.156	97.6	14.8	13.1	0.4	49.9	59.5
Argentina	2005	2010	-0.085	59.5	24.5	13.3	9.2	46.8	64.5
Argentina	2004	2008	0.158	69.1	24.6	12.2	8.4	48.2	64.0
Argentina	2007	2010	0.201	53.2	24.3	14.0	8.6	46.1	64.5
Argentina	2001	2008	0.195	97.4	22.3	12.2	10.1	50.4	63.3
Argentina	1998	2002	-0.02	130,7	15.0	13.2	4.7	51.8	61.0
Argentina	2002	2007	0.141	91.6	23.0	11.8	12.2	50.5	63.5
Argentina	2003	2008	0.193	78.5	23.8	12.0	9.2	49.3	63.8
Argentina	2007	2010	0.162	53.2	24.3	14.0	8.6	46.1	64.5
Argentina	1996	2001	0.111	112.6	14.3	13.1	-0.2	50.6	60.2
Argentina	2002	2008	0.112	86.7	23.3	12.0	11.7	49.9	63.6
Argentina	2004	2009	0.205	65.5	24.3	12.7	8.1	47.8	64.1
Argentina	2007	2010	0.299	53.2	24.3	14.0	8.6	46.1	64.5

Argentina	2001	2009	0.161	91.9	22.1	12.6	9.6	49.8	63.5
Argentina	1988	1994	-0.121	-	15.4	6.3	849.6	54.1	58.9
Argentina	1999	2004	0.303	135.2	16.8	12.7	6.8	52.1	61.8
Argentina	2001	2008	0.179	97.4	22.3	12.2	10.1	50.4	63.3
Argentina	2000	2006	0.126	118.7	19.6	12.3	8.9	51.5	62.8
Argentina	2005	2010	0.368	59.5	24.5	13.3	9.2	46.8	64.5
Argentina	2003	2008	0.041	78.5	23.8	12.0	9.2	49.3	63.8
Argentina	1998	2002	0.092	130,7	15.0	13.2	4.7	51.8	61.0
Argentina	1990	1998	0.012	48,3	15.3	9.6	281.7	50.6	58.8
Argentina	2004	2009	0.205	65.5	24.3	12.7	8.1	47.8	64.1
Argentina	2008	2010	0.105	51.5	23.3	14.4	8.6	45.5	64.7
Argentina	2001	2007	0.099	103.1	21.6	12.1	10.3	50.9	63.2
Argentina	1985	1990	-0.146	-	16.0	4.5	1104.9	55.1	59.2
Argentina	2002	2006	0.106	98.26	22.2	11.6	12.8	51.1	63.4
Argentina	2001	2007	0.084	103.1	21.6	12.1	10.3	50.9	63.2
Argentina	1995	2000	0.093	45.1	14.8	13.1	0.4	49.9	59.5
Argentina	2005	2010	0.001	59.5	24.5	13.3	9.2	46.8	64.5
Argentina	2003	2009	0.177	74.1	23.7	12.4	8.9	48.8	64.0
Argentina	1998	2004	-0.063	113.8	16.6	12.5	5.9	51.9	61.6
Argentina	1990	1996	-0.261	-	15.4	8.8	361.9	50.8	58.6
Argentina	2004	2009	0.188	65.5	24.3	12.7	8.1	47.8	64.1
Argentina	2001	2008	0.089	97.4	22.3	12.2	10.1	50.4	63.3

Emerging market of investment	Initial year of investment	Year of selling shareholding rights	ROI	Average: Productivity performance	Average: Literacy rate as % of population	Average: School enrollment: Secondary	Average: Unemployment, % of total work force	Average: Exchange rate index, 2005=100	Average: Tariffs
South Africa	1988	1996	0.129	0.259	-	-	19.3	116.4	-
South Africa	2005	2009	0.251	0.299	88.6	66.2	24.4	90.9	7.6
South Africa	1999	2005	0.083	0.289	85.9	62.6	29.4	90.5	8.7
South Africa	2001	2006	0.302	0.292	87	63.7	28.2	90	8.2
South Africa	2004	2010	0.172	0.299	88.5	66.1	24.7	93.6	7.6
South Africa	2000	2005	0.411	0.291	86.3	62.8	28.5	89.6	8.5
South Africa	1999	2004	0.345	0.287	85.5	62.3	28.3	88.9	8.9
South Africa	2001	2006	0.488	0.293	87.0	63.7	28.3	90.0	8.2
South Africa	1996	2004	-0.081	0.284	85.5	62.2	26.5	94.6	9.0
South Africa	2002	2005	0.181	0.293	87.0	63.5	28.7	90.4	8.3
South Africa	2005	2008	0.238	0.299	88.5	65.8	23.8	92.2	7.5
South Africa	2003	2009	0.340	0.297	88.1	65.6	25.6	92.2	7.7
South Africa	2006	2009	0.318	0.299	88.8	66.8	23.8	88.6	7.5
South Africa	1995	1999	0.098	0.274	83.0	61.5	25.4	96.3	10.0
South Africa	2001	2007	0.273	0.293	87.3	64.0	27.5	90.1	8.0
South Africa	2004	2008	0.268	0.299	88.2	65.4	24.9	93.3	7.6

South Africa	1987	1990	-0.102	-	-	-	-	115.4	-
South Africa	2003	2008	0.313	0.297	88.0	65.2	25.9	93.0	7.7
South Africa	2000	2008	0.429	0.293	87.1	64.0	26.9	89.3	8.1
South Africa	1992	1998	-0.136	0.266	-	62.0	21.2	113.9	10.0
South Africa	2005	2009	0.034	0.299	88.6	66.2	24.4	90.9	7.6
South Africa	1983	1990	0.007	-	-	-	-	115.4	-
South Africa	2004	2008	0.196	0.299	88.2	65.4	24.9	93.3	7.6
South Africa	2001	2009	0.162	0,.294	87.7	64.7	26.6	88.9	8.0
South Africa	2000	2007	0.168	0.292	86.9	63.6	27.4	90.5	8.1
South Africa	1985	1990	0.286	-	-	-	-	115.4	-
South Africa	2003	2008	0.273	0.297	88.0	65.2	25.9	93.0	7.7
South Africa	2003	2008	0.257	0.297	88.0	65.2	25.9	93.0	7.7
South Africa	2005	2009	0.115	0.299	88.6	66.2	24.4	90.9	7.6
South Africa	1988	1994	-0.471	0.253	-	-	20.0	118.4	-
South Africa	2004	2007	0.209	0.298	88.0	65.0	25.4	96.6	7.5
South Africa	1998	2002	0.247	0.283	84.8	61.6	27.4	88.9	9.4
South Africa	1995	1999	-0.169	0.274	83.0	61.5	22.2	105.7	10.0
South Africa	2001	2008	0.249	0.294	87.5	64.6	26.9	88.9	8.0
South Africa	2005	2009	0.205	0.299	88.6	66.2	24.4	90.9	7.6
South Africa	1987	1993	-0.121	0.254	-	-	-	118.6	-
South Africa	2001	2006	0.194	0.292	87	63.7	28.2	90	8.2
South Africa	1994	1999	-0.137	0.264	86.0	53.5	7.4	74.5	11.0
South Africa	2004	2009	0.198	0.274	88.8	75.6	11.2	111.6	9.5
South Africa	1998	2001	0.071	0.268	85.3	59.8	7.4	79.7	10.5
South Africa	2006	2010	0.198	0.276	89.6	76.2	11.8	120.2	9.4
South Africa	2000	2006	0.093	0.270	86.8	71.3	9.6	94.4	9.9
South Africa	2002	2007	0.035	0.271	87.8	74.1	10.5	101.9	9.8
South Africa	2007	2009	0.252	0.278	89.7	76.3	11.8	120.2	9.3
South Africa	1992	1999	0.14	0.263	86.0	56.0	7.7	74.5	11.0
South Africa	1999	2004	0.016	0.269	86.3	67.2	9.1	89.5	10.2
South Africa	2000	2005	-0.126	0.291	86.3	62.8	28.5	89.6	8.5
South Africa	2007	2010	0.23	0.278	90.0	76.0	12.1	123.6	9.5
South Africa	2005	2010	0.302	0.276	89.3	76.0	11.6	116.9	9.5
South Africa	1999	2005	0.278	0.269	86.6	68.3	9.3	89.8	10.1
South Africa	2001	2007	0.059	0.271	87.4	73.4	10.1	99.3	9.9
South Africa	2005	2009	0.21	0.299	88.6	66.2	24.4	90.9	7.6
South Africa	1993	1998	0.019	0.263	-	51.0	7.6	-	11.0
South Africa	1984	1989	0.102	-	-	-	9.6	-	-
South Africa	2005	2010	0.119	0.276	89.3	76.0	11.6	116.9	9.5
South Africa	2000	2006	-0.088	0.270	86.8	71.3	9.6	94.4	9.9
South Africa	2004	2008	-0.159	0.299	88.2	65.4	24.9	93.3	7.6
South Africa	2003	2009	0.305	0.274	88.6	75.0	11.1	109.7	9.6
South Africa	2005	2010	0.126	0.276	89.3	76.0	11.6	116.9	9.5
South Africa	2004	2010	0.260	0.299	88.5	66.1	24.7	93.6	7.6

South Africa	1984	1990	0.072	-	-	-	9.2	-	-
South Africa	2007	2010	0.057	0.278	90.0	76.0	12.1	123.6	9.5
South Africa	2000	2006	0.188	0.270	86.8	71.3	9.6	94.4	9.9
South Africa	2004	2009	0.226	0.274	88.8	75.6	11.2	111.6	9.5
South Africa	2004	2008	0.085	0.299	88.2	65.4	24.9	93.3	7.6
South Africa	1992	1998	0.047	0.266	-	62.0	21.2	113.9	10.0
South Africa	1997	2000	0.055	0.267	85.5	56.7	6.9	77.7	10.8
South Africa	1999	2005	0.043	0.269	86.6	68.3	9.3	89.8	10.1
South Africa	2007	2010	0.361	0.278	90.0	76.0	12.1	123.6	9.5
South Africa	2006	2010	0.026	0.276	89.6	76.2	11.8	120.2	9.4
South Korea	2003	2010	0.272	0.593	99.8	95.6	3.5	110.1	12.2
South Korea	2002	2009	-0.081	0.589	99.6	95.2	3.4	107.1	12.4
South Korea	2006	2010	0.352	0.600	99.8	95.8	3.3	114.8	12.0
South Korea	1999	2004	0.255	0.552	99.0	95.3	4.2	96.9	12.2
South Korea	2005	2009	0.152	0.595	99.8	95.6	3.4	110.2	12.0
South Korea	1995	2002	0.084	0.516	98.9	96.0	3.9	90.0	10.8
South Korea	2000	2007	0.093	0.572	99.5	95.1	3.7	100.7	12.4
South Korea	1993	1999	0.112	0.487	98.0	97.5	3.6	82.0	9.3
South Korea	2005	2010	0.372	0.598	99.8	95.8	3.4	112.3	12.0
South Korea	2003	2009	0.404	0.590	99.7	95.4	3.4	108.2	12.2
South Korea	2000	2008	0.245	0.575	99.4	95.2	3.6	102.6	12.3
South Korea	2002	2007	-0.202	0.586	99.7	95.0	3.4	103.1	12.5
South Korea	1994	1999	-0.004	0.489	98.0	97.5	3.8	82.0	9.3
South Korea	2001	2008	0.324	0.581	99.5	95.1	3.5	103.5	12.4
South Korea	1995	2002	0.021	0.516	98.9	96.0	3.9	90.0	10.8
South Korea	2007	2010	0.306	0.601	99.8	96.0	3.4	117.3	12.0
South Korea	2003	2009	0.198	0.590	99.7	95.4	3.4	108.2	12.2
South Korea	2008	2010	0.387	0.603	99.6	96.3	3.4	120.3	12.0
South Korea	2002	2007	-0.251	0.586	99.7	95.0	3.4	103.1	12.5
South Korea	2000	2006	0.201	0.569	99.4	95.1	3.7	99.6	12.4
South Korea	1984	1990	0.036	-	-	-	3.1	-	-
South Korea	1997	2002	0.06	0.529	98.8	96.0	4.6	89.9	10.8
South Korea	2005	2008	0.295	0.594	99.8	95.5	3.4	107.8	12.0
South Korea	2001	2007	0.246	0.579	99.6	95.0	3.6	101.4	12.4
South Korea	2006	2010	0.524	0.600	99.8	95.8	3.3	114.8	12.0
South Korea	2006	2009	0.303	0.596	99.8	95.5	3.3	112.7	12.0
South Korea	2000	2007	0.162	0.572	99.5	95.1	3.7	100.7	12.4
South Korea	2005	2009	0.257	0.595	99.8	95.6	3.42	110.16	12.0
South Korea	1992	1998	0.146	0.484	-	98.0	3.1	75.3	9.0
South Korea	1994	1999	0.073	0.489	98.0	97.5	3.8	82.0	9.3
South Korea	2007	2010	0.42	0.601	99.8	96.0	3.4	117.3	12.0
South Korea	2005	2009	0.297	0.595	99.8	95.6	3.42	110.16	12.0
South Korea	1996	2002	0.152	0.523	98.8	96.0	4.2	90.0	10.9
South Korea	2007	2010	0.351	0.601	99.8	96.0	3.4	117.3	12.0

South Korea	1995	2001	0.199	0.507	98.7	96.5	4.1	87.7	10.4
South Korea	2005	2009	0.401	0.595	99.8	95.6	3.42	110.16	12.0
South Korea	2006	2010	0.405	0.600	99.8	95.8	3.3	114.8	12.0
South Korea	1983	1989	-0.029	-	-	-	3.4	-	-
South Korea	1996	2002	0.072	0.523	98.8	96.0	4.2	90.0	10.9
South Korea	2001	2008	0.252	0.581	99.5	95.1	3.5	103.5	12.4
South Korea	2006	2010	0.398	0.600	99.8	95.8	3.3	114.8	12.0
South Korea	2004	2008	-0.040	0.591	99.8	95.4	3.4	106.5	12.2
South Korea	2003	2009	0.183	0.590	99.7	95.4	3.4	108.2	12.2
South Korea	2005	2010	0.353	0.598	99.8	95.8	3.4	112.3	12.0
South Korea	2001	2009	0.493	0.583	99.6	95.2	3.5	105.3	12.3
South Korea	1999	2003	-0.187	0.546	98.8	95.4	4.3	96.1	12.0
South Korea	2002	2006	0.289	0.584	99.6	95.0	3.5	102.1	12.6
South Korea	2007	2010	0.366	0.601	99.8	96.0	3.4	117.3	12.0
South Korea	1999	2006	0.119	0.561	99.3	95.3	4.1	98.2	12.1
South Korea	2004	2009	0.308	0.592	99.8	95.5	3.4	108.6	12.2
South Korea	1996	2002	0.163	0.523	98.8	96.0	4.2	90.0	10.9
South Korea	2000	2006	0.199	0.569	99.4	95.1	3.7	99.6	12.4
South Korea	2005	2010	0.221	0.598	99.8	95.8	3.4	112.3	12.0
South Korea	2001	2006	0.101	0.576	99.5	95.0	3.6	100.2	12.5
South Korea	2001	2007	-0.059	0.579	99.6	95.0	3.6	101.4	12.4
South Korea	2006	2009	0.350	0.596	99.8	95.5	3.4	112.7	12.0
South Korea	1998	2001	0.199	0.522	98.7	96.5	5.4	87.8	10.9
South Korea	2007	2010	0.340	0.601	99.8	96.0	3.4	117.3	12.0
South Korea	2000	2005	0.197	0.565	99.3	95.1	3.8	98.8	12.0
South Korea	1998	2004	0.054	0.546	99.0	95.7	4.6	93.8	11.7
South Korea	2006	2009	0.399	0.596	99.8	95.5	3.4	112.7	12.0
South Korea	2004	2008	-0.109	0.591	99.8	95.4	3.4	106.5	12.2
South Korea	2007	2010	0.447	0.601	99.8	96.0	3.4	117.3	12.0
South Korea	2002	2006	-0.096	0.584	99.6	95.0	3.5	102.1	12.6
South Korea	1995	2000	0.268	0.502	98.5	97.0	4.0	86.6	10.0
South Korea	2001	2008	0.254	0.581	99.5	95.1	3.5	103.5	12.4
Thailand	2005	2010	0.259	0.413	93.3	69.9	1.1	104.8	10.0
Thailand	1994	1998	0.024	0.353	90.0	-	1.6	79.8	19.0
Thailand	2002	2007	0.274	0.409	93.0	66.1	1.4	102.3	12.3
Thailand	2006	2010	0.378	0.414	93.2	70.4	1.2	105.8	9.8
Thailand	1998	2003	0.013	0.395	91.3	63.2	2.5	93.3	16.4
Thailand	2003	2008	-0.148	0.410	93.2	67.5	1.3	102.9	11.3
Thailand	1990	1992	0.025	-	-	-	2.1	-	-
Thailand	1995	2006	0.322	0.388	92.0	64.4	1.8	95.3	15.6
Thailand	2001	2009	0.397	0.408	93.0	66.9	1.5	102.4	12.1
Thailand	2007	2010	0.415	0.414	93.3	71.2	1.2	106.1	9.5
Thailand	1999	2006	0.236	0.401	92.0	64.4	2.1	95.3	14.8
Thailand	2004	2008	0.291	0.411	93.2	68.0	1.3	103.9	10.6

Thailand	2008	2010	0.407	0.415	93.3	71.6	1.2	104.7	9.7
Thailand	2000	2009	0.221	0.407	92.7	66.6	1.5	101.7	12.5
Thailand	2002	2008	0.268	0.409	93.0	66.9	1.4	103.6	11.9
Thailand	2007	2010	0.398	0.414	93.3	71.2	1.2	106.1	9.5
Thailand	2001	2009	0.304	0.408	93.0	66.9	1.5	102.4	12.1
Thailand	1992	1999	0.054	0.353	90.5	61.0	1.7	83.6	18.8
Thailand	2006	2010	0.332	0.414	93.2	70.4	1.2	105.8	9.8
Thailand	2000	2005	0.258	0.403	92.3	64.5	1.9	97.8	14.3
Thailand	2005	2009	0.343	0.412	93.4	69.2	1.2	105.6	10.0
Thailand	2003	2009	0.250	0.410	93.2	68.0	1.3	102.4	11.1
Thailand	1994	2002	0.107	0.371	91.0	62.8	1.9	92.3	17.4
Thailand	2001	2007	0.180	0.406	92.9	65.7	1.6	101.6	12.9
Thailand	2005	2010	0.399	0.413	93.3	69.9	1.1	104.8	10.0
Thailand	2001	2008	0.306	0.407	92.8	66.4	1.6	102.8	12.4
Thailand	2004	2009	0.243	0.415	93.3	68.5	1.2	103.1	10.5
Thailand	1998	2002	0.645	0.393	91.1	62.8	1.6	92.3	16.6
Thailand	2000	2006	-0.104	0.401	92.3	64.4	1.9	97.3	14.4
Thailand	1993	2000	0.009	0.359	90.3	62.5	1.8	85.7	18.2
Thailand	2002	2005	0.166	0.407	93.0	65.0	1.5	99.8	13.4
Thailand	1987	1990	0.131	-	-	-	3.1	-	-
Thailand	2000	2007	0.259	0.405	92.5	65.5	1.7	100.1	13.3
Thailand	2004	2010	0.349	0.41	93.2	69.1	1.3	103.4	10.4
Thailand	1990	1995	-0.069	0.331	-	-	1.7	-	-
Thailand	2005	2010	0.355	0.413	93.3	69.9	1.1	104.8	10.0
Thailand	1998	2005	0.152	0.399	91.9	64.0	2.2	94.1	15.3
Thailand	2003	2009	0.197	0.410	93.2	68.0	1.3	102.4	11.1
Thailand	2005	2010	0.288	0.413	93.3	69.9	1.1	104.8	10.0
Thailand	2001	2007	0.097	0.407	92.9	65.7	1.6	101.5	12.9
Thailand	2002	2008	0.091	0.409	93.0	66.9	1.4	103.6	11.9
Thailand	2007	2010	0.352	0.414	93.3	71.2	1.2	106.1	9.5
Thailand	1999	2007	0.125	0.403	92.3	65.0	1.8	98.7	13.8
Thailand	1988	1994	-0.172	0.326	-	-	1.9	-	-
Thailand	2001	2010	0.631	0.409	93.0	67.5	1.4	102.5	11.9
Thailand	1994	1999	0.145	0.359	90.5	61.0	1.8	83.6	18.8
Thailand	2000	2004	0.197	0.401	92.0	64.3	1.9	97.3	15.0
Thailand	2006	2010	0.452	0.414	93.2	70.4	1.2	105.8	9.8
Thailand	1998	2002	0.112	0.393	91.1	62.8	1.6	92.3	16.6
Thailand	2007	2010	0.391	0.414	93.3	71.2	1.2	106.1	9.5
Thailand	1992	1996	0.156	0.335	-	-	1.3	-	21.0
Thailand	2001	2008	0.199	0.407	92.8	66.4	1.6	102.8	12.4
Thailand	2000	2009	0.121	0.407	92.7	66.6	1.5	101.7	12.5
Thailand	2003	2008	0.166	0.410	93.2	67.5	1.3	102.9	11.3
Thailand	2007	2010	0.361	0.414	93.3	71.2	1.2	106.1	9.5
Thailand	1994	2000	-0.049	0.364	90.3	62.5	1.9	85.7	18.2

Thailand	1990	1994	0.172	0.326	-	-	1.8	-	-
India	2001	2006	0.201	0.276	63.8	57.1	4.8	93.6	27.0
India	2004	2009	0.363	0.291	69.0	60.3	5.1	116.0	18.5
India	1999	2005	0.159	0.276	62.1	55.6	4.6	87.7	30.1
India	2002	2007	0.216	0.280	65.5	58.1	4.9	102.1	24.2
India	2005	2010	0.361	0.296	70.5	61.3	5.2	120.4	16.8
India	2005	2009	0.229	0.293	69.8	60.8	5.3	119.4	17.2
India	2000	2007	0.240	0.279	64.1	57.2	4.8	96.6	26.7
India	2002	2006	0.248	0.278	64.6	57.4	4.8	98.1	26.5
India	1995	1999	0.149	0.281	59.5	53.4	2.9	64.8	34.5
India	2001	2009	0.564	0.284	66.6	58.8	4.9	105.4	23.0
India	1998	2002	-0.031	0.277	60.2	54.2	4.2	77.9	33.8
India	2004	2008	0.198	0.288	68.2	60.0	5.1	113.1	19.4
India	2000	2006	0.101	0.277	63.2	56.6	4.7	93.0	28.0
India	1996	2001	0.062	0.279	59.8	53.9	3.6	71.1	34.3
India	1994	1999	0.102	0.279	50.6	53.5	3.0	64.8	34.5
India	2004	2007	0.147	0.285	67.0	59.5	5.1	107.6	20.8
India	2003	2008	0.163	0.286	67.3	59.3	5.0	109.9	21.2
India	2007	2010	-0.055	0.303	72.5	62.5	5.1	130.7	15.0
India	1997	2002	-0.031	0.278	60.2	54.2	3.9	73.7	33.8
India	1990	1996	0.006	0.276	-	-	2.7	-	-
India	2002	2009	0.248	0.286	67.3	59.1	4.9	112.4	21.6
India	2003	2009	0.149	0.288	68.1	59.7	5.0	112.9	20.1
India	2000	2004	0.048	0.274	62.0	55.6	4.4	88.2	31.0
India	1993	1998	0.062	0.278	59.0	54.0	2.8	61.1	35.0
India	2005	2010	0.228	0.296	70.5	61.3	5.2	120.4	16.8
India	2006	2009	0.299	0.296	71.0	61.5	5.2	124.3	16.0
India	2008	2010	0.197	0.305	73.3	62.6	5.0	130.4	14.3
India	2003	2008	-0.078	0.286	67.3	59.3	5.0	109.9	21.2
India	2000	2005	0.066	0.275	62.5	56.0	4.7	90.2	29.5
India	2004	2009	0.202	0.291	69.0	60.3	5.1	116.0	18.5
India	1998	2004	0.199	0.276	61.1	55.0	4.3	83.2	32.0
India	2001	2006	0.109	0.276	63.8	57.1	4.8	93.6	27.0
India	1997	2002	0.057	0.278	60.2	54.2	3.9	73.7	33.8
India	2006	2010	0.295	0.299	71.6	62.0	5.1	124.6	15.8
India	2005	2009	0.319	0.293	69.8	60.8	5.3	119.4	17.2
India	2001	2008	0.016	0.281	65.75	58.4	4.9	102.3	24.1
India	1989	1994	0.036	0.273	-	-	3.7	-	-
India	2005	2009	0.033	0.293	69.8	60.8	5.3	119.4	17.2
India	2006	2010	0.244	0.299	71.6	62.0	5.1	124.6	15.8
India	2001	2007	0.111	0.279	64.7	57.9	4.8	97.6	25.6
India	2003	2008	0.151	0.286	67.3	59.3	5.0	109.9	21.2
India	2004	2009	0.098	0.291	69.0	60.3	5.1	116.0	18.5
India	1993	1999	0.048	0.278	59.5	53.5	3.0	64.8	34.5

India	1989	1994	0.011	0.273	-	-	3.7	-	-
India	2006	2010	0.202	0.299	71.6	62.0	5.1	124.6	15.8
India	2002	2007	0.179	0.280	65.5	58.1	4.9	102.1	24.2
India	2001	2008	0.183	0.281	65.75	58.4	4.9	102.3	24.1
India	1994	1999	-0.059	0.279	50.6	53.5	3.0	64.8	34.5
India	2006	2010	0.401	0.299	71.6	62.0	5.1	124.6	15.8
India	2001	2007	0.197	0.279	64.7	57.9	4.8	97.6	25.6
India	1992	1998	0.089	0.278	59.0	54.0	2.8	61.1	35.0
India	2007	2010	0.532	0.303	72.5	62.5	5.1	130.7	15.0
India	1998	2002	0.113	0.277	60.2	54.2	4.2	77.9	33.8
India	2004	2007	0.099	0.285	67.0	59.5	5.1	107.6	20.8
India	2000	2005	0.201	0.275	62.5	56.0	4.7	90.2	29.5
India	2002	2008	0.203	0.283	66.6	58.7	4.9	109.9	22.7
Poland	1999	2004	0.099	0.341	99.3	92.2	12.6	101.9	5.2
Poland	2003	2007	0.205	0.336	99.2	92.4	15.9	97.4	5.4
Poland	2007	2010	0.293	0.344	99.8	92.0	8.3	106.2	4.7
Poland	2004	2009	0.151	0.340	99.3	92.1	12.6	101.9	5.2
Poland	2008	2010	0.325	0.345	99.7	92.0	8.3	106.7	5.0
Poland	1998	2002	-0.123	0.329	97.5	91.3	15.5	94.4	6.4
Poland	1992	1998	0.071	0.289	-	-	12.7	74.3	7.0
Poland	2000	2003	0.152	0.331	98.0	91.5	18.4	97.3	6.0
Poland	2001	2010	0.249	0.338	99.1	92.0	14.2	101.3	5.3
Poland	2001	2006	0.103	0.334	98.6	92.0	18.1	97.9	5.6
Poland	2005	2009	0.163	0.340	99.3	92.8	12.1	105.9	5.0
Poland	1993	1999	0.163	0.292	97.0	-	12.6	77.6	7.0
Poland	2002	2006	0.502	0.334	98.8	92.2	18.0	96.4	5.6
Poland	2003	2008	0.097	0.337	99.1	92.3	14.4	100.5	5.3
Poland	2004	2009	0.136	0.340	99.3	92.1	12.6	101.9	5.2
Poland	2000	2004	0.097	0.331	98.2	91.4	18.6	95.8	6.0
Poland	2001	2009	0.192	0.337	99.0	92.0	14.8	100.9	5.4
Poland	2005	2010	0.385	0.342	99.5	92.3	10.8	104.4	4.9
Poland	1990	1996	-0.077	0.274	-	-	13.4	63.9	-
Poland	1997	2002	0.041	0.323	97.5	91.3	14.7	92.3	6.5
Poland	2000	2007	0.278	0.334	98.6	92.0	16.7	98.4	5.6
Poland	1994	2000	0.021	0.301	97.0	91.0	12.9	81.3	6.8
Poland	1993	1997	0.009	0.281	-	-	13.1	71.1	7.0
Poland	2001	2008	0.119	0.336	98.9	92.1	15.6	101.2	5.5
Poland	2004	2010	0.333	0.340	99.4	92.1	11.9	102.3	5.0
Poland	2002	2005	0.081	0.333	98.8	92.0	19.1	95.1	5.7
Poland	2005	2009	0.322	0.340	99.3	92.8	12.1	105.9	5.0
Poland	2002	2009	0.373	0.338	99.1	92.2	14.4	100.3	5.4
Poland	2000	2006	0.201	0.332	98.4	91.9	17.7	97.3	5.7
Poland	2004	2009	0.287	0.340	99.3	92.1	12.6	101.9	5.2
Poland	2003	2008	0.345	0.337	99.1	92.3	14.4	100.5	5.3

Poland	1990	1994	-0.031	0.271	-	-	13.9	58.8	-
Poland	2007	2010	0.241	0.344	99.8	92.0	8.3	106.2	4.7
Poland	2002	2009	0.054	0.338	99.1	92.2	14.4	100.3	5.4
Poland	2006	2010	0.399	0.343	99.6	92.2	9.4	105.4	4.8
Poland	1990	1995	-0.231	0.272	-	-	13.7	61.3	-
Poland	2000	2008	0.194	0.335	98.7	92.0	15.7	100.3	5.6
Poland	1993	1999	0.014	0.292	97.0	-	12.6	77.6	7.0
Poland	2004	2009	0.111	0.340	99.3	92.1	12.6	101.9	5.2
Poland	2002	2006	0.132	0.334	98.8	92.2	18.0	96.4	5.6
Poland	2001	2008	0.202	0.336	98.9	92.1	15.6	101.2	5.5
Poland	2008	2010	0.428	0.345	99.7	92.0	8.3	106.7	5.0
Poland	2003	2008	0.291	0.337	99.1	92.3	14.4	100.5	5.3
Poland	1991	1999	0.034	0.288	-	-	12.8	72.4	7.0
Poland	2007	2010	0.169	0.344	99.8	92.0	8.3	106.2	4.7
Poland	2000	2006	0.031	0.332	98.4	91.9	17.7	97.3	5.7
Poland	1993	2000	0.025	0.296	97.0	91.0	13.1	79.5	6.8
Poland	1998	2006	-0.161	0.329	98.3	91.9	16.3	94.8	6.0
Poland	2005	2010	0.453	0.342	99.5	92.3	10.8	104.4	4.9
Poland	2003	2009	0.147	0.339	99.3	92.1	13.5	100.2	5.3
Poland	2008	2010	0.396	0.345	99.7	92.0	8.3	106.7	5.0
Poland	1999	2003	-0.089	0.339	99.2	92.4	13.4	102.6	5.2
Poland	2004	2008	0.261	0.339	99.2	92.4	13.4	102.6	5.2
Brazil	2003	2007	0.275	0.298	89.4	78.2	8.9	102.1	12.4
Brazil	1999	2004	0.049	0.302	88.1	73.0	9.3	90.4	13.3
Brazil	2004	2009	0.234	0.305	89.5	79.8	8.4	107.2	12.5
Brazil	2005	2009	0.398	0.308	89.6	80.2	8.3	107.4	12.4
Brazil	1996	2002	0.033	0.313	87.0	69.1	8.7	80.6	14.3
Brazil	1990	1999	0.039	0.328	86.3	66.7	6.4	71.3	15.0
Brazil	2004	2007	0.402	0.301	89.2	78.8	8.7	103.4	12.2
Brazil	2003	2009	0.194	0.302	89.6	79.3	8.7	105.2	12.6
Brazil	2007	2010	0.366	0.315	90.0	81.8	7.8	112.7	12.8
Brazil	1988	1994	-0.166	0.345	-	-	4.7	-	-
Brazil	2008	2010	0.384	0.317	90.0	82.3	7.7	115.1	13.0
Brazil	2001	2006	0.150	0.299	88.8	76.1	9.1	97.8	12.7
Brazil	2004	2009	0.313	0.305	89.5	79.8	8.4	107.2	12.5
Brazil	2000	2008	0.151	0.302	88.8	76.4	8.8	98.7	12.7
Brazil	1998	2002	0.061	0.308	87.2	70.0	9.3	82.8	13.8
Brazil	2002	2008	0.168	0.301	89.4	78.2	8.7	102.7	12.6
Brazil	2003	2008	0.171	0.299	89.5	78.8	8.9	102.1	12.5
Brazil	2000	2006	0.241	0.301	88.6	75.1	9.1	96.3	12.9
Brazil	1998	2003	0.049	0.305	87.7	71.0	9.3	85.1	13.7
Brazil	2001	2007	0.079	0.301	89.0	76.7	8.9	98.9	12.6
Brazil	2005	2009	0.178	0.308	89.6	80.2	8.3	107.4	12.4
Brazil	2008	2010	0.294	0.317	90.0	82.3	7.7	115.1	13.0

Brazil	2001	2005	0.083	0.298	88.8	75.8	9.3	96.9	12.8
Brazil	2007	2010	0.393	0.315	90.0	81.8	7.8	112.7	12.8
Brazil	1983	1988	0.328	-	-	-	3.7	-	-
Brazil	1994	1998	0.028	0.329	86.0	65.5	6.6	71.8	15.3
Brazil	2001	2006	0.203	0.299	88.8	76.1	9.1	97.8	12.7
Brazil	1998	2003	0.005	0.305	87.6	71.0	9.3	85.1	13.6
Brazil	2004	2009	0.174	0.305	89.5	79.8	8.4	107.2	12.5
Brazil	2003	2008	0.058	0.299	89.5	78.8	8.9	102.1	12.5
Brazil	2004	2010	0.196	0.309	89.6	80.3	8.2	108.4	12.6
Brazil	2008	2010	0.244	0.317	90.0	82.3	7.7	115.1	13.0
Brazil	1998	2002	0.021	0.308	87.2	70.0	9.3	82.8	13.8
Brazil	1993	1998	-0.041	0.331	86.0	65.5	6.6	71.8	15.3
Brazil	2000	2006	0.079	0.301	88.6	75.1	9.1	96.3	12.9
Brazil	2001	2005	0.037	0.298	88.8	75.8	9.3	96.9	12.8
Brazil	1993	1997	-0.084	0.335	86.0	65.0	6.5	69.3	15.5
Brazil	2007	2010	0.561	0.315	90.0	81.8	7.8	112.7	12.8
Brazil	2003	2007	-0.041	0.298	89.4	78.2	8.9	102.1	12.4
Brazil	2002	2009	0.019	0.303	89.5	78.8	8.6	104.9	12.6
Brazil	2005	2010	0.367	0.310	89.7	80.6	8.2	108.9	12.5
Brazil	2000	2005	0.169	0.301	88.5	74.7	9.2	95.3	13.0
Brazil	2003	2009	0.256	0.302	89.6	79.3	8.7	105.2	12.6
Brazil	2001	2008	0.148	0.302	89.1	77.4	8.7	100.1	12.6
Brazil	2002	2009	0.195	0.303	89.5	78.8	8.6	104.9	12.6
Brazil	1999	2004	0.046	0.302	88.1	73.0	9.3	90.4	13.3
Brazil	2003	2009	0.191	0.302	89.6	79.3	8.7	105.2	12.6
Brazil	1996	2000	0.163	0.316	86.5	67.2	8.5	75.3	14.8
Brazil	2002	2006	0.071	0.297	89.2	77.2	9.1	100.9	12.6
Brazil	2006	2010	0.287	0.313	89.8	81.0	7.9	110.6	12.6
Brazil	2001	2007	0.501	0.301	89.0	76.7	8.9	98.9	12.6
Brazil	1989	1995	-0.047	0.343	-	-	5.1	-	-
Turkey	1989	1994	-0.073	0.257	-	-	8.4	-	-
Turkey	2004	2008	0.083	0.272	88.6	76.0	10.6	108.8	9.6
Turkey	2002	2005	0.153	0.271	87.5	72.5	10.6	97.3	10.0
Turkey	2006	2010	0.441	0.277	89.6	76.2	11.8	120.2	9.4
Turkey	2000	2006	0.175	0.270	86.8	71.2	9.6	94.3	9.8
Turkey	1997	2000	0.011	0.267	85.5	56.7	6.9	77.7	10.8
Turkey	2001	2006	0.123	0.275	87.1	72.7	10.1	96.6	9.8
Turkey	2000	2008	0.033	0.271	87.4	72.6	9.9	99.5	9.8
Turkey	2002	2006	0.302	0.271	87.6	73.4	10.5	99.2	9.8
Turkey	2005	2010	0.405	0.275	89.3	76.0	11.6	116.9	9.5
Turkey	1993	1998	0.028	0.263	-	51.0	7.6	-	11.0
Turkey	2005	2010	0.378	0.275	89.3	76.0	11.6	116.9	9.5
Turkey	2002	2008	0.301	0.272	88.1	74.6	10.5	104.4	9.7
Turkey	1998	2002	0.093	0.268	85.8	62.0	7.9	81.8	10.4

Turkey	2001	2005	0.092	0.271	87.0	71.8	10.1	94.6	10.0
Turkey	2004	2009	0.209	0.274	88.8	75.6	11.1	111.5	9.5
Turkey	1999	2004	0.035	0.269	86.3	67.1	9.1	88.0	10.2
Turkey	2005	2010	0.342	0.275	89.3	76.0	11.6	116.9	9.5
Turkey	2006	2010	0.163	0.277	89.6	76.2	11.8	120.2	9.4
Turkey	2006	2009	0.169	0.276	89.3	76.5	11.4	116.9	9.2
Turkey	2000	2004	0.061	0.271	86.4	69.4	9.3	90.8	10.0
Turkey	1995	1999	0.009	0.265	86.0	53.5	7.1	74.5	11.0
Turkey	2000	2005	0.163	0.271	86.6	70.3	9.5	92.3	10.0
Turkey	1992	1999	-0.138	0.263	86.0	53.5	7.7	74.5	11.0
Turkey	1994	1998	0.008	0.264	-	51.0	7.3	-	11.0
Turkey	2000	2006	0.127	0.270	86.8	71.2	9.6	94.3	9.8
Turkey	1984	1988	0.065	-	-	-	9.9	-	-
Turkey	2001	2005	0.057	0.271	87.0	71.8	10.1	94.6	10.0
Turkey	1997	2002	-0.021	0.268	85.8	62.0	7.8	81.8	10.5
Turkey	2006	2010	0.319	0.277	89.6	76.2	11.8	120.2	9.4
Turkey	2005	2010	0.197	0.275	89.3	76.0	11.6	116.9	9.5
Turkey	1999	2004	0.065	0.269	86.3	67.1	9.1	88.0	10.2
Turkey	2007	2010	0.498	0.278	90.0	76.0	12.1	123.6	9.5
Turkey	2006	2009	0.298	0.276	89.3	76.5	11.4	116.9	9.2
Turkey	2006	2009	0.317	0.276	89.3	76.5	11.4	116.9	9.2
Turkey	2008	2010	0.461	0.279	90.3	75.3	12.7	126.2	9.3
Turkey	1993	2000	0.025	0.263	85.5	56.6	7.4	77.7	10.8
Turkey	2000	2005	0.071	0.271	86.6	70.3	9.5	92.3	10.0
Turkey	2002	2009	0.198	0.273	88.3	74.5	10.9	106.9	9.6
Turkey	2006	2010	0.357	0.277	89.6	76.2	11.8	120.2	9.4
Turkey	1999	2004	0.081	0.269	86.3	67.1	9.1	88.0	10.2
Turkey	2002	2008	0.155	0.272	88.1	74.6	10.5	104.4	9.7
Turkey	1990	1997	0.118	0.261	-	-	7.9	-	11.0
Turkey	1997	2003	-0.037	0.268	86.0	63.5	8.2	85.3	10.4
Turkey	2005	2010	0.173	0.275	89.3	76.0	11.6	116.9	9.5
Turkey	2006	2010	0.464	0.277	89.6	76.2	11.8	120.2	9.4
Turkey	2003	2008	0.198	0.273	88.3	75.1	10.6	107.1	9.6
Turkey	2000	2005	0.117	0.271	86.6	70.3	9.5	92.3	10.0
Turkey	1999	2006	0.198	0.269	86.8	69.3	9.4	91.9	10.0
Turkey	2004	2009	0.398	0.274	88.8	75.6	11.1	111.5	9.5
Turkey	2005	2010	0.195	0.275	89.3	76.0	11.6	116.9	9.5
Argentina	2002	2006	0.036	0.234	95.8	78.8	13.4	101.6	11.8
Argentina	2004	2008	0.157	0.236	96.6	79.0	9.9	103.6	11.0
Argentina	1989	1994	-0.154	0.270	-	-	8.2	-	-
Argentina	2003	2009	0.147	0.236	96.6	79.1	10.6	109.1	11.2
Argentina	2005	2010	0.208	0.238	97.2	79.1	9.1	115.2	11.4
Argentina	2001	2006	0.111	0.236	95.8	78.6	14.2	99.7	11.8
Argentina	1992	1998	0.034	0.274	-	74.0	13.2	79.1	15.0

Argentina	2000	2005	0.174	0.241	95.8	78.1	15.1	96.6	12.5
Argentina	2002	2008	0.087	0.236	96.3	79.0	11.9	105.2	11.4
Argentina	1998	2005	0.044	0.251	95.7	77.4	14.7	92.6	13.1
Argentina	2007	2010	0.353	0.241	97.8	79.5	8.4	120.4	11.5
Argentina	2005	2009	0.356	0.238	97.0	79.2	9.1	112.3	11.0
Argentina	2003	2007	0.028	0.234	96.0	78.8	11.6	104.5	11.4
Argentina	2000	2006	0.071	0.241	95.9	78.3	14.4	98.5	12.3
Argentina	1999	2004	0.043	0.223	95.7	77.8	15.7	93.7	13.1
Argentina	2007	2010	0.393	0.241	97.8	79.5	8.4	120.4	11.5
Argentina	1995	2000	-0.156	0.274	95.5	75.3	15.4	84.2	15.0
Argentina	2005	2010	-0.085	0.238	97.2	79.1	9.1	115.2	11.4
Argentina	2004	2008	0.158	0.236	96.6	79.0	9.9	103.6	11.0
Argentina	2007	2010	0.201	0.241	97.8	79.5	8.4	120.4	11.5
Argentina	2001	2008	0.195	0.238	96.3	78.9	12.7	103.4	11.5
Argentina	1998	2002	-0.02	0.261	95.8	76.6	15.6	87.8	14.0
Argentina	2002	2007	0.141	0.235	96.9	78.8	12.6	103.1	11.7
Argentina	2003	2008	0.193	0.235	96.3	79.0	10.9	106.7	11.2
Argentina	2007	2010	0.162	0.241	97.8	79.5	8.4	120.4	11.5
Argentina	1996	2001	0.111	0.271	95.6	76.0	15.3	85.7	14.4
Argentina	2002	2008	0.112	0.236	96.3	79.0	11.9	105.2	11.4
Argentina	2004	2009	0.205	0.237	96.8	79.1	9.7	106.9	11.1
Argentina	2007	2010	0.299	0.241	97.8	79.5	8.4	120.4	11.5
Argentina	2001	2009	0.161	0.238	96.4	79.0	12.3	105.6	11.6
Argentina	1988	1994	-0.121	0.270	-	-	7.9	-	-
Argentina	1999	2004	0.303	0.223	95.7	77.8	15.7	93.7	13.1
Argentina	2001	2008	0.179	0.238	96.3	78.9	12.7	103.4	11.5
Argentina	2000	2006	0.126	0.241	95.9	78.3	14.4	98.5	12.3
Argentina	2005	2010	0.368	0.238	97.2	79.1	9.1	115.2	11.4
Argentina	2003	2008	0.041	0.235	96.3	79.0	10.9	106.7	11.2
Argentina	1998	2002	0.092	0.261	95.8	76.6	15.6	87.8	14.0
Argentina	1990	1998	0.012	0.274	-	74.0	11.7	79.1	15.0
Argentina	2004	2009	0.205	0.237	96.8	79.1	9.7	106.9	11.1
Argentina	2008	2010	0.105	0.242	98.0	79.6	8.4	123.5	11.7
Argentina	2001	2007	0.099	0.237	96.0	78.7	13.4	101.2	11.7
Argentina	1985	1990	-0.146	-	-	-	5.9	-	-
Argentina	2002	2006	0.106	0.234	95.8	78.8	13.4	101.6	11.8
Argentina	2001	2007	0.084	0.237	96.0	78.7	13.4	101.2	11.7
Argentina	1995	2000	0.093	0.274	95.5	75.3	15.4	84.2	15.0
Argentina	2005	2010	0.001	0.238	97.2	79.1	9.1	115.2	11.4
Argentina	2003	2009	0.177	0.236	96.6	79.1	10.6	109.1	11.2
Argentina	1998	2004	-0.063	0.253	95.7	77.3	15.3	91.6	13.4
Argentina	1990	1996	-0.261	0.271	-	-	11.1	-	-
Argentina	2004	2009	0.188	0.237	96.8	79.1	9.7	106.9	11.1
Argentina	2001	2008	0.089	0.238	96.3	78.9	12.7	103.4	11.5

Emerging market of investment	Initial year of investment	Year of selling shareholding rights	ROI	Average: Export as % of GDP	Average: Corruption level, 0-10	Average: Credit by banks as % of GDP	Average: Market capitalization as % of GDP	Average: Infrastructure
South Africa	1988	1996	0.129	24.5	5.4	116.8	134.4	9.0
South Africa	2005	2009	0.251	30.34	4.5	184.8	244.4	10.8
South Africa	1999	2005	0.083	28.4	4.6	165.8	175.9	10.6
South Africa	2001	2006	0.302	29.3	4.6	174.7	192.3	10.7
South Africa	2004	2010	0.172	29.1	4.7	182.3	244.1	11.0
South Africa	2000	2005	0.411	28.9	4.7	167.9	172.4	10.7
South Africa	1999	2004	0.345	28.8	4.8	163.7	167.1	10.5
South Africa	2001	2006	0.488	29.3	4.6	174.7	192.4	10.7
South Africa	1996	2004	-0.081	27.8	4.9	155.5	161.4	10.1
South Africa	2002	2005	0.181	28.8	4.7	167.1	190.5	11.0
South Africa	2005	2008	0.238	31.3	4.8	184.9	243.1	10.8
South Africa	2003	2009	0.340	29.5	4.6	179.4	227.0	10.9
South Africa	2006	2009	0.318	31.3	4.8	186.4	248.3	10.8
South Africa	1995	1999	0.098	25.6	5.1	141.9	167.1	9.4
South Africa	2001	2007	0.273	29.6	4.7	177.8	206.4	10.7
South Africa	2004	2008	0.268	30.2	4.7	181.8	236.1	10.8
South Africa	1987	1990	-0.102	27.9	-	94.8	112.7	-
South Africa	2003	2008	0.313	29.9	4.7	180.5	209.7	10.8
South Africa	2000	2008	0.429	30.2	4.7	174.3	197.6	10.7
South Africa	1992	1998	-0.136	24.1	5.2	119.8	79.7	9.3
South Africa	2005	2009	0.034	30.34	4.5	184.8	244.4	10.8
South Africa	1983	1990	0.007	28.3	-	94.5	112.7	-
South Africa	2004	2008	0.196	30.2	4.7	181.8	236.1	10.8
South Africa	2001	2009	0.162	30.1	4.7	177.8	208.1	10.8
South Africa	2000	2007	0.168	29.4	4.7	174.5	193.7	10.6
South Africa	1985	1990	0.286	29.1	-	95.2	112.7	-
South Africa	2003	2008	0.273	29.9	4.7	180.5	209.7	10.8
South Africa	2003	2008	0.257	29.9	4.7	180.5	209.7	10.8
South Africa	2005	2009	0.115	30.34	4.5	184.8	244.4	10.8
South Africa	1988	1994	-0.471	24.4	-	110.2	122.4	-
South Africa	2004	2007	0.209	28.7	4.7	184.1	250.5	10.8
South Africa	1998	2002	0.247	30.0	4.9	157.8	152.5	10.2
South Africa	1995	1999	-0.169	25.6	5.1	141.9	166.7	9.4
South Africa	2001	2008	0.249	30.4	4.7	176.1	202.9	10.8
South Africa	2005	2009	0.205	30.34	4.5	184.8	244.4	10.8
South Africa	1987	1993	-0.121	25.4	-	104.2	114.8	-
South Africa	2001	2006	0.194	29.3	4.6	174.7	192.3	10.7
South Africa	1994	1999	-0.137	21.8	3.4	29.7	22.5	13.0
South Africa	2004	2009	0.198	23.5	3.9	49.6	31.0	13.7
South Africa	1998	2001	0.071	22.3	3.6	38.8	26.9	13.5

South Africa	2006	2010	0.198	22.9	4.3	56.0	33.9	14.0
South Africa	2000	2006	0.093	23.9	3.5	44.8	23.9	13.4
South Africa	2002	2007	0.035	23.4	3.5	45.4	28.4	13.3
South Africa	2007	2009	0.252	23.4	4.4	54.9	32.4	14.0
South Africa	1992	1999	0.14	20.6	3.4	28.2	20.3	13.0
South Africa	1999	2004	0.016	23.4	3.4	43.2	26.3	13.3
South Africa	2000	2005	-0.126	28.9	4.7	167.9	172.4	10.7
South Africa	2007	2010	0.23	23.1	4.4	58.5	34.7	14.0
South Africa	2005	2010	0.302	22.9	4.1	54.3	33.8	13.8
South Africa	1999	2005	0.278	23.3	3.4	43.6	27.3	12.3
South Africa	2001	2007	0.059	24.1	3.5	46.4	27.8	13.4
South Africa	2005	2009	0.21	30.34	4.5	184.8	244.4	10.8
South Africa	1993	1998	0.019	20.9	3.3	27.7	18.4	13.0
South Africa	1984	1989	0.102	16.5	-	32.9	3.8	-
South Africa	2005	2010	0.119	22.9	4.1	54.3	33.8	13.8
South Africa	2000	2006	-0.088	23.9	3.5	44.8	23.9	13.4
South Africa	2004	2008	-0.159	30.2	4.7	181.8	236.1	10.8
South Africa	2003	2009	0.305	23.4	3.8	48.6	29.8	13.6
South Africa	2005	2010	0.126	22.9	4.1	54.3	33.8	13.8
South Africa	2004	2010	0.260	29.1	4.7	182.3	244.1	11.0
South Africa	1984	1990	0.072	16.0	-	31.2	6.7	-
South Africa	2007	2010	0.057	23.1	4.4	58.5	34.7	14.0
South Africa	2000	2006	0.188	23.9	3.5	44.8	23.9	13.4
South Africa	2004	2009	0.226	23.5	3.9	49.6	31.0	13.7
South Africa	2004	2008	0.085	30.2	4.7	181.8	236.1	10.8
South Africa	1992	1998	0.047	24.1	5.2	119.8	79.7	9.3
South Africa	1997	2000	0.055	21.6	3.5	34.1	29.0	13.2
South Africa	1999	2005	0.043	23.3	3.4	43.6	27.3	12.3
South Africa	2007	2010	0.361	23.1	4.4	58.5	34.7	14.0
South Africa	2006	2010	0.026	22.9	4.3	56.0	33.9	14.0
South Korea	2003	2010	0.272	44.6	5.1	97.3	81.4	12.9
South Korea	2002	2009	-0.081	42.1	4.9	95.2	73.4	13.0
South Korea	2006	2010	0.352	47.9	5.3	103.36	91.1	12.8
South Korea	1999	2004	0.255	37.7	4.2	80.9	53.1	12.5
South Korea	2005	2009	0.152	45.3	5.3	100.4	86.7	13.0
South Korea	1995	2002	0.084	35.7	4.3	67.8	39.1	12.5
South Korea	2000	2007	0.093	38.6	4.6	87.1	63.7	12.8
South Korea	1993	1999	0.112	33.1	4.3	56.6	42.8	12.6
South Korea	2005	2010	0.372	46.6	5.2	100.8	90.1	12.8
South Korea	2003	2009	0.404	43.4	5.0	96.4	77.7	13.0
South Korea	2000	2008	0.245	40.3	4.7	89.6	62.5	12.8
South Korea	2002	2007	-0.202	38.8	4.8	90.4	72.3	13.0
South Korea	1994	1999	-0.004	33.9	4.3	58.9	39.7	12.6
South Korea	2001	2008	0.324	40.3	4.8	91.4	66.3	12.9

South Korea	1995	2002	0.021	35.7	4.3	67.8	39.1	12.5
South Korea	2007	2010	0.306	49.8	5.4	105.1	91.9	12.8
South Korea	2003	2009	0.198	43.4	5.0	96.4	77.7	13.0
South Korea	2008	2010	0.387	52.4	5.5	107.3	86.9	12.7
South Korea	2002	2007	-0.251	38.8	4.8	90.4	72.3	13.0
South Korea	2000	2006	0.201	38.1	4.5	85.4	57.5	12.7
South Korea	1984	1990	0.036	33.9	-	49.4	51.7	-
South Korea	1997	2002	0.06	37.9	4.2	73.1	41.9	12.3
South Korea	2005	2008	0.295	43.9	5.2	98.1	83.3	13.0
South Korea	2001	2007	0.246	38.4	4.7	88.9	68.2	12.9
South Korea	2006	2010	0.524	47.9	5.3	103.36	91.1	12.8
South Korea	2006	2009	0.303	46.8	5.3	103.4	87.1	13.0
South Korea	2000	2007	0.162	38.6	4.6	87.1	63.7	12.8
South Korea	2005	2009	0.257	45.3	5.3	100.4	86.7	13.0
South Korea	1992	1998	0.146	31.3	4.5	54.8	31.4	12.8
South Korea	1994	1999	0.073	33.9	4.3	57.4	42.7	12.6
South Korea	2007	2010	0.42	49.8	5.4	105.1	91.9	12.8
South Korea	2005	2009	0.297	45.3	5.3	100.4	86.7	13.0
South Korea	1996	2002	0.152	36.6	4.3	70.3	39.6	12.4
South Korea	2007	2010	0.351	49.8	5.4	105.1	91.9	12.8
South Korea	1995	2001	0.199	36.0	4.2	65.3	38.4	12.4
South Korea	2005	2009	0.401	45.3	5.3	100.4	86.7	13.0
South Korea	2006	2010	0.405	47.9	5.3	103.36	91.1	12.8
South Korea	1983	1989	-0.029	34.6	-	46.3	61.2	-
South Korea	1996	2002	0.072	36.6	4.3	70.3	39.6	12.4
South Korea	2001	2008	0.252	40.3	4.8	91.4	66.3	12.9
South Korea	2006	2010	0.398	47.9	5.3	103.36	91.1	12.8
South Korea	2004	2008	-0.040	43.4	15.1	95.4	78.4	13.0
South Korea	2003	2009	0.183	43.4	5.0	96.4	77.7	13.0
South Korea	2005	2010	0.353	46.6	5.2	100.8	90.1	12.8
South Korea	2001	2009	0.493	41.4	4.9	93.4	70.1	12.8
South Korea	1999	2003	-0.187	36.9	4.16	80.2	51.8	12.4
South Korea	2002	2006	0.289	38.1	4.7	88.8	65.3	13.0
South Korea	2007	2010	0.366	49.8	5.4	105.1	91.9	12.8
South Korea	1999	2006	0.119	38.3	4.4	83.8	61.4	12.6
South Korea	2004	2009	0.308	44.6	13.5	97.8	82.1	13.0
South Korea	1996	2002	0.163	36.6	4.3	70.3	39.6	12.4
South Korea	2000	2006	0.199	38.1	4.5	85.4	57.5	12.7
South Korea	2005	2010	0.221	46.6	5.2	100.8	90.1	12.8
South Korea	2001	2006	0.101	37.8	4.6	87.2	61.7	12.8
South Korea	2001	2007	-0.059	38.4	4.7	88.9	68.2	12.9
South Korea	2006	2009	0.350	46.8	5.3	103.4	87.1	13.0
South Korea	1998	2001	0.199	40.5	4.1	73.4	49.9	12.0
South Korea	2007	2010	0.340	49.8	5.4	105.1	91.9	12.8

South Korea	2000	2005	0.197	37.7	4.4	83.6	52.4	12.7
South Korea	1998	2004	0.054	38.9	4.2	78.9	50.5	12.4
South Korea	2006	2009	0.399	46.8	5.3	103.4	87.1	13.0
South Korea	2004	2008	-0.109	43.4	15.1	95.4	78.4	13.0
South Korea	2007	2010	0.447	49.8	5.4	105.1	91.9	12.8
South Korea	2002	2006	-0.096	38.1	4.7	88.8	65.3	13.0
South Korea	1995	2000	0.268	36.1	4.3	62.9	37.4	12.4
South Korea	2001	2008	0.254	40.3	4.8	91.4	66.3	12.9
Thailand	2005	2010	0.259	73.2	3.5	127.1	65.9	17.1
Thailand	1994	1998	0.024	45.9	3.1	154.4	55.3	21.3
Thailand	2002	2007	0.274	70.7	3.4	123.8	68.6	18.3
Thailand	2006	2010	0.378	72.9	3.4	128.7	64.9	16.8
Thailand	1998	2003	0.013	63.7	3.2	142.8	42.6	19.3
Thailand	2003	2008	-0.148	72.7	3.6	124.5	68.7	18.0
Thailand	1990	1992	0.025	35.8	-	98.0	38.9	-
Thailand	1995	2006	0.322	61.1	3.3	139.7	51.8	19.8
Thailand	2001	2009	0.397	70.7	3.4	126.5	59.3	18.2
Thailand	2007	2010	0.415	72.5	3.4	133.7	64.1	16.5
Thailand	1999	2006	0.236	66.9	3.4	135.5	51.9	19.1
Thailand	2004	2008	0.291	74.2	3.6	122.9	65.7	17.8
Thailand	2008	2010	0.407	72.1	3.4	134.3	59.0	16.6
Thailand	2000	2009	0.221	70.3	3.4	127.6	55.8	18.4
Thailand	2002	2008	0.268	71.6	3.4	124.8	64.3	18.1
Thailand	2007	2010	0.398	72.5	3.4	133.7	64.1	16.5
Thailand	2001	2009	0.304	70.7	3.4	126.5	59.3	18.2
Thailand	1992	1999	0.054	45.4	3.1	143.5	60.2	20.8
Thailand	2006	2010	0.332	72.9	3.4	128.7	64.9	16.8
Thailand	2000	2005	0.258	68.4	3.4	128.2	53.3	19.3
Thailand	2005	2009	0.343	73.5	3.5	125.4	61.6	17.4
Thailand	2003	2009	0.250	72.1	3.5	126.1	66.4	17.9
Thailand	1994	2002	0.107	54.0	3.2	147.1	46.2	20.4
Thailand	2001	2007	0.180	70.1	3.5	124.4	63.3	18.6
Thailand	2005	2010	0.399	73.2	3.5	127.1	65.9	17.1
Thailand	2001	2008	0.306	70.9	3.4	125.4	60.1	18.4
Thailand	2004	2009	0.243	73.2	3.6	125.3	63.4	17.7
Thailand	1998	2002	0.645	63.2	3.1	145.4	34.1	19.4
Thailand	2000	2006	-0.104	67.9	3.8	129.2	54.4	19.2
Thailand	1993	2000	0.009	49.1	3.2	147.9	56.6	20.7
Thailand	2002	2005	0.166	69.2	3.4	125.6	66.1	19.0
Thailand	1987	1990	0.131	33.3	-	87.8	25.9	-
Thailand	2000	2007	0.259	69.8	3.4	126.2	58.3	18.8
Thailand	2004	2010	0.349	73.1	3.5	126.8	66.8	17.4
Thailand	1990	1995	-0.069	37.9	-	113.7	66.1	22.0
Thailand	2005	2010	0.355	73.2	3.5	127.1	65.9	17.1

Thailand	1998	2005	0.152	66.1	3.3	138.9	49.8	19.2
Thailand	2003	2009	0.197	72.1	3.5	126.1	66.4	17.9
Thailand	2005	2010	0.288	73.2	3.5	127.1	65.9	17.1
Thailand	2001	2007	0.097	70.2	3.4	124.4	63.3	18.6
Thailand	2002	2008	0.091	71.6	3.4	124.8	64.3	18.1
Thailand	2007	2010	0.352	72.5	3.4	133.7	64.1	16.5
Thailand	1999	2007	0.125	68.6	3.4	129.5	57.2	18.8
Thailand	1988	1994	-0.172	36.4	-	101.6	51.7	-
Thailand	2001	2010	0.631	70.7	3.4	127.4	62.1	18.0
Thailand	1994	1999	0.145	47.9	3.2	154.8	54.1	20.8
Thailand	2000	2004	0.197	67.1	3.3	129.9	49.8	19.4
Thailand	2006	2010	0.452	72.9	3.4	128.7	64.9	16.8
Thailand	1998	2002	0.112	63.2	3.1	145.4	34.1	19.4
Thailand	2007	2010	0.391	72.5	3.4	133.7	64.1	16.5
Thailand	1992	1996	0.156	39.4	3.2	127.6	77.4	22.0
Thailand	2001	2008	0.199	70.9	3.4	125.4	60.1	18.4
Thailand	2000	2009	0.121	70.3	3.4	127.6	55.8	18.4
Thailand	2003	2008	0.166	72.7	3.6	124.5	68.7	18.0
Thailand	2007	2010	0.361	72.5	3.4	133.7	64.1	16.5
Thailand	1994	2000	-0.049	50.7	3.1	152.4	49.8	20.7
Thailand	1990	1994	0.172	37.1	-	108.1	62.4	-
India	2001	2006	0.201	17.2	2.9	58.0	50.3	5.9
India	2004	2009	0.363	20.9	3.2	62.4	81.8	6.1
India	1999	2005	0.159	15.4	2.8	55.3	41.3	5.9
India	2002	2007	0.216	18.3	3.0	59.0	70.9	6.0
India	2005	2010	0.361	21.4	3.3	64.8	88.4	6.3
India	2005	2009	0.229	21.3	3.3	63.5	87.4	6.2
India	2000	2007	0.240	17.2	2.9	57.7	60.1	5.9
India	2002	2006	0.248	18.0	2.9	58.6	55.7	6.0
India	1995	1999	0.149	11.5	2.8	46.6	33.0	5.8
India	2001	2009	0.564	18.7	3.1	60.7	65.1	6.0
India	1998	2002	-0.031	13.1	2.8	52.4	29.5	5.8
India	2004	2008	0.198	20.9	3.2	61.1	81.2	6.0
India	2000	2006	0.101	16.7	2.9	57.3	47.7	5.9
India	1996	2001	0.062	12.2	2.8	48.9	30.7	5.6
India	1994	1999	0.102	11.4	2.8	47.1	34.0	5.8
India	2004	2007	0.147	19.9	3.1	59.4	88.2	6.0
India	2003	2008	0.163	19.9	3.1	60.6	75.4	6.0
India	2007	2010	-0.055	21.8	3.4	67.4	94.6	6.5
India	1997	2002	-0.031	12.7	2.8	51.3	29.7	5.6
India	1990	1996	0.006	10.1	2.6	49.1	28.4	6.0
India	2002	2009	0.248	19.3	3.1	61.4	70.5	6.1
India	2003	2009	0.149	20.1	3.2	61.8	76.8	6.1
India	2000	2004	0.048	15.1	2.8	56.1	36.3	5.8

India	1993	1998	0.062	11.0	2.7	47.2	33.1	5.7
India	2005	2010	0.228	21.4	3.3	64.8	88.4	6.3
India	2006	2009	0.299	21.8	3.4	64.8	92.8	6.3
India	2008	2010	0.197	22.4	3.3	69.6	77.3	6.6
India	2003	2008	-0.078	19.9	3.1	60.6	75.4	6.0
India	2000	2005	0.066	15.9	2.8	56.5	41.3	5.8
India	2004	2009	0.202	20.9	3.2	62.4	81.8	6.1
India	1998	2004	0.199	14.1	2.8	53.9	35.4	5.9
India	2001	2006	0.109	17.2	2.9	58.0	50.3	5.9
India	1997	2002	0.057	12.7	2.8	51.3	29.7	5.6
India	2006	2010	0.295	21.8	3.38	66.1	92.9	6.4
India	2005	2009	0.319	21.3	3.3	63.5	87.4	6.2
India	2001	2008	0.016	18.4	3.1	59.6	62.5	5.9
India	1989	1994	0.036	9.2	-	50.7	23.4	-
India	2005	2009	0.033	21.3	3.3	63.5	87.4	6.2
India	2006	2010	0.244	21.8	3.38	66.1	92.9	6.4
India	2001	2007	0.111	17.6	2.9	58.4	63.7	5.9
India	2003	2008	0.151	19.9	3.1	60.6	75.4	6.0
India	2004	2009	0.098	20.9	3.2	62.4	81.8	6.1
India	1993	1999	0.048	11.2	2.8	47.44	34.3	5.8
India	1989	1994	0.011	9.2	-	50.7	23.4	-
India	2006	2010	0.202	21.8	3.38	66.1	92.9	6.4
India	2002	2007	0.179	18.3	3.0	59.0	70.9	6.0
India	2001	2008	0.183	18.4	3.1	59.6	62.5	5.9
India	1994	1999	-0.059	11.4	2.8	47.1	34.0	5.8
India	2006	2010	0.401	21.8	3.38	66.1	92.9	6.4
India	2001	2007	0.197	17.6	2.9	58.4	63.7	5.9
India	1992	1998	0.089	10.8	2.7	47.7	33.6	5.8
India	2007	2010	0.532	21.8	3.4	67.4	94.6	6.5
India	1998	2002	0.113	13.1	2.8	52.4	29.5	5.8
India	2004	2007	0.099	19.9	3.1	59.4	88.2	6.0
India	2000	2005	0.201	15.9	2.8	56.5	41.3	5.8
India	2002	2008	0.203	19.2	3.1	60.3	68.3	6.0
Poland	1999	2004	0.099	37.7	4.1	47.4	33.3	13.3
Poland	2003	2007	0.205	35.9	3.7	40.3	33.6	12.2
Poland	2007	2010	0.293	38.5	4.8	57.7	34.4	14.5
Poland	2004	2009	0.151	37.7	4.1	47.4	33.3	13.3
Poland	2008	2010	0.325	37.2	4.6	55.8	32.6	14.3
Poland	1998	2002	-0.123	27.1	4.2	35.7	15.2	10.1
Poland	1992	1998	0.071	23.4	5.0	33.6	4.9	9.2
Poland	2000	2003	0.152	29.5	3.9	36.7	15.9	10.3
Poland	2001	2010	0.249	35.8	4.1	46.1	28.3	12.5
Poland	2001	2006	0.103	34.1	3.7	38.3	24.7	11.1
Poland	2005	2009	0.163	37.4	3.9	46.3	35.1	13.3

Poland	1993	1999	0.163	23.5	4.8	33.7	7.4	9.4
Poland	2002	2006	0.502	35.5	3.6	38.5	26.8	11.4
Poland	2003	2008	0.097	36.7	3.8	43.6	30.9	12.5
Poland	2004	2009	0.136	37.7	4.1	47.4	33.3	13.3
Poland	2000	2004	0.097	31.0	3.9	36.8	18.3	10.6
Poland	2001	2009	0.192	35.1	4.1	44.2	26.7	12.2
Poland	2005	2010	0.385	38.6	4.4	51.8	35.4	13.9
Poland	1990	1996	-0.077	23.1	5.3	31.5	2.6	9.0
Poland	1997	2002	0.041	26.6	4.4	35.2	13.9	10.0
Poland	2000	2007	0.278	33.1	3.8	38.7	26.9	11.5
Poland	1994	2000	0.021	24.2	4.7	33.2	9.6	9.7
Poland	1993	1997	0.009	22.8	5.2	33.1	4.5	9.0
Poland	2001	2008	0.119	34.6	3.9	42.0	26.7	11.9
Poland	2004	2010	0.333	38.4	4.2	49.7	34.3	13.6
Poland	2002	2005	0.081	34.3	3.6	37.7	22.6	11.0
Poland	2005	2009	0.322	37.4	3.9	46.3	35.1	13.3
Poland	2002	2009	0.373	36.1	4.0	45.1	28.9	12.5
Poland	2000	2006	0.201	33.2	3.8	37.7	23.8	11.1
Poland	2004	2009	0.287	37.7	4.1	47.4	33.3	13.3
Poland	2003	2008	0.345	36.7	3.8	43.6	30.9	12.5
Poland	1990	1994	-0.031	23.1	-	31.8	1.7	-
Poland	2007	2010	0.241	38.5	4.8	57.7	34.4	14.5
Poland	2002	2009	0.054	36.1	4.0	45.1	28.9	12.5
Poland	2006	2010	0.399	38.8	4.6	54.6	36.3	14.2
Poland	1990	1995	-0.231	23.2	-	31.5	2.1	9.0
Poland	2000	2008	0.194	33.9	3.9	41.1	25.8	11.8
Poland	1993	1999	0.014	23.5	4.8	33.7	7.4	9.4
Poland	2004	2009	0.111	37.7	4.1	47.4	33.3	13.3
Poland	2002	2006	0.132	35.5	3.6	38.5	26.8	11.4
Poland	2001	2008	0.202	34.6	3.9	42.0	26.7	11.9
Poland	2008	2010	0.428	37.2	4.6	55.8	32.6	14.3
Poland	2003	2008	0.291	36.7	3.8	43.6	30.9	12.5
Poland	1991	1999	0.034	23.2	5.0	33.5	4.4	9.3
Poland	2007	2010	0.169	38.5	4.8	57.7	34.4	14.5
Poland	2000	2006	0.031	33.2	3.8	37.7	23.8	11.1
Poland	1993	2000	0.025	24.1	4.6	33.8	8.8	9.7
Poland	1998	2006	-0.161	31.4	3.9	37.1	21.7	10.8
Poland	2005	2010	0.453	38.6	4.4	51.8	35.4	13.9
Poland	2003	2009	0.147	37.3	4.0	46.1	30.9	12.8
Poland	2008	2010	0.396	37.2	4.6	55.8	32.6	14.3
Poland	1999	2003	-0.089	37.4	3.9	44.6	33.6	13.0
Poland	2004	2008	0.261	37.3	3.9	44.6	33.6	13.0
Brazil	2003	2007	0.275	15.1	3.7	80.0	62.3	21.6
Brazil	1999	2004	0.049	13.1	3.9	72.7	39.1	20.7

Brazil	2004	2009	0.234	14.5	3.6	86.7	63.0	22.0
Brazil	2005	2009	0.398	14.1	3.5	89.4	65.6	22.2
Brazil	1996	2002	0.033	10.1	3.8	67.6	29.4	20.3
Brazil	1990	1999	0.039	9.2	3.7	88.2	21.5	20.0
Brazil	2004	2007	0.402	15.1	3.6	81.4	67.3	21.2
Brazil	2003	2009	0.194	14.6	3.7	82.9	64.1	21.9
Brazil	2007	2010	0.366	12.9	3.6	96.1	70.8	22.5
Brazil	1988	1994	-0.166	10.6	-	135.7	14.7	-
Brazil	2008	2010	0.384	12.6	3.7	97.4	60.9	22.7
Brazil	2001	2006	0.150	14.8	3.8	75.8	44.9	21.3
Brazil	2004	2009	0.313	14.5	3.6	86.7	63.0	22.0
Brazil	2000	2008	0.151	14.2	3.7	79.5	48.9	21.3
Brazil	1998	2002	0.061	10.9	4.0	71.3	30.3	20.4
Brazil	2002	2008	0.168	14.9	3.7	81.6	53.1	21.6
Brazil	2003	2008	0.171	15.1	3.7	80.0	62.3	21.7
Brazil	2000	2006	0.241	14.2	3.8	75.2	43.5	21.2
Brazil	1998	2003	0.049	11.6	3.9	71.7	32.2	20.5
Brazil	2001	2007	0.079	14.7	3.8	78.1	52.9	21.4
Brazil	2005	2009	0.178	14.1	3.5	89.4	65.6	22.2
Brazil	2008	2010	0.294	12.6	3.7	97.4	60.9	22.7
Brazil	2001	2005	0.083	14.8	3.9	73.6	40.9	21.2
Brazil	2007	2010	0.393	12.9	3.6	96.1	70.8	22.5
Brazil	1983	1988	0.328	11.5	-	75.2	9.7	-
Brazil	1994	1998	0.028	8.2	3.6	65.1	25.0	20.0
Brazil	2001	2006	0.203	14.8	3.8	75.8	44.9	21.3
Brazil	1998	2003	0.005	11.7	4.9	71.7	32.2	20.5
Brazil	2004	2009	0.174	14.5	3.6	86.7	63.0	22.0
Brazil	2003	2008	0.058	15.1	3.7	80.0	62.3	21.7
Brazil	2004	2010	0.196	14.1	3.6	88.3	64.5	22.1
Brazil	2008	2010	0.244	12.6	3.7	97.4	60.9	22.7
Brazil	1998	2002	0.021	10.9	4.0	71.3	30.3	20.4
Brazil	1993	1998	-0.041	8.8	3.6	84.3	25.1	20.0
Brazil	2000	2006	0.079	14.2	3.8	75.2	43.5	21.2
Brazil	2001	2005	0.037	14.8	3.9	73.6	40.9	21.2
Brazil	1993	1997	-0.084	9.1	3.4	87.8	26.7	20.0
Brazil	2007	2010	0.561	12.9	3.6	96.1	70.8	22.5
Brazil	2003	2007	-0.041	15.1	3.7	80.0	62.3	21.6
Brazil	2002	2009	0.019	14.6	3.6	83.6	55.6	21.8
Brazil	2005	2010	0.367	13.6	3.6	90.9	67.1	22.3
Brazil	2000	2005	0.169	14.1	3.9	73.3	39.9	21.0
Brazil	2003	2009	0.256	14.6	3.7	82.9	64.1	21.9
Brazil	2001	2008	0.148	14.6	3.7	80.5	50.7	21.5
Brazil	2002	2009	0.195	14.6	3.6	83.6	55.6	21.8
Brazil	1999	2004	0.046	13.1	3.9	72.7	39.1	20.7

Brazil	2003	2009	0.191	14.6	3.7	82.9	64.1	21.9
Brazil	1996	2000	0.163	8.7	3.8	65.2	29.6	20
Brazil	2002	2006	0.071	15.3	3.8	76.4	47.2	21.4
Brazil	2006	2010	0.287	13.2	3.6	94.2	69.7	22.4
Brazil	2001	2007	0.501	14.7	3.8	78.1	52.9	21.4
Brazil	1989	1995	-0.047	9.9	-	120.1	16.1	20.0
Turkey	1989	1994	-0.073	15.7	-	22.9	12.2	-
Turkey	2004	2008	0.083	23.6	3.8	46.9	29.9	13.6
Turkey	2002	2005	0.153	23.9	3.3	44.4	23.9	13.0
Turkey	2006	2010	0.441	22.9	4.3	55.9	33.8	14.0
Turkey	2000	2006	0.175	23.9	3.4	44.8	25.2	13.4
Turkey	1997	2000	0.011	21.6	3.5	34.1	28.9	13.3
Turkey	2001	2006	0.123	24.4	3.4	46.0	25.1	13.3
Turkey	2000	2008	0.033	23.8	3.7	46.1	26.3	13.6
Turkey	2002	2006	0.302	23.7	3.4	44.6	25.2	13.2
Turkey	2005	2010	0.405	22.9	4.1	54.3	33.8	13.8
Turkey	1993	1998	0.028	20.9	3.3	27.7	18.4	13.0
Turkey	2005	2010	0.378	22.9	4.1	54.3	33.8	13.8
Turkey	2002	2008	0.301	23.6	3.6	46.4	26.6	13.4
Turkey	1998	2002	0.093	22.8	3.5	40.6	24.4	13.4
Turkey	2001	2005	0.092	24.6	3.3	46.1	23.9	13.2
Turkey	2004	2009	0.209	23.4	3.9	49.6	31.1	13.7
Turkey	1999	2004	0.035	23.4	3.4	43.2	26.2	13.3
Turkey	2005	2010	0.342	22.9	4.1	54.3	33.8	13.8
Turkey	2006	2010	0.163	22.9	4.3	55.9	33.8	14.0
Turkey	2006	2009	0.169	23.4	4.2	52.7	31.9	14.0
Turkey	2000	2004	0.061	24.2	3.4	44.5	22.5	13.4
Turkey	1995	1999	0.009	21.8	3.4	30.3	23.7	13.0
Turkey	2000	2005	0.163	23.9	3.4	44.6	24.3	13.3
Turkey	1992	1999	-0.138	19.9	3.4	28.2	20.3	13.0
Turkey	1994	1998	0.008	22.2	3.3	28.3	18.0	13.0
Turkey	2000	2006	0.127	23.9	3.4	44.8	25.2	13.4
Turkey	1984	1988	0.065	16.5	-	34.8	1.3	-
Turkey	2001	2005	0.057	24.6	3.3	46.1	23.9	13.2
Turkey	1997	2002	-0.021	23.1	3.4	39.5	25.7	13.3
Turkey	2006	2010	0.319	22.9	4.3	55.9	33.8	14.0
Turkey	2005	2010	0.197	22.9	4.1	54.3	33.8	13.8
Turkey	1999	2004	0.065	23.4	3.4	43.2	26.2	13.3
Turkey	2007	2010	0.498	22.9	4.3	58.5	34.7	14.0
Turkey	2006	2009	0.298	23.4	4.2	52.7	31.9	14.0
Turkey	2006	2009	0.317	23.4	4.2	52.7	31.9	14.0
Turkey	2008	2010	0.461	23.1	4.4	61.6	31.5	14.0
Turkey	1993	2000	0.025	20.6	3.4	30.1	22.6	13.1
Turkey	2000	2005	0.071	23.9	3.4	44.6	24.3	13.3

Turkey	2002	2009	0.198	23.6	3.7	48.4	27.9	13.5
Turkey	2006	2010	0.357	22.9	4.3	55.9	33.8	14.0
Turkey	1999	2004	0.081	23.4	3.4	43.2	26.2	13.3
Turkey	2002	2008	0.155	23.6	3.6	46.4	26.6	13.4
Turkey	1990	1997	0.118	18.2	3.3	25.2	15.9	13.0
Turkey	1997	2003	-0.037	23.2	3.4	39.9	25.3	13.3
Turkey	2005	2010	0.173	22.9	4.1	54.3	33.8	13.8
Turkey	2006	2010	0.464	22.9	4.3	55.9	33.8	14.0
Turkey	2003	2008	0.198	23.4	3.7	46.2	28.7	13.5
Turkey	2000	2005	0.117	23.9	3.4	44.6	24.3	13.3
Turkey	1999	2006	0.198	23.3	3.4	43.8	27.7	13.4
Turkey	2004	2009	0.398	23.4	3.9	49.6	31.1	13.7
Turkey	2005	2010	0.195	22.9	4.1	54.3	33.8	13.8
Argentina	2002	2006	0.036	25.9	2.7	45.5	46.5	18.2
Argentina	2004	2008	0.157	25.3	2.8	33.4	30.1	18.4
Argentina	1989	1994	-0.154	9.3	-	35.1	9.8	19.0
Argentina	2003	2009	0.147	24.7	2.8	35.1	28.0	18.4
Argentina	2005	2010	0.208	24.1	2.9	29.8	25.5	18.6
Argentina	2001	2006	0.111	24.4	2.8	44.1	50.7	18.3
Argentina	1992	1998	0.034	9.4	2.9	27.7	15.3	18.8
Argentina	2000	2005	0.174	22.3	2.9	44.7	54.2	18.7
Argentina	2002	2008	0.087	25.7	2.8	40.1	40.3	18.1
Argentina	1998	2005	0.044	19.3	2.9	42.1	46.3	18.6
Argentina	2007	2010	0.353	23.4	2.9	27.5	20.6	18.5
Argentina	2005	2009	0.356	24.4	2.9	30.2	27.1	18.6
Argentina	2003	2007	0.028	25.5	2.7	38.7	32.8	18.4
Argentina	2000	2006	0.071	22.7	2.9	42.7	51.8	18.7
Argentina	1999	2004	0.043	19.7	2.9	44.3	53.5	18.6
Argentina	2007	2010	0.393	23.4	2.9	27.5	20.6	18.5
Argentina	1995	2000	-0.156	10.9	3.1	31.5	25.7	19.1
Argentina	2005	2010	-0.085	24.1	2.9	29.8	25.5	18.6
Argentina	2004	2008	0.158	25.3	2.8	33.4	30.1	18.4
Argentina	2007	2010	0.201	23.4	2.9	27.5	20.6	18.5
Argentina	2001	2008	0.195	24.6	2.9	39.7	44.1	18.3
Argentina	1998	2002	-0.02	15.6	3.2	40.4	55.2	18.8
Argentina	2002	2007	0.141	25.9	2.7	42.6	44.2	18.1
Argentina	2003	2008	0.193	25.3	2.8	36.3	30.1	18.3
Argentina	2007	2010	0.162	23.4	2.9	27.5	20.6	18.5
Argentina	1996	2001	0.111	11.9	3.2	33.1	35.3	19.1
Argentina	2002	2008	0.112	25.7	2.8	40.1	40.3	18.1
Argentina	2004	2009	0.205	24.6	2.8	32.5	27.7	18.5
Argentina	2007	2010	0.299	23.4	2.9	27.5	20.6	18.5
Argentina	2001	2009	0.161	24.2	2.9	38.4	41.0	18.3
Argentina	1988	1994	-0.121	9.4	-	36.1	8.6	19.0

Argentina	1999	2004	0.303	19.7	2.9	44.3	53.5	18.6
Argentina	2001	2008	0.179	24.6	2.9	39.7	44.1	18.3
Argentina	2000	2006	0.126	22.7	2.9	42.7	51.8	18.7
Argentina	2005	2010	0.368	24.1	2.9	29.8	25.5	18.6
Argentina	2003	2008	0.041	25.3	2.8	36.3	30.1	18.3
Argentina	1998	2002	0.092	15.6	3.2	40.4	55.2	18.8
Argentina	1990	1998	0.012	9.4	2.9	27.7	13.3	18.8
Argentina	2004	2009	0.205	24.6	2.8	32.5	27.7	18.5
Argentina	2008	2010	0.105	22.6	2.9	27.2	16.4	18.7
Argentina	2001	2007	0.099	24.6	2.8	41.9	48.1	18.2
Argentina	1985	1990	-0.146	10.6	-	44.7	3.1	-
Argentina	2002	2006	0.106	25.9	2.7	45.5	46.5	18.2
Argentina	2001	2007	0.084	24.6	2.8	41.9	48.1	18.2
Argentina	1995	2000	0.093	10.9	3.1	31.5	25.7	19.1
Argentina	2005	2010	0.001	24.1	2.9	29.8	25.5	18.6
Argentina	2003	2009	0.177	24.7	2.8	35.1	28.0	18.4
Argentina	1998	2004	-0.063	18.4	2.9	42.6	48.1	18.6
Argentina	1990	1996	-0.261	8.9	3.1	26.6	12.1	19.0
Argentina	2004	2009	0.188	24.6	2.8	32.5	27.7	18.5
Argentina	2001	2008	0.089	24.6	2.9	39.7	44.1	18.3

Appendix 5: Categorization of literature

Theoretical topic

	Argument	**Articles arguing for the concept**
Government debt	The lower government debt, the higher economic growth.	(Reinhart & Rogoff, 2003; Solow, 1956; Page, 1994; Stiglitz, 1996)
Government savings	The higher rate of savings, the higher economic growth.	(Gutierrez & Solimano, 2007; Kokko, 2006; Taylor & Williamson, 1994; Barro, 1991; Hall & Jones, 1999; Romer, 1994)
Government investment	The higher the investment, the higher economic growth.	(Amsden, 1994; Kokko, 2006; Taylor & Williamson, 1994; Barro, 1991; Hall & Jones, 1999; Romer, 1994)
Inflation	The lower inflation, the higher economic growth.	(Li, 2006; Barnes et al., 1999; Breasley et al., 2008; Moss & Standley, 2007)
Distribution of wealth	The lower inequality in the country, the higher economic growth.	(Kokko, 2006; Moss et al., 2007; Dollar, 2008; Arbache et al., 2008; Page, 1994)
Labor force	An increase in labor force means higher economic growth.	(Kothare, 1999; Swan, 1956; Stavig; 1979; Fengler, 2010)
Productivity	An increase in productivity means higher economic growth.	(Romer, 1994; Mankim et al.; 1992; Hall & Jones, 1999; Krugman, 1994; Swan, 1956; Stiglitz, 1996; Jajei & Ismail, 2010; Kokko, 2006; Kim & Lau, 1993)
Education	The better educated population, the higher economic growth.	(Page, 1994; Walter & Rubinson, 1983; Stevens & Weale, 2003; Arbache et al., 1998; Dollar, 2008)
Unemployment	The lower unemployment, the higher economic growth.	(Calmfors & Holmlund, 2000; Manning, 1992; Stiglitz, 1996; Choi, 2007; Lindbeck, 1996; Pissarides, 1990)
Exchange rate	The more stable exchange rate, the higher economic growth.	(Brealey et al., 2008; Balassa, 1978; Dollar, 2008; Kokko, 2006)
Barriers of trading	The less barriers of trading, the higher economic growth.	(Dollar, 2008; Rodriguez, 2001; Edwards, 1993; Yanikkaya, 2003)
Corruption	The lower corruption level, the higher economic growth.	(Arbache et al., 2008; Aron, 2000; North, 1989; Cuervo-Cazurra, 2006; Stiglitz, 1996)
Credit markets	The more effective credit market, the higher economic growth.	(King & Levine, 1993; Levine & Zervos, 1998: Page; 1994; Sanfiso, 2007; Radelet, 2006)
Capital markets	The more effective capital market, the higher economic growth.	(King & Levine, 1993; Levine & Zervos, 1998: Page; 1994; Sanfiso, 2007; Radelet, 2006)
Infrastructure	The better infrastructure, the higher economic growth.	(Canning & Pedroni, 2004; Holtz-Eakin & Schwartz, 1995; Fengler, 2010; Kokko, 2006)

Appendix 6: Model for analysis section

Descriptive Statistics

	Mean	Std. Deviation	N
ROI	,181749	,1514924	418
Debt	45,0642	25,17576	418
Productivity	,34665	,145984	418
School enrollment	74,455	16,5265	418
Unemployment	10,7166	11,99663	418
Exchange rate	99,8775	15,24286	418
Squared exchange rate	10207,29662	2644,462600	418
Credit banks	78,2511	44,27228	418

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,775[a]	,600	,593	,0966089

a. Predictors: (Constant), Credit banks, Squared exchange rate, Unemployment, Debt, School enrollment, Productivity, Exchange rate

b. Dependent Variable: ROI

ANOVAb

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,743	7	,820	87,911	,000[a]
	Residual	3,827	410	,009		
	Total	9,570	417			

a. Predictors: (Constant), Credit banks, Squared exchange rate, Unemployment, Debt, School enrollment, Productivity, Exchange rate

b. Dependent Variable: ROI

Coefficients[a]

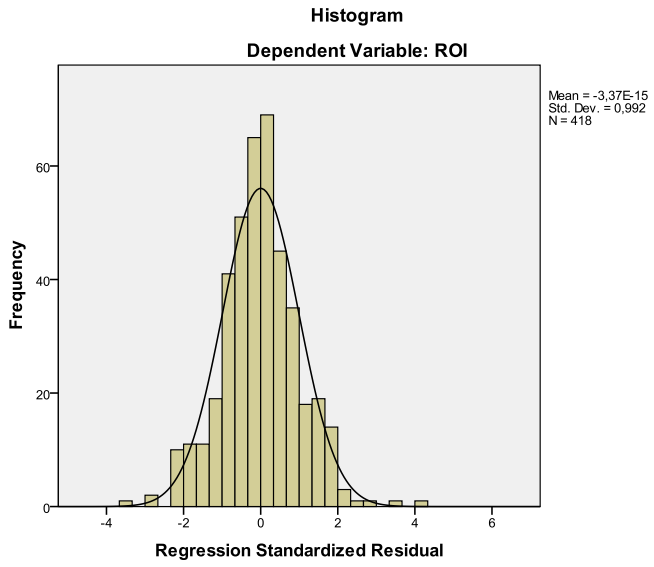
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,050	,059		-,845	,398
	Debt	-,001	,000	-,131	-3,408	,001
	Productivity	,182	,048	,176	3,836	,000
	School enrollment	,001	,000	,142	3,467	,001
	Unemployment	-,003	,000	-,221	-6,152	,000
	Exchange rate	-,002	,001	-,245	-2,041	,042
	Squared exchange rate	3,009E-5	,000	,525	4,390	,000
	Credit banks	,001	,000	,272	7,376	,000

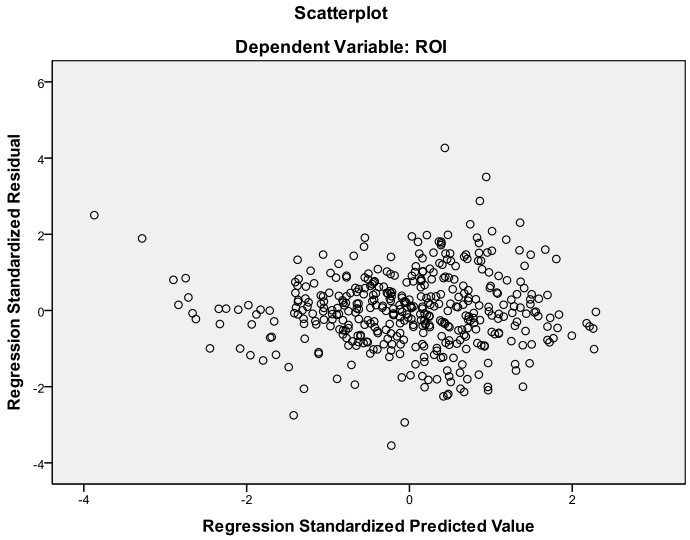
a. Dependent Variable: ROI

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-,272660	,450612	,181749	,1173600	418
Residual	-,3426404	,4121585	,0000000	,0957946	418
Std. Predicted Value	-3,872	2,291	,000	1,000	418
Std. Residual	-3,547	4,266	,000	,992	418

a. Dependent Variable: ROI




Scatterplot
Dependent Variable: ROI
Regression Standardized Residual
Regression Standardized Predicted Value
6
4
2
0
-2
-4
-4
-2
0
2

Appendix 7: Model for discussion section including intercept dummies

Descriptive Statistics

	Mean	Std. Deviation	N
ROI	,181749	,1514924	418
Debt	45,0642	25,17576	418
Productivity	,34665	,145984	418
School enrollment	74,455	16,5265	418
Unemployment	10,7166	11,99663	418
Exchange rate	99,8775	15,24286	418
Squared exchange rate	10207,29662	2644,462600	418
Credit banks	78,2511	44,27228	418
South Africa	,15	,356	418
South Korea	,15	,361	418
Thailand	,12	,325	418
India	,13	,333	418
Poland	,11	,310	418
Brazil	,12	,322	418
Turkey	,11	,319	418

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,838[a]	,703	,693	,0839892

a. Predictors: (Constant), Turkey, Squared exchange rate, Poland, Unemployment, Brazil, India, Thailand, Debt, South Africa, Credit banks, Productivity, School enrollment, South Korea, Exchange rate

b. Dependent Variable: ROI

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6,727	14	,481	68,119	,000[a]
	Residual	2,843	403	,007		
	Total	9,570	417			

a. Predictors: (Constant), Turkey, Squared exchange rate, Poland, Unemployment, Brazil, India, Thailand, Debt, South Africa, Credit banks, Productivity, School enrollment, South Korea, Exchange rate

b. Dependent Variable: ROI

Coefficients[a]

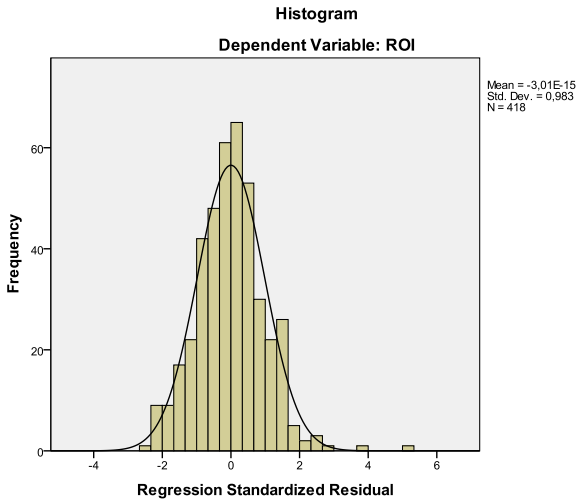
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,107	,059		-1,816	,070
	Debt	-,002	,000	-,276	-7,036	,000
	Productivity	,332	,045	,320	7,304	,000
	School enrollment	,002	,000	,232	4,877	,000
	Unemployment	-,001	,000	-,119	-3,373	,001
	Exchange rate	-,001	,001	-,144	-1,352	,177
	Squared exchange rate	2,071E-5	,000	,362	3,367	,001
	Credit banks	,001	,000	,326	8,045	,000
	South Africa	-,073	,022	-,171	-3,318	,001
	South Korea	-,185	,021	-,440	-8,968	,000
	Thailand	-,066	,023	-,142	-2,901	,004
	India	,025	,020	,055	1,283	,200
	Poland	-,038	,019	-,079	-1,966	,050
	Brazil	-,027	,018	-,057	-1,441	,150
	Turkey	,013	,018	,027	,706	,480

a. Dependent Variable: ROI

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-,233868	,567777	,181749	,1270142	418
Residual	-,2090956	,4240574	,0000000	,0825673	418
Std. Predicted Value	-3,272	3,039	,000	1,000	418
Std. Residual	-2,490	5,049	,000	,983	418

a. Dependent Variable: ROI



Appendix 8: Model for discussion section including slope dummies

Descriptive Statistics

	Mean	Std. Deviation	N
ROI	,181749	,1514924	418
Debt	45,0642	25,17576	418
Productivity	,34665	,145984	418
School enrollment	74,455	16,5265	418
Unemployment	10,7166	11,99663	418
Exchange rate	99,8775	15,24286	418
Squared exchange rate	10207,29662	2644,462600	418
Credit banks	78,2511	44,27228	418
South Africa	,15	,356	418
South Korea	,15	,361	418
Thailand	,12	,325	418
India	,13	,333	418
Poland	,11	,310	418
Brazil	,12	,322	418
Turkey	,11	,319	418
DebtSouthAfrica	4,527512	12,6169097	418
DebtSouthKorea	3,379	9,6360	418
DebtThailand	4,387	12,9432	418
DebtIndia	8,025	22,2201	418
DebtPoland	4,273	12,9408	418
DebtBrazil	7,040	20,4957	418
DebtTurkey	5,980	18,2140	418
ProductivitySouthAfrica	,043464	,1108205	418
ProductivitySouth Korea	,07995	,198257	418
ProductivityThailand	,04839	,135807	418
ProductivityIndia	,03742	,106688	418
ProductivityPoland	,03795	,115492	418
ProductivityBrazil	,03774	,110626	418
ProductivityTurkey	,03310	,100524	418
SchollEnrolSouthAfrica	9,661	23,8334	418
SchoolEnrollSouthKorea	13,921	33,3310	418
SchoolEnrollThailand	8,157	22,5173	418
SchoolEnrollIndia	7,456	20,0659	418
SchoolEnrollPoland	9,657	28,1664	418
SchoolEnrollBrazil	8,776	24,4691	418
SchoolEnrollTurkey	8,143	22,8227	418

UnemploymentSouthAfrica	2,718	8,0950	418
UnemploymentSouthKorea	1,1534	5,63222	418
UnemploymentThailand	,538	4,8909	418
UnemploymentIndia	1,083	6,1843	418
UnemploymentPoland	1,509	5,3608	418
UnemploymentBrazil	,989	2,8852	418
UnemploymentTurkey	1,395	5,4914	418
ExchangeRateSouthAfrica	14,159	34,6156	418
ExchangeRateSouthKorea	15,8126	37,46349	418
ExchangeRateThailand	11,990	32,6346	418
ExchangeRateIndia	12,761	34,2955	418
ExchangeRatePoland	10,767	31,0899	418
ExchangeRateBrazil	11,529	31,9535	418
ExchangeRateTurkey	11,256	32,4246	418
SquaredExchangeRateSouthAfrica	1395,845072	3,5150733E3	418
SquaredExchangeRateSouthKorea	1650,19502	3973,682609	418
SquaredExchangeRateThailand	1206,2257	3301,12927	418
SquaredExchangeRateIndia	1336,2154	3776,00136	418
SquaredExchangeRatePoland	1080,1952	3133,45876	418
SquaredExchangeRateBrazil	1151,5003	3259,25762	418
SquaredExchangeRateTurkey	1175,5253	3492,61566	418
CreditBanksSouthAfrica	16,471	46,9746	418
CreditBanksSouthKorea	13,9589	34,87009	418
CreditBanksThailand	15,021	41,9045	418
CreditBanksIndia	7,8539	22,38298	418
CreditBanksPoland	5,142	15,9623	418
CreditBanksBrazil	9,643	27,1532	418
CreditBanksTurkey	6,044	18,7427	418

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,827[a]	,699	,681	,0785618

a. Predictors: (Constant), CreditBanksTurkey, Unemployment, CreditBanksPoland, Exchange rate, UnemploymentBrazil, DebtIndia, DebtThailand, UnemploymentSouthKorea, Credit banks, ProductivitySouth Korea, DebtSouthAfrica, UnemploymentThailand, Debt, UnemploymentTurkey, UnemploymentPoland, Productivity, School enrollment, UnemploymentIndia, ProductivitySouthAfrica, ProductivityBrazil, DebtSouthKorea, DebtTurkey, CreditBanksIndia, DebtPoland, ProductivityTurkey, ProductivityThailand, DebtBrazil, SquaredExchangeRateIndia, SquaredExchangeRateBrazil, SquaredExchangeRateSouthAfrica, CreditBanksSouthKorea, ProductivityPoland, Squared exchange rate, SquaredExchangeRateTurkey, CreditBanksBrazil, ProductivityIndia, SchoolEnrollPoland, SchollEnrolSouthAfrica, India, CreditBanksThailand, SchoolEnrollSouthKorea, SchoolEnrollThailand, UnemploymentSouthAfrica, SquaredExchangeRateSouthKorea, SquaredExchangeRatePoland, SchoolEnrollBrazil, Turkey, SquaredExchangeRateThailand, SchoolEnrollIndia, South Africa, Brazil, CreditBanksSouthAfrica, Poland, South Korea, SchoolEnrollTurkey, ExchangeRateTurkey, Thailand, ExchangeRateSouthAfrica, ExchangeRateIndia

b. Dependent Variable: ROI

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7,361	59	,125	20,213	,000[a]
	Residual	2,210	358	,006		
	Total	9,570	417			

a. Predictors: (Constant), CreditBanksTurkey, Unemployment, CreditBanksPoland, Exchange rate, UnemploymentBrazil, DebtIndia, DebtThailand, UnemploymentSouthKorea, Credit banks, ProductivitySouth Korea, DebtSouthAfrica, UnemploymentThailand, Debt, UnemploymentTurkey, UnemploymentPoland, Productivity, School enrollment, UnemploymentIndia, ProductivitySouthAfrica, ProductivityBrazil, DebtSouthKorea, DebtTurkey, CreditBanksIndia, DebtPoland, ProductivityTurkey, ProductivityThailand, DebtBrazil, SquaredExchangeRateIndia, SquaredExchangeRateBrazil, SquaredExchangeRateSouthAfrica, CreditBanksSouthKorea, ProductivityPoland, Squared exchange rate, SquaredExchangeRateTurkey, CreditBanksBrazil, ProductivityIndia, SchoolEnrollPoland, SchollEnrolSouthAfrica, India, CreditBanksThailand, SchoolEnrollSouthKorea, SchoolEnrollThailand, UnemploymentSouthAfrica, SquaredExchangeRateSouthKorea, SquaredExchangeRatePoland, SchoolEnrollBrazil, Turkey, SquaredExchangeRateThailand, SchoolEnrollIndia, South Africa, Brazil, CreditBanksSouthAfrica, Poland, South Korea, SchoolEnrollTurkey, ExchangeRateTurkey, Thailand, ExchangeRateSouthAfrica, ExchangeRateIndia

b. Dependent Variable: ROI

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,222	,464		,479	,632
	Debt	-,001	,000	-,152	-2,140	,033
	Productivity	,317	,128	,305	2,472	,014
	School enrollment	,002	,002	,186	1,106	,269
	Unemployment	-,005	,006	-,365	-,824	,411
	Exchange rate	-,009	,009	-,879	-,972	,332
	Squared exchange rate	5,843E-5	,000	1,020	1,300	,195
	Credit banks	,002	,001	,663	1,989	,047
	South Africa	-,277	,479	-,650	-,578	,564
	South Korea	-,122	,224	-,290	-,544	,587
	Thailand	,136	,266	,292	,512	,609
	India	-,491	,531	-1,081	-,926	,355

	Poland	-,167	,246	-,341	-,678	,498
	Brazil	-,061	,218	-,130	-,279	,780
	Turkey	-,529	,489	-1,114	-1,082	,280
	DebtSouthAfrica	-,002	,001	-,129	-1,369	,172
	DebtSouthKorea	-,001	,001	-,076	-,911	,363
	DebtThailand	-,004	,001	-,306	-2,477	,014
	DebtIndia	,000	,001	-,043	-,387	,699
	DebtPoland	-,002	,001	-,167	-1,659	,098
	DebtBrazil	-,002	,001	-,241	-2,347	,019
	DebtTurkey	-,001	,001	-,165	-1,427	,155
	ProductivitySouthAfrica	,071	,203	,052	,350	,727
	ProductivitySouth Korea	,196	,177	,257	1,112	,267
	ProductivityThailand	-,325	,247	-,292	-1,315	,189
	ProductivityIndia	,172	,266	,121	,648	,517
	ProductivityPoland	,206	,193	,157	1,063	,288
	ProductivityBrazil	-,028	,175	-,021	-,162	,871
	ProductivityTurkey	-,261	,164	-,173	-1,595	,112
	SchollEnrolSouthAfrica	-,001	,002	-,137	-,432	,666
	SchoolEnrollSouthKorea	-,002	,002	-,485	-1,116	,265
	SchoolEnrollThailand	,003	,002	,385	1,246	,214
	SchoolEnrollIndia	,002	,002	,300	1,017	,310
	SchoolEnrollPoland	-,001	,002	-,142	-,389	,698
	SchoolEnrollBrazil	,000	,002	,019	,059	,953
	SchoolEnrollTurkey	,005	,003	,824	1,763	,079
	UnemploymentSouthAfrica	,003	,006	,138	,454	,650
	UnemploymentSouthKorea	,002	,006	,071	,327	,744
	UnemploymentThailand	,002	,006	,078	,416	,678
	UnemploymentIndia	,004	,006	,154	,664	,507
	UnemploymentPoland	,002	,006	,071	,347	,729
	UnemploymentBrazil	,003	,008	,063	,407	,684
	UnemploymentTurkey	,005	,006	,166	,801	,423
	ExchangeRateSouthAfrica	,010	,009	2,211	1,053	,293
	ExchangeRateIndia	,011	,010	2,503	1,056	,292
	ExchangeRateTurkey	,008	,009	1,706	,869	,385
	SquaredExchangeRateSouthAfrica	-6,100E-5	,000	-1,415	-1,307	,192

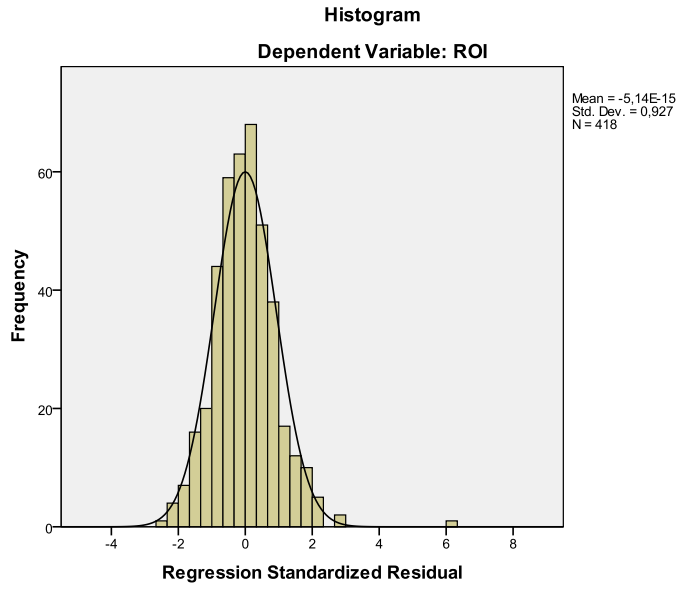
	SquaredExchangeRateSouthKorea	1,989E-5	,000	,522	1,941	,053
	SquaredExchangeRateThailand	3,138E-6	,000	,068	,179	,858
	SquaredExchangeRateIndia	-6,640E-5	,000	-1,655	-1,255	,210
	SquaredExchangeRatePoland	2,339E-5	,000	,484	1,619	,106
	SquaredExchangeRateBrazil	9,741E-6	,000	,210	,935	,350
	SquaredExchangeRateTurkey	-5,606E-5	,000	-1,292	-1,163	,246
	CreditBanksSouthAfrica	-,001	,001	-,443	-1,233	,218
	CreditBanksSouthKorea	-,002	,001	-,505	-1,760	,079
	CreditBanksThailand	-,002	,001	-,570	-1,503	,134
	CreditBanksIndia	-,002	,002	-,353	-1,571	,117
	CreditBanksPoland	-,001	,001	-,078	-,512	,609
	CreditBanksBrazil	,000	,002	-,086	-,301	,763
	CreditBanksTurkey	,000	,001	,026	,156	,876

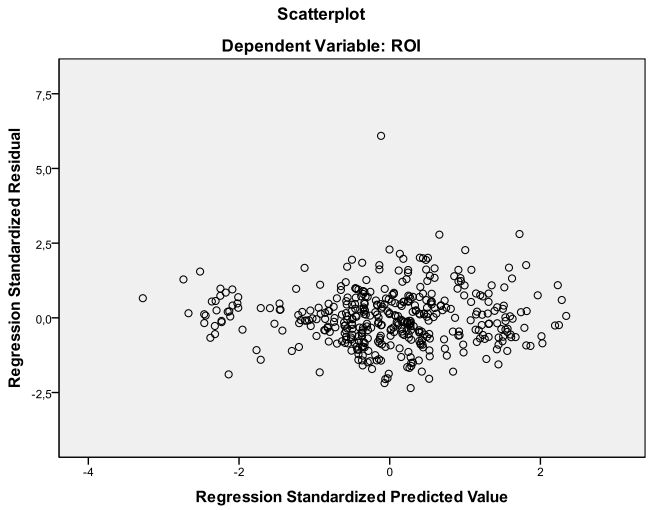
a. Dependent Variable: ROI

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-,253617	,492944	,181749	,1328580	418
Residual	-,1846876	,4785145	,0000000	,0727922	418
Std. Predicted Value	-3,277	2,342	,000	1,000	418
Std. Residual	-2,351	6,091	,000	,927	418

a. Dependent Variable: ROI


Histogram
Dependent Variable: ROI
Mean = -5,14E-15
Std. Dev. = 0,927
N = 418
Frequency
Regression Standardized Residual


Scatterplot
Dependent Variable: ROI
Regression Standardized Residual
Regression Standardized Predicted Value

Appendix 9: VIF tests

Method: in SPSS I regress each independent variable on all the other independent variables.

If the value is above 5, then we have evidence of multicollinearity, and above 10 it is harmful.

1st test: Regressing debt on GDP on the other independent variables

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	Productivity	,502	1,993
	School enrollment	,612	1,633
	Unemployment	,764	1,310
	Exchange Rate	,896	1,116
	Credit banks	,798	1,253

a. Dependent Variable: Debt

2nd test: Regressing productivity on the other independent variables

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	School enrollment	,711	1,407
	Unemployment	,840	1,190
	Exchange Rate	,892	1,121
	Credit banks	,808	1,237
	Debt	,711	1,406

a. Dependent Variable: Productivity

3rd test: Regressing exchange rate on the other independent variables

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	School enrollment	,623	1,605
	Unemployment	,759	1,318
	Credit banks	,733	1,364
	Debt	,664	1,507
	Productivity	,466	2,145

a. Dependent Variable: Exchange Rate

4th test: Regressing school enrollment on the other independent variables

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	Unemployment	,775	1,290
	Credit banks	,775	1,290
	Debt	,682	1,466
	Productivity	,559	1,790
	Exchange Rate	,937	1,067

a. Dependent Variable: School enrollment

5th test: Regressing unemployment on the other independent variables

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	Credit banks	,735	1,361
	Debt	,665	1,504
	Productivity	,516	1,936
	Exchange Rate	,893	1,120
	School enrollment	,606	1,650

a. Dependent Variable: Unemployment

6th test: Regressing credit banks on the other independent variables

Coefficients[a]

Model-		Collinearity Statistics	
		Tolerance	VIF
1	Debt	,719	1,391
	Productivity	,514	1,946
	Exchange Rate	,892	1,121
	School enrollment	,627	1,595
	Unemployment	,760	1,316

a. Dependent Variable: Credit banks

Appendix 10: Durbin-Watson test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,775[a]	,600	,593	,0966089	1,724

a. Predictors: (Constant), Credit banks, Exchange Rate, Unemployment, Debt, School enrollment, Productivity

b. Dependent Variable: ROI

Appendix 11: Excluding insignificant parameters

The appendix shows the process of the exclusion of the insignificant independent variables step-by-step.

1st step: All coefficients included

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,062	,143		,437	,663
	Debt	-,001	,000	-,151	-3,772	,000
	Savings	-,006	,001	-,308	-4,991	,000
	Gov spending	7,308E-5	,002	,002	,032	,975
	Inflation	-6,320E-5	,000	-,029	-,878	,381
	Gini	,000	,001	,011	,188	,851
	Labor Part.	,000	,000	-,038	-1,235	,218
	Productivity	,299	,048	,291	6,287	,000
	Literacy	-,005	,001	-,326	-3,166	,002
	School enrollment	,003	,001	,269	4,664	,000
	Unemployment	-,003	,001	-,154	-2,787	,006
	Exchange Rate	,004	,000	,332	8,644	,000
	Tariffs	,000	,002	,005	,062	,951
	Export	,001	,001	,116	2,008	,045
	Corruption	-,015	,005	-,117	-3,093	,002
	Credit banks	,001	,000	,308	4,742	,000
	Market cap	,000	,000	-,045	-,608	,543
	Infrastructure	,001	,002	,016	,237	,813

a. Dependent Variable: ROI

2nd step: Government spending now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	,063	,140		,452	,651
	Debt	-,001	,000	-,151	-3,779	,000
	Savings	-,006	,001	-,308	-5,323	,000
	Inflation	-6,299E-5	,000	-,029	-,880	,380
	Gini	,000	,001	,011	,189	,850
	Labor Part.	,000	,000	-,038	-1,244	,214
	Productivity	,300	,047	,291	6,322	,000
	Literacy	-,005	,001	-,326	-3,174	,002
	School enrollment	,003	,001	,270	4,850	,000
	Unemployment	-,003	,001	-,154	-2,802	,005
	Exchange Rate	,004	,000	,332	8,701	,000
	Tariffs	,000	,002	,005	,061	,951
	Export	,001	,001	,116	2,035	,043
	Corruption	-,015	,005	-,117	-3,179	,002
	Credit banks	,001	,000	,308	4,755	,000
	Market cap	,000	,000	-,044	-,614	,539
	Infrastructure	,001	,002	,017	,247	,805

a. Dependent Variable: ROI

3rd step: Infrastructure now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	,042	,110		,381	,703
	Debt	-,001	,000	-,150	-3,789	,000
	Savings	-,007	,001	-,313	-5,729	,000
	Inflation	-6,285E-5	,000	-,029	-,879	,380
	Gini	,000	,001	,019	,399	,690
	Labor Part.	,000	,000	-,037	-1,221	,223
	Productivity	,299	,047	,290	6,333	,000

	Literacy	-,004	,001	-,308	-4,397	,000
	School enrollment	,003	,001	,266	5,000	,000
	Unemployment	-,003	,001	-,157	-2,930	,004
	Exchange Rate	,004	,000	,335	9,217	,000
	Tariffs	,000	,002	,011	,160	,873
	Export	,001	,001	,116	2,055	,041
	Corruption	-,015	,005	-,118	-3,262	,001
	Credit banks	,001	,000	,313	5,101	,000
	Market cap	,000	,000	-,052	-,779	,437

a. Dependent Variable: ROI

4th step: Tariffs now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,055	,077		,707	,480
	Debt	-,001	,000	-,149	-3,821	,000
	Savings	-,006	,001	-,308	-6,924	,000
	Inflation	-6,466E-5	,000	-,029	-,917	,360
	Gini	,000	,001	,019	,418	,676
	Labor Part.	,000	,000	-,037	-1,215	,225
	Productivity	,299	,047	,290	6,348	,000
	Literacy	-,004	,001	-,314	-5,596	,000
	School enrollment	,003	,001	,265	5,005	,000
	Unemployment	-,003	,001	-,158	-2,960	,003
	Exchange Rate	,004	,000	,332	10,034	,000
	Export	,001	,000	,114	2,083	,038
	Corruption	-,015	,005	-,118	-3,266	,001
	Credit banks	,001	,000	,314	5,181	,000
	Market cap	,000	,000	-,054	-,840	,401

a. Dependent Variable: ROI

5th step: Gini coefficient now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,071	,067		1,056	,292
	Debt	-,001	,000	-,145	-3,828	,000
	Savings	-,007	,001	-,312	-7,138	,000
	Inflation	-6,303E-5	,000	-,029	-,896	,371
	Labor Part.	,000	,000	-,035	-1,167	,244
	Productivity	,296	,047	,288	6,351	,000
	Literacy	-,004	,001	-,311	-5,602	,000
	School enrollment	,003	,001	,261	5,020	,000
	Unemployment	-,003	,001	-,162	-3,116	,002
	Exchange Rate	,004	,000	,331	10,045	,000
	Export	,001	,000	,107	2,063	,040
	Corruption	-,016	,005	-,122	-3,493	,001
	Credit banks	,001	,000	,317	5,284	,000
	Market cap	,000	,000	-,044	-,739	,460

a. Dependent Variable: ROI

6th step: Market capitalization coefficient now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,071	,067		1,067	,287
	Debt	-,001	,000	-,143	-3,794	,000
	Savings	-,007	,001	-,319	-7,472	,000
	Inflation	-5,628E-5	,000	-,026	-,807	,420
	Labor Part.	,000	,000	-,034	-1,144	,253
	Productivity	,297	,047	,288	6,369	,000
	Literacy	-,004	,001	-,303	-5,567	,000
	School enrollment	,003	,001	,259	4,985	,000

	Unemployment	-,003	,001	-,186	-4,525	,000
	Exchange Rate	,004	,000	,330	10,025	,000
	Export	,001	,000	,112	2,198	,029
	Corruption	-,016	,004	-,124	-3,582	,000
	Credit banks	,001	,000	,284	7,205	,000

a. Dependent Variable: ROI

7th step: Inflation coefficient now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,067	,067		1,003	,316
	Debt	-,001	,000	-,144	-3,810	,000
	Savings	-,007	,001	-,320	-7,503	,000
	Labor Part.	,000	,000	-,034	-1,127	,261
	Productivity	,297	,047	,288	6,368	,000
	Literacy	-,004	,001	-,312	-5,874	,000
	School enrollment	,003	,001	,268	5,298	,000
	Unemployment	-,003	,001	-,181	-4,459	,000
	Exchange Rate	,004	,000	,335	10,441	,000
	Export	,001	,000	,120	2,398	,017
	Corruption	-,016	,004	-,125	-3,611	,000
	Credit banks	,001	,000	,283	7,183	,000

a. Dependent Variable: ROI

8th step: Labor participation coefficient now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,064	,067		,960	,338

	Debt	-,001	,000	-,148	-3,950	,000
	Savings	-,007	,001	-,322	-7,570	,000
	Productivity	,298	,047	,289	6,398	,000
	Literacy	-,005	,001	-,318	-6,003	,000
	School enrollment	,003	,001	,269	5,322	,000
	Unemployment	-,003	,001	-,178	-4,377	,000
	Exchange Rate	,004	,000	,336	10,464	,000
	Export	,001	,000	,122	2,436	,015
	Corruption	-,016	,004	-,124	-3,574	,000
	Credit banks	,001	,000	,278	7,101	,000

a. Dependent Variable: ROI

9th step: Government savings coefficient now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,178	,062		-2,853	,005
	Debt	-,001	,000	-,161	-4,019	,000
	Productivity	,233	,049	,226	4,762	,000
	Literacy	-,002	,001	-,162	-3,110	,002
	School enrollment	,003	,001	,265	4,895	,000
	Unemployment	-,002	,001	-,102	-2,421	,016
	Exchange Rate	,004	,000	,305	8,958	,000
	Export	-,001	,000	-,079	-1,745	,082
	Corruption	-,022	,005	-,171	-4,707	,000
	Credit banks	,001	,000	,363	9,054	,000

a. Dependent Variable: ROI

10th step: Export coefficient now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,143	,061		-2,368	,018
	Debt	-,001	,000	-,155	-3,991	,002
	Productivity	,198	,047	,192	4,219	,001
	Literacy	-,003	,001	-,192	-4,511	,044
	School enrollment	,003	,001	,263	5,248	,000
	Unemployment	-,002	,000	-,164	-4,402	,001
	Exchange Rate	,004	,000	,304	9,174	,000
	Corruption	-,020	,005	-,155	-4,380	,066
	Credit banks	,001	,000	,319	8,532	,002

a. Dependent Variable: ROI

11th step: Corruption coefficient now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,166	,062		-2,698	,007
	Debt	-,001	,000	-,121	-3,117	,002
	Productivity	,202	,048	,196	4,221	,003
	Literacy	-,003	,001	-,215	-4,984	,059
	School enrollment	,002	,001	,238	4,678	,000
	Unemployment	-,002	,000	-,193	-5,157	,002
	Exchange Rate	,004	,000	,300	8,844	,010
	Credit banks	,001	,000	,286	7,636	,000

a. Dependent Variable: ROI

12th step: Literacy rate coefficient now excluded

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,318	,050		-6,343	,000
	Debt	-,001	,000	-,135	-3,472	,001
	Productivity	,187	,048	,181	3,907	,000
	School enrollment	,001	,000	,127	3,087	,002
	Unemployment	-,003	,000	-,229	-6,315	,000
	Exchange Rate	,003	,000	,288	8,610	,000
	Credit banks	,001	,000	,261	7,063	,000

Appendix 12: Squaring the leveled significant coefficients

Squaring each significant independent variable. Yet, only the squared exchange rate has a lower p-value than 0.05.

Descriptive Statistics

	Mean	Std. Deviation	N
ROI	,181749	,1514924	418
Debt	45,0642	25,17576	418
Squared debt	2663,08121	2719,849602	418
Productivity	,34665	,145984	418
Squared productivity	,14142881	,125655552	418
School enrollment	74,455	16,5265	418
Squared school enrollment	5815,9517	2290,91633	418
Unemployment	10,7166	11,99663	418
Squared unemployment	258,419345	769,5546581	418
Exchange rate	99,8775	15,24286	418
Squared exchange rate	10207,29662	2644,462600	418
Credit banks	78,2511	44,27228	418
Squared credit banks	8078,580798	8922,0196693	418

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,772[a]	,606	,594	,0946090	1,768

a. Predictors: (Constant), Squared credit banks, Squared exchange rate, Squared unemployment, Squared productivity, Squared debt, School enrollment, Unemployment, Debt, Exchange rate, Squared school enrollment, Credit banks, Productivity

b. Dependent Variable: ROI

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,945	12	,495	55,349	,000[a]
	Residual	3,625	405	,009		
	Total	9,570	417			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,115	,082		-1,396	,163
	Debt	-,001	,001	-,232	-2,054	,041
	Squared debt	6,283E-6	,000	,113	1,043	,298
	Productivity	,520	,198	,501	2,631	,009
	Squared productivity	-,339	,200	-,281	-1,696	,091
	School enrollment	,004	,002	,429	2,470	,014
	Squared school enrollment	-2,079E-5	,000	-,314	-1,806	,072
	Unemployment	-,005	,001	-,432	-4,262	,002
	Squared unemployment	4,193E-5	,000	,213	2,410	,066
	Exchange rate	-,002	,001	-,213	-1,797	,043
	Squared exchange rate	3,029E-5	,000	,529	4,451	,000
	Credit banks	-,001	,001	-,332	-1,862	,063
	Squared credit banks	9,630E-6	,000	,567	3,287	,081

a. Dependent Variable: ROI

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-,232997	,507471	,181749	,1194013	418
Residual	-,2784588	,3965511	,0000000	,0932378	418
Std. Predicted Value	-3,474	2,728	,000	1,000	418
Std. Residual	-2,943	4,191	,000	,986	418

a. Dependent Variable: ROI