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## The employment spillover of Foreign Direct Investment and host country productivity

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## Abstract

This study uses panel data to advance international business literature about the efficiency with which Foreign Direct Investment (FDI) inflows to developed countries create employment compared to developing countries. It is argued that the economic activity of a host economy in the growth of its Gross Domestic Product (GDP) facilitates its ability to attract FDI. The importance of this relationship lies in the components that make the GDP a composite measure and has wide-ranging implications on governance, effectiveness and efficiency of a host country. The analysis of data confirmed the hypothesis on the efficiency of developed economies in creating employment from FDI inflows.

The study further presents a detailed case, analysed from data, on the relationship between economic activities of major industrial sectors in South Africa and their ability to attract foreign investments. Furthermore, the extent to which the foreign investment creates employment in proportion to the FDI inflow is examined. The study findings support a positive relationship with GDP – FDI and employment. While similar trends were seen on industrial sectors, a declining growth in employment and FDI inflow were noticeable in South Africa.

## Key Words

GDP, FDI, Employment

## Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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## 1 Introduction

Host countries, through their representative governments, generally expect multinational enterprise (“MNE”) investments, commonly referred to as foreign direct investment (“FDI”) to bring benefits to local economies. A multinational enterprises is also sometimes referred to as a multinational corporation (“MNC”) or Foreign Controlled Company. MNEs have become synonymous to globalisation (Dusanjh & Sidhu, 2009). In 2003, MNEs accounted for about 70 per cent of the total world trade (UNCTAD, 2003).

As a result, governments continuously devise means to attract investment through incentives that seek to entice MNE investors (Meyer and Sinani, 2009). While MNEs are profit maximising and thus naturally not interested in creating benefits for others without being paid for it, the rationale for these expectations, according to Meyer (2004), are that governments expect aggregate benefits of inwardly directed FDI to a host country would exceed the private benefits to the investing MNE.

MNEs’ foreign affiliates’ share in global GDP reached historic highs of 11% and MNEs foreign employment increased to 80 million workers slightly in 2009 (UNCTAD, 2010). The rise of developing economies is apparent in international production patterns and these economies now host the majority of foreign MNEs affiliates’ labour force. In addition, they accounted for 28% of the 82,000 MNEs worldwide in 2008, two percentage points higher than in 2006 (UNCTAD, 2011). This compares to a share of less than 10% in 1992, and reflects their growing importance as home countries as well (UNCTAD 2010).

The paper begins with the review of literature on FDI, GDP, MNEs and spillovers in general and employment spillovers in particular to host countries in both developed and developing economies. Four hypotheses that examine the impact of host economies productivity (GDP) in



attracting FDI inflows and the subsequent employment spillovers. Methodology and data analysis used in the study are then delineated. Empirical results tested using statistical analysis tools are then presented and discussed, after which conclusions that address academic and managerial implications are outlined. Research limitations are stated in the methodology section, findings highlighted in chapter six and further studies based on findings recommended in chapter seven.

### 1.1 Developing versus developed economies

Dunning (2006) defines Foreign MNEs as corporations that engage in FDI and own or control value-adding activities in more than one country. A developing economy is one whose national income per capita is relatively low, but economic growth is rapid; industrial and national environments are volatile but market potential is vast; governmental interference is strong but economic and market liberalisation is on the rise (Wright, M. I., Filatotchev, I., Hoskisson, R. E., & Peng, M. W., 2005; Peng, 2001).

The largest part of developed country MNEs' employment in foreign affiliates is concentrated in other developed countries and not in low-wage developing countries (UNCTAD, 2010). For instance, 70% per cent of United States FDI abroad is concentrated in high-income countries and the share of investment in developing countries has fallen in recent years (Jackson, G. and Deeg, R., 2008). Developed countries therefore may profit the most from employment created by MNEs' foreign affiliates.

The key advantage of developed economies is the quality of regulation in many areas, the effectiveness of and efficiency of their governance (UNCTAD, 2011). The International Monetary Fund's (IMF's) classification of developing economies versus developed economies is different to the United Nations' classification of developed and developing economies (UNCTAD, 2010).

The one used in this study is based on United Nations and countries that represent both developed and developing economies are listed in Annexure A.

## 1.2 International productivity (GDP growth)

Despite its impact on FDI flows, the global crisis has not halted the growing internationalisation of production (Shih, 2010). The reduction in sales and in the value-added of foreign affiliates of MNEs in 2008 and 2009 was more limited than the contraction of the world economy. Both new sources and recipients of intraregional FDI flows have emerged over the past few years.

As a result, for instance, FDI flows between ASEAN and China increased substantially in the 2000s in parallel with their growing trade links (UNCTAD, 2010). The establishment of the China-ASEAN Free Trade Area (CAFTA), a free trade zone of 1.9 billion people and a US\$6-trillion GDP will further strengthen regional economic integration and boost intraregional FDI flows (UNCTAD, 2010).

An increase in investments and employment abroad does not automatically come at the cost of domestic investment and employment (Dikova & Witteloostuijn, 2007). On the contrary, outward FDI can save or create employment at home through various channels. A large part of FDI is related to marketing, financing and distribution activities, which help stimulate domestic exports and GDP growth, which in turn stimulate employment at home (UNCTAD, 2010).

For example, employment by German MNEs in trade and repair alone accounts for more than one fifth of total employment in foreign affiliates of German MNEs. Several studies covering different countries have shown that outward FDI and exports go hand in hand and stimulate each other (Girma and Görg, 2007). Relocations of production facilities abroad which cause layoffs at home in the short-run may help to save and increase employment in some types of FDI.

Studies indicate that companies that internationalise their operations are more productive and successful than competitors that concentrate their investments and activities in the domestic economy (Desai, Foley and Hines, 2009; Becker and Muendler, 2006). GDP is a composite measure of a country's economic growth, an internationally accepted measurement of any economy; it is likely the single most important measure (Dunning & Fortainer, 2007). The paper argues that the performance of an economy determines its potential to attract FDI. It therefore follows that:

**Hypothesis 1a:** *The higher the GDP of an economy the greater its potential to attract FDI inflow*

A growing strand of the literature attributes the lack of robust results to the fact that the growth impact of FDI depends on the characteristics of the economy in which FDI takes place. It is argued that the host countries' capacity to absorb FDI productively is linked to their GDP per capita. Host economies with a better endowment of human capital are supposed to benefit more from FDI-induced technology transfers, as spillovers from foreign affiliates to local enterprises are more likely (UNCTAD, 2004).

### 1.3 International employment trends

Neto, Brandão, & Cerqueira, (2010) argued that, in spite of the vast literature on FDI-growth relationship, very few highlighted the impact of FDI on host countries' economic growth and employment. UNCTAD (2010) agreed and only found some works that analyse, in a theoretical way, the potential influences of cross-border FDI on growth in local employment.

The global financial and economic recovery remains fragile, threatened by emerging risks, constraints in public investment and other factors (UNCTAD, 2010). For the recovery to remain on track, private investment is crucial for stimulating growth and employment (Haskel, Pereira and Slaughter, 2007). High levels of unemployment in developed countries triggered concerns

about the impact of outward investment on employment at home (Kaynak, Demirbag, & Tatoglu, 2007).

MNCs' foreign employment increased slightly in 2009, to 80 million workers. The rise of developing and transition economies is apparent in international production patterns. These economies now host the majority of foreign affiliates' labour force (UNCTAD 2010). In addition, they accounted for 28% of the 82,000 MNEs worldwide in 2008, two percentage points higher than in 2006. This compares to a share of less than 10% in 1992, and reflects their growing importance together with home countries too (UNCTAD 2010).

The economic downturn revived longstanding concerns in developed countries over the impact of the growing internationalisation of production on home country employment. Rapid growth of outward FDI over the past decade resulted in a growing share of developed-country MNEs' employment moving abroad (UNCTAD, 2010). FDI can save or expand domestic employment if it results in exports for the home country or improved competitiveness for investing firms. UNCTAD (2011) believes for recovery to remain on track, private investment is crucial for stimulating growth and employment as FDI has a major role to play.

It is argued that FDI inflows result in employment, however the hypothesis on employment seeks to highlight the efficiency with which developed countries create employment versus developing countries and therefore:

***Hypothesis 1b: FDI inflow subsequently drives growth in host country employment***

#### **1.4 The economy of South Africa**

The study further examines how different industrial sectors contribute to South Africa's economic development. The impact of FDI inflows on employment in the sectors and

proportionality of the relationship is analysed. South Africa is classified by UNCTAD as a developing country, and is a host country to major foreign MNEs in Africa, Africa's largest economy and a new member of the emerging markets block of the five biggest economies in year 2011: Brazil, Russia, India, China and South Africa ("BRICS") (Correspondents, 2011).

Host government – MNE interactions may have both positive and negative spillovers for local economies (Spencer, 2008), however the quantification of these spillovers for host economies and especially growth in employment, is, to this day, a challenge to measure despite some progress having been made (Dunning & Fortainer, 2007). It is also clear that completely unfettered access to domestic markets by MNEs can have a detrimental effect on sustainable domestic growth (Chan, Makino, & Isobe, 2006).

South Africa is no exception and, as a low-savings developing economy, with high domestic investment requirements (National Treasury, 2011), it is required to carefully consider how it attracts FDI in order to support domestic investment financing requirements and rapid growth and development to boost employment. The patterns of these relationships are argued and are supported by the two sub-hypotheses below:

***Hypothesis 2a:*** SA industrial sectors contribution to GDP attracts proportional FDI inflows

***Hypothesis 2b:*** FDI inflows subsequently create employment proportional to the industrial sectors

Lipsey and Sjöholm (2004) argue that there is a need for more research on different circumstances that obstruct or promote spillovers as there is no consistent relation between the size of inward FDI flows and GDP or growth in employment of host economies. Prasad, Rajan and Subramanian (2007) concluded from their literature review that spillovers are not

automatic since local conditions have an important effect in influencing firms' adoption of foreign technologies and skills.

Alfaro, Kalemli-Ozcan, & Sayek, (2009) believe that the empirical evidence on whether international capital mobility, via FDI or other forms, contributes to employment growth is mixed. Hermes and Lensink (2003) concluded that the macroeconomic literature did not seem to find a robust significant effect of financial integration on economic growth. However, Alfaro et al (2009) found that financial opening and the resulting inflows of FDI could lead to employment and knowledge spillovers, technology transfers and the fostering of linkages with domestic firms, depending on the local conditions.

Dunning & Fortainer (2007), Meyer (2004) and Spencer (2008) discuss aspects and the nature of determinants of benefits and spillovers by MNEs to local economies in general and through local employment in particular. They recommend further research in identifying these factors and the moderating role host country and MNE characteristics play in the development of local economies. Bartkus and Davis (2010) extended their research to focus on the in-country economic returns for MNEs and assert that an increase in FDI does not always result in a concomitant increase in local business development and employment.

Meyer (2004) and Spencer (2008) recommended further research into spillovers to include both foreign investors and local recipient firms to determine the extent of employment created both directly by foreign investors as well as indirectly through local firms creating additional employment as a consequence of FDI. The study focused on the four hypotheses based on these research recommendations.

The uniqueness of this study was in the results that came from a dataset that included multi-industry sectors that are representative of the GDP, employment and FDI inflows to South

Africa and all countries of the world over a 14-year period between years 1996 and 2009. All the data was supplemented with information publicly available from the World Bank, United Nations Conference on Trade and Development (“UNCTAD”), South African Reserve Bank (“SARB”) National Treasury of South Africa, Statistics South Africa and Organisation for Economic Co-operation and Development (“OECD”) databases.

### 1.5 Foreign Direct Investment in South Africa

FDI in South Africa has been lower than in countries with comparable levels of income (National Treasury, 2011). Table 1 below shows the pattern of flows between 2005 and 2009 compared to the group of upper middle-income economies.

**Table 1: Foreign Direct Investment, Percentage of GDP**

COUNTRIES	FLOWS					STOCK 2009
	2005	2006	2007	2008	2009	
South Africa	2.6	-0.1	2.0	3.5	2.0	43.7
Upper middle income	2.7	2.9	3.6	3.6	2.3	28.21
Brazil	1.7	1.7	2.5	2.7	1.7	26.2
China	3.5	2.9	3.9	3.3	1.6	10.1
India	0.9	2.1	2.0	3.4	2.6	13.3
Russia	1.7	3.0	4.2	4.5	3.0	20.3
Australia	-5.1	3.5	4.8	4.5	...	34.1
Chile	5.9	5.0	7.6	8.9	7.8	75.0

Source: Flow data from *World Development Indicators*, World Bank, September 2010; stock data from UNCTAD Stat. Current income classification from the World Bank.

Note: South Africa is an upper middle-income economy; Brazil, Chile and Russia are upper middle-income; China and India are lower middle-income; Australia is high-income.  
 RSA National Treasury (2011) calculation using the stock data in US dollars reported by UNCTAD for each upper middle income economy, weighted by US\$ GDP as reported by the World Bank.

Over the five years, the average annual net inflow of FDI as a percentage of GDP was 2.0 percent in South Africa but 3.0 percent for upper middle-income economies; for the five years between 2000 and 2004, the average for South Africa was 1.8 percent and 2.8 percent for the upper middle-income group.

The table also shows FDI to major emerging economies - Brazil, China, India and Russia (known as the BRIC countries). Relative to GDP, China and Russia have received more FDI than South Africa over the past five years, while Brazil and India have recorded similar levels. Australia and Chile are both resource-based economies; in particular, Chile has maintained very high levels of inward FDI (National Treasury, 2011).

In examining the spillovers from FDI inflows for South Africa, the study justified the extent to which the economic activity measured through GDP attracts FDI inflows and how the FDI capital inflows support the increase in economic activity that eventually give rise to employment spillovers.

#### 1.6 Research Problem

Transaction-based exchange control is an imperfect policy tool for supporting the intended net benefits of inward FDI, given that its historical objective has been to limit outflows of capital from South Africa. The current processes lack a transparent framework and set of principles for assessing the broader economic benefits and costs of cross-border investments (National Treasury, 2011).

Local firms experience inward FDI as both a competitor and a source of advanced technologies and managerial knowledge. The scale and scope of such spillovers vary with many characteristics and the context within which they interact (Meyer & Sinani, 2009).

#### 1.7 Research Questions

1. Does advancement of developed countries allow them to use FDI inflows to create employment more efficiently than developing countries?
2. Is employment growth in South Africa proportional to sectoral FDI inflows and representative of industrial sectors contribution to the GDP?



## 1.8 Research Motivation

Policy makers across a range of developing countries devise strategies to entice MNEs to undertake FDI within their borders for local economic development (Spencer, 2008). South Africa is currently going through a review of its FDI policy framework to accelerate growth and development through foreign investment (National Treasury, 2011). Hence the motivation to undertake this study was to gain empirical evidence for considerations that would give insights as to whether FDI would benefit the local economy in terms of employment creation.

National Treasury (2011) believes South Africa is committed to maintaining an open environment for investment as a core to long-term sustainable economic growth strategy and has set itself the following motivating objectives:

- To encourage new inflows of foreign capital with expected benefits for employment, growth and competition while safeguarding public interests relating to strategic cross-border acquisitions and corporate restructuring.
- To support consistency in policy on inward investment across government departments
- To support the growth of South African companies domestically and abroad with long-term benefits for the South African economy
- To provide policy certainty for investors through the transparency of decision-making
- To support the overall policy framework for the management of the macroeconomic benefits and risks arising from cross-border capital flows

## 2 Theory and Literature Review

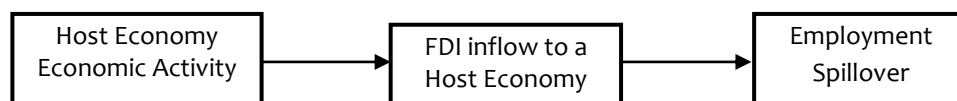
MNEs play an important role in the development of many emerging economies, linking rich and poor economies and in transmitting capital, knowledge, ideas and value systems across borders (Bartkus & Davis, 2010). Their interaction with institutions, organisations and individuals generates positive and negative spillovers for various groups of stakeholders. Meyer (2004)

suggested that one of the challenges was to tie the partial views discussed in different literatures together to allow for comprehensive assessments of factors that help generate these benefits.

This theory and literature review section discusses spillovers, productivity measured through GDP and FDI inflow into host countries of emerging economies and the extent to which FDI inflow and economic activity generate spillovers for the host economy. On spillovers, this study specifically focuses on employment growth and skills development. Section 2.1 discusses the spillovers, a dependent variable, that will be measured based on the effects caused by the independent variables of the GDP and FDI inflow.

The model in figure 1 represents, graphically, the causal relationship between spillovers and modes of entry adapted from literature from (Meyer & Sinani, 2009), (Spencer, 2008), (Dunning & Fortanier, 2007), (Meyer, 2004) and ((Bhaumik, Estrin, & Meyer, 2007), (Bhaumik & Gelb, 2005), (Brouthers & Hennart, 2007), (Brouthers, Brouthers, & Werner, 2008), (Dikova & van Witteloostuijn, 2007), (Meyer, Estrin, Bhaumik, & Peng, 2009), and (Bartkus & Davis, 2010).

**Figure 1. The Value Add Model**



The proposed model contends that the extent of employment spillover to a host economy is a function of FDI inflow and that FDI inflow is a function of the host economy's GDP. Each

variable, FDI inflow, GDP and employment in developed and developing economies are described below, before proceeding to the hypotheses generated by the model.

Meyer (2004), Bhaumik, Estrin, & Meyer, (2007) and Brouthers et al. (2008) believe the entry of FDI needs to be managed as it may include the perceived risks for employment, production, exports and research and development (R&D) at the firm level; issues of corporate governance, competition, security of the tax base, identity and control of strategic assets.

### 2.1 Host country productivity (GDP)

Branstetter (2006) states that conventional measures of productivity can reflect market power and technical efficiency. When technologically more advanced foreign affiliates first enter a market, their presence may erode the market power of indigenous incumbents while at the same time introducing new production techniques and technologies from which these same incumbents learn. Real knowledge spillovers can take place, yet their effects can be masked in the data by changes in appropriability conditions and have impact on employment for the host economy (Lu & Gaur, 2007).

Alternatively, robust demand growth in a sector of the host country could lead to higher profits, which generates higher measured total factor production growth for domestic firms while, at the same time, inducing investment by foreign firms (Branstetter, 2006). The increase in economic activity by MNE entry into a host country increases not only the profits of the investing MNE but also profits of local businesses as active participants in the industry (Gorg and Strobl, 2002). These in many cases result in further investments and therefore an improvement of existing skills and sometimes overall increase in employment in directly or indirectly through formation of new firms by highly skilled individuals.

Branstetter (2006) believes that the acquisition of new knowledge through FDI should lead to the generation of profits for local businesses, as companies become more innovative and adopt best practices from MNEs through demonstration effects and competition. These profits should manifest themselves in business market value and more openly in the financial markets of global and host economies.

Alfaro et al. (2009) concurs that the new knowledge may also generate patent applications and more business for the local firm that brings more profits, enhances business market value and further add to more spillovers, such as employment, and technological and industry opportunities. Business profits breed unobserved firm-specific entrepreneurial skill and possible effects of market power that augment the productivity of the firm's research and development (R & D) and capital stocks (Branstetter, 2006).

Balsvik (2010) argues that there is a large empirical literature looking for horizontal or intra-industry spillovers from FDI in the form of productivity effects in local firms from surveys done by Görg and Greenaway (2004). Smarzynska-Javorcik (2004) argues that the results are ambiguous and since multinationals have incentives to limit spillovers of their final good technology. While MNEs may benefit from more productive local suppliers, knowledge spillovers to suppliers may be more likely than horizontal spillovers (Blalock and Gertler 2008) and (Kugler 2006).

Balsvik (2010) further argues that despite the documented increase in vertical fragmentation of production (Hummels, D., Ishii, Y. and Yi, K., 2001), theoretical work on vertical technology transfer and spillovers in the upstream market hardly exists. One exception is Pack and Saggi (2001), who discuss vertical technology transfer through outsourcing. They focus on how spillovers that generate threat of both upstream and downstream entry affect profits. Building

on their model, Goh (2005) endogenises the vertical technology transfer decision and studies how spillovers affect the incentives to transfer knowledge to a supplier. This study will look at the resultant employment that is partly given rise to by the increase of profits to local businesses and FDI.

## 2.2 Foreign Direct Investment

Balsvik (2010) studied the various costs and benefits of FDI, and productivity spillovers and analysed together with several other indirect effects that influence the welfare assessment, such as those arising from the impact of FDI on government revenue, tax policies, terms of trade, and the balance of payments. These increase economic activity of a host country and are recorded through gross domestic product calculations, which are used by many institutions for investment and other functions to support and rank countries (Balsvik, 2010).

The surplus that the MNE and local business share is the revenue generated from sale of the final good (Girma, S., 2005). In the bilateral monopoly case considered by Pack and Saggi (2001) the MNE always benefits from vertical spillovers that generate more competition in the market for intermediate inputs. This helps to increase the level of skilled employment as countries and industries catchup with improvements introduced by MNEs and resultant competition (Dunning & Lundan, 2008).

Dimelis and Louri (2002) found in a study from Greece that spillovers from minority owned foreign firms were larger than from majority owned firms, while Bengoa and Sanchez-Robles (2003) found that the degree of foreign ownership does not affect the extent of spillovers in Indonesia. The study will not necessarily focus on the impact of MNEs and FDI in businesses but on the employment spillovers.

### 2.3 Characteristics of FDI

Blomstrom and Kokko (1998) found that the positive impact of FDI on economic growth is confined to higher-income developing countries. They found that the larger the technological gap between the host and the home country of FDI, the smaller the impact of FDI on economic growth. Meyer (2004) found that FDI enhances growth only in economies with a sufficiently qualified labour force.

Regression analysis by Alfaro et al. (2001) suggested that FDI is associated with faster growth only in host economies with comparatively well-developed financial markets. As these results are sometimes based on FDI flows which are not corrected for potential endogeneity biases, namely higher economic growth causing higher FDI flows, the finding that host-economy characteristics matter for the growth effects of FDI may also be sensitive to the choice of the FDI variable. Bhaumik et al. (2007) considered that the exogenous component of FDI flows does not exert a significant independent influence on the growth rate of GDP even if non-linearities caused by host-economy characteristics are considered.

Against this backdrop, it seems that the favourable perception of FDI among policymakers in developing and developed countries and foreign advisors may easily be exaggerated. Important shortcoming of most previous cross-country studies constrains their studies to employment in certain sectors of the economy or to employment growth for MNEs (Bhaumik, et al., 2007). The study argues that aggregated data from economies of the world can capture important aspects of the relationship between FDI and employment growth.

Empirical evidence in South Africa supported the argument that FDI has positive impact on employment. Industrial sectors were analysed to verify the extent of the employment spillovers from FDI inflow and South Africa's ability to attract FDI because of its good

governance through GDP growth. Industry characteristics such as technology intensity, factor requirements, linkages to local and foreign markets, and the degree of vertical integration of foreign affiliates shape the growth impact of FDI in various ways (Nunnenkamp & Spatz, 2004).

Industry characteristics may influence the extent to which FDI supplements (“crowds in”) or displaces (“crowds out”) local investment. They also may influence the amount of technology and expertise transferred from parent companies to foreign affiliates, the compatibility of technology transfers to the host countries’ factor endowment and, hence, the degree to which local suppliers, competitors and buyers can benefit through spillovers (Nunnenkamp & Spatz, 2004).

Industry characteristics may influence the amount of foreign exchange earnings generated through FDI-induced exports or lost through the repatriation of funds, the extent to which foreign affiliates foster competition in host economies by breaking up oligopolistic market structures, or stifle competition through their market power (UNCTAD, 2010). Finally they may influence the degree to which the location competition for FDI increases or decreases distortions in host countries’ economic policies (UNCTAD, 2011).

These factors are closely linked to the different motives for FDI in developing economies. For instance, resource-seeking FDI inflows tends to involve a large up-front transfer of capital, technology and expertise, and to generate high foreign exchange earnings. On the other hand, resource-seeking FDI is often concentrated in enclaves dominated by foreign affiliates with few linkages to the local product and labour markets (UNCTAD, 2010).

Furthermore, its macroeconomic benefits can easily be embezzled or squandered by corrupt local elites. Efficiency-seeking FDI in some parts of manufacturing, draws on the relative factor endowment and the local assets of host economies (UNCTAD, 2010). This type of FDI is more

likely to bring in technology and expertise that is compatible to the host countries' level of development, and to enable local suppliers and competitors to benefit from spillovers through adaptation and imitation (UNCTAD, 2008).

Additionally, the world market orientation of efficiency-seeking FDI generates foreign exchange earnings for host economies. As a result, one would expect a relatively strong growth impact of FDI in industries that attract efficiency-seeking FDI (Haskel, Pereira, Slaughter, & Matthew, 2007). Market-seeking FDI in services and other parts of manufacturing can benefit host countries' consumers by introducing new products and services, by modernising local production and marketing and by increasing the level of competition in the host economies. However, fiercer competition may also lead to the crowding out of local competitors, especially if foreign affiliates command superior market power (Nunnenkamp & Spatz, 2004).

In the long-run, the host countries' balance of payments is likely to deteriorate through the repatriation of funds since market-seeking FDI often does not generate export revenues, especially if the protection of local markets discriminates against exports (Meyer & Sinani, 2009).

The growth impact of this type of FDI should be weaker than the growth impact of efficiency-seeking FDI. Finally, it has been argued that the growth effects of FDI depend on the interaction between industry and host-economy characteristics. Meyer (2004) reckoned that FDI in developing countries would be more growth enhancing if it is undertaken in more labour-intensive and less technology-intensive industries. In these industries, the technological differences between foreign affiliates and local enterprises are considered relatively small.



## 2.4 Impact of FDI on Employment

Alfaro et. al (2009) believe there is enough evidence that MNEs undertake substantial efforts in the employment and education of local workers and that MNEs offer more training to technical workers and managers than do local firms, in terms of the relation between human capital accumulation and FDI. In some cases, MNEs also enter into training cooperation with local institutions in the host economy.

Meyer and Sinani (2009) agree and state that, for example, Intel in Costa Rica and Shell-BP in Nigeria have contributed to local universities; in Singapore, the Economic Development Board has collaborated with MNEs to establish and improve training centres. Alfaro et al (2009) cautions that an empirical analysis of a panel of countries, te Velde and Xenogiani (2007) found that FDI enhances skill development, particularly secondary and tertiary enrolment, only in countries that are relatively well endowed with skills to start with.

Lehrer & Delaunay (2009) relate to a popular proposition in the economics literature about the technology gap hypothesis which stipulates that spillovers increase with the difference in technology levels between local and foreign firms in the industry. Meyer & Sinani (2009) confirm a broad consensus adopted from Desbordes & Vauday (2007) that local firms need a certain level of indigenous human capital to be able to benefit from knowledge transfer by multinational enterprises through a concept called absorptive capacity, which is a firm's ability to recognise valuable new knowledge, integrate it into the firm, and use it productively.

The extent to which knowledge can be transferred, therefore depends on the actions of both firms and the capacity with which the local business can absorb it (Marcin, 2008). The motivation is to find out whether South Africa does receive these spillovers and to what extent in relation to employment growth.

Spencer (2008), Skippari & Pajunen (2010) declare that employment of local residents can have either positive spillover or negative crowding out effects in the local economy. Since MNEs often pay higher wages than local firms, their presence can crowd out local firms when they hire the most qualified employees away from local enterprises. At the same time, details about an MNE's strategy and operations can diffuse to local firms when its employees take new jobs in local enterprises, creating horizontal spillover effects.

Meyer (2004) points out that even in countries where labour mobility from MNEs to local firms is relatively infrequent, the overall impact may be large, particularly when managers leave an MNE to launch entrepreneurial enterprises in the host economy. UNCTAD (2011) argues that entrepreneurship, which is largely promoted by FDI is the most effective and sustainable source of growth and development, especially for developing countries.

MNE and FDI literature suggests that MNEs are unlikely to expand local operations, especially in the form of employment, as long as they do not have operational control of the local operations (Bhaumik et al., 2007). At the same time, however, it is not obvious as to whether there is any systematic difference in the growth rates of greenfield projects and outright or full acquisitions (Skippari & Pajunen, 2010), hence this study.

## 2.5 Spillovers

Branstetter (2006), Meyer (2004) and Meyer & Sinani (2009) stated that spillovers are said to take place when the firm specific assets of the advantages of the company cannot be fully internalised, thus making the uncompensated benefits to leak from these MNEs to domestic companies, customers, as well as suppliers in the host nation. FDI is believed to bring positive spillovers to the host country (Dunning & Lundan, 2008) and in this study spillover is synonymous to value add and spillover in this case will imply employment.

The idea is that the presence of multinational corporations, which are among the most technologically advanced firms, can facilitate the transfer of technological and business expertise (Marcin, 2008). Spencer (2008) defines the spillovers as either horizontal or vertical and each of these is discussed in the following sections.

### 2.5.1 Horizontal Spillovers

Spencer (2008) notes that horizontal spillovers occur when local firms improve their performance by absorbing knowledge both in its basic form and also as it is embodied in more tangible technological artefacts and organisational practices from the MNE investor. Peng, Wang, & Jiang (2008) believe FDI contributes to increased productivity among local firms by providing them with advanced knowledge and technology, by improving the country's infrastructure for private investment and by motivating local firms to improve their business practices.

Spencer (2008) further observes that, although MNEs rarely formulate deliberate strategies to strengthen local competitors, many tolerate such spillovers and refrain from imposing strong barriers to exclude local businesses from appropriating these positive externalities. Offering benefits to local industry helps MNEs maintain a positive relationship with its host government (Meyer, 2004).

### 2.5.2 Vertical Spillovers

MNEs may also contribute to the development of public goods in the host economy by transmitting knowledge vertically to strengthen suppliers, distributors and other firms operating in supporting industries, thereby improving the infrastructure for all firms in the MNE's foreign and local industry (Spencer, 2008).

Foreign firms often purchase intermediate goods from domestic suppliers, which can create spillovers through several mechanisms: MNEs improve local business productivity and boost supplier product quality by providing training, technical assistance, and bringing new and advanced ways of management and generating more economies of scale (Gammeltoft, Pradhan, & Goldstein, 2010).

Both these spillovers result in employment directly in the value chain of the foreign investor and in other cases indirectly within or out of the same industry of the investing MNE. Meyer and Nguyen, (2005) argue that empirical evidence of vertical spillovers may be hard to establish and Alfaro et al. (2009) encourages more research and empirical evidence that FDI in the host economy contributes to employment creation.

## 2.6 Spillover effects

Harris and Robinson (2004) divided the spillover effects of FDI as stated below:

### 2.6.1 Intra-industry effects

The intra-industry effects include demonstration effects (Girma and Wakelin 2001; Meyer 2004) that come because of local firms observing and learning from foreign products and processes. In turn, the observation results in an increase in competition in the local market and eventually end up in the reduction of costs (Meyer & Sinani, 2009). Investment by foreign firms cause labour market mobility (Driffield and Taylor 2001) thereby resulting in improved human capital in terms of skills and employment in the host nation.

### 2.6.2 Inter-industry effects

Inter-industry effects include forward linkages (Kugler 2006; Meyer 2004) that give rise to improvements in quality of products reduction of costs thus weeding out the crowding of less

efficient domestic firms as well as backward linkages (Kugler 2006) through the purchase of improved quality intermediate products.

### 2.6.3 Agglomeration Effects

Agglomeration effects are caused by amongst others by the movement of workers trained in foreign firms to domestic firms or effects caused by upward pressure of wage costs (Driffield, N., Munday M., & Roberts A., 2002). These effects are also caused by improvement of infrastructure as result of greater access to the research and development of foreign firms or negative spillovers in the form of increased cost of resources and access. An example of this effect is when a domestic firm improves its productivity by imitating technology used by MNE affiliates operating in the local market without paying for it (Dusanjh & Sidhu, 2009).

## 2.7 Economic sectors

Sectors used in this study are common to those used by international organisations such as UNCTAD, World Bank and International Monetary Fund. UNCTAD, (2010) noted that FDI inflows and outflows dropped in all economic sectors in 2009. The global economic and financial crisis continued to dampen FDI flows not only in industries sensitive to business cycles, such as chemicals and automobile industry, but also in those that were relatively resilient in 2008, such as pharmaceuticals and food and beverage products.

In 2009, only a handful of industries generated higher investments via cross-border FDI than in the previous year. These included electrical and electronic equipment, electricity services and construction. Telecommunication services also continued to expand, protected by resilient demand and a slightly lower internationalization than in other industries, for example in the South Africa, FDI in the information industry, which includes telecommunications and

contributes significantly to emerging markets FDI inflows, rose by 41 per cent in 2009 compared to 2008 (UNCTAD, 2010).

In 2009, the value of cross-border FDIs declined by 47 per cent after the peak of 2008. Energy investment worldwide decreased as a result of a cautious and tougher financing conditions, weakening demand and low cash flows. The economic recession caused the global use of energy to fall in 2009 for the first time since 1981, although it is expected to resume its long-term upward trend shortly (UNCTAD , 2010). The study aims to moderate the FDI investment with the weighting of the sector contribution to the GDP to ensure quality, relevance and valuable contribution to academic theory on mode of entry and spillovers.

### 3 Research Hypothesis

Blumberg, Cooper, & Schindler (2008) define hypotheses as statements in which we assign variables to cases. Since the study will focus on a few variables from what could be a long and sizeable study, the inputs will use co-relational hypothesis to test the causal relationship of employment spillover, the dependent variable, as a result of FDI inflows. Furthermore, the study will establish whether the economic activity of a host country helps to attract FDI inflows.

The hypothesis of this study seeks to answer the following questions:

1. Does advancement of developed countries allow them to use FDI inflows to create employment more efficiently than developing countries?
2. Is employment growth in South Africa proportional to sectoral FDI inflows and representative of industrial sectors contribution to the GDP?

The hypothesis is developed from literature of (Meyer & Sinani, 2009), (Spencer, 2008), (Dunning & Fortanier, 2007), (Meyer, 2004) and (Bhaumik et al., 2007), (Bhaumik & Gelb, 2005), (Brouthers & Hennart, 2007), (Brouthers et al., 2008), (Dikova & van Witteloostuijn, 2007), (Meyer et al., 2009), and (Bartkus & Davis, 2010). The model seeks to explain the impact of host country employment growth caused by FDI inflows subsequently as a result of GDP growth in host economies.

The study sought to prove that the developed countries are more efficient in creating employment from FDI than developing countries. The paper argues further that South Africa creates employment that is commensurate to the FDI inflows and industrial sector economic activity.

In order to make the linkage of economic efficiencies that result in employment spillovers from the FDI inflows, it is necessary to examine the economic activity of a host economy and its role in attracting FDI (Dikova & van Witteloostuijn, 2007). Nowhere is this point more clearly borne out than in emerging economies, where institutional frameworks differ greatly from those in developed economies (Khanna, Palepu, and Sindha, 2005; Meyer and Peng, 2005; Wright, Filatotchev, Hoskisson, & Peng, 2005; Gelbuda, Meyer, and Delios, 2008). The effects of FDI inflow will be studied and compared for the developed and developing countries.

Given these institutional differences, MNEs and foreign investors need to adapt FDI entry strategies into developed and, more importantly, developing economies. Meyer et al. (2009) argue that institutional development or under-development in different emerging economies directly affects FDI strategies and investors' needs for local resources impact entry strategies in different ways and in different institutional contexts.

Meyer et al. (2009) advocate an integrative perspective calling for explicit considerations of institutional effects and for their integration with resource-based considerations by focusing on a central concept in both the effectiveness of markets in facilitating access to sought resources. This study considered the following hypothesis to answer research questions above:

**Hypothesis 1a:** *The higher the GDP of an economy the greater its potential to attract FDI inflow*

**Hypothesis 1b:** *FDI inflow subsequently drives growth in host country employment*

**Hypothesis 2a:** *SA industrial sectors contribution to GDP attracts proportional FDI inflows, and:*

**Hypothesis 2b:** *FDI inflows subsequently create employment proportional to the industrial sectors*



## 4 Research Methodology

Blumberg et al. (2008) recommend quantitative statistics be used to test hypothesis. Data was collected from secondary sources namely UNCTAD, World Bank, Statistics of South Africa and South African Reserve Bank and used to test the validity of the stated hypothesis. The hypotheses related to the influence of GDP in host countries ability to attract FDI and subsequent impact on employment spillover in host economies.

### 4.1 Research Scope

Dunning and Narula (2010) maintain that success or failure occurs within a system which involves factors that shape the behaviour of firms both multinational and local, institutional and organisational framework, and the processes that create and distribute scientific knowledge and infrastructures. Thus, the appropriate level of analysis to understand the effects on employment spillovers should include drivers of MNE decisions on foreign direct investment and characteristics such as host economy specific characteristics and industry factors that influence, in which case the human capital growth (employment) will be studied.

Following from this input, this study examined a carefully selected and manageable combination of variables that subsequently drives the impact on employment. Adapted from Bartkus & Davis, (2010), Dikova & van Witteloostuijn, (2007) and Meyer & Sinani, (2009), the study presupposed as its main focus that GDP growth influenced the host country's ability to attract FDI and subsequently the creation of additional employment in the host economy.

In trying to answer the research questions of this study, which are:

1. Does advancement of developed countries allow them to use FDI inflows to create employment more efficiently than developing countries?

2. Is employment growth in South Africa proportional to sectoral FDI inflows and representative of industrial sectors contribution to the GDP?

#### 4.2 Population

The population to which spillovers was generalised for this study were represented by the economies of the world classified by the United Nations and the World Bank. The population was a representation of all the 210 countries of the world of which only countries with all required information of FDI inflows, GDP per year and employment per year from 1996 until 2009 were taken. Accordingly, the population size was to be the sample had all the countries contained a complete set of all components of data to be analysed for the entire period under review.

Dikova & van Witteloostuijn, (2007) and Blumberg, et al. (2008) recommend that the stratification be used to ensure the sample is representative of the population. In this case, the data was stratified according to the developed and developing economy type. For GDP, FDI and employment, the figures for employment per year over the period were taken into account but only the countries with all information were taken into consideration.

For South Africa, the information was further broken down into industrial sectors. FDI information was obtained for the entire population through World Bank and Data Monitor as referenced in the raw data in tables throughout the document and in the annexures.

#### 4.3 Sampling

The sample of countries FDI inflow figures from countries around the world was taken from UNCTAD reports of different years. For spillover measurement, the employment statistics were taken from data monitor and World Bank. The sample size eventually had 125 countries of both

developed and developing countries. Developed countries were represented by a sample of 35 out of the total of 38 countries.

The sample of 90 countries represented a population of 172 developing countries. The representation was decided on the basis of completeness of information in all categories of the following elements:

1. GDP figures per year from 1996 through 2009
2. FDI inflows per year from 1996 through 2009
3. Employment statistics per year from 1996 through 2009

For South Africa, a further breakdown of the data was done by classifying the data into industrial sectors for employment from 1996 through 2009, FDI inflows per year from 1996 to 2009 and GDP figures per year from 1996 to 2009. This data was obtained from the following sources:

1. GDP statistics: Statistics South Africa Quarterly Bulletins
2. FDI inflows: South African Reserve Quarterly Bulletins
3. Employment: Statistics South Africa Quarterly Bulletins

#### 4.4 Data Collection

Data was collected from secondary sources as depicted in the table below and adapted accordingly as shown in Annexures.

**Table 2: Data Collection Framework**

#	Type	Source	Period	Annexure
1	Developed and developing countries	UNCTAD	2011	A
2	FDI Inflow per country	UNCTAD	1996 – 2009	B
3	GDP per country	World Bank	1996 – 2009	C
4	Employment per country	Datamonitor	1996 – 2009	D
5	FDI, GDP, Employment RSA	Stats SA, SARB	1996 – 2009	E
6	SA GDP Composition per sector	Stats SA, SARB	1996 – 2009	E

#### 4.5 Data Analysis

Empirical analysis of data in the study involves econometric estimation. In keeping with relevant literature in Chapter Two the statistical analysis tools keep control for all unobserved characteristics of the host countries in developing and developed countries by analysis the trends of the longitudinal data. Differences in the longitudinal data were also processed and statistically analysed to suppress macroeconomic effects such as inflation from distorting the accuracy of interpretation as recommended (Tan and Mahoney, 2005).

The regression results are sequentially reported and discussed in chapters five and six respectively. Raw data as referenced in the document are annexed at the end of the document. The McFadden's adjusted  $R^2$  estimates for the regressions are reported in appropriate tables in chapter five and their significance in relation to the analysis of variables discussed in chapter six. The F-statistics for the specifications are significant at the 0.05 level.

These statistics are entirely consistent with goodness of fit measures of cross-sectional regressions involving less than 300 observations (Bhaumik et al., 2007). An index is introduced in section 5.1.1 of the results chapter five explaining the relationship of FDI, employment and efficiency ratios of developed and developing countries. The goodness of fit of the regressions and the significance of each model is consistently described and highlighted to ensure accuracy of analysis and interpretation.

The gathered secondary data, GDP, Inflow and employment statistics were individually transposed into SAS/JMP tool for statistical processing. Each file was transposed and rows of year figures were transposed into columns. Spelling of country names obtained from UNCTAD reports were inconsistent across files and were corrected and merged into one from different files and articles.

Log base 10 was created in the database of each of the quantities of GDP, Capital Inflow and Employment statistics. The distributions of these new variables per economy type and the relationship between GDP and Capital Inflow were investigated. Furthermore, the relationship between lagged GDP and Capital Inflow was investigated.

Bivariate analysis was used to analyse most relationships that involved two variables. This simple form of the quantitative analysis involves the analysis of two variables often denoted as X (horizontal axis), Y (vertical axis), for the purpose of determining the empirical relationship between them. In order to see if the variables are related to one another, it is common to measure how those two variables simultaneously change together (Blumberg et al., 2008).

Bivariate analysis can be helpful in testing simple hypotheses of association and causality, checking to what extent it becomes easier to know and predict a value for the dependent variable if we know a case's value on the independent variable (Blumberg et al., 2008).

To explore the influence of the independent and control variables on the likelihood of a spillover on employment, regression analysis tests were conducted. This statistical method is known to have the ability of regression techniques that incorporate a wide range of diagnostics, the dichotomous characteristic of the dependent, and the mix of continuous and categorical independent variables (Dikova & van Witteloostuijn, 2007).

For spillovers, the data was collected and analysed from on publicly available information from the World Bank, UNCTAD and Statistics South Africa. The industrial sectoral information was obtained from Statistics South Africa and industrial sector information was obtained from Statistics South Africa and South African Reserve Bank (SARB), World Bank and UNCTAD.

#### 4.6 Unit of Analysis

Grunbaum (2007) argues that the key issue in selecting and making decisions about appropriate unit of analysis is the decision about what it is that must be measured and be discussed at the end of the study. Research students agree that the case is simply identical with the unit of analysis, which is decisive and considered identical with the meaning of a case study and incommensurable with a logical deductive approach (Grunbaum, 2007). What this study examined was the effect of GDP growth on host countries ability to attract FDI and subsequent impact on employment for the host country.

The ability for a host country to attract FDI inflow as a result of host country economic activity (GDP growth) and subsequent impact on employment was measured and compared to economies of both developed and developing countries. South Africa was deeply analysed using the effect of variables of industrial sector GDP growth and corresponding sectoral FDI inflow on the impact of employment per sector.

#### 4.7 Research Assumptions

The purpose of the study was to understand the extent to which GDP enables host countries to attract FDI inflow and subsequently create employment for host economies. The patterns of GDP behaviour to FDI inflow patterns and subsequent employment trends were the main variables for the study. The main assumptions were that the underlying differences in the characteristics of individual countries in each economy type were negligible.

These characteristics were macroeconomic variables that influence the composition of the variables reviewed in the study such as the level of education, skills, financial institutions and markets, mode of entry of FDI, the structure of the economy and proportional representation of the economic sectors.

Furthermore, the economic activity of a host country and its ability to attract FDI inflows was measured to establish links amongst the three variables and most importantly to answer the hypothesis. Therefore, the main assumptions are the causal links in the hypothesis relationships.

It is understood that the causal relationship between FDI and employment and between GDP and FDI inflow may not be the only existing relationship but that the variables and the defined model were significant enough to investigate.

#### 4.8 Research Limitations

The study was restricted by the time limit to collect, analyse and finalise data within the prescribed period which was about eight months and as such only focused on the subsequent employment spillovers that result from GDP's influence in attracting FDI inflow.

The broader economic spillovers of FDI inflows and host country economic intricacies in terms of input variables of GDP such as politics, economy, social, technological, environment and legal impacts were not analysed but assumed to be *ceteris paribus* across all countries used for the study.

Only reported employment to the United Nations was considered without classification of formal and informal employment. It is understood that the models to calculate employment does vary with different countries and there was no attempt to standardise country models.

The study considered only the defined combinations of variables in the hypotheses. Other variables that contribute to influencing FDI inflows, GDP or employment were not considered. More studies are encouraged to examine effects of other variables not included especially since the significance levels of adjusted  $R^2$  in statistical analysis of different models, while

significant enough, were not at 100% level and therefore were not the only drivers of dependent variables.



## 5 Results

The results contain a cross-country analysis of patterns of gross domestic product amounts, the corresponding foreign direct investment inflows, to determine the economic activity and the resultant impact in trends of employment and growth.

Further to the analysis, the paper details a deeper look at the patterns of South African economic activity in which industrial sector data of disaggregated FDI inflow into South Africa was taken and the resultant employment examined.

The results are presented below in accordance with the four hypothesis stated in the methodology section preceding this chapter in which the variables of this study, namely GDP, FDI Inflow, Employment and South Africa (“SA”) specific data are taken into account. The results are presented in the sequence of hypothesis stated for the variables used in the study as listed below:

**Hypothesis 1a:** *The higher the GDP of an economy the greater its potential to attract FDI inflow*

**Hypothesis 1b:** *FDI inflow subsequently drives growth in host country employment*

**Hypothesis 2a:** *SA industrial sectors contribution to GDP attracts proportional FDI inflows, and:*

**Hypothesis 2b:** *FDI inflows subsequently create employment that is proportional to the industrial sectors*

### 5.1 Categories of FDI inflow per economy type

The arguments of the hypothesis were tested by taking the natural logarithms of the capital Inflow (US\$ Million) and categorising them by developed and developing countries in the following way:

**Table 3. FDI categories and ratios**

FDI Category	Economy Type	No. of countries	Mean(Log FDI)	Mean(Log Employed)	Ratio
1 < 3.76	Developing Economy	9	3.0026	13.5196	0.2221
3.76 < 2 ≤ 5.35	Developing Economy	22	4.5906	13.4066	0.3424
5.35 < 3 ≤ 7.02	Developed Economy	7	6.2614	13.1263	0.4770
5.35 < 3 ≤ 7.02	Developing Economy	31	6.1952	14.9443	0.4146
7.02 < 4 ≤ 8.71	Developed Economy	13	8.1178	15.2945	0.5308
7.02 < 4 ≤ 8.71	Developing Economy	18	7.9270	16.6227	0.4769
8.71 < 5 ≤ 10.05	Developed Economy	10	9.5648	15.5590	0.6147
8.71 < 5 ≤ 10.05	Developing Economy	7	9.1504	16.8362	0.5435
6 > 10.05	Developed Economy	5	10.8225	17.1241	0.6320
6 > 10.05	Developing Economy	3	10.5380	17.8671	0.5898

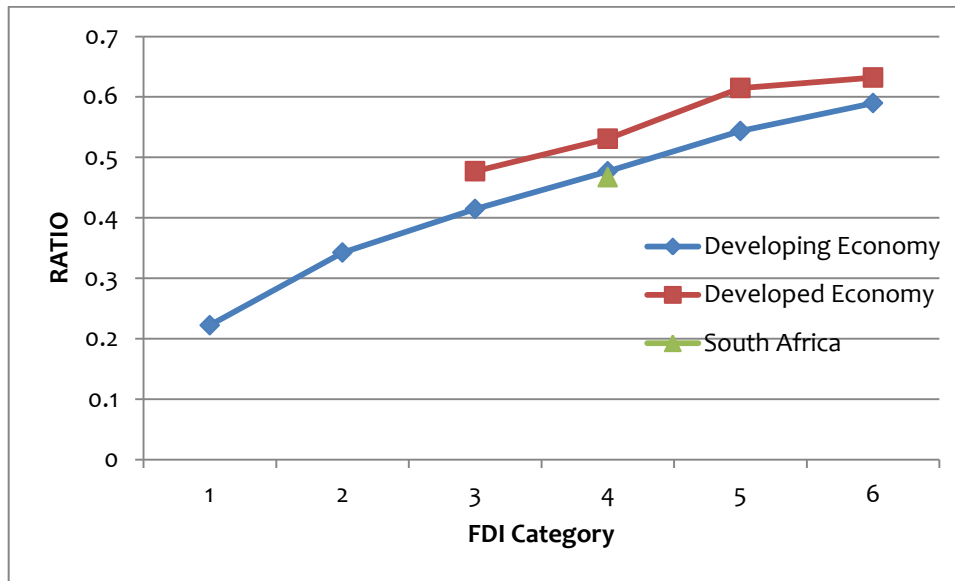
The Ratio column is the Mean Log FDI (US\$ Million) value divided by Mean Log Employment. These categories represent the 10th, 10-25th, 25-50th, 50-75th, 75-90th and the 90-100th percentiles of the FDI values respectively starting from the top row of the FDI category column.

The purpose of creating the FDI category index above was to accurately measure the impact of employment by the size of FDI inflow per economy type. Furthermore, the index was used to determine the rate of efficiency of developed and developing economies in creating employment.

## 5.2 Graphical representation of FDI categories per economy type and South Africa

The following section was to determine if there are differences in the Employment statistics between the various FDI categories as defined in the FDI categories for Developed and Developing economies. This view is presented graphically below with the South Africa ratio highlighted.

**Figure 2. Plot of FDI categories and ratios per economy type and South Africa**



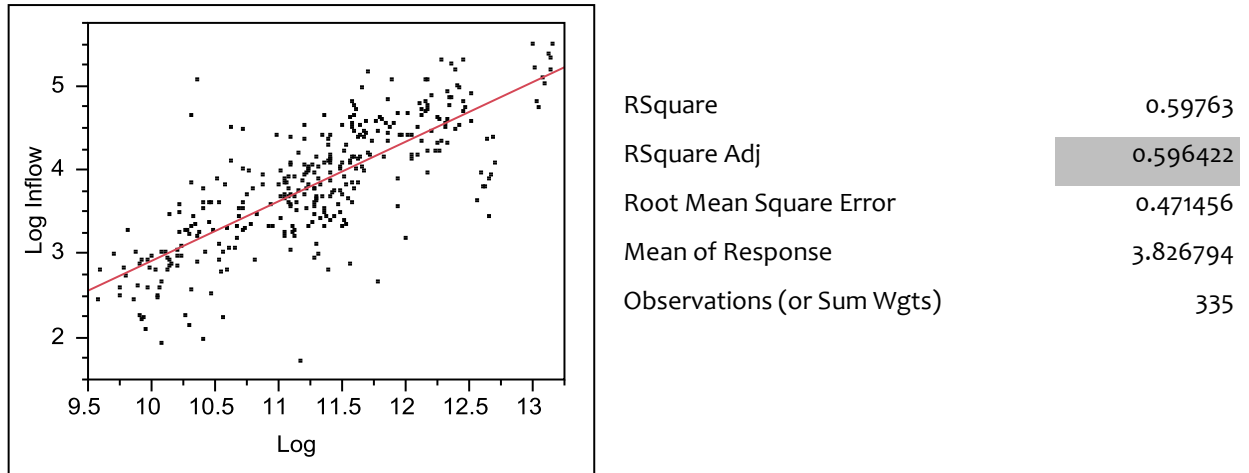
As can be seen in the graph above, the ratio for South Africa is in the upper FDI category of the developing economies and within the lower range of the FDI category of the developed countries. This presentation of data allows for measurement of efficiency on developing economies' ability to create employment in comparison to developed economies.

### 5.3 Hypothesis 1a: The higher the GDP of an economy the greater its potential to attract FDI inflow

To allow verification of the hypothesis, the relationship between FDI Inflow and GDP was examined from the data of the natural logarithm (log) of FDI and GDP statistics per economy type. The reason for taking the log of the variable was to transform the widely scattered data to ranges that are convenient to analyse without taking out the original meaning of the data. This mathematical phenomenon is important for a simpler and an improved interpretability of data for better accuracy and more impactful contribution to the theory of FDI and employment growth.

### 5.3.1 Relationship between GDP and Capital Inflow per Economy Type.

**Figure 3. Bivariate Fit of Log Inflow By Log GDP Economy Type=Developed Economy**



The following linear function was used to support hypothesis 1a and to analyse the relationship between GDP behaviour and FDI inflow:

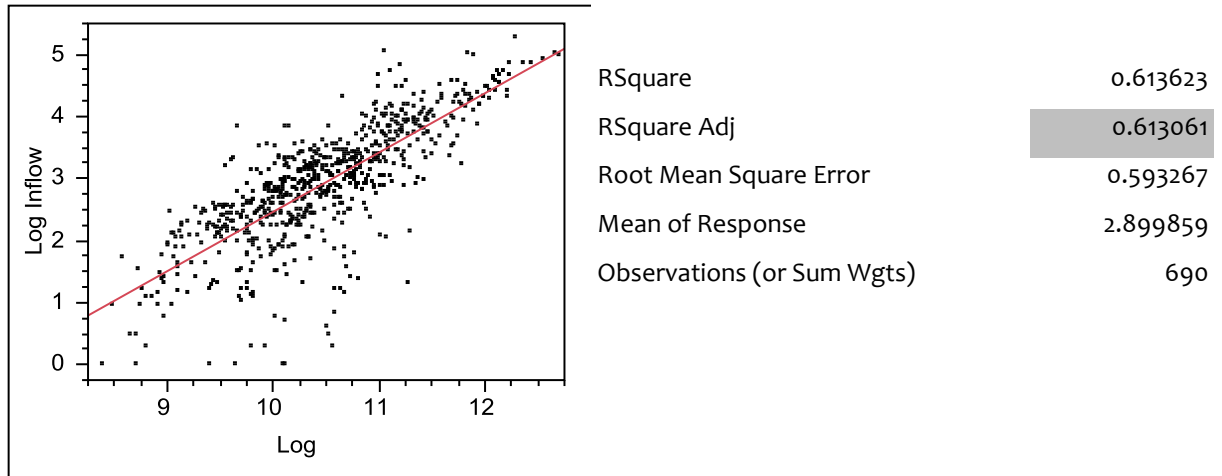
$$\text{Log Inflow} = -4.186039 + 0.7100044 * \text{Log GDP}$$

**Table 4. Analysis of Variance**

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	109.93437	109.934	494.5966
Error	333	74.01617	0.222	<b>Prob &gt; F</b>
C. Total	334	183.95054		<.0001*

The above results show that both Developed Economies have a significant relationship between GDP and Capital Inflow. According to the significance analysis, represented through adjusted R<sup>2</sup>, abbreviated as RSquare Adj, 60% of variation in Capital inflow can be explained by the economic activity (GDP) of the host economy.

**Figure 4. Bivariate Fit of Log Inflow By Log GDP Economy Type=Developing Economy**



The following formula was used to support hypothesis 1a and to analyse the impact of GDP on the FDI inflow which denotes an efficiency ratio (proportionality coefficient) of 0.9560485 units of employment for every unit of GDP where: **Log Inflow = -7.09619 + 0.9560485\*Log GDP**

**Table 5. Analysis of Variance**

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	384.57243	384.572	1092.642
Error	688	242.15231	0.352	Prob > F
C. Total	689	626.72474		<.0001*

The above results show that both Developing Economies have a significant relationship between GDP and Capital Inflow. According to the significance analysis, represented through adjusted R<sup>2</sup>, abbreviated as RSquare Adj, 61% of variation in Capital inflow can be explained by the economic activity (GDP) of the host economy. This means that the model is very representative of the variables in this section.

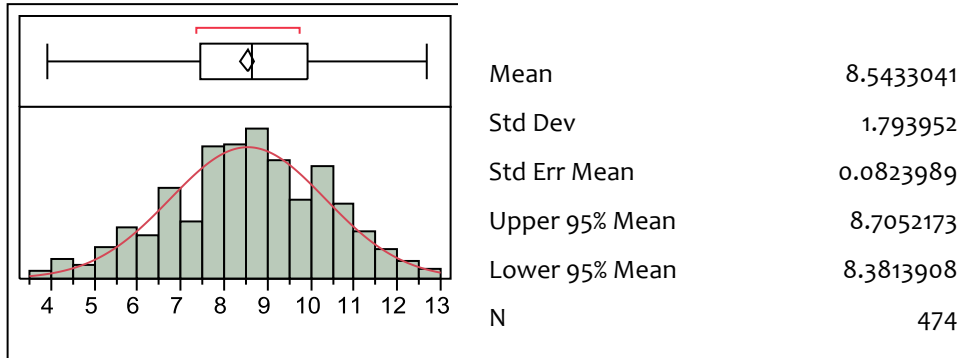
#### 5.4 Hypothesis 1b. FDI inflow subsequently drives growth in host country employment

To prove above hypothesis the relationship between FDI and employment was analysed from the data of the natural logarithms of FDI and Employment statistics per developed and developing economy types.

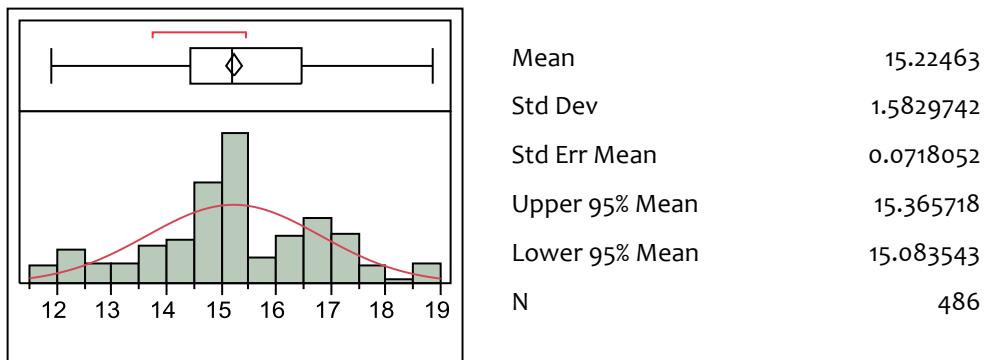
### 5.4.1 Distributions for Developed Economy Type

The graphical diagrams below represent the normalised distributions of FDI and Employment for developed economies. The proxy Emp represents employment in the graphical representation below.

**Figure 5. Log FDI**



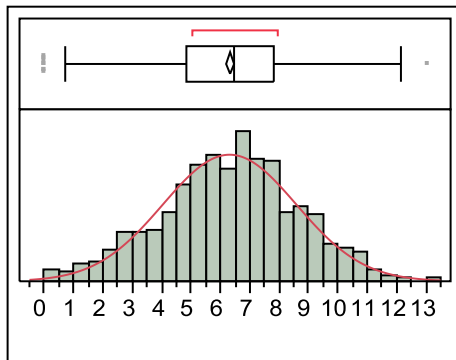
**Figure 6. Log Emp**



### 5.4.2 Distributions for Developing Economy Type

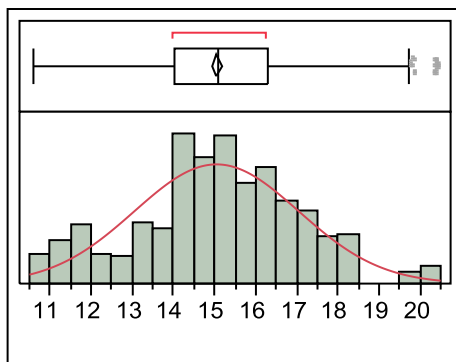
The graphical diagrams below represent the normalised distributions of FDI and Employment for developed economies.

**Figure 7. Log FDI**



Mean	6.3136316
Std Dev	2.2721188
Std Err Mean	0.0665684
Upper 95% Mean	6.4442391
Lower 95% Mean	6.1830242
N	1165

**Figure 8. Log Employment**



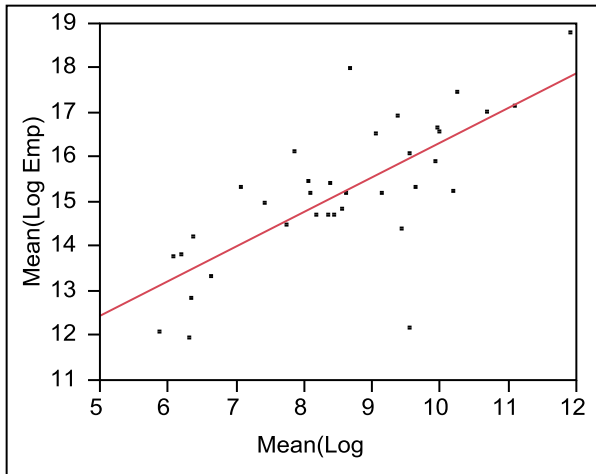
Mean	15.049919
Std Dev	1.9992274
Std Err Mean	0.0610896
Upper 95% Mean	15.169788
Lower 95% Mean	14.93005
N	1071

The mean FDI values and the mean employment statistics were calculated for each country for the period between 1996 and 2009 to achieve normal distribution in order to improve interpretability of the data and analysis.

#### 5.4.3 The relationship between the mean FDI and mean Employment

The data presented below was to check the significance of the variations and the validity of the formula applied to further support the relationship represented in hypothesis 1b for developed and developing economies.

**Figure 9. Bivariate Fit of Mean (Log Emp) By Mean (Log FDI) for Developed Economy Type**



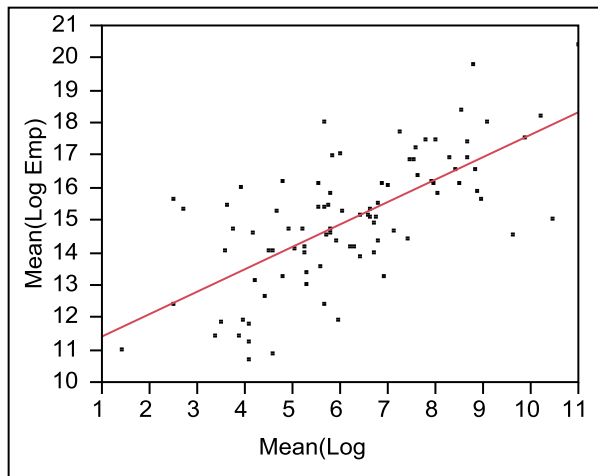
The following function below was used to support hypothesis 1b for developed economies in based on the relationships in the scatter plot. The scatter plot represents the relationship of the impact of FDI inflow on employment in developed economy type countries.

$$\text{Mean (Log Emp)} = 8.5554398 + 0.7772186 * \text{Mean (Log FDI)}$$

This significant model above for developed economies explains 53% of the variation in the mean Log Employment figure. The parameter estimates are significant at the 0.05 level of significance. This proves that 53% of employment in developed economies can be linked to the inflow of FDI. In this scenario, the developed countries are able to create employment at a rate of one unit of FDI to 0.7772186 of employment represented by Mean (Log FDI) and Mean (Log Emp) respectively.



**Figure 10. Bivariate Fit of Mean (Log Emp) By Mean (Log FDI) for Developing Economy Type**



The function below was used to support hypothesis 1b for developing economies based on the relationships in the scatter plot. This scatter plot represents the relationship of the impact of FDI inflow on employment in developing economy type countries:

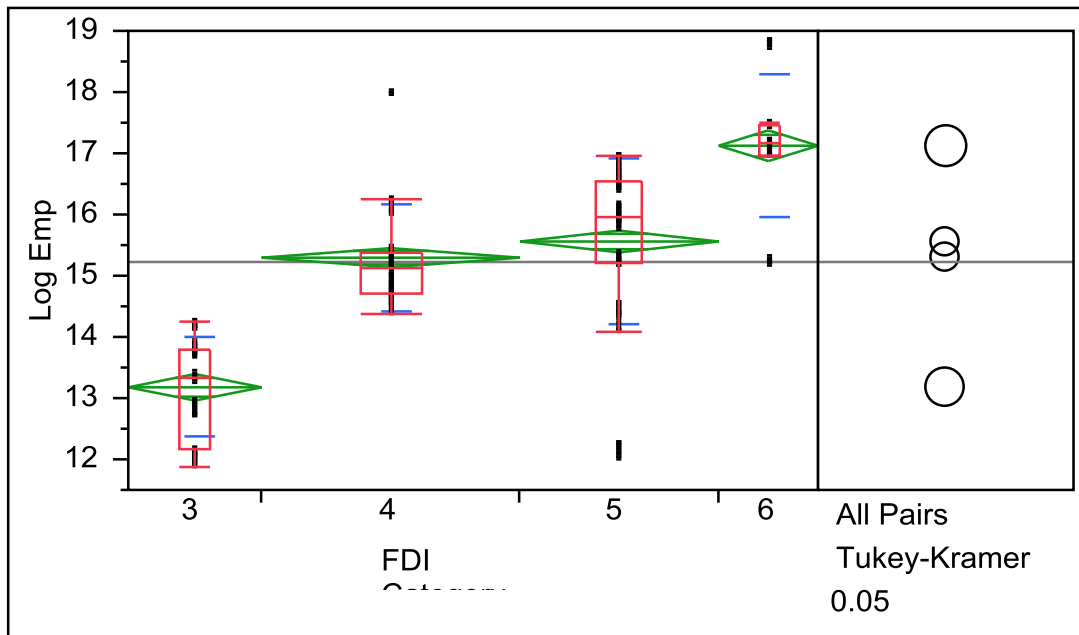
$$\text{Mean (Log Emp)} = 10.714209 + 0.6917361 * \text{Mean (Log FDI)}$$

This significant model for developing economies explains 46% of the variation in the mean Log Employment figure. The parameter estimates are significant at the 0.05 level of significance. This proves that 46% of employment in developing economies can be linked to the inflow of FDI if the means of log FDI and log Employment are taken into account.

In this scenario, the developed countries created employment at a rate of one unit of FDI to 0.06917361 of employment represented by Mean (Log FDI) and Mean (Log Emp) respectively as outlined by the model above.

### 5.4.3.1 Effects of employment by FDI categories for Developed countries

Figure 11. Oneway Analysis of Log Emp By FDI Category for Developed Economy Type



The above plot contains box-plots and diamonds which depict the mean (middle of diamond), std deviation (height) and width which represents the relative sample size based on table 7 in section 5.1.1 above where categories of FDI are explained.

Table 6. Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
FDI Category	3	663.2741	221.091	193.0395	<.0001*
Error	482	552.0425	1.145		
C. Total	485	1215.3166			

Table 7. Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
3	94	13.1769	0.11038	12.960	13.394
4	182	15.2945	0.07933	15.139	15.450
5	140	15.5590	0.09045	15.381	15.737
6	70	17.1241	0.12791	16.873	17.375

**Table 8. 1-way Test, ChiSquare Approximation for developed economies**

ChiSquare	DF	Prob>ChiSq
273.3485	3	<.0001*

**Table 9. Levene and Bartlett tests**

Test	F Ratio	DFNum	DFDen	Prob > F
Levene	11.5648	3	482	<.0001*
Bartlett	14.8888	3	.	<.0001*

The purpose of these two tests were to test for homogeneity of variances and homogeneity of variance is when variances are equal across samples contrary to the analysis of variance which assumes that variances are equal across groups or samples. The Levene test was used to verify this assumption. The Levene test is less sensitive than the Bartlett test to departures from normality and was used here as an alternative to validate if data was distributed normally (Corder, G.W., Foreman, D.I., 2009).

**Table 10. FDI category and Means for Developed Economy**

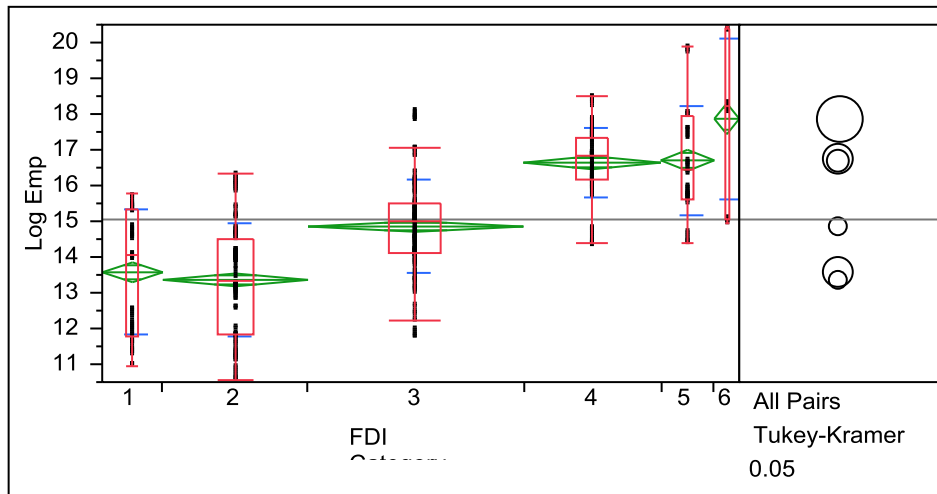
Level		Mean
6	A	17.124124
5	B	15.558962
4	B	15.294510
3	C	13.176873

Since the data is not normally distributed and has unequal variances, the Kruskal-Wallis test and the result of the Welch tests are reported. There is a significant difference between the Employment figures for the various FDI categories. The FDI categories are described in section 5.1.1 and annexure A above for further reference for developed countries.

### 5.4.3.2 Effects of Employment by FDI Categories for Developing Economies

The following one-way ANOVA tests are performed to identify differences in employment. Where the assumptions of normality were violated, non-parametric tests were performed and in the case of unequal variances the result of the Welch tests were reported. The test is conducted to determine the extent to which FDI in developing economies create employment.

**Figure 12. Oneway Analysis of Log Emp By FDI Category Economy Type=Developing Economy**



The above plot contains box-plots and diamonds which depict the mean (middle of diamond), standard deviation (height) and width which represents the relative sample size. Section 5.1.1 have reference of the FDI categories for developing economy type.

**Table 11. Analysis of Variance**

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
FDI Category	5	2097.2281	419.446	204.9629	<.0001*
Error	1065	2179.4659	2.046		
C. Total	1070	4276.6940			

**Table 12. Means for Oneway Anova**

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	102	13.5721	0.14164	13.294	13.850
2	244	13.3600	0.09158	13.180	13.540
3	362	14.8527	0.07519	14.705	15.000
4	231	16.6398	0.09412	16.455	16.824
5	90	16.7042	0.15079	16.408	17.000
6	42	17.8671	0.22074	17.434	18.300

**Table 13. Levene and Bartlett Tests**

Test	F Ratio	DFNum	DFDen	Prob > F
Levene	32.6181	5	1065	<.0001*
Bartlett	19.7372	5	.	<.0001*

The purpose of these two tests were to test for homogeneity of variances and homogeneity of variance is when variances are equal across samples contrary to the analysis of variance which assumes that variances are equal across groups or samples. The Levene test was used to verify this assumption. The Levene test is less sensitive than the Bartlett test to departures from normality and was used here as an alternative to validate if data was distributed normally (Corder, G.W., Foreman, D.I., 2009).

**Table 14. FDI category and Means for Developed Economy**

Level	Mean
6	17.867102
5	16.704194
4	16.639792
3	14.852746
1	13.572074
2	13.359959

Since the data was not normally distributed and had unequal variances, the Kruskal-Wallis test and the result of the Welch tests were reported. There is a significant difference between the

Employment figures for the various FDI categories. The FDI categories are described in section 5.1.1 and table 7 above for further reference for developing countries.

**Table 15. Welch's Test**

The Welch Anova test was done with Means Equal and Standard Deviations Not Equal

F Ratio	DFNum	DFDen	Prob > F
211.2350	5	241.16	<.0001*

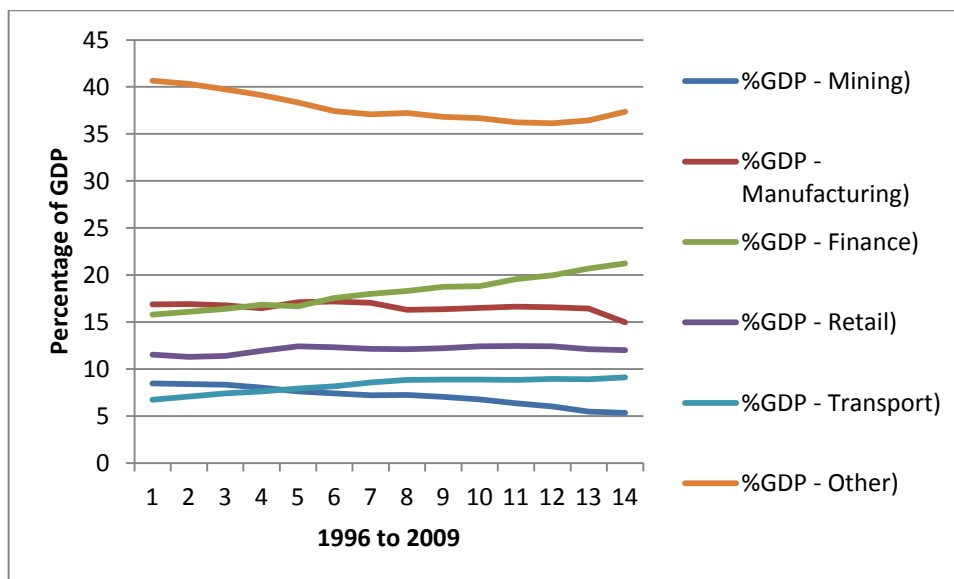
### 5.5 Hypothesis 2a: SA industrial sectors contribution to GDP attracts proportional FDI inflows

To make a case for hypothesis 2a in this section, an analysis to prove South Africa industrial sectors contribution to GDP attracts proportional FDI inflows was conducted.

#### 5.5.1 Industrial Sector GDP behaviour between 1996 and 2009

The behaviour and contribution of the various Industrial Sectors with respect to the South African GDP is depicted below. Five major sectors are outlined below in the order of highest contribution to the South African GDP: finance, manufacturing, retail, transport and mining.

**Figure 13. GDP behaviour by South Africa industry sector between 1996 and 2009**

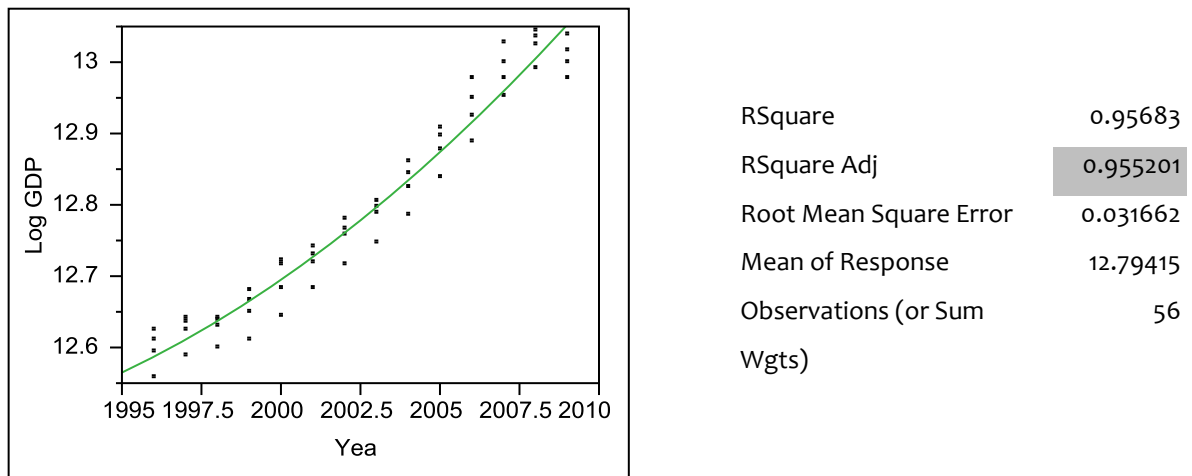


The startling evidence on the trends of the contribution and behaviour of industrial sector GDP since 1996 shows a steady decline in contribution by manufacturing and mining. Finance sector has been on a steady increase for fourteen years since 1996 and is the highest single contributing industrial sector to the South African GDP.

### 5.5.2 South African economic activity between 1996 and 2009

The following bivariate fits establish the relationship between time in years and the Natural Logs of the South African GDP and Employment statistics between 1996 and 2009.

**Figure 14. Bivariate Fit of Log SA GDP By Year**



The formula below represents 96% of the variations based on the plot of data above.

#### Polynomial Fit Degree=2

$$\text{Log GDP} = -58.9157 + 0.0358022 * \text{Year} + 0.0009806 * (\text{Year} - 2002.5)^2$$

**Table 16. Analysis of Variance**

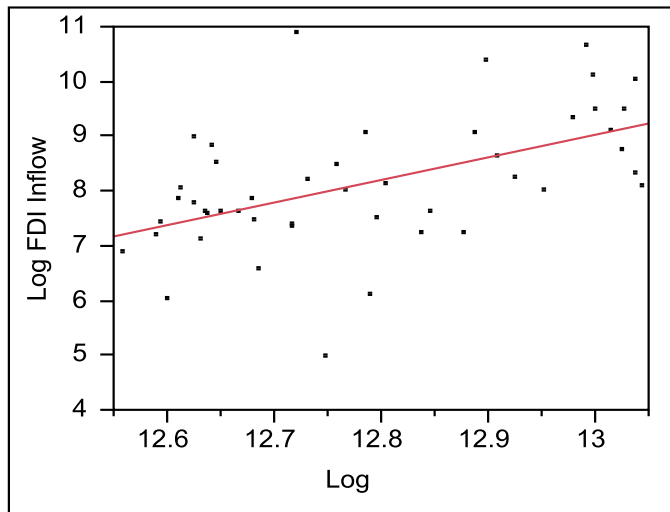
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	2	1.1776356	0.588818	587.3519
Error	53	0.0531323	0.001002	<b>Prob &gt; F</b>
C. Total	55	1.2307678		<.0001*

**Table 17. Parameter Estimates**

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	-58.9157	2.101818	-28.03	<.0001*
Year	0.0358022	0.00105	34.11	<.0001*
(Year-2002.5)^2	0.0009806	0.000293	3.34	0.0015*

### 5.5.3 The relationship between GDP and FDI Inflows for South Africa

Figure 15. Bivariate Fit of Log FDI Inflow By Log GDP



RSquare	0.284045
RSquare Adj	0.268481
Root Mean Square Error	1.029986
Mean of Response	8.162241
Observations (or Sum Wgts)	48

Only 26% of South African FDI inflow can be attributed to economic activity that is measured through the GDP. The discussion on the model below is done in detail in chapter 6. The model represents this relationship:  $\text{Log FDI Inflow} = -44.63468 + 4.1276577 * \text{Log GDP}$

Table 18. Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	19.360765	19.3608	18.2499
Error	46	48.800102	1.0609	<b>Prob &gt; F</b>
C. Total	47	68.160867		<.0001*

Table 19. Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	-44.63468	12.35976	-3.61	0.0008*
Log GDP	4.1276577	0.966215	4.27	<.0001*

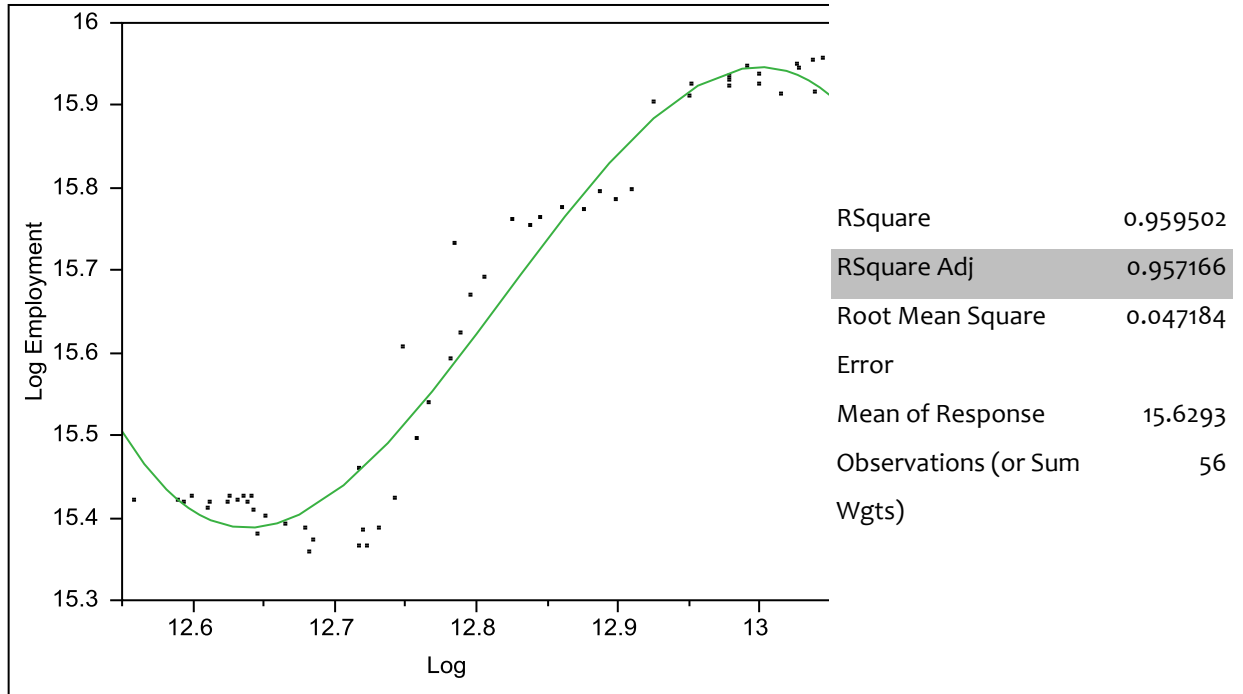
### 5.5.4 South Africa GDP and Employment

To determine the characteristics of South African economy in order to further support hypothesis 2a and 2b that South Africa industrial sectors contribution to GDP attracts proportional FDI inflows that subsequently create employment, the following relationship was



established between the natural logarithm of GDP and the natural logarithm of Employment for South Africa.

**Figure 16. Bivariate Fit of Log Employment By Log GDP**



The relationship between employment in South Africa and economic activity is explained in the formula below which explain 96% of the variations based on the plot from the data available from Statistics South Africa.

**Polynomial Fit Degree = 3**

$$\text{Log Employment} = -13.47124 + 2.2729589 * \text{Log GDP} + 1.781538 * (\text{Log GDP} - 12.7942)^2 - 23.650787 * (\text{Log GDP} - 12.7942)^3$$

**Table 20. Analysis of Variance**

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	3	2.7428186	0.914273	410.6720
Error	52	0.1157668	0.002226	<b>Prob &gt; F</b>
C. Total	55	2.8585855		<.0001*

**Table 21. Parameter Estimates**

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	-13.47124	1.491526	-9.03	<.0001*
Log GDP	2.2729589	0.116627	19.49	<.0001*
(Log GDP-12.7942)^2	1.781538	0.377369	4.72	<.0001*
(Log GDP-12.7942)^3	-23.65079	2.992489	-7.90	<.0001*

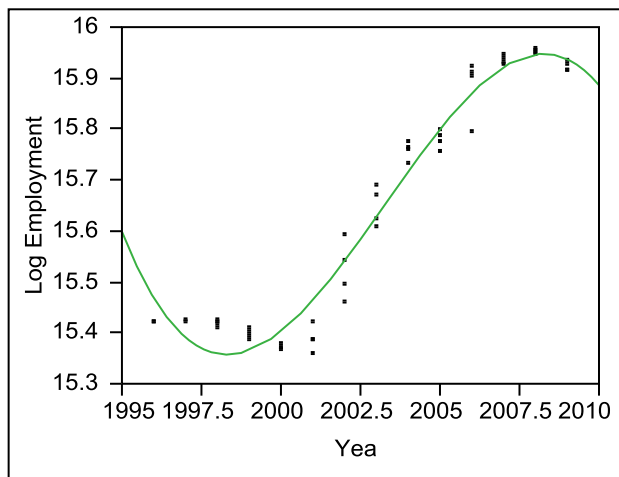
96% of the variation in Employment is explained by this cubic model. The model and the parameter estimates are highly significant and fit the economy of South Africa. A detailed discussion and interpretation is in chapter six.

### 5.6 Hypothesis 2b: FDI inflows subsequently create employment proportional to the industrial sectors

The following one-way ANOVA tests are performed to identify differences in employment. Where the assumptions of normality were violated, non-parametric tests were performed and in the case of unequal variances the result of the Welch tests were reported. The test is conducted to determine the extent to which FDI in developed economies create employment.

#### 5.6.1 South African employment between 1996 and 2009

**Figure 17. Bivariate Fit of Log Employment By Year**



RSquare	0.963741
RSquare Adj	0.96165
Root Mean Square Error	0.044646
Mean of Response	15.6293
Observations (or Sum Wgts)	56

#### Polynomial Fit Degree=3

$$\text{Log Employment} = -158.6646 + 0.0870152 * \text{Year} + 0.0028253 * (\text{Year} - 2002.5)^2 - 0.0012062 * (\text{Year} - 2002.5)^3$$

**Table 22. Analysis of Variance**

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	3	2.7549373	0.918312	460.7148
Error	52	0.1036482	0.001993	<b>Prob &gt; F</b>
C. Total	55	2.8585855		<.0001*

**Table 23. Parameter Estimates**

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	-158.6646	7.546837	-21.02	<.0001*
Year	0.0870152	0.003769	23.09	<.0001*
(Year-2002.5)^2	0.0028253	0.000414	6.83	<.0001*
(Year-2002.5)^3	-0.001206	0.000119	-10.11	<.0001*

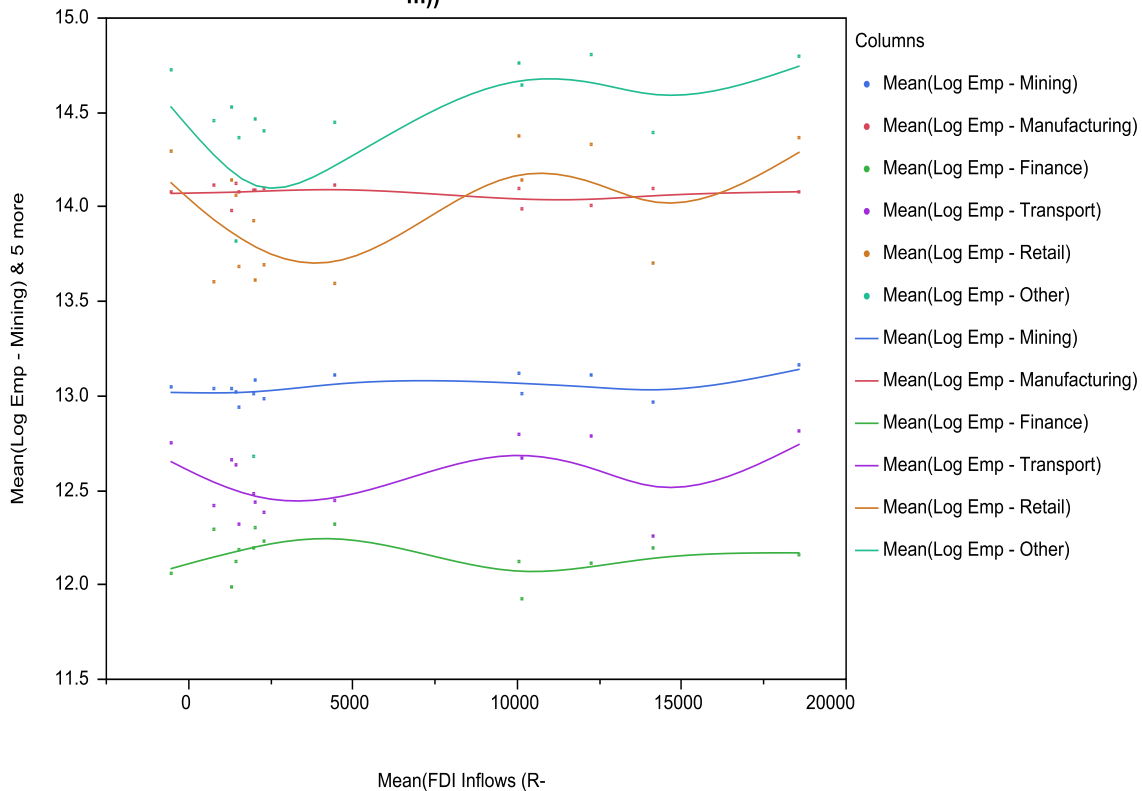
### 5.6.2 Impact of industrial sector FDI on employment

Figure 16 below outlines the impact of sectoral FDI inflows to sectoral employment.

Manufacturing sector FDI in South Africa contributes the highest in creating jobs.

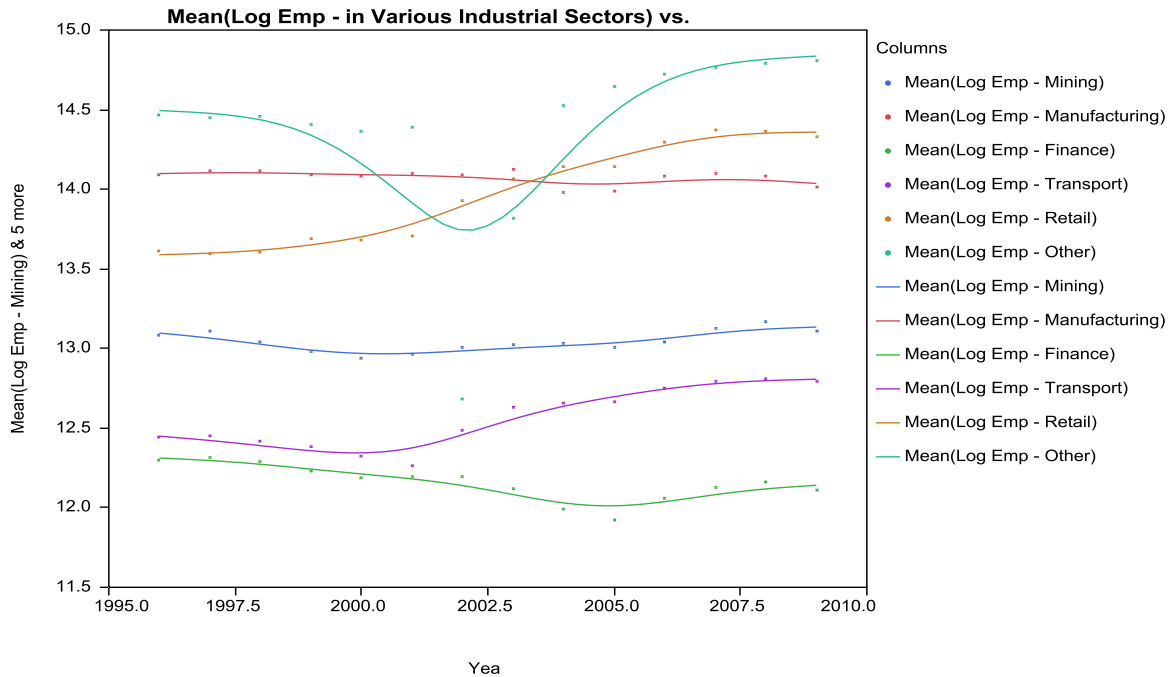
**Figure 17. FDI and employment**

**Mean(Log Employment in the various Industrial Sectors vs. Mean(FDI Inflows (R-m))**



The trends in the model highlight the cyclical nature of the FDI inflows and the corresponding impact on job creation on the vertical axis.

**Figure 18. Annual Employment statistics for South Africa:**



The model above outlines employment in various industrial sectors of the economy. Further analysis of the contribution to GDP and employment created through sectoral FDI is explained further in different models below and in the discussion section of chapter six.

## 6 Discussions of the results

By using FDI Inflow, GDP and employment statistics ranging from 1996 to 2009, the period of observation for the study, the analysis of three hypotheses in chapter four captures a significant representation of relationships between economic activity, FDI inflows and employment in the economies of the world. Specifically, the study helped to draw a picture of South Africa's performance in terms of employment, FDI inflow and economic activity compared to the rest of the world for the greater part of its democratic dispensation.

The use of longitudinal data in this study minimised the problem of endogeneity in the statistical analysis of data. Additionally, the data is very representative of the reality due to the minimum loss of relevant information from the statistical tests performed and significant levels observed and obtained. Therefore, the discussion of the results is an accurate reflection of observations.

The results discussion in this chapter is broken down into three sections that correspond to the afore-stated hypotheses in chapter four for ease and consistency of analysis and discussion.

### 6.1 Productivity (GDP) and FDI

Results for hypothesis 1a are discussed in this section. Hypothesis 1a states that the economic activity of a host country gives rise to its ability to attract FDI and is confirmed by the results.

#### 6.1.1 Developed Economies

Figure 3 represents the scatter plots of GDP and Inflow data for the developed economies. The linear relationship from the plots is established through:

$$\text{Log Inflow} = -4.186039 + 0.7100044 * \text{Log GDP}$$

where logarithms were used because of data that spans across too wide a range to be conveniently represented, which needed to be transformed. In the statistical analysis of the data corresponding to this section, effects of increases in inflation and other macro effects that could distort the representation of data were eliminated by studying the patterns of the changes over the years. The significance of the model above was effective in that the formula could explain 60% of the variations in the data used.

It is evident that as the GDP of developed economies increase the higher its ability to attract more FDI capital inflow. The rate at which the developed economies are able to attract foreign direct investment inflow is a factor of 0.7100044, which represents the gradient or the rate of change of the linear curve relationship. This means that every unit of GDP represented in the horizontal (x) axis attracts 0.7100044 of the FDI unit in the vertical (y) axis.

An attempt was made to determine if there would be a different relationship between the lag of the log GDP and the lag of the FDI capital Inflow but results showed that there was no real difference in the relationship between GDP and Capital Inflow if the GDP was lagged by one year.

### 6.1.2 Developing Economies

The relationship of the log inflows to the host economy activity of a developing country is represented in the scatter plots of GDP and Inflow data in figure 4. The linear relationship is represented by the model below:

$$\text{Log Inflow} = -7.09619 + 0.9560485 * \text{Log GDP}$$

In this instance, the logarithms of GDP and FDI were used to transform the sparsely dispersed data to a better presentable way without losing the actual meaning of information. The effects

of increases in inflation and other macro effects that could distort the representation of data were minimized. The significance of the model above was effective in that the formula could explain 61% of the variations in the data used as evident from adjusted  $R^2$  of 0.613061.

The same relationship was observed for developing economies, where it was clear that the higher the GDP growth of the developing economy, the more it was likely to attract foreign investment. The correlation in this relationship was much stronger than that of developed economies, as it could be seen that the slope of the curve is steeper with a proportionality coefficient of 0.9560485.

The rate at which the developing economies attracted foreign direct investment inflow in the period of study meant that for every unit measure of economic activity (GDP) they were able to attract 0.9560485 of FDI to their economies. Again, an attempt was made to determine if there was a difference in the developing economies ability to attract FDI when the FDI inflow was lagged by a year to the GDP activity and no significant difference was verified.

## 6.2 Employment and FDI Inflow

In order to prove hypothesis 1b, correlation between employment in a host economy and FDI inflow to developed and developing economies was studied and the results are presented below. Hypothesis 1b is confirmed by the results.

### 6.2.1 Developed Economies

Figure 5 and Figure 6 depict the normalised distributions of log FDI and log employment data of the developed countries. The means of log FDI and log employment for each developed country were established to ensure the study focused only on the significant data of the available range.

Figure 9 shows a graphical representation of the relationship of the means of log employment and those of log FDI inflow in developed countries to establish an element of causality of employment as a result of FDI inflow into a host country. The data was transformed and represented within normal scales for ease and improved accuracy of interpretability.

The scatter plot of the means is represented by a linear function modelled by the formula below:

$$\text{Mean (Log Emp)} = 8.5554398 + 0.7772186 * \text{Mean (Log FDI)}$$

The model above holds for 53% of the variation of the relationship between the mean Log of employment and the mean Log of FDI when parameter estimates (p-values) were considered at 0.05 significance levels. Developed countries were able to produce 0.7772186 units of employment on average for every one unit of FDI attracted when means of log variables studied above were considered. This is confirmed by the model's slope of the curve with proportionality coefficient of 0.7772186.

The results highlight that FDI inflow did result in increase in employment on average when developed countries are grouped together for the period under consideration.

### 6.2.2 Developing Economies

The normalised distributions of log FDI and log employment data of the developing economies are shown in figures 7 and 8 respectively. For the developing countries, the means of log FDI and log employment for each developed country were used. The appropriate significance levels were also established. The raw data used for this section is in Annexures B and D at which some of the patterns and trends can be observed.



Interestingly the bivariate fit of the mean (Log Emp) by mean (log FDI) for developing economies show that developed countries create more jobs per unit of FDI than the counterparts in the developing countries. Figure 10 shows a curvilinear representation of this relationship of the means of log employment and those of log FDI inflow.

While the difference in the slopes of developed and developing countries is marginal if one looked at the absolute number of the coefficients, 0.7772186 and 0.6917361 for developed and developing economies respectively, the interpretation in the absolute numbers in the processed data is significant and large on the ground. The data was transformed and normalised to improve interpretability and representivity.

The causal relationship of the means of the Log employment as a result of Log FDI for developing economies is represented by a linear function model hereunder:

$$\text{Mean (Log Emp)} = 10.714209 + 0.6917361 * \text{Mean (Log FDI)}$$

The model for the developing countries holds only for 46% of the variation of the relationship between the mean Log of employment and the mean Log of FDI when parameter estimates (p-values) are considered at 0.05 significance levels. The below 50% variation could be explained in the vast differences in the developmental states of the developing economies.

Developing economies produced 0.6917361 units of employment on average for every unit of FDI attracted to their host countries when means of log variables studied above were considered. For developing economies as well, the results highlight that FDI inflow did result in increase in employment on average when developing countries were grouped together.

### 6.3 Lessons from South Africa

The final hypothesis 2a and 2b was meant to determine whether South Africa possesses the same characteristics. The hypothesis are:

**Hypothesis 2a:** *SA industrial sectors contribution to GDP attracts proportional FDI inflows, and:*

**Hypothesis 2b:** *FDI inflows subsequently create employment proportional to the industrial sectors*

The rationale for this comparative hypothesis on South Africa was based on the classification of the developing and developed countries by the United Nations and to study whether employment spillovers in South Africa could be explained in the same way as those of developing countries. This is so that the spillovers effects of FDI and the imminent policy review on FDI by South African treasury could be better informed and contributed to.

The FDI categories of the economies of the world are outlined in table 3 based on the different percentiles of FDI values from 10<sup>th</sup>, 10<sup>th</sup> – 25<sup>th</sup>, 25<sup>th</sup> – 50<sup>th</sup>, 50<sup>th</sup> – 75<sup>th</sup>, 75<sup>th</sup> – 90<sup>th</sup>-100<sup>th</sup>. The first main reason for this is to declassify South Africa so that the results are not biased to either developed or developing country on the basis of FDI inflow value. Secondly, it was due to the fact that FDI inflow values to developing economies in the period under review are represented in all 6 categories of FDI whereas developed economies are only represented in categories 3, 4, 5 and 6. South Africa is in category 4 as can be seen in figure 8 and therefore comparable to both developed and developing economies when FDI inflow categories are considered.

#### 6.3.1 South Africa versus developed countries: GDP and FDI

Table 2 in section 4.4 contains annexures which depict a consolidated data of South Africa GDP information, the rate of GDP growth and employment in various industrial sectors. The South

African economy has been growing healthily until five years ago and recently growing at a slower pace in line with the world economy. Astonishingly, the employment has been declining as can be seen in figures 16 and 17.

The contribution to the South African GDP by the different industries is shown in figure 13. The relationship diagram in figure 15 can explain only 26% of the FDI inflow into the South Africa.

This relationship diagram is represented by the function below:

$$\text{Log FDI Inflow} = -44.63468 + 4.1276577 * \text{Log GDP}$$

The formula above supports the hypothesis 2a. However, the developed economies were better represented in their model than South Africa at 60%. This confirms the host country characteristics that highlight the host country's economic activity ability to influence FDI inflows (Dunning & Narula, 2010).

Hypothesis 2a is confirmed. South Africa's growing GDP has enabled it to attract FDI, however it is noted that the ratio of South Africa's ability to attract FDI is much slower than the average developing country. The trends of employment when compared to South Africa's GDP are also declining showing that South Africa is increasing its economic activity at an efficient rate by shedding jobs. The continuation of this phenomenon could pose stability challenges in South Africa in the long run unless interventions that can help absorb more labour can be devised.

### 6.3.2 South Africa versus developed countries: FDI and Employment

Statistical analysis in tables 6 to 9 show test results of an analysis on the relationship of FDI inflow and its propensity to create employment as a result of FDI amount of inflow a developed country attracted per FDI category. For the developed economies, there were significant differences between employment figures for the various FDI categories. Specifically, there are

significant increases in employment from FDI category 3 to FDI category 4 but negligible from category 4 to 5 and again very significant from category 5 to 6. This is conveniently presented in table 10.

The ratio of developed countries in category 4 is 0.5308, meaning that the for every unit of FDI attracted represented by mean (Log FDI) the developed economy will create 0.5308 jobs compared to 0.4769 in the developing economy of this FDI category and by South Africa.

### 6.3.3 South Africa versus developing countries: FDI and Employment

Tables 11 to 13 demonstrate results of FDI category for developing countries to establish the relationship of FDI inflow to the propensity to create employment as a result of FDI amount of inflow a developing country attracted per FDI category. In this section of developing economies, there were also significant differences between employment figures for the various FDI categories.

The difference in the propensity for a developing country in category 1 and 2 to create employment is marginal at means of 13.359959 and 13.572074 for category 1 and 2 respectively. Category 3 is significantly higher than category 2 and category 4 and 5 are somewhat similar even though they are significantly higher than category 3. Category 6 is significantly higher than 4 and 5.

The study emphatically confirms that the higher the FDI inflow into a developing economy, the greater it is likely to create jobs. In all categories of FDI inflows, developed countries create more jobs than developing countries even when the value of FDI inflow is the same.

Hypothesis 2b is confirmed for South Africa. It is worth noting that the correlations are understandably different to those in developing countries are composed of averages of a vast

range of countries in notably different extremes of FDI inflows. South Africa's rate of employment growth is much slower per unit of FDI and should be cause for concern and possible focus on innovation to create more employment with the healthy economic activity that South Africa currently enjoys.

#### 6.4 Contribution to theory

The structure of South Africa FDI inflows over the period reveals strong dissimilarities to the structure prevailing in the developing countries, as also stated in table 1, and in the article by national treasury titled "*A review framework for cross-border direct investment in South Africa*".

While results of many studies have been indifferent and produced results that at times confirmed and opposed the spillover effects of FDI including employment Dusanjh & Sidhu (2009), the study conducted herein proves that a positive relationship between FDI inflow and growth in employment exists when economies of the world are taken into account. This is the reason why many countries, especially in the developing world continue to embark on attracting FDI into their host economies as alluded to by Spencer (2008).

Many studies analyse various aspects of presence of FDI and resultant spillovers and in most cases for select samples of data. While research scholars differ in their findings on spillovers, it has been argued that the growth effects of FDI depend on the interaction between industry and host-economy characteristics (Nunnenkamp & Spatz, 2004).

There is a strong need to advance policies and create an environment that enables host countries, especially in developing economies to benefit from FDI. The host countries themselves must lead this change and ensure they understand and use their bargaining power more profitably when they develop policies to entice FDI. The study showed that on average FDI does produce spillovers in both developed and developing host economies.

While many countries are making efforts to make their economies attractive for FDI, they need to guard against exploitation and ensure that the opportunity for foreign investors to invest is commensurate to the overall positive benefits expected by the host countries.

An additional contribution to theory is for South African policy makers to use findings in this and other related studies to draw on best practices that may be useful to progressively shape future economic policies. These could be related to FDI and institutional development to support efforts to create employment and economic growth.

### **6.5 Host-economy characteristics and their relevance**

As evident in the study, particularly in table 7, the sample economies of this study differ considerably with regard to GDP, FDI and employment characteristics. Underlying this difference is the positive and negative conduct of the host economies in aspects such as governance, development status and institutional advancement. The relevance of host-economy characteristics for individual countries' attractiveness for FDI varies considerably especially among developing countries.

Availability of natural resources may be the dominant motive for undertaking resource-seeking FDI that at times negates issues of good governance because of scarcity and demand. This factor may distort the generalisation of how host economies attract FDI, as which may be more important and relevant in a host economy that may not have as much natural resources.

As confirmed by Nunnenkamp & Spatz (2004), economies with unfavourable characteristics hardly received market-seeking FDI in the services sector. The propensity of economies with favourable characteristics to attract FDI would be more significant when location attractiveness is taken into account (Meyer, 2004).

According to Nunnenkamp & Spatz (2004), the problem of resource-seeking FDI resulting in enclaves dominated by foreign affiliates with few growth-enhancing spillovers seems to be concentrated in closed host economies with a deficient institutional environment. This supports the contribution of the study that governments of host economies need to think beyond short term gains of FDI that may be exploitive and detrimental to their host countries.

While the study focused on relationships of FDI, GDP and employment spillover, it would be interesting to consider whether the mode of entry of FDI would have a significant impact on the extent to which the employment spillover is achieved by host economies. Dusanjhi & Sidhu (2009) believe that the FDI in the services sector often takes place in the form of mergers and acquisitions, which may crowd out local investment and typically lead to follow-up FDI, as well as transfers of technology and know-how in order to modernize undercapitalized operations in host economies with unfavourable characteristics.

Nunnenkamp & Spatz (2004) believe it can be reasonably assumed that efficiency-seeking FDI should result in a closer vertical integration between parent companies and their affiliates in developing economies and a stronger export orientation of the latter. Considering both indicators together, South Africa FDI in manufacturing, mining and finance to be efficiency seeking.

Taking into account that manufacturing, mining and finance represent the most important industries for South Africa as a developing economy, these industries can be regarded as the prototypes of market-seeking and efficiency-seeking FDI.

## 7 Conclusion

From the above results, it can be seen that for both developing and developed economies, there is a significant association between FDI and employment. An increase in FDI is associated with an increase in employment and the causal relationship was established through the significance of the representative models.

Relationship between LAG Log GDP and Log Capital Inflow per Economy Type was investigated to determine whether there would be a different relationship between the LAG log GDP and FDI (Capital Inflow). The conclusion was that there was no real difference in the relationship between GDP and Capital Inflow if the GDP was lagged by one year.

An interesting finding on the efficiency of developed economies in terms of the rate of employment creation for the same category of FDI inflow was discovered in section 6.3.2. It would be interesting to study the causes of this effect in future studies based on the results in this study.

It seems that FDI may have an impact on growth even if average FDI-to-GDP ratios are small. Moreover, the growth effects of FDI appear to be related to industry characteristics.

Finally, other characteristics such as openness to trade could be explored in the future to measure whether the ability to attract FDI would be enhanced and corresponding spillovers in this case employment improved.

It seems as if opening up to international trade could even turn market-seeking FDI into efficiency-seeking FDI in manufacturing industries, improve the employment growth impact of FDI (Nunnenkamp & Spatz, 2004), this issue deserves more attention in future research on the link between FDI and economic growth in developing countries.



Positive growth effects of FDI in developing economies cannot be taken for granted. The analysis on South Africa FDI inflows and comparisons to large numbers of developing and developed economies clearly suggests that the currently prevailing differences about FDI among policymakers and researchers should not exist, instead each country should devise competitive advantaged to attract FDI and balance the incentive to investors with potentially greater benefits for the host country.

The link between FDI and subsequent growth in employment varies considerably when host economies are classified according to developing countries and therefore while the averages of developing countries were seen to be favourable, host economy characteristics still need to be stringently considered.

In host economies with unfavourable characteristics, higher total FDI inflows tend to be associated with lower subsequent growth. Even though the picture is brighter for economies with favourable characteristics, generally it seems to be much easier to attract FDI than to derive macroeconomic benefits from FDI as confirmed in other studies such as the one conducted by Nunnenkamp and Spatz in 2004.

The comparison of mean of log employment and log GDP ratios between subgroups of host economies reveals that the link between FDI and economic growth is stronger in the developed country than in developing countries. Furthermore, the model for South African relation between FDI and Employment could only be explained by 26%, therefore, it seems there are far stronger variables that explain South Africa employment than FDI.

Growth effects of FDI also differ between industrial sectors for South Africa. These differences are related to industry characteristics such as factor requirements, export orientation and the integration of foreign affiliates into corporate networks via intra-firm trade.

Separating efficiency-seeking FDI from market-seeking FDI also deserve further investigation in order to sharpen the policies meant to draw FDI to host countries.

The findings above tend to support Meyer (2004) that the interaction of host-economy and industry characteristics suggests that positive growth effects of FDI are more likely when the technological gap is relatively small as more benefits are obtained from quicker returns on investment achieved through a skilled and efficient absorptive capacity of a host economy.

Attracting FDI, is just a part of a step forward, the central challenge is for host economies to derive macroeconomic benefits from FDI that are far more beneficial and sustainable to the host economy .

For developing economies with unfavourable location characteristics, in particular, it makes little sense to offer fiscal incentives and outright subsidies, in order to attract foreign direct investment. Scarce public resources could be used more productively to minimise exploitation by MNEs and foreign investors through effortless advantage of bargaining power.

Apart from improving the local availability of a sufficiently qualified labour force, host economies are well advised to focus on developing sound institutions, which appear to be a prerequisite for attracting, and benefiting from both market-seeking and efficiency-seeking FDI.

The study confirmed the efficiency of advanced economies in using FDI and advancement in their economic activities to attract and create more employment with FDI they receive for their host countries.

Finally, the study confirmed the positive relationship of GDP activity and FDI inflows in South Africa, however the declining employment despite positive growth and slower than developing

economy average of FDI inflows into South Africa should be cause for concern. Further studies are encouraged to investigate broader macroeconomic drivers for possible answers and institutional development and advancement for reasons of the decline of FDI and employment.

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## Annexure A: List of developed and developing countries

<b>Economy Type</b>	<b>Country</b>
Developed Economy	Austria
Developed Economy	Belgium
Developed Economy	Bulgaria
Developed Economy	Cyprus
Developed Economy	Czech Republic
Developed Economy	Denmark
Developed Economy	Estonia
Developed Economy	Finland
Developed Economy	France
Developed Economy	Germany
Developed Economy	Greece
Developed Economy	Hungary
Developed Economy	Ireland
Developed Economy	Italy
Developed Economy	Latvia
Developed Economy	Lithuania
Developed Economy	Luxembourg
Developed Economy	Malta
Developed Economy	Netherlands
Developed Economy	Poland
Developed Economy	Portugal
Developed Economy	Romania
Developed Economy	Slovakia
Developed Economy	Slovenia
Developed Economy	Spain
Developed Economy	Sweden
Developed Economy	United Kingdom
Developed Economy	Gibraltar
Developed Economy	Iceland
Developed Economy	Norway
Developed Economy	Switzerland
Developed Economy	Canada
Developed Economy	United States
Developed Economy	Australia
Developed Economy	Bermuda
Developed Economy	Israel
Developed Economy	Japan
Developed Economy	New Zealand

<b>Economy Type</b>	<b>Country</b>
Developing Economy	Algeria
Developing Economy	Egypt
Developing Economy	Libyan Arab Jamahiriya
Developing Economy	Morocco
Developing Economy	Sudan
Developing Economy	Tunisia
Developing Economy	Benin
Developing Economy	Burkina Faso
Developing Economy	Cape Verde
Developing Economy	Côte d' Ivoire
Developing Economy	Gambia
Developing Economy	Ghana
Developing Economy	Guinea
Developing Economy	Guinea-Bissau
Developing Economy	Liberia
Developing Economy	Mali
Developing Economy	Mauritania
Developing Economy	Niger
Developing Economy	Nigeria
Developing Economy	Saint Helena
Developing Economy	Senegal
Developing Economy	Sierra Leone
Developing Economy	Togo
Developing Economy	Burundi
Developing Economy	Cameroon
Developing Economy	Central African Republic
Developing Economy	Chad
Developing Economy	Congo
Developing Economy	Congo, Democratic Republic of
Developing Economy	Equatorial Guinea
Developing Economy	Gabon
Developing Economy	Rwanda
Developing Economy	São Tomé and Príncipe
Developing Economy	Comoros
Developing Economy	Djibouti
Developing Economy	Eritrea
Developing Economy	Ethiopia
Developing Economy	Kenya
Developing Economy	Madagascar
Developing Economy	Mauritius
Developing Economy	Mayotte
Developing Economy	Seychelles
Developing Economy	Somalia
Developing Economy	Uganda
Developing Economy	United Republic of Tanzania
Developing Economy	Angola

<b>Economy Type</b>	<b>Country</b>
Developing Economy	Botswana
Developing Economy	Lesotho
Developing Economy	Malawi
Developing Economy	Mozambique
Developing Economy	Namibia
Developing Economy	South Africa
Developing Economy	Swaziland
Developing Economy	Zambia
Developing Economy	Zimbabwe
Developing Economy	Argentina
Developing Economy	Bolivia, Plurinational State of
Developing Economy	Brazil
Developing Economy	Chile
Developing Economy	Colombia
Developing Economy	Ecuador
Developing Economy	Falkland Islands (Malvinas)
Developing Economy	Guyana
Developing Economy	Paraguay
Developing Economy	Peru
Developing Economy	Suriname
Developing Economy	Uruguay
Developing Economy	Venezuela, Bolivarian Republic of
Developing Economy	Belize
Developing Economy	Costa Rica
Developing Economy	El Salvador
Developing Economy	Guatemala
Developing Economy	Honduras
Developing Economy	Mexico
Developing Economy	Nicaragua
Developing Economy	Panama
Developing Economy	Anguilla
Developing Economy	Antigua and Barbuda
Developing Economy	Aruba
Developing Economy	Bahamas
Developing Economy	Barbados
Developing Economy	British Virgin Islands
Developing Economy	Cayman Islands
Developing Economy	Cuba
Developing Economy	Dominica
Developing Economy	Dominican Republic
Developing Economy	Grenada
Developing Economy	Haiti
Developing Economy	Jamaica
Developing Economy	Montserrat
Developing Economy	Netherlands Antillesb
Developing Economy	Puerto Rico

<b>Economy Type</b>	<b>Country</b>
Developing Economy	Saint Kitts and Nevis
Developing Economy	Saint Lucia
Developing Economy	Saint Vincent and the Grenadines
Developing Economy	Trinidad and Tobago
Developing Economy	Turks and Caicos Islands
Developing Economy	Bahrain
Developing Economy	Iraq
Developing Economy	Jordan
Developing Economy	Kuwait
Developing Economy	Lebanon
Developing Economy	Oman
Developing Economy	Palestinian Territory
Developing Economy	Qatar
Developing Economy	Saudi Arabia
Developing Economy	Syrian Arab Republic
Developing Economy	Turkey
Developing Economy	United Arab Emirates
Developing Economy	Yemen
Developing Economy	China
Developing Economy	Hong Kong, China
Developing Economy	Korea, Democratic People's Republic of
Developing Economy	Korea, Republic of
Developing Economy	Macao, China
Developing Economy	Mongolia
Developing Economy	Taiwan Province of China
Developing Economy	Afghanistan
Developing Economy	Bangladesh
Developing Economy	Bhutan
Developing Economy	India
Developing Economy	Iran, Islamic Republic of
Developing Economy	Maldives
Developing Economy	Nepal
Developing Economy	Pakistan
Developing Economy	Sri Lanka
Developing Economy	Cambodia
Developing Economy	Indonesia
Developing Economy	Lao People's Democratic Republic
Developing Economy	Malaysia
Developing Economy	Myanmar
Developing Economy	Philippines
Developing Economy	Singapore
Developing Economy	Thailand
Developing Economy	Timor-Leste
Developing Economy	Viet Nam
Developing Economy	Cook Islands
Developing Economy	Fiji

<b>Economy Type</b>	<b>Country</b>
Developing Economy	French Polynesia
Developing Economy	Kiribati
Developing Economy	Marshall Islands
Developing Economy	Micronesia, Federated States of
Developing Economy	Nauru
Developing Economy	New Caledonia
Developing Economy	Niue
Developing Economy	Palau
Developing Economy	Papua New Guinea
Developing Economy	Samoa
Developing Economy	Solomon Islands
Developing Economy	Tokelau
Developing Economy	Tonga
Developing Economy	Tuvalu
Developing Economy	Vanuatu
Developing Economy	Wallis and Futuna Islands
Developing Economy	Albania
Developing Economy	Bosnia and Herzegovina
Developing Economy	Croatia
Developing Economy	Montenegro
Developing Economy	Serbia
Developing Economy	The FYR of Macedonia
Developing Economy	Armenia
Developing Economy	Azerbaijan
Developing Economy	Belarus
Developing Economy	Georgia
Developing Economy	Kazakhstan
Developing Economy	Kyrgyzstan
Developing Economy	Moldova, Republic of
Developing Economy	Russian Federation
Developing Economy	Tajikistan
Developing Economy	Turkmenistan
Developing Economy	Ukraine
Developing Economy	Uzbekistan

*Source: Extracted from UNCTAD World Investment Report, 2011*

Annexure B: FDI inflows per country: 1996 - 2009

FDI inflows (Millions of Dollars)

No.	Economy Type	Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
1	Developed Economy	Austria	4 426	2 654	4 567	2813	8 840	5 919	952	7144	3685	10 784	7 933	31 154	6 858	7 011
2	Developed Economy	Belgium	7 032	5 999	11 345	7931	44 369	44 102	14 759	33375	42044	34 370	58 893	93 429	142 041	23 595
3	Developed Economy	Bulgaria	109	505	537	770	1 002	813	905	2097	3443	3 920	7 805	12 389	9 855	3 351
4	Developed Economy	Cyprus	50	68	56	65	804	652	614	891	1079	1 186	1 864	2 234	4 050	5 725
5	Developed Economy	Czech Republic	1 428	1 300	2 720	5108	4 984	5 693	8 483	2101	4974	11 653	5 463	10 444	6 451	2 927
6	Developed Economy	Denmark	742	2 801	6 716	7454	33 818	11 525	6 637	2595	-10722	12 871	2 691	11 812	2 216	2 966
7	Developed Economy	Estonia	151	267	581	306	387	542	284	919	1049	2 869	1 797	2 725	1 731	1 838
8	Developed Economy	Finland	1 109	2 114	12 144	3023	8 015	3 732	7 920	3319	3537	4 750	7 652	12 451	-1 035	-4
9	Developed Economy	France	21 960	23 178	29 495	39101	43 250	50 476	48 906	42498	31371	84 949	71 848	96 221	64 184	34 027
10	Developed Economy	Germany	6 572	11 097	21 163	26822	198 276	21 138	36 014	29202	-15113	47 439	55 626	80 208	4 218	37 627
11	Developed Economy	Greece	1 058	984	700	900	1 089	1 560	51	1275	2101	623	5 355	2 111	4 499	2 436
12	Developed Economy	Hungary	2 275	2 173	2 036	1 944	2 764	3 936	2 845	2137	4654	7 709	6 818	3 951	7 384	2 045
13	Developed Economy	Ireland	2 618	2 743	8 579	18322	25 843	9 659	24 486	22781	11159	-31 689	-5 542	24 707	-16 453	25 960
14	Developed Economy	Italy	3 546	3 700	3 065	4901	13 375	14 871	14 545	16415	16815	19 975	39 239	40 202	-10 845	20 073
15	Developed Economy	Latvia	382	521	357	366	411	163	384	292	699	707	1 663	2 322	1 261	94
16	Developed Economy	Lithuania	152	355	926	486	379	446	732	179	773	1 028	1 817	2 015	2045	172
17	Developed Economy	Luxembourg	7 032	5 999	11 346	7931	44 370	44 101	116 984	3943	3958	6 564	31 843	-28 260	9 785	30 196
18	Developed Economy	Malta	325	165	273	811	622	281	-428	958	309	676	1 840	1 006	845	760
19	Developed Economy	Netherlands	15 052	14 463	41 682	33785	63 854	51 927	25 571	21742	442	39 046	13 976	119 383	3 577	34 514
20	Developed Economy	Poland	4 498	4 908	6 365	7500	9 341	5 713	4 131	4589	12873	10 293	19 603	23 561	14 839	13 698
21	Developed Economy	Portugal	1 368	2 278	2 802	570	6 787	5 892	1 844	8593	2367	3 930	10 902	3 055	4 665	2 706
22	Developed Economy	Romania	265	1 215	2 031	961	1 037	1 157	1 144	2213	6517	6 483	11 367	9 921	13 910	4 847
23	Developed Economy	Slovakia	251	206	631	322	1 925	1 584	4 123	756	1261	2 429	4 693	3 581	4 687	-50
24	Developed Economy	Slovenia	185	321	165	90	137	369	1 606	333	827	588	644	1 514	1 947	-582
25	Developed Economy	Spain	6 585	6 375	11 863	9355	37 523	28 005	35 908	25926	24761	25 020	30 802	64 264	76 993	9 135
26	Developed Economy	Sweden	5 070	10 963	19 560	59968	23 242	11 910	11 647	4886	12609	11 896	28 941	27 737	36 771	10 322
27	Developed Economy	United Kingdom	24 435	33 227	63 649	82182	118 764	52 623	27 776	16778	56214	176 006	156 186	196 390	91 489	71 140
28	Developed Economy	Gibraltar	1	1	1	8	138	12	27	62	102	122	137	165	159	172
29	Developed Economy	Iceland	84	149	148	66	175	176	126	318	645	3 071	3 843	6 824	917	83
30	Developed Economy	Norway	3 172	3 627	3 599	6577	5 829	2 062	872	3484	2473	5 413	6 415	5 800	10 781	14 074
31	Developed Economy	Switzerland	3 078	6 636	7 500	3413	19 255	8 856	5 648	16505	750	-951	43 718	32 435	15 149	26 964
32	Developed Economy	Canada	9 636	11 761	21 705	25061	66 791	27 487	21 030	7615	1533	25 692	60 294	114 652	57 177	21 406
33	Developed Economy	United States	84 455	105 488	186 316	275000	314 007	159 461	62 870	53146	122377	104 773	237 136	215 952	306 366	152 892
34	Developed Economy	Australia	6 127	7 732	6 345	5422	13 071	4 006	13 978	9722	42390	-24 246	31 050	45 397	46 843	25 716
35	Developed Economy	Bermuda	2 100	1 700	2 400	184	10 627	13 346	2 711	2292	14772	44	261	577	-146	-88
36	Developed Economy	Israel	1 382	1 622	1 850	2256	5 011	3 549	1 721	3941	1753	4 818	15 296	8 798	10 875	4 438
37	Developed Economy	Japan	200	3 200	3 192	12741	8 323	6 241	9 239	6324	7816	2 775	-6 507	22 550	24 426	11939
38	Developed Economy	New Zealand	2 231	2 623	745	-1063	3 347	1 911	823	3695	2580	1 548	4 526	3 138	4 598	-1293

No.	Economy Type	Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
39	Developing Economy	Algeria	4	7	5	6	438	1 196	1 065	634	882	1 081	1 795	1 662	2 594	2 761
40	Developing Economy	Egypt	637	888	1 077	1500	1 235	510	647	237	2157	5 376	10 043	11 578	9 495	6 712
41	Developing Economy	Libyan Arab Jamahiriya	-135	-82	-152	-100	-142	-101	-96	142	-354	1 038	2 013	4 689	4 111	2 674
42	Developing Economy	Morocco	357	1079	329	847	215	2825	481	2429	1070	1 654	2 449	2 805	2 487	1 952
43	Developing Economy	Sudan	0	98	371	371	392	574	713	1349	1511	2 305	3 534	2 426	2 601	2 682
44	Developing Economy	Tunisia	351	366	670	368	779	486	821	584	639	783	3 308	1 616	2 758	1 688
45	Developing Economy	Benin	25	26	35	31	56	41	41	45	64	53	53	255	171	135
46	Developing Economy	Burkina Faso	17	13	10	10	23	8	9	29	14	34	34	344	137	171
47	Developing Economy	Cape Verde	29	12	9	15	34	9	12	14	20	82	131	190	209	119
48	Developing Economy	Côte d'Ivoire	302	450	314	279	235	273	230	165	283	312	319	427	446	381
49	Developing Economy	Gambia	12	13	14	15	44	35	43	-1	2	45	71	76	70	47
50	Developing Economy	Ghana	120	83	56	115	115	89	59	137	139	145	636	855	1 220	1 685
51	Developing Economy	Guinea	24	17	18	20	10	2	30	83	98	105	125	386	382	141
52	Developing Economy	Guinea-Bissau	1	10	0	3	1	1	1	4	2	8	17	19	6	14
53	Developing Economy	Liberia	17	15	16	10	21	8	3	372	207	83	108	132	395	218
54	Developing Economy	Mali	47	74	36	40	78	104	102	132	101	225	82	65	180	109
55	Developing Economy	Mauritania	5	3	0	2	40	92	118	214	5	814	106	138	338	-38
56	Developing Economy	Niger	20	25	9	15	9	26	8	11	20	30	51	129	566	739
57	Developing Economy	Nigeria	1593	1593	1051	1400	930	1104	1281	2171	2127	4 978	4 898	6 087	8 249	8 650
58	Developing Economy	Saint Helena					0	0	0	0	0	0	0	0	0	0
59	Developing Economy	Senegal	7	176	71	60	62	39	54	52	77	52	210	273	272	208
60	Developing Economy	Sierra Leone	5	4	5	1	5	2	4	3	26	83	59	97	53	33
61	Developing Economy	Togo	27	23	42	35	41	71	53	34	59	77	77	49	24	50
62	Developing Economy	Burundi	0	0	2	0	12	0	0	2	-1	1	0	1	14	10
63	Developing Economy	Cameroon	35	45	50	40	31	75	176	0	0	225	309	284	270	337
64	Developing Economy	Central African Republic	5	6	5	13	1	5	6	3	-13	32	35	57	117	42
65	Developing Economy	Chad	18	15	16	15	116	453	1030	713	478	-99	-279	-69	234	462
66	Developing Economy	Congo	8	9	4	5	168	76	152	323	668	1475	1925	2275	2483	2083
67	Developing Economy	Congo, Democratic Republic of	2	1	0	1	23	82	117	158	15	0	-256	1808	1727	664
68	Developing Economy	Equatorial Guinea	376	20	24	120	109	931	323	1431	1664	769	470	1243	-794	1636
69	Developing Economy	Gabon	312	143	211	200	-43	-88	251	206	323	242	268	269	209	33
70	Developing Economy	Rwanda	2	3	7	5	8	4	7	5	8	14	31	82	103	119
71	Developing Economy	São Tomé and Príncipe					4	3	3	1	-2	16	38	35	33	14
72	Developing Economy	Comoros	2	2	2	2	0	1	0	1	0	1	1	8	8	9
73	Developing Economy	Djibouti	5	5	6	5	3	3	4	14	39	22	108	195	229	100
74	Developing Economy	Eritrea					28	12	20	22	-8	-1	0	0	0	0
75	Developing Economy	Ethiopia	13	68	178	90	135	20	75	465	545	265	545	222	109	221
76	Developing Economy	Kenya	13	40	42	42	111	5	28	82	46	21	51	729	96	141
77	Developing Economy	Madagascar	10	14	16	58	69	84	8	95	53	86	295	773	1169	1066
78	Developing Economy	Mauritius	37	55	12	49	277	32	33	63	14	42	105	339	383	257
79	Developing Economy	Mayotte					0	0	0	0	0	5	0	0	0	0
80	Developing Economy	Seychelles	30	54	55	60	56	65	48	58	37	86	146	239	179	275
81	Developing Economy	Somalia	0	0	0	0	0	0	0	-1	21	24	96	141	87	108
82	Developing Economy	Uganda	120	175	210	180	275	229	249	202	222	380	644	792	729	816
83	Developing Economy	United Republic of Tanzania	149	158	172	183	282	467	240	527	470	494	597	647	679	645
84	Developing Economy	Angola	181	412	1114	1814	879	2146	1643	3505	1449	6794	9064	9796	16581	11672
85	Developing Economy	Botswana	71	100	90	112	57	31	405	418	391	279	486	495	528	579
86	Developing Economy	Lesotho	286	269	262	136	31	28	27	42	53	57	89	97	56	48
87	Developing Economy	Malawi	44	22	70	60	26	19	6	4	-1	52	72	92	9	60
88	Developing Economy	Mozambique	73	64	213	384	139	255	155	337	245	108	154	427	592	893
89	Developing Economy	Namibia	129	84	77	114	9	26	8	149	226	348	387	733	720	516
90	Developing Economy	South Africa	818	3 817	561	1376	888	6789	757	734	799	6647	-527	5695	9006	5365
91	Developing Economy	Swaziland	-62	-48	51	-4	91	51	47	-61	60	-46	121	37	106	66
92	Developing Economy	Zambia	117	207	198	163	122	72	82	172	239	357	616	1324	939	695



No.	Economy Type	Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
93	Developing Economy	Zimbabwe	81	135	444	59	23	4	26	4	9	103	40	69	52	105
94	Developing Economy	Argentina	6 522	8 755	6 526	23153	10418	2166	785	8778	67601	5265	5537	6473	9726	4017
95	Developing Economy	Bolivia, Plurinational State of	426	879	957	1016	822	832	1044	1026	5188	-288	281	366	513	423
96	Developing Economy	Brazil	10 496	18 743	28 480	31397	32779	22457	16590	37243	103015	15066	18822	34585	45058	25949
97	Developing Economy	Chile	4 633	5 219	4 638	9221	4860	4200	1888	10067	45753	6984	7298	12534	15150	12874
98	Developing Economy	Colombia	3 112	5 639	2 907	1396	2395	2525	2115	3500	10991	10252	6656	9049	10596	7137
99	Developing Economy	Ecuador	491	695	831	636	720	1330	1275	1626	7081	494	271	194	1006	319
100	Developing Economy	Falkland Islands (Malvinas)					0	0	0	0	58	0	0	0	0	0
101	Developing Economy	Guyana	93	53	47	48	67	56	44	45	756	77	102	152	178	144
102	Developing Economy	Paraguay	246	270	423	306	104	85	11	417	1325	54	173	185	320	209
103	Developing Economy	Peru	3 226	1 702	1 930	2068	810	1144	2156	1330	11062	2579	3467	5491	6924	5576
104	Developing Economy	Suriname	7	12	10	5	-97	-27	-74	0	0	348	323	179	209	151
105	Developing Economy	Uruguay	137	126	164	200	273	320	175	671	2088	847	1493	1329	2106	1593
106	Developing Economy	Venezuela, Bolivarian Republic of	2183	5536	4435	2607	4701	3683	779	3865	35480	2589	-508	1008	349	-3105
107	Developing Economy	Belize	17	12	18	3	30	60	25	89	300	127	109	143	170	109
108	Developing Economy	Costa Rica	427	483	559	450	409	454	662	1324	2709	861	1469	1896	2078	1347
109	Developing Economy	El Salvador	-5	11	872	231	173	279	208	212	1973	511	241	1551	903	366
110	Developing Economy	Guatemala	77	85	673	147	230	456	110	1734	3420	508	592	745	754	600
111	Developing Economy	Honduras	90	128	99	230	282	193	176	293	1392	600	669	928	1006	523
112	Developing Economy	Mexico	9 186	12 831	10 238	11 233	16586	26776	14745	22 424	97 170	24122	20052	29734	26295	15334
113	Developing Economy	Nicaragua	97	173	184	300	267	150	204	2198	6775	241	287	382	626	434
114	Developing Economy	Panama	410	1256	1206	22	603	405	78	2198	6775	962	2498	1777	2196	1773
115	Developing Economy	Anguilla					38	33	37	11	234	117	142	119	99	46
116	Developing Economy	Antigua and Barbuda	19	24	26	12	28	44	48	290	644	221	359	338	174	118
117	Developing Economy	Aruba	84	196	84	394	117	-261	289	145	469	101	565	-127	200	73
118	Developing Economy	Bahamas	88	210	147	145	250	101	200	586	1606	912	1159	1164	1103	657
119	Developing Economy	Barbados	13	15	16	15	19	19	17	171	308	128	245	338	267	160
120	Developing Economy	British Virgin Islands	510	500	200	400	830	222	132	126	32093	-9 090	7549	31443	51742	42100
121	Developing Economy	Cayman Islands	410	2 000	3 500	1 800	6922	4356	2509	1749	24973	10221	14963	22969	18749	17878
122	Developing Economy	Cuba	12	13	30	15	-10	4	3	2	74	16	26	64	24	24
123	Developing Economy	Dominica	18	21	9	13	11	12	14	66	282	19	26	40	57	41
124	Developing Economy	Dominican Republic	97	421	700	353	953	1079	917	572	1673	1123	1085	1667	2870	2165
125	Developing Economy	Grenada	19	35	51	43	37	59	58	70	364	70	90	152	142	103
126	Developing Economy	Haiti	4	4	11	30	13	4	6	149	95	26	160	75	30	38
127	Developing Economy	Jamaica	184	203	369	520	469	614	479	790	3317	682	882	867	1437	541
128	Developing Economy	Montserrat					3	1	2	40	76	1	4	7	13	3
129	Developing Economy	Netherlands Antillesb	11	103	151	70	-63	-5	8	408	78	42	-22	234	266	117
130	Developing Economy	Puerto Rico					0	0	0	0	0	36	0	0	0	0
131	Developing Economy	Saint Kitts and Nevis	35	20	34	77	96	88	82	160	505	93	110	134	178	104
132	Developing Economy	Saint Lucia	17	47	84	87	55	22	31	316	825	78	234	272	161	146
133	Developing Economy	Saint Vincent and the Grenadines	43	55	28	25	29	21	32	48	500	40	109	131	159	106
134	Developing Economy	Trinidad and Tobago	355	1000	732	633	680	835	791	2093	7008	940	883	830	2801	709
135	Developing Economy	Turks and Caicos Islands					0	0	0	2	4	108	58	97	99	95
136	Developing Economy	Bahrain	2048	329	181	300	364	81	217	552	5906	1049	2915	1756	1794	257
137	Developing Economy	Iraq					-3	-6	-2	0	0	515	383	972	1856	1452
138	Developing Economy	Jordan	16	361	310	151	787	100	56	615	2284	1984	3544	2622	2829	2430
139	Developing Economy	Kuwait	347	20	59	72	16	-147	7	37	698	234	121	112	-6	1114
140	Developing Economy	Lebanon	80	150	200	250	298	249	257	53	4988	3321	3132	3376	4333	4804
141	Developing Economy	Oman	75	53	106	70	16	83	23	1706	2506	1538	1588	3431	2528	1471
142	Developing Economy	Palestinian Territory					62	20	0	0	932	47	19	28	52	265
143	Developing Economy	Qatar	35	55	70	50	252	296	631	63	1912	2500	3500	4700	3779	8125
144	Developing Economy	Saudi Arabia	-1129	3044	4289	4800	-1884	20	-615	21894	17577	12097	17140	22821	38151	32100
145	Developing Economy	Syrian Arab Republic	89	80	80	75	270	110	115	374	1699	583	659	1242	1467	1434
146	Developing Economy	Turkey	722	805	940	783	982	3266	1038	11194	19209	10031	20185	22047	19504	8411

No.	Economy Type	Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
147	Developing Economy	United Arab Emirates	130	100	100	160	-515	1184	834	751	1061	10900	12806	14187	13724	4003
148	Developing Economy	Yemen	-60	-139	-210	-150	6	136	102	180	1336	-302	1121	917	1555	129
149	Developing Economy	China	40 180	44 236	43 751	40400	40715	46878	52743	20691	193348	72406	72715	83521	108312	95000
150	Developing Economy	Hong Kong, China	10 460	11 368	14 776	23 068	61939	23775	9682	45073	455469	33625	45060	54341	59621	52394
151	Developing Economy	Korea, Democratic People's Republic of	0	0	0	0	5	-4	-15	572	1046	50	-105	67	44	2
152	Developing Economy	Korea, Republic of	2 308	3 088	5 215	10340	8572	3683	2941	5186	37474	7055	4881	2628	8409	7501
153	Developing Economy	Macao, China	6	3	0	1	-1	160	382	2809	2801	1240	1608	2305	2591	2770
154	Developing Economy	Mongolia	16	25	19	30	54	43	78	0	182	188	245	373	845	624
155	Developing Economy	Taiwan Province of China	1 864	2 248	222	2926	4928	4109	1445	9735	17581	1625	7424	7769	5432	2805
156	Developing Economy	Afghanistan	0	0	0	0	0	1	1	12	17	271	238	243	300	185
157	Developing Economy	Bangladesh	14	141	308	150	280	79	52	324	2162	845	792	666	1086	700
158	Developing Economy	Bhutan					0	0	0	2	12	9	6	78	28	15
159	Developing Economy	India	2 426	3 577	2 635	2168	2319	3403	3449	1657	17517	7622	20328	25350	42546	35649
160	Developing Economy	Iran, Islamic Republic of	26	53	24	85	39	55	276	2039	2474	3136	1647	1670	1615	3016
161	Developing Economy	Maldives	9	11	12	10	13	12	12	25	119	53	64	91	135	112
162	Developing Economy	Nepal	19	23	12	132	0	21	2	12	72	2	-7	6	1	39
163	Developing Economy	Pakistan	918	713	507	531	305	385	823	1892	6919	2201	4273	5590	5438	2338
164	Developing Economy	Sri Lanka	133	435	206	202	175	82	197	679	1596	272	480	603	752	404
165	Developing Economy	Cambodia	294	168	121	135	149	149	145	38	1580	381	483	867	815	539
166	Developing Economy	Indonesia	6 194	4 677	-356	-3270	-4550	-2977	145	8855	24780	8336	4914	6928	9318	4877
167	Developing Economy	Lao People's Democratic Republic	128	86	45	79	34	24	25	13	556	28	187	324	228	319
168	Developing Economy	Malaysia	7296	6513	2700	3532	3788	554	3203	10318	52747	4065	6060	8595	7172	1430
169	Developing Economy	Myanmar	310	387	315	300	208	192	191	281	3865	236	428	715	976	579
170	Developing Economy	Philippines	1 520	1 249	1752	737	1345	982	1792	3268	12810	1854	2921	2916	1544	1963
171	Developing Economy	Singapore	8 984	8 085	5 493	6984	17217	15038	5730	30468	112633	15460	29348	37033	8588	15279
172	Developing Economy	Thailand	2 405	3 732	7 449	6078	3350	3813	1068	8242	29915	8067	9517	11355	8448	4976
173	Developing Economy	Timor-Leste					0	0	0	0	72	1	8	9	40	50
174	Developing Economy	Viet Nam	2 455	2 745	1 972	1609	1289	1300	1200	1650	20596	2021	2400	6739	9579	7600
175	Developing Economy	Cook Islands								14	34	1	3	0	1	1
176	Developing Economy	Fiji	2	16	76	30	-16	42	26	284	388	160	370	376	354	114
177	Developing Economy	French Polynesia								69	139	8	31	58	14	10
178	Developing Economy	Kiribati	0	1	0	0	1	1	1	0	69	5	1	1	3	3
179	Developing Economy	Marshall Islands								5	513	7	6	12	6	8
180	Developing Economy	Micronesia, Federated States of										0	1	17	6	8
181	Developing Economy	Nauru								2	7	1	0	1	1	1
182	Developing Economy	New Caledonia	0	10	5	3	22	-1	2	70	129	-7	749	417	1673	1146
183	Developing Economy	Niue								0	8	-1	0	0	0	0
184	Developing Economy	Palau								0	97	1	1	3	2	2
185	Developing Economy	Papua New Guinea	111	29	110	170	96	63	21	1582	2007	34	-7	96	-30	423
186	Developing Economy	Samoa	4	4	3	2	-2	1	0	9	53	-4	3	3	17	1
187	Developing Economy	Solomon Islands	6	34	9	15	1	-12	-1	70	150	19	34	64	95	120
188	Developing Economy	Tokelau								0	1	0	0	0	0	0
189	Developing Economy	Tonga	2	3	2	2	5	1	2	1	21	17	10	28	6	15
190	Developing Economy	Tuvalu					1	1	26	0	0	0	5	0	2	2
191	Developing Economy	Vanuatu	33	30	27	26	20	18	15	0	0	28	72	57	44	32
192	Developing Economy	Wallis and Futuna Islands								0	0	0	1	1	1	1
193	Developing Economy	Albania	90	48	45	41	143	207	135	178	332	264	325	656	988	979
194	Developing Economy	Bosnia and Herzegovina	-2	1	10	10	147	130	265	381	606	613	766	2080	932	246
195	Developing Economy	Croatia	506	517	893	1382	1089	1561	1124	2133	1262	1825	3473	5035	6179	2911
196	Developing Economy	Montenegro					12	83	238	0	0	501	622	934	960	1527
197	Developing Economy	Serbia					13	82	237	1360	966	1577	4256	3439	2955	1959
198	Developing Economy	The FYR of Macedonia	12	16	118	22	175	442	78	95	157	96	433	693	586	201
199	Developing Economy	Armenia	18	52	232	130	124	88	150	157	217	239	453	699	935	778
200	Developing Economy	Azerbaijan	627	1115	1023	691	130	227	1392	3285	3556	1680	-584	-4749	14	473

No.	Economy Type	Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
201	Developing Economy	Belarus	73	200	149	225	119	96	247	172	164	305	354	1805	2180	1886
202	Developing Economy	Georgia	45	111	265	96	131	110	165	340	499	453	1170	1750	1564	658
203	Developing Economy	Kazakhstan	1137	1321	1152	1587	1283	2835	2590	2092	4113	1971	6278	11119	14322	13771
204	Developing Economy	Kyrgyzstan	47	83	109	35	-2	5	5	46	175	43	182	209	377	190
205	Developing Economy	Moldova, Republic of	24	76	81	34	134	146	117	78	154	191	240	534	713	128
206	Developing Economy	Russian Federation	2 479	6 638	2 761	2861	2714	2469	3461	7958	15444	12886	29701	55073	75002	36500
207	Developing Economy	Tajikistan	16	4	30	29	24	9	36	14	272	43	339	360	376	16
208	Developing Economy	Turkmenistan	108	108	130	80	126	170	100	100	-15	418	731	856	1277	3867
209	Developing Economy	Ukraine	521	624	743	496	595	792	693	1424	1715	7808	5604	9891	10913	4816
210	Developing Economy	Uzbekistan	55	285	200	113	75	83	65	70	1	192	174	705	711	711

\* Belgium & Luxembourg were report as one country from 1996 - 1999: I divided the figure by two to get inflows for each country

\*\* economy type categorisation based on the 2011 World Investment Report

Annexure C: GDP per country (in current US \$) for the period 1996 - 2009

Country Name	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Afghanistan						2 461 666 314.78	4 338 907 578.66	4 766 127 271.58	5 704 202 650.64	6 814 753 580.54	7 721 931 671.42	9 739 317 182.88	11 757 405 532.51	
Albania	3 013 217 852.57	2 196 223 713.81	2 727 745 453.08	3 434 402 453.41	3 686 649 387.03	4 091 020 249.37	4 449 373 455.57	5 652 325 081.60	7 464 446 950.03	8 376 483 740.48	9 132 562 332.43	10 704 660 232.43	12 968 653 524.78	12 044 881 925.41
Algeria	46 171 861 308.28	48 177 861 890.89	48 187 780 126.18	48 660 613 515.07	54 700 508 957.37	55 180 990 395.74	57 053 038 888.24	6 018 606 941.40	85 013 944 727.06	102 139 100 115.45	117 169 320 524.24	153 805 556 324.92	170 989 269 622.04	140 576 526 509.70
American Samoa														
Andorra	1 224 023 469.07	1 180 646 037.01	1 211 953 953.56	1 239 840 265.63	1 239 840 265.63	1 260 740 246.44	1 456 198 796.29	1 681 978 475.28	2 322 163 262.56	2 539 759 285.93	2 823 505 852.62	3 245 411 583.72	3 712 034 266.51	
Angola	7 526 446 605.52	7 675 412 589.46	6 445 192 203.75	6 154 480 386.74	9 129 180 960.52	8 936 023 211.53	11 431 738 445.42	13 956 268 299.11	19 775 218 958.00	30 632 364 953.75	45 163 239 832.43	60 451 994 340.40	84 178 512 502.43	75 490 890 278.34
Antigua and Barbuda	54 074 082.30	57 951 829.76	62 037 014.23	65 811 840.34	66 474 062.34	66 474 062.34	713 533 320.73	753 107 394.11	815 396 281.11	866 818 503.21	1 010 881 463.63	1 155 366 399.60	1 203 314 811.81	1 097 688 888.89
Argentina	272 149 757 958.00	292 838 888 192.00	298 948 362 240.00	298 948 362 240.00	283 523 022 848.00	284 203 745 280.00	268 666 115 264.00	102 040 334 258.58	129 597 103 033.81	153 129 481 873.14	183 193 480 940.74	214 066 231 199.56	260 768 703 249.43	326 676 673 164.78
Armenia	1 596 969 913.19	1 639 492 424.38	1 839 726 437.36	1 845 482 181.49	1 911 665 665.39	2 118 467 913.38	2 118 467 913.38	2 376 335 048.40	2 807 061 008.69	3 576 615 240.42	4 900 436 758.50	6 206 427 478.95	7 107 881 888.89	8 051 111 814.58
Australia	1 379 888 869.04	1 531 863 679.53	1 665 363 126.18	1 722 905 064.69	1 858 659 293.19	1 898 062 757.74	1 898 062 757.74	2 098 688 458.88	2 569 888 458.88	3 166 666 666.67	3 833 333 333.33	4 500 000 000.00	5 166 666 666.67	5 833 333 333.33
Austria	403 660 849 772.98	437 674 127 406.48	401 236 868 673.95	390 208 672 766.01	416 923 318 470.14	416 923 318 470.14	380 427 718 293.05	397 230 434 234.15	468 468 841 001.75	615 275 990 433.03	696 033 679 145.99	749 316 412 099.43	856 816 361 786.64	1 039 415 095 376.83
Australia	234 143 004 938.91	206 878 199 346.04	212 150 714 762.12	210 234 102 192.74	202 954 943 524.15	202 954 943 524.15	195 281 483 477.77	195 281 483 477.77	289 038 612 932.43	322 340 100 433.93	322 340 100 433.93	372 291 930 780.79	416 670 756 947.77	381 078 317 703.92
Azerbaijan	3 176 749 593.12	3 962 710 163.11	4 446 396 217.63	5 581 222 442.46	5 272 617 396.05	5 707 618 246.57	6 236 024 951.20	7 275 766 111.24	8 680 511 918.49	13 245 421 880.83	20 982 270 733.25	33 049 380 917.70	46 258 154 886.60	43 019 407 812.89
Bahamas, The	3 609 000 000.00	4 204 761 925.22	4 714 138 518.85	5 528 200 494.70	5 658 890 129.36	5 658 890 129.36	5 912 310 096.17	5 942 400 639.84	6 031 700 548.47	6 508 774 909.11	6 875 630 000.00	7 293 903 886.00	7 927 192 101.00	
Bahrain	5 101 865 655.74	6 349 202 800.38	6 183 941 092.32	6 621 186 419.42	7 970 690 894.22	7 528 934 205.58	8 491 183 200.55	9 747 599 583.42	11 235 671 061.44	13 460 189 289.70	15 854 942 950.61	18 473 097 688.77	21 902 892 583.96	20 598 899 954.29
Bangladesh	40 666 015 641.06	42 218 798 337.71	44 091 754 148.18	45 694 072 379.37	45 694 072 379.37	47 124 925 462.13	46 987 842 846.55	47 571 110 071.39	51 913 661 485.32	56 960 040 012.23	60 277 560 975.61	64 901 116 736.15	68 415 421 372.72	79 554 506 677.74
Barbados	1 892 896 516.74	2 192 363 132.96	2 364 540 276.61	2 468 492 932.74	2 558 850 008.22	2 558 850 008.22	2 754 187 133.61	2 476 105 823.73	2 694 879 717.51	2 824 000 000.00	3 005 000 000.00	3 190 900 000.00	3 670 215 312.50	3 955 210 912.50
Belarus	14 756 861 538.46	14 128 412 417.19	15 222 014 828.30	12 138 485 328.63	12 736 856 485.11	12 354 820 143.88	14 594 925 392.97	17 825 634 034.54	23 141 587 717.76	30 210 091 836.83	36 961 918 588.74	45 275 711 995.83	60 763 483 146.07	47 271 267 252.20
Belgium	275 433 224 755.70	249 438 301 312.23	255 267 837 297.18	254 175 367 568.72	232 371 475 953.92	232 154 809 843.40	252 452 475 019.82	311 187 836 517.71	361 109 559 019.82	376 616 674 128.24	399 113 833 060.90	458 619 726 868.85	505 373 711 699.78	491 161 072 622.20
Belize	64 271 333.36	65 418 121.11	68 827 472.72	73 207 693.77	83 202 464.65	84 760 755.40	93 276 403.18	98 199 088.31	1 056 306 706.29	1 114 874 607.78	1 211 104 430.03	1 267 751 655.94	1 358 700 000.00	1 351 500 000.00
Benin	2 087 070 080.23	2 156 363 028.13	2 334 564 287.17	2 387 363 924.06	2 254 838 684.51	2 371 785 987.12	2 807 353 230.89	3 357 983 482.45	4 047 438 048.47	4 287 463 884.07	4 738 839 086.749	5 546 177 809.03	6 682 744 115.64	6 638 062 115.93
Bermuda	2 695 390 000.00	2 912 827 000.00	3 130 748 000.00	3 324 433 000.00	3 507 864 000.00	3 660 790 000.00	3 919 849 000.00	4 168 843 000.00	4 464 176 000.00	4 846 147 000.00	5 280 000 000.00	5 387 377 000.00	6 067 898 000.00	6 715 300 000.00
Bhutan	300 967 232.39	342 864 384.23	355 712 835.24	396 644 740.65	427 808 817.31	455 709 385.90	507 270 767.64	610 970 025.74	702 744 043.34	818 869 145.81	897 731 525.05	1 136 077 342.23	1 257 625 054.12	1 264 816 920.36
Bolivia	7 396 952 017.93	7 925 733 799.38	8 497 499 275.78	8 497 499 275.78	8 397 858 205.83	8 141 513 227.14	7 905 485 150.07	8 082 396 474.24	8 773 451 753.44	9 549 196 301.70	10 399 916 301.70	11 297 465 951.96	16 675 015 771.12	13 399 992 191.23
Bosnia and Herzegovina	2 786 045 391.91	3 671 816 537.76	4 116 699 576.18	4 685 729 742.92	5 038 990 554.80	5 038 990 554.80	6 651 226 179.02	10 022 840 634.92	10 765 867 749.73	10 765 867 749.73	12 254 412 802.26	15 226 731 980.41	18 500 599 161.17	17 042 400 579.80
Botswana	8 400 126 339.31	5 179 680 522.00	5 190 543 764.48	5 866 964 491.10	5 632 391 130.03	6 743 896 672.57	6 091 305 296.51	8 086 707 335.42	10 048 660 849.75	10 255 448 712.79	11 255 175 568.25	12 376 435 509.55	13 473 345 712.55	11 473 685 551.29
Brazil	893 682 246 564.43	871 199 987 487.79	843 836 501 664.43	843 836 501 664.43	858 863 101 444.69	644 701 831 001.39	353 582 378 388.19	506 221 238 974.04	552 469 288 267.79	663 760 000 000.00	882 185 291 700.90	1 089 911 270 411.76	1 365 982 651 542.37	1 594 480 675 023.96
Brunai Darussalam	8 115 602 836.88	5 197 332 974.14	4 051 147 227.53	4 600 000 000.00	6 001 153 317.87	5 860 100 584.36	5 843 329 101.98	6 557 333 067.39	7 872 333 197.25	9 531 402 829.85	11 470 703 002.08	12 247 627 894.63	14 393 099 068.59	10 732 345 033.69
Bulgaria	9 890 314 314.92	10 053 468 883.36	11 060 786 260.89	13 428 364 648.11	12 903 546 576.09	13 660 612.00	15 979 194 407.51	20 638 176 666.37	25 283 228 755.22	28 895 033 539.80	31 209 188 275.28	51 824 867 625.65	46 766 514 012.51	46 766 514 012.51
Burkina Faso	2 586 563 406.93	2 447 666 540.08	2 804 910 748.37	3 041 661 262.30	2 610 945 548.70	2 612 839 821.17	3 289 645 662.49	4 270 385 658.53	5 108 983 826.56	5 427 488 071.31	5 771 194 544.67	6 769 986 320.81	8 045 823 005.29	8 140 839 745.95
Burundi	869 033 856.32	897 823 273.37	893 702 806.08	808 077 223.37	709 062 400.27	709 062 400.27	628 096 157.26	595 020 974.04	664 493 918.67	679 785 001.00	719 885 000.00	799 785 001.00	1 168 900 121.00	1 330 790 159.56
Cambodia	3 506 695 722.70	3 443 413 331.64	3 120 425 502.37	3 572 242 477.23	3 654 031 716.28	3 979 813 387.84	4 284 028 138.35	4 658 246 906.86	5 337 833 255.95	6 239 046 162.11	7 278 424 518.57	8 639 184 917.04	10 351 829 065.60	10 451 584 204.11
Cameroon	9 732 338 099.34	9 840 560 361.48	9 639 642 599.84	10 046 456 218.36	10 075 040 310.76	9 598 224 208.27	10 870 770 088.64	13 611 809 491.86	15 755 327 312.01	16 587 863 738.17	17 956 985 510.81	20 685 921 877.06	21 735 512 829.10	21 285 977 471.13
Canada	613 764 625.95	637 536 472 627.49	616 766 237 112.62	661 246 633 699.27	724 918 660 682.78	742 918 571 001.01	734 661 951 188.43	865 873 242 452.36	992 226 668 149.61	1 133 799 085 475.67	1 278 610 846 644.80	1 424 065 742 257.91	1 499 107 812 265.71	1 336 067 710 615.00
Cape Verde	502 176 380.16	506 433 841.30	539 517 920.09	583 442 832.02	531 386 031.00	550 199 629.95	616 209 203.88	797 314 309.69	924 644 653.09	999 332 627.44	1 107 887 282.28	1 331 215 013.59	1 550 552 391.54	1 586 929 006.00
Cayman Islands		1 012 444 041.02												
Central African Republic	1 070 076 555.21	1 003 264 949.12	1 047 204 550.34	1 053 323 696.61	959 413 050.59	967 526 420.21	1 041 975 238.48	1 139 211 629.21	1 269 621 728.75	1 350 047 284.99	1 476 870 078.01	1 696 340 453.23	1 982 983 854.76	1 980 151 889.30
Chad	1 667 352 991.07	1 544 687 914.87	1 744 615 916.46	1 744 615 916.46	1 548 050 963.93	1 729 344 295.52	1 729 344 295.52	1 916 667 938.42	2 144 619 334.44	2 501 038 221.08	2 999 000 000.00	3 546 000 000.00	4 141 000 000.00	4 638 983 050.83
Chile	1 898 000 000.00	2 192 827 000.00	3 130 748 000.00	3 324 433 000.00	3 507 864 000.00	3 660 790 000.00	3 919 849 000.0							

Country Name	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
India	388 343 910 827 92	410 915 167 039 78	416 252 442 223 14	450 476 199 267 53	460 182 011 503 10	477 848 859 036 57	507 189 954 386 40	599 461 389 810 15	721 573 248 762 03	834 035 801 005 14	951 339 358 745 93	1 242 126 253 335 13	1 213 782 569 748 83	1 380 640 843 779 05
Indonesia	221 260 871 443 35	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79	215 748 544 646 79
Iran, Islamic Rep.	110 573 439 131 01	105 298 720 965 10	102 661 888 397 34	104 656 040 167 70	101 286 514 977 46	115 438 386 681 93	116 420 831 373 68	135 409 681 532 11	163 226 579 21 20	192 014 940 324 05	222 880 533 511 29	286 057 933 325 52	383 187 289 004 76	331 074 137 186 14
Ireland	10 113 863 358 26	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91	10 468 730 246 91
Israel	7 025 237 136 32	81 120 025 000 00	88 007 645 411 01	96 292 879 615 38	102 777 745 866 74	104 819 388 536 91	122 777 745 866 74	158 022 111 467 27	185 436 542 160 02	201 852 365 461 62	222 473 595 430 242	259 189 260 412	263 650 850 514 25	221 778 533 696 93
Italy of Man	10 023 086 918 63	11 809 919 719 41	13 584 249 719 01	15 368 456 656 85	1 563 667 799 22	1 614 595 290 92	1 897 606 791 43	2 264 911 806 90	2 758 117 365 05	2 915 710 378 28	3 437 450 711 55	4 075 664 785 25	4 715 664 785 25	5 454 843 011 95
Japan	105 370 179 506 03	108 889 866 534 23	110 790 638 711 84	110 790 638 711 84	124 749 211 298 41	123 059 811 586 89	111 010 25 792 552	118 903 844 887 03	126 842 927 254 61	134 246 880 570 41	145 943 615 552 05	166 989 905 900 54	182 101 449 275 36	195 391 755 146 1
Jordan	1 259 602 980 208 66	1 192 322 069 12 31	1 217 086 529 497 04	1 200 822 526 74 96	1 097 344 112 195 87	1 114 584 481 43 77	2 128 921 24 782 56	1 507 171 243 792 37	1 727 825 472 522 22	1 777 693 635 638 76	1 863 380 936 371 36	2 116 201 719 593 01	2 296 497 394 246 16	2 111 617 906 965 30
Jamaica	6 527 302 707 85	7 432 222 628 83	8 742 153 397 26	8 830 909 008 27	9 008 629 79 41	9 107 55 930 21	9 676 893 928 79	10 134 991 341 82	10 134 991 341 82	11 151 727 459 34	11 989 334 128 57	12 893 782 820 11	14 121 426 276 67	12 651 606 967 03
Japan	6 624 54 385 824 12	4 261 842 060 299 65	3 857 027 943 100 85	4 368 734 790 196 90	4 667 448 302 100 39	4 905 848 283 985 13	3 918 333 087 887 20	4 229 906 852 937 24	4 605 920 900 612 79	4 552 200 185 087 74	4 362 589 532 154 19	4 377 948 649 01 22	4 879 861 453 767 94	5 032 982 339 381 15
Jordan	6 298 490 840 95	7 248 048 122 68	8 463 892 909 23	8 860 439 920 00	9 084 239 920 00	9 584 232 160 00	9 584 232 160 00	10 197 756 100 00	10 197 756 100 00	11 588 665 467 81	15 645 466 528 10	17 765 381 859 82	22 696 902 203 59	25 092 339 119 21
Kazakhstan	21 035 357 832 82	22 165 932 062 97	22 135 245 413 23	16 870 817 134 78	18 291 960 619 14	22 158 629 129 56	24 636 598 580 12	30 833 621 40 01	43 151 647 002 61	57 123 671 733 90	81 001 864 915 21	104 853 480 212 16	134 441 571 813 62	115 306 081 355 93
Kenya	12 045 836 991 71	13 115 729 422 01	14 092 238 424 71	12 895 602 251 69	12 661 78 914 24	12 886 961 85 43	13 149 26 398 53	14 940 634 448 15	16 096 190 637 49	18 737 922 545 46	22 500 230 913 45	27 173 670 133 73	30 031 427 402 56	29 375 775 193 80
Kiribati	67 866 700 01	69 591 989 76	67 096 993 69	70 595 807 35	68 239 10 70	63 810 762 05	74 173 806 51	87 133 283 95	102 405 500 21	108 938 510 70	127 854 317 32	138 006 609 31	128 006 027 81	
Korea, Dem. Rep.	557 643 607 433 65	516 282 942 11 19	345 432 412 375 84	445 399 303 511 05	533 384 027 728 66	504 585 783 003 74	575 928 900 990 49	643 762 388 701 00	721 975 255 823 70	844 863 004 335 43	951 773 478 984 91	1 049 235 951 186 97	931 402 204 981 63	834 060 441 840 98
Kuwait	1 849 196 082 06	2 702 427 046 94	3 355 033 631 89	3 639 935 347 51	3 743 116 980 19	3 639 935 347 51	3 743 116 980 19	3 639 935 347 51	3 743 116 980 19	3 639 935 347 51	3 743 116 980 19	3 639 935 347 51	3 743 116 980 19	3 639 935 347 51
Kyrgyz Republic	31 482 937 200 88	30 360 433 059 97	25 946 185 993 55	30 130 888 963 68	37 718 011 468 57	34 890 773 740 22	38 138 801 497 25	47 875 817 662 45	59 440 511 981 76	80 797 945 205 48	104 561 153 806 39	114 721 683 982 92	148 782 689 790 76	109 462 798 286 13
Laos	1 875 671 510 57	1 673 011 884 41	1 280 177 847 19	1 454 340 642 02	1 755 155 219 37	1 768 619 058 35	1 829 660 932 68	2 148 830 163 56	2 507 094 677 57	2 738 209 638 91	4 497 316 141 92	4 262 812 788 55	4 549 625 802 65	6 095 274 800 07
Latvia	5 585 292 782 57	6 136 234 179 75	6 618 957 681 24	7 288 542 272 50	7 833 068 425 39	8 313 047 743 57	9 314 784 080 03	11 186 450 670 33	13 761 569 544 99	16 041 846 426 27	19 935 046 397 122	22 865 486 720 47	25 875 367 720 47	26 075 741 250 00
Lebanon	13 690 217 120 56	15 751 287 489 44	17 247 179 026 32	17 391 056 436 81	17 260 364 842 45	17 649 751 243 78	19 152 238 805 97	20 082 198 739 64	21 838 805 970 15	22 437 147 595 36	25 066 716 417 91	30 079 601 990 05	34 924 709 784 21	
Lesotho	796 081 272 54	837 654 100 18	800 117 786 22	783 167 363 67	745 832 990 09	686 484 199 49	638 601 203 29	547 163 200 29	454 120 116 55	354 859 672 29	258 171 533 67	1 600 614 922 77	1 720 262 875 28	
Liberia	159 400 900 00	295 900 000 00	393 600 012 47	441 800 017 77	569 900 012 47	643 569 012 47	559 200 012 47	410 200 003 54	451 459 999 916	530 200 009 24	611 859 617 24	724 932 179 20	879 454 612 39	
Libya	2 784 615 384 62	30 700 897 874 87	27 251 534 529 59	30 464 399 895 65	33 896 600 870 77	24 240 321 951 54	19 842 519 685 04	24 062 500 000 00	33 884 615 384 62	44 000 000 000 00	56 484 375 000 00	71 803 276 688 52	93 167 701 863 35	62 360 446 570 57
Liechtenstein	2 298 390 584 38	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66	2 479 698 578 66
Lithuania	8 426 600 000 00	10 128 700 000 00	11 254 050 000 00	10 197 375 000 00	11 434 200 000 00	12 159 225 000 00	14 163 949 141 90	18 608 709 856 58	22 551 543 054 46	25 962 254 180 80	30 088 510 798 10	47 252 926 428 67	36 846 183 172 30	
Luxembourg	18 516 889 250 81	18 516 889 250 81	20 269 578 035 75	20 269 578 035 75	20 269 578 035 75	20 269 578 035 75	20 269 578 035 75	20 269 578 035 75	20 269 578 035 75	20 269 578 035 75	20 269 578 035 75	20 269 578 035 75	20 269 578 035 75	20 269 578 035 75
Macao S.A.R., China	6 398 039 390 44	6 513 395 734 33	6 186 444 076 80	5 956 989 316 86	6 101 795 437 27	6 187 141 345 62	6 823 847 934 87	7 974 786 814 94	10 250 791 553 44	11 507 945 226 00	14 211 125 553 03	18 596 613 700 93	21 564 640 135 86	21 736 141 478 50
Macedonia, FYR	4 422 539 648 94	3 735 112 200 73	3 571 043 201 51	3 673 288 165 67	3 586 883 988 96	3 436 961 384 81	3 791 306 76 56	4 629 520 042 41	5 368 441 930 36	5 814 726 241 34	6 373 133 830 34	8 359 625 620 39	9 834 029 812 98	9 275 517 779 80
Madagascar	6 394 890 762 54	3 545 868 958 21	3 738 620 505 35	3 717 416 630 39	3 877 575 177 26	4 529 469 041 24	4 397 127 092 24	4 363 950 630 41	5 938 577 100 25	5 038 577 100 25	5 038 577 100 25	5 038 577 100 25	5 038 577 100 25	5 038 577 100 25
Malawi	2 281 034 088 69	2 663 348 222 11	1 750 585 419 50	1 971 521 700 01	1 743 506 520 29	1 716 502 772 12	2 665 159 241 85	2 424 655 975 58	2 625 187 246 93	2 755 429 810 91	3 116 942 711 16	3 458 333 162 70	4 074 143 954 30	4 727 486 010 93
Malaysia	100 168 847 815 19	72 175 310 308 04	93 789 738 019 01	92 783 948 532 71	100 845 527 581 23	102 749 475 649 61	122 749 475 649 61	128 749 475 649 61	137 848 284 960 42	156 523 432 242 51	186 642 151 167 79	221 828 443 113 77	199 090 897 727 27	
Maldives	450 382 327 95	508 233 603 23	540 006 400 17	589 239 757 01	624 337 143 59	625 066 369 28	640 703 125 00	692 421 875 00	776 484 375 00	759 625 000 00	915 390 625 00	1 260 234 375 00	1 318 671 875 00	
Mali	2 619 098 932 87	2 475 182 970 21	2 596 836 146 95	2 570 405 031 06	2 422 469 641 47	2 629 733 715 67	1 340 833 644 19	1 462 242 742 86	1 404 185 850 19	1 505 318 991 42	1 866 095 675 49	2 146 280 975 07	2 738 000 982 52	4 964 607 644 28
Nauru	3 671 847 264 62	3 613 453 447 38	3 809 843 648 75	3 901 057 240 70	3 893 057 240 70	3 850 924 288 63	4 034 073 168 22	4 994 073 168 22	5 670 279 338 68	5 749 853 526 50	6 462 031 685 40	7 547 856 387 87	8 143 230 926 27	7 989 423 157 06
Marshall Islands	97 037 000 00	92 184 200 00	95 657 000 00	95 360 000 00	107 573 000 00	110 480 000 00	119 286 000 00	133 300 000 00	133 300 000 00	133 300 000 00	146 000 000 00	151 000 000 00	152 000 000 00	152 000 000 00
Mauritania	1 442 598 429 57	1 401 946 882 22	1 242 433 071 76	1 194 629 187 74	1 081 168 277 51	1 121 565 583 39	1 285 179 087 40	1 547 861 407 11	1 857 837 742 16	2 699 180 938 20	3 588 611 731 81	4 027 018 188 62	4 885 125 549 40	
Mauritius	4 421 952 121 49	4 187 375 687 64	4 169 672 974 23	4 291 171 395 71	4 562 362 887 64	4 536 544 699 06	5 609 931 153 04	6 385 579 077 78	6 283 845 864 32	6 507 112 279 85	7 791 974 538 11	9 641 036 888 45	8 865 125 549 40	



Country Name	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
South Africa	143 732 002 576.51	148 814 150 953.26	134 295 556 521.53	133 183 580 945.09	132 877 648 090.74	118 478 978 977.56	111 100 827 740.94	168 219 302 326.32	219 092 937 439.46	247 064 310 285.63	261 007 039 378.85	286 169 133 891.57	275 278 721 835.79	281 754 441 019.85
South Sudan														
Spain	622 428 740 312.62	572 637 500 000.00	600 838 623 454.73	617 879 821 010.02	580 673 484 429.70	609 107 829 977.63	686 246 941 464.33	883 667 042 889.39	1 044 299 168 699.91	1 130 169 626 423.92	1 234 767 751 251.03	1 441 941 152 800.70	1 593 912 183 689.16	1 464 088 697 118.68
Sri Lanka	13 893 738 375.25	15 091 930 835.73	15 794 972 847.17	15 656 342 015.86	16 330 810 303.92	17 102 623 876.23	15 746 224 409.80	18 881 765 437.22	20 662 525 941.30	24 405 791 044.78	28 267 410 542.52	32 351 184 234.32	40 716 249 699.92	42 067 965 895.25
St. Kitts and Nevis	245 555 551.22	275 089 909.08	287 324 365.95	305 008 729.11	326 203 986.93	342 746 455.58	351 318 063.99	362 654 126.53	399 585 548.50	438 718 510.77	487 137 028.43	513 233 324.27	570 140 740.74	526 214 814.81
St. Lucia	566 370 360.37	604 411 088.58	657 529 594.31	692 527 395.18	707 525 925.50	687 048 136.01	705 003 691.25	738 214 801.78	799 237 022.92	858 055 540.40	930 935 634.94	957 841 412.22	954 222 222.22	
St. Martin (French part)														
St. Vincent and the Grenadines	281 538 501.69	293 070 365.19	317 851 822.53	331 866 660.81	339 014 808.83	349 459 253.09	370 055 549.02	386 954 849.83	420 633 353.09	445 566 734.41	497 902 361.58	555 281 481.48	583 870 370.37	585 381 481.48
Sudan	9 018 315 170.69	11 681 198 236.14	11 250 216 339.07	10 682 045 000.35	12 366 140 065.80	13 362 328 043.01	14 975 626 178.22	17 780 302 166.59	21 684 761 535.48	27 386 699 507.39	36 393 186 003.68	46 533 234 126.98	58 032 057 416.27	54 633 362 293.66
Suriname	859 987 492.56	929 607 506.15	944 999 985.92	885 444 152.71	892 164 328.18	763 465 547.36	1 078 402 171.42	1 271 049 474.70	1 484 318 751.33	1 793 410 616.23	2 132 482 915.72	2 419 307 832.42	3 065 318 761.38	3 251 876 138.43
Swaziland	1 613 812 745.58	1 718 172 156.43	1 562 195 983.75	1 534 888 918.39	1 489 618 181.42	1 290 582 262.02	1 174 110 115.58	1 795 877 962.85	2 281 533 677.20	2 523 979 485.95	2 669 670 497.79	2 949 751 596.88	2 836 875 998.64	2 936 025 585.05
Sweden	276 456 158 663.88	253 177 906 717.84	254 723 204 065.46	258 813 540 859.80	247 260 155 857.76	227 359 498 891.48	250 960 758 336.67	314 713 404 152.70	362 089 648 912.97	370 579 639 747.41	399 075 661 572.87	462 512 853 670.12	486 158 607 819.64	403 612 967 119.69
Switzerland	304 751 566 124.60	264 584 062 461.93	272 632 435 331.77	268 211 568 893.36	249 918 732 455.00	254 989 746 186.89	278 620 794 936.48	325 009 717 286.19	362 990 618 832.33	372 475 755 389.58	391 233 703 828.24	434 116 631 636.91	502 447 278 285.28	491 924 171 371.33
Syrian Arab Republic	13 789 560 878.24	14 505 233 969.81	15 200 846 139.08	15 873 875 968.99	19 325 894 913.13	21 099 833 783.50	21 582 248 881.66	22 396 829 912.62	25 012 613 861.39	28 859 003 831.42	33 332 825 024.44	40 404 985 983.18	52 581 935 483.87	53 934 534 350.51
Tajikistan	1 043 893 062.61	921 843 115.77	1 320 126 664.95	1 086 567 367.91	860 550 294.27	1 080 774 005.56	1 221 113 794.73	1 554 125 542.56	2 076 148 710.32	2 312 319 579.03	2 830 236 053.84	3 719 497 371.10	5 161 336 170.46	4 978 154 343.79
Tanzania	6 496 158 706.99	7 683 883 940.27	9 345 191 090.92	9 607 835 544.34	10 185 767 294.26	10 383 580 744.17	10 805 631 194.52	11 659 118 661.04	12 825 801 580.93	14 141 919 722.50	14 331 230 928.99	16 825 553 272.06	20 715 098 399.47	21 368 198 377.65
Thailand	181 947 631 899.94	150 891 449 495.05	111 859 654 863.99	122 629 741 697.72	122 725 247 705.56	115 536 405 150.35	126 876 918 690.02	142 640 079 033.31	161 339 790 594.63	176 351 815 950.37	207 088 920 189.90	246 977 009 038.81	272 577 816 170.88	263 709 706 585.78
Timor-Leste														
Togo	1 465 311 925.47	1 498 949 402.30	1 587 350 761.33	1 576 092 231.45	1 329 110 396.46	1 328 031 238.67	1 476 122 251.81	1 758 946 962.64	2 061 009 613.09	2 115 154 592.61	2 202 809 610.76	2 523 461 504.25	3 163 383 040.42	3 156 613 950.27
Tonga	219 586 403.71	212 148 825.95	188 683 875.97	194 664 218.93	188 628 160.92	165 865 871.01	180 853 022.91	207 622 052.79	238 546 865.49	259 662 952.07	294 944 991.47	305 669 407.51	348 011 965.57	326 082 104.23
Trinidad and Tobago	5 759 537 847.67	5 737 751 324.18	6 043 710 211.43	6 808 976 088.60	8 154 315 708.35	8 824 873 155.63	9 008 273 516.36	11 235 960 523.09	12 884 712 295.99	15 982 284 589.50	18 370 220 923.84	21 132 936 507.94	23 620 192 762.85	23 620 192 762.85
Tunisia	19 587 322 786.11	18 897 006 962.65	19 812 681 127.60	20 798 853 481.71	19 443 277 157.66	19 988 392 298.60	21 047 411 855.81	24 992 239 037.64	28 129 265 355.28	28 967 848 882.04	30 962 208 865.51	35 619 594 067.14	40 844 817 790.76	43 522 180 256.24
Turkey	181 475 555 282.56	189 834 649 111.26	269 287 100 115.08	249 751 470 869.15	266 567 531 989.76	196 005 288 838.12	232 534 560 774.95	303 005 302 818.31	392 166 274 991.23	482 979 839 217.87	530 900 094 504.73	647 155 311 629.44	730 337 495 197.85	614 553 921 823.29
Turkmenistan	2 379 281 767.96	2 450 084 970.23	2 605 688 065.08	2 450 686 659.78	2 904 662 604.82	3 534 771 968.51	4 462 028 988.73	5 977 440 582.80	6 838 351 088.47	8 104 355 716.88	10 277 598 152.42	12 664 165 103.19	17 017 140 631.09	18 476 842 105.20
Turks and Caicos Islands														
Tuvalu	12 278 541.16	12 567 987.37	13 809 433.14	15 509 925.06	17 823 324.91	20 668 617.85	20 402 781.69	18 044 012.24	19 275 460.50	16 843 978.83	16 114 283.35	18 282 479.25	22 907 951.83	25 592 939.88
Uganda	6 044 585 326.94	6 269 333 313.17	6 584 815 846.53	5 998 563 257.95	6 193 246 632.33	5 840 503 702.94	6 176 563 467.09	6 336 696 289.00	7 940 362 663.20	9 237 336 670.03	9 977 209 198.94	11 916 019 462.51	14 440 830 267.25	15 803 499 656.86
Ukraine	44 558 077 827.14	50 150 399 813.13	41 883 241 479.90	31 580 639 053.20	31 261 527 363.14	38 009 344 576.61	42 392 896 031.24	50 132 953 288.20	64 883 060 725.70	86 142 018 069.35	107 753 069 306.93	142 719 009 900.99	180 354 647 630.62	117 227 769 791.56
United Arab Emirates	47 993 462 223.62	51 209 479 852.39	48 500 477 900.04	55 193 466 518.73	70 991 424 755.71	68 676 925 038.66	75 284 685 608.63	88 578 899 739.22	103 784 073 761.03	132 999 867 652.07	163 296 124 473.91	207 569 781 286.57	280 251 878 598.89	280 251 878 598.89
United Kingdom	1 219 541 341 653.67	1 359 017 504 911.59	1 455 948 989 731.70	1 502 556 207 676.27	1 477 580 571 947.34	1 470 891 032 100.19	1 612 056 354 915.07	1 860 809 795 918.37	2 202 400 021 604.60	2 380 113 745 868.17	2 444 148 638 090.23	2 810 973 803 142.23	2 657 482 265 112.41	3 173 154 245 317.56
United States	7 751 100 000 000.00	8 256 500 000 000.00	8 741 000 000 000.00	9 301 000 000 000.00	9 898 800 000 000.00	10 233 900 000 000.00	10 590 200 000 000.00	11 089 200 000 000.00	11 812 300 000 000.00	12 579 700 000 000.00	13 336 200 000 000.00	13 995 000 000 000.00	14 296 900 000 000.00	14 043 900 000 000.00
Uruguay	20 515 465 834.07	23 969 746 851.50	25 385 928 196.40	23 983 945 190.62	22 823 255 805.97	20 898 788 420.09	13 606 494 599.02	12 045 627 411.02	13 686 333 821.79	17 362 872 709.75	19 802 235 564.26	23 876 761 050.37	31 176 899 890.64	31 322 414 681.61
Uzbekistan	13 948 892 215.57	14 744 603 773.58	14 988 971 210.84	17 078 465 982.03	13 760 374 487.51	11 401 351 420.17	9 687 951 055.23	10 134 453 435.46	12 030 023 547.88	14 307 509 838.81	17 030 896 203.20	22 311 393 927.35	27 917 519 210.66	32 816 828 372.98
Vanuatu	245 177 629.28	255 890 215.73	271 052 988.83	276 932 016.27	280 776 470.78	267 003 870.97	271 626 880.50	324 750 468.94	376 357 455.94	406 432 100.82	448 572 250.59	544 563 540.87	619 283 529.06	616 110 011.01
Venezuela, RB	64 258 588 862.78	85 837 385 778.75	91 138 542 541.77	97 974 116 436.65	117 147 614 565.56	122 909 734 601.32	92 889 586 976.18	83 622 191 418.98	112 451 400 422.98	145 513 489 651.87	183 477 522 123.89	236 537 506 287.84	311 130 615 277.13	326 132 984 630.72
Vietnam	24 657 470 331.60	26 843 701 136.73	27 209 601 995.83	28 683 668 004.77	31 117 517 272.21	32 506 754 577.08	35 075 432 968.66	39 541 252 948.95	45 439 397 789.35	52 931 104 515.60	60 933 124 863.18	71 111 309 691.06	90 273 764 945.75	97 146 622 927.77
Virgin Islands (U.S.)														
West Bank and Gaza	3 361 387 738.68	3 701 277 958.82	3 944 403 662.12	4 168 899 306.51	4 113 261 232.93	3 332 382 199.49	2 832 538 290.43	3 144 395 542.91	3 606 871 947.80	4 015 865 743.75	4 488 572 250.59	544 563 540.87	619 283 529.06	616 110 011.01
Yemen, Rep.	5 793 813 887.51	6 936 303 759.17	6 318 571 349.91	7 467 832 877.38	9 441 473 354.85	9 459 570 743.57	9 902 721 941.30	11 006 776 814.32	13 873 381 756.54	16 736 795 898.33	19 081 645 676.85	21 656 550 140.16	26 917 363 956.06	26 365 156 990.24
Zambia	3 270 303 736.90	3 910 384 000.05	3 237 203 900.32	3 131 338 936.09	3 237 716 324.83	3 636 936 435.69	3 716 091 408.83	4 373 861 968.24	5 439 176 259.82	7 178 556 949.30	10 702 206 685.72	11 941 428 666.23	14 640 794 797.86	12 805 027 606.31
Zimbabwe	8 553 146 596.98	8 5												

Annexure D: World Employment Data for the period 1996 - 2009

Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Afghanistan					5486163	5629658	4972434	4722894	4684999	4635677	4745032	4854280	5673405	
Albania					1088844	1100157	1119723	1142770	1164662	1182083	1198752	1214269	1231950	1238120
Algeria		7233535	7517792	7706285	7800436	8404373	8910618	9443881	10525897	11178049	11970986	12133981	12849371	13327724
Argentina	12210072	12868882	13520963	13652590	13840332	13539452	13716049	14541700	15601566	16325387	16790765	17264723	17629086	17926654
Armenia					1290405	1325248	1338538	1368232	1393036	1431517	1457605	1478946	1503435	1516294
Australia	8365332	8439613	8597355	8768954	9022514	9115138	9300666	9526342	9702385	10027504	10240426	10480194	10654989	10612764
Austria	3677550	3661946	3686760	3720140	3739399	3730841	3799731	3823357	3755148	3867549	3961573	4065136	4129833	4089088
Azerbaijan					3531532	3604171	3332896	3434274	3551485	3650353	3750759	3832154	3917514	3965288
Bahamas	126974	132157	137856	140890	145203	148494	148062	148354	152437	155503	163160	165793	167508	160085
Bangladesh	55463208	56430670	57584652	58828178	60071098	61845134	63616714	65353874	66837077	68451749	70035003	71550008	73342107	74625923
Barbados	118024	119906	122445	125130	127084	127194	127319	127484	131534	133794	135521	138526	138422	136249
Belarus	4758871	4762459	4730941	4684215	4704343	4717182	4707081	4724678	4800131	4833986	4858549	4876217	4887347	4898432
Belgium	3780797	3821333	3836111	3970815	4084240	4004726	4006745	4010115	4082060	4212715	4235728	4344335	4395007	4368505
Belize	67049	70634	72123	76335	80730	86097	88653	89258	91669	98453	103905	108777	113041	115101
Bhutan					179502	192766	208233	224792	238776	250901	262065	269340	276726	291418
Bolivia	3095070	3181339		3219873	3288560	3342953	3427903	3468874	3715410	3729862	3835715	3959871	4043942	4170716
Bosnia and Herzegovina					1274414	1297734	1313169	1322301	1328106	1333433	1337807	1380906	1490604	1481501
Botswana	545504		593065		672568			656506			761760			
Brazil	69577884	71365222	72091672	74060029	75493254	76888659	79549377	80702587	83795227	85165871	87296429	88834201	92060289	93284372
Brunei Darussalam					147450	147999	158237	160939	167111	170268	175433	181191	185154	190085
Bulgaria	3239246	3184219	3195699	3082910	2959001	2793103	2817904	2916321	3014886	3030775	3180304	3333623	3448716	3314350
Cameroon	3697358	3816427	3939000	3661956	3954238	4319094	4192152	4117276	4698675	4832552	4968086	5104798	5154105	
Canada	13706462	13983940	14345896	14733755	15105165	15269491	15639573	16040681	16333662	16551426	16849231	17240024	17497622	17417482
Cape Verde	104129	107616	112568	119175	126299	129412	134989	140731	147162	153315	159730	166215	173497	179522
Chile	5351387	5495844	5623130	5506404	5519296	5619929	5698851	5862410	6108628	6218171	6422112	6755028	7086399	6788237
China	677389018	683869921	691159409	698585241	706067700	710107634	714724810	719720581	727366775	733823198	740502457	746632079	750933502	756962825
Colombia						13300649	13593164	14090705	14558487	15304842	15575120	16063355	16463303	16679458
Costa Rica	1280610	1389530	1468198	1490697	1516628	1612487	1649362	1685208	1705884	1802327	1861342	1960418	2008713	1965339
Croatia	1882102	1866256	1805672	1750649	1681865	1665337	1662599	1678042	1728989	1745116	1758659	1800236	1823290	1805679
Cuba	4346006	4387823	4443504	4448444	4498844	4566558	4608494	4658554	4679429	4706767	4734626	4860575	5003932	
Cyprus	323737	328974	334240	340698	344154	362887	371396	382662	388596	389550	401209	413776	421647	422296
Czech Republic	4952945	4880804	4804808	4705965	4674662	4688742	4735755	4702906	4674590	4746674	4803547	4901059	4958389	4815529
Denmark	2634847	2696398	2697069	2726599	2737923	2745680	2755754	2714092	2738062	2759322	2812688	2812382	2847071	2749831
Dominican Republic					3203542	3213986	3267188	3318239	3323456	3415165	3558840	3658911	3801084	3834396
Ecuador	3834427	3992415	3997887	3995505	4353698	4389112	4578825	4574003	4815489	4953081	5069960	5285951	5321933	5326231
Egypt	17710013	18316581	18931067	19486066	19704428	20288304	20553122	20826081	21543803	21897217	22599691	23406619	24019498	24831491
El Salvador	1990723	2003636	2098275	2104386	2111320	2110772	2127571	2180791	2157505	2192284	2253353	2295746	2348607	2275842
Estonia	626990	622071	610569	580274	566346	573093	576623	598117	602865	615929	649784	660050	662566	600079
Fiji					285936	286708	291342	289618	294000	305394	306990	309880	311355	312863
Finland	2106183	2193296	2238053	2383200	2413256	2446918	2457072	2451065	2438426	2407215	2456274	2505677	2541433	2479604
Former Yugoslav Republic of Macedonia					564356	587288	575861	543321	522028	539239	566082	586375	598796	602460
France	22911433	22900613	23178932	23583231	24089127	24327734	24537482	24965836	25118661	25351348	25487897	25933587	26286419	25841425

Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
French Guiana	44216	43543	44225	45489	47717	49260	53334	54774	55642	57628	57615			
French Polynesia	78389	79848	81282	82756	84301	85945	87643	89657	91639	93640	95585	97506		
Gabon	373344	384257	396006	410182	423732	437129	451340	465564	480399	495378	511028	526277	539023	
Georgia					2113783	2164284	2053464	2115572	2040966	1998263	1991768	1984932	1900542	1874355
Germany	36340355	36244087	36509273	37062525	37270977	37295554	37053501	36856131	36571747	36916093	37565026	38571112	39252337	39188955
Greece	4196074	4226894	4272485	4292750	4360434	4339166	4411288	4496959	4541543	4576684	4671928	4712931	4761104	4657180
Guadeloupe	137966	139802	139760	143772	154063	151467	156498	154776	160265	158484	156906	168242		
Guam		61743	63832	60192	60162	62788	65073							
Guatemala				3781942	3903835	4016077	4052623	4158459	4293971	4550672	4883095			
Honduras	2036119	2129594	2179843	2256648	2268982	2289833	2330392	2340103	2362404	2460951	2542390	2639078	2731521	2707305
Hong Kong Special Administrati	3049784	3124463	3109776	3114375	3208767	3254172	3242981	3243915	3317477	3384927	3446606	3558981	3588415	3509237
Hungary	3689297	3671809	3754756	3856586	3898982	3911378	3908213	3972909	3944962	3958087	3979210	3973940	3927082	3837888
Iceland	153425	153587	160103	166278	169828	170651	168500	171498	171421	174555	180006	186946	189774	184419
India						367932196	374147818	381366870	390337036	398129412	411780649	423545210	417777615	423828043
Indonesia	82780558	84703896	84847020	89152692	91064128	90670164	91179997	92797519	94463493	95021393	97835267	100879778	103386723	106498567
Iran (Islamic Republic of)					20313668	20918761	22221700	23146974	24112167	24374567	24750388	25291929	25348593	
Iraq								4640573	4859488	5597400	5768007		6193251	6341106
Ireland	1331448	1389586	1499588	1602608	1685536	1734410	1775943	1822235	1881336	1982528	2049740	2103051	2085666	2009592
Israel	2002279	2037741	2086458	2146994	2217323	2252275	2266156	2312831	2384080	2476244	2556714	2673427	2851560	2736212
Italy	20379765	20370118	20457681	20691014	20959811	21363862	21800484	22188822	22726007	22716063	23097692	23292279	23436363	23244459
Jamaica					987068	996825	1006701	1041733	1046288	1064496	1088719	1106672	1109824	1101799
Japan	65114466	65661158	65172473	64543134	64317787	64020353	63295966	63207689	63249173	63511850	63738927	64115539	63947499	62194895
Jordan	1133270	1155598	1198615	1211457	1251882	1271739	1292285	1350104	1393931	1449983	1530078	1629905	1726369	1768065
Kazakhstan					6614053	6845640	7015848	7118423	7187878	7340916	7489552	7653101	7830655	7864809
Kenya	7638241	7881308	8122193	8366340	8628444	8879911	9136293	9386150	9572690	9747350	9909693	10061284	10908364	
Kuwait	877747	935541	1007075	1082113	1152577	1217833	1274470	1329003	1370526	1406323	1446023	1477560	1504170	1541903
Kyrgyzstan					1932951	1963201	1980074	1980740	2041326	2129388	2200344	2286364	2358994	2340116
Latvia	921901	975165	981556	965603	934208	958401	997627	1001199	1009999	1029367	1080291	1112968	1120210	988306
Lithuania	1482575	1482009	1472319	1479793	1408616	1375588	1417580	1496464	1449168	1474349	1497433	1523387	1501276	1344027
Luxembourg	165998	169889	172260	177749	184211	185791	191170	189761	193159	199827	203351	205499	205882	210647
Macau Special Administrative R	201187	204589	204696	203652	206567	218968	220285	224329	240679	256780	275507	298218	316101	313336
Malaysia	8212009	8491240	8708557	8960734	9434009	9655663	9899642	10119698	10355955	10592583	10854341	11101721	11339138	11569585
Malta					145266	147562	149289	150519	149591	152871	154819	159873	162532	158544
Martinique	122421	120693	120845	123850	128348	132283	140525	142676	142188	148254	139923	144059	144158	
Mauritius	470159	474210	480524	483984	485536	491029	489113	487364	497179	501172	509560	516141	535681	527250
Mexico	34280325	36625603	37650528	38344559	39242061	39413582	40218007	40432234	41871207	42664872	44089402	45049680	45730799	45487567
Mongolia					1081579	1114184	1163184	1197959	1234017	1274474	1304727	1336300	1362900	1388550
Morocco	7574562	7969171	7950434	8737307	8837880	8847663	9068094	9421251	9798984	9893565	10223703	10458631	10672004	10897434
Myanmar					24169228	24422759	24603511	24728518	24860108	25011617	25194932	25414127	25758479	25927629
Nepal	4861673	4990581	5126204	5262148	5403753	5551037	5981086	6295117	6626354	6769555	6912686	7055703	6981445	
Netherlands	7008804	7268756	7487816	7683430	7894974	8066414	8142619	8092431	8081653	8119143	8290847	8522802	8698848	8676758
New Caledonia	66342	68023	69287	71069	73042	75154	77008	79251	80054	81568	83108	84649		
New Zealand	1759336	1759202	1747186	1781069	1822136	1881340	1932551	1966491	2031184	2092024	2140189	2181047	2195369	2185761
Nicaragua	1353658	1433585	1488904	1587043	1669835	1686385	1712521	1732762	1791891	1823715	1872535	1936252	2007012	2071088



Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Nigeria					34083840	34890081	36362966	36338364	37849683	39562364	40438427	41319439	41369392	40148588
Norway	2177550	2256616	2314998	2316676	2330416	2347700	2361541	2329994	2344155	2351199	2415148	2498095	2570601	2529077
Pakistan					41121919	42344347	43344721	45235001	47399596	49795380	53140542	54845276	56432501	58477477
Panama	984708	1019963	1057414	1099778	1106164	1117841	1152571	1190020	1242421	1305138	1332440	1406354	1505713	1470239
Papua New Guinea					2229699	2302215	2377256	2443775	2511079	2578394	2649134	2712926	2782607	
Paraguay					2109846	2168923	2160709	2295972	2387399	2503271	2555298	2662055	2768338	2841532
Peru	9256191	9366425	9840213	9865268	10310909	10494533	10653707	10848445	11196280	11412245	11773145	11997231	12195301	12483688
Philippines	26360362	26974510	27504582	28232262	27956407	29419968	29978863	30737234	31092941	32769595	33179234	34124959	35071432	35918152
Poland	15244838	15304359	15398025	14798984	14621850	14432178	13957349	13940665	14021252	14448942	14958957	15716131	16383868	15962488
Portugal	4534282	4642702	4861276	4925560	5010485	5100021	5132197	5100393	5088069	5104038	5155121	5183168	5223581	5132247
Puerto Rico	1140196	1173524	1187467	1216822	1219425	1227653	1239936	1270855	1300208	1328741	1336103	1322150	1294469	
Republic of Korea	21193530	21527989	20222324	20533461	21395245	21727592	22262678	22185073	22588666	22770177	23038500	23328145	23408743	23592913
Republic of Moldova				1688039	1697911	1677982	1643082	1536685	1448639	1379356	1373403	1404454	1419448	1390139
Reunion	173461	181238	181001	185567	193526	218764	227782	224220	223678	236625	247340	262638	265496	
Romania	11060696	11265674	11093484	11016069	10838144	10677635	9584751	9466706	9315589	9143411	9291546	9323393	9309669	8798030
Russian Federation	64779692	63311034	62229367	62286278	64776724	66547119	67717208	67693956	67835226	68926260	69735063	71437937	70955980	68987781
Saint Lucia	47876	46602	47127	50535	52996		53364	53568	55968					
Saint Vincent and the Grenadines	39067	39504	39961	40443	40994	41616	42262	42936	43568	44152	44644	45079		
Samoa						60727	59639	58474	57786	58327	60944	60890	61318	
Saudi Arabia				6393523	6634221	6929724	7200781	7453677	7714535	7956352	8198758	8498086	8772227	8969251
Serbia					3896365	3882778	3825752	3758021	3548038	3450585	3463342	3610657	3722096	3660718
Singapore	1785047	1841203	1880164	1902782	1935789	2036334	2033617	2055105	2065578	2118150	2209087	2343261	2434189	2487222
Slovakia	2229838	2215927	2202307	2127395	2095991	2124227	2136314	2197070	2193717	2235945	2310208	2373086	2444274	2394764
Slovenia	870675	888492	905866	894642	895411	907999	919843	895984	944782	950573	960471	983056	985333	964948
South Africa	11201817	11323457	11049898	11658854	11633807	11311300	11440512	12149935	12707166	12885417	13387426	14177932	14666357	14581217
Spain	12958310	13413888	13945329	14744293	15554728	16145530	16619528	17251350	17890927	18848407	19509916	19923450	19697117	18375650
Sri Lanka				7184941	7237415	7246821	7360457	7421234	7524510	7803649	7776941	7818692	7835697	
Sudan				8908977	9170806	9318317	9572241	9795370	9978566	10196960	10230595	10378330	10882590	
Suriname	134227	137854	140551	137810	136568	139167	149622	158371	159271	155834	156564	161692	169265	
Sweden	4129668	4094175	4126361	4244624	4259302	4392218	4409094	4420807	4413540	4451875	4521621	4634536	4678948	4588902
Switzerland	3788512	3778425	3841492	3877595	3889436	3953698	3973561	3972567	3972222	3987770	4056489	4116782	4177059	4112705
Syrian Arab Republic					4018538	4509598	4629430	4863143	5020404	5518317	5799367	6067593	6188404	
Tajikistan					1955516	2070323	2162549	2267086	2381113	2467854	2550275	2642903	2750057	2877585
Thailand	32889254	33367304	32558306	32630072	33480942	34046205	34879594	35516343	36168335	36790846	37030777	37682505	37984803	38105039
Trinidad and Tobago	453728	471720	487215	503012	517858	535193	547385	565444	598094	618241	636843	645682	656908	660053
Tunisia					2676354	2748412	2800413	2879893	2944048	3050941	3135226	3204413	3271361	3282250
Turkey	21205553	21206200	21780752	22080668	21631817	21581623	21424767	21243965	21896363	22094439	22061370	22417647	22940582	22023946
Turkmenistan	668538	604778	604102	649225	694554	738849	778299	816558	852712	867257	867551	866712		
Ukraine	22533646	21966837	21130454	20768181	20570943	20497852	20779324	20822074	20942146	21468319	21502099	21536560	21496396	20836347
United Arab Emirates					1825106	1954672	2087050	2219172	2347138	2461922	2564254	2656300	2700446	2763371
United Kingdom	26241777	26714252	27048114	27355490	27730490	27831484	28124115	28406865	28718640	29055344	29246111	29420627	29658105	29200434
United States	134218616	137353650	139999351	142387354	144756437	144626497	144099060	144573406	146454947	148882625	151629744	152959487	152872357	147811896
Uruguay	1297905	1320966	1362131	1360499	1339651	1323385	1305209	1310287	1376878	1402427	1436647	1495519	1519361	1542317
Uzbekistan					9138710	9459350	9784517	10131462	10533854	10941457	11352268	11778880	12183243	12503892

Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Venezuela	7787116	8203041	8462985	8423732	8833999	9186408	9134384	9361586	9861597	10601706	11179027	11560076	11929261	12215096
Vietnam	33774767	34052653	34479962	35431484	35933891	37411895	38164399	39036038	39854156	40717544	41853165	42867473	43892064	44210833
Yemen									4223795	4407636	4617847	4837494	5062432	5301056

**Annexure E: FDI, GDP and Employment for South Africa for the period 1996 to 2009**

**FDI inflows and GDP (R-millions)**

Factor	Years													
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
GDP (R-millions)	1 183 226	1 213 990	1 220 060	1 249 341	1 301 813	1 336 962	1 386 435	1 427 322	1 492 330	1 571 082	1 659 122	1 751 499	1 814 134	1 783 617
GDP Growth Rate	4.3%	2.6%	0.5%	2.4%	4.2%	2.7%	3.7%	2.9%	4.6%	5.3%	5.6%	5.6%	3.6%	-1.7%
FDI Inflow (R-millions)	3 515	17 587	3 104	9 184	6 158	58 404	16 540	5 550	5 155	42 270	-3 567	40 120	74 403	45 465
% FDI Inflow as a % of GDP	0.30%	1.45%	0.25%	0.74%	0.47%	4.37%	1.19%	0.39%	0.35%	2.69%	-0.21%	2.29%	4.10%	2.55%
FDI Stock	58 708	82 463	91 862	318 630	328 859	370 695	264 419	311 208	362 858	499 586	611 722	751 925	632 619	866 664
FDI Stock as a % of GDP	4.96%	6.79%	7.53%	25.50%	25.26%	27.73%	19.07%	21.80%	24.31%	31.80%	36.87%	42.93%	34.87%	48.59%

**Sectoral Stock Composition of FDI (R-millions)**

Sectors	Years													
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Mining	2 897	3 642	7 269	114 095	91 540	124 063	80 617	103 093	111 639	168 271	250 361	332 254	195 365	289 836
Manufacturing	25 422	35 088	40 429	79 486	86 783	89 443	67 248	75 427	111 354	136 028	165 432	197 099	204 754	242 217
Finance	21 622	29 357	29 357	104 992	129 162	130 562	81 634	86 626	100 215	157 590	162 521	178 580	182 420	234 955
Transport, ICT	534	5 373	5 779	8 411	8 521	8 825	10 131	22 043	14 112	9 449	13 809	12 840	15 525	64 943
Retail	7 619	8 307	8 237	10 596	11 895	15 141	13 312	13 425	14 517	14 722	16 172	27 766	30 990	31 148
Other	614	696	791	1 050	958	2 661	11 477	10 594	11 021	13 526	3 427	3 386	3 565	3 565
Total	58 708	82 463	91 862	318 630	328 859	370 695	264 419	311 208	362 858	499 586	611 722	751 925	632 619	866 664

Spillover	Years													
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Employment	4 972 497	5 000 667	4 918 934	4 811 216	4 711 214	4 987 472	5 909 000	6 522 000	7 097 000	7 248 000	8 222 000	8 410 000	8 512 000	8 163 000
Mining	480 601	498 765	443 372	417 777	415 957	438 045	444 000	448 000	456 000	439 000	475 000	506 000	518 000	488 000
Manufacturing	1 322 834	1 354 778	1 327 823	1 316 010	1 281 417	1 363 092	1 233 000	1 361 000	1 178 000	1 195 000	1 333 000	1 315 000	1 275 000	1 185 000
Finance	221 090	222 703	214 944	198 394	196 449	191 868	1 978 000	1 702 000	1 565 000	1 559 000	1 799 000	1 872 000	1 914 000	1 796 000
Transport, ICT	252 811	246 734	248 497	234 209	217 279	212 361	285 000	309 000	313 000	312 000	364 000	360 000	366 000	359 000
Retail	818 001	801 909	833 399	897 583	893 351	900 004	1 198 000	1 301 000	1 388 000	1 430 000	1 739 000	1 774 000	1 747 000	1 665 000
Other	1 877 160	1 875 778	1 850 899	1 747 243	1 706 761	1 882 102	771 000	1 401 000	2 197 000	2 313 000	2 512 000	2 583 000	2 692 000	2 670 000

**Annexure F: South Africa GDP per sector  
1996 to 2009**

Year	1996			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>284 435</b>	<b>294 811</b>	<b>300 201</b>	<b>303 779</b>
Mining	24 907	24 737	25 181	25 170
Manufacturing	48 083	48 477	51 529	51 603
Finance	44 425	45 833	47 500	48 817
Transport, ICT	19 268	19 181	20 490	20 603
Retail	31 777	32 290	33 855	38 599
Other	115 975	124 293	121 646	118 987

Year	1997			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>293 427</b>	<b>304 209</b>	<b>307 247</b>	<b>309 107</b>
Mining	24 809	25 306	25 838	25 742
Manufacturing	48 886	50 565	53 014	52 618
Finance	48 115	48 887	49 172	49 182
Transport, ICT	20 408	20 600	22 022	22 558
Retail	32 450	32 661	33 915	38 042
Other	118 759	126 190	123 286	120 965

Year	1998			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>296 337</b>	<b>306 135</b>	<b>308 019</b>	<b>309 569</b>
Mining	25 391	25 393	25 469	25 340
Manufacturing	49 840	50 694	52 238	51 901
Finance	48 537	49 922	50 635	50 759
Transport, ICT	22 051	22 140	22 920	23 184
Retail	32 465	33 179	34 404	38 801
Other	118 053	124 807	122 353	119 584

Year	1999			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>299 561</b>	<b>311 995</b>	<b>316 710</b>	<b>321 076</b>
Mining	24 819	24 945	25 190	25 217
Manufacturing	48 788	50 065	52 918	54 130
Finance	51 054	52 293	53 177	53 543
Transport, ICT	22 545	23 059	24 413	24 974
Retail	33 900	35 209	37 235	43 058
Other	118 455	126 424	123 777	120 154

Year	2000			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>310 335</b>	<b>322 671</b>	<b>333 332</b>	<b>335 476</b>
Mining	24 545	24 844	24 830	24 850
Manufacturing	52 236	54 092	57 401	58 850
Finance	52 888	53 700	54 622	55 538
Transport, ICT	24 539	25 167	26 412	26 757
Retail	37 121	38 512	40 140	45 730
Other	119 006	126 356	129 927	123 751

Year	2001			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>321 922</b>	<b>334 571</b>	<b>338 363</b>	<b>342 105</b>
Mining	24 394	24 949	24 964	24 663
Manufacturing	55 590	56 708	58 319	59 085
Finance	56 219	58 089	59 463	60 680
Transport, ICT	25 921	26 414	27 868	28 741
Retail	38 628	39 421	40 506	46 016
Other	121 170	128 990	127 243	122 920

Year	2002			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>333 306</b>	<b>347 204</b>	<b>350 397</b>	<b>355 528</b>
Mining	24 272	24 939	25 304	25 444
Manufacturing	55 853	57 999	61 089	61 192
Finance	62 383	62 225	61 925	62 632
Transport, ICT	28 219	28 977	30 426	31 128
Retail	39 113	40 079	41 610	47 556
Other	123 466	132 985	130 043	127 576

Year	2003			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>343 995</b>	<b>358 345</b>	<b>360 923</b>	<b>364 059</b>
Mining	24 977	25 819	26 341	26 218
Manufacturing	56 905	57 095	59 577	59 004
Finance	65 193	64 824	65 121	65 985
Transport, ICT	30 280	30 872	32 080	33 055
Retail	39 758	40 820	43 057	49 210
Other	126 882	138 915	134 747	130 587

Year	2004			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>356 887</b>	<b>371 714</b>	<b>379 044</b>	<b>384 685</b>
Mining	26 218	26 148	26 941	25 608
Manufacturing	57 990	59 585	63 263	63 127
Finance	69 261	69 354	69 721	71 208
Transport, ICT	31 536	32 203	33 963	34 757
Retail	41 559	42 792	44 739	53 085
Other	130 323	141 632	140 417	136 900

Year	2005			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>376 327</b>	<b>391 002</b>	<b>399 722</b>	<b>404 032</b>
Mining	27 314	26 780	26 436	25 462
Manufacturing	60 083	63 866	67 716	67 436
Finance	73 169	73 288	73 956	75 091
Transport, ICT	33 325	34 035	35 687	36 425
Retail	44 714	45 741	47 897	56 661
Other	137 722	147 292	148 030	142 957

Year	2006			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>395 450</b>	<b>410 299</b>	<b>420 696</b>	<b>432 677</b>
Mining	25 829	26 141	26 338	27 055
Manufacturing	64 270	67 358	71 460	72 694
Finance	79 405	80 254	81 374	83 069
Transport, ICT	34 860	35 709	37 790	38 248
Retail	47 122	48 496	50 913	60 105
Other	143 964	152 341	152 821	151 506

Year	2007			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>421 731</b>	<b>433 011</b>	<b>442 243</b>	<b>454 515</b>
Mining	26 386	26 250	26 459	26 240
Manufacturing	68 753	71 153	74 004	76 336
Finance	86 091	85 714	87 185	90 511
Transport, ICT	37 390	38 228	40 002	40 669
Retail	50 059	51 313	53 701	62 534
Other	153 052	160 353	160 892	158 225

Year	2008			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>438 730</b>	<b>453 884</b>	<b>459 016</b>	<b>462 503</b>
Mining	24 068	25 314	24 891	25 124
Manufacturing	70 732	75 970	77 530	73 667
Finance	93 058	91 791	93 580	96 661
Transport, ICT	38 811	39 566	41 322	41 973
Retail	52 124	52 253	52 989	61 994
Other	159 937	168 990	168 704	163 084

Year	2009			
Quarters	Q1	Q2	Q3	Q4
<b>Total</b>	<b>432 656</b>	<b>441 909</b>	<b>449 356</b>	<b>459 697</b>
Mining	22 669	24 209	23 962	24 346
Manufacturing	63 490	64 629	68 873	69 940
Finance	94 069	93 135	93 950	97 267
Transport, ICT	39 542	39 764	41 382	42 034
Retail	50 871	50 496	52 207	60 366
Other	162 015	169 676	168 982	165 744

Source: Statistics South Africa