ECONOMIC GROWTH, FOREIGN DIRECT INVESTMENT, MACROECONOMIC CONDITIONS AND SUSTAINABILITY IN MALAYSIA
Jamal OTHMAN1*
Yaghoob JAFARI2
Tamat SARMIDI3

Abstract
Most studies on examining the links between economic growth and FDI inflows have relied on the conventional GDP measure which has been argued as inadequate to provide clear insights on the macro sustainability of a country. Alternatively, the Genuine Savings (GS) indicator has been proposed as one of the alternative measures to reflect whether an economy is moving on a sustainable path, albeit in the weak sustainability sense. In this paper, we estimated the impact of FDI on conventional GDP and GS growth as well as on the GDP-GS gap for Malaysia from 1974-2009. The potential nonlinearities associated with the impact of FDI are captured using a macroeconomic conditions indicator as a threshold variable. The results demonstrate stronger FDI impacts on Malaysian GDP and GS growth as well as on reducing the GDP-GS gap once the general macroeconomic conditions in the country reaches a particular level. The results may suggest that FDIs will be more impactful in accelerating future economic growth and sustainability if a country is able to maintain a particular state of macroeconomic conditions.

Keywords: Malaysian macroeconomic conditions, Sustainable development, Genuine savings, Conventional GDP, GDP-GS Genuine savings gap, Foreign direct investment
JEL Classification: F23, F36, F43, Q56, O16

1. Introduction
Many studies have shown positive relationships between FDI inflows and economic growth especially in developing countries. However, most studies have relied on the conventional GDP measure to reflect economic performance, while it has been well established that the conventional GDP indicator fails to measure true economic progress. It has been especially criticized for not appropriately addressing the degradation and depletion of natural capital including defensive expenditures meant for pollution control. In essence the main weakness of the GDP indicator is its inability to provide a sense whether an economy is moving on the sustainability path. One of the popular alternatives to the conventional GDP is the Genuine Saving (GS) measure. The GS is a class of Green GDP systems along with other similar measures, namely Genuine Progress Indicator (GPI) and Index of Sustainable Economic Welfare (ISEW).

Essentially, GS defines the sustainability conditions for a resource dependent economy on the ability to maintain a constant stream of consumption into the infinite future. This can be achieved via a rule that ensures the aggregate stock of physical and natural capital remains constant over time. Vincent (2001) attributed the inability of many

* Jamal Othman1, Yaghoob Jafari2 and Tamat Sarmidi3. Authors 1, 2, 3, are respectively, Professor (corresponding author: jortman@ukm.my, ), Post-Doctoral Associate, and Associate Professor at the School of Economics, Faculty of Economics and Management, National University of Malaysia, Bangi
resource-rich economies to achieve long-term welfare improvements to the failure to offset the depletion of natural resource stocks with sufficient investments in physical capital and human capital; consequently, their total wealth which is the sum of physical, human, and natural capital declines.

The World Bank publishes cross-country estimates of GS in the World Development Indicators ever since 1999. The World Bank constructs these estimates by making appropriate adjustments to gross national savings. The major adjustments are to subtract a depreciation allowance for man-made capital and depletion allowances for fossil fuels, minerals, and timber, and to add investment in human capital. A negative GS rate denotes that the overall national capital depletes faster than renewed. A positive GS is desirable, however, it still does not assure sustainable in the strict sense, because the indicator is still based on the weak sustainability paradigm. Hamilton and Clemens (1999) and Bolt et. al (2002) detailed out the methods as used by the World Bank to make these adjustments.

While the importance of the relationships between greater foreign direct investment (FDI) and GDP growth has received considerable theoretical and empirical support, in recent years, an important dimension that emerges in the FDI-GDP growth literature has been the role of general economic development in inter-mediating the impact of FDI on economic growth. For instance, Hermes and Lensink (2003) argues that the impact of FDI on economic growth is contingent on the development of financial markets of the host country. They observed that well-functioning financial markets reduce the risks inherent in the investment made by local firms that seek to imitate new technologies and thereby improve the absorptive capacity of a country with respect to FDI inflows. W.N.W. Azman-Saini et al (2011) also asserted that a certain level of financial development is required before host countries can benefit from FDI-generated externalities. Using a threshold regression model, they found that the positive impact of FDI on growth emerges only after financial market development exceeds a certain threshold level. A related observation is from a study by Chan Sok Gee and Mohd Zaini A.K. (2011) who found that FDI inflows from developed countries to selected sectors in Malaysia have greater tendency to create positive impact on the growth of Malaysia's manufacturing sector. The authors asserted that such spillover effects in the economy are possible through the transfer of technologies in relevant sectors only, in this case Malaysia's R&D intensive sectors.

Two important observations of the growth-FDI literature are worthy to be further noted here. Firstly, while a number of authors have asserted on the role of specific systems in providing the "channels" towards spillover effects or broader economic development and growth, as deliberated above, we opined that any economic system is not a "means", rather it is a reflection or manifestation of the general macroeconomic conditions that prevail in a country. We define here macroeconomic conditions as the internal socio-economic variables which contribute to the health of macroeconomic system in a country. This encompasses the initiatives of a country to move towards a market oriented economy, good governance and politics, best practices policies, effective institutions, quality infrastructure and resourceful human capital. Hence, an effective financial or R&D system entails the presence of desirable macroeconomic conditions in a country. Such thinking may also help address the issue of endogeneity in the analysis of FDI-growth linkages. Secondly, as aforementioned, many studies which linked FDI and
economic growth have relied on the conventional GDP indicator which is inadequate to provide clear insights on whether an economy is moving on a sustainable path. In this paper, we examined the effect of inward FDI on Malaysia's GDP and GS as well as on the GDP-GS gap from 1974-2009. We have used a regression model based on the concept of threshold effects. The model was specified to examine the relationship between GDP, GS and GDP-GS gap with FDI to be piecewise linear with a macroeconomic conditions indicator acting as a regime-switching trigger. The role of macroeconomic conditions in inter-mediating the impact of FDI on Green GDP (GS) and on the gap between GDP and GS seems to be the missing part of the FDI- growth literature. This paper attempts to narrow down this literature gap.

The main motivation of looking into the GDP-GS gap and FDI linkages stems from an increasing body of literature that suggests a growing gap between GDP and green GDP (measured by ISEW or GPI) over time. Most studies have shown that both GDP and green GDP move up together until they reached a certain threshold point, after which green GDP growth declines (Max-Neef, 1995). Such results imply that when the economy expands beyond a certain level, the additional benefits of growth are increasingly offseted by environmental externalities and other welfare costs, and consequently the gap widens (Lawn, 2003).

In Section 2 of this paper, we overview the GDP and GS trajectory for Malaysia from 1970 to 2009, followed by an overview of Malaysia's FDI inflows and development of her financial markets, which is presumed in this study to represent Malaysia's macroeconomic conditions. All data were sourced from the World Bank World Development Indicators (2012). The debate on economic growth and FDI is discussed in section 3. The theoretical framework of the study, empirical model/results and implications are presented in subsequent sections.

2. Malaysia’s growth, sustainability performance and FDI inflows

This section first presents the trend of GS per capita for Malaysia and compares with that of her GDP. As shown in Figure 1, Malaysia's GS has been positive during 1974-2009. This indicates quite well that Malaysia's economy has been operating on the sustainability track. Note that negative GS rates or a marked downtrend are a serious sign denoting unsustainability. Figure 1 seems to suggest that the growth path of the Malaysian GS is lower than her GDP. It further reveals that the gap between GDP and GS per capita has been growing. This signifies to some extent the declining capacity of the Malaysian economy to sustain the levels of overall national capital for future productive activities. Jamal et. al (2012) found that Malaysia's GS to GDP ratio has been falling pronouncedly in the period following the ASIAN financial crisis of 1997/98. It will thus be interesting to know the impact of FDI on GS as well as on the GDP-GS gap. This is an important aim of this study.

<insert Figure 1 here>

Figure2 shows the trend of FDI as a percentage of GDP for Malaysia. This figure shows a fluctuated pattern where the ratio reached its peak in the period prior to 1991/92 but declined thereafter. This reflects to some extent the presence of relatively more financial impediments or less opportunities for higher long-run investments returns to prospective foreign investors. Further, the value of domestic credit to private sector as a percentage of GDP, a financial development indicator, which was used to represent
general macroeconomic conditions in this study showed an increasing trend through the outset of the ASEAN financial crisis (1997-1998) - see Figure 3. Thereafter, it declined steadily. Domestic credit to private sector is thought to reflect the general sentiments of businesses and financial agents on the prospect of new investments, economic growth and jobs creation. Thus it may be an appropriate indicator to represent the general macroeconomic conditions in Malaysia.

**<insert Figure 2 here>**

**<insert Figure 3 here>**

3. **Theoretical framework**
   
The neoclassical economic growth and endogenous growth models provide the basis for most of the empirical work on the FDI-growth relationship. Fundamentally, these models emanate from the standard Solow growth model which suggests that GDP is a function of the nation’s stocks of capital and labor and other factors which may affect the productivity of these inputs such as financial development. In general notation we have:

\[
GDP_t = f(K_t, L_t, FDI_t) \quad (1)
\]

where \( GDP_t \) is per capita GDP or Green GDP measures of national income at time \( t \). In this study we will use GS to represent the Green GDP indicator. \( K_t \) is a measure of the nation’s capital stock at time \( t \), \( L_t \) is a measure of labor input at time \( t \), and \( FDI_t \) is an index of financial liberalization at time \( t \). Following Mankiw et al. (1992) and Talberth and Bohara (2006), this relationship is expressed in Cobb-Douglas form production function;

\[
GDP_t = A \cdot K_t^\alpha \cdot FDI_t^\beta \cdot L_t^{1-\alpha-\beta} \cdot \epsilon \quad (2)
\]

The prime motivation of incorporating inward FDI into the production function is to test whether FDI flows play a significant role in economic growth and its sustainability. Note in Talberth and Bohara (2006) the economic openness variable was used in place of FDI as the aim was to identify the links between economic openness and national income. Note also Equation 1 implicitly assumes there is no presence of contemporaneous correlation between the error term and the independent variables.

Equation 2 can be represented in log-linear form;

\[
GDP_t = \alpha + \alpha K_t + \beta FDI_t + (1 - \alpha - \beta)L_t + \epsilon \quad \text{(3)}
\]

where all variables are now logged (for convenience, the log notation is dropped), \( \alpha \) is a constant, and \( \epsilon \) is the error term.

3.1 **A model of GDP-green GDP gap**

Talberth and Bohara (2006) formulated a model of the GDP-Green GDP gap (hereafter referred to as gap) and examined whether environmental degradation factors and economic openness affect the gap over time. The gap was defined as the difference in logged GDP and green GDP values (GDPgrn) in a given year:

\[
GAP_t = \ln(GDP_t) - \ln(GDP_{grn_t}) \quad (4)
\]

In general form, the model can be written;

\[
GAP_t = f(E_{1t}, ..., E_{nt}, I_{1t}, ..., I_{kt}, ..., O_t) - \ln(GDP_{grn_t}) \quad (5)
\]
where \( E \) is a vector of environmental quality variables, \( I \) is a vector of measures addressing inequality of income, wealth, opportunities and environmental degradation, while \( O_t \) represents economic openness. In this study, we used FDI which measures financial openness rather than trade openness as per Talberth and Bohara (2006).

Further, Talberth and Bohara (2006) relied on two environmental indicators - a livestock production index and per capita carbon dioxide emissions (CO2). In our study we used oil palm planted area (OPA) in place of livestock production index. Oil palm is Malaysia's most important agro-industrial crop in terms of land use and value adding activities while livestock (except for poultry) is a negligible sector in the Malaysian economy. Since the GS do not directly capture CO2 emitted from land use changes and deforestation, we presumed that the OPA is sufficiently independent econometrically. However, increases in OPA may lead to long-run environmental costs in the form of land use changes, biodiversity loss, soil erosion, degradation of water catchment function and losses in timber rents. On the other hand, increases in palm oil-based value adding activities may also result in increases in fossil fuel combustion and consequently CO2 emission. Note, of all these impacts, only losses in timber rents and increases in CO2 from fuel combustions are captured by the World Bank GS indicator.

We also removed the CO2 emission indicator from the gap model of Talberth and Bohara (2006). Inclusion of CO2 would lead to collinearity problem since CO2 is a cost component in the GS calculation. The inclusion of CO2 emission in the original construct of Talberth and Bohara (2006) is acceptable as they used GPI and ISEW rather than GS to represent Green GDP. Both the ISEW and GPI do not directly deduct CO2 emissions costs and there should be no collinearity problem. Taking into consideration the above arguments and the existence of non-stationary process in the data series (as per Talberth and Bohara, 2006) our gap model is thus written in the growth rate form;

\[
GAP_{Grw_t} = \alpha_1 + \alpha_2 OPA_{Grw_t} + \alpha_3 FDI_t + u_t \quad (6)
\]

4. Empirical model

Following W.N.W. Azman-Saini et. al (2011) we posited that there is a threshold state of macro-economic conditions in a country where FDI inflows would affect national income in a more pronounced manner. This is written:

\[
GROWTH_i = \alpha X_i + \begin{cases} 
\beta_1 FDI + e_i, & ME \leq \lambda \\
\beta_2 FDI + e_i, & ME > \lambda 
\end{cases}
\]

(7)

Where \( GROWTH \) is the growth rates of traditional GDP, GS and GDP-GS gap over the period 1974-2009, FDI is foreign direct investment, and \( X_i \) is a vector of variables in growth rates form which are thought to affect the dependent variables. When the dependent variable is traditional GDP and GS, \( X \) includes the nation’s capital stock and labor input; and when GAP is the dependent variable, \( X \) refers to oil palm hecatreage (OPA). Note ME (i.e., state of macro-economic conditions) is the threshold variable used to split the sample into regimes and \( \lambda \) is the unknown threshold parameter. This type of modelling approach allows the role of FDI to differ depending on whether macro-economic conditions are below or above some unknown level of \( \lambda \). In this study, as mentioned earlier, a financial indicator (ratio of domestic credit to private sector to GDP)
was used to represent the state of macro-economic conditions and acts as sample-splitting (or threshold) variables. The impact of FDI on GDP and GS per capita and the gap will be $\beta_1$ and $\beta_2$ given a poor (low) or high macro-economic conditions, respectively. It is obvious that under the hypothesis $\beta_1 = \beta_2$ the model becomes linear and reduces to:

$$GROWTH_i = \alpha X_i + \beta_i FDI_t \quad (8)$$

Equation 8 relies on updated GDP and GS time series data from the World Bank World Development Indicators (2012). Physical capital is represented by the ratio of gross fixed capital formation to GDP as, for example, used by Moudatsou (2003) and Yaghoob et.al (2012). The labor input is represented by the number of employed persons. Time series data for gross fixed capital formation was also taken from the latest World Development Indicators (2012), while, the number of employed persons was taken from Hand Book of Statistics public (1973-2010) published yearly by the Department of Statistics, Malaysia. Our measure of financial openness is the ratio of the value of FDI to GDP, as commonly used in the literature. The ratio of domestic private sector credit to GDP, representing macroeconomic conditions, was also obtained from the same data source. Further, data for OPA was sourced from the Malaysian oil palm 2010 statistics (MPOB, 2011).

The first step of our estimation is to test the null hypothesis of linearity $H_0 : \beta_1 = \beta_2$ against the threshold model in Equation (2). We follow Hansen (1996, 2000) who suggested a heteroskedasticity consistent Lagrange Multiplier (LM) bootstrap procedure to test the null hypothesis of a linear specification against a threshold regression alternative. Since the threshold parameter $\lambda$ is not identified under the null hypothesis of the no-threshold effect, the $p$ values are computed by a fixed bootstrap method. Hansen (2000) shows that this procedure yields asymptotically correct $p$ values. If the hypothesis of $\beta_1 = \beta_2$ is rejected and a threshold level is identified, we should test again the threshold regression model against a linear formulation after dividing the original sample according to the identified threshold. This procedure is carried out until the null of $\beta_1 = \beta_2$ can no longer be rejected.

5. Results and discussions

The impact of FDI on GDP growth (Model A: Traditional GDP), GS (Model B: GS), and the GDP-GS gap (Model C: GAP), respectively, was estimated using Equation 7. As noted previously, we employed Hansen (1996 and 2000) splitting sample threshold method for model A, B and C to investigate the threshold effect of macroeconomic conditions as measured by the ratio of domestic private sector credit to GDP.

The results of each model are presented in Table 1. The findings reveal several interesting observations. First, it shows that the $p$-value of the hypothesis of no threshold effect as computed by the bootstrap method with 1,000 replications and 10% trimming percentage are rejected at a very high significant level for all of the models. The finding clearly indicates that the relationship between FDI on GDP and GS growth on one hand and on the GAP on the other hand is non-linear.

Second, the presence of threshold level also indicates that the sample can be split into two different groups depending on the state of macroeconomic conditions in the country. The country is said to have low macroeconomic conditions if within a period of time the state of macroeconomic conditions is below the threshold level, vice versa. The behaviour of
the relationships between FDI and GDP, GS and GAP is markedly different for low and high macroeconomic conditions.

Table 1: Threshold estimates using share of domestic credit to GDP (to proxy macroeconomic conditions)

<table>
<thead>
<tr>
<th></th>
<th>Model A GDP as dependent variable</th>
<th>Model B GS as dependent variable</th>
<th>Model C GAP as dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>S.E.</td>
<td>t.test</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-12.0805</td>
<td>0.6369</td>
<td>18.96</td>
</tr>
<tr>
<td><strong>Labor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0937</td>
<td>0.0635</td>
<td>1.47</td>
</tr>
<tr>
<td><strong>Capital</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.5518</td>
<td>0.0470</td>
<td>11.73</td>
</tr>
<tr>
<td><strong>OPA</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>FDI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Linear</strong></td>
<td>0.0297</td>
<td>0.0083</td>
<td>3.57</td>
</tr>
<tr>
<td><strong>Low ME ≤ 4.60</strong></td>
<td>-0.0644</td>
<td>0.0053</td>
<td>-11.93</td>
</tr>
<tr>
<td><strong>High ME &gt; 4.60</strong></td>
<td>0.0191</td>
<td>0.0046</td>
<td>4.16</td>
</tr>
<tr>
<td><strong>Threshold Estimate</strong></td>
<td>4.6085</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Boot (p-value)</strong></td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LM test for no threshold</strong></td>
<td>18.6591</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: The standard errors are reported in parentheses (White corrected for heteroskedasticity). Results correspond to trimming percentage of 10%

Table 1 depicts that the hypotheses of FDI-led Growth, FDI-led GS, and FDI-led GAP reduction are rejected at lower level of macroeconomic conditions for all the models - A, B and C. In Model A, the coefficients for FDI variable for the low and high level of macroeconomic conditions are -0.064 and 0.019, respectively, and significant at the one percent level, implying that contributions of general macro-economic health are evident...
on the impact of FDI on GDP growth. For Model B, at lower level of macroeconomic conditions (≤ 4.6) FDI has a negative impact on economic sustainability where the coefficient of FDI is -0.10 while at higher level (>0.46) of macroeconomic conditions the results noticeably change to 0.06.

The regression results of Equation 7 also provide insight to the understanding of the role of FDIs on the absorptive capacity of the country. As evidenced by the results of Model C, the threshold regression coefficient for FDI is negative which reinforces the important role of FDI in reducing the sustainability gap after a certain state of macroeconomic conditions. The change in sign of the FDI coefficient from positive to negative denotes the sustainability path of Malaysia’s economic growth improves as macroeconomic development effects in the country become more widespread. Further, in this model the coefficient for OPA is positive; implying that as the area allocated to oil palm plantation expanded in the 1974–2009 period, the GDP-GS gap likewise increased, i.e., the absorptive capacity of the economy somewhat decreases as long term environmental repercussions work its way out in the economy. Support for such finding is provided by Talberth and Bohara (2006) using livestock index to represent the pressures exerted on environmental resources.

6. Conclusion and policy implications

It is an interesting policy issue about whether FDI enhances growth, sustainability and the absorptive capacity of the economy in the host countries. In this study, we have attempted to address the issue by employing a threshold model for the period 1974-2009 for Malaysia. In order to capture the nonlinearities associated with the impact of FDI on the variables of interest we used an indicator of macro-economic conditions, represented by the ratio of private banking credit to GDP as a threshold variable. An important contribution of the paper is the adoption of the regression model based on such threshold effects to capture the relationship between FDI, macroeconomic conditions, national output growth and the absorptive capacity of the Malaysian economy, separately.

There are several major findings of this paper. First, a priori monotonic restriction on the analysis of FDI on economic growth and sustainability may lead to misleading conclusion. For instance, the study by Jarita (2007) using a linear model and Toda-Yamamoto causality test found that there was no causality between FDI and economic growth for Malaysia. In this paper, we have provided evidence on the role of macroeconomic conditions in "channeling" the impact of inward FDIs on Malaysia’s economic growth. Most importantly, we presented new evidence on the role of macroeconomic conditions in inter-mediating the impact of FDI on GS as a measure of macro sustainability and further on the gap between GDP and GS.

In this study, we fail to reject the presence of threshold effect in the estimation irrespective of the models. We observe robust results showing that inward FDI has contributed markedly to Malaysia’s GDP growth, sustainability, and absorptive capacity especially after her macroeconomic conditions exceeds a particular threshold state. The results suggest that attracting FDIs may be an appropriate strategy to generate future economic growth and enhances the productive capacity of the country to remain on the path of sustainability, so long as the country is able to maintain her threshold level in terms of macroeconomic conditions. This further implies that continuous improvements of
the local macroeconomic conditions including socio-political stability is imperative to the country.

The findings further underline the importance of national policies to focus on local diffusion of knowledge presumably embodied in FDI to ensure greater productive capacity of the economy and hence sustaining the welfare impacts of FDI. In short, FDI policies need to be part of a comprehensive development strategy aimed at new knowledge diffusion while promoting the overall macroeconomic conditions including her financial markets and long-run sustainability.

It is important to note that thus far there has been no general agreement globally on the choice of specific alternative measure to the conventional GDP indicator. The GS rule although denotes explicitly whether the national capital in aggregate is depleting faster than renewed, still does not assure sustainability in the strict sense of the term, due to its reliance on the weak sustainability paradigm. Future studies may consider addressing similar issues using other alternative Green GDP measures such as ISEW and GPI. These indicators may provide more insights on the linkages between FDI, sustainability and the future productive capacity of an economy. Despite the limitations of the GS indicator and the single country application in this study, we believe this study contributes to narrowing some of the literature gap. As rightly pointed by Talberth and Bohara (2006), the use of ISEW and GPI to reflect Green GDP in their study on economic growth-openness linkages will set the stage for more rigorous future studies once standardized green GDP systems such as the United Nations System of Environmental and Economic Accounting (SEEA) are more widely implemented.

Finally, it will be worthy to note that all the models were estimated in reduced forms. Hence, the problems of endogeneity, causality, and omitted exogenous variable bias may arise in such modelling context. Some of the macroeconomic variables particularly FDI and oil palm area (OPA) could be endogenously determined and therefore should be modelled simultaneously with growth. However, in our growth models, we assumed that our regressors were simply exogenous to avoid somewhat complicated econometric issues. Also, the employment of OPA in our gap model as well as financial development indicator may better be seen as illustrative, representing respectively, Malaysia's environmental degradation and general macroeconomic conditions in a very general manner. They are not meant to be indicative of the respective variables in contributing to the GDP, GS and GDP-GS gap.

References


Hansen, B., 1996. Inference when a nuisance parameter is not identified under the null hypothesis. Econometrica 64, 413-430.


Lawn, P., 2003. A theoretical foundation to support the index of sustainable economic welfare (ISEW), genuine progress indicator (GPI), and other related indexes. Ecological Economics 44, 105–118.


Annex on line at the journal Website: http://www.usc.es/economet/eaat.htm
Figure 1: Genuine Savings and Gross Domestic Products of Malaysia from 1974 to 2009. SOURCE: World Bank, World Development Indicators (2012)

Figure 2: The plot of FDI to GDP ratio (1974-2009). SOURCE: World Bank, World Development Indicators (2012)

Figure 3: Domestic credit to private sector as a percentage of GDP (proxy for macroeconomic conditions). SOURCE: World Bank, World Development Indicators (2012)