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Association between foreign capital inflow and macroeconomic factors: Evidence from Nigeria

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This paper empirically examines the association between foreign capital inflows to Nigeria and real growth rate of gross domestic product, domestic credit to the private sector, rate of inflation, perceived level of corruption and market capitalization. Data covering the period 1982 and 2012 were analyzed using econometric models of cointegration technique with its implied error correction model (ECM). Results are consistent with *a priori* expectations as the parsimonious ECM tests suggest that high level of corruption constitutes the greatest impediment to foreign capital inflow to Nigeria. Further, the documented evidence suggests that high rate of inflation has a negative impact on foreign capital inflow to Nigeria. The short-run dynamic results suggest that domestic credit to the private sector, real growth rate of gross domestic product and market capitalization have been beneficial to foreign capital inflows to Nigeria.

Key words: Foreign capital inflows, foreign direct investment, gross domestic product growth, real growth rate of gross domestic product, inflation, domestic credit to private sector, market capitalization, perceived level of corruption, Nigeria.

INTRODUCTION

This paper empirically examines the impact of real gross domestic product growth, domestic credit to the private sector, inflation, perceived level of corruption, and market capitalization on foreign capital inflow to Nigeria. Foreign capital inflow (hereafter, FCI) can play an important role in the country's developmental efforts.[1] Because there is low rate of savings in Nigeria it is difficult to finance investment in the country entirely through domestic savings. By augmenting available local capital FCI can assist in creating direct and indirect employments in Nigeria. Umoh et al. (2012) posit that foreign direct investment augments domestic savings in the process of capital accumulation. The private sector is a very important catalyst in the Nigerian free market economy.

The Nigerian government, like its counterparts else-where, realizes the need to focus on providing an enabling environment that would make the private sector to thrive in contributing meaningfully to the country's quest for development. The government has committed itself to improving the country's economic performance through expansion of the private sector. The commitment has become more pronounced or visible since Nigeria transited to democratic dispensation in 1999. Past and present leaders of Nigeria since 1999 have visited foreign countries to solicit and attract foreign investors to Nigeria. In addition, major policy steps are being taken to reduce regulatory constraints so as to attract foreign investors.

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[1] In this study, we equate foreign capital inflow with foreign direct investment, and define it in line with the International Monetary Fund's (IMF) (1993) definition, which defines it as an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor.

For example, visa restrictions have been relaxed, privatization of state-owned enterprises has taken place. Support for private-sector development is being pursued with vigour including, but not limited to, public-private partnerships, the establishment of the Nigeria Investment Promotion Commission (NIPC), among others. These measures have been yielding the desired effects because since the inauguration of civilian political dispensation in Nigeria in 1999 FCI to the country has been increasing. The surge in FCI to Nigeria since 1999 has partly been attributed to the democratic rule and relative peace within the system (Wafure and Nurudeen, 2010).

But beyond diplomacy-driven inflow of foreign finance to Nigeria, there is a need to examine the relationship between macroeconomic factors and foreign capital inflows to Nigeria; hence the purpose of the paper is to examine the likely impact of the macroeconomic factors on the inflow of FCI to Nigeria between 1982 and 2012.

In this paper, we argue that foreign capital is likely to flow to Nigeria when there is high real gross domestic product growth, when the country extends some credit to the private sector, and when the market size is large. Thus, we expect a positive association between FCI and real gross domestic product growth, domestic credit to the private sector, and market capitalization. We argue that high level of corruption perception and high rate of inflation are likely to militate against foreign capital inflow to Nigeria; so we expect a negative relation between FCI and high level of corruption perception, and high rate of inflation.

Documented results are consistent with *a priori* expectations as the parsimonious ECM test suggests that high level of corruption constitutes the greatest impediment to FCI to Nigeria. Further, the documented evidence suggests that high rate of inflation has a negative impact on FCI to Nigeria. The short-run dynamic results suggest that domestic credit to the private sector, real gross domestic product growth and market capitalization have been beneficial in attracting FCI to Nigeria. The result shows a satisfactory speed of adjustment, and it indicates that a long-run relationship exists among the variables.

The paper recommends that governments in Nigeria should intensify efforts at tackling corruption in the country. The government should also employ proactive inflation reducing and stabilizing measures as they can be helpful in reducing the cost of doing business in Nigeria. Furthermore, the Federal Government of Nigeria should continue with on-going reforms of the capital market, and grant more credit to the private sector since this is likely to impact positively on FCI to Nigeria.

This paper contributes to the growing literature on the determinants of foreign capital inflow to Nigeria. Specifically, the paper extends this literature by introducing and investigating additional variables such as corruption and domestic credit to the private sector.

The remainder of the paper is organized as follows: the next section reviews related literature, presents the theoretical framework, and develops the hypotheses. Section 3 addresses methodology. Section 4 presents the empirical results while section 5 is the discussion and conclusion of the paper.

REVIEW OF RELATED LITERATURE AND DEVELOPMENT OF HYPOTHESES

Review of related literature

Numerous studies have been undertaken on foreign direct investment (FDI) to Nigeria (Obadan, 1982; Ekpo, 1995; Anyanwu, 1998; Ayadi, 2009; Wafure and Nurudeen, 2010; Umoh et al., 2012). While a section of the literature conceives foreign direct investment as the cause of some hypothesized variables (Ayadi, 2009, Umoh et al. 2012), others (Borensztein et al., 1998) view it as the effect of some hypothesized variable. Ekpo (1995) who examines the relationship(s) between foreign direct investment and some macroeconomic variables for the period, 1970-1994 shows that real income per capita, rate of inflation, world interest rate, credit rating, and debt service explain the variability of foreign direct investment to Nigeria. Anyanwu (1998) identifies change in domestic investment, change in domestic output or market size, indigenization policy and change in openness of the Nigerian economy as major determinants of foreign direct investment to Nigeria. Ayanwale (2007) who examines the determinants of foreign direct investment inflow to Nigeria finds that market size, infrastructure development and stable macroeconomic policy are the determinants of FDI to Nigeria. Ayanwale (2007) finds a positive link between FDI and gross domestic product growth in Nigeria. Obadan (1982) argues that market size, trade policies and raw materials are very important determinants of FDI to Nigeria. Wafure and Nurudeen (2010) who investigate the determinants of FDI to Nigeria find that market size of host country, deregulation, political instability, and exchange rate depreciation are the main determinants of foreign direct investment to Nigeria.

In this paper, we follow the above strand of prior literature to examine the relationship between foreign capital inflow (FCI) to Nigeria and macroeconomic factors. In the next subsection we present the paper's theoretical framework and hypotheses.

Theoretical framework and hypotheses

This subsection presents the theoretical framework of the

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study, alongside the five hypotheses of the paper.

In the paper, we relate foreign capital inflows to real growth rate of gross domestic product, market capitalization, domestic credit to the private sector, and perceived level of public sector corruption in Nigeria as well as inflation. Below, we motivate the choice of these variables.

FCI and real growth rate of gross domestic product: It has been shown (Akinlo, 2004; Ayadi, 2009) that there is no significant relationship between FDI and gross domestic product growth in Nigeria. Akinlo (2004) who investigates the impact of FDI on economic growth in Nigeria using data for the period, 1970 to 2001 finds that both private capital and lagged foreign capital have small and insignificant impact on economic growth. Ayanwale (2007) finds a positive link between FDI and growth in Nigeria. Ayadi (2009), while comparing growth rate of GDP with the FDI growth rate, finds that there is negative and insignificant relationship, indicating that FDI cannot be said to have contributed significantly to growth in Nigeria. Against this backdrop, we formulate our first hypothesis, *H1*, thus:

H1: *There is no association between FCI to Nigeria and real gross domestic product growth*

FCI and perceived level of corruption: The level of corruption in Nigeria can have an impact on FCI inflow to Nigeria. Prior studies document mixed findings about the effect of corruption on economic activities. Pantzalis et al. (2008) present the literature that documents negative effect of corruption on investment. Pantzalis et al. (2008) opine that corruption distorts economic decisions and hence might lower investment. Wijeweera and Dollery (2009), who examine the effects of corruption on foreign direct investment inflow, find that there is no statistically significant impact of corruption on foreign direct investment. In light of the literature, we hypothesize that:

H2: *There is no association between FCI to Nigeria and perceived level of corruption in the public sector in Nigeria*

FCI and domestic credit to private sector: Aremu (1997) argues that host countries make credit available to investors in form of subsidized loans, loan guarantees as well as guaranteed export credits. Aremu (1997) notes that the credits provided directly to foreign investors for their operations are to help defray some inevitable costs which invariably have an immediate impact on cash flow and liquidity. This leads to the third hypothesis, *H3*, that:

H3: *There is no association between FCI to Nigeria and domestic credit to the private sector*

FCI and market capitalization: According to Djankov et al. (2008) and Kwok and Tadesse (2006) the size of a country's equity market can be measured by the overall market capitalization of the country's capital market relative to its GDP. Wafure and Nurudeen (2010) find a positive and statistically significant relationship between market size and foreign direct investment. Hence, the next hypothesis, *H4*, is stated that:

H4: *There is no association between FCI to Nigeria and the country's market capitalization*

FCI and Inflation: It has been argued that one aspect of high inflation is that it causes large and seemingly arbitrary redistributions of wealth (Paldam, 2002, p. 222), which can decrease FCI. That is, high inflation can discourage FCI to Nigeria. Hence the next hypothesis, *H5*, is stated thus:

H5: *There is no association between FCI to Nigeria and inflation*

METHODOLOGY

Sources of data

We collected all our data from World Bank's Development Indicators for Nigeria, Central Bank of Nigeria Statistical Bulletin and National Bureau of Statistics[2,3,4] These data sources contain a repository of Nigeria's development indicators on major macro-economic variables such as the amount of foreign direct investment to Nigeria, real gross domestic product growth, domestic credit to private sector, inflation rate, and market capitalization amongst other important indicators. Umoh et al. (2012) and Bushman et al. (2004) collected data for their studies from the World Development Indicators database. Our data cover the period 1982 through 2012.

Methods of analyzing data

We applied econometric models in analyzing the data. Specifically, we used cointegration test, vector error correction as well as Augmented Dickey Fuller (ADF) Unit Root. The conventional approach to time-series econometrics is based on the implicit assumption of stationarity of time-series data. A recent development in time-series econometrics has cast serious doubts on the conventional time-series assumptions. There is substantial evidence in the recent literature to suggest that many macro-economic time series may possess unit roots. That is, they are non-stationary processes. A time-series integrated of order zero I(0), is level stationary, while a time-series integrated of order one, I(1) is stationary in first difference. Most commonly, series are found to be integrated of order one, or I(1). The implication of some systematic movements of integrated variables in the estimation process may yield spurious results. In the case of a small sample study, the risk of spurious regression is extremely high. In the presence of I(1) or

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[2] World Development Indicators at http:// devdata.worldbank.org/dataonline/
[3] http://www.nigerianstat.gov.ng

[4] www.cenbank.org/Rates

higher order integrated variables, the conventional t-test of the regression coefficients generated by conventional OLS procedure is highly misleading (Granger and Newbold, 1977).

Resolving these problems requires transforming an integrated series into a stationary series by successive differencing of the series depending on the order of integration (Box and Jenkins, 1970). However, Sargan (1964), Hendry and Mizon (1978) and Davidson et al. (1978) have argued that the differencing process loses valuable information in data, especially in the specification of dynamic models. If some, or all, of the variables of a model are of the same order of integration, following the Engle-Granger theorem, then the series are cointegrated and the appropriate procedure to estimate the model will be an error correction specification. Hendry (1986) supports this view, and argues that error correction formulation minimizes the possibilities of spurious relationships being estimated as it retains level information in a non-integrated form (Hendry, 1986). Davidson et al. (1978) propose a general autoregressive distributed lag model with a lagged dependent variable, which is known as the 'error-correction' term. Davidson et al. (1978) also advocate the process of adding lagged dependent and independent variables up to the point where residual whiteness is ensured in a dynamic specification. Therefore, error correction models avoid the spurious regression relationships. To guard against the possibility of estimating spurious relationships in the presence of some non-stationary variables, estimation is performed using a general-to-specific Hendry-type error correction modelling (ECM) procedure. This procedure begins with an over-parameterized autoregressive distributed lag (ADL) specification of an appropriate lag. The consideration of the available degrees of freedom and type of data determine the decision on lag length. With annual data, one or two lags would be long enough, while with quarterly data a maximum lag of four can be taken. Under this ECM procedure, the long run relationship is embedded within the dynamic specification.

The model that was estimated for the study is stated as:

$$FDI = \alpha_0 + \beta_1 DC\_PS + \beta_2 CORR + \beta_3 MCAP + \beta_4 INF + \beta_5 RGDPR + \varepsilon \quad ...(1)$$

In terms of expectation, $\beta_1 > 0$, $\beta_2 < 0$, $\beta_3 > 0$, $\beta_4 < 0$, $\beta_5 > 0$
Where:
FDI = Foreign direct investment
DC_PS = Domestic credit to the private sector
CORR = Corruption
MCAP = Market capitalization
INF = Inflation rate
RGDPR = Real gross domestic product growth rate
ε = is a vector of mean zero independent and identically normally distributed residuals.

Dependent and independent variables

Dependent variable: The dependent variable is FDI which is a proxy for foreign capital inflow (FCI). Our use of FDI as the dependent variable is influenced by Onuchukwu and Adelegan (2004) who use the same measure as their dependent variable.

Independent variables: The independent variables are real gross domestic product growth (*RGDPR*), domestic credit to private the sector (*DC_PS*), perceived level of corruption in the public sector (*CORR*), rate of inflation (*INF*) and market capitalisation (*MCAP*). As earlier predicted, we expect positive signs for the coefficients of *DC_PS, MCAP* and *RGDPR,* and negative signs for the coefficients of *CORR* and *INF*. The E-view 4.1 software is used to estimate the model shown in equation 1 above.

Definition of variables

FDI is used as a proxy for FCI. FDI is the amount of foreign direct investment to Nigeria from 1982-2012 (Bushman et al., 2004, p.233).

RGDPR = Growth rate of Nigeria's real gross domestic product.

DC_PS = domestic credit to private sector, and it refers to financial resources provided to the private sector. These include loans, purchases of non-equity securities, and trade credits and other accounts receivable that establish a claim for repayment. For some countries, these claims include credit to the public.

MCAP = Amount of Nigeria Stock Exchange market capitalization from 1982 through 2012. The assumption behind this measure is that it is less arbitrary than any other measure of stock market development (Saibu, 2012; p. 4). According to Djankov et al. (2008), theoretically, it would appear that the measure of Nigeria's stock market capitalization is relevant for testing foreign capital inflow to Nigeria.

INF = is the inflation rate during the period 1982 through 2012

CORR = measures perceived level of public-sector corruption in Nigeria.

EMPIRICAL RESULTS

In this section, we present the empirical results of the study. We separate the estimation process into components of cointegration test and vector error correction unit root test. The Augmented Dickey Fuller (ADF) Unit Root test was used to test whether or not the variables are stationary, and their order of integration. The result of the ADF unit root test is shown in Table 1.

As can be seen from the table, the result of the ADF unit root test indicates that market capitalization (MCAP), foreign direct investment (FDI), corruption (CORR) and domestic credit to the private sector (DC_PS) were originally non-stationary. They, however, became stationary after the first difference was taken. The real gross domestic product growth rate and inflation rate were stationary at the levels probably because they were computed in growth rate. However, following Harris (1995) and Gujarati (2003), both I(1) and I(0) variables can be carried forward to test for cointegration. This forms the basis of the cointegration test that follows next.

Cointegration test

The Johansen cointegration test was used to test whether a long-run relationship exists among the variables. The result of the Johansen cointegration test is shown in Table 2.

The result of the trace statistic indicates two cointegrating equations whereas the result of the Max-Eigen test indicates one cointegrating equation. Thus, we can

Table 1. Summary of ADF unit root test result.

Variables	Level data	1st difference	1% CV	5% CV	10% CV	Order of integration
RGDPR	-3.99[*]	-6.18	-3.68	-2.97	-2.62	I(0)
MCAP	1.70	-3.41[**]	-3.68	-2.97	-2.62	I(1)
INF	-3.08[**]	-5.38	-3.68	-2.97	-2.62	I(0)
FDI	2.16	-4.85[*]	-3.68	-2.97	-2.62	I(1)
CORR	-2.32	-3.28[**]	-368	-2.97	-2.62	I(1)
DC_PS	1.39	-3.53[*]	-3.68	-2.97	-2.62	I(1)

*, ** Indicates statistical significance at the 1 and 5% levels, respectively.

Table 2. Summary of Johansen cointegration test.

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	5% critical value	1% critical value
None **	0.982859	195.7727	94.15	103.18
At most 1 **	0.659461	77.85061	68.52	76.07
At most 2	0.512448	46.61109	47.21	54.46
At most 3	0.420096	25.77873	29.68	35.65
At most 4	0.289205	9.976853	15.41	20.04
At most 5	0.002655	0.077091	3.76	6.65
Hypothesized No. of CE(s)	**Eigenvalue**	**Max-Eigen Statistic**	**5% critical value**	**1% critical value**
None **	0.982859	117.9221	39.37	45.10
At most 1	0.659461	31.23951	33.46	38.77
At most 2	0.512448	20.83237	27.07	32.24
At most 3	0.420096	15.80187	20.97	25.52
At most 4	0.289205	9.899762	14.07	18.63
At most 5	0.002655	0.077091	3.76	6.65

conclude that long-run relationship exists among the variables.

Vector Error Correction (VEC)

The relevant portions of the VEC result are shown in Table 3. The vector error correction test result shows that the corruption equation constitutes the true cointe-grating equation. However, the others are statistically flawed, since they are either not significant or have the wrong signs.

Overparameterization and parsimonious ECM

The result of the overparameterize ECM result is shown in Table 4. The overparameterize ECM result includes two lags of each independent variable. The Akaike and Schwarz information criteria were used to select the appropriate lag length.

The parsimonious ECM result was obtained by deleting insignificant variables from the overparameterize ECM result. The result of the parsimonious (preferred) ECM is shown in Table 5.

The result of the parsimonious ECM shows that domestic credit to the private sector has a significant and positive impact on foreign capital inflow to Nigeria. The result suggests that an increase in domestic credit to the private sector by 1% increased foreign capital inflow by about 18%. This is an indication that domestic credit to the private sector is an important determinant of foreign capital inflow to Nigeria, which fails to support *H3*. The signed result for corruption perception shows that corruption has a negative and significant ($p < 0.05$) impact on the level of foreign capital inflow to Nigeria, thus failing to support *H2*. This finding shows that corrup-tion has a detrimental impact on foreign capita l inflow to

Table 3. Vector error correction test result.

Cointegrating Eq:	Coint Eq1				
LFDI (-1)	1.000000				
LDC_PS (-1)	-0.350532				
	(0.04920)				
	[-7.12533]				
LCORR (-1)	-3.325136				
	(0.09366)				
	[-35.5013]				
INF (-1)	0.048816				
	(0.00157)				
	[31.1050]				
LMCAP (-1)	0.012201				
	(0.02955)				
	[0.41290]				
RGDPR (-1)	1.378939				
	(0.04347)				
	[31.7181]				
C	7.648515				
Error correction:	D(LFDI)	D(LDC_PS)	D(LCORR)	D(INF)	D(LMCAP)
CointEq1	-0.028708	0.024089	-0.258247	9.802599	-0.084931
	(0.11651)	(0.25573)	(0.04364)	(6.93469)	(0.24719)
	[-0.24641]	[0.09419]	[-5.91719]	[1.41356]	[-0.34358]

Table 4. Summary of overparameterize ECM result. Modelling: DLFDI.

Variable	Coefficient	Std. Error	t-statistic	prob.
DLDC_PS	0.177041	0.076571	2.312098	0.0365
DLDC_PS (-1)	0.007162	0.068275	0.104892	0.9179
DLDC_PS (-2)	0.034499	0.064027	0.538814	0.5985
DLCORR	-0.456692	0.161915	-2.820572	0.0093
DLCORR (-1)	0.402398	0.336709	1.195093	0.2519
DLCORR (-2)	-0.562045	0.391683	-1.434948	0.1733
DLMCAP	-0.024873	0.077261	-0.321932	0.7523
DLMCAP (-1)	0.273501	0.089406	3.059103	0.0050
INF	-0.006995	0.003252	-2.151421	0.0494
INF (-1)	0.001042	0.003925	0.265451	0.7945
INF (-2)	-0.010085	0.002964	-3.402777	0.0043
RGDPR	-0.024493	0.048690	-0.503043	0.6228
RGDPR (-1)	0.376539	0.187319	2.010144	0.0549
RGDPR (-2)	0.073059	0.050707	1.440816	0.1716
ECM (-1)	-0.383472	0.178956	-2.142827	0.0313
C	0.039510	0.090724	0.435500	0.6698

Table 5. Summary of parsimonious ECM: **Modeling: DLFDI.**

Variable	Coefficient	Std. Error	t-statistic	prob.
DLDC_PS	0.181221	0.053685	3.375622	0.0026
DLCORR	-0.378536	0.176519	-2.144450	0.0412
DLMCAP (-1)	0.667347	0.178440	3.739888	0.0009
INF	-0.003915	0.001852	-2.114112	0.0456
INF (-2)	-0.008681	0.001893	-4.585829	0.0001
RGDPR (-1)	0.000492	0.031412	0.015650	0.9876
ECM (-1)	-0.328877	0.139257	-2.361657	0.0234
C	0.021992	0.061338	0.358541	0.7232

R^2 = 0.72, AIC = -0.54, SC = -0.16, F statistic = 25.77, DW = 2.15. DC_PS = domestic credit to the private sector, CORR = corruption perceptions index, MCAP = market capitalization, INF = annual rate of inflation, RGDPR = real gross domestic product growth rate. Data cover the period 1982-2012.

Table 6. Diagnostic test result.

Jarque-bera normality test			
Jarque-bera	2.95	Probability	0.23
Breusch-Godfrey serial correlation LM test			
F statistic	2.18	Probability	0.14
White-heteroskedasticity			
F statistic	2.49	Probability	0.04

Nigeria. This suggests that an increase in corruption by 1% increased foreign capital inflow by approximately 38%. The result of the test for market capitalization, *H4*, indicates that the level of market capitalization has significant and positive influence on the level of FDI to Nigeria. The result shows that an increase in the level of market capitalization by 1% is likely to increase FDI by about 67%. This high elasticity provides an indication that the capital market plays a major role in attracting FDI to Nigeria. Testing for the impact of inflation on FDI, *H5*, the result shows that inflation rate has a detrimental impact on FDI to Nigeria, which fails to support *H5*. The result suggests that an increase in the inflation rate by 1 unit is likely to reduce FDI by about 04 percent. Finally, we test for *H1*. As predicted, the level of real gross domestic product growth rate has a positive impact on the level of foreign capital inflow to Nigeria; however, the result is not statistically significant ($p > 0.01$). This test fails to reject *H1* that there is no asso-ciation between FCI to Nigeria and real gross domestic product growth.

Diagnostic test

We performed a diagnostic test, the result of which is shown in Table 6.

The result of the jarque-bera normality test indicates an acceptance of the null hypothesis that the residuals are normally distributed. The Breusch-Godfrey serial corre-lation test shows that the residuals are not serially correlated, and the result of the white heteroskedasticity test indicates that the residuals are homoskedastic.

The result of the Commutative Sum of Recursive Residuals (CUSUM) and Cumulative Sum of Squares of Recursive Residuals (CUSUMQ) stability test are shown in Figures 1 and 2.

It can be seen that the result of both the CUSUM and CUSUMQ stability test indicates that the model is stable. This is because both the CUSUM and CUSUMQ lines fall in-between the two 5% lines.

Variance decomposition

Finally, we performed a variance decomposition test, and the result of the test is shown in Table 7.

The result of the variance decomposition of FDI presented in Table 7 shows that apart from shocks to itself which explain 100% of the changes in first period and 75% in the last period, shocks to corruption explain about 10% of the changes in FDI in the 7th period and this increased to 12% in the last period. The shocks to FDI explain about 24% of the shocks in domestic credit to the private sector in the second period, but this decreased to 10%in the last period. Shocks to FDI explain about 33% of changes in inflation in the first period and this increased to 41% in the 5th period. It, however, decreased to about 12% in the last period. Shocks to FDI explain about 5% of the changes in economic growth in the first period, but decreased to 4% in the last period.

DISCUSSION

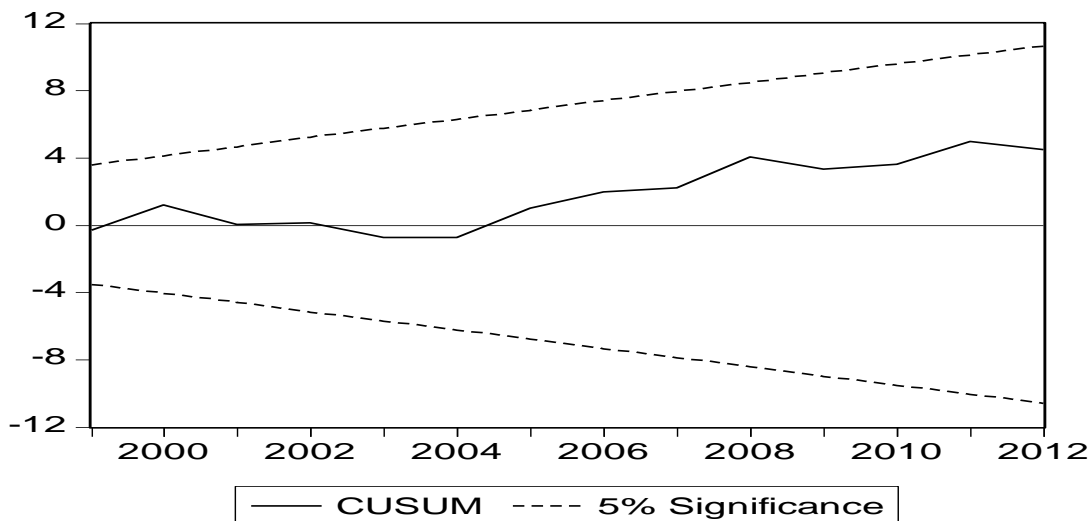A major policy thrust in both industrialized and less
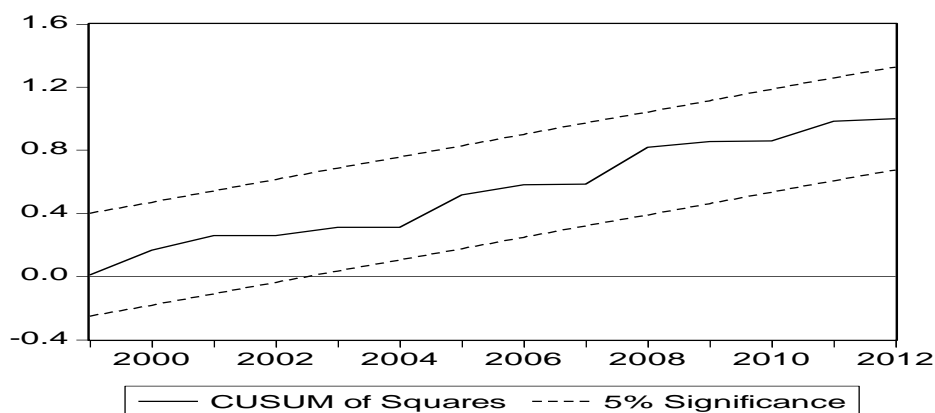
Figure 1. CUSUM stability test.

Figure 2. CUSUMQ stability test.

developed countries has been the increase in foreign capital inflow to facilitate capital accumulation and skills development as well as increase foreign exchange earnings. In Nigeria, the ability of the Federal Government to increase FCI has been bedeviled by several factors. Our result indicates that corruption is the greatest impediment to attracting foreign capital inflow to Nigeria. The result indicates further that high inflation rate has also bedeviled the attraction of FCI to Nigeria. This is not surprising, however, given the high cost of doing business in Nigeria as a result of decaying infrastructure. The documented result shows that domestic credit to the private sector has been beneficial in attracting FCI to Nigeria. The policy of increasing the market capitalisation in Nigeria has also been beneficial to FCI in Nigeria. The documented result also shows a satisfactory speed of

adjustment, which suggests that a long-run relationship among the macroeconomic variables.

CONCLUSION

In this paper, we empirically examine the impact of real gross domestic product growth, domestic credit to the private sector, inflation, perceived level of corruption, and market capitalization on foreign capital inflow to Nigeria between 1982 and 2012. From the result of the parsimonious ECM we find that domestic credit to the private sector has a significant and positive impact on foreign capital inflow to Nigeria. This is an indication that domestic credit to the private sector is an important determinant of foreign capital inflow to Nigeria. We

Table 7. Cholesky variance decomposition.

Period	S.E.	LFDI	LDC_PS	LCORR	INF	LMCAP	RGDPR
Variance Decomposition of LFDI							
1	0.241253	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.396175	88.46661	3.556562	0.778551	7.123379	0.001707	0.073190
3	0.553642	86.70175	5.828569	2.426882	4.328795	0.661042	0.052961
4	0.694304	82.08046	8.392588	3.438808	2.859145	3.186125	0.042874
5	0.778237	80.13065	9.246934	5.438433	2.298206	2.722113	0.163660
6	0.846133	78.82711	9.538365	7.034633	2.036350	2.329397	0.234148
7	0.903394	76.72763	9.221942	9.658018	1.924511	2.098697	0.369205
8	0.952805	75.71191	9.070258	10.85378	1.768254	2.174592	0.421207
9	0.997290	75.20354	9.169273	11.44567	1.614628	2.111779	0.455112
10	1.039120	75.30547	9.163902	11.53133	1.600462	1.946940	0.451897
Variance Decomposition of LDC_PS							
1	0.529555	14.83744	85.16256	0.000000	0.000000	0.000000	0.000000
2	0.795318	24.26427	71.64555	3.184625	0.444529	0.280108	0.180918
3	0.911887	19.53639	73.01244	2.844373	3.344570	0.768781	0.493446
4	0.988410	17.28701	75.71248	2.424367	3.084166	1.071721	0.420254
5	1.082880	14.57907	76.30057	3.099531	3.343722	2.083353	0.593750
6	1.131849	13.83466	77.09776	3.214965	3.069501	2.236404	0.546708
7	1.182974	12.75082	78.42798	3.266896	2.969066	2.055842	0.529394
8	1.235893	11.80369	79.70463	3.133363	2.742554	2.083044	0.532717
9	1.296491	10.74273	79.87816	3.933361	2.537656	2.297805	0.610283
10	1.352172	9.896105	80.61963	4.245857	2.446872	2.187103	0.604430
Variance Decomposition of LCORR							
1	0.090374	1.793863	31.01170	67.19444	0.000000	0.000000	0.000000
2	0.169255	0.873751	11.13833	75.90977	0.019624	7.873368	4.185155
3	0.273151	0.339940	5.970914	83.46430	1.288454	3.178181	5.758214
4	0.379150	2.709570	5.420934	83.53431	0.801558	1.760659	5.772973
5	0.441424	5.469158	4.158124	79.15920	0.613586	4.473842	6.126086
6	0.499850	7.477218	3.277687	78.23803	0.996469	3.777609	6.232984
7	0.559216	9.649115	2.626246	77.46207	1.053425	3.026878	6.182265
8	0.598090	10.80731	2.329222	75.78446	1.047528	3.674766	6.356719
9	0.629931	11.15001	2.106245	75.20081	0.960119	4.260913	6.321896
10	0.664394	11.26807	1.896705	75.71968	0.872455	3.941995	6.301094
Variance Decomposition of INF							
1	14.35992	33.06120	1.541859	1.046748	64.35019	0.000000	0.000000
2	22.03232	35.98216	7.359976	1.768861	54.85025	0.037141	0.001611
3	27.50114	37.27022	12.43600	1.161525	45.83983	2.123140	1.169276
4	30.17851	41.02728	12.06102	1.097445	40.26253	4.532090	1.019637
5	33.08838	40.84165	14.18213	2.892931	35.43163	5.786485	0.865178
6	36.35724	36.98805	15.14037	4.223067	37.09692	5.801694	0.749899
7	38.73827	36.54123	13.85563	4.246033	39.45067	5.244400	0.662036
8	41.08891	35.21766	13.13880	6.049507	36.32925	8.675064	0.589720
9	42.64919	34.38509	14.80572	6.254073	35.12521	8.882555	0.547362
10	44.62195	33.90365	14.72016	5.713360	35.70134	9.460968	0.500519

Table 7. Contd.

Variance Decomposition of LMCAP

Period	S.E.	LFDI	LDC_PS	LCORR	INF	LMCAP	RGDPR
1	0.511873	0.186059	1.692122	11.60474	0.951361	85.56572	0.000000
2	0.686269	3.079911	4.666966	6.463491	4.251166	81.51720	0.021269
3	0.774390	11.14644	4.663082	15.17778	4.099780	64.11328	0.799632
4	0.835202	15.95843	6.398782	17.31025	3.550489	55.61402	1.168034
5	0.959493	14.87746	5.605980	13.15924	3.259369	62.10167	0.996279
6	1.052305	14.55135	6.033759	12.31260	4.062492	61.94454	1.095259
7	1.111530	14.00607	5.748413	19.34359	3.654398	55.52537	1.722155
8	1.144927	13.58584	6.068819	20.35554	3.493648	54.51513	1.981016
9	1.257839	12.05968	5.054192	16.86779	3.481010	60.78072	1.756610
10	1.315107	12.20868	5.777948	16.98826	3.915363	59.31008	1.799682

Variance Decomposition of RGDPR

Period	S.E.	LFDI	LDC_PS	LCORR	INF	LMCAP	RGDPR
1	1.245348	5.041263	0.801793	79.08173	2.691200	5.818397	6.565620
2	1.518986	3.410168	0.606451	63.11749	21.15410	6.985887	4.725902
3	1.678154	2.977096	0.678039	66.61050	17.55974	6.887169	5.287457
4	1.813294	4.186683	2.446881	64.79577	15.15766	8.868893	4.544113
5	1.967530	4.834506	2.223963	57.90108	14.21540	15.93087	4.894175
6	2.049808	4.459563	2.077557	58.58177	15.27353	14.93039	4.677185
7	2.217012	4.489033	1.780137	61.60404	14.44841	13.21951	4.458872
8	2.249673	4.456684	1.986967	61.98495	14.18760	12.90359	4.480199
9	2.303740	4.433717	2.087076	62.30596	13.74396	12.93704	4.492250
10	2.403906	4.310328	1.935589	61.52829	15.23603	12.65434	4.335432

Cholesky ordering: LFDI , LDC_PS , LCORR , INF, LMCAP, RGDPR.

document evidence suggesting that corruption perception has a negative and significant impact on the level of foreign capital inflow to Nigeria. This finding shows that corruption has a detrimental impact on foreign capital inflow to Nigeria. We document evidence that indicates that the level of market capitalisation has significant and positive influence on the level of foreign capital inflow to Nigeria. This high elasticity provides an indication that the size of the capital market plays a major role in attracting foreign capital inflow to Nigeria. Our finding reveals that high inflation rate has a detrimental impact on FDI to Nigeria. As predicted, the level of real gross domestic product growth rate has a positive impact on the level of foreign capital inflow to Nigeria; however, the result is not statistically significant, which makes it difficult to infer the relationship between real gross domestic product growth and foreign capital inflow to Nigeria.

RECOMMENDATIONS

We recommend that governments in Nigeria should intensify efforts at tackling corruption in Nigeria. The government should also employ proactive inflation reducing and stabilizing measures as they can be helpful in reducing the cost of doing business in Nigeria. Furthermore, the federal government should continue with on-going reform of the capital market and grant more credit to the private sector since this is likely to result in impacting positively on FCI in Nigeria.

This paper contributes to the literature that examines the relationship between foreign capital inflow to Nigeria and macroeconomic factors of domestic credit to the private sector, real gross domestic product growth, corruption, market capitalization and inflation. The paper extends this literature by introducing and investigating additional variables.

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