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Globalization Threats to and Opportunities for Foreign Direct Investment Lessons for Uganda and Other Low Income Countries

By

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Abstract:

Virtually all countries are competitively pursuing globalization as one of the major strategies for attracting Foreign Direct Investment (FDI). However, the Low Income Countries such as Uganda attract a lot less FDI inflows than the Middle and High Income Countries. This variance in the FDI attainable by the various country-groupings is apparently due to the observation that globalization levels and processes lead to inequalities related to especially businesses, trade, aid and financial capital flows over time among the Low, Middle and High Income Countries. This study investigates the relationship between the levels of economic, social and political globalization and FDI to identify globalization threats to and/or opportunities for enhancing FDI inflows as lessons to benefit Low Income Countries such as Uganda.

The study was designed as a cross-sectional, desk-top research that applied a triangulation of descriptive and inferential statistics to analyze the correlation between FDI inflows and the levels/indices of economic, social and political globalization for 125 countries. Data for the indices of economic, social and political globalization was obtained from the KOF Globalization Index (2011) while data on FDI was from UNCTAD/World Investment reports. Units of analysis were countries and economic/GNI per capita groupings of countries

Results from the descriptive statistics, Pearson Product-Moment correlations and regression analyses carried out indicated that generally there is a statistically significant positive relationship between inbound FDI and the levels/indices of a country's economic globalization, Actual economic flows, economic restrictions, social globalization, personal contacts, information flow, cultural integration, and political globalization. Thus a country is likely to register greater FDI inflows as she improves her levels/indices of the fore-stated predictor variables. It was noted that low levels of globalization pose threats to FDI while higher levels present opportunities for enhanced FDI. Hence, in order for countries, especially the Low Income Countries such as Uganda, to realize greater FDI inflows, specific measures were recommended for improving their levels/indices of Economic globalization, Actual economic flows, social globalization, personal contacts, information flow, cultural integration, and political globalization as they reduce economic restrictions.

Key words: Economic Globalization, Social Globalization, Political Globalization, Foreign Direct Investment

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1. Introduction

This paper presents a comparative analysis of the statistical relationship between Foreign Direct Investment (FDI) and the levels of globalization for 125 countries to identify globalization lessons for enhancing FDI flows to especially low income countries such as Uganda. The paper is organized as follows: Section 1 serves as an introduction and covers the context and main objectives of the study, the specific objectives, and key research questions of the study, the operational and contextual definition of the concepts, and the scope of the study; Section 2 presents the literature reviewed, the conceptual framework, and hypotheses of the study; section 3 covers the methodology, section 4 presents and discusses the results and section 5 concludes the paper.

1.1 Context and Main Objective of the Study

Globalization is one of the current major strategies for attracting Foreign Direct Investment (FDI) in many countries (Nunnenkamp, 2002). However, globalization levels and processes lead to inequalities related to especially businesses, trade, aid and financial capital flows over time among the low, middle and high income countries (Addison & Heshmati, 2004). The major factors that have been identified by most studies as being influential to FDI inflows are mainly internal country-specific strengths/weaknesses arising from: Natural and artificial resources; Markets' potential and access; National competitiveness derived from the quality and magnitude of infrastructure; labor, technology, global image, stability of the social, economic and political environs among others; Legal and policy frameworks affecting especially FDI, macro-economics, the private sector, and trade and industry; and the National development plans and priorities; among others (UNCTAD, 2009). This study, however, focuses on the influence of globalization on FDI inflows.

Since 1999, Uganda and other low income countries have generally attained low levels of globalization and have as well registered meager proportions (less than 10%) of the global FDI inflows compared to the middle and high income countries (UNCTAD, 2009). The sizeable variance in the FDI inflows attained by the low and high income countries can thus apparently be partially attributable to the disparity in the levels of globalization generally notable in each category of these countries. Hence, the main objective of this study is to investigate the relationship between FDI inflows and the levels of globalization for various countries. The study findings identify globalization threats to and/or opportunities for FDI as lessons for Uganda and

other low income countries. The key research question was thus: "What is the statistical relationship between FDI inflows (measured in millions of US\$) and the levels of globalization (measured as globalization indices) of the various countries of the world?

1.2 Specific Objective and, Research Questions

The specific objectives of the study were:

- 1. To find out the statistical relationship between the levels of economic globalization and FDI inflows of the various countries.
- 2. To explore the statistical relationship between the levels of social globalization and inbound FDI attained by the various countries.
- 3. To examine the statistical relationship between the levels of political globalization and FDI inflows realized by the various countries.

The specific objectives stated above respectively translated into the following key research questions:

- 1. What is the relationship between the levels of economic globalization and FDI inflows of the various countries?
- 2. What is the relationship between the levels of social globalization and inbound FDI attained by the various countries? And
- 3. What is the relationship between the levels of political globalization and FDI inflows realized by the various countries?

1.3 Operational and Contextual Definition of Key Concepts

The key concepts of the paper, stated in bold letters below, were operationally and contextually define as follows:

Foreign Direct Investment: (abbreviated as FDI and also stated as: FDI inflows/ Inbound FDI), refers to any investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or

affiliate enterprise or foreign affiliate). This operational definition of FDI was directly derived from that given by OECD (2008), and UNCTAD (2009).

Globalization: in this report globalization refers to the process of creating networks of connections among actors at multi-continental distances, mediated through a variety of flows including people, information and ideas, capital and goods. This definition was directly derived from the KOF Globalization Index (2011). Thus contextually, globalization should be conceptualized as a process that erodes national boundaries, integrates national economies, cultures, technologies and governance and produces complex relations of mutual interdependence. More specifically, globalization in the context of this paper and according to the KOF Globalization Index has three dimensions defined as:

Economic Globalization, characterized as long distance flows of goods, capital and services as well as information and perceptions that accompany market exchanges. Data for economic globalization applied for this study does not, however, consider the ownership of MNCs especially resulting from internal transfers with subsidiaries and how that might complicate the analysis and use of the trade index.

Political Globalization, characterized by a diffusion of government policies; and Social Globalization, expressed as the spread of ideas, information, images and people.

High Income Country refers to a country whose gross national income per capita is equivalent to US\$ 12, 196 or more. This definition is exactly as that given by the World Bank (2009).

KOF Index of Globalization is an overall index calculated by the Swiss think tank (KOF) to measure the economic, social and political dimensions of globalization that was introduced in 2002 (Dreher, published in 2006) and is updated and described in detail in Dreher, Gaston and Martens (2008).

Low Income Country (LIC) refers to a country with a Gross National Income (GNI) per capita equal to or less than US \$ 995. This definition is exactly as that given by the World Bank (2009).

Middle Income Country (MIC) refers to any country Gross National Income per capita is between US\$ 996 and US\$ 12,195. This definition is exactly as that given by the World Bank (2009).

1.4 Scope of the Study

The thematic scope of this study comprised of net foreign direct investment inflows as established by UNCTAD; and the globalization index, economic globalization, social globalization, and political globalization as established by the KOF Index of Globalization, (2011).

The geographical scope of the study covers 125 countries located on the various continents/regions of the world and recognized by the World Bank and UNCTAD. Of these 125 countries, 37 are categorized as high income countries, 65 are middle income countries, and 23 are low income countries.

The time scope of the study stretched from calendar year 1999 to year 2011 with a focus on year 2008 as this is the most recent/latest year with the most updated data on globalization. However, some references to periods before 2002 have been made to substantiate some of the study's observations. The choice of this time scope (1999 – 20110) is based on the fact that the concept of globalization began in 1999 with the launch of the World Trade Organization and its significance has increasingly influenced the social, economic and political affairs of virtually all countries in the world (Dreher, 2006).

2. Review of related literature

2.1 Trends of Globalization and FDI in Low, Middle and High Income Countries

According to the KOF Index of Globalization (2011), the levels of economic, social and political globalization have generally been highest in the high income countries and lowest in the low income countries from 1999 to 2008. Likewise, the high income countries have always generally registered the biggest proportion of the global FDI inflows, followed by the middle income countries while the low income countries attain less than 10 percent of such flows between 1999 and 2010 (UNCTAD, 2010).

2.2 Uganda's Globalization and FDI Profile

According to the KOF Globalization Index (2011) database, Uganda's globalization trends and development have been steadily improving between 1999 and 2008 as shown in Table 1 below.

Year	economic	Restrictions	social	personal	information	cultural	political	overall	FDI
	globalization	Index	globalization	contact	flows	proximity	globalization	globalization	Inflows
	Index		Index	Index	Index	Index	Index	index	(Millions
									of US\$)
1999	34.8	45.4	19.9	21.6	25.5	11.6	48.8	32.7	140
2000	37.9	51.2	20.6	21.2	28.0	11.5	49.0	34.2	181
2001	41.0	53.6	20.3	22.1	29.7	7.7	49.3	35.3	151
2002	38.9	53.0	22.6	22.9	32.9	10.3	50.5	35.7	185
2003	44.5	55.9	23.7	23.0	35.3	11.2	51.0	38.3	202
2004	50.7	63.3	23.3	24.3	35.3	8.6	68.7	45.0	295
2005	44.1	52.9	23.9	22.9	38.4	8.3	69.4	43.0	380
2006	44.4	52.5	23.2	23.7	38.0	5.7	71.5	43.3	644
2007	46.9	55.5	24.4	24.1	39.3	7.5	72.8	45.0	733
2008	48.3	56.8	25.2	23.1	44.1	5.9	74.3	46.2	787

Table 1 Uganda's Trends of Globalization and FDI inflows from 1999 to 2008

Source: KOF Globalization Index (2011) and UNCTAD (2009)

Table 1 above shows that Uganda's improvement in her globalization process between 1999 and 2008 is directly proportional to the increase in the FDI inflows she registered over the same period. This observation ostensibly alludes that a country is bound to realize greater FDI inflows as she improves her globalization status.

2.3 Trends and Development of Globalization and FDI Inflows

According to the KOF index of globalization (2011) and UNCTAD (2009), virtually all countries in the world have experienced greater and increasing level of globalization and FDI between 1999 and 2010. However, levels of globalization and inbound FDI registered by the low income countries have been the least, followed by those of the middle income countries, while the high income countries have enlisted the highest levels over the same period respectively. According to Dreher et al (2008), the low income countries have , since 1999, generally shown a lowest levels of economic, social and political globalization while the high income countries have had the highest levels. Likewise, the value of inbound FDI registered by the low income countries has been the lowest compared to that attained by the middle and high income countries since 1999 (UNCTAD, 2009). Table 1b below shows the trend (increment) of of FDI inflows attained by the economic groupings of countries between 2005 and 2009.

Region	2005	2006	2007	2008	2009
World	985 796	1 459 133	2 099 973	1 770 873	1 114 189
Developed Economies	624 529	970 098	1 444 075	1 018 273	565 892
Europe	509 148	628 420	988 422	551 059	<i>378 388</i>
North America	130 465	296 897	374 371	379 830	148 540
Developing economies	330 166	434 366	564 930	630 013	478 349
Africa	38 197	55 382	63 092	72 179	58 565
Sub-Saharan Africa	25 961	32 232	38 307	48 081	40 279
Latin America & Caribbean	75 955	94 557	163 612	183 195	116 555
Asia & Oceania	216 014	284 426	338 226	374 639	303 230

Table 1b: FDI inflows attained by the Various Economic Blocks of the World: 2005 – 2009(Millions of US Dollars)

Source: UNCTAD, FDI/TNC database, 2009

Table 1b above shows that world over, and in each and every economic block/grouping of countries, the FDI inflows have been increasing since 2005. Such empirical facts indicate an apparent proportional and statistically significant relationship between the levels of globalization and FDI attainable by a country.

2.4 The Conceptual Framework of the Study

The conceptual framework of the study was as illustrated by Figure I below



Source: Adapted from KOF Globalization Index (2011) and UNCTAD/World Investment Report (2009)

Figure 1 above illustrates the inter-relationship of the predictor and criterion variables that were investigated in the study.

2.5 Hypotheses of the Study

The following null hypotheses were tested in order to realize the objectives of the study stated in section 1 above:

H0₁: There is no statistically significant relationship between the levels of economic globalization and FDI inflows

H0₂: There is no statistically significant relationship between the levels of social globalization and FDI inflows

H0₃: There is no statistically significant relationship between the levels of political globalization and FDI inflows

3. Methodology

The study was conducted as a cross-sectional desk-top survey (secondary research) principally applying a triangulation of quantitative research techniques that included descriptive statistics, correlations, and regressions to analyze the empirical relationship between inbound FDI and various indices of globalization.

3.1 Research Design (components)

The purpose of the study was to test the basic research hypothesizes stated in section 2 above. The type of investigation carried out was correlational to discern the relationship between FDI and globalization. The time horizon of the study was cross-sectional focusing 2008 calendar year because this was the year with the latest/most recent quantitative data on the variables of the study. The units of analysis were countries and groups of countries based on Gross National Income per capita categorized as Low Income Countries, Middle Income Countries and High Income Countries. The study setting was non-contrive (natural/empirical) and the extent of the researcher interference was minimal/none as the study was of a secondary research (desk-top) type. The research paradigm was POSITIVISM as the study principally based on quantitative techniques.

3.2 Study Population and Sampling

The study population comprised 183 countries that are identified and recognized by both UNCTAD (2009) and Dreher (2006). Out of these 183 countries a sample of 125 countries was purposively selected aiming at emerging with only countries that had all the relevant data for the variables of the study.

3.3 Type and Sources of Data

The study principally based on quantitative type of secondary data. Data on the independent variables (i.e. globalization) was generally derived from the KOF Globalization Index (2011) database (KOF, 2011). Data on FDI (the criterion variable) was sourced from various *World Investment Reports* compiled by UNCTAD. Choices for the data-sources were hinged on the observation that these data sources provided authentic, scientific, empirical, well-researched, reliable and relevant data for the study.

3.4 Analysis of Data

Data was analyzed using a triangulation of quantitative research techniques that included descriptive statistics (with a focus on frequencies and particularly the mean and standard deviations) and inferential statistics (principally entailing regressions and Pearson Product-Moment Correlations). These techniques were applied using computer software known as Statistical Package for the Social Science (SPSS) version 16.

3.5 Reliability and Validity

The reliability and validity of the study was ensured through triangulation of research techniques and basing the study on scientific, authentic, well-researched empirical data derived from renowned professional research sources.

3.6 Measurement of Variables

The measurements of the criterion and explanatory variables of the study were exactly as presented by the UNCTAD/*World Investment* Report (2009) and the KOF Globalization Index (2011) respectively.

The criterion (dependant/inbound FDI) variable was, thus measured in millions of US dollars on a net basis (i.e. capital transactions' credits less debits between direct investors and their foreign affiliates). FDI inflows with a negative sign that feature in this study indicate that at least one of the three components of FDI, (i.e. equity capital, reinvested earnings or intra-company loans), is negative and is not offset by positive amounts of the other components, or represent instances of reverse investment or disinvestment (UNCTAD, 2009).

The independent (predictor) variables were measured in exactly the same way they were estimated from their source (i.e. the KOF Globalization Index (2011)). Hence, indices of the variables and sub-variables of globalization, as given in the in the KOF Globalization Index (2011), were the ones used as predictor variables for this study. These variables and indices were estimated as explained below.

3.7 Calculation Methods for the Globalization Indices

In constructing the indices of globalization, each of the variables introduced above was transformed to an index on a scale of one to hundred, where hundred was the maximum value for a specific variable over the period 1999 to 2008 and one was the minimum value. Higher

values denote greater globalization. The data was transformed according to the percentiles of the original distribution. The weights for calculating the sub-indices were determined with the help of principal components analysis for the entire sample of countries and years. The analysis partitioned the variance of the variables used in each sub-group. The weights were then determined in a way that maximized the variation of the resulting principal component, so that the indices captured the variation as fully as possible. The same procedure was applied to the sub-indices in order to derive the overall index of globalization.

The dependant (predictor) variables were weighted and measured according to the KOF Globalization index (2011) as illustrated in Table 2 in annex.

It is vital to note that while developing the Economic Globalization index, the KOF Index of Globalization authors did not consider nor discuss the implications of ownership of MNCs and how that can complicate the use and analysis of the trade index. This is one notable down-side of the data on the predictor variables that was used for this study because most MNCs tend to supply resources to their subsidiaries and in return also receive resources, i.e., internal transfers. As a result, countries with MNCs are expected to experience larger inflows and outflows which would boost the trade index simply due to what would be internal transactions rather than FDI.

4. Results and discussions

The results presented below begin with the findings from the descriptive statistics, followed by those from the Pearson product-moment correlations and end with the outcomes from the linear regressions. In each sub-section, the findings are presented and discussed according to the order of the specific key research questions and hypotheses of the study as stated in sections: 1 and 2 above and end with an overall summation of results.

4.1 Descriptive statistics Results

The descriptive statistics of the predictor and criterion variables were generated for the economic (GNI per capita) groupings of the sampled countries and were presented according the key research question as stated below.

Research Question i: What is the relationship between the levels of economic globalization and FDI inflows of the various countries? The descriptive statistics (mean and absolute figures) for the indicators of economic globalization and FDI inflows for the sampled Low, Middle and High Income Countries were as shown in Table 3 below.

From Table 3, it is evident that the sampled high income countries had the highest mean of economic globalization indices (i.e. with 81.02) followed by the Middle Income Countries (with 61.64) while the sampled Low Income Countries had the lowest average (i.e. 43.18). In a similar order, the sampled Low Income Countries registered the lowest average FDI inflows (i.e. US\$ 2164.87) followed by the middle Income Countries (with US\$ 7637.88) while the High Income Countries attained the highest averages of US\$ 26162.65 million. These results uphold the observation by UNCTAD (2009) that High Income Countries attract greater FDI inflows than their counterparts greatly due to their comparatively reforms that avert economic restriction. Such findings empirically imply that a country is bound to realize greater FDI inflows as it improves her global ranking on economic globalization through increasing her actual economic flows and reducing economic restriction. Thus these findings negate the null hypothesis: H0₁ and instead indicate that there is a statistically significant relationship between the levels of economic globalization and FDI inflows.

Variable	Statistic	Low Income	Middle Income	High Income
		Countries	Countries	Countries
Economic	Mean	43.18	61.64	81.02
Globalization Indices				
	Maximum	68.11	85.71	96.80
	Minimum	27.23	25.69	57.71
Actual Economic	Mean	43.72	63.05	81.67
Flows Indices	Maximum	76.26	93.48	99.42
	Minimum	19.37	22.22	43.55
Economic Restrictions	Mean	42.41	60.11	80.38
Indices	Maximum	61.82	89.26	95.55
	Minimum	21.21	26.25	48.06
FDI Inflows	Mean	2164.87	7637.88	26162.65
	Maximum	41554.00	108312.00	316112
	Minimum	1.00	30.00	20030
Observations	Number	23	65	37

 Table 3: Descriptive Statistics for the Indices of Economic Globalization and FDI

Source: Researcher's analysis based on Empirical figures provided by the KOF Index Globalization (2011) and UNCTAD (2009)

Research Question ii: What is the relationship between the levels of social globalization and inbound FDI attained by the various countries?

The descriptive statistics (mean and absolute levels) of the indicators of social globalization and FDI inflows of the sampled low, middle and high income countries were as shown in Table 4 below

Table 4 shows that, of the three sampled group of countries, the low income countries had the least averages of social globalization indices (i.e., 26.93) and thus the lowest mean indices for personal contact (26.84), information flow (45.15), and cultural proximity (7.29). In contrast, the high income countries had the highest mean indices for social globalization (i.e. 77.89) followed by the middle income countries with an average of 49.89. In the same order the sampled high income countries emerged with the greatest mean FDI inflows (i.e. US\$ 26162.65 million) followed by the middle income countries with a mean of US\$ 7637.88 million, while the low income countries registered only an average of US\$ 2164.87 million. These results concur with the observation by the World Bank (2009) that low income countries generally need to seriously implement economic and social reforms so as to catch up with the middle and high income countries in regard to the globalization and investment levels.

Variable	Statistic	Low Income Countries	Middle Income Countries	High Income Countries
Social Globalization	Mean	26.93	49.89	77.89
Indices	Maximum	45.95	85.41	92.36
	Minimum	17.67	21.01	46.06
FDI Inflows	Mean	2164.87	7637.88	26162.65
	Maximum	41554.00	108312.00	316112
	Minimum	1.00	30.00	20030
Personal Contact	Mean	26.84	45.71	76.06
Indices	Maximum	49.28	75.00	93.87
	Minimum	13.29	10.45	42.73
Information Flow	Mean	45.15	70.22	87.59
Indices	Maximum	77.50	97.80	98.56
	Minimum	34.43	44.85	65.22
Cultural Proximity	Mean	7.29	31.40	68.90
Indices	Maximum	32.09	85.62	94.78
	Minimum	1.00	1.00	8.47
Observations	Number	23	65	37

Table 4: Descriptive Statistics for the Indicators of Social Globalization and FDI

Source: Researcher's analysis based on Empirical figures provided by the KOF Index Globalization (2011) and UNCTAD (2009)

The findings in Table 4 indicate that low social globalization indices inhibit FDI inflows while high social globalization indices present opportunities for attracting greater FDI inflows. Hence, these findings do not support the study's null hypothesis: H0₂ but instead indicate that there is a statistically significant relationship between the indices of social globalization and FDI inflows.

Research Question iii: What is the relationship between the levels of political globalization and FDI inflows realized by the various countries?

The descriptive statistics of FDI inflows and the indices of political globalization for the sampled low, middle and high income countries were as shown in table 5 below

Variable	Statistic	Low Income	Middle Income	High Income
		Countries	Countries	Countries
Political	Mean	72.05	74.06	84.16
Globalization	Minimum	58.37	43.51	36.46
Indices	Maximum	92.46	93.68	98.43
FDI Inflows	Mean	2164.87	7637.88	26162.65
	Minimum	41554.00	108312.00	316112
	Maximum	1.00	30.00	20030
Observations	Number	23	65	37

Table 5: Descriptive Statistics for the Indices of Political Globalization and FDI

Source: Researcher's analysis based on Empirical figures provided by the KOF Index Globalization (2011) and UNCTAD (2009)

From Table 5 above it is evident that the sampled high income countries have the highest mean indices for political globalization (i.e., with 84.16), followed by the middle income countries (i.e., with 74.06) while the sampled low income countries have the lowest averages (i.e., 72.05). The average FDI inflows registered by the respective country groupings are commensurate to the levels of the mean political globalization indices. The variance of the mean political globalization indices among the sampled low, middle and high income countries is, however not as big as that among the FDI averages for the respective groups of countries. This is perhaps because of the generally recommendable political reforms that have occurred in most parts of the world as analyzed by the World Bank (2009). Hence, low levels of political globalization qualify to be considered as threats to FDI inflows and the converse is true. The findings in this subsection contradict the study's null hypothesis H0₃ stated in section 2 above and, instead support the postulation that there is a statistically significant relationship between the levels of political globalization and FDI inflows.

In order to sum-up the results stated above, descriptive statistics illustrating the relationship between inbound FDI and the general globalization indices for the sampled low, middle and high income countries were generated and the findings were as shown in table 6 below.

Table 6:	Descriptive	Statistics for	the Vari	ables of	General	Globalization	and FDI	for the
Sampled	Low, Middl	e and High Ir	ncome Co	untries				

Variable	Statistic	Low Income	Middle Income	High Income
		Countries	Countries	Countries
General /overall	Mean	44.45	60.38	80.64
Globalization	Minimum	33.53	38.51	54.89
Indices	Maximum	57.19	85.71	92.60
FDI Inflows	Mean	2164.87	7637.88	26162.65
Observations	Number	23	65	37

Note: the data in Table 6 above is deliberately skewed to cater for the relative proportions of the low, middle and high income countries in the world (World Bank, 2009)

Table 6 above shows that the sampled low income countries have the smallest actual and mean overall globalization indices (i.e. 33.53 and 44.45 respectively) while the high income countries have the biggest actual and average globalization indices of 92.60 and 80.64 respectively. In the same order, the high income countries have the highest mean FDI inflows of US\$ 26162.65 millions, followed by the middle income countries (with a mean of US\$ 7637.88 millions) while the low income countries have the lowest mean of FDI inflows (i.e. US\$ 2164.87 millions). These findings tally with the observations by the World Bank (2009) that high income countries have implemented the highest levels of economic, social and political reforms for facilitating globalization. The results imply that low levels of globalization present threats to FDI inflows while higher levels present opportunities for greater FDI inflows. This buttresses the basic postulation of the study that there is a statistically significant relationship between the levels of globalization and the monetary value of inbound FDI attainable by any country.

In order to substantiate the results given by the descriptive statistics above, other tests using correlations and regressions were conducted and the findings are presented in the subsequent sub-sections below.

4.2 Correlation Results

Pearson Product-Moment correlations were to establish the statistical relationship between FDI and the predictor variables and sub-variables of globalization and the results obtained were as illustrated in Table 7 below.

Table	7:	Pearson	Product-Moment	Correlation	Coefficients	for	the	variables	of
Global	izati	ion and FI	DI						

	Economi c Globaliz ation Indices	Actual Econo mic flows Indice s	Econom ic Restrict ions Indices	Social Globaliz ation Indices	perso nal Cont act Indic es	Informa tion flow Indices	cultur al Proxi mity Indice s	Political Globaliz ation Indices	General/ Globaliz ation Indices
FDI Inflo ws (US\$ millio ns)	.126	.036	.197*	.284**	.123	.178*	.416**	.298**	.275**

Notes: <u>**</u>*Correlation significant at the 0.01 level (2-tailed); * Correlation significant at the 0.05 level (2-tailed) and Number of Observations= 125*

Source: Researcher's analysis based on Empirical figures provided by the KOF Index Globalization (2011) and UNCTAD (2009)

From Table 7 above, it is evident that there is a positive correlation between FDI inflows and all the predictor variables and sub-variables of globalization as all the correlation coefficients were positive. However, the only predictor variables and sub-variables that proved positive and statistically significant in their correlation with FDI were led by the of cultural proximity indices (with r = .416, p < 0.01), followed by political globalization (with r = 0298, p < 0.01) then social globalization indices (with r = .284, p < 0.01) followed by the general/overall globalization indices (with r = .275, p < 0.01) then Economic Restriction Indices (with r = .197, p < 0.05) and lastly came the information flow indices (with r = .178, p < 0.05). Such results were possibly because components of these predictor variables and sub-variables whose correlation with FDI has proven statistically significant were also identified by UNCTAD/World Investment Report (2009) as critical perquisites for enhancing FDI inflows. The predictor variables and sub-variables whose correlation with FDI proved weakest and statistically insignificant were led by the Actual Economic Flows Indices with r = .036, followed by Personal Contact indices (with r = .123) and Economic Globalization indices with r = .126. The weakness and insignificance of such correlation is perhaps attributable to the observation by Asiedu (2002) that virtually all countries have equally important reforms in respect to the components of indices for economic globalization, actual economic flows and personal contacts and so such factors do no longer provide a competitive edge in attracting FDI.

In summary, the results from correlations generally proved that there is a statistically significant relationship between FDI inflows and the predictor variables of globalization save for the indices of economic globalization, actual economic flows and personal contacts.

4.3 Regression Results

In order to corroborate the results given above, linear regressions of FDI inflows against each of the predictor variables and sub-variables were carried out and the findings were as summarized in table 8 below.

Predictor Variable	R- Square (r2)	Regression Standardized Beta coefficient
	_	& Significance levels of the F statistic
Economic Globalization	.016	.126
Indices		
Actual Economic flows	.001	.036
Indices		
Economic Restrictions	0.39	.197*
Indices		
Social Globalization Indices	.081	.284**
personal Contact Indices	.015	.123
Information flow Indices	.032	.178*
cultural Proximity Indices	.173	.416**
Political Globalization Indices	.089	.298**
General Globalization Index	.076	.275**

Table 8: Results Summary for Regression of FDI against Variables of Globalization

Notes: ** Denotes significance at 0.01 level, and *Denotes significance at 0.05 level

Source: Researcher's analysis based on Empirical figures provided by the KOF Index Globalization (2011) and UNCTAD (2009)

Table 8 above shows from the regressions executed, the only predictor variables that significantly explain variances in FDI inflows were led by the indices of Cultural proximity (with $r^2 = .089 \& p < 0.01$) followed by Political Globalization Indices (with $r^2 = .089$; p < 0.01), then Social Globalization indices (with $r^2 = .081$ and p < 0.01), followed by General/Overall Globalization Indices (with $r^2 = .076 \& p < 0.01$), then Economic Restrictions Indices (with $r^2 =$.039 & p < 0.05), and lastly the Information Flow Indices (with $r^2 = .032$ and p < 0.05). Respectively, these results imply that: at over 99% of the time/chance, a unit change (increase/decrease) in the Cultural Proximity indices significantly explains 17.3 % of unit variance (increase/decrease) in FDI inflows; at a probability of over 0.99, 8.9% variance in inbound FDI has been significantly explained by a unit change in the political globalization indices; at more than 99% probability, 8.1% of changes in FDI inflows has been significantly cause by a unit change in the social globalization indices; 7.6% of the variance in FDI has been reliably explained by a variance in the globalization indices at a probability level exceeding 0.99 ; At over 95% of the chances, a unit change in the Economic Restrictions Indices explains 3.9 % of unit changes in the FDI inflows; and 3.2% of the variance in FDI inflows is significantly explained by a unit variance in the Information Flow indices at a probability rate exceeding 0.95.

The predictor variables that did not prove to significantly affect (explain) changes in the FDI inflows were: Actual Economic Flow indices (with $r^2 = .001$, and p = 0.000, Personal Contact Indices (with $r^2 = .015$ and p = .173), and Economic Globalization Indices (with $r^2 = .001$, and p = .162). It is however important to note that although these predictor variables did not prove to significantly explain the variances in FDI, they were all positive R-square values and positive beta coefficients which implies positive, though week, relationships between these variables and FDI.

In a nutshell, the regression results generally proved that the predictor variables and subvariables of globalization significantly explain the variance in FDI inflows save for the Actual Economic Flow indices, Personal Contact Indices, and the Economic Globalization Indices.

5. Conclusions and recommendations

5.1 Conclusions

The results presented in section 4 above generally proved that there is statistically significant relationships between inbound FDI and the indices (variables and sub-variables) of economic globalization, social globalization, political globalization, and the general/overall globalization.

The descriptive statistics indicated that countries with higher levels/indices of economic, social, political and general/overall globalization attain greater FDI inflows than their counterparts. Results from the descriptive statistics proved that there is a statistically significant relationship between FDI inflows and each of the predictor variables thus disqualifying all the null hypotheses of the study.

The results from correlations generally proved that there is a statistically significant relationship between FDI inflows and the predictor variables of globalization save for the indices of economic globalization, actual economic flows and personal contacts.

Results from regression analysis generally proved that the predictor variables and sub-variables of globalization significantly explain the variance in FDI inflows save for the Actual Economic Flow indices, Personal Contact Indices, and the Economic Globalization Indices.

By and large, findings showed that lower levels/indices of economic, social, and political globalization pose threats to FDI inflows while higher levels/indices present opportunities for enhancing FDI inflows. Inbound FDI is generally statistically related to the levels/indices of economic globalization, social globalization and political globalization.

5.2 Recommendations

Basing on the findings and conclusions above, it is recommended that all countries, and especially Uganda and other Low income Countries, relentlessly and competitively implement the following measures pertaining to economic, social and political globalization so as to realize greater FDI inflows.

Recommendations for Economic Globalization

Regarding economic globalization, we recommend that individual countries, especially the Low Income Countries to always competitively reduce economic restrictions by decreasing and/or

eliminating hidden import barriers such as unclear tariffs, lowering the mean tariff rates, reducing taxes on international trade, and liberalizing capital accounts. As a way of improving the actual economic flows, it is recommendable for countries, especially Uganda and other Low Income Countries, to competitively facilitate increment of international trade, FDI stocks, portfolio investments, and income payments to foreign Nationals.

Recommendations regarding Social Globalization

We recommend relentless increment of personal contacts by facilitating the enhancement/boosting : 1) the international telephone traffic (i.e. the sum of international incoming and outgoing telephone traffic, 2) increase transfers (i.e. increase the sum of gross inflows and outflows of goods, services, income and financial items without a quid pro quo), 3) improving international tourism by facilitating an increase in the sum of arrivals and departures of international tourists, 4) attracting more foreigners to live alongside the citizens of country, 5) facilitate increase in the number of international letters sent and received per capita. We also recommend persistent increment of information flows through facilitating increment of: 1) the number of internet users, 2) share of households with a television set, and 4) international trade in Newspapers and periodicals. Lastly we recommend that countries, especially the Low Income Countries, should competitively increase cultural integration through facilitating international trade in books and pamphlets and easy establishment of globally recognizable brands of stores/shops, groceries, restaurants/hotels, hospitals, schools, recreation and convenience centers among others.

Recommendations for Political Globalization

Regarding political globalization, we recommend that, in order to realize greater FDI inflows, countries such as Uganda and other Low Income Countries, should competitively improve their respective political globalization status by: 1) facilitating establishment of more embassies, consulates and high commissions in their territories, 2) attaining membership in as many international and inter-governmental organizations as possible, 3) increased participation in the U.N. Security Council Missions by contributing competitively more personnel to such missions, and signing /entering as many international treaties as possible.

Recommendations for further Studies

Future studies should apply panel data modeling and Granger- causality tests to further investigate the relationship between FDI inflows and the levels of globalization so as to corroborate and substantiate the findings of this study.

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ANNEX:

Table 2: Components and Estimation of the Globalization Index (Weights for the Indices and Variables)

Index of Globalization		(100%)
	Indices and Variables	Weights
А.	Economic Globalization	[37%]
	i) Actual Flows	(50%)
	International Trade (Sum of exports & imports as percent of GDP)	(19%)
	Foreign Direct Investment, flows (percent of GDP)	(20%)
	Foreign Direct Investment, stocks (percent of GDP)	(24%)
	Portfolio Investment (percent of GDP)	(17%)
	Income Payments to Foreign Nationals (percent of GDP)	(20%)
	ii) Restrictions	(50%)
	Hidden Import Barriers	(22%)
	Mean Tariff Rate	(28%)
	Taxes on International Trade (percent of current revenue)	(27%)
	Capital Account Restrictions	(22%)
B.	Social Globalization	[39%]
	i) Data on Personal Contact	(33%)
	International Telephone Traffic	(26%)
	Transfers of goods, services, income & financial items (percent of GDP)	(3%)
	International Tourism (sum of arrivals & departures of international tourists)	(26%)
	Foreign Population (percent of total population)	(20%)
	International letters (per capita)	(25%)
	ii) Data on Information Flows	(36%)
	Internet Users (per 1000 people)	(36%)
	Television (per 1000 people)	(36%)
	International Trade in Newspapers (percent of GDP)	(28%)
	iii) Data on Cultural Proximity	(31%)
	Number of McDonald's Restaurants (per capita)	(43%)
	Number of Ikea (per capita)	(44%)
	International trade in books and pamphlets (percent of GDP)	(12%)
C.	Political Globalization	[25%]
	Embassies in Country	(25%)
	Membership in International Organizations	(28%)
	Participation in U.N. Security Council Missions	(22%)
	International Treaties	(25%)

Note: The indices on economic, social and political globalization as well as the overall index are calculated employing the weighted individual data series instead of using the aggregated lower-level globalization indices. This has the advantage that data enter the higher levels of the index even if the value of a sub-index is not reported due to missing data.

Source: Dreher et al (2008)