

Foreign Direct Investment Inflows, Financial Openness, and Banking Stability

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Submitted in partial fulfillment of the requirements for
the degree of Bachelor of Arts in Economics
from Washington & Jefferson College
Fall 2021

Abstract

This paper analyzes the impact of financial openness and banking stability on foreign direct investment inflows as a share of GDP. This research question is explored in a sample of 151 countries from 2000 to 2017 in both the full sample and then the samples split based on high versus low-income status. The results overall provide support for my hypothesis that a country with greater financial openness and greater banking stability will experience higher foreign direct investment inflows as a share of GDP. Specifically, I find that financial openness is only significant when the sample is split between high and low-income countries and has a positive relationship with FDI inflows as a share of GDP. Financial openness is more consistently significant for low-income countries than high-income countries. For banking stability, I find that it has an overall positive relationship with FDI inflows as a share of GDP. The banking stability variables are more consistently significant for high-income countries than low-income countries.

Introduction

In this paper, I am researching the relationship between foreign direct investment (FDI) inflows as a share of GDP and financial openness and banking stability. Foreign direct investment flow is “the value of cross-border transactions related to direct investment during a given period of time” (OECD). Specifically, inward foreign direct investment flows are “transactions that increase the investment that foreign investors have in enterprises resident in the reporting economy less transactions that decrease the investment of foreign investors in resident enterprises” (OECD). In other words, foreign direct investment inflows indicate a financial interest in a firm that comes from an investor or firm outside of the country’s borders. Given that FDI inflows are a net value, the reported data can display positive values or negative values if, for example, disinvestment occurs (UNCTAD). Inward foreign direct investment is extremely important in forming strong bonds between economies around the world (OECD). However, making the right foreign investment decisions can be complex. The purpose of this study is to assist foreign investors in making investment decisions as well as assisting the reporting economy with how to attract higher foreign direct investment inflows, specifically in terms of financial openness and banking stability. For this study, I use foreign direct investment inflows as a share of GDP as my dependent variable. For my main variables of interest, I use the Chinn-Ito index, which measures financial openness and capital account openness. For measures of banking stability, I incorporate private credit by deposit money banks as a share of GDP, bank return on assets, insolvency risk measured as a z-score, non-performing loans as a share of total loans, and bank regulatory capital to risk-weighted assets. These all are aspects of banking sectors that contribute to banking stability, and they indicate development, earnings and profitability, risk of becoming insolvent, asset quality, and capital adequacy, respectively. I run

six regressions: two regressions with the full sample of countries and then split into two regressions for both high- and low-income countries. Overall, I find evidence that financial openness and banking stability have a positive and significant relationship with FDI inflows as a share of GDP. Specifically, the development of a country's banking sector as well as its risk of becoming insolvent is consistently significant across these six regressions. I find that financial openness measured through the Chinn-Ito Index is more consistently significant for low-income countries, and that other measures of banking stability, such as bank return on assets and non-performing loans as a share of total loans, are only significant for high-income countries. Therefore, I can conclude that it is possible that foreign investors are more concerned with financial openness when looking to invest in low-income countries, while they may be more concerned with banking stability when looking to invest in high-income countries.

Literature Review

Inward foreign direct investment, also known as inward FDI, is the investment into a foreign country by another country that is influenced by a wealth of economic, financial, and political variables in the recipient country. In other words, it is “an investment made by a firm or individual in one country into business interests located in another country” (Srivastava and Talwar, 2020, p. 5). This is an important macroeconomic concept to understand so that both the investing and receiving country can maximize the benefits of their investment and spillovers can occur in the receiving economy. Inward foreign direct investment into a country can promote job growth within a country and introduce new technologies (Babunek, 2017). It also has the power to increase competition in the receiving economy (Babunek, 2017). However, it is possible that inward foreign direct investment could create a large dependence on another country for financing. Another downside to inward foreign direct investment is that there is a potential loss

associated with national sovereignty (Ghosh and Wang, 2012). Having the relevant financial, economic, and political information assists in the investing country's ability to make an informed investment decision. Therefore, researching the specific variables that indicate ideal conditions for investment and that attract inward foreign direct investment into a country is critical.

The political stability of a country and inward foreign direct investment have a positive relationship in which FDI inflows will increase if the government is sounder (Wang and Swain, 1995; Das, 2020). Other political and government variables that can influence inward FDI flows and that are important to control for according to Hermes and Lensink (2003) include uncertainty of government expenditures, government consumption as a percent of GDP, and the political rights index (Hermes and Lensink, 2003).

The human development of a country is important when making inward foreign direct investment decisions as this will influence the absorption and spillover effects in the receiving country, and ultimately growth (Srivastava and Talwar, 2020). Srivastava and Talwar (2020) study the impact of the Human Development Index (HDI) on attraction of inward foreign direct investment flows and use a sample of 30 countries with high, medium, and low HDI ranks (Srivastava and Talwar, 2020). HDI consists of three variables: education, income, and life expectancy (Human Development Reports, 2010; Srivastava and Talwar, 2020). They find that HDI does not have a significant impact on inward FDI into a country (Srivastava and Talwar, 2020). However, there are contradicting studies like that of Majeed and Ahmad (2008), who reported that greater human development is tied to higher foreign direct investment inflows (Majeed and Ahmad, 2008; Srivastava and Talwar, 2020).

Another macroeconomic concept that is common in the literature is trade openness. It is agreed that inward foreign direct investment flows and trade openness have a positive

correlation, with a more open economy attracting more inward FDI flows (Das, 2020). Das (2020) finds that overall trade openness in countries is a significant determinant of inward FDI flows, therefore aligning with previous research by others (Das, 2020).

Exchange rate regime is also influential on inward foreign direct investment. There is evidence that fixed exchange rates attract higher levels of inward foreign direct investment in comparison to floating arrangements due to the fact that exchange rate volatility and risk is not a concern (Schiavo, 2007; Babunek, 2017).

With trade openness being significant to foreign direct investment inflows, financial openness is also important to consider. Ghosh and Wang (2012) study the relationship between inward foreign direct investment stocks and foreign direct investment restrictions, or cross-border capital restrictions, in 23 OECD countries from the years 1981 to 2004. They report results that display a significant yet negative relationship between the two (Ghosh and Wang, 2012). In other words, they find that greater FDI restrictions, or international capital flow restrictions, are associated with lower levels of inward FDI stocks (Ghosh and Wang, 2012).

According to Albulescu (2018), banking stability is a significant financial determinant of inward foreign direct investment flows to a country in the long run based on their research conducted on sixteen EU countries between 2001 to 2015. In particular, inward foreign direct investment and banking stability of a country displays a positive relationship (Albulescu, 2018). In order to assess banking stability, Albulescu (2018) used the Capital Adequacy Ratio (CAR) and Return on Assets (ROA) in his calculations (Albulescu, 2018). Overall, financial conditions have proven to be significant determinants of attracting inward foreign direct investment into countries, specifically into EU countries, in the long run (Albulescu, 2018).

With banking stability in a country influencing inward foreign direct investment flows into that country, it is important to identify what determines banking stability. In a study completed by Ozili (2018), he focused on 48 countries in Africa between 1996 to 2015 and aimed to identify determinants and components of banking stability (Ozili, 2018). In this study, banking stability was substituted with a z-score measuring bank insolvency risk, the non-performing loans to total loans ratio, and the private credit to GDP ratio as dependent variables (Ozili, 2018). The non-performing loans to total loans ratio indicates the asset quality of banks, therefore associating a lower ratio with higher asset quality and a more stable banking system (Ozili, 2015; Ozili, 2018). The private credit to GDP ratio is an indicator of financial development in a host country (Ozili, 2018). These variables represent bank credit risk and financial development and are effective proxies of banking stability in a country (Ozili, 2018).

The explanatory variables used by Ozili (2018) include the regulatory capital ratio, also known as the capital adequacy ratio (CAR), which indicates the quantity of risk-capital that banks are required to reserve in case of major losses, and it provides a safety net for banks when they take risks and potentially need to offset any losses incurred (Diamond and Rajan, 2000; Ozili, 2018). It has been suggested that a higher level of this ratio is associated with a more stable banking system as banks can mitigate risk whether or not they are risk averse in their activities (Besanko and Kanatas, 1996; Aiyar et al, 2015; Ozili, 2018). Ozili (2018) also includes the GDP growth rate to account for economic growth as well as multiple political and governance variables. His results show that all of these explanatory variables do have a significant relationship with banking stability. Specifically, when the regulatory capital ratio and GDP growth rate variables are significant, the majority of the results show a positive relationship

with banking stability. His political and governance variables also display significant relationships with banking stability (Ozili, 2018).

Although the dependent and explanatory variables mentioned above are used in a study that assesses banking stability in Africa, they are still relevant in determining what attracts FDI inflows into a country as banking stability is a critical factor in determining ideal conditions for inward foreign direct investment as discussed by Albulescu (2018). Therefore, these could be beneficial in also assessing levels of foreign direct investment.

According to Hermes and Lensink (2003), the financial system development of a country is a significant determinant for whether inward foreign direct investment flows will be beneficial to the recipient country in terms of promoting growth (Hermes and Lensink, 2003). The proxy for financial system development that they use in this study is the ratio of private sector bank loans to GDP (Hermes and Lensink, 2003). Therefore, this is important for attracting inward FDI.

Data and Methodology

The research question that I am testing is the following: how does financial openness and banking stability impact foreign direct investment (FDI) inflows into a country? I hypothesize that greater financial openness and greater banking stability are associated with greater foreign direct investment inflows as a share of GDP into a country. My sample includes annual data from 2000 to 2017 for 151 countries. Due to data limitations, not all countries have data available for the entire time period, resulting in an unbalanced panel. I run a total of six regressions. Two of these regressions include the full sample of countries, while the other four regressions are split samples between high and low-income countries. A split sample between income groups is an important step to account for different motivations of FDI between high-

and low-income countries. Also, I run two regressions for each of these samples due to my inclusion of only two banking stability variables in one and five banking stability variables in the other, since when five are included there is a large drop in observations. Below is my full regression equation:

$$\begin{aligned}
 FDI \text{ inflows as a share of GDP} = & \beta_0 + \beta_1 CHINN-ITO_{t-1} + \beta_2 PRIVATECREDIT_{t-1} + \\
 & \beta_3 ROA_{t-1} + \beta_4 INSOLVENCYRISK_{t-1} + \beta_5 NONPERFORMINGLOANS_{t-1} + \\
 & \beta_6 BANKREGCAPITAL_{t-1} + \beta_7 LOGGDP PERCAPITA_{t-1} + \beta_8 GDPGROWTH_{t-1} + \\
 & \beta_9 GROSSFIXEDCAPFORM_{t-1} + \beta_{10} DEMOCRACY_{t-1} + \beta_{11} TRADEOPENNESS_{t-1} + \\
 & \beta_{12} SOFTPEG_{t-1} + \beta_{13} NOSEPARATELEGALTENDER_{t-1} + \beta_{14} CURRENCYBOARD_{t-1} + \\
 & \beta_{15} 2002-2017
 \end{aligned}$$

For my dependent variable, I am using inward foreign direct investment (FDI) flows as a percentage of GDP, which is pulled from the UNCTAD. Foreign direct investment inflows are by definition “transactions that increase the investment that foreign investors have in enterprises resident in the reporting economy less transactions that decrease the investment of foreign investors in resident enterprises” (OECD). Therefore, it is possible for some observations of inward foreign direct investment flows to be positive or negative.

My main independent variables of interest can be broken down into two categories: measures of financial openness and banking stability. To measure financial openness, I use the Chinn-Ito Index, which uses a scale of 0 to 1 to indicate capital account openness and restrictions on cross-border financial transactions of a country (Chinn and Ito, 2006). One indicates completely open and zero indicates completely closed. Specifically, the measures that make up the Chinn-Ito Index and determine the extent of a country’s financial openness include the following: restrictions associated with the presence of numerous exchange rates, restrictions on

cross-border current account transactions, restrictions on cross-border capital account transactions, and requirements regarding the surrender of export proceeds by the foreign company (Chinn and Ito, 2006). I hypothesize that countries with greater financial openness attract higher FDI inflows as a share of GDP than countries that are more closed financially.

To measure banking stability, I use private credit by deposit money banks as a share of GDP, insolvency risk measured as a z-score, bank non-performing loans to total gross loans, bank regulatory capital to risk-weighted assets, and bank return on assets as a percentage. Private credit by deposit money banks as a share of GDP is “the financial resources provided to the private sector by domestic money banks as a share of GDP”, where domestic money banks are commercial banks and financial institutions that accept transferable deposits (FRED). An example of this variable is a loan. Private credit by deposit money banks as a share of GDP is used as a proxy for banking stability in Ozili’s (2018) study. In particular, it measures financial development of the banking sector (Ozili, 2018). I hypothesize that higher levels of private credit by deposit money banks as a share of GDP is associated with higher levels of foreign direct investment inflows as a share of GDP. Data on this variable is retrieved from the FRED.

Insolvency risk is an indicator of default risk within the banking sector, and it is used to compare “the buffer of a country’s banking system with the volatility of those returns” (The World Bank). It is measured using a z-score where an increase in the measures indicates a lower probability of default in the banking system. This data was retrieved from the World Bank. The z-score is calculated by the following equation: $(CAR+ROA)/\text{standard deviation of ROA}$, where CAR is the capital adequacy ratio and ROA is the return on assets (Albulescu, 2018). I expect that a higher z-score is associated with higher FDI inflows as a share of GDP, because lower risk

of default in the banking sector should be associated with more banking stability and reassure foreign investors when making an investment decision.

Bank non-performing loans to total gross loans is the ratio of defaulted loans as a share of total loans in the banking sector, where defaulted loans include the full value of the principal amount and the interest payment associated with a loan that is 90 or more days overdue and total loans includes the value of the total loan portfolio (The World Bank). Bank non-performing loans to total loans measures banks' asset quality within a country (IMF). Data on this variable is pulled from the World Bank as well (World Bank). For this variable, I hypothesize that greater non-performing loans as a share of total loans is associated with the less FDI inflows as a share of GDP.

Bank regulatory capital to risk-weighted assets measures capital adequacy and the required capital, or safety net, that banks have for the risks that they take, and this data will be extracted from the FRED. I hypothesize that higher regulatory capital to risk-weighted assets is associated with higher FDI inflows as a share of GDP. Finally, bank return on assets (%) measures "commercial banks' net income to yearly averaged total assets" (FRED). In other words, it measures the earnings and profitability of the banking sector (IMF). This data is sourced from the FRED. I expect higher bank return on assets to be associated with higher foreign direct investment inflows as a share of GDP. All of these are measures of various factors that contribute to banking stability as a whole within the sector

For my independent control variables, which are all also lagged by one year, I use real GDP per capita in USD-based, constant 2015 prices as well as GDP growth rate per capita in USD-based, constant 2015 prices sourced from UN National Accounts: Analysis of Main Aggregates (UN National Accounts). GDP per capita is used to measure income level, but I also

include GDP growth rate per capita to account for economic performance of the countries since investing involves analyzing growth and the health of the economy during the decision window. I hypothesize that countries with a higher GDP per capita as well as a higher GDP growth rate per capita are associated with higher FDI inflows as a share of GDP as a healthy, growing economy should provide the most favorable conditions for foreign direct investment.

Gross fixed capital formation as a percentage of GDP is also be used and extracted from the UN National Accounts: Analysis of Main Aggregates (UN National Accounts). Gross fixed capital formation as a percentage of GDP is, in simpler terms, domestic investment as a percentage of GDP. According to UN National Accounts, gross fixed capital formation is “the total value of a producer’s acquisitions, less disposals, of fixed assets during the accounting period” (UN National Accounts). Furthermore, the OECD describes it as “assets that are intended for use in the production of other goods and services” (OECD). In other words, gross fixed capital formation is the investment in production inputs within a country and will be important to include as it indicates how much a country is investing within its own economy in comparison to its GDP. In this study, I expect that higher levels of gross fixed capital formation as a percentage of GDP attracts higher levels of FDI inflows.

Additionally, I will be incorporating trade openness, calculated as imports and exports as a percentage of GDP, from the UNCTAD. Like financial openness, it is important to control for trade openness as it is a determinant of accessibility into and out of a country. Like financial openness of a country, I expect that greater trade openness is associated with greater FDI inflows as a share of GDP. I will also be incorporating the political regime by means of the Polity5 index. This index generates an autocratic score as well as a democratic score for each country, and the difference between these two values will indicate their Polity5 score on a scale of

negative ten to positive ten, with negative ten indicating a completely autocratic regime and a positive ten indicating a completely democratic regime (Polity5). Rather than use these scores, I will transform them into dummy variables with any Polity5 score where $6 \leq \text{score} \leq 10$ is equal to one. These will represent the countries that have the highest democratic scores. I hypothesize that, if a country is a democracy, then FDI inflows as a share of GDP will be higher relative to less democratic political regimes.

Data from the IMF on exchange rate regimes will be used as dummy variables (IMF). I split the exchange rate regimes into four categories: arrangements with no separate legal tender, currency board arrangements, soft peg exchange rate regimes, and floating arrangements. Arrangements with no separate legal tender and currency board arrangements are both hard peg exchange rate regimes but are split to account for extreme differences between countries such as Hong Kong, which is classified under currency board, and Zimbabwe, which is classified as an exchange arrangement with no separate legal tender after 2009 following extremely high inflation. An exchange arrangement with no separate legal tender is a regime in which another country's currency, such as the U.S. Dollar, is used as the sole currency of a country, such as Zimbabwe (IMF). This type of hard peg exchange rate regime also includes countries that participate in currency or monetary unions where a certain group of countries use the same currency established by the union (IMF). A currency board arrangement is a fixed exchange rate regime in which each unit of domestic currency must be completely backed by one unit of the foreign currency, such as the case of the Hong Kong Dollar and the U.S. Dollar, and there are strict regulations on issuance of these currencies (IMF). In simpler terms, one currency could theoretically be completely switched for the other currency in a country that has a currency board arrangement. Due to these stark differences between the two, they will most likely produce more

insightful results when split. The omitted group is floating arrangements. I hypothesize that if the country is a hard peg or soft peg exchange rate regime, then FDI inflows as a share of GDP will be lower relative to floating arrangements. Although floating arrangements are associated with more exchange rate volatility and risk, I believe that they will attract higher FDI inflows as a share of GDP, since greater risk can be associated with greater returns and due to the nature of many of the countries in this classification.

Lastly, I use classifications of high and low-income countries based on 2017 classifications on *The World Bank* to split my sample of regressions. Any country that is listed as a high-income economy with a GNI per capita of \$12,696 or higher is included in the high-income samples, and any country below this level is included in the low-income samples (*World Bank Country and Lending Groups*). It is critical to split the sample between high and low-income countries in order to account for differences in their financial conditions.

Results

To answer my research question of how financial openness and banking stability impact foreign direct investment (FDI) inflows as a share of GDP into a country, I run six regressions and find a significant relationship between these variables and FDI inflows as a share of GDP. All independent variables are lagged by one year. The results of my regressions along with an in-depth analysis of each are shown below.

Table 1: Full Sample		
	Regression 1	Regression 2
ln GDP per Capita	-1.061***	-1.871***
	(0.235)	(0.567)
GDP Growth Rate	-0.073	-0.115
	(0.077)	(0.179)
Gross Fixed Capital Formation	0.013	-0.217***
	(0.036)	(0.080)
Democracy	3.184***	5.024**
	(0.929)	(2.087)
Trade Openness	0.111***	0.133***
	(0.021)	(0.031)
Chinn-Ito	0.575	0.654
	(0.656)	(0.470)
Private Credit by Deposit Money Banks	0.020**	0.024*
	(0.008)	(0.014)
Bank Return on Assets	-0.027	-0.105
	(0.086)	(0.161)
Insolvency Risk		0.281***
		(0.104)
Non-Performing Loans to Total Loans		-0.005
		(0.055)
Bank Regulatory Capital to Risk-Weighted Assets		0.128
		(0.169)
Soft Pegs	1.263	0.506
	(1.365)	(1.891)
No Separate Legal Tender	0.289	-3.454**
	(0.825)	(1.713)
Currency Board	-5.004**	-3.647***
	(2.117)	(1.282)
Constant	0.112	3.465
	(2.138)	(5.264)
Number of Observations	2,061	1,276
F-Stat	7.04	2.38
R ²	0.1177	0.1362

Note: The asterisks *, **, *** indicate 10%, 5%, and 1% significance levels, respectively. Parentheses indicate robust standard errors. Years are controlled for in the regression and are not shown above but can be referenced at the end of this paper.

In my first regression with the full sample and only two variables that measure banking stability, the model explains slightly over 11% of the variation in FDI inflows as a share of GDP. For my main independent variables of interest, I find that financial openness measured by the Chinn-Ito Index is not significant, which contradicts my hypothesis. It is possible that financial openness is not significant because the sample is not split between high and low-income countries. Private credit by deposit money banks as a share of GDP is significant at the 5% level. A one percentage point increase in private credit by deposit money banks as a share of GDP is associated with a 0.020 percentage point increase in FDI inflows as a share of GDP. With that being said, I can conclude that banking stability measured through private credit by deposit money banks as a share of GDP is attractive for FDI inflows as a share of GDP, which supports part of my hypothesis. Given that private credit by deposit money banks as a share of GDP measures development of the banking sector, it is evident that this aspect of banking stability is important when making investment decisions abroad. Bank return on assets is not significant in this case, indicating that earnings and profitability of the banking sector are not as important in attracting FDI inflows. I find that the natural log of GDP per capita is significant at the 1% level. If GDP per capita increases by one percent, then FDI inflows as a share of GDP will decrease by 0.01 percentage points, which is an unexpected relationship. This result could be due to GDP per capita's representation of wages. Because higher GDP per capita can be indicative of higher wages, this could explain why it has a negative relationship with FDI inflows as it could create a less attractive environment in the eyes of foreign investors (Benassy-Quere et al., 2007). Democracy and trade openness are both significant at the 1% level as well, and they have positive relationships with FDI inflows as a share of GDP. If the country is a democracy, then expect FDI inflows as a share of GDP to be 3.184 percentage points higher relative to all other

forms of government. Similarly, if trade openness, measured as imports and exports as a share of GDP, increases by one percentage point, then FDI inflows as a share of GDP will increase by 0.111 percentage points. Currency board arrangements, which are considered a hard peg exchange rate regime, are significant at the 5% level and have a negative relationship with FDI inflows as a share of GDP. This means that FDI inflows as a share of GDP on average decrease by 5.004 percentage points relative to floating exchange rate regimes.

In my second regression, I add three more variables that measure banking stability, and the explanatory power of my variables rises to 13.62%, possibly due to the large drop in observations. In terms of my main independent variables of interest, I find two of my banking stability variables to be significant in this regression. Private credit by deposit money banks as a share of GDP is significant at the 10% level, while insolvency risk is significant at the 1% level. A one percentage point increase in private credit by deposit money banks as a share of GDP is associated with a 0.024 percentage point increase in FDI inflows as a share of GDP, and an increase of one point in the z-score for insolvency risk is actually associated with a 0.281 percentage point increase in FDI inflows as a share of GDP. This is an expected relationship, because a higher z-score is associated with lower risk of insolvency and a more stable banking sector, which makes sense to attract higher FDI inflows as a share of GDP. Bank return on assets, non-performing loans as a share of total loans, and bank regulatory capital to risk-weighted assets are not significant in this case. In other words, earnings and profitability, asset quality, and capital adequacy of the banking sector are not significant in attracting FDI inflows. Based on these first two regressions with the full sample, banking stability does significantly impact FDI inflows as a share of GDP into a country, but financial openness does not, since the

Chinn-Ito index which measures financial openness is not significant. Therefore, I have found evidence to support part of my hypothesis.

Also in my second regression, GDP per capita is still significant at the 1% level. In this case, a one percent increase in GDP per capita is associated with a 0.01871 percentage point decrease in FDI inflows as a share of GDP. Gross fixed capital formation as a share of GDP is significant at the 1% level in the second regression, and a one percentage point increase in gross fixed capital formation as a share of GDP is associated with a 0.217 percentage point decrease in FDI inflows as a share of GDP, which is an unexpected relationship. Democracy and trade openness are significant again, but democracy is significant at the 5% level this time. If the country is a democracy, then expect FDI inflows as a share of GDP to be 5.024 percentage points higher relative to all other forms of government. For trade openness, a one percentage point increase is associated with a 0.133 percentage point increase in FDI inflows as a share of GDP. Regarding exchange rate regimes, both currency board arrangements and regimes with no separate legal tender are significant at the 1% and 5% levels, respectively. This means that, for no separate legal tender, FDI inflows as a share of GDP on average decrease by 3.454 percentage points relative to floating exchange rate regimes. For currency board arrangements, FDI inflows as a share of GDP on average decrease by 3.647 percentage points relative to floating exchange rate regimes.

Below is my second set of regression results. I ran the regression again only using two variables that measure banking stability in addition to the other independent variables, but this time split the sample between high and low-income countries.

Table 2: High and Low-Income Countries Using Two Banking Variables		
	High Income	Low Income
ln GDP per Capita	-4.737**	-0.961***
	(1.987)	(0.202)
GDP Growth Rate	-0.823*	0.051
	(0.465)	(0.038)
Gross Fixed Capital Formation	-0.301**	0.113***
	(0.143)	(0.028)
Democracy	23.336***	0.555*
	(8.876)	(0.293)
Trade Openness	0.171***	0.032***
	(0.037)	(0.007)
Soft Pegs	11.552*	-0.380
	(6.467)	(0.355)
No Separate Legal Tender	-1.476	-0.521
	(4.740)	(0.571)
Currency Board	-13.621**	-0.788
	(5.520)	(0.956)
Chinn-Ito	3.738	1.397***
	(4.429)	(0.323)
Private Credit by Deposit Money Banks	0.045**	0.025**
	(0.018)	(0.010)
Bank Return on Assets	0.985***	-0.035
	(0.325)	(0.069)
Insolvency Risk		
Non-Performing Loans to Total Loans		
Bank Regulatory Capital to Risk-Weighted Assets		
Constant	15.943	4.382***
	(11.865)	(1.440)
Number of Observations	731	1,330
F-Stat	4.22	7.71
R ²	0.1781	0.1974

Note: The asterisks *, **, *** indicate 10%, 5%, and 1% significance levels, respectively. Parentheses indicate robust standard errors. Years are controlled for in the regression and are not shown above but can be referenced at the end of this paper.

Some notable results from splitting the sample between country income levels are the following. For my main independent variables of interest, the Chinn-Ito index, which measures financial openness, is significant at the 1% level for lower income countries. This means that if the country is financially open, then expect FDI inflows as a share of GDP to be 1.397 percentage points higher relative to countries that are financially closed for lower income countries. This is an expected result as more financial openness and accessibility should attract higher investment internationally.

Private credit by deposit money banks as a share of GDP is significant for both high and low-income countries in these regressions. If private credit as a share of GDP increases by one percentage point, then FDI inflows as a share of GDP increase by 0.045 percentage points in high-income countries, while they would increase by 0.025 percentage points in lower income countries. This means that greater development of the banking sector for both high and low-income countries is important for attracting FDI inflows.

For high-income countries, bank return on assets is significant at the 1% level. Specifically, a one percentage point increase in bank return on assets is associated with a 0.985 percentage point increase in FDI inflows as a share of GDP. This is once again an expected relationship as countries with higher returns on assets from the previous year will attract more investment from abroad. Based on this set of regressions, it is evident that banking stability does impact FDI inflows as a share of GDP into a country. Specifically, private credit by deposit money banks as a share of GDP attracts FDI inflows in both high and low-income countries. It is evident that higher levels of bank return on assets is an important condition for high-income countries that attract FDI inflows, while, on the other hand, greater financial openness is an important condition for lower income countries that attract FDI inflows.

By referring to the tabulated Chinn-Ito data for high and low-income countries in tables 10 and 11, it is important to note that the majority of high-income countries are financially open, while the majority of low-income countries are financially closed. Therefore, it is possible that when foreign investors are looking to invest in high-income countries, they expect that they will have less restrictions on capital accounts, so they focus on the earnings and profitability of the banking sector. On the other hand, it is possible that when foreign investors are looking to invest in low-income countries, they focus more on capital account openness and if they will be able to get their money in and out.

While gross fixed capital formation as a share of GDP was unattractive for FDI inflows as a share of GDP for high-income countries in this regression, they were an attractive force for the lower income countries. Specifically, a one percentage point increase in gross fixed capital formation as a share of GDP in lower income countries is associated with a 0.113 percentage point increase in FDI inflows as a share of GDP, and this is significant at the 1% level. If the country is a democracy, then expect FDI inflows as a share of GDP to be 23.336 percentage points higher relative to all other forms of government for high-income countries, whereas it is 0.555 percentage points higher relative to all other forms of government for low-income countries. Democracy is significant at the 1% level for high-income countries, and at the 10% level for low-income countries. Exchange rate regimes only have significance for the high-income countries, with soft pegs and currency board arrangements being significant at the 10% and 5% levels, respectively. For soft peg regimes, this means that countries with it have on average 11.552 percentage points higher in FDI inflows as a share of GDP relative to floating exchange rate regimes. On the contrary, for currency boards, FDI inflows as a share of GDP on average are lower by 13.621 percentage points relative to floating exchange rate regimes.

Table 3: High and Low-Income Countries Using Five Banking Variables		
	High Income	Low Income
ln GDP per Capita	-13.376***	-0.493**
	(4.603)	(0.241)
GDP Growth Rate	-1.043*	0.080***
	(0.618)	(0.031)
Gross Fixed Capital Formation	-0.292	0.031
	(0.205)	(0.028)
Democracy	42.940***	0.321
	(16.441)	(0.315)
Trade Openness	0.192***	0.033***
	(0.042)	(0.007)
Soft Pegs	13.040	-0.161
	(8.426)	(0.309)
No Separate Legal Tender		-0.690
		(0.428)
Currency Board	-2.980	0.507
	(3.279)	(0.848)
Chinn-Ito	8.844**	0.525*
	(4.087)	(0.274)
Private Credit by Deposit Money Banks	0.092***	-0.006
	(0.033)	(0.008)
Bank Return on Assets	0.692	-0.075
	(0.714)	(0.076)
Insolvency Risk	1.676***	0.048***
	(0.597)	(0.013)
Non-Performing Loans to Total Loans	0.328*	-0.043
	(0.190)	(0.032)
Bank Regulatory Capital to Risk-Weighted Assets	1.015	0.030
	(0.674)	(0.037)
Constant	41.339	2.187
	(22.868)	(3.031)
Number of Observations	555	721
F-Stat	1.64	6.46
R ²	0.308	0.2321

Note: The asterisks *, **, *** indicate 10%, 5%, and 1% significance levels, respectively. Parentheses indicate robust standard errors. Years are controlled for in the regression and are not shown above but can be referenced at the end of this paper.

Above is my third set of regression results. This time, I run the regressions using all five variables that measure banking stability while still splitting the sample between high and low-income countries.

In this third set of regressions, the one with the high-income countries has the highest explanatory power out of all six of my regressions at slightly more than 30% of explanatory power in the variance of FDI inflows as a share of GDP. For my main independent variables of interest, the Chinn-Ito index is significant at the 5% level. Therefore, for high-income countries, if the country is financially open, then expect FDI inflows as a share of GDP to be 8.844 percentage points higher relative to countries that are financially closed. Private credit by deposit money banks as a share of GDP is significant at the 1% level for high-income countries, and a one percentage point increase in private credit by deposit money banks as a share of GDP is associated with a 0.092 percentage point increase in FDI inflows as a share of GDP. Insolvency risk is also significant at the 1% level for high-income countries, and a one-point increase in the z-score for insolvency risk is associated with a 1.676 percentage point increase in FDI inflows as a share of GDP for high-income countries. Lastly, a result that is unique to this regression is that non-performing loans as a share of total gross loans is significant at the 10% level. In other words, a one percentage point increase in non-performing loans as a share of total gross loans is associated with a 0.328 percentage point increase in FDI inflows as a share of GDP for high-income countries. This result is the only one out of my main independent variables of interest that has an unexpected relationship with FDI inflows as a share of GDP. My hypothesis states that lower non-performing loans as a share of total loans, or higher asset quality in the banking sector, is associated with greater FDI inflows as a share of GDP, but the results report the opposite relationship. With more banking stability variables included in this regression, bank

return on assets now becomes insignificant for high-income countries. This could possibly be due to the drop in observations. Similar to the previous regression results, bank regulatory capital to risk-weighted assets, which measures capital adequacy in the banking sector, continues to be insignificant. Based on this regression, it can be reported that financial openness and banking stability do have an impact on FDI inflows as a share of GDP.

An important result to note is that the Chinn-Ito index is significant at the 10% level for lower income countries, and if a country is financially open, then expect FDI inflows as a share of GDP to be 0.525 percentage points higher relative to countries that are financially closed. Insolvency risk is significant at the 1% level. If the z-score for insolvency risk increases by one point, then this is associated with a 0.048 percentage point increase in FDI inflows, which is an expected relationship between the two. For low-income countries, it can be concluded that financial openness and banking stability significantly impact FDI inflows as a share of GDP. For lower income countries in this particular regression, an important condition to attract FDI inflows is having a low default risk in the country's banking sector as insolvency risk is the variable that has significance here. However, this is the first regression in which private credit by deposit money banks as a share of GDP does not have significance. Therefore, it is possible that foreign investors looking to invest in low-income countries are more concerned with whether the country's banking sector will become insolvent and whether they will be able to get their money. Also, GDP growth rate is significant at the 1% level for low-income countries, and a one percentage point increase in its growth is associated with a 0.080 percentage point increase in FDI inflows.

Given the results of the following six regressions, there is significant evidence that supports my hypothesis. Banking stability significantly impacts FDI inflows as a share of GDP

into a country, and financial openness impacts FDI inflows as a share of GDP as well, but more so for lower income countries. Overall, there is a positive relationship with FDI inflows as a share of GDP and both financial openness and banking stability.

Conclusion

As discussed above in my study of the relationship between foreign direct investment inflows as a share of GDP and financial openness and banking stability, I find a large amount of evidence overall in support of my hypothesis that financial openness and banking stability do have a positive and significant relationship with foreign direct investment inflows as a share of GDP. I find that private credit by deposit money banks as a share of GDP and insolvency risk are consistently significant across the six regressions, indicating that the development of the banking sector and risk of default within the banking sector are important for attracting FDI inflows into a country. When the sample is split between high and low-income countries, I find that financial openness, or capital account openness, measured by means of the Chinn-Ito Index is more consistently significant for low-income countries in comparison to high-income countries. Therefore, it is possible that foreign investors considering investment into a low-income country abroad are mostly considering accessibility and whether they will be able to get their money in and out when investing. On the other hand, I find that only certain variables measuring banking stability, which are bank return on assets and non-performing loans as a share of total loans, are significant for only high-income countries. With that being said, it is possible that international investors who are considering investment in high-income countries abroad are mostly considering the banking stability of the country. For example, based on my regression results, investors may only focus on the bank return on assets (earnings and profitability) and non-performing loans as a share of total loans (asset quality) when considering investing in high-

income countries, but not when considering low-income countries. In terms of how these results relate to the potential recipient country of FDI inflows, high and low-income countries can gain an understanding of what is most attractive for FDI inflows in other countries and possibly work towards adjusting capital account openness and restrictions and developing and improving certain parts of their banking sector in order to facilitate higher FDI inflows into their country. Overall, it is important for foreign investors as well as the reporting economies to pay special attention to these aspects when looking to invest and attract FDI.

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Appendix

Table 4: Summary Statistics for Regressions with Full Sample

Variable (Source)	Description	Mean	Standard Deviation	Minimum	Maximum
Foreign Direct Investment Inflows as a Share of GDP (4)	Foreign direct investment inflows as a share of gross domestic product	5.779	17.516	-58.326	499.600
GDP per Capita (1)	Gross domestic product per capita at constant 2015 prices in USD	12943.43	16932.63	258.612	106582.3
ln GDP per Capita (1)	Natural log of gross domestic product per capita at constant 2015 prices in USD	8.581	1.443	5.555	11.577
GDP Growth Rate (1)	Annual rate of growth per capita at constant 2015 prices in USD	2.500	5.741	-61.577	123.340
Gross Fixed Capital Formation (2)	Domestic investment as a share of gross domestic product	23.111	7.379	2.000	80.675
Democracy (3)	Country has a Polity5 score $6 \leq x \leq 10$	0.692	0.462	0	1
Trade Openness (4)	(Exports+Imports)/GDP	91.894	58.427	20.893	510.458
Soft Pegs (5)	includes “conventional fixed peg”, “pegged exchange rate within horizontal bands”, “crawling peg”, and “crawling band” for years 2000-2006 and “conventional pegged arrangement”, “stabilized arrangement”, “pegged exchange rate within horizontal bands”, “crawling peg”, “crawl-like arrangement”, and “other managed arrangement” for years 2008-2017 (5)	0.364	0.481	0	1
No Separate Legal Tender (5)	Hard peg exchange rate regime	0.062	0.242	0	1
Currency Board (5)	Hard peg exchange rate regime	0.057	0.232	0	1
Floating Arrangement (5)	includes “managed floating” and “independently floating” for years 2000-2006 and “floating” and “free floating” for years 2008-2017 (5)	0.398	0.490	0	1
Chinn-Ito (6)	an index that measures financial openness and consists of four binary dummy variables: “the presence of multiple exchange rates, restrictions on current account transactions, restrictions on capital account transactions, and the requirement of the surrender of export proceeds” (6)	0.496	0.500	0	1
Private Credit by Deposit Money Banks (7)	“The financial resources provided to the private sector by domestic money banks as a share of GDP” (refer to Footnote 9 for full description) (i.e., loans) (7)	48.865	46.819	0.510	906.383
Bank Return on Assets (7)	“Commercial bank’s net income to yearly averaged total assets” (7)	1.340	1.803	-24.182	15.062
Insolvency Risk (8)	“The probability of default of a country’s banking system. Z-score compares the buffer of a country’s banking system (capitalization and returns) with the volatility of those returns. It is estimated as $(ROA + (Equity/Assets))/\text{standard deviation } (ROA)$.” (8)	14.544	9.095	0.017	63.409
Non-Performing Loans to Total Loans (8)	“Ratio of defaulting loans (payments of interest and principal past due by 90 days or more) to total gross loans (total value of loan portfolio)” (Refer to Footnote 10 for full description) (8)	6.492	6.508	0.1	45.3
Bank Regulatory Capital to Risk-Weighted Assets (7)	“The capital adequacy of deposit takers” (7)	15.779	4.453	1.755	36

Sources: (1) UN National Accounts: Analysis of Main Aggregates, (2) World Bank, World Development Indicators Database, (3) Systemic Peace, (4) UNCTAD, (5) International Monetary Fund (IMF), (6) Chinn and Ito (2006), (7) FRED, (8) World Bank, Global Financial Development Database

Notes: (9) “Domestic money banks comprise commercial banks and other financial institutions that accept transferable deposits” (7). (10) “The loan amount recorded as nonperforming includes the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue” (8).

Table 5: Summary Statistics for High-Income Countries

Variable (Source)	Description	Mean	Standard Deviation	Minimum	Maximum
Foreign Direct Investment Inflows as a Share of GDP (4)	Foreign direct investment inflows as a share of gross domestic product	8.090	28.827	-58.326	499.600
GDP per Capita (1)	Gross domestic product per capita at constant 2015 prices in USD	31080.32	18129.72	6416.615	106582.3
ln GDP per Capita (1)	Natural log of gross domestic product per capita at constant 2015 prices in USD	10.175	0.597	8.767	11.577
GDP Growth Rate (1)	Annual rate of growth per capita at constant 2015 prices in USD	1.655	3.875	-15.151	24.488
Gross Fixed Capital Formation (2)	Domestic investment as a share of gross domestic product	22.798	4.321	10.787	40.660
Democracy (3)	Country has a Polity5 score $6 \leq x \leq 10$	0.871	0.336	0	1
Trade Openness (4)	(Exports+Imports)/GDP	115.954	81.526	20.893	510.458
Soft Pegs (5)	includes “conventional fixed peg”, “pegged exchange rate within horizontal bands”, “crawling peg”, and “crawling band” for years 2000-2006 and “conventional pegged arrangement”, “stabilized arrangement”, “pegged exchange rate within horizontal bands”, “crawling peg”, “crawl-like arrangement”, and “other managed arrangement” for years 2008-2017 (5)	0.257	0.437	0	1
No Separate Legal Tender (5)	Hard peg exchange rate regime	0.014	0.117	0	1
Currency Board (5)	Hard peg exchange rate regime	0.067	0.250	0	1
Floating Arrangement (5)	includes “managed floating” and “independently floating” for years 2000-2006 and “floating” and “free floating” for years 2008-2017 (5)	0.544	0.498	0	1
Chinn-Ito (6)	an index that measures financial openness and consists of four binary dummy variables: “the presence of multiple exchange rates, restrictions on current account transactions, restrictions on capital account transactions, and the requirement of the surrender of export proceeds” (6)	0.855	0.352	0	1
Private Credit by Deposit Money Banks (7)	“The financial resources provided to the private sector by domestic money banks as a share of GDP” (refer to Footnote 9 for full description) (i.e., loans) (7)	77.940	40.900	12.859	263.268
Bank Return on Assets (7)	“Commercial bank’s net income to yearly averaged total assets” (7)	0.922	1.412	-14.455	7.558
Insolvency Risk (8)	“The probability of default of a country’s banking system. Z-score compares the buffer of a country’s banking system (capitalization and returns) with the volatility of those returns. It is estimated as $(ROA + (Equity/Assets))/\text{standard deviation (ROA)}$.” (8)	14.498	7.890	0.017	39.928
Non-Performing Loans to Total Loans (8)	“Ratio of defaulting loans (payments of interest and principal past due by 90 days or more) to total gross loans (total value of loan portfolio)” (Refer to Footnote 10 for full description) (8)	4.515	5.059	0.1	36.647
Bank Regulatory Capital to Risk-Weighted Assets (7)	“The capital adequacy of deposit takers” (7)	14.638	3.600	7	35.653

Sources: (1) UN National Accounts: Analysis of Main Aggregates, (2) World Bank, World Development Indicators Database, (3) Systemic Peace, (4) UNCTAD, (5) International Monetary Fund (IMF), (6) Chinn and Ito (2006), (7) FRED, (8) World Bank, Global Financial Development Database

Notes: (9) “Domestic money banks comprise commercial banks and other financial institutions that accept transferable deposits” (7). (10) “The loan amount recorded as nonperforming includes the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue” (8).

Table 6: Summary Statistics for Low-Income Countries

Variable (Source)	Description	Mean	Standard Deviation	Minimum	Maximum
Foreign Direct Investment Inflows as a Share of GDP (4)	Foreign direct investment inflows as a share of gross domestic product	4.607	6.089	-37.155	70.355
GDP per Capita (1)	Gross domestic product per capita at constant 2015 prices in USD	3687.83	3434.314	258.612	25156.31
ln GDP per Capita (1)	Natural log of gross domestic product per capita at constant 2015 prices in USD	7.768	1.004	5.555	10.133
GDP Growth Rate (1)	Annual rate of growth per capita at constant 2015 prices in USD	2.931	6.448	-61.577	123.340
Gross Fixed Capital Formation (2)	Domestic investment as a share of gross domestic product	23.273	8.540	2.000	80.675
Democracy (3)	Country has a Polity5 score $6 \leq x \leq 10$	0.602	0.490	0	1
Trade Openness (4)	(Exports+Imports)/GDP	79.660	36.455	21.236	347.997
Soft Pegs (5)	includes “conventional fixed peg”, “pegged exchange rate within horizontal bands”, “crawling peg”, and “crawling band” for years 2000-2006 and “conventional pegged arrangement”, “stabilized arrangement”, “pegged exchange rate within horizontal bands”, “crawling peg”, “crawl-like arrangement”, and “other managed arrangement” for years 2008-2017 (5)	0.418	0.493	0	1
No Separate Legal Tender (5)	Hard peg exchange rate regime	0.087	0.282	0	1
Currency Board (5)	Hard peg exchange rate regime	0.052	0.223	0	1
Floating Arrangement (5)	includes “managed floating” and “independently floating” for years 2000-2006 and “floating” and “free floating” for years 2008-2017 (5)	0.324	0.468	0	1
Chinn-Ito (6)	an index that measures financial openness and consists of four binary dummy variables: “the presence of multiple exchange rates, restrictions on current account transactions, restrictions on capital account transactions, and the requirement of the surrender of export proceeds” (6)	0.320	0.467	0	1
Private Credit by Deposit Money Banks (7)	“The financial resources provided to the private sector by domestic money banks as a share of GDP” (refer to Footnote 9 for full description) (i.e., loans) (7)	33.896	42.438	0.510	906.383
Bank Return on Assets (7)	“Commercial bank’s net income to yearly averaged total assets” (7)	1.571	1.948	-24.182	15.062
Insolvency Risk (8)	“The probability of default of a country’s banking system. Z-score compares the buffer of a country’s banking system (capitalization and returns) with the volatility of those returns. It is estimated as $(ROA + (Equity/Assets))/\text{standard deviation}(ROA)$.” (8)	14.572	9.769	0.423	63.409
Non-Performing Loans to Total Loans (8)	“Ratio of defaulting loans (payments of interest and principal past due by 90 days or more) to total gross loans (total value of loan portfolio)” (Refer to Footnote 10 for full description) (8)	7.958	7.054	0.7	45.3
Bank Regulatory Capital to Risk-Weighted Assets (7)	“The capital adequacy of deposit takers” (7)	16.703	4.848	1.755	36

Sources: (1) UN National Accounts: Analysis of Main Aggregates, (2) World Bank, World Development Indicators Database, (3) Systemic Peace, (4) UNCTAD, (5) International Monetary Fund (IMF), (6) Chinn and Ito (2006), (7) FRED, (8) World Bank, Global Financial Development Database

Notes: (9) “Domestic money banks comprise commercial banks and other financial institutions that accept transferable deposits” (7). (10) “The loan amount recorded as nonperforming includes the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue” (8).

Table 7: Full Sample		
Year	Regression 1	Regression 2
2002	-0.402	-0.272
	(0.877)	(1.173)
2003	0.067	-0.021
	(0.802)	(1.056)
2004	1.784	-0.329
	(1.884)	(1.073)
2005	2.959	4.654
	(3.389)	(5.222)
2006	3.171	4.878
	(2.114)	(3.395)
2007	4.889	8.558
	(3.759)	(6.642)
2008	1.636	2.417
	(1.272)	(1.967)
2009	-1.255	-0.316
	(0.800)	(1.254)
2010	0.156	0.281
	(0.960)	(1.852)
2011	1.881	2.410
	(1.820)	(2.680)
2012	0.783	0.683
	(1.341)	(1.883)
2013	-0.292	-0.842
	(1.149)	(1.758)
2014	-0.682	-0.819
	(1.047)	(1.612)
2015	-0.528	-0.332
	(1.004)	(1.652)
2016	-1.330	-1.131
	(0.859)	(1.361)
2017	-0.775	-1.035
	(0.737)	(1.379)

Table 8: High and Low-Income Countries Using Two Banking Variables		
Year	High Income	Low Income
2002	-3.462	0.382
	(2.540)	(0.893)
2003	-2.107	0.751
	(2.215)	(0.907)
2004	2.294	0.925
	(4.938)	(0.811)
2005	7.888	-0.039
	(8.427)	(0.664)
2006	6.602	0.776
	(5.569)	(0.710)
2007	10.673	1.336*
	(9.725)	(0.728)
2008	3.873	1.025
	(3.320)	(0.674)
2009	-5.081*	0.063
	(2.761)	(0.647)
2010	-7.235	0.855
	(4.859)	(0.740)
2011	0.463	1.172
	(4.752)	(0.817)
2012	-2.434	1.436
	(3.485)	(0.996)
2013	-5.876	0.889
	(3.679)	(0.922)
2014	-4.751	0.108
	(3.468)	(0.667)
2015	-4.100	0.237
	(3.220)	(0.661)
2016	-4.756*	-0.492
	(2.456)	(0.865)
2017	-5.040**	0.082
	(2.556)	(0.646)

Table 9: High and Low-Income Countries Using Five Banking Variables		
Year	High Income	Low Income
2002	-3.707	0.389
	(3.848)	(0.587)
2003	-5.027	0.873
	(4.153)	(0.625)
2004	-6.313	0.797
	(4.615)	(0.592)
2005	5.514	1.014
	(8.894)	(0.734)
2006	3.559	2.713***
	(6.071)	(0.916)
2007	12.709	2.950***
	(12.505)	(0.848)
2008	1.852	2.089***
	(4.068)	(0.676)
2009	-3.997	0.985
	(3.900)	(0.661)
2010	-11.918	1.912**
	(7.328)	(0.780)
2011	-3.619	1.626**
	(6.093)	(0.735)
2012	-6.032	1.451*
	(4.890)	(0.844)
2013	-11.852**	0.830
	(5.943)	(0.576)
2014	-13.437**	0.652
	(6.159)	(0.596)
2015	-12.127**	1.151*
	(5.996)	(0.635)
2016	-14.729**	1.018*
	(6.129)	(0.611)
2017	-16.301**	1.016*
	(6.841)	(0.610)

Table 10: Chinn-Ito Index and High-Income Countries		
Chinn-Ito	Frequency	Percent
0	120	14.23
1	723	85.77

Table 11: Chinn-Ito Index and Low-Income Countries		
Chinn-Ito	Frequency	Percent
0	1,169	68.12
1	547	31.88

Table 12: Democracy and High-Income Countries		
Democracy	Frequency	Percent
0	119	12.96
1	799	87.04

Table 13: Democracy and Low-Income Countries		
Democracy	Frequency	Percent
0	723	39.73
1	1,097	60.27