The impact of economic freedom on foreign portfolio investments: The case of the caricom single market and economy

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ABSTRACT

The present phenomena of globalization and market liberalization have attracted considerable attention from foreign investors. Several member states of the Caricom Single Market and Economy are becoming heavily dependent on foreign investments. Consequently, this study intends to investigate the effect of economic freedom on foreign portfolio investments in the case of the Caricom Single Market and Economy. For this purpose, this study has used data from 2012 to 2016. The results of the stationarity test showed that data of all variables considered in the study are stationary at level. Moreover, the fixed-effect model better modeled the data as suggested by the results of the Hausman test. Based on the results of the fixed effect models, economic freedom has a significant and positive effect on the total foreign portfolio investments. Therefore, an increase in economic freedom among the Caricom Single Market and Economy member countries will attract more investors to invest in their country stocks and debt instruments. Furthermore, for the robustness of the results, the study has also estimated a separate regression model for foreign debt portfolio investments and foreign equity portfolio investments which also support the baseline regression results and showed a significant and positive effect of economic freedom on both foreign debt and foreign equity portfolio investments. This study suggests that the member countries of the Caricom Single Market and Economy improve their economic freedom which will attract foreign investors to invest in their countries.

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Introduction

The syndicated loans were considered as the sole source of private capital for firms from 1980 to the debt crisis. However, currently banks' long term financing has shown significant decline in the emerging countries and the gradual increase and dependence has increased on the foreign direct investments and foreign portfolio investments (Agarwal, 1997; Singhania & Saini, 2017).

The current wave of globalization and stocks and bonds market liberalization has attracted considerable attention towards the foreign portfolio investments. This focus is mainly due to the fact that countries alone cannot achieve their developmental goals. They will definitely require the help of the other countries with surplus resources and funds and the deficient countries at the same time provide opportunities of investments to the surplus countries. The last two decades have shown that emerging countries have devised different strategies to improve their country business environment and provide an attractive market place for investments (Singhania & Saini, 2017). The role of the country environment for foreign capital inflows has received significant attention from the researchers across the globe. For instance, Wu, Li, and Selover (2012) examined the role of the business environment and its impact on the foreign portfolio investments. Their results showed a significant and positive effect on the foreign capital inflows. Garg and Dua (2014), Ghosh and Herwadkar (2009) considered BRICS countries and examined country specific factors that can affect the forging portfolio inflows and found that economic growth potential, and stability in economic policies and diversified industries have significantly attracted foreign investments. Mody, Taylor, and Kim (2001) categories factors that could attract foreign capital into two broad categories i.e. country specific factors called pull factors whereas the global factors were known as push factors. Boyer and Zheng

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(2009) and Rai and Bhanumurthy (2004) found that growth in private sectors in underdeveloped countries has gained attraction from the foreign investors looking to diversify their portfolio by investing in these markets. Moreover, they also found that high volatility in such markets has a negative effect on the foreign portfolio. Similarly, earlier studies such as Agarwal, (1997); Grubel, (1968); and Levy & Sarnat, (1970) have also reported that foreign investors invest in other countries in order to diversify their risk. Buckberg (1996) suggested a mechanism on how to invest in foreign markets; first, one should find-out the amount of funds that are required to be invested and then a potential market could be identified with investment opportunities and investments may be made accordingly. Rai and Bhanumurthy (2004) found that stability in the stock market prices and exchange rate have a positive influence on the foreign portfolio investments. Portes and Rey (2005) found that efficient transaction processing, market size and stock market efficiency and liquidity have a significant effect on the foreign portfolio investments (Lin, Lee & Chiu, 2009). Ghosh, Qureshi, Kim & Zalduendo, (2014) found that interest rate volatility has a negative effect on the foreign capital inflows (Portes & Rey, 2005).

The Caricom Single Market and Economy (CSME) is a strategy for regional development among the member countries envisioned in the 10th meeting of conference of governments of the Caribbean community held in July 1990. The focus of this strategy was to deepen economic integration, develop a progressive environment for globalization and trade liberalization. Furthermore, this will provide many opportunities to the member countries including free trade and free capital flow under a single currency. The member countries have made significant improvements in attracting foreign trade due to their openness towards international business. Thus, the member countries of the CSME provide a good ground to examine how economic freedom affects the foreign portfolio investments.

The current study has mainly focused on the influence of economic freedom on the foreign portfolio investments in the Caricom Single Market and Economy (CSME). This study makes several contributions, this is the first study of this nature investigating the foreign portfolio investments in CSME. Moreover, the role of economic freedom has rarely been studied in relation to foreign portfolio investments and most of the studies conducted have focused on a single country whereas the current study has followed a holistic approach and has focused on some CSME countries. Furthermore, prior studies have taken cumulative foreign portfolio investments whereas this study has considered both debt and equity foreign investments.

Due to the ease with which globalization has made foreign investments, the CSME has grown increasingly dependent on those foreign investments. Moreover, the inflows of foreign investments into this single market and economy is comparatively lower to the inflows of more developed nations. Subsequently, increased efforts are being made to attract more foreign investments into the region.

Literature Review

The literature on foreign capital shows that studies have been divided into foreign direct investments and foreign portfolio investments. The foreign direct investments are made with the aim to gain ownership advantage and control of firms operating in foreign countries. The investors directly participate in the management decisions. However, in the case of foreign portfolio investment, investors invest in countries with the expectation of earning higher returns and to diversify their country specific risks. This study has examined the effect of the economic freedom index and its sub-indexes on the foreign portfolio inflows.

Theoretical Background of the Study

This study is based on the following theories related to the foreign portfolio investments and provides theoretical grounds to the understanding of the topic.

Portfolio Balanced Approach

The portfolio balance approach suggested a framework which consists of global factors and domestic factors that could play a role in influencing the inflow of foreign portfolio investments. This approach is based on the fact that investors considered global and country specific factors while evaluating and making decisions related to investments and also keeping in mind their expected abnormal returns (Grubel, 1968; and Harvey, 1991). This study has followed this approach and has considered both country specific factors that affect foreign portfolio investments and has also considered global factors such as global liquidity, economic growth and business growth (Mody, Taylor, & Kim, 2001).

International Finance Theory

The theory of international finance illustrates the reasons why investors invest in cross border firms. Investors invest in foreign debt and equity stocks portfolio in order to diversify country specific risks. Furthermore, it also helps in balancing a gap between saving and investment across different countries. These foreign investments are found to have a positive and significant effect on employment generation and economic growth along with the well-being of the society.

Capital Allocation Theory

The capital allocation theory suggested that investors allocate their funds with the aim to earn abnormal returns and diversify their portfolio of investments. For this purpose, they invest their savings in developing and industrialized countries. Buckberg (1996) has suggested a two-step process of investments. In the first step the investors find out how much they are going to invest in the foreign

portfolio and in the second step, they evaluate different countries' markets for risks and returns and then allocate their funds accordingly in such a way to have a balanced portfolio with the optimal level of risks.

Determinants of Foreign Portfolio Investments

A myriad of studies have been conducted to investigate the determinants of foreign capital inflows. The literature has divided these studies into three broad classes, firm level, industry level and country level factors that play an important role in attracting foreign capital. This study particularly focused on country level determinants of foreign capital inflows. Calvo, Leiderman, and Reinhart, (1993) investigated various country level factors that affect the portfolio inflows in emerging markets and found that stability in interest rates and exchange rates along with the business opportunities, liquidity of stock markets and country economic growth have a positive and significant effect on the foreign capital inflows (Byrne & Fiess, 2011; Felices & Orskaug, 2008; Kim, 2000). Another group of studies have identified local country factors that affect the foreign capital inflows (Chuhan, Claessens, & Mamingi, 1998; De Vita & Kyaw, 2007). Chakrabarti (2001) argued that stable stock market returns have a positive effect on the foreign portfolio inflows. In a similar manner, Rai and Bhanumurthy (2004) also found that stability in stock market returns and exchange rate volatility attract more foreign capital inflows (Lin, Lee & Chiu, 2009). French and Vishwakarma (2013) argued that volatility in the host country market affects the foreign investments for two to three weeks. Srinivasan and Kalaiyani (2015) found a positive and significant effect of the foreign investments on the local stock market development in the long run, however, in the short run, they evidenced a negative effect. Whereas Arora (2016) found that there is no significant effect of the foreign equity investments on the future returns of the stock market, the local equity prices were found significant in explaining the behaviour of the future stock market returns.

The extant literature on financial markets has highlighted the role of globalization and stock and bond market liberalization that has attracted and opened doors for the foreign investors. Therefore, various studies have shown a considerable increase in the foreign capital inflows to the emerging markets like ASEAN and BRICS countries (Garg & Dua, 2014; Holtbrügge and Kreppel, 2012). Mostafa and Mahmood (2015) identified innovation, consumption and human capital as important determinants of foreign portfolio investments in the BRICS and G7 countries. Agarwal (1997) found that an increase in the inflation rate has a negative effect on the foreign portfolio inflows, whereas, stability in exchange rates and economic freedom have a significant positive effect on the foreign portfolio inflows. Portes and Rey (2005) employed the gravity model and found that market size, liquidity, efficiency in transactions and advancement in technology are positively associated with the equity inflows. In the same vein, Byrne and Fless (2011) reported a significant effect of interest rates on foreign portfolio inflows (Ghosh, Qureshi, Kim & Zaldueño, 2014).

Dua and Garg (2013) reported that more economic growth, stability in exchange rates and stock market performance have a positive relationship with foreign investment inflows (Bhasin & Khandelwal, 2013; and Ahmed & Zlate, 2014).

Research and Methodology

Data Collection and Sampling Techniques

The current study has used data of the Caricom Single Market and Economy member countries such as Barbados, Belize, Guyana, Jamaica and Suriname from 2012 to 2016 subject to availability of data for the considered variables¹. The economic freedom index data is collected from the Heritage Foundation². The foreign portfolio of investments annual data are collected from the International Monetary Fund website³. Data of other variables such as ease of business development index, financial development index, business development index, trading volume, interest rate, exchange rate, literacy rate, gross domestic product growth rate and total trade to gross domestic product ratio data are taken from the World Bank Indicators (WDI).

Research Modelling

This study used the research model applied in the study of Singhania and Saini (2017) and Afaq and Khan (2016) to examine the proposition that the economic freedom index has a significant effect on foreign portfolio investments.

$$FPI_{i,t} = \alpha + \beta EFi_{i,t} + \beta MCP_{i,t} + \beta BI_{i,t} + \beta EDBi_{i,t} + \beta TV_{i,t} + \beta GDP_{i,t} + \beta IR_{i,t} + \beta IFi_{i,t} + \beta Tax_{i,t} + \beta LRate_{i,t} + \beta TO_{i,t} + \beta Years_{i,t} + \beta Country + \mu_{i,t}$$

Equation 1

$$FEP_{i,t} = \alpha + \beta EFi_{i,t} + \beta MCP_{i,t} + \beta BI_{i,t} + \beta EDBi_{i,t} + \beta TV_{i,t} + \beta GDP_{i,t} + \beta IR_{i,t} + \beta IFi_{i,t} + \beta LRate_{i,t} + \beta TO_{i,t} + \beta Years_{i,t} + \beta Country + \mu_{i,t}$$

Equation 2

$$FDP_{i,t} = \alpha + \beta EFi_{i,t} + \beta BDi_{i,t} + \beta EDBi_{i,t} + \beta GDP_{i,t} + \beta IR_{i,t} + \beta IFi_{i,t} + \beta LRate_{i,t} + \beta GDP_{i,t} + \beta TO_{i,t} + \beta Years_{i,t} + \beta Country + \mu_{i,t}$$

Equation 3

¹ www.worldbank.org

² www.heritage.org/index/ The Heritage Foundation is an American conservative think tank based in Washington, DC.

³ www.imf.org Foreign portfolio investments data is collected from the coordinated Portfolio Investment Survey (CPIS).

Whereas FPI stands for foreign portfolio investments, FEP stands for the foreign equity portfolio investments and FDP stands for the foreign debt portfolio investments in the country “i” at time “t”. The aforementioned represent the dependent variables. The value of countries range from 1, 2, 3...N and “t” represents the number of years ranging from 2000 to 2016.

The independent variables include EFI, which stands for the economic freedom index computed by the Heritage Foundation. MCP stands for market capitalization, BI stands for the business development index, EDB stands for the ease in doing business index, TV stands for trading volume, GDP stands for the gross domestic product annual growth, IR is the interest rate spread between the lending and borrowing rates, IF stands for consumer price index and represents inflation, LRate stands for literacy rate, Year stands for the year dummy and country stands for the country dummy. The data of the macroeconomic variables are collected from the World Bank indicators (WDI).

Results and Discussions

This section includes various types of analysis performed to test the relationship between the foreign portfolio investments and economic freedom. The analysis section includes descriptive statistics, panel data stationarity tests, correlation and panel regression.

Descriptive Statistics

Table 1 shows the results of the descriptive statistics. The descriptive statistics show the distributional properties of the data. It shows that foreign portfolio investment has an average value of 2.899, whereas the foreign equity portfolio is 1.604 and the mean of foreign debt portfolio investment is 1.83. The economic freedom index has an average value of 6.738, the trade openness is 9.85, GDP growth is 2.38, inflation rate is 4.77, Business development index is 3, market capitalization is 3.418, Ease of doing business is 0.271, interest rate is 8.9, literacy rate is 4.28 and trading volume of stock is 0.086.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std.Dev.	Min	Max
FEP	25	1.604	2.506	0	4.318
FDP	25	1.83	2.553	0	4.29
FPI	25	2.899	2.669	0	6.598
EFI	25	6.738	.353	6.056	7.321
TO	25	9.852	2.938	6.4	14.8
GDP	25	2.382	1.996	-.7	5.289
IF	25	4.771	4.146	.509	17.712
BI	25	3	1.451	1	5
MCP	25	3.418	15.288	0	68.37
EDB	25	.271	.124	.166	.524
IR	25	8.92	3.223	4.892	14.021
LRATE	25	4.282	19.15	0	85.64
TV	25	.086	.225	0	.901

Source: Authors' Calculation

Stationarity Tests

Table 2 shows results of the stationarity test such as Phillips-Perron tests and Augmented Dickey-Fuller tests for Unit Root. The results of both of the tests show that all variables are stationary at the level and regression can be used rather than time series analysis to test the relationship between foreign portfolio investments and economic freedom.

Pearson Correlation

The correlation test is used to find-out the association between the variables and their direction, that is, which variable has a positive association and which variable has a negative association with other variables. Table 3 represents the results of the correlation test which shows that interest rate and inflation rate have a negative association with foreign portfolio investments, foreign equity portfolio investments, and foreign debt portfolio investments. Moreover, economic freedom index, market capitalization, trading volume, trade openness, literacy rate, ease of doing business and business development index have a positive and significant effect on the foreign equity portfolio investments. Furthermore, trade openness, literacy rate, ease of doing business and business development index has a positive and significant effect on the foreign debt portfolio investments. The correlation between the explanatory variables show that there is no intense correlation and hence we expect no multicollinearity among the independent variables.

Table 2: Phillips-Perron tests and Augmented Dickey-Fuller tests for Unit Root

No.	Variables	Phillips-Perron tests		Augmented Dickey-Fuller tests	
1	FPI	6.262	0.000	6.473	0.000
2	FEP	23.462	0.000	4.299	0.000
3	FDP	7.233	0.000	6.963	0.000
4	EFI	4.477	0.006	3.464	0.000
5	INF	23.604	0.000	4.306	0.000
6	BI	24.646	0.000	3.246	0.000
7	EDB	26.376	0.000	4.366	0.000
8	IR	6.976	0.000	4.646	0.000
9	MCP	40.960	0.000	4.664	0.000
10	LRate	6.436	0.000	3.374	0.000
11	TO	4.367	0.000	4.669	0.000

Source: Authors' Calculation

Table 3: Matrix of correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) FEP	1.000												
(2) FDP	0.981	1.000											
(3) FPI	0.984	1.000	1.000										
(4) EFI	0.169	0.124	0.128	1.000									
(5) TO	0.114	0.250	0.239	-0.133	1.000								
(6) GDP	0.031	-0.086	-0.077	-0.260	-0.256	1.000							
(7) IF	-0.463	-0.462	-0.462	0.271	0.070	-0.081	1.000						
(8) BI	0.100	0.163	-0.158	-0.067	-0.812	0.043	-0.145	1.000					
(9) MCP	0.036	0.098	0.092	-0.198	0.324	-0.316	-0.165	-0.162	1.000				
(10) EDB	0.003	0.004	0.003	0.523	0.004	0.013	0.014	0.851	0.914	0.413			
(11) IR	-0.284	-0.349	-0.344	0.189	-0.802	-0.138	0.046	0.911	-0.089	0.851	1.000		
(12) LTRATE	-0.151	-0.169	-0.167	-0.339	-0.269	0.114	-0.102	0.324	-0.053	0.164	0.207	1.000	
(13) TV	-0.213	-0.203	-0.204	0.420	-0.138	-0.376	0.240	0.172	-0.090	0.751	0.361	-0.090	1.000

Source: Authors' Calculation

Panel Regression results of Foreign Portfolio investments and Economic Freedom

In order to test the effect of economic freedom on foreign portfolio investments, this study has used panel data analysis in which we have estimated both random effect models and fixed effect models and based our decision on the Hausman test to select between fixed effect and random effect.

Table 4 shows the results of the fixed effect models of panel data analysis where the dependent variables are total foreign portfolio investments, foreign equity portfolio investments and foreign debt portfolio investments.

In the Table 4 below, Model 1 represents the result of the total foreign portfolio investments as a dependent variable whereas, economic freedom index, GDP growth, inflation rate, market capitalization, business development index, ease of doing business, interest rate, literacy rate, trading volume and trade openness are used as explanatory variables. The result of Model-1 shows that the Economic freedom index has a positive and significant effect on the total foreign portfolio investments (Botric and Škuflic, 2006; Cotton and Ramachandran, 2001). Thus, an increase in the economic freedom among the Caricom Single Market and Economy member countries will attract more investors to invest in these countries' equity and debt instruments. These results are in line with the expectations, as CSME members have significantly improved their business ties and opened up doors for the member countries investments and also to the other foreign investors. Caricom countries rely heavily on tourism and it contributes significantly to their GDP.

The tourism industry in the Caribbean has grown in recent years and has attracted foreign investments. The recent reforms in the tourism industry aimed towards economic freedom coupled with incentives for foreign investors in tourism has helped a lot in attracting foreign investments in the CSME. While investigating the impact of economic freedom on tourism in more than 110 countries Saha, S., Su, J.-J., & Campbell, N. (2017) found that economic freedom and tourism have a significant positive relationship. He furthered that economic freedom plays a more dominant role when the level of civil liberty is low. This is accurate for the CSME where civil liberty is low and as a result economic freedom plays a leading role. The major portion of investment in the tourism industry is in the form of equity investments as observed by (Kumi Endo, 2006) in the case of Caribbean economies.

He also found size and internationalization as major contributing factors while investing in the Caribbean hotel industry and FDI in tourism plays a major role as compared to the developed world. Since the corruption index of Caricom countries is quite high as compared to the other developing countries, the overall economic environment becomes less efficient.

The results of the other explanatory country specific variables show that inflation and interest rate have a negative effect on the total foreign portfolio investments, however, the effect is significant in the case of inflation rate only (Waqas, Hashmi and Nazir, 2015). Moreover, the results of the gross domestic product business development index, literacy rate and trade openness are found to have a significant and positive effect on the total foreign portfolio investments. The bilateral trade agreement between Latin America and Caricom economies has also contributed substantially in the manufacturing sector in these economies (Thoumi, F. E. 1989). Market capitalization and trading volume were both also found to have a positive and significant effect on total foreign portfolio investments. This may be the case due to the fact that increased market capitalization and trading volume are both associated with improved market liquidity which subsequently attracts more foreign investors (Taylor & Sarnio 1997). One of the objectives of establishing the Caricom Single Market and Economy (CSME) was to offer an enlarged market which results in economies of scale for the countries. Our results also confirm that a bigger market size has a positive impact on the portfolio investors in the case of CSME since investors have more opportunities to invest and diversify their investments.

Thus, countries with more positive gross domestic growth, more market capitalization, and high literacy rates, more trade openness and ease in doing business and improvement in the development business index will experience more inflow of total foreign portfolio investments. However, countries with more inflationary trends and higher interest rates would generate a negative response from investors as they would reduce on that country's foreign portfolio of investments. Since tourism is the major industry in the Caricom economies; inflation will result in higher construction costs for the hotels resulting in lower equity investments (Dunning and McQueen, 1982).

Similarly, for robustness of the results we have also taken into account the foreign equity portfolio investments in Model-II and foreign debt portfolio investments in Model-III in order to identify if there is any variation in the effect of economic freedom on equity and debt. The results of Model-II with the dependent variable of foreign equity portfolio investments showed that the economic freedom index has a positive and significant effect on the foreign equity portfolio investments. Thus, an increase in the economic freedom will attract more investors to invest in these countries' equity instruments. Moreover, the results of the other explanatory country specific variables show that inflation and interest rate have a negative effect on the foreign equity portfolio investments, however, the effect is significant in the case of inflation rate only. Furthermore, the results of gross domestic product, market capitalization, business development index, literacy rate and trade openness are found to have a significant and positive effect on the foreign equity portfolio investments. Whereas, trading volume and ease of doing business are found insignificant but positive.

Model-III shows results where the dependent variable is foreign debt portfolio investments, whereas the explanatory variables include the economic freedom index, GDP growth, inflation rate, business development index, ease of doing business, interest rate, literacy rate and trade openness.

The results of model-III shows that economic freedom has a significant and positive effect on the foreign debt portfolio investments. Thus, an increase in economic freedom will lead to an increase in the attraction of investors to invest in these countries' debt instruments. Moreover, the results of the other explanatory country specific variables show that inflation and interest rate have a negative effect on the foreign debt portfolio investments, however, the effects are insignificant. Furthermore, the results of the gross domestic product, business development index, ease of doing business and trade openness are found to have a significant and positive effect on the foreign debt portfolio investments. In addition, ease of doing business also has a positive and significant effect on foreign debt portfolio investments. This is the case because an improvement in the ease with which business is conducted would lead to an improvement in foreign investments directed towards other sectors which would eventually lead to an overall increase in foreign portfolio investments. On the other hand, literacy rate is found to have an insignificant effect on foreign debt portfolio investments.

Table 4: Regression results of Foreign Equity Portfolio Investment and Economic Freedom

	(Model 1)	(Model 2)	(Model 3)
	TFP	FEP	TDFP
EF	0.072*** (0.026)	0.149*** (0.050)	0.051** (0.023)
GDP	0.014*** (0.005)	0.088*** (0.010)	0.009** (0.004)
IF	-0.125*** (0.043)	-0.311*** (0.095)	-0.014 (0.039)
MCP	0.235*** (0.035)	0.076** (0.036)	
BI	0.096*** (0.009)	0.190*** (0.017)	0.043*** (0.007)
EDB	0.008** (0.004)	0.004* (0.002)	0.003*** (0.001)
IR	-0.001 (0.000)	-0.001 (0.000)	-0.001 (0.001)
LRate	0.100*** (0.038)	0.178** (0.078)	0.006 (0.031)
TV	0.010*** (0.001)	0.002 (0.002)	
TO	1.754*** (0.106)	0.569** (0.208)	0.247** (0.121)
_cons	0.579*** (0.168)	1.491*** (0.329)	0.105 (0.137)
Year	Yes	Yes	Yes
Country	Yes	Yes	Yes
Hausman Test	20.07	21.00	23.21
P-Value	0.00	0.00	0.00
Obs.	9087	2744	2489
R-squared	0.114	0.175	0.034

Source: Authors' Calculation

Conclusions

This study investigated the effect of economic freedom on foreign portfolio investments in the case of the Caricom Single Market and Economy member countries such as Barbados, Belize, Guyana, Jamaica and Suriname from 2012 to 2016 subject to availability of data for the considered variables. The study has employed panel data analysis after testing for stationarity of data. The results of the stationarity test showed that the data of all the variables considered in the study are stationary at level. Furthermore, fixed effect model better modelled the data as suggested by the results of Hausman test. The results of panel regression models show that economic freedom has a significant and positive effect on the total foreign portfolio investments. Moreover, for robustness of the results, the study has also estimated a separate regression model for foreign equity portfolio investments and foreign debt portfolio investments.

The results of these two models were also in line with the baseline regression model and these results also showed that in the case of both foreign equity portfolio and foreign debt portfolio investments, economic freedom has a significant and positive effect. Thus, an increase in the economic freedom among the Caricom Single Market and Economy member countries will attract more investors. These results are in line with the expectations as CSME members have significantly improved their business ties and opened up doors for the member countries' investments and also to the other foreign investors. The results of country specific variables show that a country with more positive gross domestic growth, more market capitalization, and high literacy rates, more trade openness and ease in doing business and an improvement in the development business index will generate more inflow of total foreign portfolio investments into those countries. However, countries with more inflationary trends and with higher interest rates would lead investors to reduce on the country's foreign portfolio of investments.

In retrospect, economic freedom is one area in which the CSME member states should focus more attention. Specifically, three out of the five countries included in this study possess economic freedom scores which are considered to be either "repressed" or "mostly unfree". Fortunately, Jamaica and Barbados are considered to be moderately free. Unfortunately, the high levels of bureaucracy maybe one of the main impediments to increased economic freedom. Consequently, increased economic freedom scores would be quite beneficial to those member states as this would attract increased investments.

References

- Agarwal, R.N. (1997). Foreign portfolio investment in some developing countries: A study of determinants and macroeconomic impact. *Indian Economic Review*, 17(2), 217–229.
- Ahmed, S., & Zlate, A. (2014). Capital flows to emerging market economies: A brave new world? *Journal of International Money and Finance*, 48, 221–248.
- Arora, R.K. (2016). The relation between investment of domestic and foreign institutional investors and stock returns in India. *Global Business Review*, 17(3), 654–664.
- Bhasin, N., & Khandelwal, V. (2013). Foreign institutional investment in India: Determinants and impact of crises. *The Indian Journal of Commerce*, 66(2), 1–15.
- Boyer, Brian and Zheng, Lu, (2009), Investor flows and stock market returns, *Journal of Empirical Finance*, 16, issue 1, p. 87-100,
- Buckberg, E. (1996). *Institutional investors and asset pricing in emerging markets* (IMF Working Paper No. 96/2).
- Byrne, J.P., & Fiess, N. (2011). *International capital flows to emerging and developing countries: National and global determinants* (Working Paper No. 2011_01). Business School—Economics, University of Glasgow.
- Calvo, G.A., Leiderman, L., & Reinhart, C.M. (1993). Capital inflows and real exchange rate appreciation in Latin America: The role of external factors. *IMF Staff Papers*, 40(1), 108–151.
- Chakrabarti, R. (2001). FII Flows to India: Nature and Causes. *Money and Finance*, 2(7), 61–81.
- Chuhan, P., Claessens, S., & Mamingi, N. (1998). Equity and bond flows to Latin America and Asia: The role of global and country factors. *Journal of Development Economics*, 55(2), 439–463.
- Cotton, L., & Ramachandran, V. (2001). Foreign Direct Investment in Emerging Economies Lessons from sub-Saharan Africa. In *Discussion Paper No. 2001 / 82* (Vol. 2001). Helsinki.
- Dunning, J., McQueen, M., 1982. Multinational corporations in the international hotel industry. *Annals of Tourism Research* 9, 69–90
- Endo, K. (2006). Foreign direct investment in tourism—flows and volumes. *Tourism Management*, 27(4), 600–614. doi:10.1016/j.tourman.2005.02.004
- Felices, G., & Orskaug, B. (2008). *Estimating the determinants of capital flows to emerging market*
- French, J.J., & Vishwakarma, V.K. (2013). Volatility and foreign equity flows: Evidence from the Philippines. *Studies in Economics and Finance*, 30(1), 4–21.
- Garg, R., & Dua, P. (2014). Foreign portfolio investment flows to India: Determinants and analysis. *World Development*, 59(1), 16–28.
- Ghosh, A.R., Qureshi, M.S., Kim, J.I., & Zalduendo, J. (2014). Surges. *Journal of International Economics*, 92(2), 266–285.
- Glauco de Vita & Khine S. Kyaw (2009) Growth effects of FDI and portfolio investment flows to developing countries: a disaggregated analysis by income levels, *Applied Economics Letters*, 16:3, 277-283, DOI: 10.1080/13504850601018437
- Grubel, H.G. (1968) Internationally Diversified Portfolios: Welfare Gains and Capital Flows. *The American Economic Review*, 58, 1299-1314.

- Haider, M.A., Khan, M.A. & Abdulahi, E. (2016). Determinants of Foreign Portfolio Investment and Its Effects on China, *International Journal of Economics and Finance*, Canadian Center of Science and Education, vol. 8(12), pages 143-150, December.
- Harvey, C.R. (1991), The World Price of Covariance Risk. *The Journal of Finance*, 46: 111-157. doi:10.1111/j.1540-6261.1991.tb03747.x
- Hausman, J.A. (1978). Specification tests in econometrics. *Econometrica: Journal of the Econometric Society*, 46(1), 1251–1271.
- Holtbrügge, D., & Kreppel, H. (2012). Determinants of outward foreign direct investment from BRIC countries: An explorative study. *International Journal of Emerging Markets*, 7(1), 4–30.
- Kim, Y. (2000). Causes of capital flows in developing countries. *Journal of International Money and Finance*, 19(2), 235–253.
- Levy, Haim and Sarnat, Marshall, (1970), International Diversification of Investment Portfolios, *American Economic Review*, 60, issue 4, p. 668-75,
- Lin, C.M., Lee, Y.H., & Chiu, C.L. (2009). Structural changes in foreign investors' trading behaviour and the corresponding impact on Taiwan's stock market. *Research in International Business and Finance*, 23(1), 78–89.
- Mody, A., Taylor, M.P., & Kim, J.Y. (2001). Modeling economic fundamentals for forecasting capital flows to emerging markets. *International Journal of Finance and Economics*, 6(3), 201–216.
- Mostafa, G., & Mahmood, M. (2015). The rise of the BRICS and their challenge to the G7. *International Journal of Emerging Markets*, 10(1), 156–170.
- Portes, R., & Rey, H. (2005). The determinants of cross-border equity flows. *Journal of International Economics*, 65(2), 269–296.
- Rai, k. And bhanumurthy, n.r. (2004), Determinants of foreign institutional investment in India: The role of return, risk, and inflation. *The Developing Economies*, 42: 479-493.
- Saha, S., Su, J.-J., & Campbell, N. (2017). Does Political and Economic Freedom Matter for Inbound Tourism? A Cross-National Panel Data Estimation. *Journal of Travel Research*, 56(2), 221–234. <https://doi.org/10.1177/0047287515627028>
- Singhania, M., & Saini, N. (2018). Determinants of FPI in Developed and Developing Countries. *Global Business Review*, 19(1), 187–213. <https://doi.org/10.1177/0972150917713280>
- Škuflic, L., & Botric, V. (2006). Main Determinants of Foreign Direct Investment in the Southeast European Countries. *Transition Studies Review*, 13(2), 359–377.
- Srinivasan, P., & Kalaivani, M. (2015). Determinants of foreign institutional investment in India: An empirical analysis. *Global Business Review*, 16(3), 364–376.
- Taylor, M. P., & Sarno, L. (1997). Capital Flows to Developing Countries: Long- and Short-Term Determinants. *The World Bank Economic Review*, 11(3), 451–470. <https://doi.org/10.2139/ssrn.2482412>
- Thoumi, F. E. (1989). Bilateral trade flows and economic integration in Latin America and the Caribbean. *World Development*, 17(3), 421–429. doi:10.1016/0305-750x(89)90214-3
- Waqas, Y., Hashmi, S. H., & Nazir, M. I. (2015). Macroeconomic factors and foreign portfolio investment volatility: A case of South Asian countries. *Future Business Journal*, 1(1–2), 65–74. <https://doi.org/10.1016/j.fbj.2015.11.002>
- Wu, J., Li, S., & Selover, D.D. (2012). Foreign direct investment vs. foreign portfolio investment. *Management International Review*, 52(5), 643–670.