

Portfolio Equity Flows to Emerging Markets: Do Corporate Transparency and Public Governance Matter?

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Abstract

The recent accounting scandals in the U.S.A. and various financial crises prior to that have highlighted the role of corporate transparency and public governance in global capital markets. This paper examines the importance of public governance and corporate transparency in attracting portfolio flows to emerging market economies and capital markets (ECMs). Using data for 14 ECMs from 1998 to 2002, this paper demonstrates that there is positive association between these public governance, democratic institutions and portfolio flows. Corporate transparency is a significant attractor of equity flows in the presence of sound political governance.

1. Introduction

Private capital flows¹ represented a major source of finance for developing economies, accounting for 85 percent of all net long-term resource flows to developing countries and amounting to \$256 billion in 1997 (World Bank, 1998, p. 8). However, there has been a decline in the cross border flows of bonds and bank loans to emerging capital markets (ECMs) in the aftermath of the Asian crisis. Likewise, portfolio equity flows to emerging economies which had grown significantly during 1990-1997 declined after the East Asian crisis though the decline was less dramatic than that of bank lending. Portfolio equity flows (especially to Asia) grew slightly in the aftermath of the crisis but have become increasingly concentrated in a few emerging economies. The World Bank (2001) estimates that four countries- Brazil, China, Mexico, and Turkey receive more than 85% of all equity flows to developing countries. ECMs currently receive a smaller percentage of global equity flows than in the mid-1990s which in sharp contrast to the dramatic rise in global cross-border equity flows. Moreover, the volatility of equity flows is evidenced by capital flow reversals initiated by mutual fund investors during recent financial crises (Mexico, East Asia, and Russia). Recent estimates by the Institute of International Finance (2005) paint a more optimistic picture of net private capital inflows to emerging markets.

The magnitude and the volatility of the sums involved have given ample impetus to several studies that examine the motivating factors behind these flows of capital. Most of the literature has focussed on *macroeconomic* factors that "push" or "pull" equity and bond capital to ECMs. However, despite the recognized importance of transparency and governance in the context of economic development the impact of these factors on global

capital flows has been under-researched. In this regard, this paper will explicitly model the effect of transparency and governance on the level of portfolio equity flows to emerging markets. The research question asked by the paper is – Do corporate transparency and good governance matter in attracting portfolio capital to ECMs after controlling for standard macroeconomic variables? Besides its contribution to the literature, a novelty of the paper is the construction of accounting transparency measures. These constructed variables will be utilized in an empirical study of 14 ECMs² over 1998-2002.

This paper is organized as follows. The following section reviews relevant literature on transparency and governance in order to develop measurable proxies and motivate the empirical analysis. Section 3 develops a statistical specification to model portfolio equity flows and discusses the variables employed in the regression analysis. Section 4 summarizes the statistical results and section 5 concludes.

2. Transparency and Governance in Context

This section attempts to define transparency and governance in order to develop an understanding of some possible proxy measures that will be employed in the regressions. This paper focuses on corporate transparency and public governance and the following paragraphs attempt to clarify the related concepts. Transparency describes the increased flow of reliable financial and political information. Thus opacity or the lack of transparency may be described as the deliberate withholding of access to information or misrepresentation of information, or the failure to provide information of adequate

relevance or quality (Vishwanath and Kaufmann, 1999) by an agent including a government official, a public institution, a firm, or a bank to its stakeholders. The lack of corporate transparency will be characterized by the lack sufficiently rigorous accounting standards and the inadequate provision of reliable and relevant financial accounting disclosures in annual reports. Throughout our analysis poor public governance will be identified with corruption that encompasses bureaucratic corruption, red tape and deviation from the rule of law. Transparency and good governance are inexorably linked in many ways – the lack of transparency increases the scope for corruption and engenders weak states more likely to be captured by powerful elite corporates. Likewise, corruption can result in poor public administration and poor public regulation which can adversely impact the efficiency of capital markets. Why is a focus on transparency and governance important from the perspective of global finance and economic development in emerging markets? This is discussed next.

Financial markets perform an important function in the economy by facilitating capital accumulation and allocation of funds to firms that have productive investment opportunities. The presence of asymmetric information between investors may impede the seamless functioning of an efficient financial system. Hence, the reduction of such information asymmetry between investors will promote a viable financial system. In this regard, Mishkin³ (1997, p.60) highlighted the role of accountings standards and other financial regulations that encourage information production. The public release of investor-oriented accounting disclosures by firms in accordance with a set of national accounting standards helps ameliorate this asymmetric information problem. Ndubizu (1992) demonstrates that corporate transparency has an impact on economic growth as

increased accounting disclosures enhance capital accumulation and the efficient allocation of resources. Financial information, therefore, plays an important role in stimulating the efficient accumulation and allocation of capital by minimizing the impact of the asymmetric information problem.

The role of accounting standards in promoting overall transparency was given a boost after the recent financial turmoil in East Asia and Russia. From the perspective of a portfolio manager investing in an emerging market, better quality accounting standards signal a sound infrastructure for the country's financial system and introduce transparency in the financial reporting of the private corporate sector of these countries. Investors are better able to assess the risk they face and make better predictions of future cash flows. The Working Group on the Transparency in Emerging Markets Finance⁴ highlights this issue by stating that:

The Working Group notes the importance of transparency of the private corporate sector in ECMs, to permit proper risk assessment. Companies should publish timely and full audited accounts, according to national standards, and efforts to develop international accounting standards should be intensified.

Saudagaran and Diga (1997) assign considerable importance to the development of accounting standards in emerging economies. Their study suggests that before emerging economies can fulfill their developmental roles, it is essential that they have in place a set of corporate reporting policies and procedures geared towards supplying the information necessary for making investment decisions. Emphasizing the crucial role of financial information in capital markets, the World Bank (1989, p. 90) noted that

"developing an effective accounting and auditing profession is essential for building efficient financial markets." Similarly, in its report on the development outlook for Asia, the Asian Development Bank (1995, p. 229) emphasized, "accounting information is an essential element of infrastructure for a financial system."

Likewise, corruption (misgovernance) can have political and economic consequences for emerging economies. Political consequences stem from the fact that corruption dilutes the ability of democracies to judge and correct government policy, thereby encouraging rent-seeking activities. Economic consequences of corruption can be felt in all three areas of public administration - corruption can affect revenue collection as a means for mobilizing resources, revenue allocation, and public regulation. Wedeman (1997) contends that the level of corruption can vitiate the domestic investment climate by contributing to uncertainty and insecurity. Other studies have implied that corruption can lower the quality of investment in an economy especially in infrastructure (Tanzi and Davoodi, 1997). Corrupt regimes have also been associated with political/policy risk that can increase the variance of domestic returns (Mehlkop, Graeff, and Le, 2004). The negative association between corruption and GDP has been documented in Mauro (1995), and Kaufmann et al (1999). Further, in an empirical study of East Asian and Latin American economies, Caprio et al (1998) provide some evidence that opaque banking regulations and corruption can exacerbate financial crises. The association between financial crises and capital flow reversals from emerging economies has also been well researched (Calvo, 1998; Calvo and Reinhart, 2000). Wei (2002) has examined the impact of corruption in deterring FDI into China. However, despite an exhaustive search of the literature we were unable to find studies that direct attention to

the association between portfolio equity flows and Non macroeconomic factors, i.e., transparency and public governance. This caveat in the existing literature motivates our empirical analysis and defines our research hypothesis, namely, that emerging economies with better quality accounting standards and good governance attract higher levels of portfolio equity flows.

3. Methodology and Data Description

In light of the foregoing discussion, this paper models portfolio equity flows as a function of corporate transparency and governance factors in addition to the more traditional standard macroeconomic variables. To assess the incremental impact of each of these factors, the following three pooled time series, cross-sectional model are estimated.

$$PEF_{i,t} = PUSH_{i,t} + PULL_{i,t} + POLITICAL\ INSTITUTIONS_{i,t} + GOVERNANCE_{i,t} + u_{i,t} \quad (1)$$

$$PEF_{i,t} = PUSH_{i,t} + PULL_{i,t} + POLITICAL\ INSTITUTIONS_{i,t} + GOVERNANCE_{i,t} + ACCTQUAL_{i,t} + (GOVERNANCE * ACCTQUAL)_{i,t} + u_{i,t} \quad (2)$$

$$PEF_{i,t} = PUSH_{i,t} + PULL_{i,t} + POLITICAL\ INSTITUTIONS_{i,t} + (GOVERNANCE * ACCTQUAL)_{i,t} + u_{i,t} \quad (3)$$

Here, $i = 1, ..14$ countries and $t = 1998$ to 2002 . In the above equation, PEF represents the portfolio equity flows as a percentage of GDP to a country i ($i = 1$ to 14 countries) in the year t ($t = 1998$ to 2002). Control variables for the purposes of our empirical analysis are represented by $PUSH$, $PULL$ and $POLITICAL\ INSTITUTIONS$. The same have been described below. The variable $GOVERNANCE$ represents key public governance

indicators which are either measured by *ICRG* or by *CPI*. Corporate transparency is measured by *ACCQUAL* which is the product of *ACCTTRANS* and *ACCTCONV*. All these variables have been more fully described below.

3.1 Dependent variable

Net Portfolio equity flows as a percentage of GDP (PEF) include investments in country funds, depository receipts, and direct purchases of shares by foreign investors as measured in current U.S. dollars. Data on this variable are obtained from the World Development Indicators CD-ROM 2004.

3.2 Independent Variables

Much of the existing literature on global capital flows identifies at least two separate macroeconomic tendencies — the "*push*" or global economic factors that induce investors in more developed countries to invest in emerging markets, and the "*pull*" or country-specific factors that attract investors to a particular market. In their study on equity and bond flows to Latin American and Asian countries, Chuhan et. al. (1998) observed that the global push factors have a slightly greater impact on portfolio equity flows than country-specific pull factors for Latin American countries. In the case of Asian countries, however, country specific pull factors were determined to be more important than the global push factors in explaining portfolio equity flows. Accordingly this paper defines and includes both a *PUSH* and a *PULL* variable

PUSH measures the strength of global economic factors in impelling portfolio equity flows. This paper utilizes the state of the US macro economy as a proxy and considers the following variables (i) US real GDP per capita; (ii) interest rates (lending and deposit); and (iii) Index of Industrial Production. The *PUSH* variable is constructed using a Factor Components Analysis on these variables. Real GDP per capita and interest rates are taken from the World Development Indicator CD-ROM 2004. The Index of Industrial Production is taken from International Financial Statistics CD-ROM 2004. It is hypothesized that this variable will have a negative sign – the stronger the US economy the less the lure of emerging markets as investment outlets.

PULL measures country specific economic factors including (i) real GDP per capita; (2) interest rates (lending and deposit); (iii) inflation rate. The *PULL* variable is also constructed using a Factor Components Analysis on these variables. Data for the country characteristic factors are taken from the World Development Indicators CD-ROM 2004. This variable is hypothesized to have a positive sign in the regression.

This paper also utilizes a *POLITICAL INSTITUTIONS* variable that measures the general openness of political institutions. The democracy score is ranged from 0 to 10 (lowest to highest). *POLITICAL INSTITUTIONS* is obtained from the Polity IV 2003 data series. In a sense, this variable captures a political pull dimension and is expected to have a positive sign- more democratic regimes should attract more equity flows.

The *GOVERNANCE* variable is measured in two different ways, namely, using *CPI* or *ICRG*. Both capture different but overlapping aspects of public governance *CPI* represents the Corruption Perceptions Index and measures the perceptions of corruption by business people, academics and risk analysts, both resident and non-resident in

countries around the world. The CPI is an overall index ranging from 10 to 0 (highly clean to highly corrupt), based on a “pool of pools” draws on 17 surveys from 13 independent institutions. CPI is obtained from Transparency International – a Berlin based international non-governmental organization devoted to fighting corruption. A low score on the CPI index represents poor governance and is expected to result in a restricted flow of equity capital to emerging markets. ICRG or International Country Risk Guide risk rating is an overall index, ranging from 0 to 100 (highest risk to lowest), based on 22 variables in three subcategories of country risk: political, financial, and economic. ICRG incorporates a "Type II" forecast in which its experts provide a current assessment, a one-year assessment, and a five-year assessment. The projections of future conditions are framed in "best" case and "worst" case scenarios. ICRG is obtained from the World Development Indicator CD-ROM 2004. ICRG is expected to have a positive sign in the regressions- the lower the score, the higher the risk rating and consequently the lower the PEF.

ACCTQUAL is a composite measure of corporate transparency. The variable is a constructed as a product of two accounting scores, *ACCTRANS* and *ACCTCONV*. *ACCTTRANS* – the Accounting Transparency and Disclosure Score is the annual score for the sample countries as obtained from Standard and Poor’s (S&P) and utilized in Patel et al. (2002). S&P analyzes a total of 1600 annual reports over 30 countries to assess the inclusion of 98 different items relating to (i) ownership structure and investor relations; (ii) financial transparency and information disclosure; and (iii) disclosures relating to the Board, Management Structure and Process. A higher *ACCTTRANS* score signals greater accounting transparency.

ACCTCONV – Accounting Convergence measures the convergence between local GAAP and IFRS or International GAAP using the GAAP (2001) convergence survey conducted by 7 accounting firms. This data is obtained from GAAP 2001: A survey of National accounting rules benchmarked against International Accounting Standards published by: Andersen, BDO, Deloitte Touche Tomahatsu, Ernst and Young, Grant Thornton, KPMG, PricewaterhouseCoopers. The survey contained 79 specific questions relating to 25 international financial reporting standards. A score of 100 percent represents full convergence with IFRS. For each divergence in any question a country earns a score of negative one. The survey was conducted in 2001. A higher *ACCTCONV* score signals faster accounting convergence. The results are described in the next section.

4. Results

Table 1 contains descriptive statistics on the sample. Table 2 provides the correlations matrix for all variables used in the regression. A negative correlation between *ACCTQUAL* and the governance variables: *CPI* and *ICRG* might be a function of the sample time period. In the post East-Asian crisis period, countries attempted to converge to the international accounting standards especially after 2000 once the International Accounting Standards Board completed its Core Standards project and got the approval of the IOSCO. However, institutions related to political governance, which are more deep-rooted, were slower to respond to change and did not improve as rapidly as the degree of corporate transparency.

Table 3 contains the results for equation 1. The significantly positive coefficient for both the *GOVERNANCE* variables, *CPI* and *ICRG*, indicates that countries that have better political governance attract higher levels of portfolio equity flows. The control variables *PULL* and *POLITICAL INSTITUTIONS* are both significant and positive as per expectations. Better macro-economic conditions and a robust democracy, both, attract portfolio equity flows. The *PUSH* variable is highly significant with the *ICRG* variable but is not significant with the *CPI* variable.

Table 4 contains the results with the corporate transparency variable. Column (1) and (2) provide the results for equation 2. In both equations, the corporate transparency variable, *ACCTQUAL*, does not achieve significance. The *CPI* variable is incrementally significant indicating the importance of political governance over and above corporate transparency. The *ICRG* variable is not significant but the variable *POLITICAL INSTITUTIONS* is significant. Overall, the results indicate that political governance is an important factor in attracting portfolio equity flows.

The results for equation 3 are provided in columns (3) and (4) of Table 4. Once again, the *POLITICAL INSTITUTIONS* variable is significant in both columns indicating the importance of democratic institutions in ECMs. The interactive variables, *CPI*ACCTQUAL* and *ICRG*ACCTQUAL* are both significant indicating the corporate transparency and political governance attract portfolio equity flows. While, *ACCTQUAL* by itself is not significant it achieves significance when it interacts with the political governance variables.

5. Conclusions

This paper examines whether corporate transparency and good political governance matter in attracting portfolio capital to emerging markets after controlling for standard macroeconomic variables. The main findings of this paper are that democratic political institutions and good political governance significantly attract portfolio equity flows. Corporate transparency, by itself, does not have any significant impact on portfolio equity flows. However, investors are attracted to economies that have strong institutions of political governance that are coupled with high levels of corporate transparency as measured by the transparency of the accounting disclosures and the convergence of the accounting standards to International Financial Reporting Standards. As policy issue, the establishment strong institutions related to public governance should take priority over efforts to enhance corporate transparency.

Table 1: Descriptive Statistics of Variables

	<i>PORTFOLIO EQUITY</i>	<i>PULL</i>	<i>PUSH</i>	<i>POLITICAL INSTITUTIONS</i>	<i>CPI</i>	<i>ICRG</i>	<i>ACCTQUAL</i>
Mean	0.250	-0.059	2.220E-17	7.357	4.074	70.021	2235.243
Standard Error	0.265	0.248	0.000E+00	0.714	0.343	1.768	251.706
Median	0.180	-0.363	2.220E-17	8.000	4.100	71.955	1942.900
Standard Deviation	0.993	0.927	0.000E+00	2.672	1.285	6.614	941.798
Minimum	-1.026	-1.008	2.220E-17	0.000	1.840	52.440	1065.600
Maximum	3.074	2.789	2.220E-17	10.000	7.220	76.440	4717.000
No. of Countries	14	14	14	14	14	14	14

Table 2: Correlations Matrix

	<i>PORTFOLIO EQUITY</i>	<i>PULL</i>	<i>PUSH</i>	<i>POLITICAL INSTITUTIONS</i>	<i>CPI</i>	<i>ICRG</i>	<i>ACCTQUAL</i>
<i>PORTFOLIO EQUITY</i>	1.000						
<i>PULL</i>	0.149	1.000					
<i>PUSH</i>	-0.127	-0.027	1.000				
<i>POLITICAL INSTITUTIONS</i>	0.285	0.167	0.175	1.000			
<i>CPI</i>	0.204	0.097	-0.051	0.190	1.000		
<i>ICRG</i>	0.214	-0.075	0.044	0.122	0.498	1.000	
<i>ACCTQUAL</i>	0.333	-0.252	0.000	-0.182	-0.073	-0.138	1.000

Table 3: Portfolio Equity Flows and Public Governance Effects

Independent variable	(1)	(2)	(3)	(4)
<i>PULL</i>	0.678*** (3.498)	0.556*** (3.136)	0.550*** (3.426)	0.451** (2.384)
<i>PUSH</i>	-0.050 (-0.661)	-0.191** (-2.183)	-0.111 (-1.349)	-0.203** (-2.319)
<i>POLITICAL INSTITUTIONS</i>	—	0.213*** (3.241)	0.245*** (4.289)	0.181*** (2.619)
<i>CPI</i>	—	—	0.984*** (2.509)	—
<i>ICRG</i>	—	—	—	0.048* (1.474)
Adjusted R ²	0.31	0.41	0.50	0.42
Total panel observations	69	69	69	69

Notes: Dependent variable is Portfolio Equity/GDP. Fixed effects are not reported. t-stats are in parentheses. ***, **, * Statistically significant at the 1%, 5%, and 10% level, respectively.

Table 4: Portfolio Equity Flows and Public Governance – Incremental Effects of Corporate Transparency Effects

Independent variable	(1)	(2)	(3)	(4)
<i>PULL</i>	0.500*** (2.533)	0.365* (1.675)	0.503*** (2.952)	0.313 (1.493)
<i>PUSH</i>	-0.149 (-1.234)	-0.284*** (-2.479)	-0.231*** (-2.613)	-0.330*** (-3.123)
<i>POLITICAL INSTITUTIONS</i>	0.258*** (3.479)	0.221***	0.270*** (3.973)	0.234*** (3.392)
<i>ACCTQUAL</i>	0.042 (0.415)	0.095 (0.890)	—	—
<i>CPI</i>	0.923** (2.159)	—	—	—
<i>ICRG</i>	—	0.049 (1.504)	—	—
<i>CPI * ACCTQUAL</i>	—	—	0.029** (1.966)	—
<i>ICRG * ACCTQUAL</i>	—	—	—	0.002** (1.989)
Adjusted R ²	0.45	0.41	0.46	0.42
Total panel observations	69	69	69	69

Notes: Dependent variable is Portfolio Equity/GDP. Fixed effects are not reported. t-stats are in parentheses. ***, **, * Statistically significant at the 1%, 5%, and 10% level, respectively.

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ENDNOTES

¹ Private capital flows include private debt flows, foreign direct investment and portfolio equity flows. Portfolio equity flows are the sum of country funds, depository receipts (American or global) and direct purchases of shares by foreign investors (World Bank, 1996).

² Argentina, Brazil, Chile, China, Czech republic, Hungary, Indonesia, Malaysia, Mexico, Peru, Philippines, Poland, South Africa, Thailand (India, Pakistan, Israel, Korea, and Turkey were dropped from the analysis due to data unavailability).

³ In "Maintaining Financial Stability in a Global Economy": A symposium sponsored by the Federal Reserve Bank of Kansas City, p. 56. 1997.

⁴ 26 April 1999: From the Report of the working Group on Transparency in Emerging Markets Finance, Institute of International Finance, Inc., March 1999