

# **The Value of Clean Hands: Public Policy and International Asset Allocation**

Piet Sercu and Rosanne Vanpée\*

April 11, 2007

\*Rosanne Vanpée, the corresponding author ([rosanne.vanpee@econ.kuleuven.be](mailto:rosanne.vanpee@econ.kuleuven.be)) gratefully acknowledges financial support from the Fonds for Wetenschappelijk Onderzoek-Vlaanderen (FWO-Vlaanderen). Both authors are otherwise at KU Leuven, Leuven School of Business and Economics, Naamsestraat 69, B-3000.

## **Abstract**

Despite of the intuitive idea that corporate governance and transparency are crucial for a country's international appeal, foreign portfolio investors appear to care first and foremost about transparency, predictability and honesty in governments. This is, at least, what our analysis of international portfolio holdings implies. Our estimates indicate that (i) a modest improvement of government corruption, economic policy transparency and especially institutional quality can trigger an economically substantial rise in foreign interest for the stocks of that country; and (ii) an amelioration in country-level governance variables creates significantly higher effects on foreign equity demand than an improvement in traditional macroeconomic policy indicators.

## Introduction

This paper quantifies how much capital could be attracted by a modest improvement in country level governance and simple macroeconomic policy indicators. The main difference with prior studies is that we use portfolio theory rather than an ad hoc regression to forecast asset demand. This provides a structure with a better theoretical basis, a better empirical performance, and more careful estimates of the impact of changes in policy or legislation on capital flows.

We evaluate empirically the roles of transparency at the country level and at the firm level and conclude that the effect of government transparency on international asset allocation is far more pronounced than the effect of corporate transparency. We also confirm that country-level and firm-level transparency can not be studied independently: we find a distinct interaction effect between them. This is in line with Doidge, Karolyi and Stulz (2004) and Stulz (2005), who find that good corporate governance can create benefits only if there is proper country-level governance.

Given that country-level governance matters more for aggregate international portfolios than corporate governance, we focus on the effects of public policy-making on international asset demand. We distinguish between governance variables –notably the level of perceived public corruption, economic policy transparency and institutional quality– and traditional macroeconomic policy indicators, that is the Misery Index, the government deficit and the balance on the current account. We estimate that improving transparency and credibility in the public sector leads to a substantial additional foreign demand for a country's equities. Improving macroeconomic policy-making leads to more modest inflows into the equity markets. The demonstrable effect of improving government transparency on international asset allocation is at least ten times larger than the effect of an improvement in factors that influence economic activity directly. The large effect on demand is mainly caused by the fact that countries with weak government institutions and public transparency are typically countries with small and less developed financial markets. A modest improvement in these countries public policy transparency leads to a significant decrease in implicit inward investment costs and an additional foreign demand that is large compared to their initial market capitalization. The larger effect on demand following a change in government transparency variables compared to a change in macroeconomic variables is explained by the fact that for the countries in our sample, cross-country differences in macroeconomic variables have become smaller than differences in transparency and public governance variables, because most developing

countries have already adopted better macroeconomic policies in the sense of the Washington Consensus. By contrast, they still perform poorly compared to the industrialized countries in areas as institutional quality and transparency of public policy-making, leaving more room for improvement.

The remainder of the paper is structured as followed. In Section 1, we provide an overview of the relevant literature. In Section 2, we briefly review the model of international portfolio holdings with deadweight costs of foreign investments of Cooper and Kaplanis (1994, 2000) and show how the effect of a change in the variables on the asset allocation of investors is computed. Section 3 describes the data. Section 4 discusses estimates of the effect of an improvement in government transparency and macroeconomic policy-making in particular on the shadow costs of foreign investments and the resulting new asset allocation. The final section concludes.

## **1 Literature review**

We first cover some recent work on the impact of good governance and the quality of institutions on financial development in general. We then review some studies considering the effects of governance on FDI and in a third part we discuss the literature on the effect of corporate and government transparency on international portfolio flows in particular.

### **1.1 Governance and financial development**

The Washington Consensus, initiated by John Williamson in 1990, started as a set of ten macroeconomic policy prescriptions that were believed to be necessary for the recovery of the Latin American countries from the financial crises of the 1980s. Later, the Consensus evolved into a general guideline promoting economic liberalization and free mobility of capital. The prospect offered by the Washington Consensus was that if a developing country would implement conservative macroeconomic and liberal microeconomic policies to expand the role of the private market at the expense of the state in resource allocation, it would achieve sustained high growth rates and a well developed financial market (Woo, 2004).

The Washington Consensus is striking in its free-market approach, even in fields where market failure is not unthinkable. For the financial sector, for instance, the risks are many. First, foreign investors are more prone to feedback trading and herding behavior than domestic investors, which can destabilize financial markets, especially in developing countries (Choe, Kho

and Stulz, 1999). Second, foreign investors may engage in speculative attacks on developing countries' currencies. Third, there is a larger risk of contagion: foreign investors could withdraw capital from initially healthy countries for reasons unrelated to domestic factors (Prasad et al., 2003). Additional volatility can be disruptive and costly (Eichengreen, 2004). Countries that, like Argentina, have more or less played by the rules of the Washington Consensus have recently been hit by financial crises, hyperinflation or capital flight. Important questions therefore are: What went wrong, how to prevent or manage financial crises and how to provide adequate capital flows to developing countries to create sustainable growth and development?

An intense debate has emerged on the effects of financial integration for developing economies. In a paper written on behalf of the Copenhagen Consensus, Eichengreen (2004) lists the causes of financial instability in the developing countries. These include unsustainable macroeconomic policies, fragile financial systems, institutional weakness and flaws in the structure of international financial markets. Some authors argue that adequate microeconomic and macroeconomic policies are necessary but not sufficient conditions for eliminating vulnerabilities. Prasad, Rogoff, Wei and Kose (2003) find that the quality of domestic governance, proxied by the rule of law, corruption and political polarization play a crucial role in allowing financial globalization to boost economic growth rather than holding it back. Wyplosz (2004) states that good policies are a prerequisite for successful liberalization which, in turn, presupposes good governance: good governance delivers better economic policies which then promote growth. Johnson, Boone, Breach and Friedman (2000) and Acemoglu, Johnson, Robinson and Thaicharoen (2003) find that macroeconomic variables have less power in explaining the variation in the depth of financial crises across countries than corporate transparency variables or institutional quality measures. Stulz (2005) reasons that opening borders to foreign investors and cutting transaction costs is not sufficient to create large shifts in international asset allocation. Poor governance in certain countries and firms stops investors from placing their money there where the return is most likely to be higher, because third parties pick off the gains before they are received by the investor. The merits of a good governance at both the firm-level and the country-level have been studied extensively (amongst others Shleifer and Vishny, 1997; Bhattacharya, Daouk and Welker, 2003; Wei, 2000a, 2000b). A more extensive literature review can be found in Fergusson (2006).

## 1.2 Governance and FDI

This paper is about the impact of corporate and government transparency on portfolio investment not FDI, but the relationship to portfolio investments is close enough for also this literature to be relevant. Several studies have looked at the impact of corruption on foreign direct investment (FDI) and conclude that there exists a significantly negative relationship between corruption and FDI (Hines, 1995, Wei 2000a, 2000b). Wei's (2000b) regression results imply that a rise in the host country's corruption from the level prevailing in Singapore to that in Russia reduces FDI by an estimated 65 percent of its initial value. Rammal and Zurbruegg (2006) study the relationship between country-level governance and outward FDI among the ASEAN countries and show that the quality and the effectiveness of the regulatory system in the host country can have a positive effect on the amount of FDI received. Interestingly, the causality between good governance practices and FDI seems to work both ways: Hellman, Jones and Kaufmann (2003) find that higher FDI inflows can help improve the standards of governance practices. Further evidence on the positive effects of good government and corporate governance on FDI can be found in amongst others Carstensen and Toubal (2004), Nonnenberg and Mendonca (2004) and Janicki and Wunnana (2004).

## 1.3 Governance and international equity flows

There is convincing evidence that corporate governance and transparency at the company-level and political risk at the country-level can be drivers for the equity home bias.<sup>1</sup> A lack of transparency leads to information asymmetries, adding complexity and imposing an additional burden on investors' expected returns. Information acquisition costs are much higher for companies that lack adequate accounting and governance practices and that provide little protection to minority shareholders. La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998, 1999) find that company ownership is more dispersed in countries with a good legal protection of minority shareholders. In the next paragraph, we elaborate on the implications of the findings of La Porta *et al.*, studied by Doidge, Karolyi and Stulz (2004). Dahlquist, Pinkowitz, Stulz and Williamson (2003) show that part of the home bias can be explained by the fact that a portion of a company's shares are held by controlling shareholders, and thus only a fraction of the shares is freely available for foreign investors. In the same line, Giannetti and

---

<sup>1</sup>Excellent reviews on the home bias puzzle can be found in Lewis (1999) and Karolyi and Stulz (2003).

Simonov (2006) find empirically that investors who enjoy only security benefits (domestic and foreign; institutional and small individual investors) are reluctant to invest in companies with bad corporate governance. In contrast, individuals who have strong connections with the local financial community because they are board members or hold large blocks of at least some listed companies behave differently. They do not care about the expected extraction of private benefits or even prefer to invest in firms where there is more room for it. Gelos and Wei (2005) conclude that both government and corporate transparency positively influence international portfolio holdings, but the effect of government transparency is more pronounced.

Firm-level governance and country-level governance are closely related. A good legal system limits the rights of managers and discourages them from extracting private benefits. Simultaneously, it provides a mechanism for investors and shareholders to exercise their rights in the firm (Shleifer and Vishny, 1997). A sufficient level of economic and financial development in a country is necessary for a firm to raise funds on the capital markets and be able to benefit from better governance. Doidge, Karolyi and Stulz (2004) find that for countries with poor country-wide governance, firm-level governance and country-level governance are complements. If the government does not provide a reliable legal and financial system, it will be too costly for firms to bond themselves to better governance, since they cannot guarantee investor protection. Stulz (2005) distinguishes between two agency problems: on the one hand, there is the agency problem of corporate insider discretion, meaning that corporate insiders can expropriate outside investors by extracting private benefits from the firm. On the other hand, there is the agency problem of state ruler discretion, that is, the risk of expropriation by actions that state rulers take to improve their welfare by reducing the return on corporate investments. Stulz then shows both theoretically and empirically that there is a positive correlation between the two agency problems: ownership concentration increases if the importance of the state ruler agency problem increases and a dispersed firm ownership is inefficient when expropriation by the state is significant. In a similar context, Kho, Stulz and Warnock (2006) show that in countries with weak governance and weak institutions, concentrated ownership is optimal. In contrast, Klapper and Love (2004) and Durnev and Kim (2006) state that in countries with weak legal and policy-making institutions, firms search for alternative solutions to guarantee investor protection, such as establishing good corporate governance practices.

## 2 The shadow costs of international equity positions

In this section, we briefly review the international portfolio holdings model with shadow costs for international investments developed by Cooper and Kaplanis (1994, 2000), and generalized by Sercu and Vanpée (2007, henceforth SV).

We consider a world with  $N$  countries and  $N$  currencies. There are  $N$  risky equity assets,  $N - 1$  foreign currency bills or notes and a risk-free asset  $2N$ . Cooper and Kaplanis (1994) propose a model for international equity holdings where a representative investor from country  $l$  experiences a proportional deadweight loss  $C_i^l$  to invest in a stock of foreign country  $i$ . Under these assumptions, the net return on asset  $i$  for the representative investor of country  $l$  is:

$$R_i^l := (\mu_i - C_i^l) dt + \sigma_i dz_i, \quad i = 1, \dots, 2N - 1, \quad (1)$$

where  $\mu_i$  and  $\sigma_i$  are the annualized expectation and standard deviation of the nominal rate of return on this asset respectively, and  $dz_i$  is the increment to a standard Wiener process. The resulting vector of optimal portfolio holdings is:

$$x^l = \alpha \Omega^{-1} (\mu - r\mathbf{1} - C^l) + (1 - \alpha) \Omega^{-1} w^l, \quad (2)$$

where

$x^l$  denotes the  $(2N - 1) \times 1$  vector of the proportions of investor  $l$ 's wealth invested in each risky asset,

$\mu$  denotes the  $(2N - 1) \times 1$  vector of *p.a.* expected returns on the risky assets,

$r$  denotes the *p.a.* risk-free rate of the reference country,

$\alpha$  denotes the parameter of relative risk tolerance,

$\Omega$  denotes the  $(2N - 1) \times (2N - 1)$  covariance matrix of the *p.a.* nominal rates of return on the risky securities,

$\mathbf{1}$  denotes the  $(2N - 1) \times 1$  vector of elements all equal to unity, and

$w^l$  denotes the  $(2N - 1) \times 1$  vector of covariances of the risky asset returns with investor  $l$ 's rate of inflation.



In SV, the vector of shadow costs,  $C^l$ , is structured in the following way:

$$C_i^l = \begin{cases} 0 & , \text{ if } i \leq N \text{ and } i = l, \text{ (domestic stocks)} \\ C(h_l, f_i, a_{l,i}) & , \text{ if } i \leq N \text{ and } i \neq l, \text{ (foreign stocks)} \\ 0 & , \text{ if } i > N \text{ (fixed-interest)}. \end{cases} \quad (3)$$

Formally, expression (3) says that the shadow costs of investing abroad can be associated with three classes of instruments: home-country related instruments  $h_l$ , host country related instruments  $f_i$ , and an interaction effects,  $a_{i,l}$ . For riskfree lending and borrowing there is assumed to be no cost.

SV further generalize the Cooper-Kaplanis model by first considering hedged stock returns, so as to properly account for exchange rate risk and omitted stock markets from the sample. These hedged stock returns are the residuals of a regression of a stocks' return on the  $N - 1$  exchange rate changes and the equity returns of the missing markets. SV premultiply equation (2) by (minus) the covariance matrix of returns from hedged stocks,  $\Omega_{S|X}$ , and denote the resulting vector of conditional covariance risks by  $y^l := -\Omega_{S|X}x^l$ . They then show that expected returns can be eliminated and shadow costs can be extracted from the international portfolio holdings model by subtracting the domestic portfolio covariance risk from the covariance of the foreign asset with the return on the portfolio of the domestic investor.

$$\begin{aligned} y_i^l &= \alpha (-R_{e,S_i} + C(h_l, f_i, a_{l,i}) + \Gamma_i' R_{e,X}) - (1 - \alpha) w_{S_i|X}^l, \\ y_i^i &= \alpha (-R_{e,S_i} + \Gamma_i' R_{e,X}) - (1 - \alpha) w_{S_i|X}^i, \\ \Rightarrow (y_i^l - y_i^i) &= \alpha [C(h_l, f_i, a_{l,i})] - (1 - \alpha) (w_{S_i|X}^l - w_{S_i|X}^i), \end{aligned} \quad (4)$$

where

$-y_i^l := \text{cov}(R_i^h, R_{p(l)})$ , the conditional covariance of hedged stock  $i$ 's return with the return on the portfolio held by investor  $l$ ,

$C$  denotes the vector of shadow costs, consisting of home country-related (h) costs, foreign-country related (f) costs and interaction variables between the home and host country (a),

$w_{S_i|X}^l := \text{cov}(R_i^h, \Pi^l)$ , the conditional covariance between the hedged return of stock  $i$  with investor  $l$ 's inflation rate,

$R_{e,S_i}$  and  $R_{e,X}$  denote the excess returns on stocks and bonds respectively, and

$\Gamma$  is the matrix of hedge ratios.

There are as many elements in  $C$  as there are country pairs (and observed  $x_i^l$ 's per cross-section) and also  $\alpha$  is unknown. As a result, point estimates of costs can be backed out only if  $\alpha$  is known. This is essentially what Cooper and Kaplanis (1994) do: they postulate various values for  $\alpha$  and compute the corresponding implied costs. SV in contrast, replace  $C$  by a projection on a much smaller number of instruments  $H$ ,  $F$  and  $A$  that have been proven to be correlated with home bias. Since this economizes on degrees of freedom, they are able to estimate  $\alpha$  from the same data. SV assume an exponential cost structure such that all fitted values are strictly positive and the effect of alpha on the coefficient estimates is minimal. Thus, the regression for the SV-model is:

$$\begin{aligned} \left(y_i^l - y_i^i\right)_t &= \alpha \times \exp\left(c + \sum \beta_j X_j\right)_t + (1 - \alpha) \left(w_{S_i|X}^i - w_{S_i|X}^l\right)_t \\ &= \exp\left(\bar{c} + \sum \beta_j X_j\right)_t + (1 - \alpha) \left(w_{S_i|X}^i - w_{S_i|X}^l\right)_t. \end{aligned} \quad (5)$$

where  $\bar{c} = c + \log(\alpha)$  and  $X = [H, F, A]$ .

## 2.1 The impact of a shadow cost differential on international equity demand

To calculate the influence of a change in the costs factors on the international equity demand, we start from equation (2), repeated below:

$$x^l = \alpha \Omega^{-1} \left(\mu - r\mathbf{1} - C^l\right) + (1 - \alpha) \Omega^{-1} w^l, \quad (6)$$

Following SV, we can find an estimate for  $C^l$ , by plugging in the coefficient estimates and the values of the variables that compose  $X$  in equation (5).

$$C^l = \exp(\hat{c} + \sum \hat{\beta}_j X_j) \quad (7)$$

where  $X = [H, F, A]$ . If we change one of the cost factors in  $X$ , we can calculate a new cost vector  $C_{new}^l$ . We compute how each country would have invested its initial wealth if the costs had been different. We define  $x_{new}^l$  as the vector of proportional portfolio holdings that corresponds to a new vector of shadow costs  $C_{new}^l$ :

$$x_{new}^l = \alpha \Omega^{-1} (\mu - r\mathbf{1} - C_{new}^l) + (1 - \alpha) \Omega^{-1} w^l. \quad (8)$$

By subtracting equation (8) from equation (6), we obtain an expression for  $\Delta x^l = (x^l - x_{new}^l)$ , the change in proportional portfolio holdings, which then implies the change in dollar holdings of country  $l$ :

$$W^l \Delta x^l = W^l \alpha \Omega^{-1} (C_{new}^l - C^l), \quad (9)$$

with  $W^l$  the total wealth of country  $l$ , that is, the sum of the investing country's total bond holdings and total equity holdings. Note that this is a pure demand side approach; how this demand is met cannot be specified from the model. Presumably, improved governance or better macroeconomic policies should improve future cash flows and thus increase prices. In the medium run, also new issues can help meet the increased demand. A pure price hike (without new issues or improved cash flows) is also conceivable; but this would imply either a change in the expected returns or some irrationality, neither of which is strictly compatible with the model. Note also that this is a "first-round" prediction: there should also be interesting feedback mechanisms if changed asset demand affects prices and thus wealths, but these feedbacks cannot be quantified using portfolio theory. However, the main beneficiaries would be emerging-country investors, whose impact on worldwide demand is minimal.

The estimates of the implicit cost changes and the estimated change in foreign demand following an improvement in transparency measures or macroeconomic variables should be interpreted as indicative rather than actual values since we assumed that the total world wealth will remain unchanged after an improvement in one of the variables. In reality, relaxing a market friction such as perceived corruption will lead to an increase in aggregate wealth accruing to security holders because less money is siphoned off. A second reason why the predictions are indicative is that, transparency variables are correlated and one would expect for example that an improvement in the transparency of economic policy would also lower the perception of corruption in the public sector, and thus reinforce the positive effect on the shadow costs of inward investment and further improve international demand for the country's assets. Transparency variables are also correlated to other information-related cost factors. It has been shown that the negative effects of a financial crisis in a country, that is the large capital flight of foreigners and the loss in confidence by investors in the equity markets, are much worse in countries with a bad corporate governance and a weak legal system (Gelos and Wei, 2005; Johnson, Boone, Breach and Friedman, 2000). Lastly, improved governance

policy-making may also lead to a drop in expected returns which would further boost demand. However, there is no obvious way that a mean-variance model can predict such an effect.

In terms of the twin agency problem of Stulz (2005), we study the effect of a decrease in the agency problem of state ruler discretion of the demand of foreign investors for a country's equities. This decrease in the state agency problem can have two side-effects. First, an improvement in the transparency of the public policy or a reduction in the level of public corruption will decrease the controlling shareholder discretion since, for instance, controlling shareholders can no longer get away with expropriation of minority shareholders by bribing state rulers. Second, there can be positive side-effects on the concentration of controlling shareholders in the firm. A substantial increase in foreign demand towards a country's equities can lead to a rise in the stock prices. If the price of a company's share is high enough, inside investors will be more willing to sell part of their shares, resulting in a more dispersed shareholder structure. Thus, the improvement in government transparency variables can change the quality of corporate governance and also its impact on international asset allocation. However, we do not study these side-effects in this paper.

For all these reasons our forecasted increases in demand are conservative.

To compare the impact of changes in these variables on foreign demand we cannot just look at the regression coefficients because the impact depends also on the size of the change in the instrument under consideration. The results also rely on the covariance matrix: a given change in e.g. the TI CPI has a smaller impact if the country is a high-variance one. So we also need to come up with a set of changes in the instruments  $X$  that are feasible and of comparable significance across instruments. One could think of a one-sigma change, but this would mean that a country that already does well is expected to realize the same change in  $X$  as one that does quite poorly. Instead, we only look at underperforming countries, and let these reduce the observed distance to the median of  $X$  by one fourth. Thus, we rank our sample countries on each of the government opacity and macroeconomic variables and focus on the countries that score worse than the median. In most cases, these are emerging markets. For each country, we reduce the distance of one of the variables vis-à-vis the median by one fourth. For instance, if a higher score of a variable  $X$  is associated with worse policies, the change is:

$$X_{new} = X - [0.25 * (X - Median)_+]. \quad (10)$$

Then, we calculate the new set of shadow costs as in equation (8), using the coefficient estimates from Table 2. Finally, using equation (9), we calculate the new asset allocation resulting from

the change in the government opacity variable.

### 3 Data

The data we use are similar to SV. We use ten years of monthly data to estimate the covariance matrix of hedged stock returns. Stock prices from 1992 to 2000 are from the research list of De Moor (2004), based on Datastream. From January 2001 to December 2004 we use the Morgan Stanley International Country indices. Exchange rates and CPI are from Datastream. The currency of denomination is USD.

Data on international portfolio holdings in equities and bonds are from the Coordinated Portfolio Investment Survey (CPIS), conducted by the IMF. We use portfolio holdings data for 37 countries for each of the years 2001 to 2004. To obtain an estimate for the total wealth portfolio, we combine the aggregate equity holdings with the aggregate bond holdings for each country. Domestic stock market capitalizations for each year end are from the World Federation of Exchanges (<http://www.world-exchanges.org>) and bond market capitalizations are from the Bank of International Settlements Security Statistics (<http://www.bis.org/statistics/secstats.htm>). Domestic equity holdings are calculated as the difference between a country's equity market capitalization and its foreign holdings of these equities. The country's total equity holdings are equal to the sum of its domestic equity holdings and the total amount invested in foreign equities reported in the CPIS. Domestic and total bond holdings are calculated in a similar way. Total invested wealth is simply the sum of the total equity and bond portfolio of each country. Following SV, investments in off-shore financial centers are reallocated over the sample countries in proportion to the foreign investments of these centers.<sup>2</sup>

The instruments used to capture the shadow costs of international investments have been used before in studies that try to explain international portfolio holdings directly, like Chan, Covrig and Ng (2005), Fidora, Fratzscher and Thimann (2006) Lane and Milesi-Feretti (2004, 2005), Berkel (2004), Coval and Moskowitz (1999), Faruquee, Lee and Yan (2004) and Portes and Rey (1999). We use the variables of SV as instruments in this paper. Apart from the distinction between home country-related, host country-related and interaction costs, SV distinguish six

---

<sup>2</sup>These off-shore financial centers are Luxembourg, Ireland, Bermuda, Cayman Islands, Panama, the Netherlands Antilles and Guernsey. SV show that alternative allocation methods for the investments from and into financial off-shores do not meaningfully affect the estimation results.

Table 1: Definition of the variables

Variable	Exp. Sign	Description
<b>Int. investment costs <math>C(H_l, F_i, A_l, i)</math></b>		
<i>- 1. Information-related</i>		
Host	-	Dummy if the host country has English as official language
Interaction	-	Dummy if home and host country are situated in the same region
	-	Dummy if home and host country share a the same official language
	+	Logarithm of the physical distance between the home and the host country
	-	Imports of country $l$ from country $i$ divided by country $l$ 's GDP
<i>- 2. Explicit frictions</i>		
Host	+	Elkins/McSherry Co., Inc. transaction costs of the host country
	+	Index of controls on capital inflows
Home	-	Elkins/McSherry Co., Inc. transaction costs of the home country
	+	Index of controls on capital outflows
<i>- 3. Fin. development</i>		
Host	-	Dom. credit provided by banks plus stock market cap relative to GDP
	-	Stock market turnover relative to stock market capitalization of the host country
<i>- 4. Economic health and stability</i>		
Host	-	GDP of the host country relative to world GDP
	+	Annual inflation rate + unemployment rate of the host country
	+	Host country's current account balance as a percentage of its GDP
	-	Host country's government deficit or surplus as a percentage of its GDP
	+	Dummy if the host country suffered from a financial crisis recently
	?	3-year annual average GDP-growth of the host country
	?	GDP of the home country relative to world GDP
Home	-	Dummy if home and host country are Euroland members
Interaction		
<i>- 5. Political risk and corporate governance</i>		
Host	+	Measure for economic policy opacity (PwC and the Kurtzman Group)
	+	Measure for accounting practices and corporate governance (PwC and the Kurtzman Group)
	?	Interaction term country-level and corporate-level opacity (PwC and the Kurtzman Group)
	-	Indicator of government effectiveness (Kaufmann, Kraay and Mastruzzi, 2006)
	-	Index for insider trading in the host country (Global Competitiveness Report)
	-	Transparency International Corruption Perception Index
<i>- 6. Skewness</i>		
Host	-	Skewness of the return of the host country

categories of instruments to proxy for the costs of international investments: information asymmetries, explicit frictions, the level of financial development, economic health and stability measures, political risk and corporate governance and return skewness of stocks. We add one macroeconomic variable to the instruments of SV, the host country's government surplus or deficit as a percentage of its GDP. Table 1 offers a brief description of the variables used for the projection of the shadow costs of international investments. We use coefficient estimates based on an annual estimation and compare those with the results of the pooled sample estimates. Table 2 reports the coefficient estimates and the t-statistics for equation (5). Following SV, we estimate the model using GMM with a Newey-West weighted covariance matrix to account for heteroskedasticity. Note that most cross-country commonalities are already picked up by variables indicating common language, common region, English-speaking countries and Euroland countries. Correlations over time are avoided by studying year-by-year cross sections, but the t-statistics from the pooled (panel) estimation are quite similar to those from the separate cross sections, suggesting that the Newey-West correction works well.

Among the regressors, our subset deserves special attention, namely the macroeconomic policy indicators and governance variables used in the demand simulation. They are discussed in the next two subsections.

### 3.1 Macroeconomic policy making

We consider three macroeconomic policy indicators for each country: the Misery Index, its government deficit or surplus, and its balance on the current account. We focus on these variables because they are eye-catching indicators of macroeconomic health. In its weekly Country Indicators page, for instance, The Economist covers the components of the Misery Index, output growth, exchange and interest rates, and the current-account and government deficit. We do not consider the effect of output growth and exchange rate changes on foreign asset demand, because they are too volatile to explain long-memory home bias and they cannot so easily be controlled by the government as the indicators we consider.

The *Misery Index*, first proposed by Robert Barro in the 1970's, is the sum of a country's unemployment rate and inflation rate. Table 11 in the Appendix shows the Misery Index (and its components) for our four sample years. There is little cross sectional difference in official unemployment rates, except for South Africa which reports a high unemployment rate of 30 percent. Inflation rates differ more across countries and over time. Table 2 shows that if the





host country has a high misery score, the shadow costs of investment into this country tend to be higher.

The two other macroeconomic variables, the host-country *government deficit or surplus* as a percentage of its GDP and the host-country's *current account balance* as a percentage of GDP are obtained from the IMF and Datastream and shown in Table 12 in the Appendix. The government budget was not originally included in the set of instruments of SV. There seems to be a negative correlation between the host-country's government budget and implicit investment costs. The relation is clear for 2003 and 2004; in 2001 however, the coefficient is insignificantly different from zero, and in 2002 it is significant only at the 90% confidence level. The current account balance, lastly is a special case. Deficits are generally frowned upon, but a negative current account balance means a financial surplus, possibly under the form of foreign purchases of equity. We indeed observe that a current account deficit is correlated with more foreign demand for stocks, as reflected by a lower shadow cost. Thus, the issue here is: when the current account balance improves, how much demand for stocks is eliminated rather than created?

### 3.2 Political risks and transparency

In this second group of instruments, we focus on the variables that capture the effects of political risks and of corporate and government transparency. The variables of interest here are the Transparency International Corruption Perception Index; the ENF Index, ACC Index and their interaction; the Government Effectiveness Indicator and the Insider Trading Index.

With Gelos and Wei (2005) and Stulz (2005) as an exception, most authors focus on transparency and governance in general. We make a clear distinction between firm-level governance, country-level governance and the interaction effect between the two. The first measure of corporate governance is the ACC Index. This is a component of the Opacity Index developed in 2000 by consulting firms PricewaterhouseCoopers and the Kurtzman Group, and wants to capture the effect of accounting practices and corporate governance.<sup>3</sup> The second corporate governance measure is the Insider Trading Index, obtained from the Global Competitiveness Report. The estimation results in Table 2 show that the coefficient of the ACC Index has an incorrect sign, and the coefficient for the Insider Trading Index is always insignificant from

---

<sup>3</sup><http://www.opacity-index.com/>

zero, except for 2002.<sup>4</sup> This suggests that at the aggregate portfolio level, corporate governance does not play a meaningful role of its own in international portfolio choices. This result is in contrast with the findings of Gianetti and Simonov (2006) and Gelos and Wei (2005), who conclude that good corporate governance and protection of minority shareholders have a positive effect on international asset holdings; still, also in Gelos and Wei (2005), who study individual portfolios rather than aggregated data but make a similar distinction between corporate and government transparency, the effect of government transparency on international asset allocation is far more important than the effect of corporate transparency. Moreover, once Gelos and Wei add a series of control variables to their regressions, the corporate transparency variable is no longer significant while the government transparency variables remain highly significant. All these results are consistent with the idea that, as a stand-alone measure, corporate governance does not really help: it works only if the legal and political environment is right too (see below).

In light of our results, we focus in this paper on the effect of country-level governance on international asset allocation rather than on corporate governance, but we do include corporate governance as an interaction term. The need for an interaction term between corporate governance and country-level governance, the ENF\*ACC term in SV, has been emphasized in several papers. However, the expected sign of the coefficient of this interaction term is debated, and the empirical findings are contradictory. On the one hand, Doidge, Karolyi and Stulz (2004) state that good government transparency, efficient legal environments and a high level of financial development have to come first before the positive effects of good corporate governance can pay off. A firm cannot convincingly bond itself to better governance if a country protects investors poorly and has low financial development. Stulz (2005) takes this argument even further by stating that a firm might even hurt existing shareholders if greater transparency increases the risk of expropriation from the state. On the other hand, Klapper and Love (2004) conclude that in countries with weak legal and policy making institutions, firms search for alternative solutions to guarantee investor protection, such as establishing better corporate governance practices. Similarly, Durnev and Kim (2006) find that the positive effects of good corporate governance seem to be larger in countries with weaker legal frame-

---

<sup>4</sup>When we estimate the SV-model with the ACC Index or the Insider Trading Index as single explanatory variables, their coefficient estimates are insignificant from zero. These results are not shown but can be obtained from the corresponding author.

works. The estimation results of Table 2 are consistent with Doidge et al. (2004) and Stulz (2005) since the interaction term between country-level and firm-level transparency correlates positively with the implicit costs of international investments.

The first measure capturing country-level governance is the *Transparency International Corruption Perception Index* (TI CPI index), first released in 1995 by Transparency International. This index ranks more than 150 countries by their perceived levels of corruption in the public sector, as determined by expert assessments and opinion surveys. Business people and analysts are questioned about the misuse of public power for private benefit, with a focus, for example, on bribe-taking by public officials in public procurement. The lower a country is scoring on the index, the more corrupt it is perceived to be.<sup>5</sup> The TI CPI Indices over the sample period 2001-2004 for our 37 countries are given in Table 13 in the Appendix. The countries that are perceived to be the most corrupt are Venezuela, Indonesia and Russia, and the best scores are obtained by Finland, Denmark, Sweden and Singapore. The negative relation between corruption and FDI has already been documented elsewhere (Hines, 1995; Wei, 2000a, 2000b). Gray and Kaufmann (1998) and Vishwanath and Kaufmann (2001) argue that the economic costs of corruption can be substantial. Bribery raises transaction costs and uncertainty, leads to inefficient economic outcomes, impedes long-term foreign and domestic investment, misallocates talent to rent-seeking activities, and distorts sectoral priorities and technology choices. Table 2 shows that the TI CPI of the host (foreign) country correlates negatively with the shadow costs of international investments, even after controlling for items like information asymmetries, the level of development of the financial markets, transaction costs and border controls, economic development, and return skewness. This means that investors face higher implicit costs to buy stocks from countries that have a low score on the TI CPI index, that is, countries that are perceived to be more corrupt. For 2001, the coefficient for the TI CPI is insignificantly different from zero.

A second proxy for country-level governance is the *ENF Index*, another component of the Opacity Index. The ENF Index tries to capture the effects of the transparency of the economic policy. A higher score on the index corresponds to a higher level of opacity about the economic policy. Data on the ENF Index is available for the years 2001 (for only 22 of our sample countries) and 2004. Table 13 in the Appendix shows the ENF Index for the year

---

<sup>5</sup>More information on the composition of the TI CPI Index and the raw data can be obtained from <http://www.transparency.org/>.

2004. Following SV, we use the 2004 ENF Index for all our sample years, because the data for 2001 is incomplete. We find that the level of opacity in economic policy-making in the host country has a significantly positive correlation with the shadow costs for foreigners to invest in that country.

A third measure for the quality of country-level governance is the *Government Effectiveness Indicator* developed by Kaufmann, Kraay and Mastruzzi (2006).<sup>6</sup> This indicator captures the effect of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Table 13 in the Appendix shows the Government Effectiveness Indicator for our sample years. Values on the indicator range from -2.5 to 2.5, where a higher value indicates a better score. Data for 2001 are unavailable, so we use data for 2000 instead. Government effectiveness is the lowest in Venezuela and the highest in Switzerland and Singapore. Gwartney, Holcombe and Lawson (2006) show that private investment is higher in countries with better institutional quality. Acemoglu, Johnson, Robinson and Thaicharoen show that high volatility rates and crises periods are not so much explained by unsustainable and distortionary macroeconomic policies, but by institutional differences like the above. Thus, we expect that an improvement in the quality of public institutions will have a substantial positive effect on international asset demand. The results in Table 2 confirm that there is a significantly negative correlation between the Government Effectiveness Indicator of the host country and the implicit costs of international investments.

---

<sup>6</sup>Kaufmann *et al.* collect data from 31 different sources and apply an unobserved components model to construct the aggregate indicator from the individual data. The Government Effectiveness Indicator is a weighted average of the underlying data, with weights reflecting the precision of the individual data sources. Interestingly, Kaufmann *et al.* also provide standard error estimates for their indicators. For the countries in our sample, standard errors are generally low and comparable. Other indicators developed by Kaufmann *et al.* are Voice and accountability, Political stability and absence of violence, Regulatory quality, Rule of law and Control of corruption. A detailed description of the variables with their sources and components can be found at [www.govindicators.org](http://www.govindicators.org).

## 4 The impact of public policy of international asset demand

In this section, we examine to what extent asset demand changes in response to an amelioration of transparency in the public sector and the overall policy of the government. We first focus on our three measures of government opacity: the TI CPI Index as a measure for corruption in the public sector, the ENF Index as an indicator of economic policy opacity and the Government Effectiveness Indicator as a measure for the quality of public institutions. Then we look at our three macroeconomic policy indicators: the Misery Index, the government budget and the balance on the current account.

Recall that an improvement of the current account balance hurts foreign demand for stocks rather than stimulating it, so that the question is how harmful such a Washington-Consensus policy is rather than how beneficial it is.

### 4.1 Overall effects

Table 3 shows the percentage change in the average annual inward investment costs for the pooled sample in response to a one-quarter improved governance measure or policy-making variable for countries that score worse than the median. A first observation from the table is that a modest change in public governance variables has a larger effect on the shadow costs of foreign investments than a comparable change in the macroeconomic policy indicators. A modest improvement in the Government Effectiveness Indicator leads an average decrease in implicit inward investment costs for initially non-transparent countries of 16 percent. For an improvement in the ENF Index and the Corruption Perception Index the average decrease in implicit costs is 13 percent and 9 percent respectively. For comparison, a similar improvement in the Misery Index and the government deficit leads to an average decrease in implicit investment costs of 4 percent and 1 percent, respectively. A decrease in the deficit on the current account leads to an average increase in implicit costs of 3 percent.

Table 4 shows the overall effect of a change governance variables and macroeconomic variables on foreign demand for a country's equities. For each of our sample years, the first column shows the total increase in foreign demand, expressed in million USD, for the stocks of the countries where we improved one dimension of country-level governance or macroeconomic policy. The second column shows the total initial stock market capitalization of these countries and the third column contains the ratio of additional foreign demand to initial market capitalization. The table shows that the overall effect of a modest improvement in government

**Table 3: Average percentage change in the annual shadow cost of inward investment due to an improvement of government transparency or macroeconomic policy-making**

The columns TI CPI, ENF Index and G effectiveness show the percentage change in the average inward investment costs over the period 2001-2004 after improving the public governance variable by one fourth towards the median score for the opaque countries. The column showing the effect of the ENF Index includes the effect of the interaction term with the ACC Index. The columns Misery Index, G budget and Current acc show the percentage change in the average inward investment costs after improving the macroeconomic policy indicator by one fourth towards the median score for poor policy-making countries.

	Country-level governance			Macroeconomic policy		
	TI CPI	ENF Index	G effectiveness	Misery Index	G budget	Current acc
Argentina	-17.69	-2.56	-27.80	-10.89	-0.01	0.36
Austria		-1.66				2.54
Belgium				-0.47		
Brazil	-10.45	-1.53	-23.28	-4.89		2.62
Canada		-6.83				
Chile						2.16
Colombia	-10.81	-17.72	-27.80	-4.89	-1.09	3.21
Czech Republic	-7.28	-1.97	-8.39	-0.45	-0.44	5.87
Finland				-0.45		
France		-3.23		-0.68	-0.57	0.58
Germany		-2.02		-0.27	-0.80	0.26
Greece	-5.88	-10.74	-5.92	-0.78	-0.14	6.90
Hong Kong			-0.06		-0.32	
Hungary	-4.49		-7.70	-0.59	-1.59	6.37
Indonesia	-20.78	-45.99	-32.09	-4.44		
Israel		-13.70	-1.23	-0.93	-0.77	2.73
Italy	-2.47	-33.27	-5.43		-0.07	1.55
Japan					-2.46	
Korea	-7.91		-6.61			0.42
Malaysia	-5.29		-7.86		-0.74	
Netherlands					-0.24	
Philippines	-17.77	-24.81	-24.78	-1.80	-1.06	
Poland	-8.23	-26.40	-12.59	-4.31	-0.60	4.33
Portugal	-0.57		-0.09		-0.30	8.25
Russia	-17.32	-12.13	-32.17	-6.32		
South Africa	-5.18		-13.88	-7.92		1.49
Spain		-2.30		-1.26		3.53
Thailand	-11.89		-19.14		-0.03	
Turkey	-8.80		-20.91	-8.66	-4.25	2.72
UK					-0.15	3.17
UK					-1.69	4.08
Venezuela	-3.85	-21.62	-40.53	-14.13	-1.09	
<b>Average</b>	<b>-9.29</b>	<b>-13.44</b>	<b>-15.91</b>	<b>-3.75</b>	<b>-0.84</b>	<b>3.16</b>
<b>Median</b>	<b>-8.07</b>	<b>-10.74</b>	<b>-13.24</b>	<b>-1.79</b>	<b>-0.58</b>	<b>2.72</b>

transparency and economic policy making can lead to an additional foreign demand of more than 50 percent of the total initial market capitalization of the group of countries. The foreign demand increase is the largest for the Government Effectiveness Index. An improvement in the macroeconomic policy indicators, the Misery Index and the government budget, leads to a smaller additional foreign demand. Similarly, an improvement in the current account balance leads to a tiny decrease in foreign demand compared to the countries initial stock market cap.

The percentage change in inward investment costs for each year is reported in Tables 14 and 15 in the Appendix, together with yearly figures showing the original and new inward invest-

**Table 4: Overall effect of an improvement in public policy on foreign equity demand**

This table shows total increase in demand by foreigners for equities of the countries where we improved the transparency in the public sector or a macroeconomic policy indicator. For each year, the first column shows the total demand increase by foreign investors, the second column contains the initial total market capitalization for the countries with altered public policy levels and the third column contains the ratio of the first two columns. All figures are in USD million.

Country	2001			2002		
	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)
TI CPI	370,004	1,539,489	0.240	543,075	1,438,831	0.377
ENF	1,223,554	4,653,401	0.263	436,084	4,130,282	0.116
Government Effect.	1,453,349	2,103,791	0.691	819,173	1,506,409	0.544
Misery	225,365	3,909,227	0.058	489,840	3,367,313	0.145
Government budget	8,148	5,013,165	0.002	6,141	19,688,537	0.000
Current account	-79,276	19,224,116	-0.004	-22,049	17,212,443	-0.001

Country	2003			2004			average (1)/(2)
	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	
TI CPI	259,538	2,227,472	0.117	885,651	3,103,254	0.285	<b>0.255</b>
ENF	1,450,824	5,362,745	0.271	331,162	7,559,235	0.044	<b>0.174</b>
Government Effect.	1,186,974	2,296,516	0.517	990,473	3,103,254	0.319	<b>0.518</b>
Misery	30,663	4,911,124	0.006	19,736	7,0554,949	0.003	<b>0.053</b>
Government budget	80,788	21,471,663	0.004	24,753	28,480,595	0.001	<b>0.002</b>
Current account	-45,533	17,988,942	-0.003	-4,777	24,857,462	0.000	<b>-0.002</b>

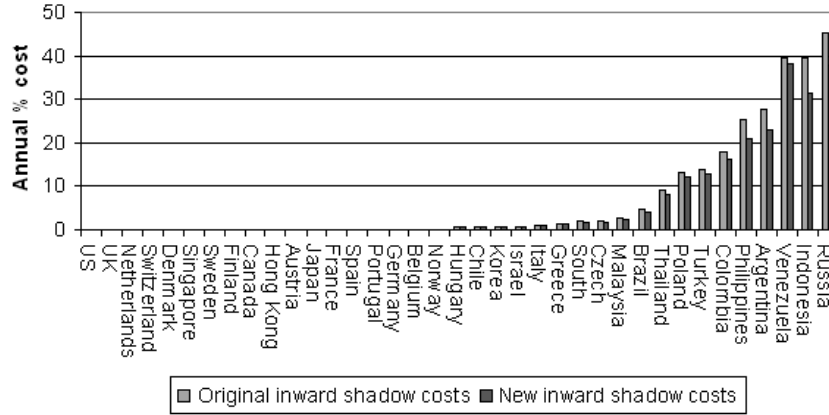
ment costs following a change in one of the transparency variables or one of the macroeconomic policy indicators.

We will discuss the effect of an improvement in each transparency variable and macroeconomic variable on the implicit costs of foreign investments and the foreign demand for a country's equities in turn. The general picture is as follows: (i) improvements in governance matter far more than further improvements in conventional macro figures; (ii) in the governance group, policy effectiveness clearly leads before transparency and then corruption; (iii) the only conventional macroeconomic variable with a meaningful impact is the Misery Index—mostly inflation. The effects of an improvement in the government budget and the current account balance are economically insignificant.

## 4.2 Corruption in the public sector

We first focus on the TI Corruption Perception Index. Figure 1 visualizes the first column of Table 3 and shows the original estimated shadow costs of inward investment using the coefficient estimates from Table 2, and the new shadow costs after a change in the level of perceived corruption in the public sector, averaged over the full sample period 2001-2004. Figures for the individual years are shown in the Appendix. A modest change in the level of perceived

Figure 1: **Original and new average inward investment costs after a change in the level of perceived corruption.**



corruption in the public sector leads to an average decrease in implicit inward investment costs in the range of 0.6 percent for Portugal to 20.8 percent for Indonesia. Concretely, in Argentina the estimated cost differential is  $-17.7$  percent, meaning that the average inward investment cost for Argentina falls from 28.1 percent per annum to 23.1 percent per annum. From Figure 1, it might seem that the reduction in implicit costs is only marginal, but the main interest of this paper is to estimate to what extent this reduction in implicit costs translates into additional demand of international investors for a country's equities.

For each sample year, we calculate the new foreign demand following the methodology laid out above. First, we look at the change in the demand from foreigners for the stocks of a country where we improved government transparency. The total value of the additional demand by foreign investors for country  $i$ 's equities can be calculated as:

$$\sum_{i \neq l} (x_{i,new}^l - x_i^l) W^l \quad (11)$$

with  $W^l$  the total wealth (in USD) of source country  $l$ . Table 5 shows the results. A first remark is that, when the perceived level of government corruption is lowered, the additional demand by foreigners for a country's equities can be very substantial. For example, the estimated increase in demand by foreigners for equities of Thailand in 2001 equals USD 23,894m, 66 percent of the total stock market capitalization of Thailand for that year end. For Venezuela, the Philippines and Indonesia, the effects are even larger. These estimates seem unrealistic at first sight, but reflect the small initial market capitalizations of these countries. If for example US investors decide to invest 1 % of their total wealth in Venezuela in response to a decrease in



Table 5: The impact of a change in perceived corruption on asset demand by foreigners

This table shows the increase in demand by foreigners for a country's stocks after a decrease in the level of corruption in the public sector for the years 2001 to 2004. For each year, the third column shows the ratio of the additional demand by foreign investors for the country's stocks to the initial market capitalization of the country. All figures are in USD million.

Country	2001			2002			2003			2004		
	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)
Argentina	16,783	33,384	0.50	78,072	16,549	4.72	37,651	34,995	1.08	152,786	40,594	3.76
Austria		25,204			33,578			56,523			87,776	
Belgium		146,016			167,147			170,705			281,711	
Brazil	6,366	186,238	0.03	2,443	126,762	0.02	3,276	226,358	0.01	19,738	330,347	0.06
Canada		611,493			570,224			888,678			1,177,518	
Chile		56,310			49,828			86,291			116,924	
Colombia	30,208	5,965	5.06	28,395	6,658	4.26	10,178	9,768	1.04	31,605	25,223	1.25
Czech Rep.	6,891	9,384	0.73	1,079	15,860	0.07	1,385	25,122	0.06	2,975	43,671	0.07
Denmark		85,145			76,750			118,167			155,233	
Finland		190,456			138,833			170,283			183,765	
France		1,491,498			1,447,040			1,237,618			2,331,020	
Germany		1,061,291			861,724			1,079,026			1,194,517	
Greece	5,494	83,481	0.07	333	66,040	0.01	599	103,765	0.01	1,643	121,921	0.01
Hong Kong		506,073			463,055			714,597			861,463	
Hungary	873	10,254	0.09	95	13,017	0.01	452	18,868	0.02	1,092	28,630	0.04
Indonesia	72,999	22,998	3.17	148,540	30,648	4.85	49,760	54,659	0.91	239,392	73,251	3.27
Israel		58,229			40,774			69,044			90,158	
Italy	2,275	527,467	0.00	69	477,075	0.00	308	614,842	0.00	159	789,563	0.00
Japan		2,474,518			2,329,815			2,933,648			3,557,674	
Korea	1,729	194,470	0.01	1,156	215,662	0.01	482	293,874	0.00	852	389,473	0.01
Malaysia	4,450	118,981	0.04	1,994	122,892	0.02	619	160,970	0.00	2,333	181,624	0.01
Netherlands		551,056			386,034			538,977			540,340	
Norway		63,857			103,388			95,920			141,624	
Philippines	22,541	20,606	1.09	67,301	18,183	3.70	21,986	23,191	0.95	86,151	28,602	3.01
Poland	39,201	26,155	1.50	19,772	28,849	0.69	8,256	37,405	0.22	10,387	71,547	0.15
Portugal	55	50,329	0.00		67,578		11	62,379	0.00	5	109,738	0.00
Russia	118,549	77,902	1.52	131,290	101,339	1.30	42,541	172,194	0.25	266,795	205,540	1.30
Singapore		117,338			101,554			173,817			217,618	
South Africa	1,629	84,344	0.02	546	116,544	0.00	529	260,749	0.00	543	442,526	0.00
Spain		407,675			461,560			726,243			940,673	
Sweden		236,514			179,117			289,877			376,781	
Switzerland		625,909			547,020			727,103			826,041	
Thailand	23,894	35,950	0.66	23,100	45,406	0.51	8,255	119,017	0.07	12,920	115,390	0.11
Turkey	7,650	47,150	0.16	20,454	34,217	0.60	39,162	68,379	0.57	17,045	98,299	0.17
UK		2,157,319			1,856,194			2,362,584			2,865,243	
US		14,441,088			12,155,206			12,023,005			16,323,609	
Venezuela	8,416	4,431	1.90	18,436	3,130	5.89	34,089	3,317	10.28	39,229	7,316	5.36
TOTAL	370,004	1,539,489	0.240	543,075	1,438,831	0.377	259,538	2,227,472	0.117	885,651	3,103,254	0.285

public corruption in that country, the total dollar amount of this additional foreign demand is far larger than the initial market capitalization of Venezuela. Actual growth rates of emerging countries' stock markets can be very large. Vietnam's stock market capitalization, for instance, has risen from USD 400 million in early 2006 to around USD 22 billion in March 2007. This was not all caused by increases in stock prices: the price-earnings ratio of the market's top 20 firms was around 70. But if the P/E is reduced to, for example, 20 (the level of India), Vietnam's market capitalization would still be USD 12 billion, 30 times its value one year ago.<sup>7</sup> Still, it seems advisable to look at total extra demand across all countries, as a fraction of their aggregated initial market cap rather than at individual growth rates. For example, for 2004 the total increase of foreign equity demand following a modest decrease in the perceived level of public corruption is estimated at USD 885,651m, i.e. 28 percent of the total initial market capitalization of the countries where the level of perceived government corruption is worse than the median. Thus, our calculations indicate that the perceived level of corruption in the host country can be very influential for foreign investor confidence and a reduction in government corruption should create large foreign inward investments.

In the next section, we turn to the effect of a change in economic policy opacity on the shadow costs of international investments and international asset allocation.

### **4.3 Economic policy opacity**

The column labeled ENF in Table 3 and Figure 2 show the average change in the shadow costs of inward investments after an improvement of the transparency in economic policy-making. We can conclude that the effect of an amelioration of economic policy transparency in opaque countries lowers the inward investment costs substantially. For Venezuela, the inward investment costs drop by 21.6 percent, that is a decrease from 39.7 to 31.1 percent per annum. The cost reduction is the most pronounced for Indonesia, the country that scores worst on the index of economic policy opacity. Shadow costs of inward investment in Indonesia on average change from 39.8 to 21.5 percent per annum.

Table 6 displays the estimated change in demand by foreign investors if the economic policy of a country would have become more transparent. The conclusions that can be drawn are similar to the conclusions for the Corruption Perception Index. The increase in demand by

---

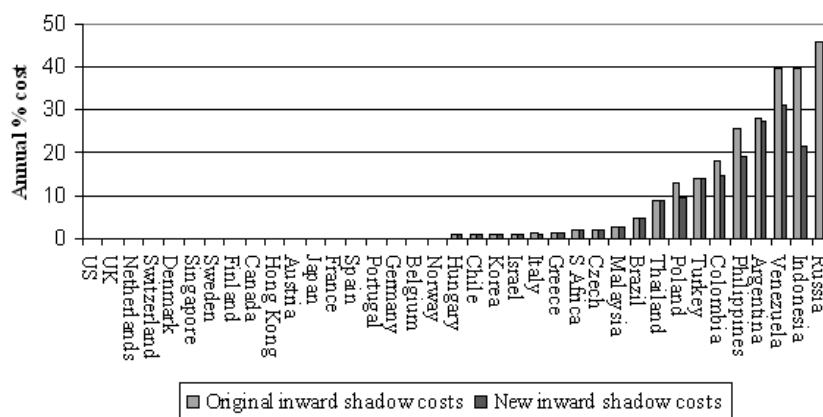
<sup>7</sup>The Economist, March 15th 2007.

Table 6: The impact of a change in economic policy opacity on asset demand by foreigners

This table shows the increase in demand by foreigners in a country's equities after a decrease in the level of economic policy opacity. For each year, the third column shows the ratio of the additional demand by foreign investors for the country's stocks to the initial market capitalization of the country. All figures are in USD million.

Country	2001			2002			2003			2004		
	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)
Argentina	8,418	33,384	0.25	5,958	16,549	0.36	19,945	34,995	0.57	5,534	40,594	0.14
Austria	147	25,204	0.01	4	33,578	0.00	101	56,523	0.00	2	87,776	0.00
Belgium		146,016			167,147			170,705			281,711	
Brazil	2,383	186,238	0.01	172	126,762	0.00	2,638	226,358	0.01	554	330,347	0.00
Canada	111	611,493	0.00	8	570,224	0.00	72	888,678	0.00	1	1,177,518	0.00
Chile		56,310			49,828			86,291			116,924	
Colombia	104,101	5,965	17.45	16,082	6,658	2.42	77,228	9,768	7.91	10,942	25,223	0.43
Czech Rep.	2,684	9,384	0.29	106	15,860	0.01	1,201	25,122	0.05	96	43,671	0.00
Denmark		85,145			76,750			118,167			155,233	
Finland		190,456			138,833			170,283			183,765	
France	296	1,491,498	0.00	27	1,447,040	0.00	419	1,237,618	0.00	7	2,331,020	0.00
Germany	91	1,061,291	0.00	20	686,014	0.00	514	1,079,026	0.00	10	1,194,517	0.00
Greece	12,698	83,481	0.15	208	66,040	0.00	3,167	103,765	0.03	280	121,921	0.00
Hong Kong		506,073			463,055			714,597			861,463	
Hungary		10,254			13,017			18,868			28,630	
Indonesia	412,069	22,998	17.92	184,603	30,648	6.02	672,739	54,659	12.31	191,917	73,251	2.62
Israel	2,888	58,229	0.05	499	40,774	0.01	4,050	69,044	0.06	184	90,158	0.00
Italy	33,560	527,467	0.06	246	477,075	0.00	7,838	614,842	0.01	100	789,563	0.00
Japan		2,474,518			2,329,815			2,933,648			3,557,674	
Korea		194,470			215,662			293,874			389,473	
Malaysia		118,981			122,892			160,970			181,624	
Netherlands		551,056			386,034			538,977			540,340	
Norway		63,857			103,388			95,920			141,624	
Philippines	210,600	20,606	8.05	27,064	18,183	0.94	84,520	23,191	2.26	3,922	28,602	0.05
Poland	5,183	26,155	0.20	4,634	28,849	0.16	3,573	37,405	0.10	2,921	71,547	0.04
Portugal		50,329			67,578			62,379			109,738	
Russia	203,828	77,902	2.62	64,264	101,339	0.63	184,945	172,194	1.07	42,789	205,540	0.21
Singapore		117,338			101,554			173,817			217,618	
South Africa		84,344			116,544			260,749			442,526	
Spain	223	407,675	0.00	4	461,560	0.00	150	726,243	0.00	2	940,673	0.00
Sweden		236,514			179,117			289,877			376,781	
Switzerland		625,909			547,020			727,103			826,041	
Thailand		35,950			45,406			119,017			115,390	
Turkey		47,150			34,217			68,379			98,299	
UK		2,157,319			1,856,194			2,362,584			2,865,243	
US		14,441,088			12,155,206			12,023,005			16,323,609	
Venezuela	137,787	4,431	31.10	80,133	3,130	25.60	202,152	3,317	60.94	42,529	7,316	5.81
TOTAL	1,223,554	4,653,401	0.263	436,084	4,130,282	0.116	1,450,824	5,362,745	0.271	331,162	7,559,235	0.044

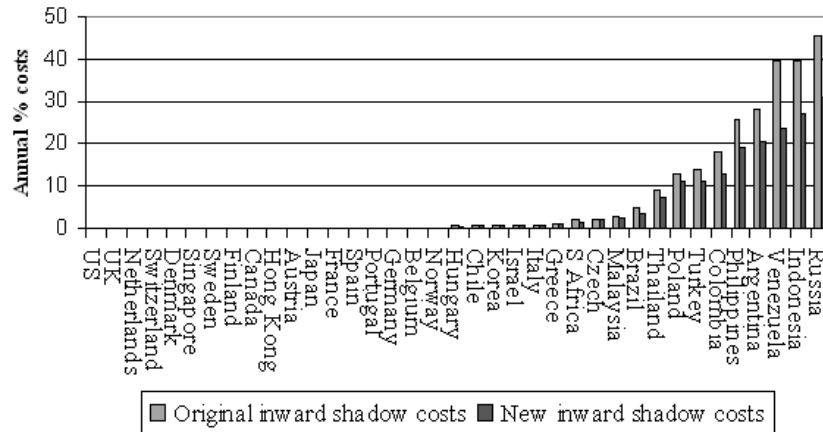
Figure 2: Original and new average inward investment costs after a change in the level economic policy opacity.



foreign investors towards a country’s stocks after an improvement in economic policy transparency is less marked than in the case of the Corruption Perception Index but can still be very important. In 2004, improving economic policy transparency in Argentina leads to an estimated additional foreign demand of USD 5,534m, or 14 percent of Argentina’s stock market capitalization for that year. Exceptionally high demand changes are again for Venezuela and Indonesia because of the small initial market capitalizations of these countries and the bad initial scores (i.e. the large assumed changes). Compared to the other sample years, the effect of the ENF Index in 2004 is small. Aggregated over all countries in 2004, the additional foreign equity demand is estimated at USD 331,162m, or a modest 4 percent of the total initial market capitalization of the countries with initially non-transparent economic policy. In contrast, the additional foreign demand for 2001, 2002 and 2003 is estimated at respectively 26 percent, 12 percent and 27 percent of total initial market capitalization. This difference is explained by the lower coefficient estimate for the interaction term between the ENF and the ACC Index in 2004. Overall, we can conclude that improving economic policy opacity can be, just like lowering government corruption, an efficient tool to attract foreign capital.

We turn to our third country-level governance measure, the Government Effectiveness Indicator.

Figure 3: Original and new average inward investment costs after a change in the level of government effectiveness.



#### 4.4 Government effectiveness

Table 3 shows the percentage decrease in implicit investment costs when the Government Effectiveness Indicator is improved and Figure 3 shows the corresponding initial and new implicit costs of inward investments. Both the figure and the table indicate that an improvement in institutional quality leads to substantial reductions in the shadow costs of inward investments. The reduction in implicit investment costs is again the largest for Venezuela (−40.5%) and the smallest for Hong Kong (−0.06%). In a more middle-of-the road example like Colombia, average inward investment costs drop from 17.9 percent per annum to 12.9 percent per annum.

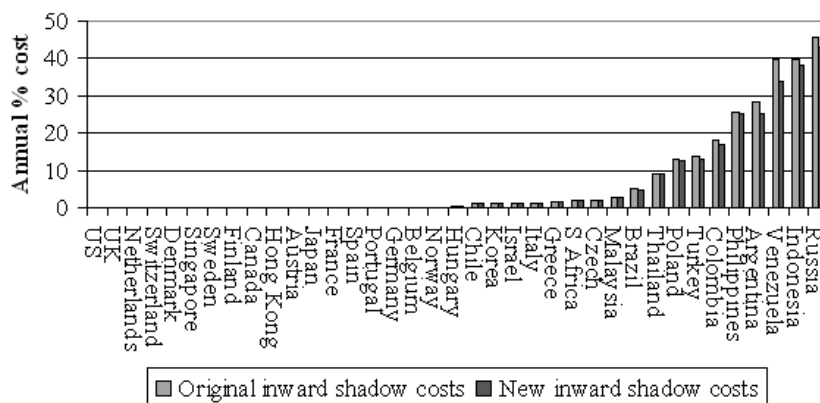
Table 7 reports the estimated additional foreign demand for a country’s equities after a small improvement in the level of institutional quality. For some emerging countries, the additional demand exceeds their initial market capitalization by several times. For example, in 2004, the additional foreign demand towards Colombia’s equities is estimated at USD 38,236m, while its market capitalization is only USD 25,223m. Overall, the improvement in the Government Effectiveness Indicator leads to an additional foreign demand that amounts up to an impressive 69 percent of the initial market capitalization of the countries with bad quality of public institutions in 2001 and to 32 percent of total initial stock market cap in 2004 –by large the biggest effect among all we looked at. Although these estimates are only indicative, our results indicate the importance of institutional quality in particular and a good and transparent public policy in general for international portfolio allocation and the development and growth

Table 7: The impact of a change in the level of government effectiveness on asset demand by foreigners

This table shows the increase in demand by foreigners in a country's equities after an increase in the level of government effectiveness. For each year, the third column shows the ratio of the additional demand by foreign investors for the country's stocks to the initial market capitalization of the country. All figures are in USD million.

Country	2001			2002			2003			2004		
	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)
Argentina	44,686	33,384	1.34	95,798	16,549	5.79	179,067	34,995	5.12	140,146	40,594	3.45
Austria		25,204			33,578			56,523			87,776	
Belgium		146,016			167,147			170,705			281,711	
Brazil	31,039	186,238	0.17	3,639	126,762	0.03	16,920	226,358	0.07	21,138	330,347	0.06
Canada		611,493			570,224			888,678			1,177,518	
Chile		56,310			49,828			86,291			116,924	
Colombia	144,637	5,965	24.25	43,499	6,658	6.53	59,356	9,768	6.08	38,236	25,223	1.52
Czech Rep.	10,284	9,384	1.10	472	15,860	0.03	2,984	25,122	0.12	1,446	43,671	0.03
Denmark		85,145			76,750			118,167			155,233	
Finland		190,456			138,833			170,283			183,765	
France		1,491,498			1,447,040			1,237,618			2,331,020	
Germany		1,061,291			686,014			1,079,026			1,194,517	
Greece	6,285	83,481	0.08	142	66,040	0.00	1,162	103,765	0.01	683	121,921	0.01
Hong Kong	3	506,073	0.00		463,055			714,597			861,463	
Hungary	2,270	10,254	0.22	64	13,017	0.00	1,334	18,868	0.07	754	28,630	0.03
Indonesia	234,857	22,998	10.21	162,900	30,648	5.32	232,993	54,659	4.26	220,260	73,251	3.01
Israel		58,229			40,774			69,044			90,158	
Italy	5,327	527,467	0.01	39	477,075	0.00	813	614,842	0.00	119	789,563	0.00
Japan		2,474,518			2,329,815			2,933,648			3,557,674	
Korea	3,197	194,470	0.02	319	215,662	0.00	706	293,874	0.00	241	389,473	0.00
Malaysia	12,846	118,981	0.11	711	122,892	0.01	1,719	160,970	0.01	760	181,624	0.00
Netherlands		551,056			386,034			538,977			540,340	
Norway		63,857			103,388			95,920			141,624	
Philippines	64,318	20,606	3.12	64,033	18,183	3.52	92,181	23,191	3.97	77,277	28,602	2.70
Poland	103,694	26,155	3.96	12,441	28,849	0.43	19,042	37,405	0.51	5,192	71,547	0.07
Portugal		50,329		2	67,578	0.00		62,379		8	109,738	0.00
Russia	482,335	77,902	6.19	163,199	101,339	1.61	207,989	172,194	1.21	282,224	205,540	1.37
Singapore		117,338			101,554			173,817			217,618	
South Africa	7,030	84,344	0.08	514	116,544	0.00	1,644	260,749	0.01	306	442,526	0.00
Spain		407,675			461,560			726,243			940,673	
Sweden		236,514			179,117			289,877			376,781	
Switzerland		625,909			547,020			727,103			826,041	
Thailand	69,753	35,950	1.94	19,386	45,406	0.43	28,868	119,017	0.24	9,285	115,390	0.08
Turkey	27,016	47,150	0.57	22,340	34,217	0.65	156,989	68,379	2.30	14,784	98,299	0.15
UK		2,157,319			1,856,194			2,362,584			2,865,243	
US		14,441,088			12,155,206			12,023,005			16,323,609	
Venezuela	203,773	4,431	45.99	299,726	3,130	73.39	182,544	3,317	55.03	177,614	7,316	24.28
TOTAL	1,453,349	2,103,791	0.691	819,173	1,506,409	0.544	1,186,974	2,296,516	0.517	990,473	3,103,254	0.319

Figure 4: **Original and new average inward investment costs after a change in the level of the Misery Index.**



of the financial markets, especially for emerging markets.

Lastly, we turn to the three macroeconomic policy indicators, the Misery Index, the government deficit or surplus and the balance on the current account. This enables us to compare the effects of transparency variables to those of traditional macroeconomic variables.

#### 4.5 Misery Index

Figure 4 and Table 3 show that a moderate reduction of the Misery Index has a substantially smaller effect on the shadow costs of inward investments than the pure transparency variables. Exceptions here are South Africa, Poland and Argentina. South Africa and Poland have very high unemployment rates, while in Argentina both unemployment rates and inflation rates are particularly bad during the financial crisis. A lower Misery Index decreases the average shadow costs of investing in Argentina from 28 to 25 percent per annum.

Table 8 shows the change in demand for a country’s equities by foreign and domestic investors after a reduction in the Misery Index, relative to the initial market capitalization of that country. Predictably, in light of the lower effect on costs  $C^l$ , the impact of lowering the Misery Index is less spectacular than the impact of an improvement in government transparency. We find that the additional demand by foreign investors is puny (ranging between 0.3 percent of total initial market cap in 2004 to 14.5 percent of initial market cap in 2002), especially compared to the additional foreign demand resulting from the improvement in the Government Effectiveness indicator (32 percent of initial market cap in 2004). Exceptions here

Table 8: The impact of a change in the misery rate on asset demand by foreigners

This table shows the increase in demand by foreigners for a country's stocks after a decrease in the Misery Index for the years 2001 to 2004. For each year, the third column shows the ratio of the additional demand by foreign investors for the country's stocks to the initial market capitalization of the country. All figures are in USD million.

Country	2001			2002			2003			2004		
	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)
Argentina	4,898	33,384	0.15	104,655	16,549	6.32	5,189	34,995	0.15	2,224	40,594	0.05
Austria		25,204		33,578	33,578			56,523			87,776	
Belgium	51	146,016	0.00	44	167,147	0.00	11	170,705	0.00	2	281,711	0.00
Brazil	1,867	186,238	0.01	1,561	126,762	0.01	523	226,358	0.00	442	330,347	0.00
Canada		611,493		570,224	570,224			888,678			1,177,518	
Chile		56,310		49,828	49,828			86,291			116,924	
Colombia	21,172	5,965	3.55	18,534	6,658	2.78	948	9,768	0.10	800	25,223	0.03
Czech Rep.	774	9,384	0.08	38	15,860	0.00		25,122		22	53,798	0.00
Denmark		85,145		76,750	76,750			118,167			155,233	
Finland	39	190,456	0.00	138,833	138,833			170,283			183,765	
France	52	1,491,498	0.00	27	1,447,040	0.00	12	1,237,618	0.00	1	2,331,020	0.00
Germany	7	1,061,291	0.00	15	686,014	0.00	13	1,079,026	0.00	2	1,194,517	0.00
Greece	929	83,481	0.01	75	66,040	0.00	19	103,765	0.00	18	121,921	0.00
Hong Kong		506,073		463,055	463,055			714,597			861,463	
Hungary	353	10,254	0.03	13,017	13,017			18,868		13	28,630	0.00
Indonesia	21,331	22,998	0.93	59,133	30,648	1.93	1,659	54,659	0.03	2,504	73,251	0.03
Israel		58,229		310	40,774	0.01	2,401	69,044	0.03		90,158	
Italy		527,467		477,075	477,075		4	614,842	0.00	4	789,563	0.00
Japan		2,474,518		2,329,815	2,329,815			2,933,648			3,557,674	
Korea		194,470		215,662	215,662			293,874			389,473	
Malaysia		118,981		122,892	122,892			160,970			181,624	
Netherlands		551,056		386,034	386,034			538,977			540,340	
Norway		63,857		103,388	103,388			95,920			141,624	
Philippines	6,475	20,606	0.31	10,885	18,183	0.60	649	23,191	0.03	1,291	28,602	0.05
Poland	26,652	26,155	1.02	12,044	28,849	0.42	745	37,405	0.02	325	71,547	0.00
Portugal		50,329		67,578	67,578			62,379			109,738	
Russia	89,526	77,902	1.15	77,558	101,339	0.77	3,497	172,194	0.02	4,873	205,540	0.02
Singapore		117,338		101,554	101,554			173,817			217,618	
South Africa	3,312	84,344	0.04	1,397	116,544	0.01	152	260,749	0.00	37	442,526	0.00
Spain	157	407,675	0.00	8	461,560	0.00	2	726,243	0.00	1	940,673	0.00
Sweden		236,514		179,117	179,117			289,877			376,781	
Switzerland		625,909		547,020	547,020			727,103			826,041	
Thailand		35,950		45,406	45,406			119,017			115,390	
Turkey	21,000	47,150	0.45	38,424	34,217	1.12	7,580	68,379	0.11	338	98,299	0.00
UK		2,157,319		1,856,194	1,856,194			2,362,584			2,865,243	
US		14,441,088		12,155,206	12,155,206			12,023,005			16,323,609	
Venezuela	26,768	4,431	6.04	165,130	3,130	52.76	7,259	3,317	2.19	6,841	7,316	0.94
TOTAL	225,365	3,909,227	0.058	489,840	3,367,313	0.145	30,663	4,911,124	0.006	19,736	7,055,949	0.003



are Argentina and Venezuela.

#### 4.6 Government deficit or surplus

The second macroeconomic policy indicator that we consider is the government surplus or deficit as a percentage of a country’s GDP. Table 3 and Figure 5 show the percentage decrease in the shadow costs of inward investment after a small decrease in the government deficit. Table 3 already suggests that there is only a minimal decrease in implicit investment costs in response to an improvement in the government budget of the host country: the percentage decrease in implicit investment costs ranges from 0.01 percent for Argentina to 4.25 percent for Turkey. On top of that, it is important to note that many cost reductions are for initially low-cost countries such the Netherlands, Hong Kong, France and Germany. These are countries with already well developed and large financial markets. For example the cost decrease of 1.7 percent in the US corresponds to a drop in implicit investment costs from 0.0078 percent per annum to 0.0076 percent per annum, which is very small in absolute figures and will probably not lead to meaningful inflows of foreign capital.

Table 9 shows the change in foreign asset demand after a decrease in the government deficit for countries with initially large deficits. Overall, the additional foreign demand is small compared to the initial market capitalization of these countries, and never exceeds 1 percent of the total initial market cap. This finding has two explanations. First, the regression coefficient

Figure 5: **Original and new average inward investment costs after a decrease in the government deficit.**

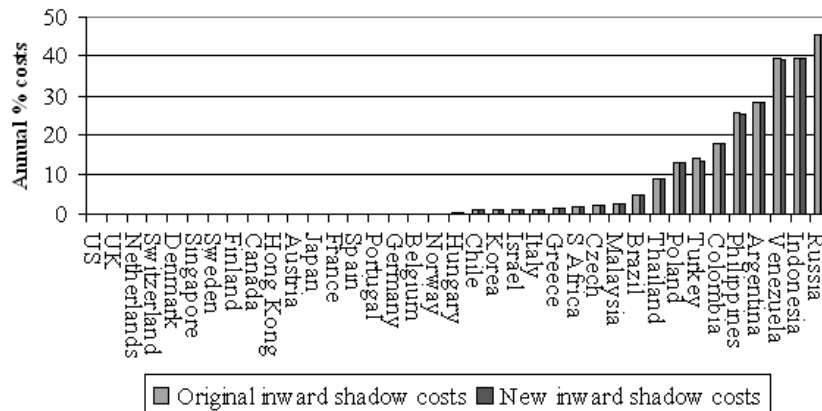


Table 9: The impact of a decrease in the government deficit on asset demand by foreigners

This table shows the increase in demand by foreigners for a country's stocks after an decrease in the government deficit for the years 2001 to 2004. For each year, the third column shows the ratio of the additional demand by foreign investors for the country's stocks to the initial market capitalization of the country. All figures are in USD million.

Country	2001			2002			2003			2004		
	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)
Argentina	332	33,384	0.01		16,549		32,094		40,594			
Austria		25,204			33,578			56,523		87,776		
Belgium		146,016			167,147			170,705		281,711		
Brazil		186,238			126,762			226,358		330,347		
Canada		611,493			570,224			888,678		1,177,518		
Chile		56,310			49,828			86,291		116,924		
Colombia	1,580	5,965	0.26	618	6,658	0.09	7,622	9,768	0.78	4,159	25,223	0.16
Czech Rep.	122	9,384	0.01	4	15,860	0.00	816	25,122	0.03	137	53,798	0.00
Denmark		85,145			76,750			118,167			155,233	
Finland		190,456			138,833			170,283			183,765	
France		1,491,498			1,447,040		162	1,237,618	0.00	6	2,331,020	0.00
Germany	4	1,061,291	0.00	4	686,014	0.00	256	1,079,026	0.00	18	1,194,517	0.00
Greece		83,481			66,040		174	103,765	0.00	81	121,921	0.00
Hong Kong	10	506,073	0.00	11	463,055	0.00	4	714,597	0.00	2	861,463	0.00
Hungary	30	10,254	0.00		13,017	0.00	388	18,868	0.02	443	28,630	0.02
Indonesia	78	22,998	0.00		30,648	0.00	540	69,044	0.01	17	90,158	0.00
Israel	35	58,229	0.00	13	40,774	0.00	540	69,044	0.01	17	90,158	0.00
Italy	78	527,467	0.00	1	477,075	0.00	276	614,842	0.00	31	789,563	0.00
Japan	10	2,474,518	0.00	11	2,329,815	0.00	276	2,933,648	0.00	31	3,557,674	0.00
Korea		194,470			215,662			293,874			389,473	
Malaysia	361	118,981	0.00	98	122,892	0.00	589	160,970	0.00	466	181,624	0.00
Netherlands		551,056			386,034		9	538,977	0.00		540,340	
Norway		63,857			103,388			95,920			141,624	
Philippines	522	20,606	0.03	1,381	18,183	0.08	10,626	23,191	0.46	4,805	28,602	0.17
Poland	1,357	26,155	0.05	577	28,849	0.02	4,870	37,405	0.13	1,419	71,547	0.02
Portugal	17	50,329	0.00		67,578		8	62,379	0.00	11	109,738	0.00
Russia		77,902			101,339			172,194			205,540	
Singapore		117,338			101,554			173,817			217,618	
South Africa		84,344			116,544			260,749			442,526	
Spain		407,675			461,560			726,243			940,673	
Sweden		236,514			179,117			289,877			376,781	
Switzerland		625,909			547,020			727,103			826,041	
Thailand	226	35,950	0.01		45,406			119,017			115,390	
Turkey	2,305	47,150	0.05	1,591	34,217	0.05	41,841	68,379	0.61	1,157	98,299	0.01
UK		2,157,319		1	1,856,194	0.00	2	2,362,584	0.00		2,865,243	
US		14,441,088		1	12,155,206	0.00	8	12,023,005	0.00	2	16,323,609	0.00
Venezuela	1,091	4,431	0.25	1,827	3,130	0.58	12,597	3,317	3.80	12,001	7,316	1.64
TOTAL	8,148	5,013,165	0.002	6,141	19,688,537	0.000	80,788	21,471,663	0.004	24,753	28,480,595	0.001

between host country government budget and inward investment costs is statistically negative, but small. Second, the cross-country differences in government deficit or surplus are small and deficits are not confined to developing countries.

Lastly, we turn to our third macroeconomic policy indicator, the balance on the current account.

#### 4.7 Current account deficit or surplus

Table 3 and Figure 6 show the percentage increase in the implicit costs of investments following a decrease in the current account deficit for the countries with an initially negative balance on their current account. Both the table and the figure show that the effect is minimal. On average, the implicit investment costs increase by 3.2 percent after an improvement of the current account balance. The maximal increase in implicit investment costs is for Portugal (+8.3%) because this country had an initial balance on its current account in the range of -9.5% to -5.1% of its GDP during the period 2001-2004.

The estimated decrease in foreign equity demand following an improvement in the current account balance is shown in Table 10. The estimates from table indicate that foreign investors' demand for a country's equities is hardly affected if the deficit on the current account in the host-country decreases. The only exception is Colombia in the years 2001, 2002 and 2003. On average, the total decrease in foreign equity demand following an improvement in the current

Figure 6: **Original and new average inward investment costs after a decrease in the current account deficit.**

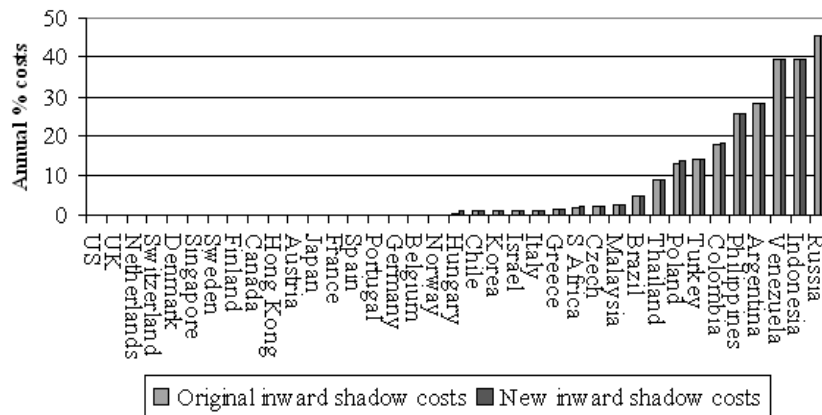


Table 10: The impact of a decrease of the current account deficit on asset demand by foreigners

This table shows the decrease in demand by foreigners for a country's stocks after an improvement in the current account balance for the years 2001 to 2004. For each year, the third column shows the ratio of the additional demand by foreign investors for the country's stocks to the initial market capitalization of the country. All figures are in USD million.

Country	2001			2002			2003			2004		
	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)	Additional demand by foreigners	Initial market cap equity	(1)/(2)
Argentina	-6,801	33,384	-0.20		16,549		32,094		-992	40,594	-0.02	
Austria	-257	25,204	-0.01	-9	33,578	0.00	-100	56,523	-2	87,776	0.00	
Belgium		146,016			167,147			170,705		281,711		
Brazil	-6,410	186,238	-0.03	-882	126,762	-0.01	-558	226,358	-161	330,347	0.00	
Canada		611,493			570,224			888,678		1,177,518		
Chile	-778	56,310	-0.01	-45	49,828	0.00	-542	86,291	-18	116,924	0.00	
Colombia	-13,511	5,965	-2.27	-6,132	6,658	-0.92	-8,928	9,768	-1,209	25,223	-0.05	
Czech Rep.	-7,577	9,384	-0.81	-763	15,860	-0.05	-2,754	25,122	-335	53,798	-0.01	
Denmark		85,145			76,750			118,167		155,233		
Finland		190,456			138,833			170,283		183,765		
France		1,491,498		-15	1,447,040	0.00	-123	1,237,618	-4	2,331,020	0.00	
Germany	-54	1,061,291	0.00		686,014			1,079,026		1,194,517		
Greece	-8,280	83,481	-0.10	-298	66,040	0.00	-1,285	103,765	-206	121,921	0.00	
Hong Kong		506,073			463,055			714,597		861,463		
Hungary	-2,196	10,254	-0.21	-142	13,017	-0.01	-1,020	18,868	-240	28,630	-0.01	
Indonesia		22,998			30,648			54,659		73,251		
Israel	-596	58,229	-0.01	-248	40,774	-0.01	-306	69,044	-18	90,158	0.00	
Italy	-1,434	527,467	0.00	-37	477,075	0.00	-479	614,842	-9	789,563	0.00	
Japan		2,474,518			2,329,815			2,933,648		3,557,674		
Korea		194,470		-151	215,662	0.00		293,874		389,473		
Malaysia		118,981			122,892			160,970		181,624		
Netherlands		551,056			386,034			538,977		540,340		
Norway		63,857			103,388			95,920		141,624		
Philippines		20,606			18,183			23,191		28,602		
Poland	-29,551	26,155	-1.13	-8,934	28,849	-0.31	-7,027	37,405	-436	71,547	-0.01	
Portugal	-864	50,329	-0.02	-24	67,578	0.00	-112	62,379	-12	109,738	0.00	
Russia		77,902			101,339			172,194		205,540		
Singapore		117,338			101,554			173,817		217,618		
South Africa	-595	84,344	-0.01	-108	116,544	0.00	-252	260,749	-38	442,526	0.00	
Spain	-352	407,675	0.00	-13	461,560	0.00	-180	726,243	-4	940,673	0.00	
Sweden		236,514			179,117			289,877		376,781		
Switzerland		625,909			547,020			727,103		826,041		
Thailand		35,950			45,406			119,017		115,390		
Turkey		47,150		-4,263	34,217	-0.12	-21,843	68,379	-1,092	98,299	-0.01	
UK	-23	2,157,319	0.00	-1	1,856,194	0.00	-5	2,362,584	0.00	2,865,243	0.00	
US	-3	14,441,088	0.00	-15	12,155,206	0.00	-18	12,023,005	0.00	16,323,609	0.00	
Venezuela		4,431			3,130			3,317		7,316		
TOTAL	-79,276	19,224,116	-0.004	-22,049	17,212,443	-0.001	-45,533	17,988,942	-4,777	24,857,462	0.000	

account balance is 0.4 percent of total market cap in 2001, 0.1 percent in 2002, 0.3 percent in 2003 and only 0.02 percent of total initial stock market capitalization in 2004. Thus, if inflows into the stock market are viewed as healthy, then the Washington Consensus' insistence on balanced trade does little harm.

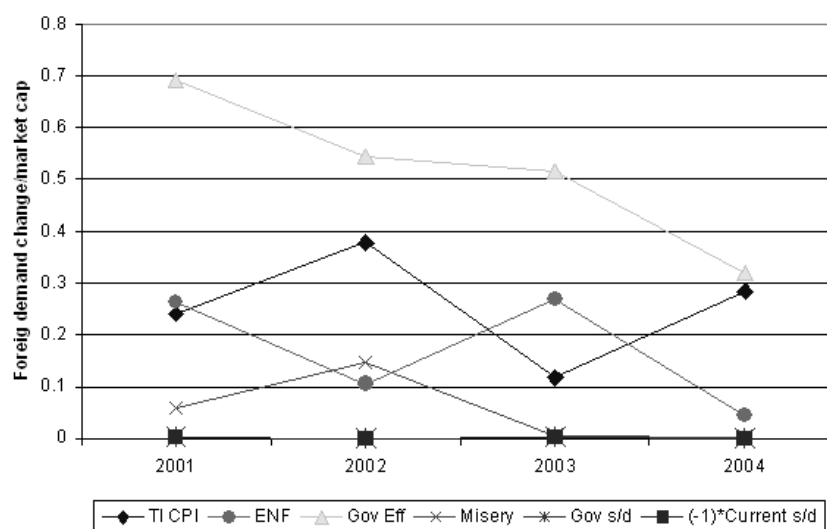
## 5 Conclusion

This paper illustrates the general importance of good governance on the country level for financial development and foreign equity investments and tries to identify the fields where action would be most effective. This study differs from earlier work on the effects of government transparency on international asset allocation in that it uses portfolio theory rather than an ad hoc regression approach. We first consider a specific set of governance dimensions: perceived corruption in the public sector, economic policy opacity and a government effectiveness index measuring the quality of public institutions, calculating the additional foreign demand for a country's equities after a modest improvement in one of the public governance variables. These results for the governance variables are then compared to the results of an improvement in one of three macroeconomic variables, notably the Misery Index, and the government deficit and the balance on the current account. Our results support the recently growing idea that the benefits from financial liberalization for developing countries can only occur if transparency is improved. Low levels of corruption, clear economic policies and high quality institutions have a positive effect on investor confidence and can be an important driver to attract foreign capital.

Figure 7 shows the magnitude of the effect of a modest improvement in each of our governance and macroeconomic variables on the demand of foreigners for a country's equities. For each sample year, the figure shows the total increase in foreign equity demand, as a percentage of initial market capitalization following an improvement in one of the variables for the countries that score worse than the median on the governance measure or macroeconomic policy indicator. The demand effect following a change in the Government Effectiveness Indicator is consistently the largest. An improvement in the transparency of economic policy making (ENF Index) or the level of perceived corruption in the public sector (TI CPI) does also lead to a sizeable substantial increase in foreign equity demand. The effect of an improvement in the traditional macroeconomic variables is considerably lower: the demand effect of an improvement in the Misery Index is at least ten times smaller than the effect of a similar improvement

Figure 7: Overall effect of an improvement in public policy.

This figure shows the overall effect of an improvement in our three public governance variables - notably the TI Corruption Perception Index (TI CPI), the ENF Index (ENF) and the Government Effectiveness Indicator (Gov Eff)- and our three macroeconomic policy indicators, the Misery Index (Misery), the government deficit or surplus (Gov s/d) and the current account deficit or surplus (Current s/d) on the foreign demand towards a countries equities. The Y-axis shows the average increase in foreign demand following the change in a variable relative to the total initial market capitalization of the countries with initially poor scores on the variables. We changed the sign of the effect of a decrease in the current account deficit to make it comparable with the other variables.



in transparency variables, and the demand effect of a decrease in the government deficit or current account deficit is even less significant.

The main conclusion of this paper is that more transparent policy-making and improving the quality of public institutions seem to be more efficient at attracting foreign investment than an active public policy that lowers unemployment or inflation rates or reduces the government account deficit, especially for the emerging markets. Cross-country differences in macroeconomic policy indicators are smaller than cross-country differences in transparency and public governance. One reason may very well be that the emerging markets in the sample have already adopted better policies by tackling inflation rates, unemployment rates and deficits, while they are still far away from the developed markets with respect to institutional quality and transparency. More transparency in the public sector, a lower perceived level of corruption and, first and foremost, more effective public institutions are important factors in reducing information costs and in building confidence with foreign investors. Our results confirm earlier research on corruption, transparency and institutional quality that conclude that government corruption and public policy opacity can be a large burden on economic growth and financial

globalization (Wei, 2000 and Stulz, 2005). Corporate governance, lastly, seems to add little of its own although it does work when the general legal and political environment is up to scratch.

## **Appendix**

Table 11: Misery Index

The Misery Index is the simple sum of a countries unemployment rate and its inflation rate. Annual unemployment and inflation rates are from the IMF International Financial Statistics.

	2001			2002			2003			2004		
	Unemployment	Inflation	Misery	Unemployment	Inflation	Misery	Unemployment	Inflation	Misery	Unemployment	Inflation	Misery
Argentina	18.1	4.0	22.1	17.5	25.9	43.4	17.8	13.4	31.2	13.3	4.4	17.7
Austria	6.1	2.7	8.8	6.9	1.8	8.7	7.0	1.4	8.4	7.1	1.4	9.2
Belgium	10.8	2.5	13.3	11.6	1.6	13.2	12.3	1.6	13.9	12.8	2.1	14.9
Brazil	9.4	6.8	16.2	11.7	8.5	20.2	12.3	14.7	27.0	11.5	6.6	18.1
Canada	7.2	2.5	9.8	7.7	2.3	9.9	7.6	2.8	10.4	7.2	1.8	9.0
Chile	7.9	3.6	11.5	7.8	2.5	10.3	7.4	2.8	10.2	8.8	1.1	9.9
Colombia	14.7	8.5	23.2	15.7	6.2	21.9	14.2	6.5	20.7	13.6	5.9	19.5
Czech Republic	8.9	4.7	13.6	9.8	1.8	11.6	10.3	0.1	10.4	9.5	2.8	12.3
Denmark	4.8	2.4	7.2	4.9	2.4	7.3	5.7	2.1	7.8	5.8	1.2	7.0
Finland	11.7	2.6	14.3	9.1	1.6	10.7	9.0	0.9	9.9	8.8	0.2	9.0
France	11.9	1.7	13.6	11.6	1.9	13.5	12.3	2.1	14.4	10.0	2.1	12.1
Germany	10.4	2.0	12.4	10.9	1.4	12.3	11.7	1.1	12.8	11.7	1.7	13.4
Greece	10.8	3.4	14.2	10.3	3.6	13.9	9.7	3.5	13.2	10.5	2.9	13.4
Hong Kong	5.1	-1.6	3.5	7.3	-3.0	4.3	7.9	-2.6	5.3	6.8	-0.4	6.4
Hungary	5.7	9.2	14.9	5.8	5.3	11.1	5.8	4.6	10.4	6.1	6.8	12.9
Indonesia	8.1	11.5	19.6	9.1	11.9	21.0	9.5	6.6	16.1	9.9	6.2	16.1
Israel	9.3	1.1	10.4	10.3	5.6	15.9	10.7	0.7	11.4	10.3	-0.4	9.9
Italy	9.1	2.8	11.9	8.6	2.5	11.1	8.4	2.7	11.1	8.0	2.2	10.2
Japan	5.0	-0.7	4.3	5.4	-0.9	4.5	5.3	-0.3	5.1	4.7	0.0	4.7
Korea	4.0	4.1	8.1	3.3	2.7	6.0	3.6	3.6	7.2	3.7	3.6	7.3
Malaysia	3.7	1.4	5.1	3.5	1.8	5.3	3.6	1.1	4.7	3.5	1.5	5.0
Netherlands	3.4	4.2	7.6	4.1	3.3	7.4	3.9	2.1	6.0	5.5	1.2	6.7
Norway	2.7	3.0	5.7	3.2	1.3	4.5	3.9	2.5	6.4	4.4	0.5	4.9
Philippines	11.1	6.8	17.9	11.4	3.0	14.4	11.4	3.5	14.9	11.8	6.0	17.8
Poland	16.2	5.5	21.7	17.8	1.9	19.7	19.9	0.8	20.7	19.4	3.6	23.0
Portugal	4.1	4.4	8.5	5.1	3.6	8.7	6.3	3.3	9.6	6.6	2.4	9.0
Russia	9.1	21.5	30.6	8.0	15.8	23.8	8.6	13.7	22.3	8.2	10.9	19.1
Singapore	3.4	1.0	4.4	5.2	-0.4	4.8	5.4	0.5	5.9	4.0	1.7	5.7
South Africa	27.9	5.7	33.6	30.1	9.2	39.2	29.6	5.9	35.5	27.1	1.4	28.4
Spain	13.0	3.6	16.6	11.4	3.1	14.5	8.8	3.0	11.8	10.3	3.0	13.3
Sweden	4.0	2.4	6.4	4.0	2.2	6.2	4.8	1.9	6.7	5.5	0.4	5.9
Switzerland	1.8	1.0	2.8	2.8	0.6	3.4	3.8	0.6	4.4	4.3	0.8	5.1
Thailand	3.3	1.6	4.9	2.4	0.6	3.0	2.2	1.8	4.0	2.1	2.8	4.9
Turkey	8.3	54.4	62.7	10.3	45.0	55.3	10.5	25.3	35.8	10.3	8.6	18.9
United Kingdom	5.1	1.8	6.9	5.2	1.6	6.8	5.0	2.9	7.9	4.7	3.0	7.7
United States	4.7	2.8	7.5	5.8	1.6	7.4	6.0	2.3	8.3	5.5	2.7	8.2
Venezuela	13.2	12.5	25.7	15.8	22.4	38.2	18.0	31.1	49.1	15.3	21.8	37.1
<b>Average</b>	<b>8.5</b>	<b>5.6</b>	<b>14.0</b>	<b>9.0</b>	<b>5.5</b>	<b>14.4</b>	<b>9.2</b>	<b>4.6</b>	<b>13.8</b>	<b>8.9</b>	<b>3.4</b>	<b>12.3</b>
<b>Median</b>	<b>8.1</b>	<b>3.0</b>	<b>11.9</b>	<b>8.0</b>	<b>2.4</b>	<b>11.1</b>	<b>8.4</b>	<b>2.5</b>	<b>10.4</b>	<b>8.2</b>	<b>2.2</b>	<b>9.9</b>



Table 12: Government and current account deficit (–) or surplus (+) as a percentage of GDP

Data are directly obtained from the IMF.

Country	Government budget				Current account			
	2001	2002	2003	2004	2001	2002	2003	2004
Argentina	–3.3	–1.1	0.1	2.1	–1.4	9.0	6.2	1.1
Austria	0.7	1.1	1.5	2.0	–1.9	0.3	–0.9	–1.0
Belgium	0.5	0	0.2	–0.2	3.7	5.3	3.8	4.5
Brazil	0.5	0.6	0.6	0.7	–4.6	–1.7	0.8	1.2
Canada	1.1	0.3	0.6	0.7	2.3	2.0	2.0	2.9
Chile	–0.5	–1.2	0.0	2.1	–1.6	–1.3	–0.8	0.5
Colombia	–6.0	–5.4	–4.9	–4.5	–1.4	–1.8	–1.9	–1.1
Czech Republic	–2.9	–1.8	–4.3	–3.4	–5.4	–5.6	–6.2	–5.5
Denmark	2.8	1.6	1.2	1.2	3.1	2.0	3.0	1.8
Finland	5.2	4.3	2.1	2.5	7.1	6.8	5.7	5.8
France	–1.4	–3.2	–4.1	–3.4	1.6	1.0	0.3	–0.6
Germany	–2.8	–3.7	–3.8	–3.9	0.1	2.2	2.2	4.4
Greece	–1.4	–1.2	–3.2	–3.4	–6.9	–6.0	–5.7	–6.0
Hong Kong	–5.0	–4.9	–3.3	–4.9	6.1	7.9	10.7	10.0
Hungary	–2.8	–9.1	–5.6	–6.2	–6.2	–7.2	–8.9	–8.8
Indonesia	–1.6	–1.3	–1.6	–1.2	4.8	4.5	3.5	2.9
Israel	–4.1	–3.4	–4.9	–3.2	–1.9	–1.6	0.1	–0.5
Italy	–2.6	–2.3	–2.4	–2.9	–0.1	–0.6	–1.5	–1.1
Japan	–6.1	–7.9	–8.2	–6.9	2.1	2.8	3.2	3.4
Korea	0.6	2.3	2.8	1.0	1.7	1.0	2.0	3.1
Malaysia	–5.5	–4.8	–5.3	–4.3	8.3	8.4	12.9	12.4
Netherlands	–0.1	–1.9	–3.2	–3.0	1.9	2.5	2.2	2.9
Norway	13.6	9.2	8.3	6.6	15.4	12.9	13.0	15.9
Philippines	–4.0	–5.4	–4.6	–3.9	1.9	5.8	4.9	2.8
Poland	–4.1	–4.5	–4.5	–4.8	–2.9	–2.6	–1.9	–1.7
Portugal	–4.4	–2.7	–2.8	–4.1	–9.5	–6.8	–5.1	–6.1
Russia	3.1	1.7	2.4	4.9	10.9	8.9	8.3	9.9
Singapore	4.8	4.0	5.0	3.7	18.7	21.4	30.9	25.7
South Africa	–1.0	–0.5	–2.1	–2.5	0.0	0.6	–0.8	–2.0
Spain	–0.3	0.1	0.3	–0.7	–2.8	–2.4	–2.8	–3.4
Sweden	2.9	–0.3	0.5	0.3	4.4	5.4	6.4	6.7
Switzerland	0	–1.2	–1.9	–2.5	8.5	8.5	10.2	10.3
Thailand	–2.4	–1.4	0.4	0.4	5.4	5.5	5.6	3.8
Turkey	–29.8	–12.3	–9.7	–3.9	2.2	–0.8	–2.9	–4.0
United Kingdom	0.8	–1.7	–3.4	–3.0	–2.3	–1.7	–1.9	–2.0
United States	–0.7	–4.0	–4.6	–4.9	–3.8	–4.5	–4.8	–5.4
Venezuela	–4.4	–4.4	–4.4	–4.4	1.6	7.9	11.3	13.5
<b>Average</b>	<b>–1.6</b>	<b>–1.8</b>	<b>–1.8</b>	<b>–1.6</b>	<b>1.6</b>	<b>2.4</b>	<b>2.8</b>	<b>2.6</b>
<b>Median</b>	<b>–1.4</b>	<b>–1.4</b>	<b>–2.4</b>	<b>–2.9</b>	<b>0.9</b>	<b>1.5</b>	<b>2.0</b>	<b>1.5</b>

Table 13: **Transparency International Corruption Perception Index, ENF Index and Government Effectiveness Indicator**  
 Data for the TI Corruption Perception Index, the ENF Index and the Government Effectiveness Indicator are directly obtained from <http://www.transparency.org/>, <http://www.opacityindex.com/> and <http://www.govindicators.org/>. Data for the Government Effectiveness Indicator for 2001 are those for 2000, since there are no figures available for 2001.

	TI Corruption Perception				ENF				Government Effectiveness			
	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
Argentina	3.5	2.8	2.5	2.5	33	-0.24	-0.37	-0.40	0.36			
Austria	7.8	7.8	8	8.4	32	1.76	1.84	1.89	1.78			
Belgium	6.6	7.1	7.6	7.5	30	1.77	1.80	1.93	1.56			
Brazil	4	4	3.9	3.9	32	0.08	0.06	-0.11	-0.13			
Canada	8.9	9	8.7	8.5	37	2.01	2.02	2.01	1.94			
Chile	7.5	7.5	7.4	7.4	30	1.30	1.23	1.25	1.31			
Colombia	3.8	3.6	3.7	3.8	45	-0.13	-0.19	-0.39	-0.22			
Czech Republic	3.9	3.7	3.9	4.2	32	0.73	0.73	0.75	0.77			
Denmark	9.5	9.5	9.5	9.5	21	2.21	2.11	2.03	1.84			
Finland	9.9	9.7	9.7	9.7	23	2.06	2.14	2.08	1.89			
France	6.7	6.3	6.9	7.1	33	1.49	1.57	1.62	1.54			
Germany	7.4	7.3	7.7	8.2	33	1.44	1.50	1.80	1.92			
Greece	4.2	4.2	4.3	4.3	36	0.80	0.83	0.82	0.89			
Hong Kong	7.9	8.2	8	8	14	1.56	1.40	1.38	1.13			
Hungary	5.3	4.9	4.8	4.8	26	0.70	0.75	0.80	0.83			
Indonesia	1.9	1.9	1.9	2	90	-0.42	-0.58	-0.55	-0.39			
Israel	7.6	7.3	7	6.4	44	1.12	0.97	1.11	1.18			
Italy	5.5	5.2	5.3	4.8	45	0.66	0.88	0.90	0.90			
Japan	7.1	7.1	7	6.9	31	1.17	1.16	1.11	1.15			
Korea	4.2	4.5	4.3	4.5	22	0.92	0.91	0.95	0.73			
Malaysia	5	4.9	5.2	5	28	0.95	0.85	0.95	0.71			
Netherlands	8.8	9	8.9	8.7	22	2.06	2.07	2.15	2.09			
Norway	8.6	8.5	8.8	8.9	21	2.11	2.07	1.89	1.63			
Philippines	2.9	2.6	2.5	2.6	52	-0.17	-0.16	-0.06	0.12			
Poland	4.1	4	3.6	3.5	47	0.60	0.65	0.64	0.52			
Portugal	6.3	6.3	6.6	6.3	31	1.05	1.23	1.06	1.14			
Russia	2.3	2.7	2.7	2.8	39	-0.37	-0.34	-0.47	-0.70			
Singapore	9.2	9.3	9.4	9.3	25	2.19	2.42	2.31	2.33			
South Africa	4.8	4.8	4.4	4.6	28	0.74	0.64	0.63	0.40			
Spain	7	7.1	6.9	7.1	32	1.35	1.53	1.58	1.82			
Sweden	9	9.3	9.3	9.2	21	1.99	2.03	1.93	1.77			
Switzerland	8.4	8.5	8.8	9.1	20	2.28	2.29	2.25	2.18			
Thailand	3.2	3.2	3.3	3.6	29	0.37	0.29	0.26	0.19			
Turkey	3.6	3.2	3.1	3.2	27	0.07	0.09	-0.05	0.11			
United Kingdom	8.3	8.7	8.7	8.6	25	1.92	1.96	2.02	2.04			
United States	7.6	7.7	7.5	7.5	27	1.79	1.80	1.70	1.74			
Venezuela	2.8	2.5	2.4	2.3	49	-0.98	-1.04	-1.06	-0.83			
<b>Average</b>	<b>6.1</b>	<b>6.1</b>	<b>6.1</b>	<b>6.1</b>	<b>33</b>	<b>1.05</b>	<b>1.06</b>	<b>1.04</b>	<b>1.03</b>			
<b>Median</b>	<b>6.6</b>	<b>6.3</b>	<b>6.9</b>	<b>6.4</b>	<b>31</b>	<b>1.15</b>	<b>1.20</b>	<b>1.11</b>	<b>1.14</b>			

Table 14: Annual percentage implied investment cost reduction after a change in public governance variables  
 This table shows the percentage decrease in inward shadow costs after a modest change in a public governance variable for each sample year 2001, 2002, 2003, 2004.

	TI Corruption Perception				ENF Index				Government Effectiveness			
	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
Argentina	-6.33	-28.23	-5.60	-29.94	-3.17	-3.05	-2.97	-1.08	-16.84	-35.64	-26.62	-27.47
Austria					-1.72	-1.66	-1.60	-0.55				
Belgium												
Brazil	-5.33	-19.58	-3.85	-20.40	-2.00	-1.94	-1.85	-0.57	-26.00	-29.17	-19.89	-21.84
Canada												
Chile												
Colombia	-5.73	-22.58	-4.10	-21.12	-19.75	-19.06	-18.59	-7.31	-27.44	-34.54	-23.93	-25.55
Czech Rep.	-5.53	-21.84	-3.85	-18.19	-2.15	-2.09	-1.99	-0.58	-8.26	-9.56	-8.30	-8.84
Denmark												
Finland												
France					-3.41	-3.39	-3.18	-1.10				
Germany					-2.15	-2.03	-2.04	-1.01				
Greece	-4.93	-18.05	-3.35	-17.44	-11.40	-11.12	-10.56	-2.97	-5.64	-7.72	-6.50	-7.24
Hong Kong									-0.07			
Hungary	-2.70	-12.42	-2.71	-13.58	-53.24	-51.55	-51.15	-26.51	-7.03	-8.33	-8.01	-9.38
Indonesia	-9.43	-34.10	-6.34	-33.07	-14.53	-13.86	-13.79	-6.49				
Israel												
Italy	-2.29	-9.90	-2.07	-13.58	-33.81	-33.20	-31.53	-8.58	-5.37	-5.59	-5.48	-10.23
Japan												
Korea	-4.93	-15.68	-3.35	-15.92					-9.12	-4.32	-4.90	-4.50
Malaysia	-3.32	-12.42	-2.20	-11.99					-9.57	-4.43	-6.11	-3.91
Netherlands												
Norway												
Philippines	-7.50	-29.58	-5.60	-29.30	-30.51	-29.61	-28.75	-10.98	-21.41	-28.14	-23.47	-26.28
Poland	-5.13	-19.58	-4.23	-23.25	-27.58	-14.47	-25.85	-8.78	-13.58	-12.32	-9.75	-11.62
Portugal	-0.63		-0.39	-0.91						-1.28		-1.51
Russia	-8.67	-28.90	-5.35	-28.00	-14.90	-14.47	-13.89	-4.49	-35.26	-35.93	-26.16	-29.62
Singapore												
South Africa	-3.72	-13.25	-3.22	-15.15					-16.06	-12.48	-10.02	-8.53
Spain					-2.39	-2.33	-2.21	-0.60				
Sweden												
Switzerland												
Thailand	-6.92	-25.46	-4.60	-22.55					-20.19	-21.36	-16.10	-16.20
Turkey	-6.13	-25.46	-4.85	-25.32					-21.64	-27.80	-19.46	-21.96
UK												
US												
Venezuela	-2.32	-1.90	-5.59	-7.27	-25.19	-24.36	-23.73	-9.35	-37.25	-45.84	-72.66	-39.04

**Table 15: Annual percentage implied investment cost reduction after a change in macroeconomic policy-making variables**  
 This table shows the percentage decrease in inward shadow costs after a modest change in a macroeconomic policy-making variable for each sample year 2001, 2002, 2003, 2004.

Country	Misery Index				Government budget				Current acc balance			
	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
Argentina	-1.85	-37.84	-0.77	-0.44	-0.12				2.56			0.19
Austria	-0.50	-3.07	-0.13	-0.28					3.00	3.19	1.59	0.78
Belgium	-1.56	-12.51	-0.62	-0.46					5.37	7.07	0.66	0.17
Brazil												
Canada												
Chile	-4.02	-14.74	-0.38	-0.53	-0.30	-0.73	-1.83	-2.78	2.71	6.28	1.54	0.36
Colombia	-0.62	-0.76		-0.14	-0.10	-0.07	-1.35	-0.84	2.56	7.27	2.15	0.81
Czech Rep.									6.08	15.06	4.57	2.05
Denmark												
Finland	-0.86											
France	-0.60	-3.54	-0.15	-0.12		-0.33	-1.23	-0.86		1.86	0.93	0.67
Germany	-0.17	-1.75	-0.09	-0.19	-0.09	-0.42	-1.02	-1.72	1.27			
Greece	-0.83	-4.04	-0.11	-0.20					7.43	15.92	4.29	2.19
Hong Kong					-0.24	-0.64	-0.65	-3.41				
Hungary	-1.09			-0.17	-0.09	-1.40	-2.33	-5.51	6.80	18.51	6.12	2.98
Indonesia	-2.76	-13.57	-0.21	-0.35	-0.01							
Israel		-6.92	-0.04		-0.17	-0.37	-1.84	-0.59	3.00	6.87	1.04	0.64
Italy			-0.02	-0.02	-0.08	-0.16			1.44	4.92	1.93	0.81
Japan					-0.31	-1.18	-0.66	-6.70				
Korea									1.86			
Malaysia					-0.27	-0.61	-2.09	-2.40				
Netherlands						-0.09	-0.58	-0.17				
Norway												
Philippines	-2.16	-4.78	-0.17	-0.44	-0.17	-0.72	-1.62	-1.63				
Poland	-3.49	-11.93	-0.38	-0.73	-0.18	-0.57	-1.49	-3.18	3.87	8.86	2.15	0.98
Portugal					-0.20				9.82	17.64	3.95	2.22
Russia	-6.54	-17.08	-0.44	-0.51								
Singapore												
South Africa	-7.57	-33.91	-0.93	-1.03					1.36	2.62	1.54	1.06
Spain	-1.69	-4.88	-0.05	-0.19					3.78	8.46	2.65	1.45
Sweden												
Switzerland												
Thailand					-0.07							
Turkey	-16.82	-47.82	-0.94	-0.50	-1.85	-1.98	-5.19	-1.72		5.31	2.71	1.62
UK						-0.05	-0.73	-0.17	3.35	7.07	2.15	1.06
US						-0.01		-0.04	4.66	5.10	0.22	5.74
Venezuela	-4.89	-32.95	-1.43	-1.50	-0.20	-0.56	-1.48	-2.64				

Figure 8: Original and new average inward investment costs after a change in the level of the TI Corruption Perception Index.

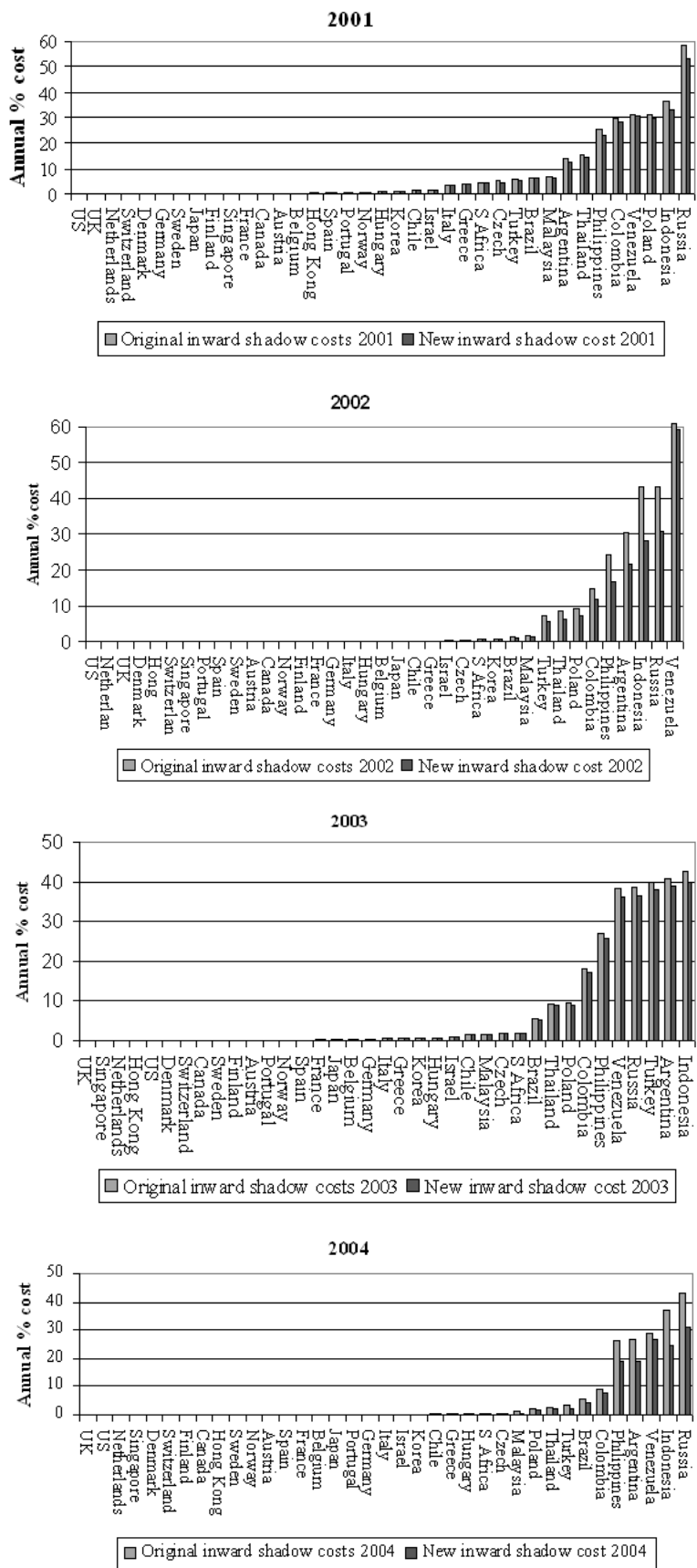


Figure 9: Original and new average inward investment costs after a change in the level of the ENF Index.

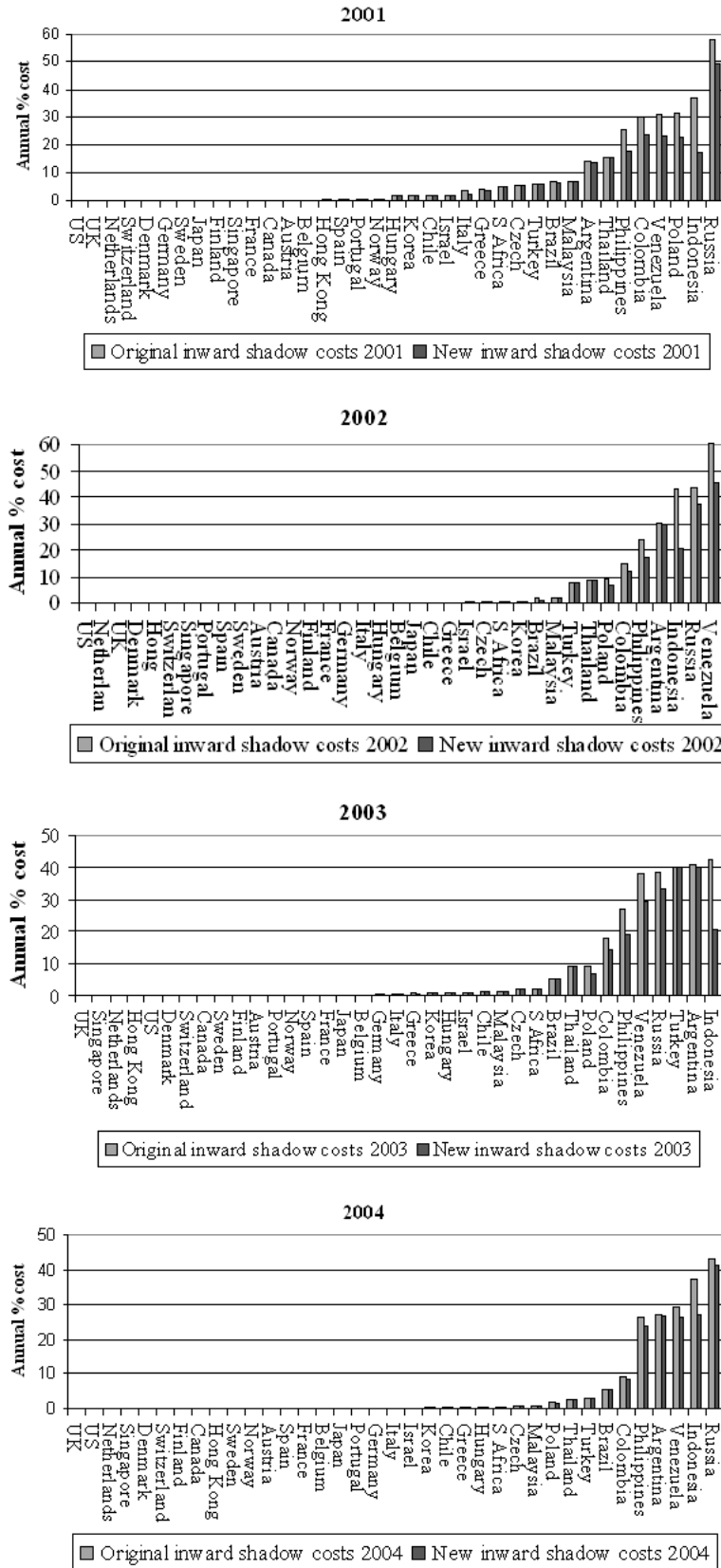


Figure 10: Original and new average inward investment costs after a change in the level of the Government Effectiveness Indicator.

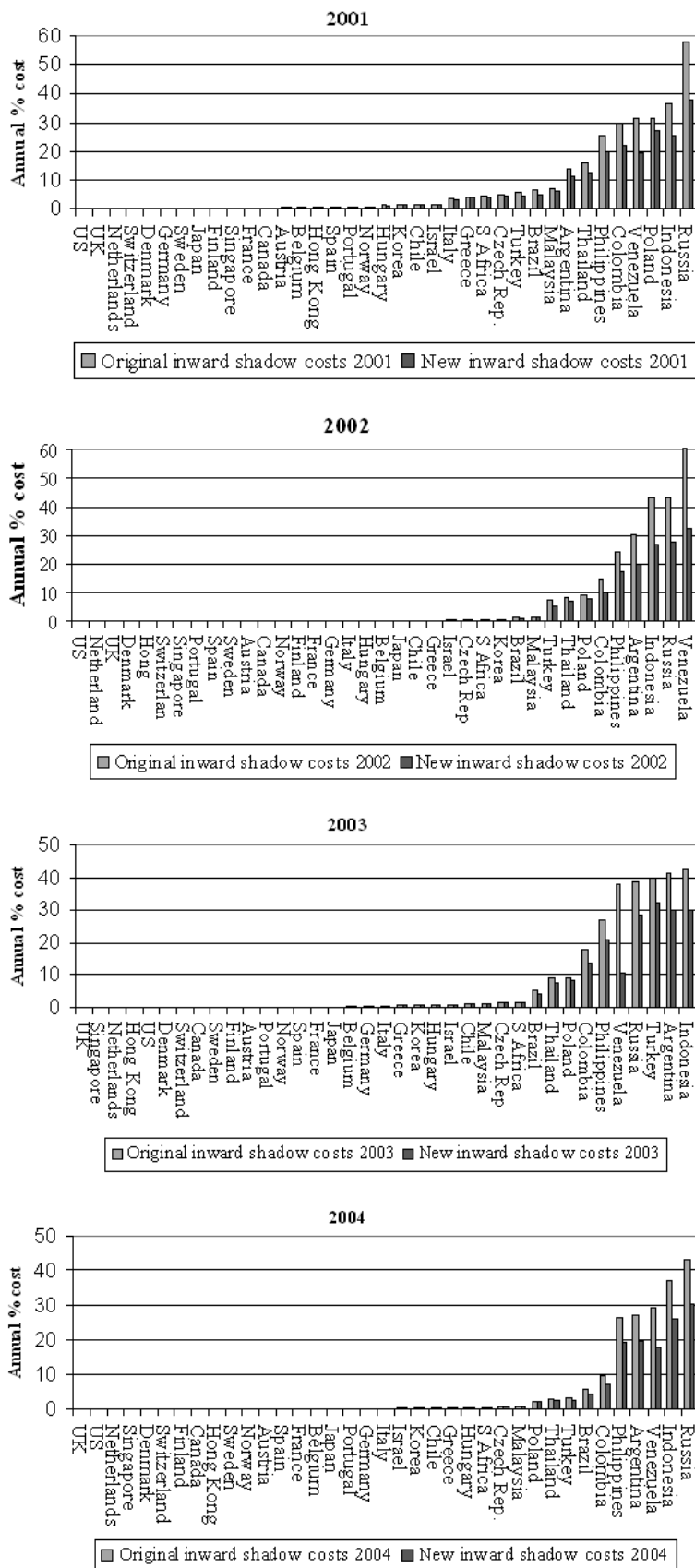


Figure 11: Original and new average inward investment costs after a change in the Misery Index.

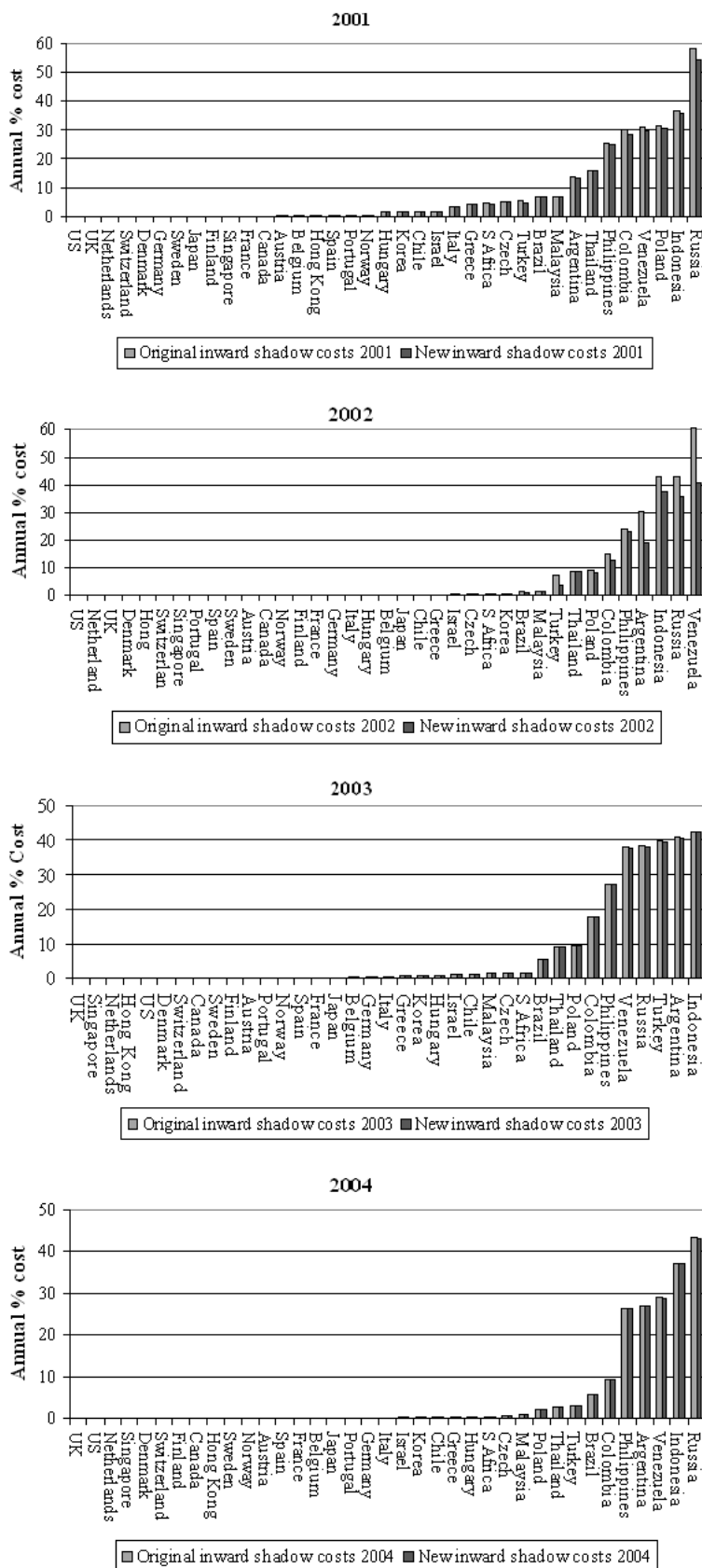




Figure 12: Original and new average inward investment costs after a decrease of the government deficit.

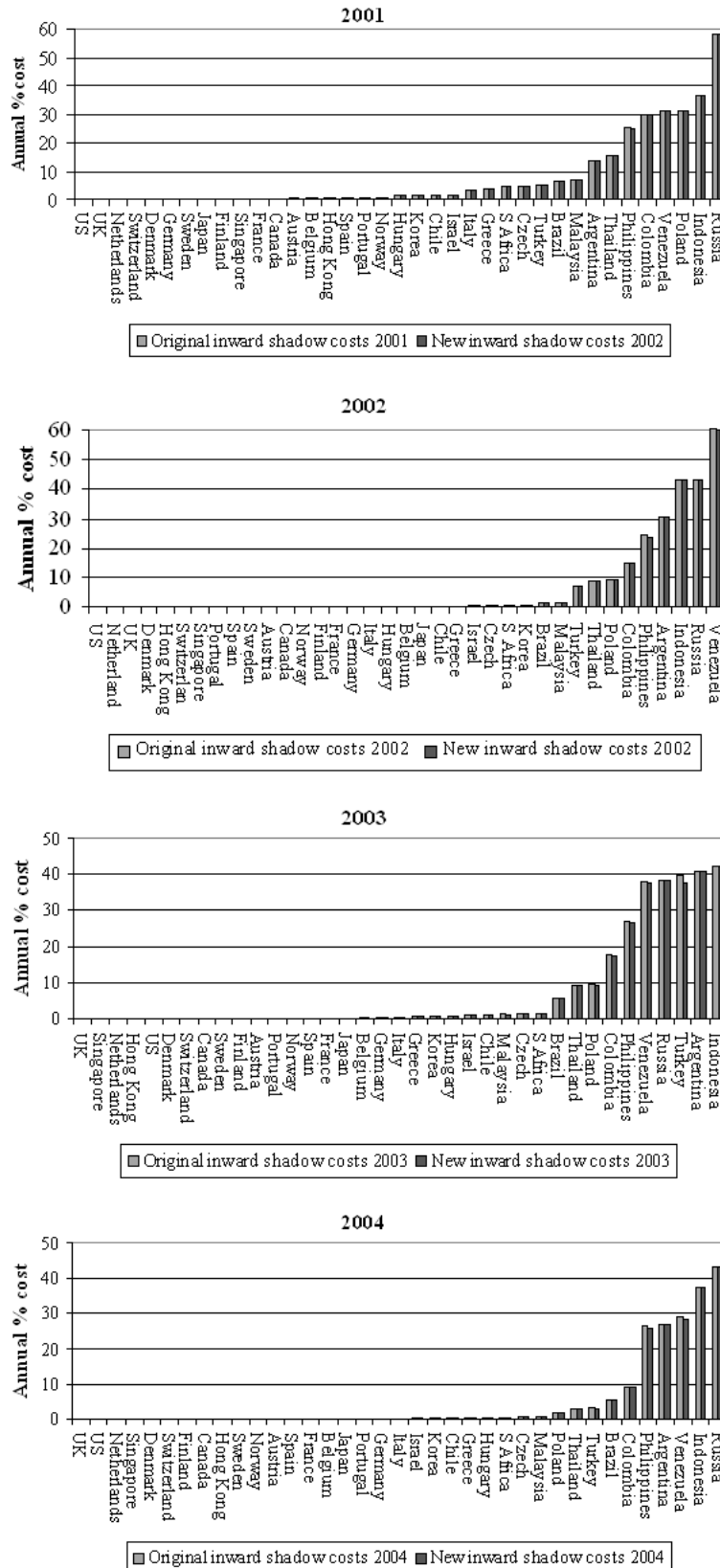
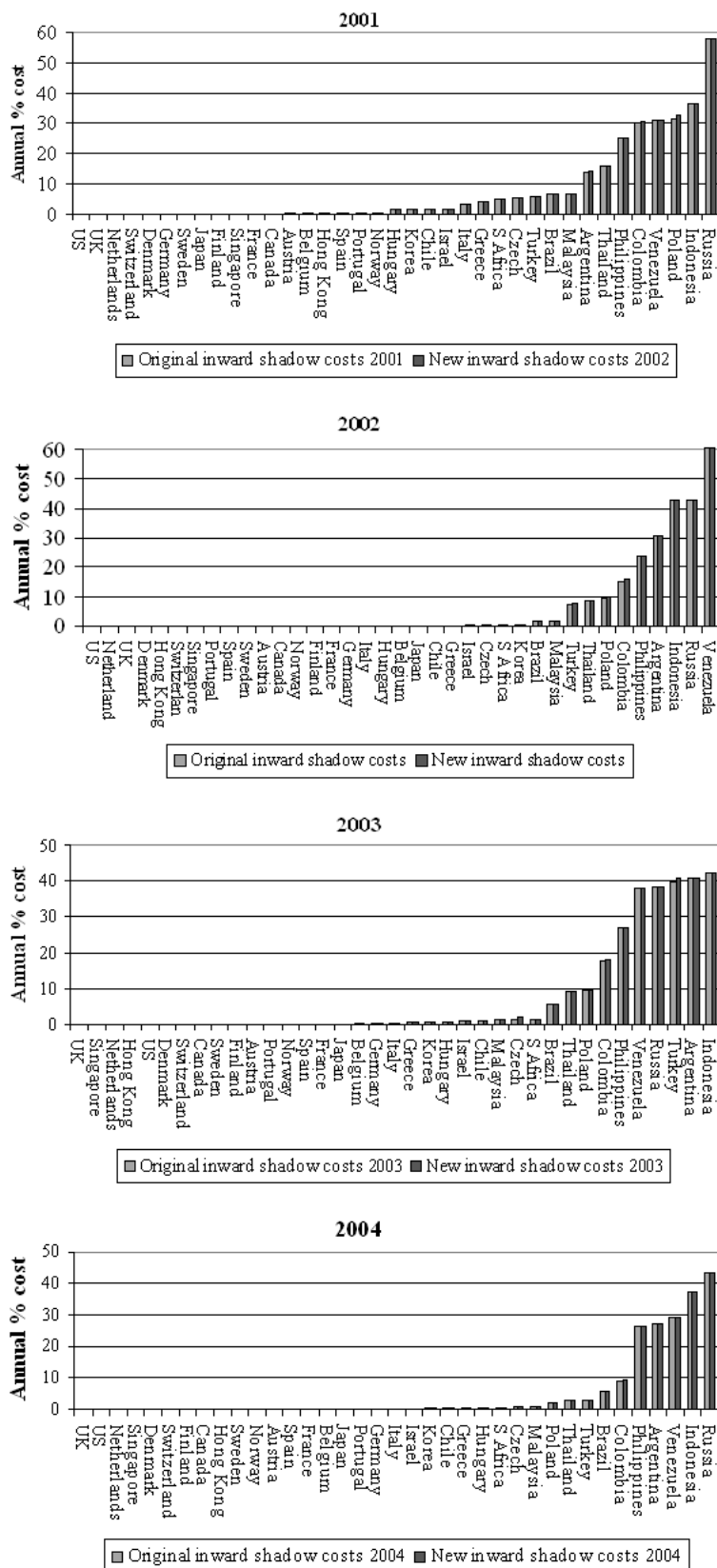


Figure 13: Original and new average inward investment costs after a decrease of the current account deficit.



## References

- [1] Acemoglu, D., S. Johnson, J. Robinson and Y. Thaicharoen, 2003, Institutional causes, macroeconomic symptoms: volatility, crisis and growth, *Journal of Monetary Economics* 50, 49-123.
- [2] Ahearne, Alan, G. Grier and W.L. Warnock, F.E., 2004, Information costs and home bias: an analysis of U.S. holdings of foreign equities, *Journal of International Economics*, 62.2, 313-336.
- [3] Berkel, Barbara, 2004, Institutional Determinants of International Equity Portfolios – A Country-Level Analysis, MEA discussion paper 0461, Mannheim Research Institute for the Economics of Aging, University of Mannheim.
- [4] Bhattacharya, U., H. Daouk and M. Welker, 2003, The world price of earnings opacity, *Accounting Review* 78, 641-678.
- [5] Brennan, M.J. and H.H. Cao, 1997, International Portfolio Investment Flows, *Journal of Finance* 52.5, 1851-1880.
- [6] Brennan, M.J., H.H. Cao, N. Strong and X. Xu, 2005, The dynamics of international equity market expectations, *Journal of Financial Economics* 77, 257-288.
- [7] Carstensen, K. and F. Toubal, 2004, Foreign direct investment in central and eastern European countries: A dynamic panel analysis, *Journal of Comparative Economics* 32.1, 3-22.
- [8] Chan, K., Covrig, V., Ng, L., 2005, What Determines the Domestic Bias and Foreign Bias? Evidence from Mutual Fund Equity Allocations Worldwide, *Journal of Finance* 60.3, 1495-1534.
- [9] Chen, K., Z., Chen and K. Wei, 2003, Disclosure, corporate governance, and the cost of equity capital: evidence from Asia's emerging markets, Working Paper, Hong Kong University of Science and Technology.
- [10] Choe, H., BC Kho, and R.M. Stulz, 1999, Do foreign investors destabilize stock markets? The Korean experience in 1997, *Journal of Financial Economics* 54.2, 227-264.
- [11] Cooper, I.A. and E. Kaplanis, 1994, Home Bias in Equity Portfolios, Inflation Hedging, and International Capital Market Equilibrium, *Review of Financial Studies* 7.1, 45-60.

- [12] Cooper, I.A. and E. Kaplanis, 2000, Partially segmented international capital markets and international capital budgeting, *Journal of International Money and Finance* 19, 309-329.
- [13] Coval, J. and T. Moskowitz, 1999, Home bias at home: Local equity preference in domestic portfolios, *Journal of Finance* 54.6, 2045-2073.
- [14] Dahlquist, M., L. Pinkowitz, R. Stulz and R. Williamson, 2003, Corporate Governance and The Home Bias, *Journal of Financial and Quantitative Analysis*, 38.1, 87-110.
- [15] De Moor, L. and P. Sercu, 2004, CAPM tests and alternative factor portfolio composition: getting the alpha's right, *Tijdschrift voor Economie en Management*, 49.4 (Nov.), 789 - 846.
- [16] Doidge, C., G.A. Karolyi and R. M. Stulz, 2004, Why do countries matter so much for corporate governance?, *NBER Working Paper* 10726.
- [17] Durnev, A. and E.H. Kim, 2006, To Steal or Not to Steal: Firm Attributes, Legal Environment, and Valuation, *Journal of Finance* 60.3, 1461-1493.
- [18] Eichengreen, B., 2004, Financial Instability, Copenhagen Consensus Challenge Paper, available at <http://www.copenhagenconsensus.com/>
- [19] Erb, C.B., C.R. Harvey and T.E. Viskanta, 1996, Political Risk, Economic Risk and Financial Risk, *Financial Analysts Journal*, 52.6, 29-46.
- [20] Faruquee, H., S. Li and I.K. Yan, 2004, The Determinants of International Portfolio Holdings and Home Bias, IMF Working Paper, WP/04/34.
- [21] Fergusson, L., 2006, Institutions for financial development: What are they and where do they come from?, *Journal of Economic Surveys* 20.1, 27-69.
- [22] Fidora, M., M. Fratzscher and C. Thimann, 2006, Home bias in global bond and equity markets: the role of real exchange rate volatility, ECB Working Paper.
- [23] Gelos R.G. and S-J Wei, 2002, Transparency and International Investor Behavior, NBER Working Paper No. 9260, 136.
- [24] Gelos R.G., and S-J Wei, 2005, Transparency and International Portfolio Holdings, *Journal of Finance* 60.6, 2987-3020.
- [25] Giannetti, M. and A. Simonov, 2006, Which Investors Fear Expropriation? Evidence from Investor's Portfolio Choices, *Journal of Finance* 61.3, 1507-1547.

- [26] Gray, C.W. and D. Kaufmann, 1998, Corruption and Development, *Finance & Development*, March 1998, 7-10.
- [27] Gwartney, J.D., R.G. Holcombe and R.A. Lawson, 2006, Institutions and the Impact of Investment on Growth, *Kyklos* 59.2, 225-273.
- [28] Hellman, J.S., G. Jones and D. Kaufmann, 2003, Seize the state, seize the day: State capture and influence in transition economies, *Journal of Comparative Economics* 31.4, 751-773.
- [29] Hines, J.R., 1995, Forbidden Payment: Foreign Bribery and American Business after 1977, Working Paper 5266, Cambridge, Mass, National Bureau of Economic Research.
- [30] Janicki, H.P. and P.V. Wunnana, 2004, Determinants of foreign direct investment: Empirical evidence from EU accession candidates, *Applied Economics* 36.5, 505-509.
- [31] Johnson, S., P. Boone, A. Breach, E. Friedman, Corporate governance in the Asian financial crisis, 2000, *Journal of Financial Economics* 58, 141-186.
- [32] Karolyi, G.A. and R.M. Stulz, 2003, Are Financial Asset Priced Locally or Globally?, in the Handbook of the Economics of Finance, G. Constantinides, M. Harris, and R.M. Stulz, eds. Elsevier North Holland, 2003.
- [33] Kaufmann, D., A. Kraay and M. Mastruzzi, 2006, Governance Matters V: Aggregate and Individual Governance Indicators for 1996-2005, The World Bank (September 2006), Available at SSRN: <http://ssrn.com/abstract=929549>.
- [34] Khp, B-C, R.M. Stulz and F.E. Warnock, 2006, Financial globalization, governance and the evolution of the home bias, BIS Working Papers 220.
- [35] Klapper, L.F. and I. Love, 2004, Corporate governance, investor protection, and performance in emerging markets, *Journal of Corporate Finance* 10.5, 703-728.
- [36] Kurtzman, J., G. Yago and T. Phumiwasana, 2004, The Global Costs of Opacity, *MIT Sloan Management Review* Fall 2004, 38-44.
- [37] Lane, Philip and G.M. Milesi-Ferretti, 2001, The External Wealth of Nations: Measures of Foreign Assets and Liabilities for Industrial and Developing Countries, *Journal of International Economics* 55.2, 263-294.

- [38] Lane, Philip and G.M. Milesi-Ferretti, 2004, International Investment Patterns, IMF Working Paper 04/134.
- [39] Lane, Philip and Gian M. Milesi-Ferretti, 2005, The International Equity Holdings of Euro Area Investors, IIS Discussion Paper 104.
- [40] La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny, 1998, Law and Finance, *Journal of Political Economy* 106, 1113-1155.
- [41] La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny, 1999, Corporate ownership around the world, *Journal of Finance* 54, 471-517.
- [42] La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny, 1999, The Quality of Government, *Journal of Law, Economics and Organization* 15.1, 222-279.
- [43] Lewis, K. K., 1999, Trying to explain home bias in equities and consumption, *Journal of Economic Literature* 37.1, 571-608.
- [44] Nonnenberg, B. and C. Mendonca, 2004, The determinants of direct foreign investment in developing countries, Available at SSRN: <http://ssrn.com/abstract=525462>.
- [45] Prasad, E., K. Rogoff, S-J Wei and M.A. Kose, 2003, Effects of Financial Globalization on Developing Countries: Some Empirical Evidence, IMF, Washington D.C.
- [46] Portes, R. and H. Rey, 1999, The determinants of cross-border equity flows: the geography of information. NBER Working paper, McGill University.
- [47] Rammal, H.G. and R. Zurbruegg, 2006, The impact of regulatory quality on intra-foreign direct investment flows in the ASEAN markets, *International Business Review* 15, 401-414.
- [48] Sercu, P. and R. Vanpée, 2007, Estimating the Costs of International Equity Investments, *Forthcoming*.
- [49] Shleifer, A. and R. Vishny, 1997, A survey of corporate governance, *Journal of Finance* 52, 737-783.
- [50] Stulz, R.M., 2005, The Limits of Financial Globalization, *Journal of Finance* 60.4, 1595-1638.
- [51] Vishwanath, T. and D. Kaufmann, 2001, Toward Transparency: New Approaches and Their Application to Financial Markets, *The World Bank Research Observer* 16.1, 41-57.

- [52] Wei, S-J., 2000a, How Taxing Is Corruption on International Investors, *Review of Economics and Statistics*, 82.1, 1-11.
- [53] Wei, S-J., 2000b, Local corruption and global capital flows, *Brookings Papers on Economic Activity* 2, 303-354.
- [54] Woo, W.T., 2004, Serious Inadequacies of the Washington Consensus: Misunderstanding the Poor by the Brightest, in *Diversity in Development, Reconsidering the Washington Consensus*, J.J. Teunissen and A. Akkerman, Forum on Debt and Development (FONDAD), The Hague.
- [55] Wyplosz, C., 2004, Financial Instability in Emerging Market Countries: Causes and Remedies, in *Diversity in Development, Reconsidering the Washington Consensus*, J.J. Teunissen and A. Akkerman, Forum on Debt and Development (FONDAD), The Hague.