

# Does Governance is Responsible Capital Flight and External Borrowings: An Evidence from Pakistan

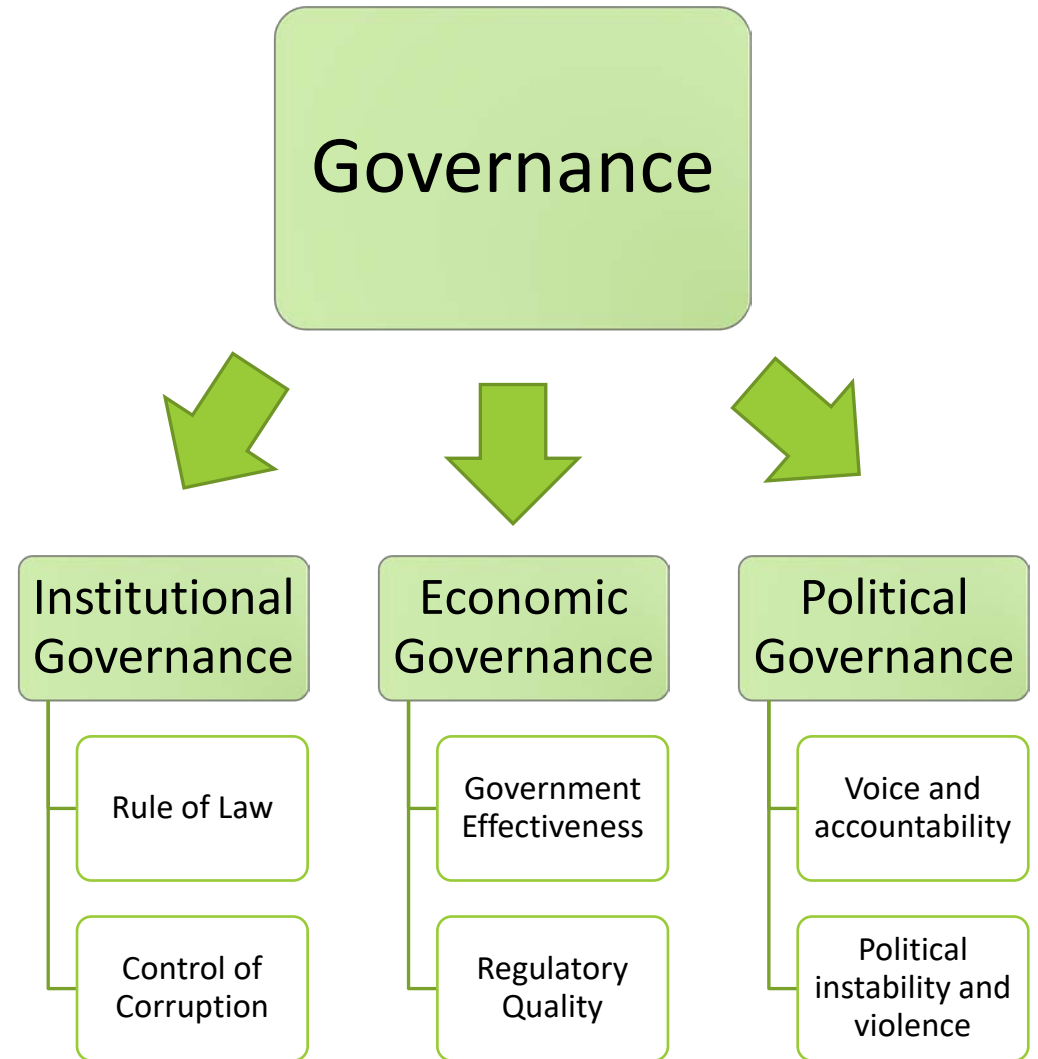
By  
Faizan Ali (Assistant Research Fellow)

---

PUNJAB ECONOMIC RESEARCH INSTITUTE (PERI)

# Introduction

- Governance has remained as one of the issues in Developing Economies Like Pakistan.
- Governance is the system of values, institutions and policies through which the society manages its economic, political and social affairs through the interaction within and among the state, society or for private sector (UNDP 1997).
- McCawley (2005) postulates issue of governance and categorizes it into macro and micro level.
- According to him macro level issues of governance include constitution, rule of law, size and resources available to the government,
- While at the micro level he includes social institutions, awareness to the civil society and their affairs, and finally the commercial firms.



## Introduction (Continued....)

- Capital flight may be classified as legal or illegal. Capital outflow may be legal if the foreign investors transfer their capital back to their home land.
- Capital flight is illegal when the country imposes capital controls to restrict the transfer of resources, so to avoid these controls flight of capital occurs through the improper channels.
- Capital flight can enforce a severe burden on poorer economies, since lack of capital resources hampers the process of economic development and decreases economic growth and may lead to lower the standards of living. The more transparent the economy is the problem of capital flight will also be lower.

# Governance & Capital Flight

The recent literature has focused more on the role of non-economic variables, such as, political risk, institutional setup and governance which are the main causes of creating capital flight from developing countries (Gibson & Tsakalotos, 1993; Schineller 1997a). According to Hermes and Lensink (2001), Lensink et al. (2000) and Le and Zak (2006) poor governance and political risk factors are recognized to be significant determinants of capital outflow.

Fig 1: Governance in Pakistan

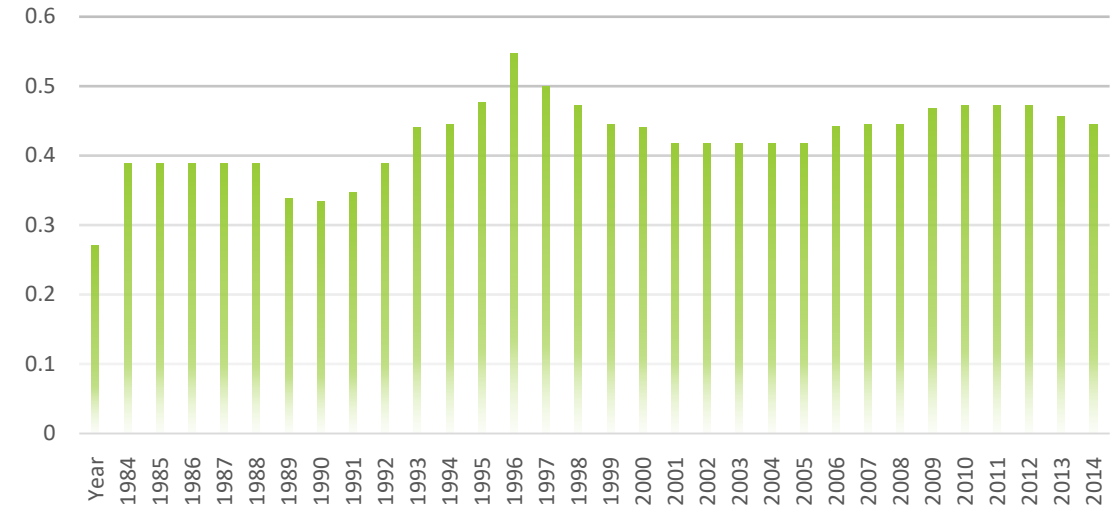
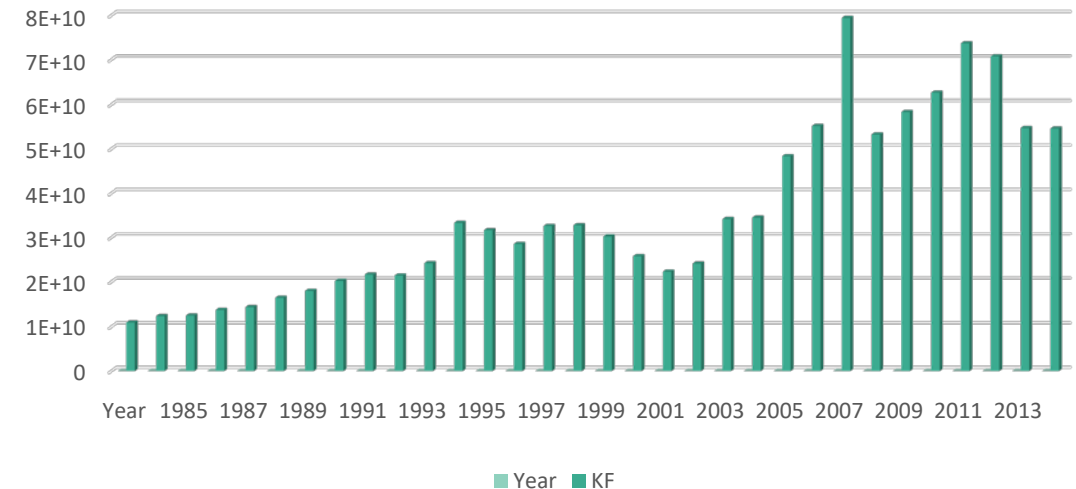


Fig 2: Capital Flight from Pakistan



# Capital Flight & External Borrowing

Capital outflow and external borrowings are affected through direct and indirect channels.

## *Indirect Channels*

- The linkages between capital flight and external debt may be due to external factors, such as, poor economic performance and track records of the debtor nation.
- Morgan Guarantee Trust Company (1986) points out some of the indirect factors, such as, persistently low economic growth, overvalued exchange rates and poor economic and institutional governance.
- This would not only cause capital outflows but would also generate demand for external borrowings. It shows positive correlation between debt and capital flight.

## *Direct Channels*

- Large amount of external debt also increases the probability of fiscal crisis and thus it induces capital flight Lessard and Williamson (1987).
- Increase in flight of Capital creates shortage of resources to the economy so the government may start borrowing to fulfill this resource gap.
- Boyce (1992) has beautifully exemplified it. Suppose Mr. Peso flees from the country and comes back to the country in the disguise of Mr. Dollar due to the arbitrage capital to earn income from interest differentials that prevail in the foreign and domestic market, you can say this is the round tripping of capital.



# Objectives of the Study



1. Measuring capital flight over the time period of 1984 to 2015 from Pakistan.

2. Exploring the role of governance in driving out capital from Pakistan which further leads to debt burden.

3. Testing the existence of Financial Revolving Door Hypothesis in case of Pakistan.

## Data & Methodology

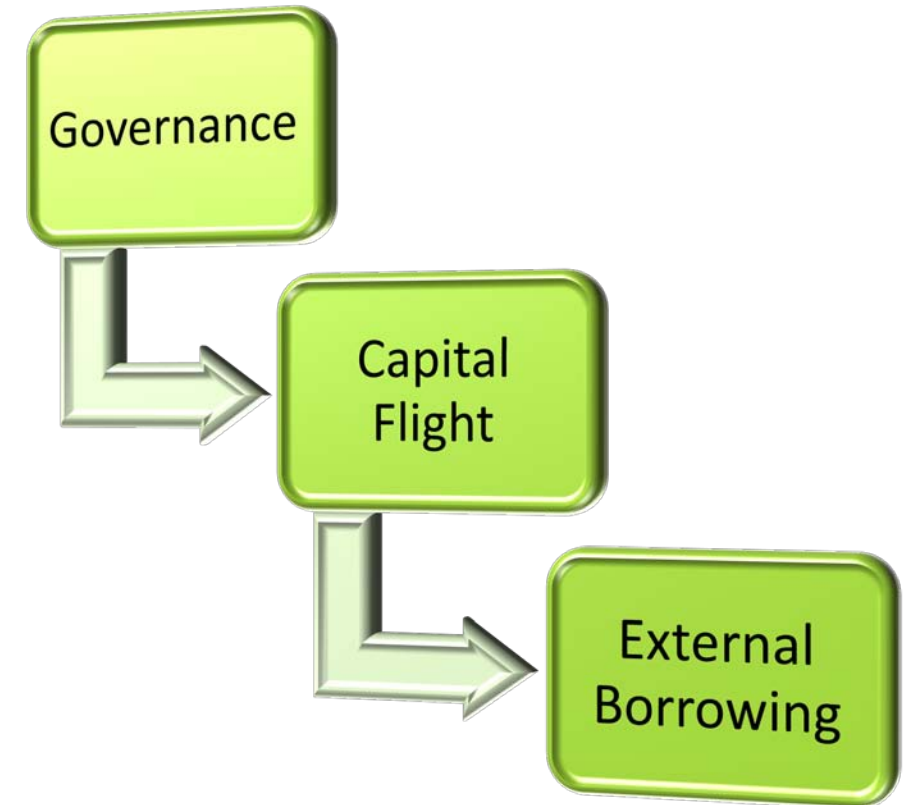
Time series data from 1984 to 2015 is used in this study. The data has been collected from the various issues of International Monetary Fund (IMF), World Development Indicators (WDI), International Financial Statistics (IFS) and Direction of Trade Statistics (DOTS).

Recursive simultaneous equation system is used to investigate the relationship among governance, capital flight and external debt in Pakistan. The study used 3SLS technique for simultaneous equation approach. (Zellner and Thiel 1962).

Through 3SLS we can get more efficient parameter estimates as compared to 2SLS as the former takes cross-equation correlation between the errors into consideration.

Three stage least square or “Full Information Method” for empirical process is applied on the model of the study because only this technique incorporates the association among all equations within a system by estimating them at the same time that results in more efficient estimates of parameters Judge et al. (1988).

**Fig 4: Conceptual Framework**





## The Model

$$\ln ED_t = \alpha_0 + \alpha_1 \ln KF_t + \alpha_2 OPP_t + \alpha_3 \ln ED_{t-1} + \alpha_4 TOT_t + \varepsilon_{1t} \dots (1)$$

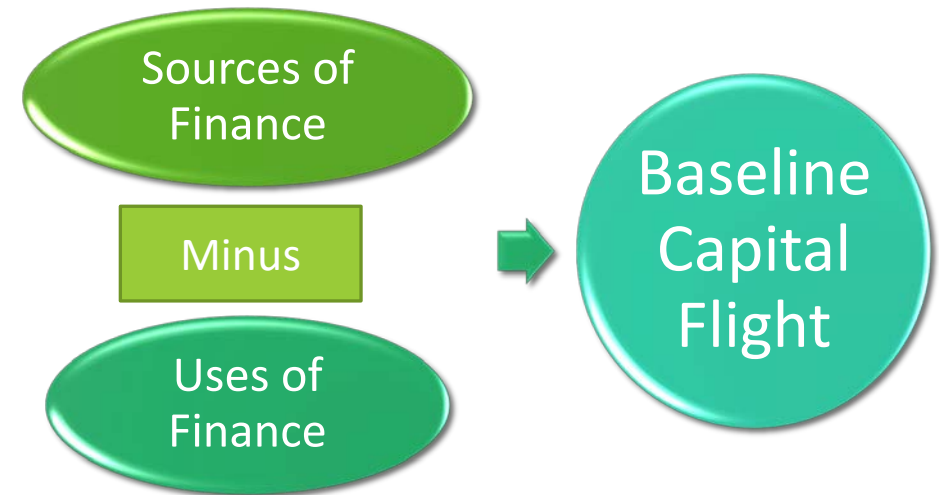
$$\ln KF_t = \beta_0 + \beta_1 \ln ED_t + \beta_2 \ln KF_{t-1} + \beta_3 INF_t + \beta_4 OPP_t + \beta_5 \ln ICRG_t + \beta_6 (R-R^F)_{t-1} + \beta_7 FDI_t + \varepsilon_{2t} \dots (2)$$

The application of 3SLS required to fulfil undermentioned assumptions:

1. The specification of the system must be completely known.
2. There is no serial correlation in random term of each equation.
3. All equations of the system must be over identified. The identities must be dropped from the system before applying 3SLS.
4. There must exist simultaneity in the model.

# Measuring Capital Flight

- Capital flight is measured with the residual method which was proposed by World Bank.
- According to this method capital flight is measured by the difference between the sources and uses of finance.
- The sources of finance include changes in external debt borrowings (CDET) plus non-debt creating inflows which we can call as net foreign direct investment (NFDI).
- The uses of finance are current account deficit (CAD) plus changes in official reserves (CRES).



## Adjustments of External Debt

$$\begin{aligned}
 & ATTD_{t-1} \\
 = & \sum_{i=EU,UK,FF,DM,Yen,SF} \left[ (\alpha_{i,t-1} LTDEBT_{t-1}) \left( \frac{FX_i}{FX_{i,-1}} \right) \right] + \sum_{i=USD,MUL,Other} (\beta_{i,t-1} LTDEBT_{t-1}) \\
 & + IMF_{t-1} \left( \frac{SDR_t}{SDR_{t-1}} \right) + STDEBT_{t-1} \dots \dots \dots 1 \Bigg)
 \end{aligned}$$

The first adjustment is concerned with financial accounts. Particularly, this adjustment is required to check the effect of exchange rate fluctuations on the external debt stock (DEBT). Long-term external debt (LTDEBT) is usually denominated in a combination of hard currencies, and their variations will affect the USD values of LTDEBT, which have implications for CDET.

## Adjusted External Debt

$$ADEBT = ATTD_{t-1} + DEBT_{t-1} \dots \dots \dots (2)$$

$$CDETADJ = CDET - ADEBT \dots \dots \dots (3)$$

## Trade Mis-Invoicing

- The second set of adjustments is related to the current account. The import under-invoicing is the form of reverse capital flight as they are taxed while crossing the board, but actually no taxes are levied if the imports are under-invoiced. The export over-invoicing is committed if there are incentives for firms on better export performance which leads to invoice padding. If anything of the above happens the current account will give inaccurate estimates, thus in this respect the adjustments are needed to make accurate estimations.

$$DX = PX - CIF * X \dots\dots\dots 4 \text{ (a)}$$

$$DM = M - CIF * PM \dots\dots\dots 4 \text{ (b)}$$

$$MISX = DX / X\_INDUS \dots\dots\dots 5 \text{ (a)}$$

$$MISM = DM / M\_INDUS \dots\dots\dots 5 \text{ (b)}$$

## Adjusted Capital Flight

$$KFADJ = (CDETADJ + NKI) - (CAD + CRES) + MIS \dots\dots\dots (6)$$

# Empirical Results

Table 1: Model Specification Test

Equation	F-statistic	Probability
lnED <sub>t</sub>	1.81	0.1742
lnKF <sub>t</sub>	0.36	0.7810

Table 2: Test for Autocorrelation

Equation for	Chi <sup>2</sup> -statistic	Probability
lnED <sub>t</sub>	2.420	0.1198
lnKF <sub>t</sub>	0.465	0.4953

Table 3: Test for Simultaneity

Test statistic	Value	d.f.	Probability
F-statistic	3.67	(1,25)	0.0669

Table 4: 3SLS Estimation Results

	Dependent Variables	
Regressors	lnED <sub>t</sub>	lnKF <sub>t</sub>
lnED <sub>t</sub>		0.4818*** (0.0665)
lnKF <sub>t</sub>	0.1872*** (0.07555)	
lnED <sub>t-1</sub>	0.732*** (0.080)	
FDI <sub>t</sub>		0.1632*** (0.0304)
(R-RF) <sub>t-1</sub>		-0.0367*** (0.0105)
TOT <sub>t</sub>	-0.00032 (0.00062)	
lnKF <sub>t-1</sub>		0.2317** (0.1058)
OPP <sub>t</sub>	-2.864 (0.4112)	-0.6738 (0.9470)
INF <sub>t</sub>		0.0197*** (0.0057)
ICRG <sub>t</sub>		-1.118** (0.5748)
Constant	2.15** (1.077)	7.1155** (2.82)
Observations	32	32
R-squared	0.99	0.97

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# Confirmation of Financial Revolving Door Hypothesis

**Table 5: The Financial Revolving Door Relationship**

Coefficients	Estimates	Standard error	t-ratios	Probability
Capital Flight to External Debt	0.2076	0.0655	3.17	0.002
External Debt to Capital Flight	0.4818	0.1730	2.78	0.005

**Table 6: Granger Causality Test**

Equation	Excluded	Chi <sup>2</sup>	D.F	Prob > Chi <sup>2</sup>
lnKF <sub>t</sub>	lnED <sub>t</sub>	10.308	3	0.016
	All	10.308	3	0.016
lnED <sub>t</sub>	lnKF <sub>t</sub>	21.644	3	0.000
	All	21.644	3	0.000

# Discussions & Recommendations

- From our above analysis it is seen that poor governance hindering the way towards development. There is a need to improve efficiency to implement economic policies by the government. As far the institutional governance is concerned there is a need to strong the system. Because financial reforms without the institutional reforms can increase the probability of expected, economic and financial crises. The Govt. should regularly monitor the indicators of governance in order to enhance its performance in governance score.
- Increase debt maturity can help to control over the capital and reduces the flight of capital from the country.
- Foreign Direct Investment (FDI) is the need of the day. Effective management and routing of economic plans must be placed there to sustain the process of capital accumulation through improvement of infrastructure, shipping, storage, ports and appropriate use of human resources.
- To attract the global investment there must be the introduction of investment allowance to the companies who will invest more than up to a certain limit. As in Indian manufacturing sector has given at the rate of 15 percent to manufacturing companies that invest more than INR 1 billion in plant and machinery. Because these efforts will restore the foreign investors' confidence including overseas Pakistanis who have a huge role to play but are discouraged.

# Discussions & Recommendations (Continued....)

- The study also confirms the Financial Revolving Door Hypothesis in Pakistan. The Country has also been experiencing simultaneity between large flight of capital and external indebtedness during last many years. The Indirect linkages show that both borrowing and capital flight are caused by other factors, such as, economic mismanagement of domestic authorities which contributes to a positive cross-sectional correlation between debt and capital flight.
- Due to easy and ineffective policies in Pakistan, capital flight is very high and due to which it forces the economy to go for external debt.
- Macroeconomic variables also contributes to flight of capital due to the mismanagement in the capital controls and unpredictable macroeconomic policy environment. Our findings suggested that strong policies of capital control should be implemented but with the support of effective institutional setup with sound and predictable macroeconomic policies. The channels through which capital is outflowing out from the country must be addressed and capital controls must be made effective.



# Discussions & Recommendations (Continued....)

- Rate of return on financial assets needs to be maintained at reasonable level which could attract foreign investment. As fluctuations in macroeconomic variables like interest rate, exchange rate and inflation rate are mostly acknowledged by the investors. These are directly or indirectly affecting the business plans and the future expectations of the businessmen and the finance providers, which hinder the investment process and deter the process of capital formation. So the rate of return on financial assets must be attractive.

# **Thank You!**

---