# IMPACT OF POLITICAL INSTABILITY ON ECONOMIC GROWTH, POVERTY AND INCOME INEQUALITY

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# Abstract

We study the impact of political instability on economic growth, income distribution and poverty. The estimates are obtained by applying Heteroscedasticity consistent OLS on a cross-section of 103 countries from 1984-2011. We take into account alternative dimensions of political instability: formal, informal and military coups D'Etat. Formal and informal political instability has statistically significant and positive impact on poverty and inequality. Similarly we find that direct effect of Coups D'Etat on both poverty and income inequality is insignificant, while its indirect effect (through economic growth) is significant. On the whole our study indicates political instability is detrimental to the process of economic growth, worsen income distribution and increases poverty.

*Keywords:* Economic Growth, Income Inequality, Poverty, Political Instability, Heteroscedasticity Consistent OLS.

# **JEL Classification:** I390

# Introduction

An emerging concept in literature relates economic growth to the instability in political regime. Political economists disagree about the definition and measurement of political instability. For the purpose of defining political instability we distinguish between its formal and informal dimensions. Formal political instability arises due to elections and constitutional changes (Campos & Karanasos, 2008). On the other hand, informal political instability originates through protests, assassinations, riots, strikes and violations (Campos & Karanasos, 2008). These formal and informal measures have been combined to define political instability. The first definition is labeled as "Social Political Instability". This is the simplest definition and it covers only informal measures of political

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instability. The second measures "Government Changes" covers a broader definition of political instability and is based on informal political instability, economic and institutional measures.

Whatever are the definitional and measurement problems, higher level of political instability is undesirable. It shortens the time span of policy makers to lead and implement optimal macroeconomic policies. Absence of coherent and consistent policies greatly reduces the government ability to response to shocks appropriately; this uncertainty cause macroeconomic misbalances such as less economic growth, inflation, poverty, and inequality etc. There exist an ample amount of literature documenting the relationship of political instability with growth, saving rate, investment, land inequality, crime rate, debt, capital and inflation (Venieris & Gupta, 1986; Ozler & Tabellini, 1991; Edwards & Tabellini, 1991; Alesina et al., 1996; Devereux & Wen, 1998; Syed & Ahmad, 2013). Less attention has been paid to empirically examine the relationship of political instability with income inequality and poverty.

Uncertainty associated with unstable political regimes may have adverse effects on the wellbeing of poor segment of society. Political instability can affect poverty in a number of ways. First, uncertainty regarding government policies reduces accumulation of human and physical capital leading to a decline in investment. This low level of domestic and foreign investment depresses faster economic growth, which in turn increases poverty (Dollar & Kraay, 2002). Second, political instability is also expected to affect income inequality and poverty through its impact on growth. Any frequent switch of government, political violence, strikes and/or revolutions may hinder the effectiveness of pro-poor policy programs. For example, it is possible that the new government, whether obtained through constitutional or non-constitutional changes, is such that it promotes pro-rich policies. The alleged government then serves its own political allies and do not promote pro-poor policies; thereby causing more inequality and poverty. Given the close linkages between political instability, growth, income inequality and poverty no efforts has been made to collectively examine these relationships.

This study makes several contributions. First, we improve on the existing literature by examining the relationship of political instability with income distribution and poverty. To this end, we use direct and indirect channels linking political instability to poverty and income inequality. Second, we contribute to the existing literature by using alternative measures of political instability. We use three broad set of measures; (i) formal political instability measures: an index of constitutional and non-constitutional measures of political instability, (ii) informal political instability: an index of measures of mass violation, and (iii) coups D'Etat.

This study answers the following key questions:

- Does political instability reduce economic growth?
- Does political instability increase income inequality and poverty?
- How close are the links from political instability to economic growth and then to poverty?
- How close are the links from political instability to economic growth and then to income inequality?

The rest of this paper is arranged as follows. In section 2, background and related work clarify how this research relates to the existing work. Section 3 formulate empirical models and explain the methodology. Section 4 defines data sources and provides some basic summary statistics. In section 5, we interpret and discuss empirical results. The last section 6 concludes.

## Literature Review

There is a large amount of studies exploring the relationship between economic growth and political instability. Alesina et al. (1996) using data for 113 countries find that countries with higher degree of political instability grow slower than others. Their findings reveal that political instability is persistent in character; the occurrence of a government collapse raises the probability of future government collapses. Gurgul and Lach (2013) while studying impact of government changes in 10 CEE transitional economies also support the negative relationship of political instability with economic growth.

Some studies have explored channels through which political instability affects growth (Barro, 1991; Devereux & Wen, 1998; Aisen & Veiga, 2013). Aisen and Veiga (2013) investigate relationship between political instability and GDP growth for 169 countries from 1960 to 2004. They find that higher degree of political instability is associated with lower growth rates. This damaging effect of political instability on GDP growth is transferred through the negative effects of political instability number capital and physical capital.

Similarly, Barro (1991) finds an inverse relationship between political unrest and growth rate of GDP for a large sample of countries. He finds that political instability reduces growth and investment through its adverse effects on property rights. Moreover, Devereux and Wen (1998) developed a linear endogenous growth model where economic growth and government spending are linked to political instability. They find evidence from cross country regressions that political instability reduces growth and increases share of government in GDP.

In the same vein, Jong-A-Pin (2009) re-examines the effect of alternative dimensions of political instability on economic growth. He finds that instability of political regime depresses economic growth. He also assumed the reverse causality between these dimensions. Lower economic growth increases political instability, while, higher growth fosters stability within government.

Some studies lift up doubt on the negative relationship of political instability with economic growth. Ali (2001) explores the relationship between a variety of political instability measures, policy uncertainty and economic growth. His findings show that policy instability has a more significant effect on economic growth than political instability. Similarly, Campos and Nugent (2002) using two different measures of political instability find that the negative impact of political instability on growth is only contemporaneous. In the long run, they did not found any evidence for the negative

relationship between political instability and economic growth.

Literature describing relationship between economic growth and political instability is quite established. On the other end, literature regarding impact of political instability on income inequality and poverty is yet to be developed. The link, however, has been developed from inequality and poverty to political instability. Studies have found that income inequality and poverty is an important cause of political instability. Alesina and Perotti (1996) examine the impact of income distribution on investment through the channel of political instability. They find that income inequality cause socio-political unrest and reduce investment, and ultimately hamper growth. Muller and Seligson (1987) and Wang et al. (1993) using alternative techniques and robustness checks also confirm that income inequality has positive association with political instability.

Londregan and Poole (1990) find that poverty and lower economic growth increases the chances of coups DEtat- a measure of forced government changes (Alesina & Perotti, 1994). Likewise, Alcantar-Toledo and Venieris (2014) suggest that political instability, fiscal policy and income inequality are the major factors hindering economic growth. More importantly they confirm that lower growth and socio political instability are main causes of poverty traps. Thus, the overwhelming amount of literature suggests that political instability is inversely related with economic growth and positively with income inequality and poverty.

# **Empirical Model Specification And Methodology**

#### Political instability and economic growth

The empirical model for growth is derived from Aisen and Viega (2013):

$Growth_i = \alpha_0 + \alpha_1 IGDPPC$ (log	$(a_1)_i + \alpha_2 P I_i + \alpha_3 In f_i + \alpha_4 P o p_i + \alpha_4 P o p_i)$	$+ \alpha_5 Ethnicity_i + \alpha_6 Corruption_i$
$+\mu_i$		(1)

Where, *Growth* is dependent variable and is calculated as growth rate of GDP per capita. *IGDPPC* (*log*), is the value of GDP per capita in 1984; it is expected to have a negative coefficient to confirm convergence effect.

#### Political Instability, Poverty and Income Inequality

Based on the poverty and inequality literature (Kuznets, 1955; Chong & Calderon, 2000; Dollar & Kraay, 2002; Gupta et al., 2002) we use following determinants of poverty and income inequality:

*Pov* is explained variable and represent number of people living in moderate poverty (less than \$2/day). *Gini* is also dependent variable and is calculated from Lorenz curve; it represents distri*Pov*<sub>i</sub> =  $\beta_0 + \beta_1 I pov_i + \beta_2 P I_i + \beta_3 Growth_i + \beta_4 P op_i + \beta_5 Ethnicity_i + \beta_6 Inf_i + \varepsilon_i$ .....(2) *Gini*<sub>i</sub> =  $\gamma_0 + \gamma_1 I Gini_i + \gamma_2 P I_i + \gamma_3 Growth_i + \gamma_4 Growth_2 + \gamma_5 Ethnicity_i + \gamma_6 Inf_i + \varepsilon_i$ ......(3)

The explanatory variable *PI* in all equations is main variable and it represent political instability index. We use three broad dimensions of political instability: (i) formal political instability measures: an index of constitutional and non-constitutional measures of political instability, (ii) informal political instability: an index of measures of mass violation, and (iii) Coups D'Etat. All measures are expected to have negative association with growth, and positive with poverty and income inequality. *Inf*, *Ethnicity*, *Pop* and *Corruption* are other covariates of growth, poverty and inequality. All these determinants are expected to have inverse relationship with growth, and positive with inequality and poverty.

#### **Econometric Methodology**

Since we are using cross country data the problem of heteroscedasticity is likely to occur. In the presence of heteroscedasticity OLS still yields unbiased estimates but they are no longer efficient. A variety of methods is available to correct heteroscedasticity. The simplest method involves transforming functional form of dependent variable or entire model (Carroll & Ruppert, 1988). This method is discouraged because it is difficult to know that which functional form is optimal. The second method is Weighted Least Square (WLS). This method corrects heteroscedasticity by weighting each observation by sum of square residuals (Greene, 2003; Gujarati, 2012). Although WLS produce efficient estimates it is applicable only when the magnitude and form of heteroscedasticity is known.

An alternative and most appropriate procedure is to use test of hetero-consistent standard error on OLS estimates. In this method the original model is estimated using OLS and then white's test is applied to obtain hetero-consistent standard errors (White, 1980). In this study we are using hetero-consistent standard error OLS (HCOLS) because it allows one to avoid heteroscedasticity without using weights and it is also applicable even if nothing is known about the form of heteroscedasticity.

#### Data Description, Sources And Definition Of Variables

The relationship of political instability with growth, poverty and income inequality is evaluated using three alternative categories of political instability. The first dimension named "formal political instability" (FPI) is defined as propensity of government collapse by either constitutional and/or non-constitutional means. The FPI index is composed of four celebrated measures: legislative elections, major constitutional changes, major cabinet changes and effective executive changes. The second index "informal political instability" (IPI) is based on five measures of mass violation: assassinations, strikes, purges, riots and revolutions. The last measure "coups D'Etat" reflects the forced transfer of power which in now commonplace in many countries. Data on all the political instability measures is taken from Cross National Time Series Data Archives (CNTS report, 2012). Table 1 portrays the pair wise correlation matrix among different measures of political instability. Table shows a fairly low correlation among ten measures of political instability. Only assassinations and revolutions, and legislative elections and coups d'Etat have partial correlation greater than 0.50. This little correlation among alternatives measures of political instability shows that each measure has some information and properties that are not captured by others. Each set of these measures forms an important dimension of political instability which is different from the other. Table 2 is the summary statistics of all important variables used in this study. Assassinations, a measure of informal political instability, has the highest average value (& standard deviation) of 4.14 (0.52).

Data on economic and institutional variables is from World Development Indicators online database (2014), PovcalNet online database (2014), International Country Risk Guide database (2013) and Alesina et al. (2003). The data set include 103 countries from both developed and developing regions of world. The cross section is made by taking average of the data between period 1984 and 2011. Table 3 displays the correlation matrix of political instability measures with growth, poverty and income inequality. Each measure of political instability has standard negative relationship with growth and positive with poverty head count ratio and income inequality.

		1	2	3	4	5	6	7	8	9	10
1	Coups D'Etat	1									
2	Assassinations	0.0681	1								
3	Strikes	0.0223	0.1314	1							
4	Purges	0.0447	0.1534	0.0738	1						
5	Riots	0.0594	0.1506	0.4625	0.1632	1					
6	Revolutions	0.2917	0.5472	-0.017	0.2021	0.1165	1				
7	Cabinet changes	0.3777	0.1645	0.0874	-0.123	0.0649	0.223	1			
8	Executives changes	0.2332	0.1672	0.2829	-0.066	0.0626	0.0152	0.4106	1		
9	Legislative elections	0.5888	-0.016	-0.086	0.0313	-0.044	0.2043	0.457	0.156	1	
	Constitutional										
10	changes	-0.258	0.165	0.278	-0.176	0.052	-0.134	-0.086	0.325	-0.202	1

# Table 1Correlation matrix of political instability variables

Variable	Observations	Mean	Std. Dev.	Min	Max
Political Instability Me	easures				
Coups D'Etat	103	0.015086	0.035227	0	0.217391
Assassinations	103	0.242068	0.521945	0	4.142857
Strikes	103	0.179233	0.27803	0	1.392857
Purges	103	0.028803	0.062791	0	0.392857
Riots	103	0.374154	0.589674	0	3.928571
Revolutions	103	0.187177	0.272682	0	1.5
Cabinet changes	103	0.479973	0.230028	0	1.1
Executives changes	103	0.191553	0.140114	0	0.565217
Legislative elections	103	0.074055	0.083779	0	0.391304
Constitutional changes	103	0.241256	0.072065	0.086957	0.521739
<b>Economic and Institut</b>	ional Variables				
Poverty	103	30.98525	31.61724	0.048571	95.15
Income inequality	103	40.15709	9.589034	24.79	66.51667
GDPPC	103	8861.759	13589.79	155.0149	55298.09
GDPPC growth	103	1.728036	1.507374	-2.76242	8.696973
Corruption	103	2.985274	1.164687	0.616071	6
Ethnic tensions	103	0.451676	0.263547	0.0119	0.9084

# Table 2

# Descriptive statistics of important variables

# Table 3

Correlation matrix of political instability with growth, poverty and income inequality

		1	2	3	4	5	6	7	8	9	10	11
1	Economic growth	1										
2	Poverty	-0.8651	1									
3	Income inequality	-0.3952	0.6085	1								
4	Coups D'Etat	-0.3733	0.3595	0.1299	1							
5	Assassinations	-0.0765	0.1606	0.2547	0.0681	1						
6	Strikes	-0.0204	0.0668	0.1533	0.0223	0.1314	1					
7	Purges	-0.2512	0.1702	-0.141	0.0447	0.1534	0.0738	1				
8	Riots	-0.194	0.2349	0.082	0.0594	0.1506	0.4625	0.1632	1			
9	Revolutions	-0.3256	0.3923	0.1752	0.2917	0.5472	-0.017	0.2021	0.1165	1		
10	Cabinet	-0.2937	0.2419	0.0596	0.3777	0.1645	0.0874	-0.123	0.0649	0.223	1	
11	Legislative elections	-0.3946	0.2988	-0.006	0.5888	-0.016	-0.086	0.0313	-0.044	0.2043	0.457	1

# **Interpretation of Empirical Results**

Table 4 presents heteroscadisticity consistent OLS estimation results for growth model using averaged data for 103 countries from 1984-2011. To make analysis more comparable to existing studies we have grouped political instability index into three dimensions. Column 1 of the Table 4 shows that coups D'Etat, a measure of forced government, has negative and statistical significant coefficient. The estimated parameter indicates that occurrence of an additional coups D'Etat per year will reduce economic growth by 0.04 points. Results for other measures are reported in columns 2 and 5. Our results allow us to distinguish between impacts of different dimensions of political instability on growth. From column 2 we find that formal political instability has statistically significant impact on growth while impact of informal political instability is insignificant. Cabinet changes and legislative elections, most widely used measures of formal political instability, also support our hypothesis regarding adverse impact of political instability on growth.

Results regarding the other determinants of growth are also according to our expectations. Initial GDPPC have negative and significant sign confirming conditional convergence hypothesis as suggested by new classical growth models. Finally, higher inflation, population growth, and ethnic tensions slow down growth. Corruption, although not significant, but has expected positive sign.

Independent Variables	<b>Dependent Variable is Economic Growth</b>							
	1	2	3	4	5			
GDPPC84(log)	-0.592***	-0.575***	-0.609***	-0.604***	-0.568***			
	(0.211)	(0.175)	(0.186)	(0.197)	(0.210)			
Coups D'Etat	-0.0409**							
	(0.0200)							
Formal political instability		-1.388***						
		(0.513)						
Cabinet changes			-2.120***					
			(0.751)					
Legislative elections				-5.994***				
				(1.774)				
Informal political instability					-0.0140			
					(0.0405)			
Inflation	-0.00145**	-0.00142**	-0.00123**	-0.00104*	-0.00150**			
	(0.000582)	(0.000584)	(0.000606)	(0.000581)	(0.000668)			

# Table 4Impact of political instability on economic growth

Population	-0.520***	-0.685***	-0.629***	-0.653***	-0.582***
	(0.177)	(0.176)	(0.176)	(0.185)	(0.180)
Ethnic tensions	-0.404**	-0.512***	-0.495***	-0.331*	-0.405**
	(0.183)	(0.179)	(0.176)	(0.174)	(0.189)
Corruption	0.182	0.0253	0.0780	0.0715	0.233
	(0.197)	(0.198)	(0.190)	(0.188)	(0.205)
Constant	5.472***	6.586***	7.748***	7.352***	5.975***
	(1.395)	(1.295)	(1.554)	(1.511)	(1.432)
Observations	103	103	103	103	103
R-squared	0.304	0.364	0.346	0.338	0.265
White standard errors i	n parentheses				
*** p<0.01, ** p<0.05, *	p<0.1				

Table 5 depicts results for the HCOLS estimation of political instability on poverty head count ratio. Column 1 show that informal political instability has positive and significant coefficient indicating that higher level of political instability worsen poverty rates. An occurrence of additional strikes, riots, and revolutions hinder the effectiveness of Government policies, threaten foreign investment and create unemployment which worsen poverty rates. Column 2 and 4 show that formal political instability and coups D'Etat has positive coefficients, but they are not significant statistically. Our results also indicate that a constitutional change, an important formal political instability measure, has significant positive impact on poverty. While direct effect of formal political instability and coups D'Etat on poverty is insignificant. The indirect effect of political instability measures is channeled through economic growth and is estimated using simultaneous equation approach where all other determinants of growth are excluded.

Independent Variables	Dependent Variable is Poverty Head Count Ratio							
	1	2	3	4				
Initial dependent	0.0732**	0.0889**	0.0916***	0.0883**				
	(0.0337)	(0.0349)	(0.0307)	(0.0350)				
Informal political instability	0.0639***							
	(0.0238)							
Formal political instability		0.0913						

Impact of political instability on poverty

Table 5

		(0.161)		
Constitutional changes			0.544*	
			(0.322)	
Coups D'Etat				0.000719
				(0.00812)
Economic growth	-0.709***	-0.720***	-0.762***	-0.729***
	(0.0642)	(0.0712)	(0.0734)	(0.0692)
Population	0.481***	0.458***	0.480***	0.449***
	(0.118)	(0.120)	(0.122)	(0.118)
Ethnic tensions	0.159*	0.182**	0.170*	0.177**
	(0.0848)	(0.0883)	(0.0869)	(0.0872)
Inflation	0.000505	0.000557	0.000803**	0.000572*
	(0.000311)	(0.000344)	(0.000382)	(0.000341)
Constant	7.210***	7.274***	8.321***	7.354***
	(0.598)	(0.643)	(0.858)	(0.614)
Observations	103	103	103	103
R-squared	0.873	0.864	0.869	0.864
White standard errors in parent	heses			
*** p<0.01, ** p<0.05, * p<0.1				

# Table 6

Indirect impact of political instability on poverty

	1	2	3	4	5	6
			Dependen	t Variables		
	Poverty	Growth	Poverty	Growth	Poverty	Growth
Independent variables						
Growth	-0.112		-0.133		-0.0114	
	(0.121)		(0.135)		(0.126)	
Informal political						
instability	0.239***	-0.0295				
	(0.0543)	(0.0442)				
Formal political instability			0.256	-0.861**		
			(0.525)	(0.375)		
Coups D'Etat					0.0952***	-0.0466***
					(0.0227)	(0.0172)
Constant	2.747***	1.697***	2.555***	1.656***	4.106***	0.857**

	(0.279)	(0.154)	(0.300)	(0.148)	(0.462)	(0.352)	
Observations	103	103	103	103	103	103	
Standard errors in parentheses							
*** p<0.01, ** p<0.05, * p<0.1							

Statistical results for the impact of political instability on income inequality are given in Table 7 and 8. It is clear from the Tables that direct and indirect impact of formal and informal political instability on income inequality is statistically significant. Direct impact of coups D'Etat is insignificant while its indirect impact on inequality is significant. Our results confirm that all dimensions of political instability are detriment to income inequality; higher level of political instability increases income inequality.

We also found support for Kuznets hypothesis which states that initial level of development in GDP will cause inequality to increase, while at alter stages growth in GDP reduces income inequality. Other detriments of income inequality, such as, ethnic tension and inflation have expected positive signs.

Variables	Depende	ent Variable is Incom	e Inequality
Initial dependent	0.639***	0.662***	0.643***
	(0.0414)	(0.0378)	(0.0400)
Informal political instability	0.00367*		
	(0.00195)		
Formal political instability		0.0697**	
		(0.0268)	
Coups D'Etat			0.0779
			(0.431)
Economic growth	0.143***	0.154***	0.145***
	(0.0339)	(0.0332)	(0.0371)
Squared Economic growth	-0.00912***	-0.00957***	-0.00934***
	(0.00214)	(0.00209)	(0.00227)
Ethnic tensions	0.0278*	0.0339**	0.0284**
	(0.0145)	(0.0136)	(0.0137)

# Table 7Impact of political instability on income inequality

Inflation	0.0000615	0.0000543	0.0000642
	(0.0000531)	(0.0000446)	(0.0000534)
Constant	0.810***	0.674***	0.790***
	(0.218)	(0.213)	(0.246)
Observations	103	103	103
R-squared	0.826	0.834	0.823
White standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

#### Table 8

Indirect impact of political instability on income inequality

	1	2	3	4	5	6	
	Dependent Variables						
Independent variables	Inequality	Growth	Inequality	Growth	Inequality	Growth	
Growth	-0.0360**		-0.0324**		-0.0306**		
	(0.0155)		(0.0157)		(0.0148)		
Formal political instability	-0.0500	-0.861**					
	(0.0606)	(0.375)					
Coups D'Etat			0.000537	-0.0466***			
			(0.00285)	(0.0172)			
Informal political instability					0.0172***	-0.0295	
					(0.00664)	(0.0442)	
Constant	3.723***	1.656***	3.731***	0.857**	3.736***	1.697***	
	(0.0347)	(0.148)	(0.0578)	(0.352)	(0.0341)	(0.154)	
Observations	103	103	103	103	103	103	
Standard errors in parentheses							
*** p<0.01, ** p<0.05, * p<0.1							

# Conclusion

The objective of this study has been to examine the relationship of political instability with economic growth, poverty and income inequality. We have used three dimensions of political instability namely, formal political instability, informal political instability and coups D'Etat. Our findings for the impact of different dimensions of political instability on growth are in conformity with most of literature, suggesting that higher degree of political unrest reduces the economic growth.

In analyzing the link of political instability with poverty and income inequality we have used both direct and indirect means. Formal and informal political instability has statistically significant and positive impact on poverty; higher level of political instability increases poverty. Similarly we find that direct effect of Coups D'Etat on both poverty and income inequality is insignificant, while its indirect effect (through economic growth) is significant. On the whole our study indicates that all dimensions of political instability have damaging repercussion on poverty and income inequality. Our results suggest that governments in highly politically instable countries need to address the root causes of political instability and try to make a stable political system and policies. Only then, countries can attain higher and sustained economic growth and lower poverty and inequality rates.

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# Appendix

Data and Variables Description

Sr. No.	Variables	Data source	Description			
		CNTS report, 2012	No. of forced/ constitutional changes in the			
1	Coups D'Etat		government structure in a year.			
		CNTS report, 2012	Any politically motivated murder of Govt.			
2	Assassinations		official/ politician.			
		CNTS report, 2012	A protest of 1,000 or more workers against the			
3	Strikes		policies of government.			
		CNTS report, 2012	A systematic elimination of political opposition by			
4	Purges		jailing or execution.			
		CNTS report, 2012	A violent demonstration or use of physical force on			
5	Riots		more than 100 citizens.			
		CNTS report, 2012	A legal/ forced attempt to change the top			
			government or any rebellion to get freedom from the			
6	Revolutions		government.			
		CNTS report, 2012	No. of times cabinet posts are assumed by new			
7	Cabinet changes		ministers in a year.			
8	Executives changes	CNTS report, 2012	No. of times executive power changes in a year.			
		PovcalNet online	Head count ratio measured as number of people			
9	Poverty	database	living at less than \$2/day.			
		PovcalNet online	GINI index			
10	Income inequality	database				
11	GDPPC	WDI	Per capita GDP at 2005 (US\$) constant prices			
12	GDPPC growth	WDI	Calculated as (GDPPC1-GDPPC0)/GDPPC0			
13	Corruption	ICRG	Corruption index (Scaled 0-6)			
14	Ethnic tensions	Alesina et al. (2003).	nic fractionalization index (Scaled 0-1)			