Sociopolitical Instability and Economic Growth Empirical Evidence from Sri Lanka

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Abstract: Sociopolitical instability severely affects economic growth in short and long run. This study analyzes that sociopolitical instability measured by proxy measure; annual growth rate of tourist arrivals in Sri Lanka during 1960-2005 adversely affects economic growth. Our empirical findings based on ordinary lease square econometric estimation, show that sociopolitical instability negatively and significantly affect economic growth. Reduction of economic growth rate (-0.032) due to the sociopolitical instability exceeds the improvement of economic growth (0.027) by increasing of physical capital accumulation. It also exceeds the improvement of economic growth (0.017) by increasing of human capital accumulation. Years which had more sociopolitical conflicts, violence within and between communities and war between government forces and Tamil tiger had lower economic growth than years which had peace talking between government and leaderships of minority, preparing political proposal for peace, effective peace or political agreements and none or less violence. Sociopolitical instability adversely affects economic growth in long runs with insignificant. Policy implications suggest that peace in Sri Lanka makes foundation for economic development based on economic growth. Sociopolitical stability plays major role in determination of economic growth.

Key words: Peace, conflicts, war, sociopolitical instability and economic growth

INTRODUCTION

Empirical studies of economic growth in modern economic literatures pay more attention sociopolitical causes rather than pure economic causes such as capital, labor and technology. Even an economy adapts standard attractive economic policies with technology, human and physical capital; it can not achieve higher economic growth which is back born of economic development unless it has peace. Increasing economic growth, rising level of living, and promoting widespread employment opportunities are all as much function of the local history, expectations, values, incentives, attitudes and beliefs, and institutional and power structure of societies^[26]. Large differences in per capita income across the countries can not be explained by differences in across to the world's stock of productive knowledge or by differences in quality of marketable human and physical capital or personal culture, the only remaining plausible explanation makes that great differences of wealth of nations caused by differences in the quality of their institutions and economic policies which make sociopolitical stability in their country^[23]. Looking back over years, it is now

clear that, in their preoccupation with growth and its stages and with the provision of capital and skills, theorists in economic growth have paid sufficient attention to sociopolitical stability made institutional, sociopolitical, historical, cultural, religious causes in the development process, particularly in economic growth. To understand why some countries have performed so much better than others with respect to growth, it is therefore necessary to go beyond the proximate causes of growth and devolve into the wider fundamental determinants of the growth. As Brain Snowdon pointed out, we can not hope to find the key determinants of economic growth by using narrow economic analysis alone. To explain growth "miracles" and "disasters", it requires the understanding of the history of the countries being investigated as well as how policy choice are made within an institutional structure involving political distortion^[7]. According to the back ground of these studies focused on sociological causes for economic growth, this study hypotheses that sociopolitical sociopolitical instability caused by and historical causes in Sri Lanka adversely affects economic growth.

Sri Lanka, small natural beauty island with extent of 65610 km² in the world containing around 20.7 millions population (2007) consists of Sinhalese (74% of the population in 1981. Latest census in 2001 did not include all parts of Sri Lanka in ethnic composition), who are predominantly Sinhala- speaking BuddhistThe ethnic minorities consists primarily of groups who speak Tamil; Sri Lankan Tamils (13%), Indian Tamils (6%) and Sri Lankan moor (7%). Within this majority group, Sinhala-speaking Buddhists are majority, but there is an important minority who are Catholic and also a number of Sinhalese who use English as their first language. The ethnic minority consists primarily of groups who use Tamil as their first language. The Tamil-speaking population is commonly divided between Sri Lanka Tamils, Indian Tamils, and Sri Lanka Moors. Whereas most Sri Lanka Tamils and Indian Tamils are Hindu or Catholic, Sri Lanka Moors are largely Muslims. Sri Lanka Tamils constitute the majority in the northern and eastern regions while also being strongly present in the capital, Colombo. Indian Tamils reside mainly in the plantation areas of the central highlands. Sri Lanka Moors have a strong presence in the eastern region also and in urban areas throughout the island. Since Sri Lanka gain its independence in 1948, major racial conflagrations that erupted violently against the Tamil people were inspired and master minded by the Sinhala regimes as part of a genocidal program, took placed in 1956, 1958, 1961, 1974, 1977, 1979, 1981 and July 1983 made fundamental causes for sociopolitical instability in Sri Lanka during post independent. Since 1983, the country has experienced a civil war between the Sinhalesedominated state and militant Sri Lanka Tamil separatist movements, Liberation Tiger of Tamil Eelam (LTTE), called as Tamil tigers interrupted by short period of negotiations in 1985, 1987, 1990, 1994/95 and 2002-2005^[23, 24]. Sociopolitical instability in Sri Lanka can also be explained by conflicts within communities of ethnic majority. Sri Lanka's political conflict, developed since 1970s, has two major facets. First, ethnic conflict between the majority Sinhala and the minority Tamil communities. Second, Singhalese, government forces and the militant movement of the Sinhala youth, Janatha Vimukrhi Peramuna(JVP) which erupted twice into an armed struggle with the aim of changing the existing political regime in 1971 and 1989^[1].

Sociopolitical stability is defined as a peace environment that a country experiences with socio, economic and political factors. Political stability influences on the economic growth ^[2, 22]. Cross country empirical studies show that political instability negatively affects economic growth ^[3, 4, 5, 6, 8, 19, 32]. Internal and external war effect economic growth

negatively in short runs [20, 27, 28]. Sociopolitical instability affects economic growth, fiscal and monetary policies [21]. Political instability negatively affects investment in short runs but it has positive affect on investment in long run during peace [9]. Time series study shows that sociopolitical in stability in British negatively affects economic growth [17]. Religions build up peace and positively influences on economic growth [4].Historical legends in Sri Lanka makes conflicts between Singhalese and Tamil by the way of who are origin of Sri Lanka [24, 25]. Ethnic discrimination through the economic policies made grievances to Tamils and creates conflicts in Sri Lanka [14]. Sinhala only Language law produced conflicts in 1956. Over playing of Buddhism in history with politics and special constitutional protection for Buddhism in Sri Lanka's multi religious communities caused religious based conflicts [29, 30, 31]. Internal colonization in Tamil's traditional homeland in the name of economic development has generated conflicts [12, 24]. Anti-Tamil riots which took place in all parts of Sri Lanka in the presence of security forces caused conflicts [12, 25]. Break down or non - effecting of pacts, signed between leaderships of majority and minority made instability [25]. Non – visionary leadership for political gain made conflicts among the communities [24, 25]. British's goals of colonization in Sri Lanka which led Sri Lanka to priceless independence failed to make people who works in national inertest caused instability. [27]. India's regional supper power minded intervention in Sri Lanka sociopolitical more instability. democracy, conflict within communities of majority and economic problems also caused sociopolitical instability in Sri Lanka.

We measure the overall sociopolitical instability by using one proxy measure annually. Sri Lanka pertains as tourist attractive nation in the world geographically. But tourist arrivals are disturbed due to the sociopolitical violence, conflicts and war. Even government's economic policy had been changed time to time from independence until now; all governments in Sri Lanka had an undistinguished policy on tourist industry for foreign exchange earning. Small changes in sociopolitical situation in Sri Lanka, made by violence, conflicts and war having a sound sensitivity in tourist arrivals. For the purpose of annual quantitative measurement of overall sociopolitical instability in Sri Lanka., the percentage change of tourist arrival stands as best measure than others in context of data availability and reliability and purpose of study. Direct and indirect contribution of tourism in Sri Lanka was around 1.57 percent to GDP which was a peak trend in peace time in 2004. It clears that representation of tourist arrivals in this study as an economic variable for contributing to GDP (economic growth) is very small. Because of censorships of war related deaths and causality, unavailability of northeast data in conflicts and war, legal problems for using the data from LTTE and unreliability of available war related data, this study uses annual growth rate of tourist arrival as proxy measure for measuring the degree of overall sociopolitical instability in Sri Lanka

MATERIALS AND METHOD

Empirical studies in the relationship between sociopolitical instability and economic growth have employed classical and new classical growth models to investigate the effects of sociopolitical instability on economic growth. This study employs new classical growth model to analyze the effects of sociopolitical instability on growth. Following model is used.

 $EG_t = g(PCA_t, HCA_t, OPEN_t, ISPI_t)$

Where, EG, PCA, HCA, OPEN and ISPI stand for the economic growth, physical capital accumulation, human capital accumulation, openness and index for sociopolitical instability respectively. Economic growth is measured by annual GDP growth rate. Physical capital accumulation is measured by annual investment expenditure growth rate. Human capital accumulation is measured by a proxy variable, annual growth rate of graduated students. Openness is measured by a usual measure, ratio of annual exports plus imports to GDP. Openness plays three roles in this model. It represents as measure of economic policy environment to economic growth, as measure of technological progress (by export and import) to economic growth and as measure of foreign trade to economic growth (foreign trade is engine of growth). According to the growth theories and most of existing empirical literatures, the relationships between dependent and independent variables are as

 $g_1>0$, $g_2>0$, $g_3>0$ and $g_4<0$.

Index for sociopolitical instability is computed from annual growth rate of tourist arrivals based on the period 1948 -2005. We take the highest growth rate of tourist arrivals during this period (88 % in 1950) as zero score and lowest growth rate of arrival (-50% in 1961) as 10 scores. Scores for other years during this period varies as 10 < ISPI >0. Zero score means strong stability and ten scores mean highest instability in the term of conflicts, conflicts related policies implemented by government, violence and war. The degree of sociopolitical instability varies from one to ten. Figure confirms that our quantitative measure for sociopolitical instability in Sri Lanka is mostly consistent with major events happened in which year.

The years which had more events such as ethnic riots, arms struggles, bills against to minority's fundamental rights, military operations in northeast and attacks on economic targets have upward trends of ISPI and downward trends of economic growth (Breaking lines). On other hand, the years which had more events to favor for peace and ethnic homogeneities such as preparing power devolution, direct peace talking and signing agreement between government and minority's political and military leadership and implementation of pacts have downward trends of ISPI and upward trends of economic growth (straight lines).

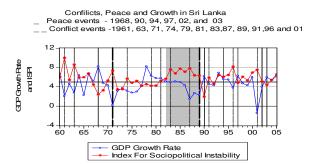


Fig. 1: Visual verification of ISPI with key stability/ instability events.

In most years, ISPI is related negatively with economic growth. The conflict within Singhalese communities in 1971 and 1989 had effected the growth severely (Bold break lines). Liberalized economic policy introduced in 1978 led Tamil minorities to higher economic discrimination. Sociopolitical instability with black July ethnic riots in 1983 had been increased and economic growth reached to down (Shaded area). India's intervention during 1987 - 1989 with carrying name of Indian Peace Keeping Force (IPKF) had increased the instability further more in both regions, Northeast and South. According our measure the highest sociopolitical instability is reported in 1961. Party's "Sathyagraha", Federal (Democratic oppositions) in North and the East, first military occupation of Tamil areas for two years (300 troops had been sent to North in first time), Federal Party MPs had been arrested and detained for six months by government and anti – Tamil riots had been led to more instability in 1961. Democratic oppositions made by minority in democratic manners against the violations of their fundamental human rights such as use of mother language, ethnic and cultural identity and political representation for economic development in North and East had been suppressed by using arms forces in 1961 severely in history of Sri Lanka.

Withdrawals of IPKF and peace talking between President R Premadasa and LTTE in 1990 reduced the instability of nation. Conflicts between and within communities were in lower degree in 1990 in comparing other years. We use the following models to estimate the effect of sociopolitical instability on economic growth.

$$\begin{split} EG_t &= B_0 + B_1 \, PCA_t + B_2 \, HCA_t + B_3 \, OPEN_t \, + \\ &\quad B_4 \, ISPI_t + e_t & (1) \\ EG_t &= B_0 \, + \quad B_1 \, PCA_t \, + \, B_2 \, HCA_t \, + \, B_3 \, OPEN_t \, + \\ &\quad B_4 \, ISPI_t \, + B_5 \, ISPI_{t-1} + e_t & (2) \\ EG_t &= B_0 \, + \quad B_1 \, PCA_t \, + \, B_2 \, HCA_t \, + \, B_3 \, OPEN_t \, + \\ &\quad B_4 \, ISPI_t \, + \, B_5 \, ISPI_{t-1} + B_6 \, ISPI_{t-2} + e_t & (3) \end{split}$$

Model one is used to estimate short run effect of ISPI on economic growth. Second and third models show the long run effect of ISPI. Time series data for all variables are taken from various publications of central bank of Sri Lanka [10, 11]. We estimate the results from 46 year annual data from 1960 to 2005. We reject null hypothesis of unit root for all series since probability values of Augmented Dickey Fuller test statistics are significant at one percent level. Our series do not have time trends they are stationary.

RESULTS AND DISCUSSION

Table 1 shows the descriptive statistics of dependent and independent variables. Average of GR. PCA, HCA, OPEN and ISPS during 1960-2005 are 4.6%, 16.7%, 14.9%, 53.2 and score 5.8 respectively. We divide our sample period based on major policy changes pursued during post 1978 as 1960-1977 and 1978 2005 to compare each others. All variables had been increased during 1978-2005. In comparing previous period, even though the physical and human capital accumulation and opening had been increased by around two folds, the growth had been increased just by 0.8 percent. Despite of an attractive economic policy environment during 1978-2005, the passive economic growth had been attained due to the increased sociopolitical instability. Table 2 reports the simple correlations among the

variables used in this empirical study. Correlations indicate that the theoretical relationships between economic growth and physical and human capital accumulation are positive and they are confirmed with growth theory. Openness is correlated with growth positively. Our objective variable sociopolitical instability is negatively correlated with economic growth, physical and human capital accumulation for all period except for human capital accumulation during 1960-1977. Indirect effect of sociopolitical instability on economic growth by the way of physical and human capital accumulation during the liberalization period is

higher than period 1960-1977 since correlations between ISPI and both capital accumulations are high during the liberalization period than other periods. Another important result in correlation analysis is that relationship between openness and sociopolitical instability during whole period and 1960-1977 are positive. (Negative between openness and growth rate of tourist arrival)

Table 1: Descriptive statistics

	1960 -2005					
Variables	GR	PCA	HCA	OPEN	ISPI	
Mean	4.6	16.7	14.9	53.2	5.8	
Maximum	8.2	66.1	251	77.5	10.0	
Minimum	-1.4	-12.2	-79.8	17.2	2.0	
Std. Dev.	1.9	18.0	48.9	16.4	1.6	
n	46	46	46	46	46	

Table 2: Correlation Matrix

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periods		1960 -2005					
variables	PCA	HCA	A	OPEN	ISPI		
GR	0.48	0.33	3	0.36	-0.42		
PCA	1	0.06	5	0.30	-0.39		
HCA		1		0.08	-0.33		
OPEN				1	0.19		
1960-1977							
variables	PCA	HCA	OPEN		ISPI		
GR	0.12	0.54	0.44		-0.41		
PCA	1	-0.23	-0.29		-0.21		
HCA		1	1 0.45 0.12		0.12		
OPEN		1		0.45			
1978-2005							
variables	PCA	HCA	OPEN		ISPI		
GR	0.66	0.26	0.35		-0.48		
PCA	1	0.16	0.40		-0.64		
HCA		1	-0.07		-0.61		
OPEN			1		-0.27		

According to estimation (1) in table 3, sociopolitical instability negative effect growth in short runs. One score increasing in sociopolitical instability (13.8 percent annual reduction of tourist arrival) during the 1960-2005 leads to around 0.44 percent reduction of economic growth. This negative effect exceeds the positive effects of physical capital accumulation (0.027*13.8 = 0.373) as well as positive effect of human capital accumulation (0.017*13.8= 0.234) on economic growth in short run. In a percentage, one percent increasing of ISPI reduces the growth by 0.032

percent. Sociopolitical causes for economic growth plays a predominant role than theoretical determinants of growth. Sociopolitical instability leads to passive economic growth in Sri Lanka even it has predominant human resources and attractive policy package in south Asia. Although current year's sociopolitical instability has negative effect on next year's economic growth, it loose its significant level in next year. This effect becomes positive but not significant after two years. Long run effect is reported in forth and fifth columns of table 3. However, third, fourth and faith lag effect of sociopolitical instability have negative effect without statistical significant (not reported). It indicates that the longest effect of sociopolitical instability on growth in Sri Lanka makes negative effects. Long run effect depends on nature of instability. If conflicts, violence and war would have been stopped permanently, the previous period's sociopolitical instability would effect current period's economic growth positively since rehabilitation programs are implemented. In Sri Lankan case, there is no permanent peace, so totally sociopolitical instability negatively effect economic growth in Sri Lanka.

Table3: Impact of sociopolitical instability on economic growth in Sri Lanka during 1960-2005 Dependent Variable: Economic growth- RG

PCA	(1) 0.027 ^b (1.87)	(2) 0.018 ° (1.84)	(3) 0.033 ° (1.81)	(4) 0.023 (1.52)
HCA	0.017^{b}	0.163 b	0.016 ^b	0.015^{b}
	(2.49)	(2.49)	(2.35)	(2.22)
OPEN	0.04^{6}	0.036^{b}	0.035 b	0.041^{a}
	(2.66)	(2.33)	(2.14)	(2.73)
ICDI	0.44h	o 40 h	0.205	o 27 h
ISPI	-0.44 ^b	-0.40 ^b	-0.38 °	-0.37 ^b
	(2.59)	(2.38)	(1.85)	(2.07)
ISPI		-0.003	-0.004	
(-1)		(0.019)	(0.026)	
ISPI			0.011	
(-2)			(0.07)	
\mathbb{R}^2	0.481	0.482	0.464	0.420
F-	9.28	6.9	5.04	6.9
DW	1.59	1.69	1.69	1.69
n	46	45	44	44

Regressions are estimated by OLS methods. Significant levels are indicated by a, b and c which donate 1, 5 and 10 percent respectively. t- Statistics are in parentheses. Probability values of Breusch-Godfrey asymptotic test for auto correlation, test for ARCH residuals, The Ramsey RESET test for model specification are insignificant at 1,5,10 percent level. Intercept is included but not reported in table.

Sri Lanka's currency had been devaluated by 22.4 and 75.9 percent respectively in 1968 and 1978

severely for economic reforms. Devaluation would have been induced the tourist arrivals to Sri Lanka hence ISPI, computed from tourist arrival would have been led to misleading our results. Even after exclusion of these two extreme observations from our sample, sociopolitical instability has negative and significant effect on economic growth in short run. It is shown in last column of table 3.

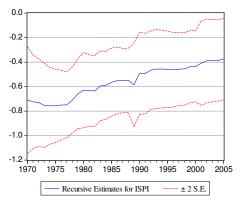


Fig. 2: Stability analysis of ISPI

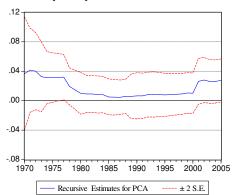


Fig. 3: Stability analysis of PCA

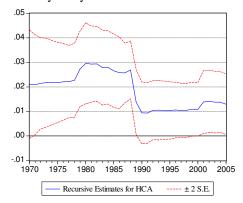


Fig. 4: Stability analysis of HCA

Figure 2, 3 and 4 show the stability of coefficients based on the model 1. In comparing other determinants

of growth, coefficient of sociopolitical stability after 1978 is more stable with negative upward trends. It has negative downward trends pre -1978. Eeffects of sociopolitical instability on growth during the liberalization period has indirect effects mostly through the physical and human capital accumulation channels rather than direct effect channel on economic growth. Both coefficients of physical and human capital accumulation in Fig. 3 and 4 have downward trends after 1978 and 1989 respectively. The correlations between economic growth and sociopolitical instability pre and post 1978 are -41 and -48 respectively. But these are -21 and -64 for physical capital accumulation and 12 and -61 for human capital accumulation respectively. The direct effect of sociopolitical instability on economic growth during 1978-2005 is less than pre-1978. Indirect effect of sociopolitical instability on growth during 1978-2005 is more than pre-1978. The coefficient of sociopolitical instability loses its effecting strength due to the increased multicollinearity between sociopolitical instability and physical and human capital accumulation during 1978 -2005.

CONCLUSION

instability Sociopolitical generated bv sociopolitical factors in Sri Lanka plays key role in determination of short and long run economic growth than theoretical determinants. Social and political causes which led nation to overall instability affect economic growth adversely since independence until 2005. Instability affects economic growth directly and indirectly. Indirect negative effect by the way of physical and human capital accumulation had been increased post 1978. Policy makers who are interested to enhance Sri Lanka's sustainable economic growth which is back born of economic development must pay attention to bring sociopolitical stability in Sri Lanka rather than formulating policies in the line of ethnic, religious and lingual interest. Even Sri Lanka attained a near 5 percent average growth during 1960-2005 despite of sociopolitical instability, the price paid for this relatively low level of growth is high since it could not attain other macroeconomic goals which are substitutable for economic growth. Sri Lanka had achieved a low level of economic growth whenever it engaged in military occupation in northeast parts of Sri Lanka with internal forces and external forces (IPKF). Instead, it attained higher economic growth when it attempted for negotiations, preparing peace proposals, implementation of peace agreements and direct peace talking with democratic political leaderships or military leaderships of minorities. This study with Sri Lanka's

46 years experiences concludes that negotiation, political solution and peace hence sociopolitical stability rather than military operations are predominant policy prescriptions for achieving economic growth which is foundation of Sri Lanka's economic prosperity. Look past before planning future.

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