DO CHOICE SPEED OF REFORMS MATTER FOR HUMAN RIGHTS DURING TRANSITION?

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ABSTRACT

Conventional wisdom posits absence of systematic relationship between economic reforms and human rights. Taking the case of transition economies, Vadlamannati & Soysa (2008) shows significant positive relationship between economic reforms and various forms of human rights. This brings us to the next question on the impact of choice and speed of reforms on human rights performance. In other words, does speed and choice of reforms increase or decrease government respect for human rights in transition economies? This is the question our paper tries to address. The Anglo-Saxon perspective is that speed of reforms lead to growth and development which inturn generates respect for human rights. While skeptics contend that rushing towards a free market economy would always be destructive as development process tends to be exclusive creating exogenous shocks leading to social and economic unrest. This leads to domestic violence and conflicts, allowing governments to resort to repressive measures.

We use a new method to construct 'speed of reforms' variable for transition economies for the period 1993 – 2006 to estimate its impact on all forms of human rights. Further, using the methodology of Wolf (1999) on discrete groupings of choice of reforms of transition economies, we classify the countries under radical, gradual and laggard reformer groups. We measure the impact of speed of reforms on human rights performance conditioned by choice of reforms.

Our findings show that speed of reforms significantly improves government respect for all forms of human rights, while volatility in reforms is associated with human rights abuses. But the interesting finding is that, controlling for the speed of reforms attained, the choice with which the country has reformed plays pivotal role in determining human rights performance. While radical reforming countries are associated with better human rights performance, gradualists and laggards share poor human rights performance.

Keywords: Speed & choice of economic Reforms; Human rights; Transition economies.

1. Introduction

The relationship between economic reforms and human rights is a contentious issue in the international political economy framework. An increasing amount of scholarship is likewise being devoted on this issue. But very often the link between the two is not properly understood as there are divergent views on this subject. Taking the case of transition economies, Vadlamannati & Soysa (2008) shows significant positive relationship between economic reforms and various forms of human rights. Thus, the focus of this study is not on economic reforms per se, but to explore the relationship between speed of economic reforms and government respect for Human rights in transition economies. Though there are vast numbers of studies that show positive relationship between speed of economic reforms and socioeconomic development[1], the consequences of speed and choice of economic reforms leading to human rights abuses remain highly litigious. Added to this, lack of any systematic empirical work on this topic makes it even more difficult to understand and is far from clear.

The literature till date presents conflicting findings on the relationship between speed and choice of reforms and socioeconomic development in transition economies, which is a key determinant of human rights performance. The pro liberal groups argue that countries which adopt radical economic reforms ensure speedy reforms and thereby experience higher economic growth and development. This however increases government respect for human rights. It is believed that speedy reforms process is most likely to affect human rights positively as it help improving quality of life. It help promote economic development, institutional efficiencies creating employment opportunities and reduce income inequality and poverty thereby leading to decline in social unrest and economic insecurity. However, another set of researchers question the validity of the argument that speed of reforms lead to greater human rights respect. They argue that greater the speed of reforms, higher the economic and social inequalities through negative feedback running from development to reforms. This creates negative exogenous shocks in the form of greater economic insecurity and social unrest paving way for the risk of political instability and outbreak of conflicts thereby (Boswell & Dixon, 1990; Rodrik, 1997; Rodrik, 1998). Thus, the governments are forced to use repressive measures and there by human rights abuses. Despite these many divergent views, any clear-cut evidence on the relationship between speed of reforms and human rights performance is lacking. The question whether speed of economic reforms improves human rights is yet unsettled.

While most have focused on the linkage between speed of economic reforms and socioeconomic conditions, the questions about choice of reforms remains unanswered. The great debate on the speed of economic reforms cropped up at the early stages of

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[1] There is an extensive research on impact of economic reforms and growth in transition economies. These include: De Melo et al. (1996); Fischer et al. (1996); De Melo et al. (1997); Fidrmuc, (2001); Karsten, (2005) and Young & Hyung (2006). They all show that economic reform has a direct impact on economic growth. White & Leavy (2000) have found the same for a set of 20 developing countries. Similar such findings were found for China by Ligang & Yu (2008). Other studies related to impact of economic reforms include: Li (1997); Lederman & Soare (2001); Basu (2004); Mwangi (2006) Vadlamannati & Vasquez (2008) and Vadlamannati (2008).

transition. One set of experts argued for what is called as 'shock therapy' or 'big bang', which advocates for faster economic reforms and radical transformation. Another set of researchers' cautioned against rapid reforms, voting for cautious approach to reforms process. These are popularly known to be 'gradualists'. It seems appropriate in the case of transition economies to gauge the impact of choice of speed of economic reforms on various forms of human rights performance. If found that speed of reforms improve human rights performance, then it would be interesting to see whether positive effect of speed of reforms is conditioned by which choice of reforms. These are the questions we try to address in this paper. Seeking to provide some empirical insight on this, we employ panel data for 26 transition economies over the period 1993 – 2006 and make use of a new measure of variable which would define 'speed of reforms' to assess whether and to what extent speed of reforms affect human rights and its direction.

1. 1. Economic Reforms, Social & Economic costs

The transition economies are in the process of transiting not only from autocratic to democratic setup, but also from centrally planned to free market economic system. In the process all these countries have agreed upon common elements of the transition process. They adopted macroeconomic liberalization and stabilization polices, popularly known as economic reforms program. Thus thrust was laid on liberalizing state controlled prices to be freely determined by the market, lowering tariff and non tariff barriers, opening up of the economy for foreign investors and integrating the price structure with that of world market. The macroeconomic stabilization focused on lowering towering inflation rates which these countries have experienced during the initial years of transition through disciplined fiscal and monetary measures. This apart, the reforms also focused on privatization, legal and institutional reforms to strengthen the state. As these countries started the process of transition, they started facing economic and social hardships. Policy makers in these economies faced with extreme discrepancies about the path to be adopted which would have lower economic and social costs. A major debate took place about the merits of fast or "radical" reforms to "gradual" reforms. Some were of the view the rapid reforms would be destructive given the fact that economies are transiting from centrally planned setup to more free market economy. Others felt that piecemeal reforms would ensure slower growth and development as gestation period to reap the potential benefits would be longer. But as it turned out, many transition economies plunged ahead with 'radical transformation' style of reforms. The initial objective of the reforms was to quickly implement the following: macroeconomic stabilization, price liberalization, reduction of direct subsidies, removal of entry barriers to the creation of new firms, carrying out small-scale privatization, and introduction of a social safety net. After well succeeding in effective implementation, the second phase of reforms include more comprehensive type of reforms which focused on building institutional setup, like: large-scale privatization, in-depth development of a commercial banking system, taxation reforms, labor market regulations and institutions related to the social safety net, and establishment and enforcement of a market oriented legal system.

However, many blamed 'shock therapy / radical reforms' because it worsened instead of improving the economic and social conditions of the people. All countries experienced

significant drop in their GDP growth rates with shift towards agriculture and services sector and very high rates of inflation. During the structural shift from industry to agriculture and services[2], many left unemployed and there was substantial reduction in wages of laborers[3]. This move not only created unemployment but led to underemployment in all these countries. This led to rapid increase in income inequality paving way for higher levels of poverty[4]. It is estimated that about half of the population in Armenia and Kyrgyz Republic were under severe poverty during the transition period though out the 1990s (Spoor, 2003). On the other hand, majority of the countries saw their savings rate decline drastically between 1990 and 2001. Some countries like Armenia witnessed negative savings rate forcing to relay heavily on remittances from abroad from its diaspora. Adding fuel to fire, rapid financial liberalization as a strategy of 'shock therapy' process led to greater increase in interest rate spread. This effectively means very high interest rates, discouraging investment opportunities in the countries arising from complete failure of banking system role as intermediary between financial development and economic growth. All these forced governments to relay heavily on external debt, aid and inflow of foreign funds.

On the name of rapid economic reforms, greater economic freedom allowed wealthy to exercise their economic rights to accumulate the wealth, while majority of the population were languishing below poverty line. Many started questioning the credibility of economic reforms process which led to uneven growth and equity in these countries during the initial stages of transition[5]. Haddad (1998) quoted from a Russian reported interview of a citizen:

"…..I am tired of all this stuff about economic freedom, we need work NOT freedom……"

Thus, reforms created a sense of economic insecurity among the people during the initial stages of implementing the reforms with rapid pace. Haddad (1998) opines that, "*without economic security one cannot formulate and pursue a life plan of one's own choosing. One would always be engaged in survival activities with little or no time left for self-reflection and self-development.*" One of the major problems was clearly the worst initial conditions and recession that made all the countries go through painful transition during the early 1990s.

In the second half of the 1990s, situation looked quite better. This improvement is led by Poland which largely succeeded in creating free market economy. Poland was followed by Bulgaria, Romania, Latvia, Lithuania and Slovakia republic. However, the

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[2] For example, in Armenia, the industry shape to GDP fell from 52% in 1990 to under 34% in 2002. But during the same period the share of Agriculture in GDP increased from 17% to 30%. In Kyrgyz Republic industry share fell from 36% to 26%, Uzbekistan from 33% to 22% and Mongolia 30% to 17% to highlight a few (World Development Indicators, 2006).

[3] For example, the unemployment rate was16% in Bulgaria and Poland, 12% in Hungary and Slovakia, 10% in Romania, 9% in Slovenia (Svejnar, 2001).

[4] For example in Russia and Uzbekistan, the Gini was around 57% during early 1990s.

[5] Many public opinion surveys for example in Poland, Czech Republic and Hungary shows that majority of individuals felt that it is not useful to change the political and economic system. Vast majority also felt that losses from transition exceeded the gains (Public Opinion Research Center, 1999 quoted in Svejnar, 2001).

performance of many other transition economies has fallen short of expectations. Many could not recover from the initial shocks and worse recession rose from implementing rapid economic reforms. Thus, moving from pervasive state control regime towards a free market economy during the mid 1990s remained partial. Except a few, many countries did not even dare to implement the reforms which focused on setting up institutional structure. The standard of living of people declined as there was uneven progress and development within the countries and between the countries which increased inequality levels increasing poverty[6] to higher levels. During this period, many countries also witnessed rapid rise in mortality and death rates. Thus, far from experiencing economic growth and development, there was complete economic and social chaos, which surprised many neoliberals who have called for radical reforms. On the other hand, critics of radical reforms pressed for gradualistic approach in implementing economic reforms.

Literature on reforms and human rights show that when the new form of polices are designed and adopted swiftly, it leads to wide spread agitation to resist making substantial policy changes in the fear that it could affect the vast sections of the population. This most of the times leads to angry mob protests or conflicts, or even deadly civil war, like in the case of some of these transition economies in the early phases of transition[7], forcing the governments to adopt repressive tactics (Davenport, 1995; Davidson 2002 and Fields, 2003).

However, despite the painful transition process led by radical economic reforms, almost all the transition economies have witnessed piecemeal success post 2000. Macroeconomic stabilization yielded small successes as inflation in majority of the countries is brought under control. Economic growth is slowly back on the track and institutional reforms such as antimonopoly law, regulatory setups, competition policy, corruption laws are underway. Some of the Central & East European countries like Poland, Croatia, Bulgaria, Slovakia, Lithuania and Romania have started witnessing the fruits of economic reforms. Infact countries like Romania, Bulgaria and Poland are now member states of EU. In a report published by IMF (2000) says that Freedom House classified 20 transition countries under the category of 'free' or 'partly free' for political and civil liberties.

The study on transition economies is a unique case in comparative economies as all these economies started transiting roughly at same point of time. Different countries had

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[6] For a detailed study on impact of speedy transition on poverty, inequality and conflicts, see Ellman, (2000); World Bank (2001); Van Tongeren, et al. (2002) and Spoor (2003).

[7] The early transition period was characterized by violent local armed conflicts in these economies. Large scale of conflicts in the form of civil war and local conflicts in transition economies include: Uzbekistan, Kyrgyzstan, Moldova, Russia, Armenia, Azerbaijan, Russia, Tajikistan and Georgia. According to UNHCR (2002 & 2003), Statistical Yearbook 2001 and UNICEF (2003), the human cost of these local conflicts was that over 200,000 were reported to be dead and refugees and internally displaced population numbers were in millions. While Bosnia & Herzegovina (former Yugoslavia); Croatia and Kosovo (Serbia and Montenegro) and Macedonia experienced international armed conflicts leading to around 330,000 deaths and over 15,00,000 were internally displayed population and refugees (UNICEF, 2001, 2003 and 2003). These internally displaced population and refugees belong to the most poorest section of the society (Spoor, 2003).

varying initial conditions (World Bank, 2000; Swinnen, 2003) and adopted different routes of implementing economic reforms process at different speed (Kolodko, 2000). Almost all the transition economies have faced economic and social hardships during their transition leading to inequality, poverty and conflicts, thereby human rights violations. But now majority of them are exhibiting very high but varying speed in further implementing economic reforms. Their comparative experiences thus provide a unique opportunity to study the interactions amongst the choice and speed of reforms and their impact on human rights performance.

Rest of the paper is structured as follows: next section presents the theoretical arguments of modernists versus traditionalists. We introduce our measures of human rights, speed and choice of economic reforms in section three. In section four we explain our empirical results and section five concludes the study. Lastly, we test the robustness of the results and are presented in Annexures.

## 2. Speed of Reforms & Human Rights – The Interrelationship

It is well know that both theoretical and empirical literature on relationship between economic reforms and human rights give contradictory picture. Though there is no direct relationship established with respect to speed and choice of reforms and human rights performance, we identify two schools of thoughts viz., Anglo-Saxon and critical schools of thought arguing for and against the choice and speed of reforms and their implications on socioeconomic conditions, which has direct impact on human rights conditions. The Anglo-Saxon school of thought rallies its support behind speedy reforms which are beneficial for economy in long run and hence positive affect on human rights, while critical school of thought argues otherwise. We present the theoretical underpinnings of both schools of thoughts.

2. 1. Anglo-Saxon Perspective

The Anglo-Saxon group argues in favour of speedy reforms process which would provide economic, social and political benefits. If this materializes, the implications of this would be increase in human rights respect. The figure 1 depicts this chain relationship between speed of reforms and human rights performance. There is a vast amount of literature which show that developed countries often tend have greater respect for all forms of human rights (Poe, Tate & Keith, 1999 and Milner, Leblang & Poe, 2004). Essentially the basic objective behind initiation of economic reforms program in the case of transition economies is to move towards a free market economy and progress towards greater development. Advocating for a faster transition, Lipton & Sachs (1990) assert political and economic logic for faster economic reforms. Supporting this view are Klaus (1993), Balcerowicz & Gelb (1994) who argue that faster reforms process has comparative advantage over piecemeal reforms process. Infact there are many studies who found empirical support for the view that speedy reforms lead to higher growth and development. The study of World Development Report conducted by Melo, Denizer & Gelb (1996, was the first and later 1997a, 1997b) found support for this argument. Similarly, Sachs (1996) and Sachs & Woo (1997) find that *"faster reform was associated*

with higher, not lower, growth." Echoing the same views are some of the prominent studies of Fischer, Sahay & Vegh (1997, a & b); Krueger & Ciolko (1996); Angjellari-Dajci (2002); Fischer & Sahay (2000); Havrylyshyn *et al.* (1998 & 2000); Jaros (2001); Campos & Coricelli (2002) and World Bank (2002)[8]. Employing different methods of speed of reforms, Heybey & Murrell (1997); Hallagan & Jun (2000); Popov (2000); Staehr (2003) and Lee & Jeong (2006) finds that speedy reforms are beneficial for transition economies in long term but its effect is limited in short and medium term. Fidrmuc (2001) finds that "*...On the one hand, countries that postponed radical reforms or implemented them more gradually may have succeeded in avoiding some of the adverse effects experienced by the more reform-enthusiastic countries. Nevertheless, such intermediate reforms apparently did not prevent disorganization effects (see Blanchard and Kremer, 1997; and Roland and Verdier, 1999) from occurring eventually. On the contrary, the outcome of the intermediate reform is worse than either that of a full reform or of no reform....*"

Figure 1: Liberal perspective on Speed of Reforms & Human Rights

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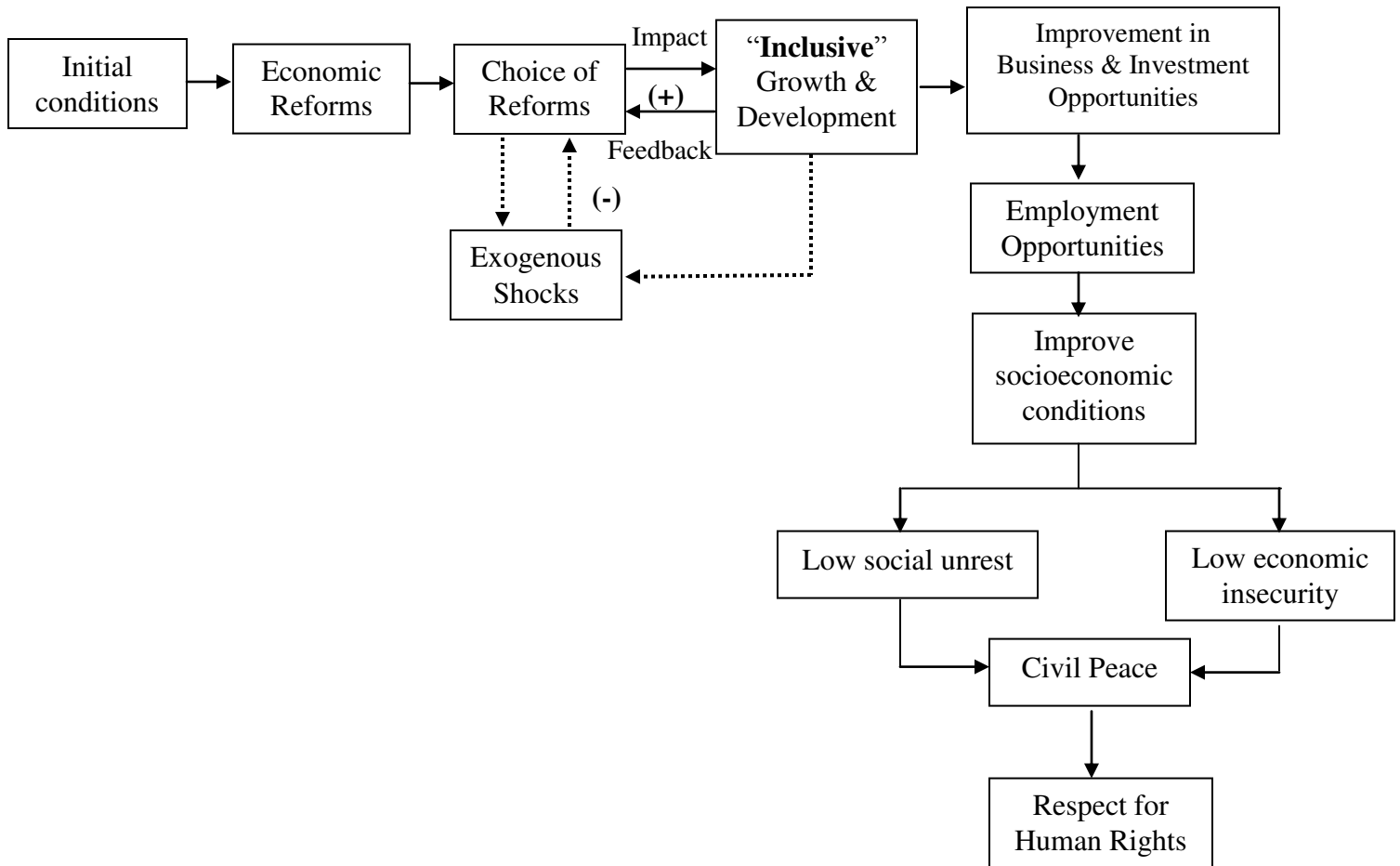
[8] Most of these studies use sum or average of various reform indices or cumulative liberalization index developed by Melo et al. (1996) and show that reforms are correlated with growth.

Arguing against gradualist approach of reforms, Anglo-Saxons' feel that the potential gains arising from economic reforms would be very limited if the government adopts gradualist approach in implementing the reforms. The piecemeal reforms process would not only take longer time to gain the potential benefits, but would give scope for reversing the reforms policies leading to macroeconomic uncertainty. The piecemeal approach of reforms endangers economic security of the people due to limited gains from half baked policies like dismantling administered price mechanism without actually curbing monopoly, resorting to piecemeal privatization with an objective to fund the fiscal deficit, attracting FDI by placing higher sectoral caps on equity investments, increase in social sector spending without formulating appropriate schemes for unemployment benefit and pension policies. Giving support to this viewpoint is Dabrowski (1996) who argues that *"the faster and more comprehensive the economic reform, the more chance there is to minimize its economic, social, and political costs, and to avoid chronic macroeconomic mismanagement. A more radical and disciplined path of transition is all the more important when initial conditions are less favorable and negative external shocks are greater."* All these studies indicate that speedy reforms are beneficial for growth[9]. The literature on human rights shows that growth and development process are associated with government respect for human rights. Thus, speedy economic reforms help achieve growth and development which should eventually lead to human rights respect. Obviously, when the growth and development process tends to be 'inclusive' (creation of equal economic opportunities to all sections in the society) there will be a positive feedback from development to choice of reforms and vulnerability to exogenous shocks would be less.

The other key objective of economic reforms is reducing the role of state in economic affairs. Experts like Cranston (1964) and Bergh (2006) argue that government respect for human rights would increase if the role of the state is curtailed[10]. Neoliberal economists believe that economic reforms process over the period of time help reduce the size of the government. Advocates of speedy reforms also agree on this as Balcerowicz (1993) feels that one way to reduce the role of state would be to implement economic reforms at faster pace. Faster reforms ensure transition process to be irreversible. Rapid reforms process lead to drastic changes interms of economic and institutional aspects that creates political constraints for the governments in future when attempting for a reversal and thereby reducing its role in economic affairs of the state.

Growth and development (assuming exogenous shocks to be less due to positive feedback running from development to choice of reforms) led by limited role of state help create conducive business environment. This improves investments creating job opportunities leading to decline in poor socioeconomic conditions (William et. al, 1978; Rothgeb, 1989; Robert, 1995; IMF, 1997; Zhao, 1998). There is also vast amount of literature which confirms that indeed economic growth and development lead to positive effect on

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[9] There is vast literature on the relationship between economic reforms and growth in transition economies. But Havrylyshyn (2001) captures extensive literature review on this aspect.

[10] See Hayek (1984) for a detailed linkage between the importance of role of the state and human freedom. Also see the speech of Prof. Milton Friedman on "*Economic Freedom, Human Freedom & Political Freedom*" delivered at Smith Center in Nov. 1991.

socioeconomic conditions (Moon & Dixon, 1985; Spalding, 1986; Park, 1987; Milner, Poe & Leblang, 1999; Milner, 2000; Milner, Leblang & Poe, 2004). The improvement in socioeconomic conditions leads to creating peaceful conditions in the home through lower social and economic unrest (Flanagan & Fogelman, 1971; Jacobsen, 1996) and thereby increasing government respect for human rights.

2. 2. Alternative Perspective

The second school of thought questions the role of speed of reforms in promoting socioeconomic development. Though they agree with trickle down process that reforms increase human rights, they argue that this can also have negative effect if the growth and development process led by speedy reforms remains "exclusive". Infact the studies by Aslund, Boone & Johnson (1996) find that there is no robust significant correlation between growth and economic reforms. Also, Falcetti et al. (2002) and Merlevede (2003) find less robust results on impact of economic reforms on economic growth.

Figure 2: Alternative perspective on Speed of Reforms & Human Rights
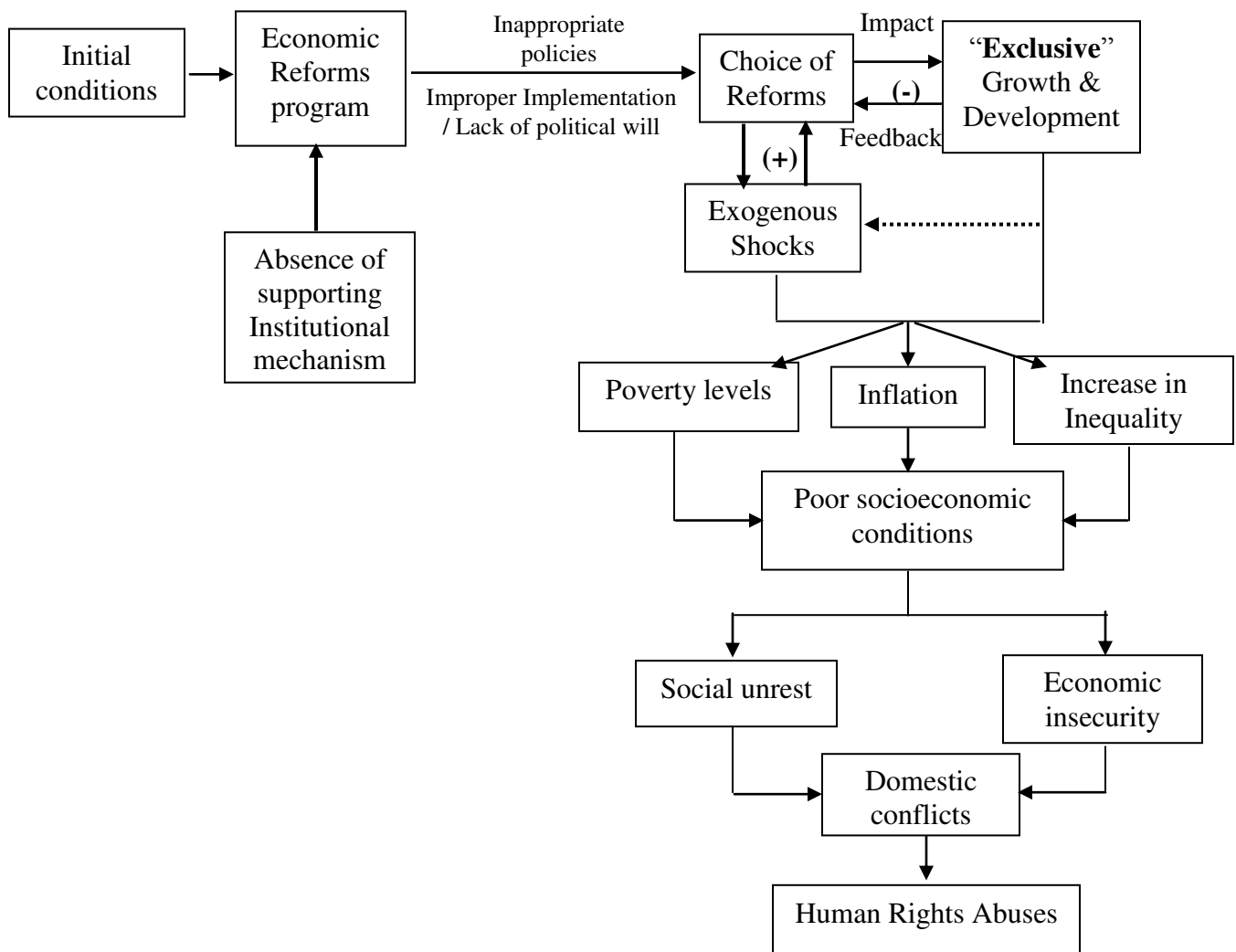
They argue that the reason for previous studies finding significant positive effect was due to the simultaneity bias between reforms and growth. Radulescu et al. (2002) arrive at similar conclusions. Moreover, they argue that lack of market supporting institutional mechanism is the root cause for the failure of radical reforms process. This is exactly what was argued by Siebert, Raiser & Langhammer (1996) who lays emphasis on reforms related to microeconomic factors and not on macroeconomic factors. This is even more evident in the case of transition economies and hence the Anglo-Saxon perspective is held inappropriate by its critics. Many experts like Kornai, (1992, 1994); Dewatripont & Roland (1992); Laban & Wolf (1993); Murrell (1993, 1995) and Taylor (1994) all argue in favour of building up proper institutional structure which includes: protection of property rights, effective regulations, efficient legal protection, placing proper social security measures, creating accessible distributional networks, removal of money constraints and stringent labour regulations, before undertaking radical economic reforms process. Failing to do so would be disastrous as many economies in the early transition phase faced with confusion and lack of consensus among which policy to be embraced and have adopted radical reforms measures and were made to suffer. For example, on one hand, price liberalization reforms were adopted very swiftly without proper institutional support (like access to credit, distributional networks and lack of protection of legal and property rights) for the new entrants to break the existing monopolies. On the other hand due to inappropriate government spendings many witnessed huge fiscal deficits, both leading to hyperinflation across the region[11]. Exactly during this time, many countries also witnessed steep fall in GDP growth rates compared to the level of pre-transition (EBRD, 1996). This led to huge unemployment crisis in the region. All this had a tremendous impact on the standard of living of the people. The empirical study by Brainerd (1998) shows that the speed with which the economic reforms were introduced resulted in significant rise in poverty levels contributing to increase in mortality and death rates. Due to higher budgetary constraints the governments borrowed heavily, cutting the developmental spending on education, health, social security and welfare measures leading to greater amount of inequality. All these resulted in increasing crime rate, riots and civil conflicts in the region.

Another argument put forth is about initiating inappropriate economic reforms polices and resorting to swift implementation of these polices lead to "exclusive" economic growth and development process. This gives rise to negative feedback to reforms leading to exogenous shocks in the form of rise in inflation, unemployment, and increase in income and wage inequalities leading to stagnant poverty levels. Thus, the poor socioeconomic conditions generate greater economic insecurity and social unrest creating hardships to the poorer sections of the society (Veerland, 2002). This often paves way for public protests, strikes and lockouts risking political instability and outbreak of conflicts thereby (Boswell & Dixon, 1990; Barbieri, 1996; Rodrik, 1997a, b; Rodrik, 1998; Rodriguez & Rodrik, 2000; Blinder, 2006 and Krugman, 2007) leading to government resorting to repressive measures (see figure 2).

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[11] Many countries had fiscal deficit in double digits; some even had as much as 58% and inflation touched five digit marks. Georgia had 15606.5% annual inflation in 1994. Similarly, Azerbaijan had 1129.04% & 11664% in 1993, 1994 respectively. Armenia had 5244.20% inflation in 1994; Belarus faced 1190% in 1993 & 2221% in 1994, while Bulgaria in 1997 saw inflation touching 1058%, Croatia has 1500% in 1993.

3. Modeling "Human rights and Speed & Choice of Reforms"

To investigate the impact of choice and speed of reforms on Human rights performance, it is convenient to define what we considered by Human Rights performance. The concept of Human Rights performance has always been problematic. However, we take into account all those aspects which are related to abuses of human rights. Basically, we consider the "integrity of people", "empowerment rights of people" and "state terrorism". To capture these broad issues, we take into account two widely used indicators in literature dealing with Human rights abuses. These indicators are physical integrity rights index and empowerment rights index[12]. Similar to Dreher, Gassebner & Siemers (2007) we use two indices in our analysis.

a. Physical Integrity Rights Index

The physical integrity rights index reported in the Human rights database (CIRI) contain information about the pattern and sequence of government respect for physical integrity rights in addition to the level. Here, the pattern is defined as "*the association of different levels of government respect for several physical integrity rights with a single, overall scale score*" (Cingranelli & Richards, 1999). Sequence is defined as "*the order in which governments have a propensity to violate particular physical integrity rights*" (Cingranelli & Richards, 1999). The CIRI data are based on the human rights practices of governments and any of its agents, such as police or paramilitary forces. The CIRI measure is an additive index constructed from observations on torture, extrajudicial killing, political imprisonment, and disappearances. It ranges from 0, meaning no government respect for these four human rights to 8, or full government respect for these four human rights.

b. Empowerment Rights Index

Empowerment rights index is a more general way of defining human rights, which extends beyond state terrorism and includes various other issues related to political and civil rights of the people. The government respect for political and civil rights is a 10-point additive scale constructed using probabilistic cumulative scale analysis (Richards, Gelleny, and Sacko 2001). This is an additive index constructed from the freedom of movement, freedom of speech, workers' rights, political participation, and freedom of religion indicators. It ranges from 0 (no government respect for these five rights) to 10 (full government respect for these five rights). The source of information used for coding these five variables was from the U.S. State Department's annual country reports on Human rights practices. To check for robustness of these two indices, we also run the results by taking into consideration civil liberties and political freedom constructed by Freedom House.

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[12] See Carleton & Stohl (1987); Gibney & Dalton (1997); Poe & Meernik (1995); Poe & Tate (1994); Stohl et al. (1984); Cingranelli & Richards (1999); Richards (1998); Zanger (2000); Neumayer (2005); Dreher, Gassebner & Siemers (2007) and Eriksen & de Soysa (2008).

Thus, in the first model Physical Integrity Rights variable is considered as dependent, while the second model considers Empowerment Rights index. Therefore, the two parsimonious models for Human rights performance are specified as follows:

Physical Integrity Rights $= \delta_1 + \psi_2$ **HYPOTHESIS VARIABLES** $_{it} + \psi_3$ **Economic Growth Rate** $_{it} +$

ψ_4 **log (Economic Development)** $_{it} + \psi_5$ **War years** $_{it} + \psi_6$ **Pace years** $_{it} + \psi_7$

Political Regime $_{it} + \psi_8$ **log (Population)**$_{it} + \psi_9$ **Ethnic Fractionalization** $_{it} + \psi_{10}$

British / Socialist Legal System $_{it} + \psi_{11}$ **Oil Exports** $_{it} + \psi_{12}$ **log (Reforms**

years / Communist years) $_{it} + \psi_{13}$ **Time** $_{it} + \epsilon_{it}$

.... (1)

Empowerment Rights $= \alpha_1 + \Omega_2$ **HYPOTHESIS VARIABLES** $_{it} + \Omega_3$ **Economic Growth Rate** $_{it} +$

Ω_4 **log (Economic Development)** $_{it} + \Omega_5$ **War years** $_{it} + \Omega_6$ **Pace years** $_{it} + \Omega_7$

Political Regime $_{it} + \Omega_8$ **log (Population)**$_{it} + \Omega_9$ **Ethnic Fractionalization** $_{it} +$

Ω_{10} **British / Socialist Legal System** $_{it} + \Omega_{11}$ **Oil Exports** $_{it} + \Omega_{12}$ **log (Reforms**

years / Communist years) $_{it} + \Omega_{13}$ **Time** $_{it} + \gamma_{it}$

.... (2)

Where: **i t** = country "i" at time "t"; $\delta\ \phi$ = Intercept for the equations; $\psi\ \Omega$ **=** Regression Coefficients for variable "n"; $\epsilon\ \gamma$ **=** error terms for country "i" at time "t". Obviously, the hypothesis variables are speed and choice of reforms, but a detailed discussion on construction of these two variables along with other alternative measured variables is discussed in the next section 3.1.

This empirical analysis covers 26 transition economies (13 CIS, three Baltic and 10 Central & East European countries, see annexure 1) for the period 1993 to 2006. We use pooled time-series cross-sectional (TSCS) to fixed effects method because some of the variables like democracy scores and ethnic fractionalization index are time invariant series. We estimate all models using year dummies to estimate any effects of trending data. However, the pooled time-series cross-sectional (TCSC) data may exhibit Heteroskedasticity and serial correlation problems. While these problems do not bias the estimated coefficients as pooled regression analysis in itself is a more robust method for large sample consisting of cross section and time series data. However, they often tend to cause biased standard errors for coefficients, producing invalid statistical inferences. To deal with these problems, we estimated for all the models the Huber-White robust standard errors clustered over countries. These estimated standard errors are robust to both Heteroskedasticity and to a general type of serial correlation within the cross-section unit (Rogers, 1993 and Williams, 2000).

3. 1. Main independent variables: 'Hypothesis variables'

a. Speed of Economic Reforms

There is a considerable amount literature to estimate the effects of speed of economic reforms on the long run rate of growth of output of the theoretical growth models and socioeconomic development process. In many of these studies speed of economic reforms is measured either by a simple dummy variable or by calculating rate of growth of economic reforms index (Merlevede & Schoors, 2004 and Vadlamannati & Vasquez 2008). Later on, other measures of reforms were developed using different methods. The well known Melo, Denizer & Gelb (1996) speed of reforms variable is based on cumulative index of economic reforms. In the first place, they developed an index which measures economic reforms. Liberalization in internal markets, external markets, and private sector entry were considered to develop the reforms index with weights assigned 0.30 for the first two and 0.40 for the last indicator. The data set includes annual measures on these three components for 28 transition economies from 1989 to 1995. In the next stage, they computed the cumulative variable of this reforms index which is the sum of all previous annual liberalization indices from 1989 onwards, to make it a proxy for speed of reforms. Using this index, Melo, Denizer & Gelb (1996) show that speed of reforms has a positive impact of economic growth in transition economies. This study was followed by Fischer, Sahay & Vegh (1997, a & b); Krueger & Ciolko (1996); Angjellari-Dajci (1999); Fischer & Sahay (2000); Havrylyshyn *et al.* (1998 & 2000); Jaros (2001); Campos & Coricelli (2002), all using the cumulative reforms index as proxy for speed of reforms and found positive effect on output.

Others, while accepting economic reforms index is an important to measure of speed of reforms, argued that the major drawback with this cumulative reforms index is that it does not distinguish between policy and policy changes. Meaning, the index do not reflect changes in the reforms policy, rather it reflects the position of policy. Another major problem with this method is that it fails to distinguish the effect of speed of reforms between the countries. This means the countries like Bulgaria, Hungary, Slovenia which started economic reforms before 1989, will have a higher cumulative index to other transition economies, suggesting that speed of reforms in these three countries are higher. Another drawback of this method is that it fails to recognize the countries which see no change in economic reforms in the current year and yet the cumulative reforms index will still increase for these countries. For example if a country has a reforms score of 4 in the starting year and has not undertaken any reforms measures in the next 2 years will have a score of 12 at the end of third year. On the other hand, a country with an initial score of 2 under takes reforms in the next two years with scores of 5 each would also have the score of 12 at the end of third year. This is because of the additive property of this measure, which makes it biased. There are also studies like Sachs' & Woo (1997) used EBRD's economic reforms index as proxy for speed of reforms. This index range between 1 and 4.3, 1 means centrally planned economy and 4.3 is full free market economy. This is also not a perfect method to measure the speed of reforms simply because this index tells us the state of reforms at current point of time rather than the pace at which reforms are being introduced. Therefore all these measures which are used as proxies for speed of reforms are incomprehensive methods.

Taking into account these loopholes, Heybey & Murrell (1997) and Fleisher, Sabirianova & Wang (2004) constructed speed of reforms variable using three disaggregate liberalization indices developed by Melo, Denizer & Gelb (1996). The index is constructed as, "*Speed equals one fourth of the difference between the value of the liberalization index in the fourth year of post-communist reform and the value of the liberalization index in the last year of the old regime (L_0), capturing the extent of policy change. L_0 is also included in the equation, because the degree of liberalization at the beginning of post-communist reforms is expected to affect growth performance*" (Heybey & Murrell, 1997). This method certainly takes into account the concerns raised above. However, this speed of reforms variable is constructed only for single point of time, i.e. for the year 1995. Our study is a cross sectional time series ranging from 1993 to 2006. Thus, we come up with our method of constructing time series index keeping in mind the concerns raised above. The speed of reforms index is:

Economic Reforms in *t* – Economic reforms position in first year of new regime

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Total number of years in transition/reforms

Where, ***t*** is current year; economic reforms is the EBRD's economic reforms index; first year of new regime is the year in which the country attained independence and total transition years include count of all the years starting from 1990 to 2006. The main advantage of using this method is that it help distinguish between policy of reforms per se and reforms policy changes by using separate variables to measure speed of economic reforms and initial conditions of reforms.

b. Alternative measures of Speed of Reforms

Apart from our standard measure of speed of reforms, we make use of other alternative measures of speed of reforms to cross check our results. To this end, we use two different methods which include:

i. Residual method

There is a wide range of debate amongst researchers about the determinants of human rights in the context of speed of economic reforms. One set of researchers argue that speed of reforms determine human rights performances in transition economies. While another set of research group argues that initial conditions are the most important factor which actually increases the pace of reforms and thereby determines human rights performance. Therefore taking into consideration both these arguments shows that speed of reforms is infact determined by initial conditions. This apart other key variables include: economic output, economic performance and political constraints. Since reform speed itself is predicted to be a function of starting positions, solving this problem includes two step procedures:

$$\text{Speed of reforms}_{it} = \varphi_0 + \beta_1 \text{ Initial Conditions}_{it} + \beta_2 \text{ Control Variables}_{it} + \xi_{it}$$

.... (3)

We run this pooled regression model for equation (3) and from the estimates of (3) residuals $\{\varphi_{it}\}$ are obtained. These are the variations in speed of reforms distinct to their respective starting positions. The second step includes:

$$\textbf{Physical Integrity Rights}_{it} = \lambda_0 + \Upsilon_1 \{\varphi_{it}\} + \Upsilon_2 \textbf{ Control Variables}_{it} + \xi_{it}$$

.... (4)

$$\textbf{Empowerment Rights}_{it} = \zeta_0 + \acute{\omega}_1 \{\varphi_{it}\} + \acute{\omega}_2 \textbf{ Control Variables}_{it} + \varpi_{it}$$

.... (5)

The residuals $\{\varphi_{it}\}$ from the estimated speed of reforms equation, (residual speed of reforms = actual speed of reforms – predicted speed of reforms), is used as an explanatory variable in the estimations (4 & 5). This we name it as "variation in speed of reforms", obtained through 'residual method'. We make use of this new variable to replace our first speed of reforms variable to check for variability of the results.

ii. Cumulative Reforms Index

As highlighted earlier, many studies have used cumulative reforms index as a proxy for speed of reforms. The cumulative reforms index not only measures the state of reforms in the current year, but also includes the sum of previous years' reforms efforts of a country. The EBRD's economic reforms index is used for this purpose. Thus, the sum of all the previous years reforms index will help obtain the information about the extent of reforms undertaken in earlier years. Justifying the usage of such cumulative indices as proxy for speed of reforms, Melo, Denizer & Gelb (1996) points out that "...*at any given moment, economic performance will not be determined by the degree of liberalization in that moment alone; it will also be shaped by institutional and behavioral changes stimulated by prior policy reforms*". Thus, taking this argument into consideration, we include this measure at the later stage of the analysis to check for robustness of the results.

c. Choice of Reforms

Apart from measuring speed of reforms, there is also a wide range of debate on quantifying the choice of reforms adopted by various transition economies. As highlighted in figures 1 and 2, the choice of reforms which a country prefers to adopt would very well influence the socioeconomic performance. This also has positive/negative feedback running from performance to the choice of reforms, which inturn determine the pace of reforms. Many countries followed variety strategies to carry forward their reforms agenda. Lack of any systematic evidence of choice effects of reforms on socioeconomic conditions stems from the complications related to measurement of such variable. It is very difficult to quantify and construct measurable hypothesis variables, radical and gradual reforms. To this end, we make use of the information provided by Wolf (1999) on discrete groupings of choice of reforms of

transition economies. This discrete groupings classify the choice of reforms adopted by various countries under three heads viz., radicals, gradualists and laggards.

Following the Wolf (1999) method, each country adopting reform path is defined as radical/gradualist/ laggard based on the following information:

Radical Reformers: If EBRD's economic reforms index increased by atleast the value of 1.0 in any given two year period and equals to or above the score of 3.0 at the end of the sample period (i.e. 2006) is known to be a radical reformer. In other words, if a country satisfies this condition, it means that the country is inching closer towards a free market economy pretty fast.

Gradual Reformers: If EBRD's economic reforms index do not increase by 1.0 in any point of time in whole sample period but has the final score of 3.0 at the end of the sample period then the country is known to be a gradual reformer. Meaning, country is moving gradually closer towards a free market economy.

Laggard Reformers: If EBRD's economic reforms index do not increase by 1.0 in any point of time in whole sample period and also the final score of 3.0 at the end of the sample period is not reached, then the country is known to be a laggard. This means the country is very far away in moving towards a free market economy.

Transition economies like, Czech Republic, Poland, Estonia, Lithuania, Albania, Hungary have adopted radical reforms with focus on stabilization and rapid liberalization achieved through large scale privatization, no restrictions on entry of private and foreign firms, taxation reforms and labor market regulatory reforms. The countries like, Slovenia, Romania, Macedonia, Mongolia, Latvia, Kyrgyz Republic followed gradual reforms process, while rest of the countries are laggards in implementing the reforms process, which means they neither satisfy the conditions of radical reforms process nor gradual reforms (see annexure 2). An important distinction between gradual reformers and laggards is made only to highlight that in sample there are certain countries which are implementing full economic reforms but in slow pace in comparison to countries whose pace is not only very slow, but have almost halted implementing economic reforms.

Using this measure, we create two variables namely, choice of reforms and interactive effect between choice and speed of reforms. We formulate three variables by name, radical reformers, gradual reformers and laggards to provide ordinal rating:

Radical reformer = "1" if the country belongs to this group; otherwise "0"

Gradual reformer = "1" if the country belongs to this group; otherwise "0"

Laggard reformer = "1" if the country belongs to this group; otherwise "0"

To measure the impact of speed of reforms on human rights performance conditioned by choice of reforms, we interact each dummy variable (radical reformers, gradual reformers and laggards) with speed of reforms variable.

d. Volatility in Economic Reforms

We are also interested in probing the impact of volatility in economic reforms process on human rights performance in transition economies. Though there are several studies which have focused on implications of reforms on socioeconomic conditions, the impact of volatility in economic reforms process is largely neglected and untouched. This is very important for transition countries because a higher volatility in economic reforms brings uncertainty in macroeconomic policy framework. This affects the socioeconomic conditions of the people at large, leading to chaos and civil disorder. This has a direct effect on human rights conditions as governments would resort to repression to contain civil disorder. We compute the volatility in economic reforms taking EBRD's economic reforms index.

$$\sigma_t^{ERI} = \sigma_{t-1}^{ERI} + \sigma_{t-2}^{ERI} + \sigma_{t-3}^{ERI} + \sigma_{t-4}^{ERI} + \sigma_{t-5}^{ERI}$$

……………………………….. (6)

σ_t^{ERI} is volatility in actual Economic Reforms Index (ERI) in current year (t). The volatility in economic reforms is simply the standard deviation of actual ERI for t-1, t-2, t-3, t-4 and t-5 years.

3. 2. Control Variables

Previous research on the violations of human rights has established several key factors that explain why governments violate human rights (McKilay & Cohan, 1975; Strouse & Claude, 1976; Park, 1987; Cingranelli, 1992; Poe & Tate, 1994; Davenport, 1995, 1996, 1997; King, 1999; Poe, Tate & Linda, 1999; Carey & Poe, 2004 and Landman, 2005). Using their arguments, we divide these control variables into two subheads namely, institutional and economic variables. The variables under later group include: economic growth; economic development and abundant natural resources. The variables selected under former head include: population pressures; democracy levels; civil war presence; civil peace years; ethnic fractionalization and British/Socialist legal heritage.

The literature shows that there is a positive impact of development and equity on human rights (Mitchell & Mc Cormick, 1988; Boswell & Dixon, 1990; Marks & Diamond, 1992; Davenport 1995; Blanton, 1999; Frey et al., 1999; Milner, 2002; Richards, Gelleny & Sacko, 2001; Sen 1999; Kaufmann 2004; Kaufmann, Kraay, & Mastruzzi 2005; Blanton & Blanton, 2006; Eriksen & de Soysa, 2008; Vadlamannati & Tamazian, 2007 and Vadlamannati & de Soysa 2008). The models control the effects of development and growth by introducing logged value of per capita GDP in US$ PPP constant terms and the economic growth rate. The data for both these variables come from world development indicators of World Bank 2006.

On institutional factors, literature shows that the level of democracy is a key variable associated with human rights. The democracy scores take shape as a discrete variable taking the value 1 if the polity IV, variable polity II, is greater than 6 on the 10-point scale and 0 if not (Jaggers & Gurr, 1995)[13]. The studies show that democracy affects rights only at very high levels (Davenport & Armstrong, 2004). Thus, we take the polity IV scores to capture for democracy levels. Following other prominent studies in literature (Goldstone 1991; Henderson, 1993; Homer-Dixon et al. 1993; Poe, Tate, 1994; Howard & Homer-Dixon 1995; Poe, Tate & Keith, 1999; Blanton, 1999; Blanton & Blanton, 2007; Eriksen & de Soysa 2008; Vadlamannati & Tamazian, 2007 and Vadlamannati & de Soysa 2008) we also take into account the log value of total population adapted from world development indicators of World Bank 2006. The countries with higher ethnic fractionalization often face the risk of ethnic wars. To capture this effect, we include the degree of ethnic fractionalization developed by Fearon & Laitin (2003). Prominent studies like Poe and Tate (1994); Poe, Tate & Keith (1999) and Dreher, Gassebner & Siemers (2007) argue that civil war and peace years are important determinants of human rights conditions. Thus, we include the dummy variable 1 if civil war exists in the country and 0 otherwise. We also include number of peace years for each country from 1993 to 2006. The peace years variable is included as the number of peace years since every last civil war occurred in a country. The data for both these variables come from the Uppsala database updated version of 2007. Poe and Tate (1994) and Poe, Tate & Keith (1999) argue that countries with British legal system are associated with lower human rights abuses to Socialistic legal system. This would be even more interesting in the context of transition economies as majority of these countries belong to former Soviet Union. We give the value 1 if the country has socialist legal system and 0 otherwise. Finally, we include the ratio of the reforms period and years under communism to reflect the initial conditions of reforms process in transition economies. The data for these ratios are partly adapted from Chousa et al. (2005) till 2000 and data for later years is constructed by the author.

4. Empirical results

4. 1. Descriptive Statistics & Bivariate Plots

The sample of country-years that we examine in total made up of 364 observations. In annexure 3, we present the summary statistics for this sample for all the variables that we employ in the regression analysis. The mean value for PIR is 8.00 per country-year with a small standard deviation of 1.83. The sample is also made up of another human rights indicator namely, ER index. The mean value of this is 7.00 with slightly higher standard deviation compared to PRI, 2.90. Infact compared to rest of the variables, the standard deviation of both these variables are large. Regarding the economic reforms we can find that the median value is 2.59, but the variance in reforms is very low, with a standard deviation of just 0.69. Economic reforms ranges from 1 to 3.90, 1 being no reforms initiation by the country. Similarly, Speed of reforms range from 0.00 to 0.15 which means from absolutely halt of reforms initiation to very high speed. The mean value is 0.08 with a very small variation of 0.03.

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[13] The data can be accessed from http://www.colorado.edu/ IBS/GAD/spacetime/data/Polity.html.

In graphs 1 to 4 (see annexures) we capture the human rights conditions of PIR and ER during early and late transition years. We find in graph 1 that PIR have considerably dipped below the score of 5 during the early transition years. Post 1995 the PIR conditions slowly started to increase. In graph 2 we can see that PIR conditions became fairly consistent with marginal fluctuations during later years of transition. Similar such trend can be observed for ER index. In graph 3 we see that the ER index coming down drastically during the early years of transition. The ER index remained low almost till 2000. Post 2000 the index improved significantly, but witnessed lot of fluctuations. This is due to adjustments in labour market as ER index includes substantial chunk of indicators related to workers' rights including that of women.

4. 2. Regression Estimates

The results of regression estimates in assessing the impact of speed and choice of reforms on Human rights performance viz., physical integrity rights and empowerment rights in transition economies are presented in tables 1 to 5 with various permutations and combinations of hypothesis variables. We control for Heteroskedasticity using White Heteroskedasticity-consistent standard errors & covariance. In models 1 and 3 (table 1) we find that economic reforms has 1% significant positive impact on both forms of human rights conditions. The Physical Integrity Rights (PIR hereafter) scores suggest that on a scale of 0 to 9, zero represent worst human rights abuses and 9 highest represent respect for human rights, while the Empowerment Rights (ER henceforth) scores suggest that on a scale of 0 to 10, zero represent worst human rights abuses and 10 represent respect for human rights. Therefore the positive effect of economic reforms on both suggests a reduction in human rights abuses. For every 1% increase in economic reforms index leads to 0.59% and 1.59% increase in government respect for both forms of human rights respectively. In other words, holding at its mean value, increase in economic reforms index by its highest value (3.90 points) would increase the respect for PIR by 0.59% and ER by 1.59%. The interesting finding however is the curvi linear effect of economic reforms. We find negative effect of current level of economic reforms, while accelerating the economic reforms process has a positive effect on PIR (model 2; table 1), while the same cannot be found for ER. However, though this relationship is week with 15% confidence level, it confirms the inverted U-shaped relationship between the two.

Table 1: Economic Reforms & Human Rights equation function

Variables	Model 1 Physical Integrity Rights	Model 2 Physical Integrity Rights	Model 3 Empowerment Rights	Model 4 Empowerment Rights
Constant	3.65 * (1.33)	5.32 * (1.97)	12.22 * (1.82)	12.79 * (2.42)
Economic Reforms	0.59 * (0.17)	-0.39 (0.73)	1.59 * (0.21)	1.25 + (0.89)
Economic Reforms Squared	-----	0.20 + (0.14)	-----	0.07 (0.18)
Economic Growth Rate	-0.02 ***	-0.02	-0.02	-0.01

	(0.01)	(0.01)	(0.01)	(0.02)
	0.67 *	0.58	0.05	0.02
Log (Economic Development)	(0.13)	(0.16)	(0.15)	(0.17)
	-0.30 *	-0.28 *	-0.57 *	-0.56 *
Log (Population)	(0.06)	(0.06)	(0.08)	(0.09)
	0.05 *	0.06 *	0.16 *	0.16 *
Democracy	(0.02)	(0.02)	(0.02)	(0.02)
	0.23	0.25	0.19	0.20
1/3rd Oil Exports	(0.22)	(0.22)	(0.26)	(0.26)
	0.53	0.53	1.87 *	1.88 *
Ethnic Fractionalization	(0.42)	(0.41)	(0.70)	(0.70)
	-0.08	-0.16	-1.91 *	-1.94 *
British / Socialist Legal System	(0.15)	(0.16)	(0.24)	(0.25)
	-2.74 *	-2.74 *	0.04	0.04
Civil War	(0.28)	(0.28)	(0.33)	(0.33)
	0.01 +	0.01	0.04 *	0.04 *
Civil Peace Years	(0.01)	(0.01)	(0.01)	(0.01)
	-0.11 *	-0.12 *	-0.24 *	-0.24 *
Time dummy	(0.02)	(0.02)	(0.02)	(0.03)
R-squared	0.633151	0.635498	0.757401	0.757511
Adjusted R-squared	0.621654	0.623000	0.749798	0.749197
S.E. of regression	1.128527	1.126518	1.451310	1.453052
Log likelihood	-552.8648	-551.7001	-644.1786	-644.0962
F-statistic	55.07245	50.85108	99.62102	91.11368
Number of countries	26	26	26	26
Number of Observations	364	364	364	364

Note: ***** Significant at 1% confidence level; ****** Significant at 5% confidence level ******* Significant at 10% confidence level; + Significant at 15% confidence level. The models are controlled for Heteroskedasticity. White Heteroskedasticity-Consistent Standard Errors are reported in parenthesis.

We see positive relationship between development and both forms of human rights suggesting that improvement in quality of life through higher development process help reduce economic insecurity thereby reducing social tensions and unrests in the society. However, the findings of economic growth rate show contrary results. The negative impact of GDP growth rate on all forms of human rights supports the view that growth would increase state repression because it leads to instability as the rebellion increases. We find that an increase in population levels exerts pressure on human rights abuses. This effect is consistent across all forms of human rights displayed in all models. The results related to ethnic fractionalization are mixed. Surprisingly we find positive sign but are only significant for ER (see models 3 & 4; table 1).

The other most significant finding of the study is the effect of transition to democracy from communist period. We find that an improvement in democracy levels is associated with higher government respect in both the cases. The results are robust across the board. When we introduce civil war year dummy, we find a 1% significant negative relationship with PIR, while it remained insignificant for ER. On the contrary the number of peace years is helping reduce human rights abuses. But the statistical significance for this

variable is week for PIR. The coefficient value for civil war dummy is higher than peace years, suggesting that the risk of civil war is always detrimental to human rights conditions. The results could not demonstrate the negative impact of oil exports on human rights abuses. This is because, except three countries (Russia, Azerbaijan and Kazakhstan) all other economies are oil importers. While consistent with the results of prominent studies Poe & Tate (1994) and Poe, Tate & Keith (1999) we find significant negative impact of both population pressures and socialist legal heritage on all forms of human rights. All these results of control variables are statistically significant and consistent across all the models.

Table 2: Speed of Reforms & Physical Integrity Rights equation function

Dependent variable: Physical Integrity Rights Index

Variables	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Constant	2.90 (1.87)	2.74 (1.93)	4.19 ** (1.78)	3.49 ** (1.79)	2.91 *** (1.88)	3.12 *** (1.81)	0.007 (2.09)
Speed of Reforms	6.86 *** (3.76)	10.01 (8.92)	-----	-----	10.30 * (3.75)	-----	-----
Speed of Reforms Squared	-----	-23.72 (54.83)	-----	-----	-----	-----	-----
Volatility in Reforms Process	-----	-----	-1.03 + (0.70)	-----	-1.67 ** (0.69)	-----	-----
Variance in Speed of Reforms	-----	-----	-----	6.41 *** (3.68)	-----	-----	-----
Speed of Reforms X Reforms	-----	-----	-----	-----	-----	2.61 ** (1.02)	-----
Cumulative Economic Reforms	-----	-----	-----	-----	-----	-----	1.59 * (0.45)
Economic Growth	-0.02 (0.01)	-0.02 *** (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.02 (0.01)	-0.02 ** (0.01)
Log (Economic Development)	0.82 * (0.11)	0.85 * (0.12)	0.85 * (0.11)	0.85 * (0.11)	0.83 * (0.11)	0.73 * (0.12)	0.75 * (0.11)
Log (Population)	-0.28 * (0.06)	-0.29 * (0.07)	-0.28 * (0.06)	-0.30 * (0.06)	-0.25 * (0.06)	-0.25 * (0.06)	-0.32 * (0.06)
Democracy	0.06 * (0.02)	0.06 * (0.02)	0.08 * (0.01)	0.07 * (0.01)	0.06 * (0.01)	0.05 * (0.01)	0.06 * (0.01)
Oil Exports	0.12 (0.22)	0.12 (0.22)	0.14 (0.22)	0.12 (0.22)	0.11 (0.22)	0.13 (0.22)	0.19 (0.22)
Ethnic Fractionalization	0.59 (0.43)	0.62 (0.44)	0.89 ** (0.41)	0.66 *** (0.42)	0.56 (0.41)	0.47 (0.43)	0.40 (0.43)
Socialist Legal System	-0.27 (0.20)	-0.21 (0.22)	-0.002 (0.15)	-0.13 (0.15)	-0.31 *** (0.19)	-0.35 *** (0.20)	0.08 (0.14)
Civil War	-2.72 * (0.28)	-2.71 * (0.28)	-2.73 * (0.28)	-2.74 * (0.28)	-2.79 * (0.28)	-2.75 * (0.28)	-2.82 * (0.29)
Peace Years	0.01 **	0.01 **	0.006	0.01 **	0.01 **	0.01 **	0.005

	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Time	-0.11 *	-0.10 *	-0.15 *	-0.09 *	-0.16 *	-0.10 *	-0.22 *
	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)	(0.03)	(0.04)
Log (Reforms Years/ Communist Years)	-0.04	-0.05	0.40	0.07	-0.13	-0.21	-0.50
	(0.39)	(0.40)	(0.34)	(0.36)	(0.39)	(0.41)	(0.41)
R-squared	0.625025	0.625172	0.623996	0.624085	0.632467	0.627859	0.634995
Adjusted R-squared	0.612168	0.611209	0.611105	0.611196	0.618777	0.615100	0.622481
S.E. of regression	1.142587	1.143998	1.144153	1.144018	1.132810	1.138261	1.127294
Log likelihood	-556.8414	-556.7703	-557.3386	-557.2957	-553.2027	-555.4645	-551.9501
F-statistic	48.61623	44.77636	48.40346	48.42178	46.19811	49.20857	50.74092
Number of countries	26	26	26	26	26	26	26
Total number of Observations	364	364	364	364	364	364	364

Note: * Significant at 1% confidence level; ** Significant at 5% confidence level *** Significant at 10% confidence level; + Significant at 15% confidence level. The models are controlled for Heteroskedasticity. White Heteroskedasticity-Consistent Standard Errors are reported in parenthesis.

Having found significant positive relationship between economic reforms and human rights conditions in the first place, we now explore the relationship between the speed of reforms and human rights performance. To this end, we present the results of the same in table 2 and 3. In model 5 (see table 2) we find that speed of reforms significantly improve government respect for PIR. The largest value of speed of reforms (0.15 points) would raise PIR by 6.86%, which is around 85% of the mean value of PIR. In model 6 (table 2), we test for curvi linear relationship between the two. Though we find that current level of speed of reforms has positive effect and acceleration of speed of reforms having negative effect on PIR, there is no statistical significance for both. But the interesting finding which emerges from this model is that while for economic reforms and human rights, there exists a perfect U-shaped relationship. But the same is not true in the case of speed of reforms and human rights. On the contrary, we find an inverted U-shaped relationship. This suggests that speed is good, but further acceleration from current level of speed may have a detrimental effect on human rights conditions.

The volatility in economic reforms leads to uncertainty and thereby increases human rights abuses. For every single percentage increase in volatility in economic reforms is associated with 1.03% decline in human rights conditions. Using the residual method to has almost the same effect as our standard measure of speed of reforms. For every 1% variation in speed of reforms leads to 6.41% increase in respect for human rights (see model 8, table 2). The residuals are captured by regressing EBRD's economic reforms index on potential determinants as discussed in previous section. The results of this model are presented in annexure 4. In model 9, we introduce both speed of reforms and volatility in economic reforms together. We find that while speed of reforms holds on with 1% significance and positive sign, volatility in reforms exert negative association with 5% significance level. This suggests that while speed of reforms help improve human rights conditions, at the same time, any uncertainty in reforms process is harmful for the human rights conditions. In model 10 (table 2) we introduce the interactive effect between economic reforms and speed of reforms only to find 1% significant positive relationship with human rights conditions. If we compare these results with that of model

1 (see table 1) the coefficient value of economic reforms when interacted with speed of reforms increased significantly. While economic reforms alone leads to 0.59% increase in PIR (see model 1; table 1), but the same conditioned by speed of reforms leads to 2.61% increase in PIR, which is an increases of 2.01% in coefficient value from model 1 to model 10. This means that the greater impact of economic reforms on human rights is conditioned by speed at which reforms are carried. To cross check our results, we introduced cumulative reforms index in model 11. We find that maximum value of cumulative reforms index associates with increase in PIR by 1.59% with 1% significance. This suggests that results are robust. The only variable whose results are not consistent across the models is initial conditions. This is neither significant nor consistent with its signs, suggesting that the initial conditions do not matter for human rights performance.

Table 3: Speed of Reforms & Empowerment Rights equation function

Dependent variable: Empowerment Rights Index

Variables	Model 12	Model 13	Model 14	Model 15	Model 16	Model 17	Model 18
Constant	11.58 * (2.18)	10.91 * (2.30)	14.28 * (2.32)	12.74 * (2.11)	11.59 * (2.17)	12.50 * (2.11)	6.10 ** (2.50)
Speed of Reforms	19.72 * (4.56)	33.17 * (11.84)	-----	-----	21.79 * (4.84)	-----	-----
Speed of Reforms Squared	-----	-101.41 (81.18)	-----	-----	-----	-----	-----
Volatility in Reforms Process	-----	-----	-0.33 (0.75)	-----	-1.01 (0.79)	-----	-----
Variance in Speed of Reforms	-----	-----	-----	27.07 * (4.86)	-----	-----	-----
Speed of Reforms X Reforms	-----	-----	-----	-----	-----	6.56 * (1.35)	-----
Cumulative Economic Reforms	-----	-----	-----	-----	-----	-----	3.40 * (0.59)
Economic Growth	-0.01 (0.01)	-0.01 (0.01)	-0.005 (0.01)	-0.005 (0.01)	-0.01 (0.01)	-0.007 (0.01)	-0.02 *** (0.01)
Log (Economic Development)	0.40 * (0.13)	0.51 * (0.16)	0.43 * (0.14)	0.48 * (0.13)	0.40 * (0.13)	0.18 (0.14)	0.26 *** (0.14)
Log (Population)	-0.50 * (0.08)	-0.55 * (0.09)	-0.54 * (0.09)	-0.59 * (0.08)	-0.49 * (0.08)	-0.46 * (0.08)	-0.60 * (0.08)
Democracy	0.17 * (0.01)	0.17 * (0.02)	0.21 * (0.02)	0.22 * (0.01)	0.17 * (0.01)	0.17 * (0.01)	0.18 * (0.01)
Oil Exports	-0.03 (0.28)	-0.03 (0.28)	0.03 (0.32)	-0.05 (0.27)	-0.04 (0.28)	0.01 (0.27)	0.13 (0.28)
Ethnic Fractionalization	2.08 * (0.73)	2.19 * (0.75)	2.75 * (0.66)	2.04 * (0.75)	2.06 * (0.74)	1.85 ** (0.77)	1.85 ** (0.73)
Socialist Legal System	-2.43 * (0.28)	-2.20 * (0.33)	-1.81 * (0.25)	-2.13 * (0.25)	-2.45 * (0.28)	-2.55 * (0.28)	-1.52 * (0.23)
Civil War	0.12	0.16	0.21	-0.002	0.08	0.04	-0.08

	(0.33)	(0.34)	(0.34)	(0.34)	(0.33)	(0.33)	(0.36)
Peace Years	0.05 *	0.05 *	0.04 *	0.04 *	0.05 *	0.05 *	0.03 *
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Time	-0.26 *	-0.26 *	-0.26 *	-0.18 *	-0.30 *	-0.26 *	-0.52 *
	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)	(0.04)	(0.05)
Log (Reforms Years/ Communist Years)	0.29	0.28	1.36 *	0.24	0.24	0.004	0.40
	(0.53)	(0.53)	(0.47)	(0.52)	(0.53)	(0.55)	(0.56)
R-squared	0.738304	0.739378	0.724235	0.748073	0.739383	0.742076	0.750273
Adjusted R-squared	0.729332	0.729670	0.714781	0.739435	0.729675	0.733232	0.741711
S.E. of regression	1.509501	1.508558	1.549545	1.481059	1.508543	1.498584	1.474577
Log likelihood	-657.9312	-657.1851	-667.4355	-651.0264	-657.1814	-655.2965	-649.4341
F-statistic	82.28592	76.16176	76.59983	86.60757	76.16387	83.91557	87.62776
Number of countries	26	26	26	26	26	26	26
Total number of Observations	364	364	364	364	364	364	364

Note: ***** Significant at 1% confidence level; ****** Significant at 5% confidence level ******* Significant at 10% confidence level; + Significant at 15% confidence level. The models are controlled for Heteroskedasticity. White Heteroskedasticity-Consistent Standard Errors are reported in parenthesis.

In table 3 we enter ER as dependent variable covering models from 12 to 18. The 1% significant positive sign of speed of reforms suggest that increase in speed help reduce the ER abuses. Holding at its mean value, increase in speed of reforms by its highest value (0.15 points) would increase government respect for ER by 19.72% (see model 12). The curvilinear relationship between the two show similar results as it did in earlier models for PIR. But this time, we see 1% statistical significance for current level of speed of reforms. This suggests that even for ER, which extends much beyond state terrorism and includes civil and political rights, acceleration of speed of reforms from current level would prove detrimental (see model 13). While volatility in economic reforms could not find any statistical significance despite its negative sign, variation in speed of reforms is associated with 27.07% increase in ER with statistical significance of 1% (model 14 & 15). When introduced together, volatility in reforms still remains statistically insignificant, but the positive effect of speed of reforms with 1% significance remains intact. This suggests that though speed of reforms matters for ER, the importance of volatility in reforms is nullified. The interesting finding of these results include model 17, where we find that the interactive effect of speed of reforms and economic reforms lead to 6.56% increase in ER with 1% significance level. The Economic reforms alone leads to 1.59% increase in ER (see model 3; table 1), but the same conditioned by speed of reforms leads to 6.56% increase in PIR, which is an increases of 5.03% in coefficient value in model 17 to model 3. In the last model 18, we capture the cumulative reforms index which replaces our standard method of speed of reforms. We find that for every 1% increase in cumulative reforms index is associated with 3.40% increase in ER conditions. This once again reiterates that the results are robust in nature. Even in these models, we could not find any statistical significance for initial conditions, but the sign remained positive and consistent.

While in both the tables (2 & 3), we tested for the relationship between speed of reforms and PIR; ER and found significant positive associations between the two, the results were

for full sample period from 1993 to 2006, which includes early transition years also. Since almost all the countries have witnessed painful conditions during the early transition years which were marked by violence, riots and state suppression, it would be interesting to test the same for early transition years. We ran same results taking into account first five years from 1993 to 1997 of our sample. The results are displayed in annexure 5. Model 31 and 32 include dependent variables, PIR and ER. In both models we find that though speed of reforms is positive, it remains statistically insignificant. Also the initial conditions in both the models show negative signs, but are insignificant. The baseline models (model 5 and 12) presented in tables 2 and 3 enables us to compare trends in speed of reforms between full sample of transition years and early transition periods. It also help identify the extent to which alternative estimation methods and different sample characteristics systematically affect estimates of the basic human rights conditions. Thus, the results suggests that speed of reforms did not matter during the early transition years, but have had a significant effect in improving human rights performance during the later years of transition. These results are consistent with the findings of Heybey & Murell (1997); Fischer et al. (1996); Wolf (1999) and Berg el al. (1999) who found that speed of reforms benefits socioeconomic conditions in long run.

Table 4: Choice & Speed of Reforms & Physical Integrity Rights equation function

Dependent variable: Physical Integrity Rights Index

Variables	Model 19	Model 20	Model 21	Model 22	Model 23	Model 24
Constant	2.95 *** (1.87)	3.00 *** (1.90)	3.45 *** (1.93)	3.95 ** (1.78)	3.59 ** (1.81)	4.13 ** (1.81)
Speed of Reforms	6.73 *** (3.78)	4.20 (3.74)	4.88 (3.64)	-----	-----	-----
Gradual Reformers	-0.17 (0.13)	-----	-----	-----	-----	-----
Radical Reformers	-----	0.71 * (0.15)	-----	-----	-----	-----
Laggard Reformers	-----	-----	-0.67 * (0.17)	-----	-----	-----
Speed of Reforms X Gradual Reformers	-----	-----	-----	-1.40 (1.33)	-----	-----
Speed of Reforms X Radical Reformers	-----	-----	-----	-----	6.95 * (1.41)	-----
Speed of Reforms X Laggard Reformers	-----	-----	-----	-----	-----	-5.65 * (1.86)
Economic Growth	-0.02 (0.01)	-0.01 (0.01)	-0.02 *** (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Log (Economic Development)	0.84 * (0.11)	0.69 * (0.12)	0.64 * (0.12)	0.84 * (0.11)	0.68 * (0.12)	0.68 * (0.12)
Log (Population)	-0.28 * (0.06)	-0.26 * (0.06)	-0.24 * (0.06)	-0.29 * (0.06)	-0.24 * (0.06)	-0.25 * (0.06)
Democracy	0.06 *	0.07 *	0.06 *	0.07 *	0.07 *	0.09 *

	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Oil Exports	0.09	0.29	0.39 ***	0.12	0.29	0.35 +
	(0.22)	(0.22)	(0.23)	(0.22)	(0.22)	(0.23)
Ethnic Fractionalization	0.66	0.45	0.18	0.88 **	0.54	0.59
	(0.44)	(0.43)	(0.45)	(0.43)	(0.42)	(0.43)
Socialist Legal System	-0.28	-0.28	-0.23	-0.03	-0.23 +	-0.08
	(0.20)	(0.20)	(0.19)	(0.14)	(0.16)	(0.15)
Civil War	-2.70 *	-2.72 *	-2.78 *	-2.68 *	-2.74 *	-2.74 *
	(0.27)	(0.27)	(0.28)	(0.27)	(0.27)	(0.28)
Peace Years	0.01 **	0.006	0.01 ***	0.006 +	0.005	0.005
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Time	-0.11 *	-0.06 ***	-0.05	-0.11 *	-0.08 **	-0.07 ***
	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)	(0.04)
Log (Reforms Years/ Communist Years)	-0.007	-0.32	-0.45	0.39	-0.06	0.10
	(0.40)	(0.40)	(0.42)	(0.35)	(0.36)	(0.37)
R-squared	0.625902	0.646274	0.641528	0.621239	0.639173	0.630065
Adjusted R-squared	0.611967	0.633098	0.628175	0.608253	0.626802	0.617381
S.E. of regression	1.142883	1.111328	1.118760	1.148339	1.120823	1.134882
Log likelihood	-556.4163	-546.2529	-548.6723	-558.6645	-549.8605	-554.3854
F-statistic	44.91621	49.04927	48.04433	47.83885	51.66621	49.67595
Number of countries	26	26	26	26	26	26
Total number of Observations	364	364	364	364	364	364

Note: * Significant at 1% confidence level; ** Significant at 5% confidence level *** Significant at 10% confidence level; + Significant at 15% confidence level. The models are controlled for Heteroskedasticity. White Heteroskedasticity-Consistent Standard Errors are reported in parenthesis.

In the earlier models we have found that both economic reforms and speed of reforms are associated with better human rights conditions in transition economies. This brings us to our third question, the choice of reforms. Along with speed of reforms, in models 19 to 21 we introduce three other variables namely, radical, gradual and laggard reformers as hypothesis variables. In model 19 we include gradual reformers along with speed of reforms. We find that speed of reforms has 10% significant and positive association with PIR. While gradual reforming countries bears a negative sign and is insignificance. In model 20, we find that radical reforming countries have a 1% significant positive impact on PIR, while laggards in model 21 have 1% significance but with negative sign. The interesting trend which emerges from these results is that radical reforming countries have better human rights conditions to others. Even interms of coefficient values, the radical reforming countries with 0.71% is highest in comparison to the rest. Meaning, for every single increase of countries under radical reformers category is associated with 0.71% increase in government rest for PIR.

Having found the association of radical reforming countries with better human rights conditions, we probe our next question which is to see whether the positive impact of speed of reforms is conditioned by which type of reforming strategy? To answer this, in the next three models (22 to 24) we introduce interactive effects between the three and speed of reforms. The results show that while speed of reforms under gradual and laggard

reforming countries has negative effect on PIR performance, it shows positive effect for radicals. Even here, the coefficient value of radical reformers is higher than the other two (see models 22, 23 and 24; table 4). This suggests that positive effect of speed of reforms on PIR is conditioned only by radical reforming countries. This also means that the speed of reforms under graduals is slow and do not matter for PIR performance. But, the effect of speed of reforms on PIR conditioned by laggards is not only negative but also significant at 1% confidence level. This suggests that though gradual reforms might not matter much for PIR conditions but no reforms scenario (that of laggards) is detrimental to basic human rights conditions.

Table 5: Choice & Speed of Reforms & Empowerment Rights equation function

Dependent variable: Empowerment Rights Index

Variables	Model 25	Model 26	Model 27	Model 28	Model 29	Model 30
Constant	11.66 * (2.19)	11.76 * (2.18)	12.63 * (2.21)	14.75 * (2.31)	13.76 * (2.18)	14.75 * (2.29)
Speed of Reforms	19.52 * (4.60)	14.88 * (4.60)	16.01 * (4.46)	-----	-----	-----
Gradual Reformers	-0.26 (0.21)	-----	-----	-----	-----	-----
Radical Reformers	-----	1.30 * (0.21)	-----	-----	-----	-----
Laggard Reformers	-----	-----	-1.26 * (0.23)	-----	-----	-----
Speed of Reforms X Gradual Reformers	-----	-----	-----	-6.27 * (2.22)	-----	-----
Speed of Reforms X Radical Reformers	-----	-----	-----	-----	15.32 * (2.13)	-----
Speed of Reforms X Laggard Reformers	-----	-----	-----	-----	-----	-8.11 * (2.73)
Economic Growth	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.004 (0.01)	0.002 (0.01)	0.002 (0.01)
Log (Economic Development)	0.42 ** (0.14)	0.17 (0.14)	0.07 (0.14)	0.48 * (0.14)	0.10 (0.14)	0.22 (0.17)
Log (Population)	-0.51 * (0.08)	-0.48 * (0.08)	-0.45 * (0.08)	-0.55 * (0.08)	-0.43 * (0.08)	-0.48 * (0.08)
Democracy	0.17 * (0.02)	0.19 * (0.02)	0.19 * (0.02)	0.22 * (0.01)	0.22 * (0.01)	0.24 * (0.01)
Oil Exports	-0.08 (0.28)	0.27 (0.28)	0.48 *** (0.29)	-0.04 (0.33)	0.36 (0.31)	0.33 (0.35)
Ethnic Fractionalization	2.18 * (0.73)	1.82 ** (0.71)	1.32 *** (0.73)	3.00 * (0.66)	2.13 * (0.68)	2.42 * (0.70)
Socialist Legal System	-2.45 * (0.28)	-2.46 * (0.28)	-2.36 * (0.27)	-1.73 * (0.24)	-2.22 * (0.25)	-1.84 * (0.25)
Civil War	0.14	0.10	-0.01	0.22	0.08	0.13

	(0.33)	(0.33)	(0.36)	(0.33)	(0.33)	(0.35)
Peace Years	0.05 *	0.04 *	0.05 *	0.04 *	0.04 *	0.04 *
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Time	-0.27 *	-0.18 *	-0.16 *	-0.30 *	-0.21 *	-0.22 *
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Log (Reforms Years/ Communist Years)	0.35	-0.22	-0.47	1.63 *	0.51	1.04 **
	(0.54)	(0.54)	(0.54)	(0.49)	(0.47)	(0.49)
R-squared	0.739123	0.766343	0.761570	0.728264	0.759895	0.731824
Adjusted R-squared	0.729406	0.757640	0.752688	0.718947	0.751663	0.722629
S.E. of regression	1.509295	1.428385	1.442903	1.538186	1.445892	1.528077
Log likelihood	-657.3623	-637.3618	-641.0325	-664.7647	-642.3031	-662.3712
F-statistic	76.06125	88.04961	85.74925	78.16772	92.30782	79.59255
Number of countries	26	26	26	26	26	26
Total number of Observations	364	364	364	364	364	364

Note: ***** Significant at 1% confidence level; ****** Significant at 5% confidence level ******* Significant at 10% confidence level; + Significant at 15% confidence level. The models are controlled for Heteroskedasticity. White Heteroskedasticity-Consistent Standard Errors are reported in parenthesis.

In models 25 to 30 presented in table 5 we replace PIR with ER as dependent variable. We find almost similar results repeating here with some changes in significance levels. In model 25, we find gradual reforming countries have negative effect on ER, but this relationship remains insignificant. The radical reforming countries are associated with better ER performance, while laggards have negative effect on the same. Both these variables share 1% statistical significance. The coefficient value of radical reformers is higher than the other two. In model 28 and 30 (table 5), we find that the interactive effect between speed of reforms; graduals and laggards has 1% significant negative impact on ER conditions. While the model 29 shows that the interactive effect between speed of reforms and radical reformers show 1% significant positive impact. This reiterates the earlier findings that the positive effect of speed of reforms on ER conditions is conditioned only by radical reforming countries. While the slow pace of reforms or no reforms scenario found amongst gradual and laggards do no good for ER conditions.

4. 3. Robustness Check

We ran several tests of sensitivity. First, we ran all the results again by dividing the total sample group into two. One set includes CIS along with Baltic countries. The second set includes East & Central European countries alone. We do not find any significant changes in both the results. The second such test includes running all the base models using lagged values of all the independent variables. We could not find any major significant changes in the results[14]. Next we test our models by replacing both PIR and ER indicators with freedom house scores. We compute the average of civil liberties and political freedom scores, which is our dependent variable. These scores are ranked between 1 and 7, with 1 suggesting lower or no rights and 7 being full liberties. For convince of interpretation, we inverse the scores. The results are displayed in annexure 6.

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[14] Both the results are not shown here due to space constraints. They will be provided upon request

The estimates show that speed of reforms lead to increase in government respect for civil and political rights. The coefficient value is much higher than that of PIR and ER indices. But, we failed to find curvi linear effect relationship for this model. The interactive effect between speed of reforms and economic reforms shows 1% significant and positive impact on civil and political rights. This once again reiterates that the greater impact of economic reforms on human rights is conditioned by speed of reforms. Finally, the cumulative reforms index holds on with 1% significant positive impact to highlight the robustness of the results.

5. Summary & Conclusion

Having found significant positive impact of economic reforms on human rights in transition economies by Vadlamannati & Soysa (2008), this paper focuses on the implications of speed and choice of reforms on human rights performance. There are divergent views on the impact of speed of reforms effecting socioeconomic conditions. The Anglo-Saxon perspective argues that speed of reforms lead to growth and development which inturn generates respect for human rights. While skeptics contend that rushing towards a free market economy would always be destructive as development process tends to be exclusive creating exogenous shocks leading to social and economic unrest. This leads to domestic violence and conflicts, allowing governments to resort to repressive measures. Taking both the arguments into account, we try to find whether speed and choice of reforms increase or decrease government respect for human rights in transition economies.

EBDR's economic reforms index was used to construct speed of reforms variable by subtracting economic reforms index in the current year with initial level of economic reforms in 1990 and dividing the derived value with number of transition/reforms years. On the other hand, CIRI's Physical Integrity Rights, proxy for state terrorism and Empowerment Rights, proxy for civil and political rights represented Human rights conditions. Using pooled regression analysis for the period 1993 – 2006 for 26 transition economies, our results find significant positive effect of speed of reforms on human rights performance. Replacing our method of speed of reforms with residual and cumulative reforms index methods, the results do not change significantly. Volatility in economic reforms is used as proxy for structural policy uncertainty leading to economic insecurity and social unrest. We find very strong negative effect of volatility in reforms on human rights conditions.

In the next phase of the study we study the relationship between choice of reforms and human rights performance. Using the methodology of Wolf (1999) we divided the 26 transition economies under three major categories viz., radicals, graduals and laggards reformers. Increase in EBDR's economic reforms index by 1 in any consecutive two years with final score of 3 at the end of sample period and above was classified as radical reforming country. Similarly, countries obtaining final score of 3 and above but failed to increase index value by 1 and above during any two consecutive years were labeled as gradual reformers. Failing to meet any of the two criteria was termed as laggards. After controlling for the speed of reforms, we found that the choice with which the country has

reformed plays pivotal role in determining human rights performance. While radical reforming countries have better human rights performance, it is exactly opposite in the case of gradualists and laggards. We also measured the impact of speed of reforms on human rights performance conditioned by choice of reforms. We find that the positive effect of speed of reforms is conditioned by only radical reforming countries and not by gradual and laggards reformers. Meaning, countries which adopt radical reforms experience faster economic reforms and there by better human rights performance, while this is not the case with countries following gradual reforms and countries with no reforms process.

Where do we go from here?

While we have focused on the most contentious topic in political economy, the linkage between not only economic reforms, but speed of reforms and human rights taking the case of transition economies, our study suggests avenues for further research on this most interesting topic. Future empirical work might focus on finding out the existence of inverse domino effect of economic reforms on host country's reforms process which inturn affect human rights in the first place. In doing so, the research has to identify the important channels through which reforms are transmitted from countries to another country. If there is any contagious effect it would be imperative to measure its impact on human rights. If found any impact, in the next stage it would be interesting to see likewise economic reforms, is speed of reforms also contagious? If so, then what would be its impact on human rights performance of respective countries.

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Annexures

Annexure 1: Transition economies under study

Armenia	Azerbaijan	Albania	Belarus	Bulgaria	Croatia
Czech Republic	Estonia	Georgia	Hungary	Kazakhstan	Kyrgyz Republic
Latvia	Lithuania	Moldova	Mongolia	Macedonia	Poland
Romania	Russia	Slovakia	Slovenia	Tajikistan	Turkmenistan
Ukraine	Uzbekistan	-----	-----	-----	-----

Annexure 2: Classification of transition economies according to choice of reforms adoption

Countries	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Armenia	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Azerbaijan	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Albania	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Belarus	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Bulgaria	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Croatia	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Czech Republic	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Estonia	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Georgia	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Hungary	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Kazakhstan	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Kyrgyz Republic	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Latvia	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Lithuania	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Moldova	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Mongolia	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Macedonia	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Poland	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Romania	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Russia	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Slovakia	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Slovenia	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Tajikistan	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Turkmenistan	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Ukraine	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Uzbekistan	L	L	L	L	L	L	L	L	L	L	L	L	L	L

Note: L = Laggards; G = Gradualists & R = Radical reformers

Annexure – 3: Descriptive Statistics

Variables	Maximum	Minimum	Mean	Median	Std. Dev.	Sum Sq. Dev.
Economic Reforms	3.90	1.00	2.54	2.59	0.69	170.90
Economic Reforms Squared	15.21	1.00	6.94	6.71	3.45	4317.48
Speed of Reforms	0.15	0.00	0.08	0.08	0.03	0.40
Reform years / communist years	0.44	0.07	0.21	0.20	0.09	2.87
Gradualist Reforms Countries	1.00	0.00	0.15	0.00	0.36	47.38
Radical Reforms Countries	1.00	0.00	0.31	0.00	0.46	77.54
Laggard Reforms Countries	1.00	0.00	0.54	1.00	0.50	90.46

Gradualist Reforms Countries X Speed of Reforms	0.14	0.00	0.01	0.00	0.03	0.41
Radical Reforms Countries X Speed of Reforms	0.15	0.00	0.03	0.00	0.04	0.70
Laggard Reforms Countries X Speed of Reforms	0.04	0.02	0.12	0.00	0.04	0.62
Personal Integrity Rights	8.00	0.00	5.48	6.00	1.83	1218.50
Empowerment Rights	10.00	0.00	6.29	7.00	2.90	3047.50
GDP Growth Rate	34.50	-30.90	3.29	4.49	7.61	20982.30
Percapita GDP	23603.56	708.1	6516.31	5894.13	4680.3	0.007
Population	149000000	1342300	15288289	5324600	28626537	0.002
Democracy	10.00	-9.00	3.83	7.00	6.51	15344.07
Oil Export Dummy	1.00	0.00	0.15	0.00	0.36	47.36
Ethnic Fractionalization	0.69	0.03	0.38	0.40	0.18	11.80
Socialist Legal System	1.00	0.00	0.81	1.00	0.39	55.88
Civil War Dummy	1.00	0.00	0.08	0.00	0.27	26.68
Civil Peace Years	60.00	0.00	15.55	8.00	19.10	132004

Annexure 4: Speed of Reforms – Initial Conditions equation function

Variables	Model 31 (Speed of Reforms)
Constant	0.09 * (0.00)
Economic growth rate	0.003 *** (0.00)
Log (Economic Development)	0.005 ** (0.00)
Initial Conditions	-0.04 * (0.00)
Political Freedom	-0.01 * (0.00)
Time	0.004 * (0.00)
R-squared	0.677101
Adjusted R-squared	0.672592
S.E. of regression	0.019019
Log likelihood	928.8124
F-statistic	150.1414
Number of countries	26
Total number of Observations	364

Note: * Significant at 1% confidence level; ** Significant at 5% confidence level *** Significant at 10% confidence level. White Heteroskedasticity-Consistent Standard Errors are reported in parenthesis.

Annexure 5: Speed of Reforms & Human rights in early transition years' equation function

Variables	Model 32 (Physical Integrity Rights Index)	Model 33 (Empowerment Rights Index)
Constant	1.27 (3.84)	5.21 (3.51)
Speed of Reforms	12.01 (8.20)	8.45 (8.92)
Economic Growth	-0.01 (0.01)	0.01 (0.01)
Log (Economic Development)	0.94 * (0.27)	0.83 * (0.28)
Log (Population)	-0.33 (0.12)	-0.42 * (0.14)
Democracy	0.05 *** (0.03)	0.15 * (0.02)
Oil Exports	0.58 (0.44)	-0.70 *** (0.45)
Ethnic Fractionalization	-0.45 (0.85)	2.80 ** (1.36)
Socialist Legal System	-0.21 (0.41)	-1.91 * (0.50)
Civil War	-3.33 * (0.42)	0.35 (0.41)
Peace Years	0.01 (0.01)	0.04 * (0.01)
Log (Reforms Years/ Communist Years)	-0.88 (0.78)	-0.19 (0.15)
Time	-0.16 (0.14)	-0.41 (0.84)
R-squared	0.589648	0.695568
Adjusted R-squared	0.547561	0.664344
S.E. of regression	1.383670	1.521079
Log likelihood	-219.8297	-232.1382
F-statistic	14.01011	22.27688
Number of countries	26	26
Total number of Observations	130	130

Note: * Significant at 1% confidence level; ** Significant at 5% confidence level & *** Significant at 10% confidence level. White Heteroskedasticity-Consistent Standard Errors are reported in parenthesis.
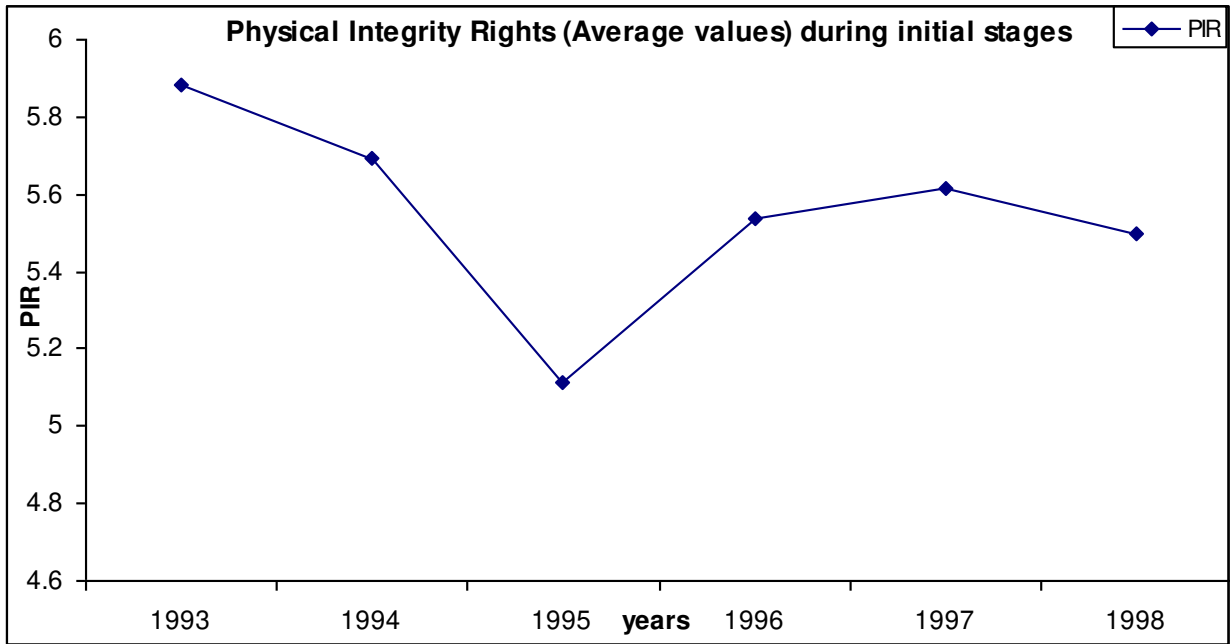
Annexure 6: Sensitivity Analysis

Dependent variable: Average values of Civil Liberties & Political Freedom indices
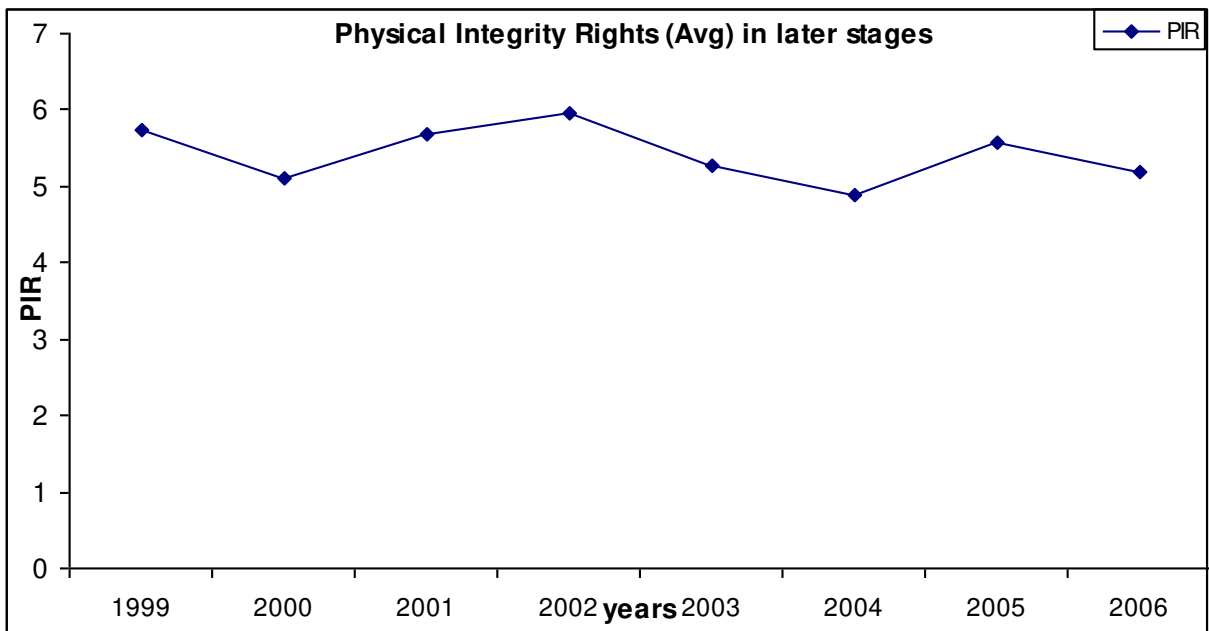
Variables	Model 33	Model 34	Model 35	Model 36
Constant	1.60 *** (0.98)	1.64 *** (0.98)	2.32 ** (0.95)	0.34 (1.13)
Speed of Reforms	14.46 * (1.57)	13.55 * (3.78)	-----	-----
Speed of Reforms Squared	-----	6.85 (24.83)	-----	-----
Speed of Reforms X Reforms	-----	-----	4.62 * (0.43)	-----
Cumulative Economic Reforms	-----	-----	-----	1.35 * (0.21)
Economic Growth	-0.005 (0.00)	-0.005 (0.00)	-0.001 (0.00)	-0.006 (0.00)
Log (Economic Development)	0.53 * (0.05)	0.52 * (0.05)	0.37 * (0.05)	0.48 * (0.05)
Log (Population)	-0.13 * (0.03)	-0.13 * (0.03)	-0.10 * (0.03)	-0.19 * (0.03)
Democracy	0.14 * (0.00)	0.14 * (0.00)	0.14 * (0.00)	0.16 * (0.00)
Oil Exports	-0.40 * (0.12)	-0.40 * (0.12)	-0.36 * (0.11)	-0.30 ** (0.12)
Ethnic Fractionalization	0.23 (0.26)	0.22 (0.26)	0.09 (0.25)	0.36 (0.25)
Socialist Legal System	-0.29 * (0.08)	-0.30 * (0.10)	-0.35 * (0.08)	0.28 * (0.08)
Civil War	-0.36 ** (0.15)	-0.36 ** (0.15)	-0.41 * (0.15)	-0.42 ** (0.17)
Peace Years	0.01 * (0.00)	0.01 * (0.00)	0.01 * (0.00)	0.003 (0.00)
Time	-0.14 * (0.02)	-0.14 * (0.02)	-0.13 * (0.01)	-0.24 * (0.02)
Log (Reforms Years/ Communist Years)	0.59 * (0.20)	0.59 * (0.20)	0.42 ** (0.21)	0.68 * (0.22)
R-squared	0.919248	0.919260	0.906310	0.903525
Adjusted R-squared	0.916480	0.916253	0.903097	0.900218
S.E. of regression	0.528383	0.529099	0.569141	0.577536
Log likelihood	-276.8855	-276.8577	-303.8589	-309.1743
F-statistic	332.0222	305.6571	282.1426	273.1578
Number of countries	26	26	26	26
Total number of Observations	364	364	364	364

Note: ***** Significant at 1% confidence level; ****** Significant at 5% confidence level & ******* Significant at 10% confidence level. White Heteroskedasticity-Consistent Standard Errors are reported in parenthesis.
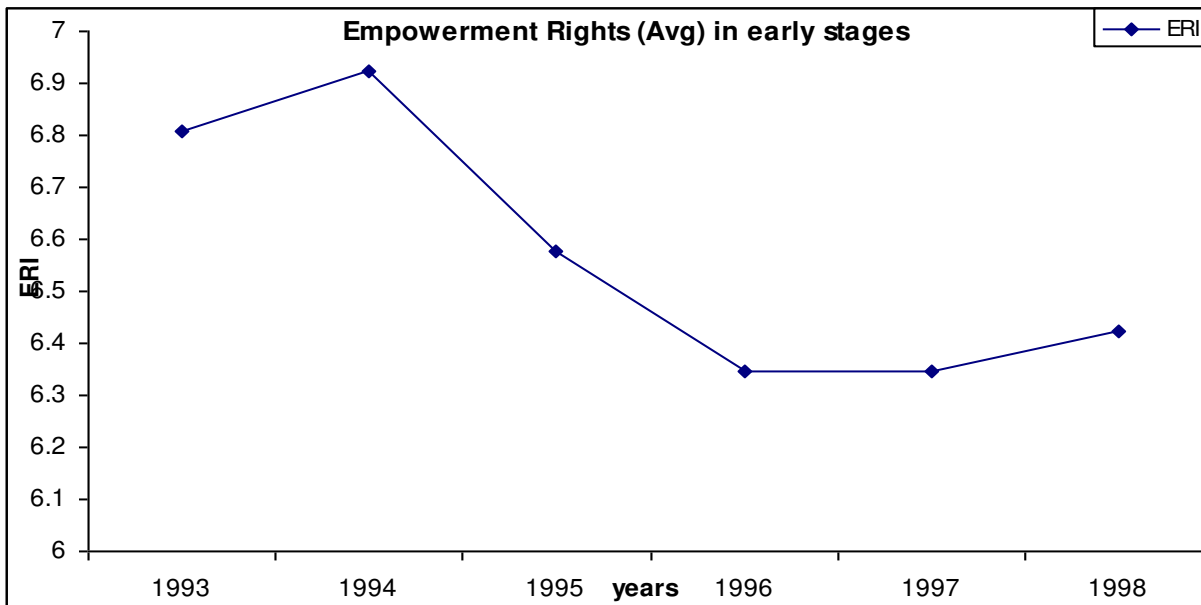
Graph 1

Physical Integrity Rights (Average values) during initial stages — PIR

PIR plotted against years 1993, 1994, 1995, 1996, 1997, 1998

Graph 2

Physical Integrity Rights (Avg) in later stages — PIR

PIR plotted against years 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006

Graph 3

Empowerment Rights (Avg) in early stages

Graph 4

Empowerment Rights (Avg) in later stages