Elite Political Instability and Economic Growth:
An Empirical Evidence from the Baltic States

Ladislava Grochová, Luděk Kouba

Abstract

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The growth theory of new political economics defines some factors that are necessary for economic growth among which political stability. There are distinguished two types of political instability – elite and non-elite – in topical literature. While non-elite political instability concerns about violent coups, riots or civil wars, elite political instability is represented with "soft changes" such as government breakdowns, fragile majority or minority governments. We don´t doubt the importance of general political stability for successful economic development. Nevertheless, we don´t agree that elite political instability can be understood as an insuperable obstacle for it. The aim of the paper is to disprove the hypothesis that elite political stability is a necessary condition for economic growth. Equally with other papers, a number of government changes is used as a proxy of elite political instability. The disproof of the hypothesis is demonstrated on data from the Baltic states where a number of government changes takes place and still fast economic growth could be seen within last two decades. The model has a form of augmented production function and includes growth rates of investments, exports, and labour as independent variables and government changes as an elite political instability dummy variable. The data resulting from estimations applying GMM and GLS because of endogeneity and autocorrelation problems are statistically significant for all three countries and confirm our hypothesis that elite political stability is a necessary condition for economic growth.

Key words

new political economics, political instability, elite political instability, production function, single equation, Baltic states

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Introduction

The two-decades-continuing transformation of the post-communist CEE countries offers a convenient opportunity to test new theoretical concepts as the concepts of new political economics growth theory. We claim it is possible to divide the transition countries into two groups – countries with successful social and economic transition and less or more problematic countries. The entrance to the European Union could be a credible criterion for this dividing. In the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenian we can watch unambiguous political, social, economic and institutional convergence with Western European countries. Thus, we understand their entrance to the EU in 2004 as an honour of their prosperous transition. Bulgaria and Romania appear to be located between both groups of transition countries. We assess their entrance to the EU in 2007 more as an intention to responsible completion of transition process. Except for Croatia, all other Balkans and post-soviet countries fall behind with their transition and nowadays they don´t have any real chance to be invited to the elite European society.

Political instability is a traditional theme of the new political economics growth theory. The thematic literatures usually distinguish two kinds of political instability: non-elite political instability (violent coups, riots, revolutions, civil wars) and elite political instability (cabinet changes, government crises, instability because of minority governments). Our literature review shows that both non-elite and elite political instability is often argued to be a serious obstacle for economic development. While we don´t question the importance of general political stability, we don´t agree that elite political instability is an insuperable obstacle for prosperity. To cast a doubt on the general validity of the hypothesis that elite political stability is a necessary condition for economic growth is the main aim of this paper.

Our argumentation is based on following assumptions about the extent of political stability within the group of successful transition countries. The Visegrad states, Slovenian and the Baltic states are stable and safe democratic countries without threats of civil wars or violent coups. Nevertheless, they suffer from different kinds of elite political instability much more intensively than Western countries. Despite it, they have grown extraordinarily fast since 1990. In this paper, we aimed at the Baltic States where we could observe especially high growth rates during the last two decades, moreover, in an environment of very frequent government changes.

First part of the paper offers a survey of evolution of the new political economics growth theory. Then, the description of used data and methodology is carried on with consequent comments on results and their discussion. The paper ends with the conclusions.

1. Literature review: Evolution of the growth theory of new political economics

In the 1980s, public choice theory began to expand thematically to other issues as well. Analysis of institutional structures and growth theory became important topics. Former public choice theory started to be called political economics or better new political economics. The authors who focus on political factors of economic growth are A. Alesina, Ch. Clague, P. Keefer, S. Knack, M. Olson, R. Perotti, T. Persson or G. Tabellini.

A strong wave of papers on new political economics growth theory we can find in the first half of the 1990s. These papers focused especially on questions about an importance of political regime and political stability for economic development. These topics were not only discussed within new political economics but they were popular among mainstream economists as well. These questions were particularly topical because of geopolitical changes that were connected with break-up of the Soviet Union and with follow-up in social and economic transformation of Eastern European countries.

However, this line of research gradually showed to have serious methodological bottlenecks related, among others, to mutual causality. Przeworski and Limogni (1993) mention 21 empirical studies focusing on a relationship between political regimes and economic growth. Their results say: eight studies emphasized advantages of democracy, eight studies point out contributions of autocracies and five studies do not show significant differences. It became obvious that vague distinguishing between political regimes is not efficient. Previous problems could hardly help to explain what a real character of political and institutional environment is. Using Chang´s terminology (2006), democracy is the only possible form, nevertheless, this form does not automatically guarantee an accomplishment of desirable functions.

The development of the growth theory of new political economy can be shown on texts by Rodrik, one of the main proponents of this approach. Democracy and Economic Performance that was written in 1997 still deals almost exclusively with the relationship between democracy and economic performance. In the paper from 2000 Institutions for High-Quality Growth: What They Are and How to Acquire Them, Rodrik calls democracy a metainstitution that ensures a high-quality growth. This paper, however, documents Rodrik´s thematic shift to new institutional economics. The author no longer argues for the significance of institutions because it is indisputable, but answers the questions about what institutions are crucial and how to acquire them.

The paper from 2002 Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development written with Subramanian and Trebbi is already fully in the spirit of new institutional economics. The title of this paper implies positively its substance. The authors

emphasize the significance of the institutional growth hypothesis. Although they admit the influence of geographical factors and economic integration as well, the quality of institutions is overriding.

As a proof of the evolution of new political economics from the theme in the first half of 1990s to the wider scope of new institutional economics, we can refer to the surveys by Aron (2000) and Jütting (2003). Their papers present a summary of growth theory contributions whose authors are thematically found at the frontier of both mentioned lines of thought.

Thus, we claim that the significance of the topic on political regime and economic growth decreased within wider contemporary economics.

Despite it, this line of research still exists. For example, Lindert (2002) asserts that recent research of the relationship between political regimes and economic performance makes important mistake of omitting history. Lindert based his research on broad historical consequences and implies that average democracy is better for economic development than average autocracy. The crucial transmission mechanism is the human capital instead of the property rights and their enforcement.

Krieckhaus (2006) adds another extension of the topic. He says that is necessary to integrate the economic growth into regional context. The implementation of democracy would decelerate growth in these regions where social groups traditionally require a substantial redistribution of incomes (Latin America) or where the governmental elites are determined to support a fast industrialization (parts of Asia). From our point of view, similar generalizations at the level of continents are not very convincing because of a large number of differences among particular countries.

Doucouliagos and Ulubasoglu (2007) use similar methodological approach as Krieckhaus, nevertheless with different results. Besides conventional conclusions (democracy does not hamper growth, democracy does not have direct effects on growth, however has indirect effects) authors speak about region-specific democracy growth effects. Be in contrast to Krieckhaus´s paper, Doucouliagos and Ulubasoglu find a stronger growth effect in Latin America and a weaker one in Asia.

These papers from the first decade of the century demonstrate that the results of research on relationship between political regime and growth are controversial. In our opinion, this traditional theme within new political economics growth theory is not a perspective line of research to the future.

On the contrary, the second traditional topic of the new political economics growth theory, that is political instability and economic growth, is from our point of view more perspective issue. First contributions to this theme emerged in the second half of the 1980s, i.e. Vanieris and Gupta (1986). However, the main wave of papers came in the 1990s. Alesina, Ozler, Roubini and Swagel (1996) use

in their classical paper a sample of 113 countries from the period 1950-1982. They show that economic growth is lower in countries with high probability of government collapse. Barro and Lee (1994) came to the same conclusion by using data on 116 countries within 1965 to 1985. Similarly, recent papers by Aisen and Veiga (2010) or Qureshi, Ali and Khan (2010) find negative relationship between political instability and economic development. The former uses a sample covering 169 countries, the latter the case of Pakistan.

As far as methodology is concerned, Jong-A-Pin (2006, 2009) offers a survey how to measure political instability and its impact on economic growth. Using a factor analysis, he distinguishes four dimensions of political instability: civil protest, politically motivated aggression, instability within regime and instability of the political regime. Being in agreement with some other authors, Jong-A-Pin questions credibility of political instability single proxies as cabinet changes and call for using of broader indexes of political stability.

Nevertheless, in this paper, we deal with one dimension of political instability typical for the Baltic states as well as for central European countries that we call elite political instability (it is compatible with Jong-A-Pin´s term instability within regime). Thus, we can mention papers by Aisen and Veiga (2010), Gyimah-Brempong and Dapaah (1996) and Fosu (1992) that use from our point of view equivalent terminology and methodology. On the other hand, all these three papers also end with conventional general conclusions: political instability has negative impact on growth.

Aisen and Veiga (2010) test their hypothesis by estimating dynamic panel data models for GDP per capita growth by using a sample covering 169 countries between 1960 and 2004. They describe in detail six explanatory variables – initial GDP per capita, investment (% GDP), primary school enrolment, population growth, trade openness, cabinet changes and two additional variables – inflation rate, government expenditures (% GDP). Aisen and Veiga work with both simple proxy – cabinet changes that stand for elite political instability – and indexes of political instability – three types of Regime instability index, Violence index and Political instability index. The most extended of them, Regime instability index, includes cabinet changes, constitutional changes, coups, executive changes, government crisis, number of legislative elections and fragmentation index.

Gyimah-Brempong and Dapaah (1996) and Fosu (1992) use identically with us a single equation model. The methodology using with Gyimah-Brempong and Dapaah differs from ours only in details – they quantify capital as percentage of GDP. Fosu´s methodology is the same as ours (see next chapter). Nevertheless, the most important general difference of these papers from that ours is that both Gyimah-Brempong and Dapaah (1996) and Fosu (1992) work with a sample of African countries.

Therefore it is obvious that they deal especially with non-elite political instability. Whereas we focus on elite political instability that can be observed also in European countries.

2. Data and methodology

The econometric analysis is based on seven-year quarterly data (2002Q1-2008Q4) collected from Eurostat – European Statistical Office and Conrad and Golder (2010). Data comprise GDP growth rate, investments growth rate, exports growth rate, population growth rate, and number of cabinet changes in the Baltic states – Estonia, Latvia, and Lithuania. We use a seven-year time series since not all data before 2002Q1 are disposable and after 2008Q4 the data are not suitable for our analysis because of an extreme situation of economic crises.

The model is based on augmented production function framework feasible for an investigation of the effects of elite political instability on economic growth. We follow the ideas of Feder (1983), Fosu (1992), Krueger (1980), and Ram (1987) including growth rates of investments, exports, and labour as independent variables and cabinet changes as an elite political instability dummy variable into the growth equation. The estimated equation is of the form:

$$y_{it} = \alpha_0{}_{it} + \alpha_1{}_{it}i_{it} + \alpha_2{}_{it}l_{it} + \alpha_3{}_{it}x_{it} + \alpha_4{}_{it}PI_{it} + \varepsilon_{it} \qquad (1),$$

where y, i, l, and x are the growth rates of GDP, investments, labour, and exports respectively; PI is a dummy variable that controls for an impact of elite political instability on economic growth, α_0 is an intercept, and ε is a stochastic error term.

Since i, l, and x are normal inputs, positive signs are expected. In particular, as for investments growth rate (i) a positive coefficient is expected. Mankiw et al. (1992) demonstrated that greater investments are positively correlated to GDP growth. Next determinant of GDP growth in our model is exports growth rate (x). The role of exports seems predominantly positive in most studies (Feder, 1983; Krueger, 1980; Tyler, 1981). According to the growth theory (for example Mankiw et al., 1992), the accumulation of human capital is an important contributor to economic growth. Active population growth rate (l) although it does not assure productive human capital is used as a proxy for human capital accumulation so again a positive sign of the parameter should result. Inspiring us by recent literature focused on the impact of political instability on economic development (Aisen and Veiga, 2010; Fosu, 1992) we use cabinet changes as a proxy for elite political instability. Cabinet change occurrence stands for a dummy controlling the influence of elite political instability on economic growth. In contrast with majority literature (Alesina et al., 1996; Darby et al., 2004; Jong-a-Pin, 2009) we expect in our case no impact of elite political instability, hence, elite political instability in our point of view cannot prevent from economic development, other factors being more important for economic growth.

The data are tested for stationarity with the Augmented Dicky-Fuller and the Elliot-Perron tests, for endogeneity with the Hausman-Wu test and for correlation with the Durbin-Watson test. We applied OLS, GLS, and GMM methods for estimation.

3. Results and discussion

Generally, using time series that are not stationary may lead to spurious results (Enders, 1995). To control for stationarity we apply the Augmented Dicky-Fuller and the Elliot-Perron tests. These show that stationarity problem does not occur in our case. The null hypothesis of no stationarity (a variable contains a unit root) can be rejected at 1% level.

Two problems may emerge doing estimations: endogeneity and high correlation among variables causing multicollinearity problem. The first problem can be detected with the Hausman-Wu test. The model estimation starts with assumption that all explanatory variables are exogenous. Hence all independent variables may be influenced by economic development it is necessary to test the investments, export and labour growth if they are independent on error terms. The Hausman-Wu test shows that investments growth is endogenous in Estonia and Lithuania, export growth is enodgenous in Latvia and Lithuania, and labour growth is endogenous in Estonia and Latvia. The endogenous variables render the whole model endogenous for all three countries. The endogeneity problem can be resolved by an IV-GMM estimator method of estimation GMM that includes instrumental variables (IV). Independent variables once-lagged values are used as instruments then regarding them natural candidates for instruments.[1] The relevance of instruments is tested with the J- test in which the partial R squared is always high and the F statistics is significant.

Marginal values of correlation among some variables may foreshadow multicollinearity problem. This, however, is not proved by examining the Variance Inflation Factors (VIF)[2] (see table 1).

Tab 1: Variance inflation factors and tolerance

Variable	VIF	1/VIF	VIF	1/VIF	VIF	1/VIF
	Estonia		Latvia		Lithuania	
X	1.4	0.712806	1.86	0.537189	1.69	0.590903
I	1.37	0.729274	1.54	0.650367	1.55	0.643174
L	1.04	0.964149	1.32	0.756192	1.12	0.894129
Mean VIF	1.27		1.57		1.46	

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[1] For more detailed discussion see Aisen and Veiga (2010).
[2] The VIF ranges from 1.0 to infinity. VIFs greater than 10.0 are generally seen as indicative of severe multicollinearity. Tolerance (1/VIF) ranges from 0.0 to 1.0, with 1.0 being the absence of multicollinearity.

Consequently autocorrelation is tested. Because of a strong serial correlation among errors in all equations that is revealed by Durbin-Watson d-statistic (see table 2)[3], estimation of parameters is continued with GLS applying Corchane-Orcutt regression AR(1).

Tab 2: Durbin-Watson d-statistics

Durbin-Watson d-statistic (4, 28)	
Estonia	2.617871
Latvia	2.694585
Lithuania	2.858878

The estimation results for Estonia, Latvia, and Lithuania are reported in table 3. Consistent with expectations, the coefficients of i, l, and x are all positive in all three countries, and, except for labour, all statistically significant at 1% level. Labour proves to be significant at 5% level only in Lithuania. The statistical significance considerably improves when moving from OLS to GMM and finally to GLS. The estimations exhibit high R-squared so that the model may be considered quite comprehensive. Most importantly, elite political instability proves to be not influential when regarding economic growth as described in our hypothesis. In other words elite political stability is not necessary for economic development as shown on the example of the Baltic states.

The estimation results for Estonia, Latvia, and Lithuania are reported in table III.

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[3] Null hypothesis is no serial correlation, i.e. errors are serially independent.

Tab 3: Estimations of growth equations

Y	OLS			OLS robust			IV GMM			corc AR(1)		
	Estonia	Latvia	Lithuania	Estonia	Latvia	Lithuania	Estonia	Latvia	Lithuania	Estonia	Latvia	Lithuania
I	0.133	0.337	0.13	0.133	0.337	0.13	0.147	0.128	0.04	0.17	0.312	0.176
	(0.051)*	(0.067)**	(0.057)*	-0.065	(0.062)**	(0.045)**	(0.049)**	-0.106	-0.077	(0.037)**	(0.063)**	(0.040)**
X	0.468	0.475	0.611	0.468	0.475	0.611	0.35	0.579	0.532	0.284	0.472	0.46
	(0.067)**	(0.167)**	(0.142)**	(0.068)**	(0.179)*	(0.151)**	(0.094)**	(0.226)*	(0.155)**	(0.061)**	(0.164)**	(0.070)**
L	-0.046	0.084	0.719	-0.046	0.084	0.719	-0.228	1.275	3.016	0.033	0.886	1.235
	-0.311	-0.751	-0.932	-0.364	-0.737	-0.864	-0.314	-0.978	(1.237)*	-0.267	-0.889	(0.523)*
cabinet_change	0.011	-0.034	0.068	0.011	-0.034	0.068	0.039	-0.031	0.047	0.032	0.017	0.049
	-0.015	-0.025	-0.033	-0.012	-0.02	(0.024)*	-0.021	-0.029	-0.036	(0.015)*	-0.02	(0.016)**
Constant	0.46	0.119	-0.463	0.46	0.119	-0.463	0.748	-0.961	-2.576	0.532	-0.662	-0.868
	-0.306	-0.74	-0.941	-0.357	-0.72	-0.92	(0.329)*	-0.96	(1.223)*	-0.284	-0.814	-0.538
Observations	28	28	28	28	28	28	27	27	27	27	27	27
R-squared	0.83	0.82	0.72	0.83	0.82	0.72				0.8	0.8	0.79

* significant at 5%; ** significant at 1%

Standard and robust standard errors in parentheses

Conclusion

Political (in)stability is often mentioned as a crucial, both positive and negative, contributor to economic growth. New political economics growth theory usually distinguishes two kinds of political instability: non-elite political instability (violent coups, riots, revolutions, civil wars) and elite political instability (cabinet changes, government crises, instability because of minority governments). In thematic studies both non-elite and elite political instability is often argued to be a serious determinant of economic development. While we don´t cast a doubt on the importance of general political stability, we don´t agree that elite political instability is an insuperable obstacle for prosperity. The disagreement results in testing the hypothesis that elite political stability is a necessary condition for economic growth expecting a negative statement, i. e. a disprovement of the hypothesis.

Our argumentation is based on following assumptions about the extent of political stability within the group of successful transition countries. The Visegrad states, Slovenian and the Baltic states are stable and safe democratic countries without threats of civil wars or violent coups, however, they experience elite political instability. That is why we show that even in relatively politically instable economies in the elite sense the economic growth has been extraordinarily fast since 1990. In this paper, we offer an evidence of our theory on the case of the Baltic States where high growth rates have been achieved during the last two decades, their political environment being characterized with a high number of cabinet changes.

For the empirical part a single-equation approach was chosen to exam the influence of elite political instability on economic growth in the Baltic states. The model has a form of augmented production function and includes growth rates of investments, exports, and labour as independent variables and government changes as an elite political instability dummy variable. The data resulting from estimations applying GMM and GLS because of endogeneity and autocorrelation problems are statistically significant for all three countries and confirm our hypothesis that elite political stability is not a necessary condition for economic growth. The case of the Baltic states so positively shows that countries can grow very fast even in the environment of significant elite political instability. We are convinced that the relevance and credibility of our results will be further strengthened prolonging and extending the data sample with the other successful CEE countries.

Our results cast a doubt on the generality of other studies conclusions (i.e. Fosu, 1992; Aisen and Veiga, 2010) that elite political instability is an important condition to economic development. Moreover, we can discuss the role of indexes frequented in recent topical literature. We agree with the general idea that an index consisting of more complementary indicators may have higher

information capability than simple proxies. Nevertheless, widespread combinations of elite- and non-elite political instability indicators can lead to confusing results because of different effects of the two types of political instability on growth. In our opinion, opposite to elite political instability non-elite political instability is a crucial condition for successful economic development. Thus, the subsuming of elite political instability indicators into the indexes distorts the conclusions hiding the real significance of the political stability for growth. As a consequence, we recommend distinguishing between indexes of elite political instability and indexes of non-elite political instability and their appropriate use in particular cases.

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