Economic Voting in the Slovak Republic and the Political Right-Wing

Research Paper

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Abstract

This paper evaluates the differences in the degree to which the preferences of the Slovak right-wing and left-wing parties are affected by the development of consumer prices and unemployment. Using the linear regression approach, it provides evidence that the Slovak left-wing voters are resistant to economic voting, which is shown by the fact that changes in the preferences of the Slovak left-wing government during 2006-2008 did not react to changes in the Consumer Price Index and the unemployment rate. By contrast, the Slovak right-wing is held accountable both for rising prices and unemployment. Thus, the research unveils a new, unexpected difference between left- and right-wing voters. Furthermore, it is argued that, under constantly shrinking monetary and fiscal sovereignty, political parties that have voters highly responsive to economic conditions are in a great disadvantage as their preferences are dependent on factors they can influence less than in the past.

Keywords: Slovak Republic, economic voting, partisan voting, left-wing, right-wing, euro-area, fiscal policy, monetary policy

Introduction

There are a number of factors that influence one's decision to vote in favor of a given party or a particular candidate. Economic conditions are, as a large body of literature[1] has already shown, a major factor behind people's political choices. For example, Rees *et al.* (1962) report the first 'ancestors' of modern economic voting theories as early as 1931[2]. Twenty-six years later, Downs (1957) published his *An Economic Theory of Democracy*, which incited a lively debate in the social sciences on the use of quantitative methods and the analytical apparatus of economics in political science. The voter described in Downs's work relies on her own rationality when deciding about her electoral choices. She assesses the costs and benefits related to the policies introduced by the incumbent and chooses, based on past experience, whether to re-elect the incumbent.

This approach, although simplistic compared to the current state of the field, served a firm basis for further enquiry into the phenomenon of economic voting. A more sophisticated example of this line of literature is Saunders's (1995) empirical analysis of British voting behavior, in which the author shows how voter preferences changed as a consequence of share ownership in public companies whose privatization had originally been opposed by the current shareholders. This type of literature emphasizes the electorate's tendency to pocketbook or "egotropic" voting (Lewis-Beck and Paldam 2000, p. 114), i.e. to form preferences based on one's personal finances. A rivaling view is that economic voting is sociotropic, which means that voters form their preferences based upon the economic condition of the society as a whole (see

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[1] Tóka (2011) estimates the literature on this particular topic to number as much as three hundred major articles and twenty books.

[2] The authors were referring to Tibbitts's (1931) *Majority Vote and the Business Cycle* which is devoted to the analysis of how incumbent parties fare in times when elections are preceded by an economic expansion.

for example Kinder and Kiewiet 1979, 1981). Another important controversy in the literature is related to the retrospectivity and prospectivity of economic voting. Needless to say, given the nature of the data, most of the time-series analyses on voting behavior base their research on the assumption that it is past experience that counts (Lewis-Beck 1988).

As far as Central and Eastern European countries (CEECs) are concerned, "voting scholars have predominantly focused on individual-level single-country studies […]. Aggregate-level analyses, as well as multinational comparative studies are more rare and hard to find" (Tverdova 2007, p. 3). Nevertheless, there still exists a relatively large body of literature on voting behavior in Central and Eastern Europe. These include works by Pacek (1994), Tóka (1995) and Fidrmuc (2000a, 2000b) who concentrate mostly on voters' support for economic reforms and the new political regime. A later work developing this line of the literature is Roberts's (2008) treatise on the signs of hyperaccountability in the CEECs. Less attention has been given to the analysis of differences in economic voting patterns along the traditional left-right divide as well as the validity of the established theories on economic voting for the region. The research paper hereby aims to fill this gap in the current literature.

According to the textbook theory on partisan economic voting, the political left will be more susceptible to reacting to increasing unemployment rates while the political right will punish its representatives less for growing unemployment, but more for increasing inflation (Evans 2004).[3] Indeed Lewis-Back and Paldam (2000) refer to these indicators as "the big-two". Moreover, empirical analyses on this particular subject were conducted by Hibbs (1982) showing the existence of an apparent cleavage between left and right voters concerning economic issues.

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[3] It is possible to refine this rather simplified view on partisan voting behavior by referring to the Phillips-curve which forces incumbents to always choose between Unemployment and Inflation as the decrease of one of them automatically increases the other. This, once again, is a theoretical underpinning of selective punishments by the voters (Evans 2004).

These statements are in accordance with the so-called salient goal hypothesis put forward by Powell and Whitten (1993). Another rivaling view (Carlsen 2000), known as the clientele hypothesis of voting behavior claims that voters will vote left if they consider unemployment as being too high and right if they consider inflation being too high. According to this view, left parties gain from high unemployment even if they are in the incumbent coalition. The same stands for the right concerning inflation. Finally, the responsibility hypothesis provides a non-partisan view on voting behavior and politician's accountability. According to this view, voters punish governments both for inflation and unemployment regardless of their ideological background (Carlsen 2000).

The empirical analysis in this paper tests these hypotheses in the conditions of the Slovak Republic. Using monthly aggregate-level survey data on voting preferences, it demonstrates that Slovak voters of the political left and the right still differ from each other, yet in a rather peculiar fashion: the voters of right-wing parties are far more likely to hold their political representatives accountable for economic imbalances, be it unemployment or changes in the price level, than the voters of the left. Thus, it seems that the real difference is in the degree to which voters of the left and the right follow the logic of economic voting and not the economic indicators they are interested in.

Finally, the analysis provided in this paper exceeds the boundaries of voting behavior theory. It evaluates the consequences of having an electorate that is strongly responsive to economic conditions. It argues that, under increasing supra-national integration in Europe, the loss of control over traditional instruments of monetary-and fiscal policy puts the Slovak right-wing at a considerable disadvantage. Having voters strongly responsive to economic conditions that depend more on the European Central Bank and the Commission of the European Union

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than on the state government might become a serious problem that will require specific measures in terms of political communication to overcome possible losses in the preferences.

2. Data and Methodology

The last decade of Slovak political history provides an excellent opportunity for an analysis on policy-oriented partisan economic voting. The 2002-2006 Slovak government is generally perceived as a strong supporter of neoliberal economic policies, while the 2006-2010 government, dominated by the party SMER-Sociálna demokracia, can be reasonably thought of as a government leaning towards the political left[4].

The data for the response variable of the regression models presented come from the monthly surveys of political preferences conducted by the Institute of Public Opinion Research of the Statistical Office of the Slovak Republic for the November, 2002-December, 2008 period[5]. By analyzing monthly changes in the preferences of the government parties in 2002-2006 and 2006-2008, it is possible to unveil the strength of partisan behavior among Slovak voters. Unfortunately, it is not possible to include data from 2009 and 2010, as the Institute of Public Opinion Research was dissolved at the beginning of 2009.

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[4] A corroboration of our assumptions about the partisanship of the governments mentioned can be found in the analysis of the international position of the governing parties. SDKU-DS, SMK and KDH are all members of the European People's Party (EPP-www.eppgroup.eu), while SMER is a member of the Party of European Socialists (PES – www.pes.org).

[5] The approximate number of respondents is around one thousand. The exact number of respondents questioned for a given survey can be found in the quarterly bulletins of the Institute of Public Opinion Research of the Statistical Office of the Slovak Republic *Názory* (Opinions).During the period from November 2002 to June 2006 and from May 2007 to December 2008 the respondents were asked the following question: "Imagine, the elections would be held today. Which party, movement or coalition would you vote for?" From July 2006 to April 2007, the respondents were asked the following question: "Please, tell which party, movement or coalition do you sympathize most with these days?" (Statistical Office of the Slovak Republic 2009).

In addition to government preferences, regressions will be run with the response variable being the preferences of the most important right-leaning and most important left-leaning coalition party. The reason for this is that the 2002-2006 and the 2006-2010 governments included parties that cannot be unequivocally identified as left-or right-leaning. The 2002-2006 government included the most stable right-wing political party of the country SDKÚ-DS, the Christian Democrat KDH, the Hungarian ethnic party SMK and a new right-wing political party ANO. The rhetoric of KDH and SMK is rarely dominated by economic issues, while ANO turned out to be a relatively unstable political subject that did not have enough time to establish itself in the political arena. The 2006-2010 government included the left-wing SMER-Sociálna demokracia, the ultranationalist SNS and ĽS-HZDS which once again cannot be identified as left or right-wing. Out of these three parties, it is primarily SMER-Sociálna demokracia that identifies itself with the left both on the national and international level.

The explanatory variables included in the research are monthly data on the change of the consumer price index[6] (CPI), unemployment (seasonally not adjusted)[7] and the Industry Production Index of the Eurostat. Whereas the CPI and unemployment would serve as the main explanatory variables whose effect we are interested in, the industry production index is included in the model as a proxy for overall economic activity. The reason this variable was chosen to

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[6] One of the major advantages of the CPI is that it only measures the change in the prices of consumer goods, thus ignoring changes in the price of industrial goods. The CPI suits the analysis better as voters/consumers are not likely to be influenced by the prices of industrial goods. The CPI in the form used in this analysis measures the evolution of the price level, yet it does not measure inflation as such, which is defined as the development of prices over a given time as opposed to one fix point in time. Despite this difference, it can be argued that the CPI also fulfills the main role expected from this variable, i.e. to be a measure of price (in)stability.

[7] Seasonally not adjusted data on unemployment are used in order to allow a more precise mapping of the relationship between unemployment and voter preferences. If this were a study on macroeconomic cycles, it would be desirable to include seasonally adjusted data. Nevertheless, voting behavior will most likely depend on the real state of the economy at a given point, which leaves students of economic voting with little concern over whether this development is caused by nature (for example, idleness during the winter season) or substantive economic changes.

fulfill this role is that of data availability, as information on the gross domestic product (GDP) is, contrary to the Industry Production Index, not supplied on a monthly basis. The variables used in the empirical analysis are listed in Table 1.

The regression coefficients are estimated using the ordinary least squares (OLS) method. The residuals of the regression equations will be tested for heteroskedasticity, normality and first and second order autocorrelation. In those cases when the tests indicate a high probability of the violation of one or more of the traditional assumptions of the OLS method, data transformations will be used to overcome these obstacles.

Box 1 - Which method to use for testing economic voting

The analysis in this paper falls within the category of single-unit time series analyses using aggregate data for the macroeconomic indicators and aggregated survey-data for the preferences of the population. The first key issue related to the data and method used in this paper is whether surveys, i.e. opinion polls can be put on par with elections. "The important point to note is that figures derived from surveys should not be regarded as precisely accurate. They are *estimates* of the true situation among the population being studied" (Denver 1994, p.7). The survey data used in this analysis is by no means an exception to this rule. This is also proven by the election results from June 2006, which, if contrasted by the survey results from the same month, can serve as a useful illustration of the reliability of survey polls[8].

Nevertheless, in the case of the Slovak Republic, time-series analyses cannot be conducted using results from elections. From 1989 The Slovak Republic held as few as seven free elections to the National Assembly, three presidential elections and three nation-wide elections to the Bodies of Self Governments (regional elections). Needless to say, constructing time-series based on just one type of election would be problematic due to the short democratic history of the country, while constructing time-series based on different elections would decrease the validity of the results as different types of elections are perceived differently by the electorate. As Broughton points out, "we must be careful in particular not to ascribe too much significance to elections below national level, whatever their importance might appear to be at the time"(Broughton 1995, 148). In addition to this, testing economic voting on the level of local elections would indirectly imply that the researchers consider voters incompetent to such an extent that they believe that nation-wide inflation and unemployment depend on their local government. Taking into account the constraint of short democratic history, it was only possible to test economic voting using aggregated survey data in combination with aggregate macroeconomic indicators followed over a given time period.

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[8] I have decided not to include, despite its higher precision, data from the elections because my intention was to keep the data points of the time-series as homogeneous as possible. Having just one data point that was formed under the conditions of a real election, while the others were the result of surveys, would decrease the quality of the dataset used.

Nevertheless, the analysis put forward could be refined by accessing individual survey-level data. This would enable us to test pocketbook voting and link voter behavior with individual income, age, marital status or other indicators. For instance, one of the key issues the data used in this survey could not allow us to test is the susceptibility of voters to vote based on the economic situation of the country in different age categories. As Pacek and Radcliffe (1995) found, "in countries with low to moderate levels of spending, the economy has a more dramatic on the vote when things are good than when things are bad, and […] the economy plays less a role in states with high levels of spending, regardless of the direction of economic change" (p. 44).

Table – Comparison of survey poll results with election results

Party	Survey (June 2006)	2006 Election Results	Difference in percentage points	Difference in percentages
SMER - SD	28.5	29.14	0.64	2.25
SDKÚ – DS	12.7	18.35	5.65	44.49
SNS	9.7	11.73	2.03	20.93
SMK	10.3	11.68	1.38	13.4
HZDS-ĽS	12.9	8.79	-4.11	-31.86
KDH	8.9	8.31	-0.59	-6.63
ANO	2.3	1,42	-0.88	-38.26

Based upon this idea, it might be hypothesized that those social groups that receive most of their income from the state are not equally sensitive to economic voting than the work force[9] or they react to incentives different than the economically active part of the population. At the same time, such findings need to be carefully tested and, if possible, corroborated by several studies, for one of the most-important weaknesses of research studies based on aggregated data is the so called ecological fallacy. Ecological fallacy refers to situations when it is assumed that a given group is homogeneous to an extent that relations discovered using the analysis of aggregated data are used to describe an individual in the group (The Sage Encyclopedia of Social Science Research Methods. 2004). This problem might have also corrupted the results of the present analysis.

Another method worth discussing is in-depth interviews. In-depth interviews are less commonly used in the economic voting literature. Nevertheless, I would argue that for discovering the effect of various institutional and legislative changes, for example, in the welfare system, it is exactly this method that might be of use to the research community. Let us presume that the voters, when making their political choices, follow the logic of pocketbook voting. In this case, they might change their preferences because of a new type of legislation or even after several legislative measures have been introduced that put them into a financially disadvantageous situation. The standard statistical apparatus used in this and many other studies will not be able to isolate the effects of the legislation on the

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[9] From a rational choice perspective, it could be argued that an average pensioner would favor a low-inflationary, high-unemployment economy as the nominal income she receives remains rather stable over time which means that higher inflation would affect its real value to a rather large extent, while, as a pensioner she is o more part of the workforce.

voters unless it is possible to identify one concrete point in time when a decisive package of reforms was introduced. In-depth interviews, on the other hand, might unveil an effect on the voting behavior of individuals and map it to greater detail.

The analysis proposed in this paper is, just as many other empirical analyses, constrained by the type of available data. This not only extends to the response variable, i.e. the preferences of chosen political parties and the governments, but also the explanatory and control variables which needed to be chosen among indicators available on a monthly basis. For this reason, it was impossible to control for the average disposable income or the gross domestic product which are only accessible at a quarterly level.

In the case of first order autocorrelation, the lagged version of the independent variable will be included on the right side of the regression equation. In cases where none of the traditional techniques seems to be efficient enough in overcoming the assumption violations, the Newey-West heteroskedasticity and autocorrelation consistent parameters will be calculated (Newey and West 1987).

Table 1 – Variables used in the regression models

Variable	Description	Source
RIGHT LEFT	RIGHT is the preferences of the right-wing government between 2002-2006. LEFT is the preferences of the left-wing government between 2006-2008.	Survey data from the monthly polls conducted by the Institute of Public Opinion Research of the Statistical Office of the Slovak Republic. Data gathered and compiled by the author from the quarterly bulletins *Názory (Opinions)* published by the Statistical Office of the SR.
SDKU SMER	The preferences of parties with strong left-right identification. SMER represents the left-wing party SMER-Sociálna demokracia incumbent in 2006-2010. SDKU represents the right-wing party SDKU-DS incumbent in 2002-2006.	Survey data from the monthly polls conducted by the Institute of Public Opinion Research of the Statistical Office of the Slovak Republic. Data gathered and compiled by researcher from the quarterly bulletins *Názory (Opinions)* published by the Statistical Office of the SR.
CPI	Consumer Price Index: Measures the monthly changes in the price level of consumer goods. Is expressed in relation to the 2005 base year	The internet portal of the Statistical Office of the Slovak Republic: www.slovstat.sk

UNMP	Seasonally not adjusted monthly unemployment rate.	The internet portal of the Statistical Office of the Slovak Republic: www.slovstat.sk
IPI	"The industrial production index shows the output and activity of the industry sector. It measures changes in the volume of output on a monthly basis. Industrial production is compiled as a 'fixed base year Laspeyres type volume-index'. The current base year is 2005" (Eurostat).	The internet portal of the Eurostat: http://epp.eurostat.ec.europa.eu

3. Results and Discussion

Eight regressions were run with the response variables RIGHT, LEFT, SDKU and SMER. Each of the response variables was regressed against UNMP, CPI and IPI with a lag of one time period and a lag of two time periods. The results of the regressions are shown in Table 2. The significance of the Jarque-Bera statistic for normality of distribution of error terms (Jarque and Bera 1980), the significance of the White statistic for testing heteroskedasticity (White 1980), the Durbin-Watson statistic and the significance of the Breusch-Godfrey statistic for testing second order serial correlation are shown in Appendix no.1. In the case of equation 1 and 5, The Newey-West parameter estimates were used. The parameters as well as the aforementioned tests were calculated using the statistical software tool Eviews 7.

As can be seen from Table 2, LEFT and SMER differ from RIGHT and SDKU both in the significance of the parameter estimates and the overall fit of the model. The only case when any of the macroeconomic indicators seems to show signs of influencing the preferences of the left is when LEFT is regressed against the explanatory variables lagged by two time periods (Eq. 6).

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Table 2 – Results of regression models

Variables (lag)	Eq. 1 RIGHT Newey-West	Eq. 2 LEFT	Eq. 3 SDKU	Eq. 4 SMER	Eq. 5 RIGHT Newey-West	Eq. 6 LEFT	Eq. 7 SDKU	Eq. 8 SMER
CPI (-1)	-0.52 (0.08)***	-0.16 (0.35)	-0.19 (0.07)***	0.24 (0.36)	-	-	-	-
UNMP(-1)	-0.87 (0.437)**	-1.64 (1.04)	-0.91 (0.30)***	-0.07 (1.15)	-	-	-	-
IPI(-1)	-0.09 (0.07)	-0.07 (0.04)	-0.07 (0.042)	-0.03 (0.04)	-	-	-	-
CPI(-2)	-	-	-	-	-0.43 (0.103)***	-0.42 (0.34)	-0.145 (0.07)**	0.00 (0.344)
UNMP(-2)	-	-	-	-	-0.62 (0.46)	-2.04 (1.0)*	-0.52 (0.31)*	-0.41 (1.08)
IPI(-2)	-	-	-	-	-0.12 (0.09)	-0.012 (-0.26)	0.033 (0.05)	0.02 (0.047)
SDKU(-1)	-	-	0.22 (0.17)	-	-	-	0.39 (0.17)**	-
SMER(-1)	-	-	-	0.34 (0.18)***	-	-	-	0.36 (2.1)
C	126.02 (15.72)***	115.9 (59.62)*	54.92 (15.77)***	-0.12 (63.36)	112.8 (15.6)***	148.52 (57.77)**	30.15 (15.38)	28.58 (60.6)
F-stat	29.9***	2.94*	13.24***	3.7**	19.3***	2.77*	8.63***	3.55**
Adj.-R^2	0.67	0.17	0.54	0.28	0.57	0.15	0.43	0.27
n	43	30	43	29	42	30	42	29

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors are given in the parentheses.

Otherwise, UNMP and CPI's performance as indicators of preference change is fairly unimpressive in the case of the Slovak political left. The adjusted R-squares reached in the equations 2, 4, 6 and 8 oscillate between 0.15 and 0.28 which once again confirms that the traditional economic indicators are not useful in explaining the left's preferences in Slovakia.

By contrast, in the case of RIGHT and SDKU the Consumer Price index and unemployment rates seem to have a considerable effect on the preferences[10]. In each case, the direction of the relationship complies with the expectations of the responsibility hypothesis mentioned earlier, i.e. increasing prices, as well as increasing unemployment cause a decrease in the preferences of the government and the incumbent political party. In addition,

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[10] The only exception to this regularity occurs in equation 5, when UNMP is lagged by two periods and does not reach a high enough statistical significance.

the adjusted R-squares show that CPI, UNMP and the control variable IPI perform much better as explanatory variables than they do in the case of LEFT and SMER.

4. Implications for the Political Parties

The results presented here show that the political right is not only more dependent on well-functioning economic policies, but is also far more exposed to the consequences of euro-area membership and the growing influence of the European Union in the fiscal and monetary policy. Taking into account that the Slovak economy, as one of the fast growing new members of the euro-area, is expected to go through a period of high-inflationary development in the coming years (Benčík *et al.* 2005)[11], it might become very difficult for the political right-wing to avoid losses due to decreasing price stability. Curbing inflationary pressures would require monetary autonomy which the Slovak Republic ceded to the European Central Bank in 2009.

In addition to this, the Slovak government will see its fiscal sovereignty curtailed in the future by the growing influence of the European Union. Under the newest amendment to the Stability and Growth Pact (SGP), the draft of which was approved by the Economic and Financial Affairs Council on March 15 2011, those member states which do not comply with the SGP will be automatically sanctioned as prescribed the EU regulations on the execution of the SGP. Nevertheless, a loophole is still left for non-complying countries to avoid sanctions if more than half of the Council of the European Union agrees with the fines not being levied (Phillips 2010). What Jose Manuel Barroso called a "silent revolution in terms of stronger economic

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[11] According to economic theory, the underlying reason for this is the so-called Balassa-Samuelson (Balassa 1964, Samuelson 1964) effect according to which high-growth countries entering monetary unions with low-growth countries will have to channel growth differences by growing inflation.

governance by small steps" (Phillips 2010) is, in other, more mundane terms, an unprecedented strengthening of the Stability and Growth Pact the consequence of which is automatization of the sanction process in the case of small euro-area members.

Needless to say, under such conditions, the political prospects of those parties whose electorate is more responsive to the state of the economy are in a considerable disadvantage, as their prospects for re-election will depend on factors outside the influence of the national government. At the same time, it should be added that voters of the Slovak right wing might eventually realize that national politicians are being punished for something she can influence only to a limited degree. When evaluating the chances of this happening, one should nevertheless take into account the argument of hyperaccountability put forward by by Robert (2008), according to which "virtually all governments [in the region]are punished" and "the overall rate of punishment is quite high" (Roberts 2008, p. 545). The results of the empirical analysis presented in this paper, in combination with Roberts's (2008) findings might indeed imply that the Slovak right-wing faces a rather difficult challenge in the form of having both an electorate responsive to economic conditions and an ever more important supra-national authority supervising national policies.

Conclusion

This paper presented an empirical analysis of the voting behavior of Slovak citizens with an emphasis on the differences between the supporters of the political left and right. Using standard time-series analysis, it showed that the difference between the electorate of the right-wing and the left-wing is their susceptibility to holding their respective representatives

accountable for the state of the economy. Most surprisingly, the regressions presented have shown very little evidence that leftist voters would react to the growth of unemployment. By contrast, the right-wing seemed to have lost voters both for unemployment and rising prices. In conclusion to these results, the paper argues that, in a small euro-area member state, having an electorate that is strongly responsive to the state of the economy is a disadvantage as many of the policies are being gradually overtaken by Brussels. Thus, the national government is held accountable for something it cannot influence.

Further research should be devoted to test other possible hypotheses of voting behavior in the Slovak Republic. Given the nature of the data, it was impossible to test pocketbook voting, i.e. economic voting dependent on the voters' personal financial situation. Neither was it possible to control for the age, geographic location or marital status of the survey respondents as these data were not publicly available. The topic discussed in the present paper might be analyzed into greater depth once individual-level data become available.

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Appendix

Appendix no.1

	RIGHT Newey-West	LEFT	SDKU	SMER	RIGHT Newey-West	LEFT	SDKU	SMER
Jarque-Bera	0.36	0.91	0.30	0.98	0.51	0.88	0.78	0.87
White	0.56	0.37	0.8	0.31	0.095	0.68	0.49	0.86
Breusch-Godfrey	0.00	0.71	0.67	0.56	0.00	0.38	0.65	0.32
Durbin-Watson	1.29	1.70	1.87	1.75	1.1	1.55	2.09	1.69