LEARNING THE ECONOMIC VOTE AT LOCAL ELECTIONS: CASE OF LITHUANIA, 1995-2011

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ABSTRACT

This paper argues that economic voting is not limited to first-order elections and also can be observed in local elections (usually considered as second-order). Though local governments do not have the power to shape the macro-economic policy of the state, they may have some instruments to influence the well-being of their regions. Moreover, voters may perceive them as accountable for the state of the economy in the region and punish or reward them in local elections on basis of the economic trends. Lithuania appears to be a quite interesting case in which to test these theoretical arguments. Party identification and cleavages are quite weak here: therefore economic voting can be expected to provide at least some explanation of voting (it should not be shadowed by other social factors). Six local municipal council elections were held in Lithuania since the transition to democracy: the first were held in 1995 and the last in 2011. While controlling for important political-contextual factors, this paper strives to compare the impact of economic voting at Lithuania's municipal elections across time five separate time periods. Results of the empirical analysis reveal that Lithuanians are learning the economic vote with unemployment being more significant as a factor in explaining changes in votes for dominant parties in the municipal councils in the more recent period than in the first several elections. A referendum effect is also observed: parties that belong to the national government parties are punished more during economic downturns.
Key-words: *economic voting, local (municipal) elections, change(s) in votes, mayor(al) parties.*

INTRODUCTION

Economic voting is one of the three main theoretical explanations of voting behaviour, alongside party identification and socio-structural theories. It was quite heavily investigated in Western democracies (literature on other democracies has also been expanding, especially in the last two decades) with a focus on first-order (parliamentary and presidential) elections. Lewis-Beck and Stegmaier (2000, p.183) convey the essence of economic voting theory simply: if the economy is doing well, citizens vote for the government (reward effect); in an opposite economic situation, the vote is against the government (punishment effect). Responsibility hypothesis presupposes that voters hold the government responsible for the economy (Lewis-Beck and Paldam, 2000, p.114): those who govern will be punished by voters for the economy's poor performance, and rewarded for good economic performance.

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The explanatory power of economic voting theory depends on the importance of elections and particularly on political context: the economy is expected to have a greater impact on incumbent votes when the incumbent's responsibility for the economy is very clear (Powell and Whitten, 1993, p.410). First, the fragmentation of party systems and governing coalitions is important. It is argued that clarity of responsibility is inversely related to the number of parties forming a coalition: increases in the number of parties weaken economic voting (Lewis-Beck and Stegmaier, 2000, p.209). Second, economics ought to matter more in elections when representatives of the dominant institutions of the political system (according to the constitutional norms and *de facto* established relations between state authorities) are elected; these institutions have the most power to shape the macroeconomic policies of the state (Tucker, 2006, pp.56-61). These insights may lead to an assumption that economic voting theory does not provide explanations of voting in second-order elections as these elections do not decide the fate of the national executive government (Marsh, 1998, pp.591-593; Reif and Schmitt, 1980), especially in local elections where fragmented local government coalitions are norm.

However, theoretical arguments that economic voting could also occur in local elections (usually considered second-order) are possible: though local governments do not have power to shape the macro-economic policy of the state, they may have some instruments to influence the well-being of their regions. Moreover, voters may perceive them to be accountable for the worsening or improving state of the economy in the region and punish or reward accordingly at the ballot box in local elections. Lithuania appears to be quite an interesting case in which to test these theoretical arguments: party identification and cleavages (especially the linkages between social groups and particular parties) are quite weak here (Ramonaitė, 2007; Ramonaitė and Žiliukaitė, 2009). Economic voting can be expected to provide at least some explanation of voting (it should not be shadowed by other social factors) in local Lithuanian elections.

The first part of this paper discusses the theoretical possibilities of economic voting in local elections generally and also particularly in Lithuania. The second part presents the other relevant political-contextual factors that must also be accounted for in the analysis, alongside the economy. The third part of this paper presents a statistical analysis of all periods between the particular municipal elections in Lithuania since the transition to democracy: controlling for the other important factors (such as voter turnout and fragmentation of local party systems) in order to compare the impact of economic voting over time. For the entire time span of 1995 to 2011, data on municipal level unemployment was available. Unemployment rates are one of the most important indicators in economic voting studies, especially in post-communist countries. Therefore, it was possible to test whether the Lithuanian electorate responds to regional economic trends by punishing or rewarding the local governments.

1. ECONOMIC VOTING IN LOCAL ELECTIONS: THEORETICAL ARGUMENTS

At first sight, research on economic voting in local elections may appear more meaningful in countries where local governments have a relatively strong impact on economics. For example, in Belgium, 44.5 per cent of government investments are made by local governments, which

were also responsible for a 7.8 per cent raise in Belgian taxes (Vermeir and Heyndels, 2006, p.2287). In such a case, independent variables (economic) will be closely related to the policies of local governments (municipalities). As the local governments cannot influence the macroeconomic policy of the state, their focus is on the policy instruments at their disposal: the most obvious of which are local taxes.

Jano Vermeir and Bruno Heyndels (2006) argue that local governments might even have some influence on such economic indicators as unemployment and income, or can simply be held responsible by voters for economic trends (even it has not enough power to influence them significantly). Hence it is worthwhile to include these factors in the statistical models: however, in their study of voting in Belgium's local elections, Vermeir and Heyndels (2006) do not find a significant effect of macro-economic indicators. Rodrigo Martins and Francisco Jose Veiga (2010) provide different evidence: in Portuguese local elections, unemployment has a negative impact on the election performance of incumbents. This effect is more strongly manifested in regions where the local government includes political parties that also govern at the national level (Martins and Veiga, 2010). Therefore, it appears that local governments, in reality, could be held responsible for unemployment trends.

One particular feature of second-order elections is very important here: "referendum effect," meaning that local elections could be treated as an event where voters express their satisfaction or disdain with the policies conducted by the national government (Kluonis, 2009; Marsh, 1998, pp.593-594). Hence during economic downturns, national government parties are expected to perform poorly in first-order *and* second-order elections. According to Michael Marsh, the time and location of a second-order election in the electoral cycle may also be important: whereas the popularity of the national government usually hits the lowest point in the middle of tenure, this is the exact time to expect national government parties to suffer their worst losses in a second-order election (Marsh, 1998, p.594).

Therefore, although the logic of conditionality of economic voting suggests that the influence of the economy in local elections should be less clear, it seems that both theoretical and empirical incentives for a more detailed investigation into this phenomenon exist. On one hand, the electorate can reward or punish the local government for particular policies (for example, tax policy) and even hold the local government partly responsible for the region's economic situation. On the other hand, on the basis of the theory of second-order elections, a municipal election could be treated as a referendum for evaluation the performance of the national government.

Resting on the previously presented theory and empirical examples, it is possible to discern the hypotheses aimed at the search for economic voting in Lithuanian local elections. However, certain specifics of the country context must be taken into account first: the peculiarities of local government and local elections obviously exert some influence on the formulation of hypotheses. Municipal council elections are the only direct elections held at the local government level in Lithuania. Hence the administrative and geographical unit of a municipality serves as the "smallest" possible case for observation[1]. (Furthermore, Lithuania's

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[1]   In further presented analysis the notion of region equals a municipality.

municipal institutions are considered quite weak regarding both budget independence and tax policy autonomy (Mačiulytė and Ragauskas, 2007; Čivinskas and Tolvaišis, 2006; Davulis, 2009). Therefore, it is only possible to study the influence of macroeconomics on voting, even if it is acknowledged that the former is not quite dependent on the policies of municipal institutions.

Some authors argue that in Lithuania, the "municipal council is incapable of luring the capital, entrepreneurs" (Čivinskas and Tolvaišis, 2006, p.87). However, a short exploration of the local media and the electoral promises of candidates in the 2011 municipal elections suggests that the electorate may have a different opinion. For example, Artūras Zuokas told voters in Vilnius, "We will initiate the founding of 'Vilnius Air' airlines"[2]. Regimantas Baravykas, the candidate leading the Liberal and Centre Union's list in the municipality of Ukmergė, said, "in our party, we have people of different professions, people that work thoughtfully. They know how to encourage business development, how to effectively utilize the budget"[3].

On other hand, it is necessary to emphasize one important characteristic of Lithuanian voters – they always punish the government in elections. All national governments, since the 1990 parliamentary elections, have experienced losses: voters have never been observed rewarding the government, regardless of whether the economy was worsening or improving. This trend of constantly punishing government in elections is observed in all post-communist Central-Eastern European countries. Andrew Roberts defines this phenomenon as "hyper-accountability," and also notices that governments tend to lose fewer votes when the economy is improving and more when it is worsening (Roberts, 2008). Therefore, it may be expected that national government will always be negatively affected in municipal elections: but less so during a rising economy, and more so during economic downturns (effect of referendum, adjusted to the peculiarities of post-communist context).

Four main hypotheses to be tested in the empirical part are introduced. Before presenting the more detailed operationalisation of variables, it has to be noted that the responsibility object was chosen with reference to an observation made by J. A. Tucker of dominant parties in coalitions (Tucker, 2006, p.60): it is most likely to find the effect of economy's influence while analysing particularly their votes. Moreover, it is strived to explain particular changes in votes: hence, emphasis is placed on the factors that influence the losses and gains of votes in comparison to the last elections.

Hypothesis 1: The economic situation in a region (municipality) is expected to be positively associated with the change in votes (in municipal council elections) for the party that is dominant in the municipality's governing coalition: the greater positive economic change is, the greater probability of a reward (and vice versa).

Hypothesis 2: in periods when the economic situation in the country is worsening, it is expected to find significant differences in votes garnered between the parties that are

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[2]   Webpage of Coalition of Artūras Zuokas and Vilnius. [Looked at 2011 01 23] <http://programa2011.taip.lt/stiprus-miestas.html>

[3]   Ligita Juodvalkienė, „Rinkėjams artėja apsisprendimo metas". Ukmergės žinios, 2010. [Looked at 2011 01 23] < http://www.ukzinios.lt/archyvas-mainmenu-40/1162-rinkjams-artja-apsisprendimo-metas.html>)

dominant in municipal councils and also belong to the national government, and parties that are dominant in the municipal councils, but at the national level are in opposition: parties that are governing at the national level should lose more votes in municipal elections than parties which are not governing at the national level.

Alongside these hypotheses, another one is presented in relation to the inexperience of Lithuania's electorate. Voters in some post-communist democracies may not behave rationally in the first decade(s) after the transition to democracy, especially in municipal elections: their motivations may be heavily influenced by the stress of the triple (social, economic, and political) transformation or by the rhetoric of populism-oriented local leaders. However, rationality of economic voting may be developed over time in relation to the consolidation of democracy and the overall success of the post-communist transformation.

Hypothesis 3: the influence of regional economic trends on voting in municipal elections should become more significant over time.

2. OTHER IMPORTANT FACTORS: CONTROLLING THE POLITICAL CONTEXT

In economic voting studies, statistical models usually incorporate variables other than indicators of economy's performance that could potentially influence voting. Controlling the influence of other factors enables researchers to assess the unique economic impact more reliably. Furthermore, Lewis-Beck and Paldam (2000, p.114) note that economics usually explain about a third of variance in voting functions. Therefore, it is quite natural to "walk the extra mile" in order to explain what is not accounted for by economic factors.

In macro-level studies that aim to explain voting (popularity) for particular political forces and candidates, political variables usually represent certain events, which could negatively affect the gains of a party or candidate (for example, corruption scandals, the country's involvement in war). They are most often coded as dummy-variables. If the study strives to explain not just the success or failure of the governing forces (but also of other political powers), variable that measures if a particular political party or candidate is part of the national executive government (Lewis-Beck and Stegmaier, 2000) may be included. It is necessary to include such factors into the analysis of voting at local elections in Lithuania to test hypothesis 2 . Unfortunately, collecting reliable data on political scandals at the municipal level in Lithuania is a very complicated task – though the author of this article agrees that in Lithuania this factor may hold considerable influence.

In studies of electoral instability, voter turnout is often taken into account: according to Bartolini and Mair, it is one of the variables potentially explaining electoral volatility. More important than the actual level of voter turnout is change: the greater the difference in voter turnout between two elections, the greater the possibility that a disproportion effect will manifest (proportions of voters according to votes casted for particular parties will change) (Bartolini and Mair, 2007 (1990), p.44). Whereas the measure of electoral volatility is an aggregation of changes in the votes (percentages) cast for all parties, voter turnout could also be used while explaining alterations in a certain party's votes. Theoretically, low voter turnout and decreases in voter turnout are useful to parties with stable support from a particular

segment of the electorate: loyal voters who self-identify with the party and are potentially more inclined to show up at elections. It must be noted that in Lithuania, regional level voting patterns (inclination to consistently vote for the same parties) are observably more stable than national level patterns. In such a context, the influence of voter turnout may be important for the dominant party.

Another important variable in studies of electoral stability is party system format. Pedersen (1979) first demonstrated that format (in a general sense, the concept refers to the party system fragmentation) and its change is one of the factors explaining electoral volatility. Considering that the Lithuanian party system is characterized by quite high fragmentation and instability levels (Jastramskis, 2010), inclusion of this variable appears as a quite logical decision. The fragmentation (party system format) factor is important because it helps to partly control another feature of the Lithuanian party system: a visible trend in the success of new parties. The supply of parties in Lithuania is constantly renewed: new organizations are founded almost perpetually. Voters react quite favourably, and give a considerable share of their votes to such political powers at each parliamentary election. Hence, including a variable that measures change in party system fragmentation controls a factor that is otherwise quite difficult to measure.

It may seem that variables and theories about their role in the local elections, presented in this part, are "borrowed" from national-level studies about party systems without questioning whether the same mechanisms work at the level of regional party systems and local elections. However, referring to Reif and Schmitt, first-order and second-order elections cannot be completely separated from each other – they are both characterized by similar (if not identical) party systems, and the same parties participate in both of them (Marsh, 1998, pp.591-593; Reif and Schmitt, 1980). Furthermore, existing studies suggest that trends in Lithuania's national party system tend to materialise in the municipal council elections as well. Mainly by analysing the results of 2002 municipal council election (but also paying attention to the preceding ones), Lukošaitis (2003) detects rising fragmentation (at the national level this trend is visible since the 2000 parliamentary elections) both at the general election results and at the municipal level.

3. EMPIRICAL STUDY: ECONOMIC VOTING IN LITHUANIA'S MUNICIPAL COUNCIL ELECTIONS

The first part of this section presents how variables (the ones used in the empirical analysis) were operationalised. A description of method and data is also given. The second section contains a quantitative analysis: the previously presented hypotheses are tested.

3.1 Method and variables

In economic voting studies, the dependent variable is usually the popularity of the responsibility object (party, politician, coalition, etc.), votes, or change in votes. Therefore, in the operationalisation it is important to decide what the responsibility object is and which attribute will be measured. Considering the latter aspect, in this study, the dependent variable

is percentage of change in votes (percentages are counted from all voters that participated in particular elections) between two elections. Hence, a negative sign means that a party got a lesser share of votes than in previous elections (decrease in percentage points) and a positive sign refers to a greater share of votes than in previous elections (increase in percentage points).

While formulating the hypotheses, it was decided that the dominant party in the coalition would be treated as a responsibility object. It is necessary to define this concept more precisely: which party is dominant in the municipal council? In Lithuania, at the municipal level it is quite easy to conceptualize such political power: the one that holds the mayoral post. Especially because of the hierarchical nature of Lithuanian municipalities, it is the most important post in local government. Moreover, the mayor could be seen as the "face" of a municipal council: the party that controls this post is the most visible to voters.

For the 1995-2011 period, the Statistics Department of Lithuania provides data on one economic indicator at the level of municipalities: unemployment rate (per cent).[4] It is well suited to the economic voting hypotheses: unemployment in economic voting studies is considered one of the "big two" variables (Lewis-Beck and Paldam, 2000, p.114). This economic factor is operationalised as a change, measured by percentage points. The indicator's value at the first year of the analysed period is subtracted from the value of the year before the second elections of a period (municipal elections in Lithuania usually are organized in the first quarter of the year). For example, if 1997-2000 is analysed and in municipality X unemployment was seven per cent in 1999 and five per cent in 1997, the value of this independent variable is two percentage points.

The operationalisation of part of the political-contextual variables is quite straightforward and was implicit in the second part. Being part of the national government is operationalised as a standard dummy variable: 1 – if attribute exists, 0 – if not. Change of voter turnout is measured by subtracting the value of the period's first elections from the respective value of the period's second elections (positive sign refers to the increased voter turnout, negative means that voter turnout decreased).

Party system fragmentation is usually measured with the Laakso-Taagepera index of the effective number of parties (Molinar, 1991, p.1383). However, serious arguments in favour of simply counting parties and applying a certain criterion of threshold (for example, all parties that receive more than 2 per cent of votes are counted) exist. According to Pappalardo (2007, p.725), the Laakso-Taagepera index creates an abstraction and it does not measure the real concentration of parties that is determined by the casted votes. Also taking into account that the variable of fragmentation change strives to control the factor of party supply, a second measurement technique was chosen. At the municipal level, party system fragmentation was measured by the number of parties with at least one seat in the council. Such criterion coincides with the boundary of electoral threshold: in Lithuania's municipal council elections four per cent threshold is applied to parties and 6 per cent to coalitions. Again, the variable

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[4]   Measured as a share of registered unemployed persons in the working age population.

included into statistical analysis (fragmentation change) is measured by subtracting the value after the period's first elections from the respective value after the second elections. It must be noted that such operationalisation is also convenient because the units are easily interpreted: for example, value "2" means that number of parties in municipal council increased by two (respectively "-2" reflect the decrease of the relevant parties by two).

In the following sub-part, analysis of voting for mayoral parties (as explained above, measured as percentage point changes in votes) in the Lithuania's local elections is presented. Six local elections (to municipal councils) were held since the transition to democracy: the first in 1995 and the last in 2011. Hence, it was possible to analyse five separate periods between elections: each of them corresponds to a separate sample of cases (and a separate OLS regression model). Using exactly the same independent variables and controlling for the impact of political-contextual factors, it was possible to compare the role of economic voting across time. Data on elections was gathered from the Central Electoral Commission of the Republic of Lithuania; data on unemployment was provided by the Statistics Department of Lithuania; the author collected data regarding whether municipal parties were part of the national government.

3.2 Empirical analysis: evidence of increasing economic voting

Regression models in the Table 1 present the results of analysis for all the periods between the previous municipal elections in Lithuania. Non-standardized regression coefficients altogether with their significance and standard errors (in parentheses) are displayed. Since our dependent variable measures the absolute change in parties' vote share between two elections, its variation could be driven by the party size and this may bias the results of the regression analysis. In order to control for this, a variable that measures the parties' electoral support (simple vote share in percentage) in the first period election (that took place in the beginning of the electoral period) is added to models. This ensures that the party size-driven variation is accounted.

As it was expected, unemployment is non-significant in Models 2 and 3 (1997-2000 and 2000-2002). The signs of B coefficients are also in the opposite direction than expected if mayoral parties were held responsible for the economic situation in the region: as the negative change in unemployment means that it is declining (the economy is getting better), the coefficient should also be negative (an increase in unemployment in a particular municipality will increase the possibility that the dominant party will lose votes). However, an unemployment rate change is statistically significant in the model that aims to explain changes in votes won by the mayoral parties in 1995-1997; moreover, the variable's coefficient is positive (contrary to expected relationship). How to explain this phenomenon?

Particularities of national politics in Lithuania may explain this "anomaly," when mayoral parties gain more votes (in comparison to the last municipal election) in regions where unemployment is increasing more: the zero-order correlation between two variables is statistically significant and of average strength (Pearson's R=0.342, p<0.05). An absolute majority of mayor posts in this period was controlled by parties that were in national

opposition for the longer part of period. The ruling Democratic Labour Party of Lithuania (DLPL) had difficulties coping with the economic challenges of the post-transition (to democracy) period. Moreover, in the beginning of 1996 a serious banking scandal involving the private interests of the prime minister heavily damaged the popularity of and trust in this party. A new parliamentary election was held in October 1996 and was won by the opposition parties, the Homeland Union-Lithuanian Conservatives (HU-LC) and the Lithuanian Christian Democrats (LCD). This new government was sworn in before the 1997 municipal elections, which were held in March 1997. Voters in the regions that experienced the greater extent of the economic decline from 1995 to 1997 probably had more incentive to vote for the new government parties (they won mayoral posts in an absolute majority of municipalities): hence responsibility for the declining economy was attributed to the outgoing national government (DLPL), not to the local governments.

Regarding the earlier periods, political-institutional variables are significant only in the second model. The impact of fragmentation change could be explained by shifting patterns in the Lithuanian party system: rising fragmentation and increasing instability (Jastramskis, 2010). A change in voter turnout is important here because the majority of mayoral posts in this period were controlled by the HU-LC. This party has the most loyal voters in Lithuania (Ramonaitė and Žiliukaitė, 2003), hence it is natural that the HU-LC is particularly affected by fluctuations in voter turnout (a negative sign means when voter turnout rises, the party receives less votes). However, taking into account both the un-standardised and Beta coefficients, being part of the national government exerted the most influence on the change in votes for the mayoral parties in this period: controlling other variables, being part of the national government cost more than 12.56 per cent of votes. Again, this could be explained by trends at the national level: the economy in the country deteriorated (unemployment rates increased in all municipalities) between this period's municipal elections and clarity of responsibility at the national level was sufficient because of the relatively stable party composition of government.[5] In this context, a referendum effect manifested: during the economic downturn, the electorate punished the parties that were governing at the national level.

Table 1 also presents the results of regression analysis for the two more recent periods between municipal elections in Lithuania: 2002-2007 and 2007-2011 Analysis reveals that Hypothesis 1 is supported by empirical evidence in these periods: regional unemployment actually exerts some influence on Lithuania's local elections, negatively affecting votes for the mayoral parties when unemployment increases and vice versa (coefficients are in the expected direction and are statistically significant). Hence it appears that Hypothesis 3 also receives empirical support: Lithuanians are learning the economic vote in local elections, as the influence of regional unemployment on voting in municipal elections has become more significant over time. It is interesting that in the last period (2007-2011) the change in

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[5]   HU-LC ruled in coalition with junior partner LCD for the greater part of the term. LCD withdrew their support for the government in 1999.

TABLE 1: Influence of economic and political-contextual factors on the change in votes of the dominant party in the municipality, OLS regression (non-standardized regression coefficients, standard errors in parentheses)

	Model nr. 1. Change in votes of the dominant party in the municipality, year 1995-1997	Model nr. 2. Change in votes of the dominant party in the municipality, year 1997-2000	Model nr. 3. Change in votes of the dominant party in the municipality, year 2000-2002	Model nr. 4. Change in votes of the dominant party in the municipality, year 2002-2007	Model nr. 5. Change in votes of the dominant party in the municipality, year 2007-2011
Unemployment (change)	1.86* (0.83)	0.31 (0.75)	1.37 (0.83)	-0.73* (0.27)	-1.71** (0.6)
Fragmentation (change)	0.72 (0.63)	-3.2 * (1.09)	-0.98 (1.23)	-3.34*** (0.7)	-1.81* (0.8)
Voter turnout (change)	0.19 (0.22)	-1.13 * (0.31)	-0.54 (0.52)	0.13 (0.16)	0.2 (0.41)
National government[6]	-	-12.56*** (3.36)	-0.93 (3.01)	-2.68 (1.8)	-6.3** (2.21)
Vote share in first election	0.01 (0.11)	-0.53*** (0.1)	-0.15 (0.11)	-0.12 (0.07)	-0.14 (0.08)
Adjusted R²	0.082	0.613	0.013	0.35	0.256
Statistical significance level	*p<0,05, **p<0,01, ***p<0,001				
N	46[7]	55[8]	60	59[9]	60

Data source: The Central Electoral Commission of the Republic of Lithuania and Statistics Department of Lithuania; part of the data was collected by author.

regional unemployment was the most important factor (see Beta coefficients). This is very interesting since the 2007-2011 period could be considered as very similar to the 1997-2000 period: general economic downturn with increased unemployment in all municipalities and quite sufficient clarity of responsibility at the national level (the party composition of the government remained stable for the longer part of the municipal council tenure). Yet, during

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[6]   In period 1995-1997 only in one municipal council was a dominant party that also belonged to the national government (for the most part of the period).

[7]   In period 1995-1997 Lithuania had 56 municipalities: however, only for 46 of them data on unemployment was available.

[8]   In 1997 Lithuania had 56 municipalities. During the reform in 2000 five new municipalities were established and one abolished. Whereas the municipal reform was executed particularly in the analyzed period and values of variables of the same cases of observation (ir order to measure the change) at two time points are needed, those six municipalities were removed from analysis. The geographical boundaries of other municipalities that were affected by the reform do not match perfectly (comparing the boundaries in 1997 and 2000). However it did not have much influence on the results of analysis: even if all of such cases (municipalities that had been reformed) were removed, the significance of coefficients remains the same.

[9]   Neringa's municipally is not included into analysis because of the special circumstances in period 2002-2007: after the death of long-time mayor Stasys Mikelis his coalition crumbled and lost 39.7 percent points of votes. Lots of coalition's politicians joined other parties.

the 1997-2000 period, national level factors (being part of the national government) do not overshadow the influence of regional unemployment: both factors uniquely impact changes in votes for the mayoral parties.

What about the 2 hypothesis? Based on the presented models, it appears that a negative referendum effect can be observed – the electorate punishes the parties that are dominant in the municipal council and also belong to the national government precisely when the economy worsens (1997-2000, 2007-2002), but in the times of economic recovery, voters are reluctant to reward them (2000-2002, 2002-2007). Additional arguments for the dominance of a negative referendum altogether with the support for hypothesis 2 are given by comparing mean changes in votes between two types of samples (Table 2). The first sample is comprised of cases when the dominant party in the municipal council also belongs to the national government. The second sample includes all remaining parties that hold a mayor's office (parties that do not belong to the national government at the respective analysed period).

When compared to other political forces, parties of the national government clearly lose in municipal elections when the state of the economy is worsening (hypothesis 2 is supported). If, in the 1997-2000 period, in all the municipalities where they held a mayor's post these parties lost 17.8 per cent of votes on average, then other parties even won 2.9 per cent of votes more on average! In the other period of economic downturn, 2007-2011, the difference between the parties that belong to the national government and other parties is not as large, but is still in the expected direction and statistically significant. A comparison of two samples in periods 2000-2002 and 2002-2007 show no significant differences, supporting the hypothesis 2: in periods when the economic situation in the country is improving, the electorate do not differentiate between parties that are dominant in municipal councils and also belong to the national governments, and parties that are dominant in the municipal councils, but are in opposition at the national level.

TABLE 2: Mean differences between changes in votes for parties that belong to the national government and changes in votes for other parties in municipal council elections (only parties that hold a mayoral post are included in samples)

	Mean of changes in votes, 1997-2000	Mean of changes in votes, 2000-2002	Mean of changes in votes, 2002-2007	Mean of changes in votes, 2007-2011
Dominant party in the municipality + belongs to the national government	-17.82 (N=37)	1.38 (N=23)	-2.57(N=17)	-4.72 (N=24)
Other dominant parties in municipality	2.92(N=18)	2.016 (N=37)	-1.96(N=42)	1.13 (N=36)
T-value	-4.59***	-0.21	-0.25	-2.36*
Statistical significance level			*p<0,05, **p<0,01, ***p<0,001	

Data source: Central Electoral Commission of the Republic of Lithuania; part of the data was collected by author.

CONCLUSIONS

Despite local elections usually being treated as second-order, and regardless of weak municipal institutions in Lithuania, it appears that the electorate partly assigns the responsibility of the region's (municipality's) macroeconomic situation to the party that is dominant in the municipal council (the one that holds the mayor's office). Results of empirical analysis reveal that Lithuanians are learning the economic vote, with unemployment being more significant (as a factor explaining voting) in the more recent period than in the first several elections: the more regional unemployment increases, the harsher the punishment is for the party that is dominant at the municipal council (holds mayor post). Moreover, referendum effect is also observed in second-order elections: When the economy is declining, the Lithuanian electorate clearly tends to punish national government parties (in comparison to other parties) in municipal elections. However, when the economy is getting better, differences in changes in votes for opposition parties and those that belong to the national government are not significant.

The analysis presented in this paper suggests that economic voting theory is not limited to the analysis of first-order elections: it can also explain voting patterns in local elections. Even if local governments do not have much power to shape the macro-economic trends of their regions, the influence of the economy can be manifested in two ways: 1) governmental parties may be punished (or rewarded) for national policies in the municipal elections; 2) the electorate can attribute responsibility to the parties that are dominant in the local institutions. Both of these trends seem to receive empirical support in Lithuania, even controlling for the impact of other important political-contextual factors. Moreover, it seems that in a context of weak party identification and unsteady cleavages, the role of economics in local elections may increase over time.

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