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Derangement or Development?
Political Economy of
EU Structural Funds Allocation in
New Member States -
Insights from the Hungarian Case

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DERANGEMENT OR DEVELOPMENT? POLITICAL ECONOMY OF EU STRUCTURAL FUNDS ALLOCATION IN NEW MEMBER STATES - INSIGHTS FROM THE HUNGARIAN CASE

Judit Kalman

ABSTRACT

This research provides some insights on the interactions between political and economic aspects in Hungarian development policy and multi-level government financing mechanisms. By looking at the allocation of European Union Structural Funds (EU SF) in Hungary from 2004 to 2008, this project addresses if and how such development programs and financing mechanisms are influenced by political and institutional/administrative factors. The theoretical framework of the political economy of intergovernmental grants offers hypotheses that are specially relevant within the Hungarian context. This study contributes to a fairly small but emerging literature on the political economy of intergovernmental grants and development as well as to the broadening multi-level governance literature and policy research on Structural Funds allocation. Results are in line with already more researched cohesion literature on the EU-15 and add the case of a new EU member CEE country. Furthermore, this research may inspire and inform potential comparative projects on old and new EU member states in regard to evaluating policy interventions, grant allocation mechanisms or governance issues.

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1. THE RESEARCH TOPIC - POLICY PUZZLE AND CONTEXT

How do political institutions affect economic policy choices? Observation of the political economy literature (especially on intergovernmental grants and on political budget cycles) together with the first and second generation of the fiscal federalism makes it obvious that indeed there are challenges to democratic governance. Institutional, political and other factors do interfere with decision-making and can increase the chances for inefficient policy outcomes. Infrastructure investment finances – at all levels of government – are especially prone to the effects of political considerations (bargaining, lobbying, election cycles and corruption¹) due to high visibility, high expenditures, involvement of public procurement, lobbying by special interests, possible control by politicians offering more transferable political capital for incumbents at next elections etc.² – yet they strongly affect productivity and long-run growth prospects of a country³.

In EU-member countries, the financial and socio-economic consequences of transfers to poorer regions dominate much of the political and professional debates for various reasons. It is a striking fact that in the history of EU every single enlargement has eventually brought an increase in the amount of resources devoted to regional policies.⁴ Thus it is not by chance that the issue of effective and efficient absorption of these large funds⁵ has come to the forefront in European policy talks. Structural Funds transfers (amounting to about one-third of the EU Budget) are originally designed to increase economic and social cohesion among EU Member States, via enhancing a fast catch-up process of the less developed. Some cautious critics question the effective and productive absorption of these substantial amounts of fiscal transfers, primarily based on the former EU-15 Cohesion countries experience of problems, where empirical analyses proved political factors have had significant influence in funds allocation.⁶ These doubts can be extended to the new EU member states in CEE precisely due to their various structural, institutional and administrative legacies and problems – as some evidence from the 2004-2006 cycle of SF allocation shows (Pires, 2001, Csire, 2006). Although some countries receive a significant share of their GDP as transfers, formal EU evaluation practice is rather input-oriented, and cares mostly about spending efficiency in light of budget allocation plans. This approach, however, does not capture the usefulness of the disbursed funds from an economic or social point of view.⁷

1 Among others, Cadot et al. (2002) write about the role of powerful lobby groups in allocation of infrastructure grants.

2 See for example Cadot et al. (1999), Romp & de Haan (2005), etc.

3 Though the magnitude of estimated elasticity of capital spent on infrastructure or the direction of causality (i.e. from infrastructure to output or from output to infrastructure) and appropriate empirical methodology is constantly debated in the so-called 'infrastructure-debate' since the influential paper series by Aschauer (1988,1989). See e.g. Gramlich (1994) for an overview.

4 Not surprisingly, it is quite a popular view among many critics that the ever increasing structural transfers are in fact results of a political bargaining game, where poorer newcomer countries and less developed regions are 'bribed' to join/stay in the common market, which on the other hand provides more scale-advantages for the larger, more affluent member states. Hence Structural Funds are viewed as serving solely redistribution purposes, while having very little to do with fostering economic growth (among many, see e.g. Boldrin-Canova 2001).

5 According to a 2009 summary report by the Ministry of Finance of Hungary funds of EU-origin in the Hungarian budget have grown significantly between 2004-2009, to more than eight times larger: they were 91,9 billion HUF (EUR 340 million) in the year of membership start (2004) while 778,9 billion HUF (2.88 billion EUR) in 2009. And even from 2008 to 2009 they more than doubled, EU resources in the Hungarian budget have grown from 379,2 billion HUF to 778,9 billion HUF.

6 In Portugal, EU funded public investments disproportionately favored Lisbon and the southern territories, where the majority of voters was loyal to the governing coalition. However according to De la Fuente & Vives (1995) there were no such effects present in Spain.

7 Several research findings in the literature support this presumption and suggest a broader definition of absorption (Hervé-Holzmann 1998), which takes the original granting goals (growth or convergence, cohesion) also into account.

Staying within the assumption that it is worthwhile to give transfers to foster economic development one should focus on investigating the problems that might lower (hopefully not fully diminish) the efficiency and effectiveness of these transfers. Here not only features of actual grant-administering institutions matter, but those of economic structure, e.g. openness, transparency and general soundness of economic policy, characteristics of the political and electoral system, degree of corruption and the space allowed for political maneuvering, rent-seeking by these, etc. This research is one attempt to shed some light on the latter, taking the case of a CEE new member state.

Here only one example is brought to highlight issues researched in this article: it is highly visible from the success ratios of applications for EU Structural Funds grants in Hungary (Table 1 below) that while overall in 2004-2009, 24 per cent of applications were eventually supported, in the 2006 election year this ratio doubled to 48 per cent, i.e. almost half of applications got funding. Not only were more applications were successful in the election year, but also higher portions of the required amounts were granted and paid. Both the success ratio and the percentage of paid/required funding is strikingly high in the case of local government applications – compared to the average 19 per cent success ratio for the whole five-year period, while in the election year, 73 per cent of their projects got funding. In contrast to their overall 5 per cent paid/required amount ratio, in the election year LGs received 35 per cent of the funds they had asked for in their project applications.

Table 1: EU SF grants in Hungary 2004-2009 application and success ratios

	No. of applications	No. of supported applications	% supported		Required EU SF grant amount (mn EUR)	Paid amount (mn EUR)	% of paid/required amount	
			all	2006			all	2006
All	61821	14860	24	47.8	18 881,60	3966,635	21,0	33,8
Local governments	7464	1444	12	72.9	3 351,29	167,2521	5,0	34,7
LGs from Regional Operative Program	5376	871	16	0.0	1 704,96	102,7986	6,0	0,0
SMEs	299921	12107	4	38.8	2 760,71	657,5017	23,8	31,3
Big companies	983	457	46	56.5	3 517,91	527,1379	15,0	35,8
LHH (special porgram for least developed small regions)	6667	2472	37	56.3	1 325,11	272,5756	20,6	43,6
Budapest (capital)	12133	5142	42	37.3	5 172,10	1402,582	27,1	36,7

Source: National Development Agency, Hungary - own calculations

The paper is structured as follows: the next section provides a brief review of relevant political economy literature, then a brief institutional background on Hungary is provided, followed by the sections on research design, data and methods, major results and then concluding notes with some policy relevance.

2. LITERATURE REVIEW

2.1. Political economy of inter-governmental grants

Intergovernmental grant policy has been thoroughly discussed in the mainstream fiscal federalism literature, originally as a sub-field of public economics (e.g. Oates 1991 provides a good summary, or Shah 2005, Gramlich 1977). Empirical literature⁸ shows that variations in intergovernmental transfers (including infrastructure related ones) to sub-national entities within countries cannot be simply explained without political variables representing electoral incentives – coming to a conclusion that grants are indeed determined or influenced to some extent by the political game (see also notes 2 and 3). Clearly more flexible formulas or conditional grants (which infrastructure grants usually are) allow a more discretionary distribution and even a strategic use of resources by political parties, e.g. for the purposes of reelection or other political interests (Johansson 2003).

For the purposes of this study however, the political economy approach to grants gives more insight (e.g. Drazen 2002, Persson-Tabellini 2000) where instead of the traditional efficiency versus equity tradeoff, focus and emphasis is directed to political factors: it is supposed that decisionmakers' behavior is mainly (or at least partly) determined by re-election prospects and other self-interested goals, while the results of collective decision-making mechanisms, such as vote trading and legislative bargaining become driving forces. Thus, they view intergovernmental grants as means for achieving direct political benefits. Here grants are acknowledged to provide more direct political benefits to the recipient government politicians, as grants allow the latter to spend on vote-generating visible expenditure items (such as infrastructure) without the pain of additional taxation, all while delivering in exchange political capital or votes of supporters and of interest group for the higher level government and its ruling party. 'Pork barrel' type programs also often serve the purpose of electoral competition among political parties through 'vote-buying'.⁹ Several empirical papers have been published (Worthington-Dollery 1998, Porto-Sanguinetti 2001, Johansson 2003, Khemani 2004, Feld-Schaltegger 2005, Veiga-Pinho 2007) that present a political economy view on grants within various countries and time periods using different research designs and estimation techniques, all of which contributed to the formulation of hypotheses for this study.

2.2. Political Budget Cycles

Elections are meant to make officeholders accountable to the community. Barro (1973) was one of the early papers in modern economics formally dealing with the issue of how re-election chances can induce an incumbent to change his actions, though his assumption of a 'representative voter' limits its applicability. Models that deal with economic cycles induced by the political cycle are called political business cycle (PBC) models. Although sometimes used interchangeably with political business cycle, originally the term political budget cycle referred specifically to a periodic, regular fluctuation in a government's fiscal policies induced by the cycle of elections.¹⁰ In empirical work (much less in quantity

8 Wright, 1974, Wildawsky, 1984, Inman-Rubinfeld, 1997, Dixit-Londregan 1996, Inman, 1987, Grossman, 1994, Worthington-Dollery, 1998, Johansson, 2003, Veiga-Pinho, 2007.

9 Social scientists have studied pork barrel politics in great detail, starting with the seminal work of Ferejohn (1974) on politics of spending on river and harbor projects, Weingast 1993, Weingast, Shepsle & Johnsen 1989, Mueller 1989, Drazen 2002:327, etc. Persson & Tabellini (2000) offer a comprehensive review and treatment of previous literature.

10 Three generations of theoretical PBC models can be differentiated depending on their assumptions about politicians' objectives and competencies, and the information asymmetries surrounding them (Nordhaus 1975, Hibbs 1977, 1987, Rogoff & Silbert 1988, Rogoff 1990, Persson & Tabellini 2000, Shi & Svensson 2002, Drazen 2002, DeHaan & Mink 2005).

than theoretical) evidence is mixed.¹¹ There are two lines in the empirical predictions emerging from this perspective: one is that opportunistic politicians may be inclined to direct transfers towards their ‘core supporters’, as they think this is the cheapest way to buy votes (e.g. Cox and McCubbins 1986). The alternative view (Lindbeck and Weibull 1987) holds that politicians take their core supporters for granted, and thus spending is allocated disproportionately towards ‘swing districts’ where voters do not have a strong attachment to either the government or opposition parties. Dixit and Londregan (1996) present a general approach that incorporates both of these perspectives.

Some institutional arrangements or political and economic conditions may make it easier or more difficult, or more or less worthwhile to create such cycles. The publication of Persson and Tabellini’s careful examination and their claim to have ‘uncovered strong constitutional effects on the presence and nature of electoral cycles in fiscal policy’ (2003: 267) had a significant impact in stimulating empirical research on such cycles. Brender and Drazen (2005) argue that until recently, a PBC was generally thought to be a phenomenon of less developed economies. Others (Alesina et al. 1997, Shi and Svensson 2002) present evidence for the existence of a PBC in both developed and developing countries. Brender and Drazen (2005) however present the argument that the results of these studies are driven by the experience of so-called ‘new democracies’, where fiscal manipulation may be effective because of the lack of experience with electoral politics in these countries.¹² They argue that once the ‘new democracies’ are removed from the sample, the PBC disappears. Alt and Lassen (2005) focus specifically on advanced democracies and, using a sample of nineteen OECD countries in the 1990s, they argue that within this group, significant opportunistic electoral cycles are conditional on the transparency of budget institutions.¹³ In countries with less transparent institutions, the electoral cycle has an impact on fiscal policy, while no such election-related fiscal policy movements show up in higher-transparency countries. Furthermore, in accordance with recent moral hazard-based PBC theory, they find that electoral cycles are larger in countries where politics are more polarised.

So far, little attention has been given in the literature to the issue of PBC with different levels of government, as research has by far focused primarily on central government behavior and macroeconomic data.¹⁴ Sole Olle and Navarro (2006) test the effects of partisan alignment on the allocation of intergovernmental transfers (that is local government of the same political color as the upper tier, central or regional, grantor governments) on Spanish data for 1993-2003. A similar paper was written by Veiga and Veiga (2007) for Portuguese municipalities. They find results suggesting that such partisan alignment has a sizeable positive effect on the amount of grants received by municipalities – a finding closely related to the issues researched in this paper on Hungary and EUSF allocation mechanisms.

11 See e.g. Alesina, Roubini & Cohen (1997) for a detailed summary of empirical research on opportunistic models.

12 Hallerberg et al. (2002) investigated whether political business cycles were present in East European accession countries during the 1990–1999 period and found that these governments act like their OECD counterparts. They also try to manipulate the economy before elections where possible, but the tools they use depend upon the exchange rate regime and upon the institutional framework.

13 However, DeHaan-Mink (2005) examine political budget cycles in countries in the Euro Area. Using a multivariate model for the period of 1999-2004, they find strong evidence to the effect that, despite the introduction of the Stability and Growth Pact, there are few restrictions to prevent incumbent fiscal policymakers in the Euro area from increasing deficits for re-election purposes, however this only applies for the election year, and not for the one prior.

14 As for the local level, Blais and Nadeau (1992), Petterson Lindblom (2001) Shi and Swenson (2002a and b). Veiga (2004), Veiga and Veiga (2007) study political business cycles at the municipal level and find clear evidence for opportunistic behavior of local governments, with expenditures increasing in pre-election periods.

3. INSTITUTIONAL BACKGROUND

3.1. Institutional structure, Governance of EU Structural Funds in Hungary

In Hungary, the central institution for the operation of the EU tendering system is the National Development Agency, established by the government in 2006 from the National Development Office and the working groups of some operational programs that formerly functioned under the auspices of certain ministries. The National Development Agency's tasks include coordinating the drafting of the national development plan, the operational programs and the action plans, approving invitations to tender and framework contracts of support, as well as setting up evaluation committees that lay down the groundwork for the selection of developments and investments which are deemed suitable for support. The Agency manages, monitors and assesses the work of cooperating organisations carrying out the actual work of tendering, it operates the informatics system supporting the tendering system, and it bears responsibility for communicating the entire development plan and the functioning of customer service for all the operational programs. Since 2007, the National Development Agency has reported annually on program progress to the parliament. Cooperating organisations – doing the actual tendering, contracting and disbursement – can be organisations in majority state ownership, public foundations or companies complying with strict provisions.

The government handles strategic decisions, e.g. approval of two-year action plans, the national development plan and its operational programs, as well as submitting these to the European Commission. It also decides on support for special projects and high-value developments (typically those with a budget of over HUF 5 billion). The government is assisted by the National Development Council: a social consultative body that monitors fulfilment and harmonisation of targets, makes proposals on possible modifications and the Steering Committee for Development Policy (responsible for drafting development policy-related government decisions). The prime minister acts as the chair of the Steering Committee, the members of which are politicians with responsibility for different sectors, fields and regions who are also chairs of the monitoring committees. The certifying authority in disbursements is the Ministry of Finance, while operational compliance and financial monitoring is done by the Government Audit Office, the State Audit Office and the inspectors of the European Commission.

3.2. Local Government system in Hungary

Due to its traditional regional development focus, sub-national governments are major recipients of Structural Funds all over Europe, combined with their growing importance in the economy as a whole (Dexia 2005). Hungarian local governments have a broad service provision responsibility, yet most of them are rather small (under 5000 and even a lot under 1000) – thus, the system is a mix of large service provider (Nordic) and small, restricted responsibility Southern municipal traditions. The legal and financial framework established for fiscal decentralisation in Hungary in 1990 set the basis for local autonomy and enables municipalities to establish local spending priorities, and to make the financing and tax decisions necessary to carry out these policies. The sources of revenue available to local governments are: own revenues; shared central taxes; and transfers and subsidies from the central government, including normative, targeted and other earmarked transfers. Own revenues include local taxes and fees, profits, dividends, rent and lease, duties, share of environmental protection fines and other revenues.

The largest source of local government revenues is transfers from the central government¹⁵, but their share has declined from an earlier 64 per cent to the current 51-53 per cent. The share of own revenues has increased from 23 to 35 per cent and then back to 30 per cent in the second half of the 1990s. Shared revenues (essentially the Personal Income Tax) have also risen, from 9 to 15 per cent of the total. Taking both transfers and shared revenues into account, roughly two-thirds of local government revenue still originates from the central government – a factor which curbs their financial autonomy to some extent. Hungarian local governments have legal autonomy in their operation and infrastructure spending decisions, irrespective of the source of revenues (i.e. they receive funds from different kinds of transfers but can use those freely), yet throughout the 1990s there was a significant shift from a general-purpose grant allocation system toward a more rigid task financing system.¹⁶ One positive impact of the overall tightening of public finances and the decreasing share of the public sector in GDP throughout transition is that with less central support, local governments are forced to make some improvements to both their own revenue collections and local service efficiency.

Nevertheless, the frequent changes of priorities, grant sharing, normatives and targets made it quite difficult for municipalities to forecast their budgets and use sound strategic and financial planning. This has its effects on their EU funds application practice and capabilities too, which are often determined by the currently available tender calls and not by long-term goals or financially sustainable project ideas.

15 The share of revenues from transfers is high in Hungary, even by the standard of transition countries (higher than in the Baltic countries, though lower than in Bulgaria, Romania and Poland). One justification given for such a large component of Hungarian local government finance coming from transfers is that local governments are responsible for health care and education and wages for these sectors, which are financed from the national budget. Thus transfers include e.g. hospital financing from the Social Security Fund, which is of a special purpose type, i.e. the municipality cannot spend it for any other goal.

16 Central government can have the most direct influence over local investment activities through its own investment grant programs. Furthermore, it has several important indirect effects on the environment of local investments: through current operational grants, it can influence the magnitude of the operational surplus of local governments or their credit ratings. It can also, for macroeconomic stability reasons, set limits on local government borrowing, boost local investment borrowing by giving state guarantees or helping establish municipal guarantee funds, and, last but not least, it can give or withhold additional funding for their project proposals for EU Structural Funds, which in recent years have become the major source of investment financing.

4. RESEARCH HYPOTHESIS AND VARIABLES USED

Driven by hypotheses formulated from the literature review and interviews conducted with Hungarian experts and government officials, data is thoroughly analysed in search of election motivated funding. Such arguments are often raised in Hungarian political discourse, but so far no systematic empirical investigation has tried to check for their validity and possible extent. My estimates are a first attempt in this direction.¹⁷

Central government behaviour is modeled as a function of variables reflecting benevolent (social welfare improving) intentions as well as those reflecting the central government's self interest, re-election motives. The examined period (starting with the country's 2004 EU Accession) spans two election cycles (2002-2006; 2006-2010) with general and local elections being held in 2002 and 2006, as national elections are always held in the spring and local elections follow a few months later the same year.¹⁸ With respect to Hungary, the first analyses evaluating National Development Plan I (that covered the first EU SF cycle from 2004-2006) and its execution acknowledge that political factors played some role (Csizé-Felföldi, 2006) and showed a robust correlation between the electoral map of the country and the grants allocated to municipalities and micro-regions.

H1: Partisanship elements are present in EU grant allocation practice. If the political colour of a member of parliament/mayor is the same as central government – the Local Government or any applicant from that municipality has higher chances to receive funds.

Political colour same as central government variables for the member of parliament and the mayor were constructed from raw election data for the two election cycles involved. Drawn from the partisan model, I expect a positive effect of these variables on grant reciprocity chances and that the incumbent central government will invest more in those municipalities where the support of the local governments will ensure that this improvement will be easily capitalised in increased political support for the next elections. The election years were 2002 and 2006. National elections were always held in the spring and local elections followed a few months later the same year. Thus the political variables at my disposal are measured only when one election is held (at time $t=k$) and remain constant until the next election (at time $t=k+4$), therefore, these are assumed a priori to be known by the central government during the electoral mandate.

The alternative hypothesis is that of the swing voter (for which there is considerable evidence in the US), whereby central politicians concentrate on regions/places where the race in the last elections was very close, and where any additional spending could gain more voters. Although this swing voter hypothesis does not fit multiparty and multidimensional political settings as well as it does in the first-past-the-post system in the US (Kemmerling-Stephan 2008), I test it on the Hungarian data. I use the closeness proxy that is often used in the literature (Johansson 2003, Veiga-Veiga 2007, among others), i.e. the percentage difference between the winner and the second on the final list of general and local elections.¹⁹ Another variable supposed to help capture a tight electoral race is whether the MP was elected only in the second round of elections in a given year.

17 The presence of partisan elements in intergovernmental allocation decisions in Hungary was proved in the PhD research project by the author (Kalman 2007) analysing the national local government infrastructure grant system.

18 What makes election effects particularly interesting for research inquiry is that, due to some scandals that questioned the credibility of the socialist-liberal cabinet (who returned to office after the general elections in spring 2006), the fall 2006 local elections brought a sweeping victory of the opposition (right-wing FIDESZ) in most of the local governments, especially in major cities. Hence, for the first time after a long period since transition, the central government and majority of mayors/local governments had opposing political colours. The effects of this situation are captured in cutting data and running regressions for different periods, and taking 2006 election results into account for 2007-2008 fund allocation data.

19 We do not have data on the closeness of the 2002 local elections, thus only the 2006 ones are used in the analysis.

H2: The closer the electoral race (more hesitant voters) was in the preceding national or local elections – the better the chances for getting funds from EU grants by applicants from that municipality.

Rent seeking and/or lobbying efforts of local governments could best be checked via qualitative research methods, e.g. a survey, that was beyond the scope of this research. However, a few of the background interviews conducted provided insights and ideas for some variables that could serve as proxies. One such candidate is a mayor's or a member of parliament's time in office (a similar variable was also used by Veiga-Pinho 2007).²⁰ Apart from an MP's number of terms served, I used a dummy for the MP getting elected for more than one term. Channels for such influence from lower to higher levels must be easier if matched with partisanship.

H3: The longer the MP/mayor is in office, the more connections, network (s)he might have for influencing central government decisions, i.e. the more powerful lobbying (s)he can exert for achieving pork-barrel type allocation goals.

The importance of the project-generation and administration capacity of applicants has been stressed in the literature on EU funds absorption, and was reinforced by my interviews (EU fund applications indeed involve heavy bureaucracy and preparations need considerable time and budget efforts). Additionally, this is a usual suspect for any institutional-minded analysis, hence some feasible proxies were included in the model. Heavily constrained by data availability, the ratio of local population with higher education is used to proxy for the general administering/management capacities of the municipal government and its staff. While for the years of the second EU funds cycle (2007), previously successful EU project experiences are used, as it not only reflects a certain level of administrative capacity – capturing risk-taking, local effort, capability to deal with heavy bureaucratic management tasks, 'learning by doing' – but is also something to capitalise on, hence a strong candidate for predicting future success.

H4: Administrativelinsitutional capacities matter in making a successful EU funds application; more capable and experienced applicants/local governments have higher chances.

To account for the normative approach, the grant giver viewed as a benevolent social well-being maximiser (development policymaker in this particular case) – certain socioeconomic control variables are used e.g. population, need-indicator variables such as ratio of dependent population (young, old) present infrastructure levels, education and social service levels, etc.²¹

H5: Chances for EU SF funding success increase with size of municipality.

H6: The larger a municipality's dependent (young, old) population, the higher the chances of any applicant (or the local government as applicant) of receiving EU SF.

As growth-enhancement and job-creation can be major goals of allocation from EU SF (as indeed they are, especially in the second period (2007-2013) of the New National Development Plan of Hungary) the *per capita personal income tax base* of the municipality is included to control for the economic position of localities (or rather for their inhabitants, but since local governments still do receive a portion of the PIT collected at their territories, this variable also falls into the category of budget constraints). Furthermore, one of the best proxies for the economic development level of a locality is the PIT base. As there are no official local GDP statistics,

20 I only have data on the terms served by MPs and not on mayoralties.

21 After multicollinearity tests, the ratios of old and young were kept.

researchers' estimated local GDP levels strongly correlate the PIT variable (Csire-Nemeth, 2008).²²

H7: Applicants from better-off municipalities have higher chances for EU SF reciprocity.

However, this hypothesis is competing with the equity hypothesis, i.e. that one of the major goals of EU SF allocation is the correction of regional disparities. Thus, less-developed localities are actually given priority.

H8: Applicants from municipalities covered by the special complex program for the least developed 33 small regions (LHH) are favoured and hence have higher chances for EU SF reciprocity.

Yet, in today's development policy there are often conflicting goals, which is reflected in the policy tools and grant designs used. Inevitably, there is a tradeoff between equity-driven policies for lagging regions that concentrate on poor, less developed, aging or scarcely populated areas (traditionally also the main goal of EU SF) and, on the other hand, new economic geography based policies that concentrate on economic growth enhancement, and which thus support the economy's faster developing hubs – e.g. following the agenda prescribed by the Lisbon goals in the EU development policy domain. Both kinds of policies are justified and have their pros and cons, especially in the case of new EU member states where one of the effects of economic transition was a marked widening of the economic and social gap between different parts of the countries. This mix of policy goals and tools can also be seen in Hungarian development policy, hence *expected signs for the socioeconomic controls is often unclear*. For example, if development policy is trying to deal with regional disparities, then the 'LHH' variable (the proxy for backwardness) – reflecting a municipality's status in the special complex program for the 33 least developed small regions of Hungary within the EU funds allocation machinery – should be very significant and positive, while size or per capita PIT base (reflecting local GDP) could be negative, as less grants would be given to larger, more prosperous areas. However, if economic growth enhancement dictates that more stimulus should be given to exactly these kinds of hub cities, then grant reciprocity chances should be positively affected by population and PIT base.²³

Since EU SF grants are matching in nature – additionality criteria and available local resources should be important for getting access, yet they are a source of inequity as well. Moreover project generation and preparing an application also requires considerable resources prior to obtaining successful funding. In order to account for the budget constraint of each local government, a decentralisation measure that is a *percentage of own revenues* in the local government budget was used.

H9: The more own revenues a local government has, the higher its chances for a successful EU SF application.

The following Table2 summarises the variables used in the analysis and their expected signs (Table 1 of the Appendix gives summary descriptive statistics).

22 In certain models, 'hdi' the estimated local Human Development Index was also used to capture the development level of a locality, as well as county head city status and percentage of Roma population. Eventually however these were removed due to reasons of strong correlation with other explanatory variables, or in the case of county-city, due to perfect prediction of grant success.

23 These clashing policy goals are part of the reason why I checked allocations from the Regional Operative Program separately from the total operative programs, and within the ROP for any applicant or the local government itself – since it is the ROP (if any) that traditionally focuses on regional disparity/convergence. Despite this, there is anecdotal evidence to the effect that some ROP allocations are politically driven.

Table2: Variables and hypotheses used in the analysis and their expected signs

Dependent variables:		
Applicant from municipality received EU funds		
Applicant from municipality received EU ROP funds		
Local Government received EU funds		
Local Government received EU ROP funds		
Explanatory variables:	Expected sign	
Political variables:		
MP same colour as central government 2002	+	H1
Mayor same political colour as central government 2002	+	
MP same colour as central government 2006	+	
Mayor same political colour as central government 2006	+	
Closeness of 2002 parliamentary elections	-	H2
Closeness of 2006 local elections (% diff. 1st and 2nd)	-	
Closeness of 2006 parliamentary elections	-	
MP got elected in the second round of election 2002	+	
MP got elected in the second round of election 2006	+	
MP re-elected for more than 1 term 2002	+	H3
MP re-elected for more than 1 term 2006	+	
Number of terms MP re-elected 2006	+	
Administrative/institutional capacity		
Any applicant received funds from NFT, first cycle of EU funds, 2004-06	+	H4
LG received funds from NFT, first cycle of EU funds, 2004-06	+	
Ratio of local population with higher education	+	
Socio-economic controls		
Ln population	+	H5
Ln per capita local personal income tax base	+/-	H7
% of young population	+	H6
% of old population	+	
% of own resources in LG budget	+/-	H9
Size indicator	-	H5
Municipality belongs to special program for the least developed 33 small regions (LHH)	+	H8
+ year and region dummies		

5. DATA AND METHODS

A major task was getting access to and putting together a relevant and feasible dataset suitable for academic inquiry. We use data on successful applicants, i.e. *funded projects* from the EMIR database of the National Development Office of Hungary, created for monitoring European funding resources.²⁴ This data is combined with the State Administration Office (TAH) database embracing all (n=3130) *municipal government budget data* (data available for up to 2005 only), with demographic, social and infrastructure data from the *territorial statistical database T-Star* of the Hungarian Central Statistical Office, and with general and local *election data* for the 2002 and 2006 election years from the National Elections Office of Hungary. In addition, some population and minority data from the *2001 Census* in Hungary are also used. For reasons of easier comparison across e.g. recipient municipalities, all variables are transformed to *per capita values* in the analysis. All the financial variables are shown *in thousand HUFs* and have been recalculated *at 2008 prices* using the GDP deflator. For analytical purposes, the *city of Budapest*, local governments of capital districts and counties have been deliberately *left out* of the dataset, due to *their very special status* in the institutional and budgeting structure.²⁵ Thus the final number of local governments included in the pooled data is N=3130. After several checkups and corrections, this database handles problems from different budget structures throughout different years, and hence has the same data content for all years.

As far as estimation methods are concerned, I used *probability models* for a limited dependent variable (*probit*) to check what affects *the chances for grant reception*.²⁶ Thus the dependent variables were binary variables:

gotgrant_all, if any kind of applicant (government, business or NGO) has received money from EU funds throughout all the years of 2004-08,

gotgrant_LG if the local government has received grants across all EU SF operation programs,

gotgrant_ROP if any applicant from a certain municipality has received funds from the Regional OP,

gotgrant_LG_ROP if the local government itself has received funds from the ROP.

24 This causes some problems for the analysis, as the group of municipalities that were not funded includes those that did not even apply along with those who applied but were not funded. They cannot be differentiated based on these data. I choose to use probability models with binary dependent variables instead of selection models partly for this reason, as determinants of selection could not be established from these data. This is also the reason why I eventually decided against truncated regression in the usage of the Tobit model, as there could be different unobservables affecting both the decision to apply and the selection decision.

25 This practice is commonly followed by researchers dealing with Hungarian municipal data.

26 Since this is a short time period (2004-2008), it means that special care is needed in handling data (e.g. clear dominance of units over time periods). As well, many recipients have more than one project per year, while municipal financial and demographic and social data are not available for the whole period. For this reason, creating a panel dataset and using panel estimation techniques did not seem a reasonable approach, as it would not have enough variation over time.

In binary response models, the primary interest is to explain the effects of various values of x on the response probability:

$$P(x)=p(y=1|x)= P(y=1| x_1,x_2,\dots,x_k)$$

Thus in a simple form, the model looks at marginal effects given by the probit estimations:

$$P(y=1|x)= \text{constant}+P+A+S+R+Z+E$$

where

- P vector of political variables
- A vector of administrative capacity variables
- S vector of socioeconomic controls
- R region dummies
- Z year dummies
- E error term

To get a more finely tuned picture, estimations are carried out on the whole database and *sub-samples by size* – partly because it is a usual suspect with any grant program and because my correlation and frequency tables corroborate its importance, but partly also because population always came out strongly and positively significant in all base models, which further justifies such sub-sampling. In order to capture more insights on the politics, I cut the data for *different periods pre- and post-election* too, and check the effect of 2002 election results over the 2004-2005 period, on the 2006 election year, and then the effects for the 2006 elections separately for the numbers in the 2007-2008 period.

To avoid the usual econometric caveats, I was very careful with variable selection and model design strongly linked to theory and economic sense. Before making any interpretation based upon the results, I checked for the following problems and made the necessary corrections. The problem of possible multi-collinearity between different independent variables was excluded here by careful variable selection, besides which I also checked for correlations between independent variables and with dependent variables. Tests have not revealed serious multicollinearity problems. In order to avoid heteroscedasticity problems and also for easier comparability, I opted to use per capita figures as well as \ln transformation of the population and PIT base variables. Finally, models were run by using *year* and *regional dummies* for the seven statistical (NUTS2) regions of Hungary to account for time- and region-specific fixed effects.

6. RESULTS, ROBUSTNESS CHECKS

Political variables – same colour favouritism, especially the colour of MP matters

Several models have been tested with different sets of political and socio-economic control variables as well as year and regional dummies and also a restricted version without any political variables. Table 2 presents the most important *probit* (maximum likelihood estimations) findings²⁷ (while Tables 2-7 in the Appendix give all the details of different model results).²⁸

Table 3: Summary of major results (probit estimation)

Dependent variables:	Model 1		Model 2		Model 3		Model 4	
Any applicant from municipality received EU funds	*							
Local Government received EU funds			*					
Any applicant from municipality received EU ROP funds					*			
Local Government received EU ROP funds							*	
Explanatory variables:	Expected							
<i>Political:</i>								
MP same colour as central government 2002	+	not sign	++	+	+	+	+	+
Mayor same colour as central government 2002	+	-	-/not sign	not sign				
MP same colour as central government 2006	+	+	+	+	+	+	+	+
Mayor same colour central government 2006	+	+	+/not sign	not sign				
Closeness of 2002 parliamentary elections	-	*0	*0	not sign				
Closeness of 2006 local elections (% diff. 1st and 2nd)	-	+	+	not sign				
Closeness of 2006 parliamentary elections	-	not sign	not sign	*0	*0	*0	*0	*0
MP got elected in the second round of election 2002	+	*0	++	+	+	+	+	+
MP got elected in the second round of election 2006	+	+	+	-	-	-	-	-
MP re-elected for more than 1 term 2002	+	+	+	not sign				
MP re-elected for more than 1 term 2006	+	-	-	not sign	not sign	not sign	not sign	+
Number of terms MP re-elected 2006	+	-/*0	-/*0	-/*0	-/*0	-/*0	-/*0	not sign

27 For checking robustness however, estimations were also done using the Linear Probability Model (OLS). See Greene 2002, who suggests that LPM estimates can be as good as probit/logit ones.

28 For probit estimations, marginal effects are given in the annex tables, as these have the same meaning as beta coefficients in linear regressions, i.e. a percentage change in the probabilities.

Administrative/institutional capacity:					
Any applicant received funds from first cycle of EU funds, 2004-06	+	∅		+	
LG received funds from first cycle of EU funds, 2004-06	+		***		***
Ratio of local population with higher education	+	*0	+/*0	+/*0	+
Socio-economic controls:					
Ln population	+	++	++	++	++
Ln per capita local personal income tax base	+	+	+	+	+
% of young population	+	not sign	+++	+++	+++
% of old population	+	+++	+++	+++	+++
% of own resources in LG budget	+/-	not sign	--	not sign	not sign
Size indicator	-	-	-	-	-
Special program for the least developed 33 small regions (LHH)	+	+	+	+/not sign	+

- +/- : low positive /negative effect (marginal effect under 7-10%)
- ++/-- : medium positive/negative effect (marginal effect between 7-10 to 20-25%)
- +++/-- : strong positive/negative effect (marginal effect above 20-25%)
- not sign. : statistically not significant
- * 0 : significant, but close to 0
- ∅ : not used in analysis
- *** : predicts success perfectly

The best performing of the political explanatory variables was the *same political colour of the member of parliament* as the incumbent central government, both for 2002 and 2006. Strongly significant (at 1 per cent) results show that *if the political colour of the member of parliament from a certain locality is the same as the incumbent central government, the locality's chances of getting funds from EU SF grants increase by +2-8 per cent across all models and different specifications*, irrespective of the grantee and the operational program. "MP same colour" has the highest effects on the funding chances of Local Government projects, especially for the years 2004-05 and in the 2006 election year, where the increase in chances reaches +8 per cent. Splitting data to subsamples by size and periods (Tables 6-7 in the Appendix and the summary table below) shows that even the MP political colour variable is not unambiguous, however *same colour MPs from 2002* seem to affect grant reciprocity chances *positively across all size groups*, while after 2006 we see an interesting point: according to these numbers, *MPs from the smallest (under 1,000 and between 1,000-5,000) places seem to be the most influential* in terms of higher grant reciprocity chances, while in other size groups it loses its significance, though it keeps its positive sign.

As far as the *mayor having the same political colour* as that of central government variable is concerned, it was almost always insignificant. The exceptions were in the models for all recipients, all Ops, and the one for LG receiving grant, where the variable was significant and *raised chances to receive EU funds by +4 – 9 per cent* (see Table 2-3 in Appendix) although, strangely, the marginal effect

was higher in the case of non-LG applicants). These results fit with the *partisan model (H1)*, i.e. that central politicians do use intergovernmental grants, among them EU funds for improving their parties' re-election chances both at national and local levels. By splitting along size categories, the *colour of the mayor* is considerable if we take only projects of the local governments and if it is positive and significant for the *small towns* (between 5,000 and 10,000) and the smallest villages (under 1,000), increasing grant chances by **+4-13 per cent** (Annex Table 6). In the case of the first, it is probable that in these places, a charismatic mayor can actively lobby even in national policymaking for grant approval, and these are also cities that possibly get more attention from parties in election mathematics. In the case of small villages finding themselves in the latter category, it may be the lack of own funds combined with the strong need for any investment that urges mayors to try everything in order to get coveted EU projects. It should also be kept in mind that here, only same colour mayor after 2006 (elections that were tainted by scandals) are included, which seems to indicate that the incumbent socialist government did indeed attempt to reward some of the few remaining loyal constituencies.

Accordingly, as the partisan model (same colour favouritism) was reinforced, it is not so surprising that the swing voter hypothesis (H2) does not seem to be acceptable (also, as I remarked above, it better fits the US political system). The closeness proxies across models for all recipients or LGs and even for different time periods are either significant, but not with the expected negative sign (the closer the race, i.e. the smaller the difference between votes the more chance for grants), or not even significant (Tables 2, 3, and 5 in Appendix). The only place where the closeness of the 2006 elections (local and/or parliamentary) are significant and show the expected negative sign are the case of ROP allocations in 2007-2008, especially those where LGs are recipients. However, their marginal effects are minute, close to zero (Tables 4-5 in Appendix). Strangely enough, they are significant at the same time with the partisan (same colour) variables, which suggests that after the scandal-ridden and – for the incumbent – disappointing 2006 local elections, perhaps both kinds of political tactics were in operation at the same time, although coefficients/marginal effects for the partisan favoritism are higher (and theory would predict such a behaviour prior to the next elections instead of through the whole term).

However, since the dummy variables for the MP getting elected in the second round of elections (another sign of a close race) behave well and often come out strongly significant, and given also that the standard deviation of the closeness variables is rather high in their current form, I am not inclined to fully reject the swing-voter hypothesis. Rather, I would say that these results should be treated with caution and require further investigation, possibly combined with other public fund allocations in future research, or perhaps using a different proxy for swing voters, such as the density at the cutpoint used by Johansson 2003.

Contrary to expectations, the variable created for proxying *lobbying capacity* – the dummy if the MP is elected for more than one term – was not positive, though almost always significant; thus I have to reject H3. This negative relationship appears to suggest that MPs are actively lobbying for 'pork barrel' projects from their constituencies in their first term, but become less active and not so successful in their subsequent ones. But this needs further research, as the time frame for this analysis was certainly not long enough to properly assess any such effect.

Administrative capacity indeed matters (H4 accepted). Both proxies (ratio of highly educated population and previous EU funding experience) behaved as expected, coming out strongly significant and (especially in the case of the latter) with highly positive marginal effects. Previous EU funds experience from the first cycle of 2004-2006 added very strongly to the chances of a new project being funded successfully, especially so from the Regional Operative Program and in the case of Local Government applications (+8-32 per cent chances, see Tables 4-5 in Appendix). Thus, results confirmed what interviewees had suggested and fit with EU absorption literature.

Socio-economic and need indicators in EU grant allocations

As already emphasised, these socio-economic indicators *were expected to have a role* in grant allocations, since they control for development policy equity or efficiency goals, whether explicit or implicit, and for local needs. Moreover no political economy theory would predict solely political factors as being important in grant allocations: at most it would allow the possibility of some political effects besides these normative ones. My findings also show quite a mixed picture: some worked fine as normative theory predicts for grant allocation, some controls turned out to not be statistically significant in the analysis – which also reflects opposing development policy goals. I have found that *EU grant reciprocity chances increase in parallel with size of municipality*.²⁹ This was how I had expected them to behave, partly because EU grants are used also (or perhaps mostly) for growth enhancement purposes to promote faster overall convergence of Hungary. Therefore, the majority of them do not go to the smallest, most needy municipalities. This is partly because these projects are generally larger in scale than usual municipal ones, thus larger places (or associated ones, usually having the largest municipality as project manager) are initially more determined for such applications in the case of local government applications.³⁰

The following Tables 4 and 5 combine size and actual grant status and show the number of projects and amounts contracted throughout 2004-2008. It shows that **larger size considerably increases the chances for as well as the magnitude of EU SF grants** (H5) – see the steady increase of mean per capita funds received by all applicants or by local governments. Moreover, Table 4 makes clear the disproportionately high percentage of both project numbers and especially contracted amounts granted for the larger cities.

Table 4: Size and EU SF project no. and amounts

Size	Total no. of municip.	Total no. of EU SF projects		% of EU LG projects from total	Contracted amount of EU SF funds total (million EUR)		% of EU funds by LG from total	Mean per capita EU SF funds received (EUR)	
		all	LG		all	LG		all	LG
Municipality size 50000-	33	6250	1526	24,4 %	10491	775	7,4 %	124,88	296,95
Municipality size 10000-50000	122	6063	2342	38,6 %	6160	412	6,7 %	112,74	108,74
Municipality size 5000-10000	138	2731	1431	52,4 %	2249	192	8,5 %	102,37	102,52
Municipality size 1000-5000	1132	8750	3267	37,3 %	4845	236	4,9 %	82,79	37,01
Municipality size -1000	1731	5889	1115	18,9 %	1443	51	3,5 %	82,11	17,79
Total	3157	29683	9681	32,6 %	25188	1666	6,6 %	504,88	563,01

29 The ln population variable is strongly significant with high positive marginal effects, size indicator is negative, as it is coded in a way that largest cities are category1 and smallest are category5.

30 Moreover when I split data along size categories and for different periods before and after elections, I have found that probits did not always run for the largest cities, as population above a certain threshold would perfectly predict EU grant success for the local government.

Table 5: Distribution of projects and contracted amounts along size categories

Size	Total no. and % of municip.		% total projects	% LG projects	% contracted amount total	% contracted amount by LG
Municipality size 50000-	33	1,0 %	21,1 %	15,8 %	41,7 %	46,5 %
Municipality size 10000-50000	122	3,9 %	20,4 %	24,2 %	24,5 %	24,7 %
Municipality size 5000-10000	138	4,4 %	9,2 %	14,8 %	8,9 %	11,5 %
Municipality size 1000-5000	1132	35,9 %	29,5 %	33,7 %	19,2 %	14,2 %
Municipality size -1000	1731	54,8 %	19,8 %	11,5 %	5,7 %	3,1 %
Total	3157	100,0 %	100,0 %	100,0 %	100,0 %	100,0 %

Virtually the same can be said about the economic development level of a municipality (measured by the per capita Personal Income Tax base, which is a good proxy for non-existent regional/local GDP levels), namely that *EU grant recipiency chances increase along a better-off economic position (H7)*. This underlines co-financing problems, but also signals that EU funds are mostly spent for growth enhancement purposes. Yet, when broken down along periods and size categories (see Table 7 in the Annex), the per capita PIT base loses its significance from the 2006 election year onward in all size categories, albeit keeping its positive sign.

Regarding the demographic need variables percentage of *young* (under 14) school-age population is significant and positive whenever it comes to local government projects, either overall or from ROP, but usually loses its significance in other models with different dependent variable. This is as it should be, since in Hungary, schools and all related facilities are maintained by the local governments and the investment needs of these institutions represent a major part of EU funded projects of LGs. In the 2006 election year and in the period following it, the percentage of young lost its significance even for LG projects. Apparently other policy goals were more important. The other local need variable – percentage of *old* population – is *always strongly significant (H6)* and positive, adding to grant recipiency chances across all model specifications and sub-samples – a finding that contradicts a previous one on Hungarian national investment grants allocation for municipalities (Kalman 2007), where the ratio of old people was never an important explanation.

Although I was unsure about its expected sign precisely because of the mentioned policy goal confusion, the *ratio of own resources in the LG budget* (a kind of decentralisation measure supposed to show the financial strength and independence of an LG) usually did *not* even come out *significant (H9)*. Where it did though, it had opposing signs, i.e. negatively effecting chances for grants in certain cases, and positively in some others (e.g. reception of ROP funds by local governments – at least rewarding the local governments that try hard and have their own funds, in order to help it become less grant dependent). In sum, the only conclusion to draw from this is that policy goals indeed seem to be mixed, probably changing from call to call even within operative programs. Thus, whether more financially independent, better-off LGs who are capable of showing the necessary co-financing own contributions are the winners, or rather the grant-dependent less independent ones remains unclear and needs further investigation.

Last but not least, to *proxy for backwardness*: a municipality belonging to the special program for the least developed 33 small regions (LHH) within the National Development Plan – in most cases, it came out significant and positive (+3-9 per cent chances if they belong to such a small region, see Tables in Appendix), though after 2006 it is more ambiguous (e.g. Tables 4-5 in Appendix). Furthermore, once broken down by size categories, it *seems to affect the chances of the smallest places* (overrepresented in these small regions), while it is not always significant for the larger ones. This reinforces the presence of some equity considerations in development policy in Hungary (H8).

Besides these, regional dummies included in models were usually significant but rather small, while the breakdown of the most important variables of policy interests regionally clearly mark the importance of regional effects (Table 6, below). It is interesting to notice that the economically most advanced region (Central Hungary) which is now out of the Object 1 category, still received a much higher portion of the Regional Operative Program funding (that is supposed to be the most equity oriented, correcting for regional disparities within the country) than from the overall EU SF allocation. Admittedly though, the mean per capita amount received is the second smallest (in the most populous region).

Table 6: Distribution of projects and contracted amounts regionally

Region	Total no. of municip.	Total no. of projects		Contracted amount of EU funds total (million EUR)		Contracted amount of ROP (million EUR)		Mean per capita EU funds received (EUR)
Central Hungary Region	187	2662	9,0 %	1796	7,1 %	170	21,1 %	59,76
Central Transdanubia Region	402	3376	11,4 %	2322	9,2 %	78	9,7 %	47,56
Western Transdanubia Region	659	4252	14,3 %	3167	12,6 %	35	4,4 %	87,02
Southern Transdanubia Region	657	3952	13,3 %	2763	11,0 %	94	11,7 %	81,61
Northern Hungarian Region	606	4989	16,8 %	4122	16,4 %	92	11,4 %	102,83
Nort Great Plain Region	391	5455	18,4 %	4789	19,0 %	163	20,2 %	98,03
South Great Plain Region	254	4997	16,8 %	6228	24,7 %	173	21,4 %	102,11
Total	2568	29683	100,0 %	25188	100,0 %	805	100,0 %	578,92

7. CONCLUDING REMARKS AND POLICY RELEVANCE

This research contributes to the fairly small but emerging literature on the political economy of inter-governmental grants and development as well as to the broadening multi-level governance literature and policy research on Structural Funds allocation. Results are in line with already more researched cohesion literature on the EU-15 and contribute the case of a new EU member CEE country. Following up on previous empirical findings with respect to Hungary (Csizé-Felföldi 2006) and standing in different robustness checks, findings prove that in Hungary political and institutional aspects also have an impact on the EU funds allocation process.

Grants – if well designed and administered – are an excellent way to alter local recipient choices and to correct certain market failure type problems, or to serve development goals such as growth enhancement, job creation etc. as prescribed in the normative public finance and economic geography literature. Yet, grants can be misused by self-interested politicians, in which case they can become distortive, or have unintended consequences – as discussed in great detail in the reviewed political economy literature. The growing international literature on aid efficiency (e.g. Burnside-Dollar 2000; Kaufman et al. 2002) that originally started out from standard neoclassical growth models mostly concentrating on developing countries offers some useful general conclusions.³¹ Most notably, grants can at best only be conditionally effective and efficient: in international aid, they lead to real and positive effects only in target countries where domestic policies are relevant and consequent. The smaller, but also increasing literature directly dealing with the efficiency of EU funds has so far reached similar conclusions: *the efficient usage of EU funds depends mostly on institutional conditions* (e.g. de la Fuente 2002; Ederveen de Groot; Nahuis 2002; Ederveen et al. 2006).

This has been reinforced by the findings of this article as well, since proxies for *administrative capacity* and earlier EU project experience came out strongly significant and positive, adding a lot to probabilities of successfully receiving EU funds – while the findings of some politically driven inefficiencies in EU Structural Funds allocations highlights the importance of institutional conditions. Apart from confirming that Hungarian development policy is focused more on growth enhancement than on economic development focus and also mixes its goals, findings reinforce the initial hypotheses: i.e. *some election motivated political distortions* (mostly same colour favouritism) are indeed verifiable in the allocation of EU funds in the case of Hungary for the period of 2004-2008, though their precise magnitude and effects cannot be measured from these data.

With regard to governance issues, experience from former EU-15 Cohesion countries has shown that in order to overcome the coordination problems of decentralisation in the beginning of SF operations, it can be worthwhile to manage funds at the central level (with the centre acting as “gatekeeper”). However, recent governance literature emphasises the role of strengthened multi-level governance in public policy, and consequently in regional policy and SF allocations. Taking an empirical perspective, Bahr (2006) used panel data (from Ederveen et al. 2006) to show that Structural Funds are more effective in promoting convergence when states exhibit a higher degree of decentralisation, as measured by a local control over local tax base and rates. In this respect, the governance of EU SF planning and administration is very much centralised in Hungary, and particularly since 2006, when the National Development Agency was created. It is this and other institutional conditions (apart from obvious advantages of efficiency and economies of scale) that seem to offer some leeway for political influence as well. Results in this study on the non-significance of ratio of own resources in LG budgets match this centralised picture. On the other hand though, according to the international findings of Bahr (2006), Ederveen et al. (2006) or the recent Barca report (2009), it goes against better convergence and good,

31 The articles of Váradi, B. (2006, 2007) provide a good summary of the strength and magnitude of lessons to be learned from this aid literature, and also highlight potential traps of this “manna” coming from the EU with regard to the Hungarian case.

meaningful absorption. It remains to be seen, as more years of data become available, whether this truly leads to less overall or internal convergence for Hungary.

Finally, a few words on the limitations of the study: data has been gathered from various sources, often greatly limiting the available political and other proxies to be used and excluding the usage of some more sophisticated estimation methods (e.g. selection models). Despite these constraints, the approach presented here provides some interesting insights into the possible determinants of EU SF grant allocation mechanisms and may inspire and inform potential comparative projects on old and new EU member states or other future investigation into these topics.

REFERENCES

- Alesina A,- Roubini N, - Cohen G. 1997. *Political Cycles and the Macroeconomy*. MIT Press
- Alt, James E. - Lassen, David Dreyer 2005. "The Political Budget Cycle is Where You Can't See It: Transparency and Fiscal Manipulation," EPRU Working Paper Series 05-03, Economic Policy Research Unit (EPRU), University of Copenhagen. Department of Economics
- Aschauer 1988 "Government spending and the falling rate of profit", *Economic Perspectives*, 1988 May, 11-17.
- Aschauer, D. 1989. "Does public capital crowd out private capital?", *Journal of Monetary Economics*, vol 24 (2), 171-188.
- Bahr, C. 2006. *How does sub-national autonomy affect the effectiveness of Structural Funds?* RWTH Aachen University Working Paper
- Barca, Fabrizio 2009.: *An Agenda for a Reformed Cohesion Policy. A place-based approach to meeting European Union challenges and expectations*. Independent Report. http://ec.europa.eu/regional_policy/policy/future/barca_en.htm
- Barro, Robert J. 1973 "The control of politicians: An economic model", *Public Choice*, Vol 14(1), 19-42
- Blais, A. – Nadeau, R. 1992. "The Electoral Budget Cycle", *Public Choice*, vol 74 (4), 389-403.
- Brender, Adi - Drazen, Allan, 2005. "Political budget cycles in new versus established democracies," *Journal of Monetary Economics*, Elsevier, vol. 52(7), p. 1271-1295, October
- Bruszt, Laszlo – Vedres, Balazs 2008. *Final report on the Evolving Regional Governance Regimes: Challenges for Institution Building in the CEE Countries*, NEWGOV New Modes of Governance - FP7 Research Project, Project no. CIT1-CT-2004-506392
- Boldrin, M. and F. Canova 2001. *Inequality and Convergence in Europe's Regions: reconsidering European Regional Policies*. *Economic Policy*, 32, 205-245.
- Burnside, C. and D. Dollar 2000, "Aid, Policies and Growth", *American Economic Review*, 90 (4), pp. 847–868.
- Cadot, Olivier - Roller, Lars-Hendrik -Stephan, Andreas, 2006 "Contribution to productivity or pork barrel? The two faces of infrastructure investment," *Journal of Public Economics*, Elsevier, vol. 90(6-7), pages 1133-1153
- Cadot, Olivier & Röller, Lars-Hendrik & Stephan, Andreas, 1999 "A Political Economy Model of Infrastructure Allocation: An Empirical Assessment," *CEPR Discussion Papers* 2336.
- Csite,A.-Felföldi Z. 2006: *Hét kistérségi vizsgálat*, Nemzeti Fejlesztési Hivatal, 2006
- Cox G, McCubbins M. 1986 "Electoral Politics as a Redistributive Game", *The Journal of Politics* 48, 370-389 Cambridge University Press
- De la Fuente, A. and X. Vives 1995, *Infrastructure and Education as Instruments of Regional Policy: Evidence from Spain*, *Economic Policy*, 20, pp. 11–40.
- De la Fuente, A 2002: "On the sources of convergence: A close look at the Spanish regions", *European Economic Review*, vol 46 (3), 569-599.

- Dexia Crédit Local 2006: Sub-national public finance in the European Union, http://www.ccre.org/docs/note_conjoncture_en.pdf
- Dixit, A. - J. Londregan 1996. "The Determinants of Success of Special Interests in Redistributive Politics," *Journal of Politics* 58, 1132-55.
- Drazen, A. 2002: *Political Economy in Macroeconomics*, Princeton University Press, 2002
- Ederveen, S., J. Gorter, R. de Mooij and R. Nahuis 2002, "Funds and Games: The Economics of European Cohesion Policy", CPB Netherlands Bureau for Economic Policy Analysis, TheHague.
- Ederveen, S., H. de Groot, and R. Nahuis 2006. "Fertile Soil for Structural Funds? A PanelData Analysis of the Conditional Effectiveness of European Cohesion Policy". *Kyklos*, 59 (1), 17-42.
- Lars Feld & Christoph Schaltegger, 2005. "Voters AS A Hard Budget Constraint: On the Determination of Intergovernmental Grants," *Public Choice*, Springer, vol. 123(1), pages 147-169
- Ferejohn, John 1974: *Pork Barrel Politics: Rivers and Harbors Legislation, 1947-1968*. Stanford, CA Stanford University Press,
- Gramlich, Edward M. 1977: *Intergovernmental Grants - A Review of the Empirical Literature*, in: W.E.Oates (ed.) : *The Political Economy of Fiscal Federalism*, Lexington Books
- Gramlich, Edward M 1994. "Infrastructure Investment: A Review Essay," *Journal of Economic Literature*, American Economic Association, vol. 32(3), pages 1176-96, September
- Grossman, G.M. & Helpman, E. 1991. *Innovation and Growth in the Global Economy*. Cambridge, Mass.: MIT Press.
- Grossman, P. J. 1994: "A political theory of intergovernmental grants." *Public Choice*, 78, 295-303.
- Hallerberg M, von Hagen J. 1999. "Electoral institutions, cabinet negotiations, and budget deficits in the European Union." In J Poterba and J von Hagen, eds. *Fiscal Institutions and Fiscal Performance*. Chicago: University of Chicago Press, 209-32
- Hallerberg, M. – Vinhas de Souza, L.-Clark, W.R. 2002:"Political Business Cycles in EU Accession Countries", *European Union Politics*, Vol. 3, No. 2, 231-250 (2002
- Hervé,Y.-Holzmann, R.: *Fiscal Transfers and Economic Convergence in The EU – An Analysis of Absorption Problems and Evaluation of The Literature*, NOMOS, Baden-Baden, 1998
- Hibbs, D. 1977. "Political Parties and Macroeconomic Policy." *American Political Science Review* 71. -----1987. *The American Political Economy: Macroeconomics and Electoral Politics in the United States*. Cambridge: Harvard University Press.
- Inman, Robert P. 1987: *Markets, governments, and the "new" political economy*, in: *Handbook of Public Economics*, vol.II., ed. by A.J. Auerbach and M Feldstein
- Inman, Robert P. - Rubinfeld, Daniel L. 1997 : *Rethinking Federalism*, *Journal of Economic Perspectives* -vol. 11. no.4., Fall 1997, p.43-64.
- Johansson, E. 2003: *Intergovernmental Grants as Tactical Instruments – some empirical evidence from Swedish municipalities*, *Journal of Public Economics* Volume 87, Issues 5-6, May 2003, Pages 883-915

- Kalman, J. 2007: Some Political Economy Insights to Multi-Level Government Financing Mechanisms in Hungary - Analysis of political budget cycles and partisanship in municipal investment activities and central grant distribution, unpublished Ph.D.dissertation
- Kaufmann, D., A. Kraay and P. Zoido-Lobaton 2002, Governance Matters II: Updated Indicators for 2000/01, World Bank Policy Research Department Working Paper, Washington D.C., www.worldbank.org/wbi/governance/wp-governance.htm
- Kemmerling, A. – Stephan, A. 2008: “The politico-economic determinants and productivity effects of regional transport investment in Europe”. EIB Papers from European Investment Bank, Economic and Financial Studies, no 7/2008.
- Khemani, S. 2004: “Political cycles in a developing economy: effect of elections in the Indian States”. *Journal of Development Economics*, vol 73 (1), 125-154.
- Lindbeck-Weibull 1987 “Balanced-budget redistribution as the outcome of political competition”, *Public Choice*, 52(3): 273-297
- Lindbeck, A. & Weibull, J. 1993. “A model of political equilibrium in a representative democracy”. *Journal of Public Economics*, 51: 195-209.
- Mink, Mark – DeHaan, Jakob 2005: Has the Stability and Growth Pact Impeded Political Budget Cycles in the European Union?, CESifo Working Paper No. 1532
- Mueller, D. C. 1989. *Public choice II*. Cambridge: Cambridge University Press
- Nordhaus W. 1975. “The Political Business Cycle.” *Review Economic Studies* 42(1):169-90
- Oates, Wallace E.1991: *Studies in Fiscal federalism*, Edward Elgar Co.
- Persson,T.-Tabellini, G. 2000. *Political Economics: Explaining Economic Policy*. Cambridge, MA: MIT Press.
- Persson T, Trebbi F. 2003. “Electoral Rules and Corruption.” *Journal of the European Economic Association* 1:4, 958-89
- Pires, Luis Madureira (2001); The present Institutional Structure of Regional Development in Hungary and Its Preparation for the EU Structural Funds; Study prepared in framework of PHARE Special Preparatory Programme for Structural Funds in Hungary, July, Budapest, 2001
- Porto, A. – Sanguinetti, P. [2001]: “Political Determinants of Intergovernmental Grants: Evidence From Argentina”, *Economics and Politics*, vol 13 (3), 237-256.
- Rogoff K,- Sibert A. 1988. “Elections and macroeconomic policy cycles.” *Review Economic Studies* 55(1):1-16
- Rogoff, K. 1990. Equilibrium political budget cycles. *American Economic Review* 80, 21–36
- Romp, W. –de Haan, J. [2005]: “Public capital and economic growth: a critical survey”, EIB Papers from European Investment Bank, Economic and Financial Studies, no 2/2005.
- Shah, A. 2005: *Fiscal Decentralization and Fiscal Performance*, World Bank Policy Research Working Paper 3786, December 2005
- Shi, Min. and J. Svensson [2002a] *Political budget cycles in developed and developing countries*. Institute for International Economic Studies, Stockholm University.

- [2002b], “Conditional Political Business Cycles,” CEPR Discussion Paper #3352.
- Solé-Ollé, A. – Sorribas-Navarro, P. [2008]: “The effects of partisan alignment on the allocation of intergovernmental transfers: Differences-in-differences estimates for Spain”, *Journal of Public Economics*, vol 92 (12), 2302-2313.
- Tullock, G. [1959]: “Problems of Majority Voting”, *Journal of Political Economy*, vol 67, 547-579.
- Váradi, B. 2006 Miért folyik a csata? Avagy a 8000 milliárd átka, *Élet és Irodalom*, 2006. November 03., 44. szám
- Váradi, B. 2007 A 8000 milliárd átka II., *Élet és Irodalom*, 2007 Jan.12. 02. szám
- Veiga, L [2002]: “The Political Economy of local Governments Expenditures”, NIPE Working Papers from NIPE – Universidade do Minho, no 8/2002
- Veiga, Linda and Pinho, Maria M., 2007. “The political economy of intergovernmental grants: Evidence from a maturing democracy,” *Public Choice*, Springer, vol. 133(3): 457-477
- Veiga, Linda - Veiga, Francisco (2007), “Political Business Cycles at the Municipal Level,” *Public Choice*, 131 (1/2): 45-64
- Weingast, B.R., Shepsle, K.A. & Johnsen, C. (1989). The Political Economy of Benefits and Costs: a neoclassical approach to distributive politics. *Journal of Political Economy* 89:4.
- Weingast, B. R. (1993). The Economic Role of Political Institutions - Working Papers on Transitions from State Socialism. Ithaca, NY: Mario Einaudi Center, Cornell University #93/6.
- Worthington, A.C. – Dollery, B.E. 1998: The political determination of intergovernmental grants in Australia, *Public Choice* 94.(1998) pp.299-315
- Wright, G. [1974]: “The Political Economy of New Deal Spending: An Econometric Analysis”, *The Review of Economics and Statistics*, MIT Press, vol 56 (1), 30-38
- Wildavsky, Aaron. 1984. *The Politics of the Budgetary Process*. 4th ed. Boston: Little, Brown and Company

APPENDIX

Table1 Summary statistics of variables used

Variable	Obs	Mean	Std. Dev.	Min	Max
dep.vars:					
gotgrant_all	15780	0,731939	0,442964	0	1
gotgrant_ROP	15780	0,268061	0,442964	0	1
gotgrant_LG	15780	0,463562	0,498686	0	1
gotgrant_LG_ROP	15780	0,244613	0,429871	0	1
explan.vars:					
closeness of 2002 parliamentary elections	15740	15,2008	10,02895	0	39,72
MP got elected in the second round of the election 2002	15740	0,689962	0,462524	0	1
MP same color as central government 2002	15740	0,210928	0,40798	0	1
MP reelected for more than 1 term 2002	9990	0,804805	0,396371	0	1
Number of terms Member of Parliament reelected 2002	9990	2,363864	0,981986	1	4
closeness of 2006 parliamentary elections	15760	13,19239	8,487905	0,01	36,65
MP got elected in the second round of the election 2006	15760	0,585343	0,492678	0	1
MP same color as central government 2006	15760	0,420368	0,493634	0	1
MP reelected for more than 1 term 2006	15760	0,801333	0,39901	0	1
Number of terms Member of Parliament reelected 2006	15760	2,827157	1,282517	1	5
mayor political color same as central government 2002	15680	0,133291	0,844102	0	1
mayor political color same as central government 2006	15675	0,045933	0,209347	0	1
human develop.index (estim.)	15780	0,837593	0,031368	0,757	0,914
ratio of local population with higher education	15780	4,655228	3,601026	0	40,1
any applicant received funds from first cycle of EU funds, 2004-06	15780	0,692015	0,461675	0	1
LG received funds from first cycle of EU funds, 2004-06	15780	0,437896	0,496144	0	1
size indicator	15780	4,396071	0,827109	1	5
special program for the least developed 33 small regions (LHH)	15780	0,21166	0,408498	0	1
countycity	15780	0,005703	0,075308	0	1
ln population	15720	6,789515	1,322424	2,70805	12,23117
% of old population	15780	0,227907	0,068833	0	1
% of young population	15780	0,165802	0,046335	0	0,775547
% of Roma in popul.	15780	0,036587	0,073965	0	0,790598

Table 2

Probability models for any actor receiving EU SF grants and political colors 2004-2008 - Probit estimation marginal effects

depvar: gotgrant_all	all 4 years 2004-08				first cycle 2004-05		election year 2006		2007-08			
	base model without politics	swing voters _2002	same pol. color		swing	same color	swing	same color	local elec. close	parlam. elec. close	same pol. color	
<i>political vars.:</i>												
doseness of 2002 parliamentary elections		0.00127*** [0.000466]			0.00127* [0.000736]		0.0013 [0.00104]					
MP got elected in the second round of the		0.0272** [0.0108]			0.0289* [0.0170]		0.027 [0.0241]					
MP same color as central government 2002			0.00142 [0.00872]			0.00202 [0.0154]		0.00059 [0.0218]				
MP reelected for more than 1 term 2002			-0.0411*** [0.0101]			-0.0415*** [0.0159]		-0.0411* [0.0225]				
mayor political color same as central government 2002			-0.0221*** [0.00429]			-0.0218*** [0.00682]		-0.0225** [0.00954]				
MP same color as central government 2006				0.0354*** [0.00646]							0.0348*** 0.0371*** [0.0102] [0.0102]	
MP reelected for more than 1 term 2006				-0.0492*** [0.00697]							-0.0493*** [0.0111]	
mayor political color same as central government 2006				0.0962*** [0.0155]							0.0964*** 0.0951*** [0.0246] [0.0251]	
doseness of 2006 local elections									0.0473*** [0.0146]			
doseness of 2006 parliamentary elections										-0.0003 [0.000798]		
MP got elected in the second round of the election 2006										0.0390*** [0.0137]		
Number of terms Member of Parliament reelected 2006											-0.0123*** [0.00380]	
<i>socioecon. controls:</i>												
ln_population	0.176*** [0.00622]	0.176*** [0.00626]	0.192*** [0.00785]	0.174*** [0.00618]	0.177*** [0.00993]	0.192*** [0.0125]	0.173*** [0.0139]	0.191*** [0.0175]	0.178*** [0.00999]	0.174*** [0.00881]	0.173*** [0.00977]	0.172*** [0.00978]
ln per capita local Personal Income Tax	0.0361*** [0.0101]	0.0376*** [0.0101]	0.0476*** [0.0118]	0.0339*** [0.00997]	0.0401*** [0.0149]	0.0454*** [0.0174]	0.0373* [0.0226]	0.0496* [0.0265]	0.0323* [0.0175]	0.0325* [0.0173]	0.0303* [0.0173]	0.0283 [0.0174]
% of young population	0.0178 [0.0872]	0.0158 [0.0873]	0.204* [0.117]	-0.00286 [0.0868]	0.0479 [0.142]	0.268 [0.190]	-0.0198 [0.188]	0.22 [0.256]	0.0232 [0.136]	-0.00114 [0.137]	0.000466 [0.135]	-0.0166 [0.135]
% of old population	0.707*** [0.0649]	0.693*** [0.0648]	0.668*** [0.0653]	0.731*** [0.0660]	0.725*** [0.106]	0.706*** [0.141]	0.653*** [0.142]	0.653*** [0.191]	0.688*** [0.102]	0.715*** [0.101]	0.730*** [0.102]	0.696*** [0.101]
% of own resources in LG budget	0.0166 [0.0394]	0.0159 [0.0392]	0.0494 [0.0452]	0.031 [0.0392]	0.0453 [0.0623]	0.0637 [0.0728]	0.00699 [0.0878]	0.0497 [0.104]	-0.00124 [0.0624]	0.00425 [0.0624]	0.00643 [0.0622]	0.00599 [0.0625]
size indicator	-0.0726*** [0.0100]	-0.0757*** [0.0101]	-0.0506*** [0.0124]	-0.0664*** [0.00996]	-0.0741*** [0.0159]	-0.0502** [0.0195]	-0.0794*** [0.0225]	-0.0520* [0.0277]	-0.0729*** [0.0159]	-0.0706*** [0.0159]	-0.0667*** [0.0158]	-0.0656*** [0.0158]
ratio of local population with higher education	0.00700*** [0.00144]	0.00695*** [0.00146]	0.00366** [0.00173]	0.00727*** [0.00142]	0.00727*** [0.00232]	0.00413 [0.00276]	0.00692** [0.00326]	0.0037 [0.00387]	0.00669*** [0.00226]	0.00681*** [0.00229]	0.00703*** [0.00224]	0.00713*** [0.00225]
Munic. Belongs to special program for the least developed 33 small regions (LHH)	0.0327*** [0.00747]	0.0329*** [0.00758]	0.0517*** [0.0106]	0.0163** [0.00789]	0.0318*** [0.0120]	0.0493*** [0.0168]	0.0334** [0.0169]	0.0511** [0.0236]	0.0356*** [0.0118]	0.0285** [0.0121]	0.0168 [0.0125]	0.0223* [0.0122]
(year and region dummies)												
Observations	15720	15680	9920	15630	6272	3968	3136	1984	6260	6280	6252	6252

Table3 Probability models for Local Government receiving EU SF grants and political colors 2004-2008- Probit estimation marginal effects

dep.var.:gotgrant_LG	Pooled- basemodel	swingvoter s_2002	same pol.color	first cycle 2004-05		election year 2006		2007-08		parl. elec.close	same color	
				swing	same	swing	same color	local elec.close				
<i>political vars:</i>												
closeness of 2002 parliamentary elections		0.00588*** [0.000663]		0.00590*** [0.00105]		0.00594*** [0.00143]						
MP got elected in the second round of the election 2002		0.103*** [0.0133]		0.103*** [0.0220]		0.107*** [0.0311]						
MP samecd or as central government 2002			0.0733*** [0.0123]		0.0303*** [0.0204]		0.0773*** [0.0283]					
MP reelected for more than 1 term 2002			-0.0503*** [0.0145]		-0.0501*** [0.0231]		-0.0518 [0.0327]					
mayor political color same as central government 2002			-0.0203*** [0.00523]		-0.0200** [0.00994]		-0.0208 [0.0140]					
MP samecd or as central government 2005				0.0216** [0.00919]						0.0216 [0.0143]	0.0257* [0.0145]	
MP reelected for more than 1 term 2005				-0.0331*** [0.0113]						-0.0328*** [0.0173]		
mayor political color same as central government 2005				0.0442* [0.0254]						0.0455 [0.0401]	0.0449 [0.0399]	
closeness of 2006 local elections								0.0705*** [0.0211]				
closeness of 2006 parliamentary elections									0.00121 [0.00113]			
MP got elected in the second round of the election 2005									0.0554*** [0.0134]			
Number of terms Member of Parliament reelected 2005											-0.0132** [0.00553]	
<i>socioecon controls</i>												
ln_population	0.214*** [0.00853]	0.216*** [0.00860]	0.195*** [0.0105]	0.213*** [0.00853]	0.219*** [0.0135]	0.197*** [0.0163]	0.212*** [0.0193]	0.193*** [0.0237]	0.215*** [0.0133]	0.213*** [0.0133]	0.211*** [0.0133]	0.209*** [0.0133]
ln per capital local personal income tax base	0.0575*** [0.0145]	0.0555*** [0.0151]	0.0548*** [0.0155]	0.0591*** [0.0143]	0.0791*** [0.0223]	0.0301*** [0.0277]	0.0550* [0.0333]	0.0795* [0.0410]	0.0483* [0.0250]	0.0483* [0.0249]	0.0481* [0.0243]	0.0455* [0.0243]
% of young population	0.432*** [0.137]	0.552*** [0.133]	0.787*** [0.183]	0.510*** [0.133]	0.574** [0.223]	0.910*** [0.297]	0.617** [0.255]	0.841** [0.394]	0.435** [0.217]	0.435** [0.213]	0.435** [0.213]	0.443** [0.217]
% of old population	0.948*** [0.100]	0.944*** [0.101]	0.890*** [0.134]	1.025*** [0.104]	0.932*** [0.155]	0.912*** [0.219]	0.965*** [0.222]	0.893*** [0.294]	0.999*** [0.150]	0.981*** [0.157]	1.037*** [0.152]	0.978*** [0.161]
% of own resources in LG budget	-0.155*** [0.0505]	-0.135*** [0.0503]	-0.134*** [0.0531]	-0.135*** [0.0503]	-0.101 [0.0313]	-0.155* [0.0393]	-0.153 [0.112]	-0.132 [0.123]	-0.133** [0.0793]	-0.172** [0.0793]	-0.170** [0.0793]	-0.172** [0.0795]
size indicator	-0.0742*** [0.0127]	-0.0772*** [0.0123]	-0.105*** [0.0155]	-0.0781*** [0.0123]	-0.0762*** [0.0203]	-0.105*** [0.0243]	-0.0793*** [0.0233]	-0.103*** [0.0343]	-0.0793*** [0.0203]	-0.0732*** [0.0201]	-0.0760*** [0.0204]	-0.0758*** [0.0203]
ratio of local population with higher education	0.0125*** [0.00177]	0.0134*** [0.00173]	0.00933*** [0.00214]	0.0130*** [0.00131]	0.0133*** [0.00283]	0.00963*** [0.00339]	0.0137*** [0.00402]	0.00955** [0.00479]	0.0125*** [0.00273]	0.0118*** [0.00281]	0.0125*** [0.00284]	0.0128*** [0.00282]
Munic. Belongs to special program for the least developed 33 small regions (LHH)	0.0335*** [0.0115]	0.0376*** [0.0117]	0.0437*** [0.0170]	0.0201* [0.0113]	0.0337** [0.0135]	0.0425 [0.0263]	0.0385 [0.0261]	0.0433 [0.0373]	0.0454** [0.0182]	0.0399* [0.0183]	0.0235 [0.0157]	0.0343* [0.0134]
<i>(+year and region dummies)</i>												
Observations	15720	15680	9920	15630	6272	3988	3136	1994	6260	6280	6252	6252
Percent correctly classified	70.95	71.01	71.94	70.83	71.01	72	71.05	71.93	71.05	70.84	70.87	71.07
Robust standard errors in brackets												
*** p<0.01, ** p<0.05, * p<0.1												

Table 4 Probability model for any actor receiving grants from EU Regional OP grants and political colors 2004-2008 - Probit estimation on marginal effects

dep. var.: gotgrant_RCP	Pooled- basemodel	all years 2004-08				first cycle 2004-05		election year 2005		2007-08			
		swingvoters _2002	same pol. color			swing	same	swing	same color	local elec.close	parl. elec.close	same pol. color	
<i>political vars.:</i>													
closeness of 2002 parliamentary elections		-0.000924* [0.000593]				-0.00092 [0.000899]			-0.00094 [0.00118]				
MP got elected in the second round of the election 2002		0.0808*** [0.0108]				0.0816*** [0.0170]			0.0810*** [0.0241]				
MP same color as central government 2002			0.0413*** [0.0108]				0.0427** [0.0171]		0.0409* [0.0242]				
MP reelected for more than 1 term 2002			0.00303 [0.0121]				0.00341 [0.0191]		0.00198 [0.0270]				
major political colors same as central government 2002			-0.00768 [0.00609]				-0.00774 [0.00881]		-0.00754 [0.0135]				
MP same color as central government 2006				0.0453*** [0.00779]								0.0428*** [0.0122]	0.0427*** [0.0121]
MP reelected for more than 1 term 2006				0.00535 [0.00924]								0.0129 [0.0141]	
major political colors same as central government 2006				0.00875 [0.0183]								0.00728 [0.0280]	0.00807 [0.0282]
closeness of 2008 local elections										-0.00701 [0.0180]			
received funds from NFT (first EU cycle 2004-2006)										0.0928*** [0.0140]	0.0889*** [0.0139]	0.0917*** [0.0140]	0.0902*** [0.0141]
closeness of 2006 parliamentary elections												-0.00759*** [0.00103]	
MP got elected in the second round of the election 2006													-0.0488*** [0.0162]
Number of terms Member of Parliament reelected 2006													-0.00336 [0.00446]
In population	0.178*** [0.00724]	0.167*** [0.00732]	0.162*** [0.00921]	0.175*** [0.00723]	0.168*** [0.0116]	0.164*** [0.0147]	0.165*** [0.0162]	0.159*** [0.0200]	0.159*** [0.0117]	0.151*** [0.0117]	0.158*** [0.0117]	0.158*** [0.0117]	0.155*** [0.0117]
In per capita local personal income tax base	0.0388*** [0.0118]	0.0477*** [0.0119]	0.0534*** [0.0147]	0.0402*** [0.0118]	0.0409** [0.0177]	0.0502** [0.0221]	0.0555*** [0.0259]	0.0594* [0.0315]	0.0416** [0.0193]	0.0449** [0.0187]	0.0433** [0.0192]	0.0433** [0.0192]	0.0425** [0.0193]
% of young population	0.715*** [0.142]	0.650*** [0.141]	0.632*** [0.178]	0.674*** [0.144]	0.790*** [0.205]	0.728*** [0.278]	0.424 [0.280]	0.352 [0.288]	0.799*** [0.191]	0.629*** [0.189]	0.768*** [0.190]	0.768*** [0.190]	0.769*** [0.191]
% of old population	0.625*** [0.109]	0.569*** [0.107]	0.411*** [0.133]	0.630*** [0.111]	0.674*** [0.159]	0.478** [0.211]	0.398** [0.201]	0.22 [0.218]	0.669*** [0.144]	0.584*** [0.137]	0.673*** [0.148]	0.673*** [0.148]	0.676*** [0.148]
% of own resources in LG budget	0.0291 [0.00419]	0.0648 [0.00411]	0.0314 [0.0480]	0.0331 [0.00417]	0.0747 [0.0547]	0.034 [0.0757]	0.0699 [0.0917]	0.0411 [0.108]	0.0219 [0.0659]	0.0509 [0.0651]	0.0284 [0.0655]	0.0284 [0.0655]	0.0226 [0.0558]
size indicator	-0.0479*** [0.0105]	-0.0484*** [0.0105]	-0.0688*** [0.0131]	-0.0448*** [0.0105]	-0.0451*** [0.0168]	-0.0680*** [0.0208]	-0.0481*** [0.0239]	-0.0714** [0.0290]	-0.0487*** [0.0162]	-0.0482*** [0.0161]	-0.0451*** [0.0162]	-0.0454*** [0.0162]	-0.0454*** [0.0163]
ratio of local population with higher education	0.0119*** [0.00133]	0.0131*** [0.00134]	0.00999*** [0.00175]	0.0127*** [0.00134]	0.0138*** [0.00211]	0.0104*** [0.00279]	0.0127*** [0.00298]	0.0093*** [0.00390]	0.0117*** [0.00208]	0.0130*** [0.00208]	0.0124*** [0.00207]	0.0125*** [0.00207]	0.0125*** [0.00207]
Munic. Belongs to special program for the least developed 33 small regions (LHH)	0.0387*** [0.0108]	0.0265** [0.0105]	0.0558*** [0.0155]	0.0352*** [0.0108]	0.0253 [0.0168]	0.0538** [0.0244]	0.0292 [0.0239]	0.0598* [0.0342]	0.0267 [0.0168]	0.0155 [0.0161]	0.0253 [0.0168]	0.0253 [0.0168]	0.0225 [0.0164]
<i>(+year and region dummies)</i>													
Observations	15720	15580	9920	15530	6272	3968	3126	1984	6280	6280	6252	6252	6252
Percent correctly classified	80.57	80.53	80.19	80.27	80.56	80.22	80.52	80.34	80.34	80.68	80.2	80.36	80.36
Robust standard errors in brackets													
*** p<0.01, ** p<0.05, * p<0.1													

Table 5 Probability models for Local Govt. receiving from EU Regional OP grants and political colors 2004-2006 - Probit estimation marginal effects

<i>depvar.: gotgrant_LG_RCP</i>	Pooled -				first cycle 2004-05		election year 2006		2007-08		
	base model	swing voters_2002	same pol. color		swing	same	swing	same	local elec. dose	parl. elec. dose	same pol. color
political vars.:											
closeness of 2002 parliamentary election:	-0,000601				-0,00049						
	[0,000496]				[0,000786]						
MP opt. elected in the second round of the:	0,0627***				0,0639***						
	[0,0102]				[0,0162]						
MP same color as central government 2002		0,0450**				0,0461***		0,0442*			
		[0,0103]				[0,0162]		[0,0229]			
MP reelected for more than 1 term 2002		0,0066				0,00529		0,00419			
		[0,0113]				[0,0178]		[0,0252]			
mayor political color same as central government 2002		-0,00336				-0,00346		-0,00319			
		[0,00549]				[0,00873]		[0,0123]			
MP same color as central government 2006			0,0437***							0,0390**	0,0375**
			[0,00732]							[0,0107]	[0,0107]
MP reelected for more than 1 term 2006			0,00414							0,0342***	
			[0,00668]							[0,0108]	
mayor political color same as central government 2006			-0,00995							-0,00421	-0,00381
			[0,0155]							[0,0214]	[0,0215]
closeness of 2006 local elections									-0,0255		
									[0,0160]		
local government has received funds from MFT									0,332***	0,329***	0,333***
									[0,0112]	[0,0111]	[0,0112]
closeness of 2006 parliamentary elections										-0,00584***	
										[0,000884]	
MP opt. elected in the second round of the election 2006										-0,0513***	
										[0,0139]	
Number of terms Member of Parliament reelected 2006											0,00402
											[0,00376]
socioecon controls:											
ln_population	0,171***	0,164***	0,145***	0,171***	0,166***	0,147***	0,161***	0,141***	0,0989***	0,0908***	0,0971***
	[0,00680]	[0,00689]	[0,00674]	[0,00689]	[0,0109]	[0,0139]	[0,0152]	[0,0189]	[0,00977]	[0,00978]	[0,00972]
ln per capital local personal income tax base	0,0397***	0,0493***	0,0464***	0,0417***	0,0486***	0,0467**	0,0620**	0,0485	0,0192	0,0213	0,0217
	[0,0111]	[0,0113]	[0,0138]	[0,0111]	[0,0168]	[0,0201]	[0,0248]	[0,0295]	[0,0161]	[0,0155]	[0,0161]
% of young population	0,686***	0,639***	0,682***	0,683***	0,755***	0,794***	0,435*	0,419	0,584***	0,452***	0,552***
	[0,137]	[0,134]	[0,173]	[0,139]	[0,192]	[0,258]	[0,245]	[0,274]	[0,168]	[0,167]	[0,168]
% of old population	0,813***	0,551***	0,417***	0,621***	0,647***	0,489**	0,405**	0,231	0,467***	0,397***	0,450***
	[0,105]	[0,102]	[0,133]	[0,107]	[0,144]	[0,202]	[0,191]	[0,211]	[0,131]	[0,127]	[0,131]
% of own resources in LG budget	-0,00683	0,0262	0,0267	-0,00127	0,0368	0,029	0,0288	0,0353	0,00665	0,0265	0,00987
	[0,0386]	[0,0383]	[0,0449]	[0,0388]	[0,0599]	[0,0700]	[0,0660]	[0,101]	[0,0590]	[0,0584]	[0,0587]
size indicator	-0,0393***	-0,0390***	-0,0389***	-0,0376***	-0,0376**	-0,0646**	-0,0409*	-0,0687**	-0,0273**	-0,0280**	-0,0257*
	[0,00975]	[0,00980]	[0,0123]	[0,00989]	[0,0155]	[0,0195]	[0,0218]	[0,0272]	[0,0136]	[0,0134]	[0,0136]
ratio of local population with higher education	0,0103***	0,0110***	0,0100***	0,0110***	0,0115***	0,0105***	0,0106***	0,00943**	0,00745**	0,00856**	0,00819**
	[0,00125]	[0,00126]	[0,00164]	[0,00128]	[0,00199]	[0,00257]	[0,00279]	[0,00369]	[0,00175]	[0,00178]	[0,00174]
Munc. belongs to special program for the least developed 33 small regions (LHH)	0,0533***	0,0434***	0,0820**	0,0907***	0,0408*	0,0768***	0,0473**	0,0902***	0,0186	0,0118	0,0225
	[0,0103]	[0,0101]	[0,0152]	[0,0104]	[0,0158]	[0,0238]	[0,0228]	[0,0337]	[0,0141]	[0,0138]	[0,0143]
(+ year and region dummies)											
Observations	15720	15580	9920	15530	6272	3968	3136	1984	6280	6280	6252
Percent correctly classified	82,21	82,34	81,88	82,16	82,32	81,91	82,37	81,85	84,44	84,33	84,1
Robust standard errors in brackets											
*** p<0,01, ** p<0,05, * p<0,1											

Table 6 Chances for Local Govt. receiving EU funds and political color by municipality size

	dep.var.: gotgrant_LG			dep.var.:gotgrant_LG_ROP			
	Probit			Probit			
	5-10000	1000-5000	under1000	10-50000	5-10000	1000-5000	under1000
MP same color as central government 2002	-0.0898***	0,0136	0.0961***	-0,0133	-0.167***	0,0216	0,00237
	[0.0304]	[0.0187]	[0.0184]	[0.00887]	[0.0494]	[0.0184]	[0.00856]
MP same color as central government 2006	-0,0196	0,0148	-0,00966	0,00142	0,0575	0.0337**	0.0346***
	[0.0207]	[0.0169]	[0.0126]	[0.00490]	[0.0463]	[0.0164]	[0.00735]
mayor political color same as central government 2006	0.0442***	-0,0128	0.130***	-0,00406	0,000824	-0,0256	0,0265
	[0.0161]	[0.0309]	[0.0455]	[0.00567]	[0.0489]	[0.0278]	[0.0229]
ln_population	0.153***	0.256***	0.146***	0,00535	0,148	0.244***	0.0935***
	[0.0446]	[0.0162]	[0.00979]	[0.00770]	[0.0913]	[0.0155]	[0.00561]
ln per capita local personal income tax base	0.0410**	0.0719***	0,0166	-0.0259**	0,0885	0.0487**	0.0369**
	[0.0209]	[0.0209]	[0.0227]	[0.0118]	[0.0584]	[0.0206]	[0.0154]
% of young population	1.819***	0.943***	0.274**	0.457**	3.540***	1.237***	0.188**
	[0.454]	[0.268]	[0.132]	[0.209]	[1.045]	[0.269]	[0.0782]
% of old population	2.595***	1.003***	0.658***	-0,0244	1.723**	0.994***	0.252***
	[0.396]	[0.230]	[0.0960]	[0.168]	[0.812]	[0.227]	[0.0574]
% of own resources in LG budget	0.257**	-0,0238	-0.240***	0,016	0.674***	-0,0355	-0,011
	[0.118]	[0.0770]	[0.0587]	[0.0474]	[0.251]	[0.0744]	[0.0298]
ratio of local population with higher education	0.00550**	0,00364	0.0179***	0.00457***	0.0182***	0.0133***	0.00465***
	[0.00226]	[0.00245]	[0.00210]	[0.00109]	[0.00515]	[0.00233]	[0.00118]
Munic. Belongs to special program for the least developed 33 small regions (LHH)	-0.0750**	0.0711***	0,0136	-0,0014	-0,0424	0.0831***	0.0137*
	[0.0362]	[0.0178]	[0.0128]	[0.00785]	[0.0547]	[0.0189]	[0.00762]
Observations	685	5650	8565	610	685	5650	8565
R-squared							
Robust standard errors in brackets							
*** p<0.01, ** p<0.05, * p<0.1							

note: in the case of cities >10000 for probit:MP_gov_02=1 and ln_population > 6.907755 predicts success perfectly, thus regressions do not run

