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The effect of party control on fiscal policy of municipalities in the Netherlands

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### **Abstract**

Economists have debated for a long time whether political parties exert influence on fiscal policy or whether they converge to the same policy following the median voter. Empirically, that is hard to answer because parties are not randomly appointed to rule but chosen by the voters. This creates an omitted variable bias, the voter's preferences. This thesis uses a regression discontinuity design to find the effect of party control on fiscal policy in Dutch municipalities. The change in party control at 50% creates a threshold around which municipalities are comparable in a quasi-experimental way. Using this method on a panel data set of Dutch municipalities in the period 2010-2022, the following results are found. Right-wing-controlled municipality councils have a lower property tax for both households and companies. Furthermore, right-wing-controlled municipalities also spend less money per capita on governance and support costs, education, and sports & culture and more on the local economy. Next to actual spending, right-wing controlled municipalities allocate relatively more of their budget to public order & safety, traffic, and economy and less to education and sports & culture. These findings give evidence to the idea that political parties do exert influence on fiscal policy and diverge in their executed policy.

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The views stated in this thesis are those of the author and not necessarily those of the supervisor, second assessor, Erasmus School of Economics or Erasmus University Rotterdam.

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## 1. Introduction

What power lies in politics or, maybe even more relevant, what power do political parties have? Are they foremost puppets to the wishes of the people or do their ideas and stances matter? These are questions that economic literature has been attempting to answer for a very long time. There exist several theories which attempt to prove that political parties will converge until their ideas meet in the middle at the median voter, while other theories try to prove that parties diverge. Unfortunately, there does not exist a conclusive answer to these questions. It is, therefore, important to continue researching the power of the party.

This research will contribute to this field of science. The municipality councils in the Netherlands from 2010-2022 will be examined to determine how great the power of the party is. It is, however, hard to identify this power of the party. This is due to an identification problem. Political outcomes are not merely caused by the choices parties make, but also by the preferences of voters. The control of political parties is not randomized but voted for. Therefore, there needs to be controlled for these preferences to obtain an unbiased effect. This would be impossible, even with extensive survey data, especially due to the unmeasured preferences. To solve this identification problem, this research uses a quasi-experimental design which is an integral part of political systems. Party control switches at 50% of the vote share. That creates the possibility to implement Regression Discontinuity Design. This design compares municipalities that are slightly above and below the threshold of 50%. These municipalities are great counterfactuals to each other since they are very likely the same in all but the treatment of party control. This causes a situation in which party control is as good as randomly assigned. Furthermore, it is possible to check for the assignment of party control. Using this design, it is possible to separate the effect of party control on different outcomes. For this research, these outcomes will be fiscal policies. How much tax revenues do municipalities receive and in what policy areas do these municipalities spend their revenue? By exploring these outcomes and how they depend on which party is in control, this research will add to the existing economic literature on the subject.

Next to the academic relevance, this research is also relevant to society. Voter turnout for local elections has been falling behind for years (KIESRAAD 2022), and a reason for this is the idea voters have that it does not matter for whom they vote since the results do not differ. Either proving or disproving this idea is important for voters and politicians, because creating a complete information position helps to make informed choices.

This paper is structured as follows. In section 2.1 the theoretical framework for electoral competition will be laid down. This is followed by the currently existing empirical literature on this subject in section 2.2. After these subsections, the hypotheses which will be tested are explained.

After the theory, section 3 will explain the workings of the institutional setting in the Netherlands for the municipalities, the fiscality, and the local governments. All subsections on institutional setting will be followed by describing how the data was retrieved and created and what underlying assumptions were made. Section 4 describes the main methodology of the Regression Discontinuity Design from both a conceptual and a mathematical view. The different robustness checks used are also explained in this section. Section 5 presents both the main results and the robustness checks. Finally, section 6 will judge the hypotheses, give a conclusion to this research, describe the limitations, and recommend further research.

## 2. Theoretical Framework and related literature

Political decisions could be seen as the outcome of the coming together of economic supply and demand (Fiva, Folke, & Sorensen, 2018). In this view, the supply side of policy outcomes is given by political parties which present their ideas in the form of a party program. The demand side on the other hand is created by the voters. The important moments of the coming together of supply and demand are elections. While the demand-side, voter's preference, is interesting, an analysis of this topic is beyond the scope of this research. This research thrives to empirically capture the supply-side of this process. How elastic is the supply-side? Do parties converge or do they differ? In this section, a theoretical framework containing the most relevant theoretical research will be laid down, after which related empirical literature will be set out.

### 2.1 Theoretical framework

The most famous theory on political competition is the median voter theorem introduced by Hotelling (1929). This theorem assumes that politicians and therefore the parties they represent have only one goal, getting into and staying in office. This also means that parties commit to their promised policy since otherwise they will not be re-elected. Therefore, parties will choose and execute their promised policies which gives them the highest chance of winning elections. According to this theory, politicians do not care for the implications of their policies. This means that parties will adopt a policy that pleases the median voter, hence converging to the same policy. Schumpeter (1942) argues that the social benefits that politicians can create are less important than their individual benefits. From this viewpoint, the supply side could be seen as completely elastic since it converges completely to the demand side. When applying this theorem to fiscal policy, it would mean that taxes and spending would be the same for every party. Stigler (1970) states that policy will therefore be focused on middle-income earners, in what he called the Director's Law. There have been a lot of theoretical contributions which build on this central convergence idea. The addition of these contributions is often focused on either market imperfections, such as incomplete information (Downs, 1957) and administration costs (Lindbeck & Weibull, 1987) or on voter behavior, such as taking an active role in elections and having the possibility to abstain from voting (Hirschman, 1970).

Some theoretical frameworks predict divergence instead of convergence. Alesina (1988) shows that divergence will happen when the commitment assumption is dropped. Next to disproving the median voter theorem, several models have been developed that drop the egoistical politician assumption altogether. They focus on the ideological allegiance of parties. Wittman (1973) assumes that parties are solely interested in policy and that winning the election is a means to that end.

Therefore, parties tend to be unresponsive to voters' preferences. Osborne and Slivinski (1996) create a model which also leads to divergent party programs. This is due to entry costs for candidates so that the social benefit which they thrive to achieve will only be worth it when it exceeds the entry costs. Therefore, candidates will only participate when they are far enough from the median voter since otherwise the entry costs would be too high. Besley and Coate (1997) come to the same conclusion for a representative democracy in which voters are also candidates. These two schools of thought have led to the demand of empirical literature to either support or reject these theories.

## 2.2 Related empirical literature

There exists a wide scope of empirical literature on this topic. A lot of research is focused on two-party systems such as the United States. There has been some research on multi-party systems and an especially influential paper was by Pettersson-Lidbom (2008), which method this research follows partly. For the Netherlands, there has been some research with contradicting results. Those studies, however, used a linear regression model and only looked at taxes. There has been very little research done on the difference in spending and the power parties have there. This research will add to the existing literature by focusing on the Netherlands and on both fiscal revenues and spending. Spending will be examined by researching actual spending and budget allocation. The latter controls for the limited view actual spending gives since actual spending is also influenced by the height of tax revenue. This leads to a more complete image of the difference in political parties' fiscal policy.

Table 1 Related Empirical Literature

Research	Method		Findings
<b>United States (two-party system)</b>			
Ferreira & Gyourko (2009)	Regression Design	Discontinuity	Democratic or Republican mayors do not affect the size of city government, the allocation of local public spending, or crime rates.
Lee, Moretti & Butler (2004)	Regression Design	Discontinuity	Party platforms do not converge but stay diverse.
<b>Denmark (multi-party)</b>			
Egerord & Larsen (2021)	Difference-in-difference		Right-wing local governments execute more conservative policies than left-wing local governments.
<b>The Netherlands</b>			

Allers, Haan & Sterks (2001)	Linear Regression for one year		Left-wing municipality councils charge more property tax.
Allers & Rienks (2021)	Linear Regression		There is no difference in property tax between left- and right-wing municipality councils.
<b>Norway</b>			
Fiva, Folke & Sorensen (2018)	Regression Design	Discontinuity	Left-wing governments raise more tax money and spend more on childcare and less on elderly care than right-wing governments.
<b>Sweden</b>			
Pettersson-Lidbom (2008)	Regression Design	Discontinuity	Left-wing municipality councils spend 2-3% more than right-wing councils.
Folke (2014)	Regression Design	Discontinuity	Party control does not affect local taxes but does affect migration and environmental policy.

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## 2.3 Hypotheses

Now that both a theoretical framework and the related literature have been laid down, it is useful to discuss the hypotheses of this paper. The main area of interest is the effect of party control on several fiscal policies. These fiscal policies are dividable into tax revenues, actual spending in different policy areas, and budget allocation to different policy areas. For these fiscal policies, the research examines the following hypotheses:

**H1:** The estimated effect of Party Control on Divergence of Tax Revenues is not significantly divergent from zero.

**H2:** The estimated effects of Party Control on the Divergence of Actual Spendings on policy areas are significantly divergent from zero.

**H3:** The estimated effects of Party Control on Divergence of Budget Allocation on policy areas are significantly divergent from zero.

Hypothesis 1 follows the research done on divergence in local Dutch tax revenues by Allers & Rienks (2021). Hypotheses 2 and 3 follow the research done on the divergence of spending policy by Norwegian municipalities by Fiva, Folke, & Sorensen (2018). There are seven policy areas which are examined. Therefore, the hypotheses need to be judged by the entirety of the outcomes.

### 3. Data and institutional setting

To answer the research question, it is important to understand both the data which will be used and the institutional setting from which this data is derived. The main analysis will take place on a panel data set for the period 2010-2020 for municipalities in the Netherlands. This panel data set is created from different sources. In subsection 3.1, the municipalities used will be described. In subsection 3.2, the fiscal framework will be explained, and the important dependent variables will be described. In subsection 3.3, the electoral system will be outlined and the grouping of political parties by ideology will be explained. The description of the independent variable will also be laid down in this subsection.

#### 3.1 Municipalities

The Netherlands has been rearranging its municipalities for almost 100 years. Smaller municipalities are rearranged together into bigger municipalities. The Netherlands had 431 municipalities in 2010, the beginning of the dataset, and 355 municipalities in 2020, the end of the dataset. The rearranging of municipalities always follows after a local rearrangement election, which is half a year after municipality council elections. Hence, the rearranging municipalities do not participate in the regular municipality elections. Therefore, data on the local elections of these municipalities is hardly comparable with municipalities that are not subject to rearrangements. Besides this, when a rearrangement is approved, there will exist two different municipalities at two different moments in time. Due to the institutional setting of the number of seats being dependent on both the population and voter outcomes, it is impossible to merge these municipalities before the rearrangement. Therefore, all municipalities, which were subdued to rearrangement are excluded from the dataset.

Table 2 Descriptive statistics on municipality characteristics (N=906)

Variables	Mean	Standard deviation	Minimum	Maximum
Population size	46421	74,256.74	919	872757
Income per capita	27,969.21	2,869.33	20,980.45	41,249.76
Proportion of young, 0-17	20.4	0.03	12.7	35.9
Proportion of old,	19.8	0.04	7.9	31.2



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Table 2 shows the descriptive statistics for some important characteristics of Dutch municipalities. It can be derived from this table that municipalities differ a lot from each other. The biggest municipality, Amsterdam, has for example around 1000 times more people living there than the smallest municipality, island Schiermonnikoog. The composition of the population also differs a lot. Some municipalities have almost three times as many young people living there and others almost four times as many older people. Lastly, the yearly income also differs substantially. The municipality with the highest-income earners earn on average two times more than the lowest-income earners. This data is important to establish several ways to control for our design.

### 3.2.1 Fiscal Framework

Local governments play a vital part in the delivery of public services in the Netherlands. Next to providing local utilities, such as sewer control and garbage collection, local governments have a broad set of mandates. They are responsible for both welfare services of the Dutch welfare state (such as elderly citizen care at home, youth services, and social security) and the provision of local public goods (such as economy, culture and sports, public order and safety and housing and environmental management) (Rijksoverheid, 2022).

To finance all these public services, local governments have three sources of income. Firstly, they receive around 60% of their income from the national government (Toolsema & Allers, 2019). Local governments receive most benefits from the *gemeentefonds*, a fund for the financing of municipalities. The distribution depends on almost 90 different factors, such as population size, the number of elderly people, and the number of school-going children (Toolsema & Allers, 2019). This source of income is, however, not interesting for this research, since local governments do not have any influence on the amount. It is completely dependent on unchangeable factors. The height of the second source of income, user fees for infrastructure services, is determined by the local governments themselves. Citizens get charged fees for the usage of the sewer, water, and garbage collection. These fees are, as determined by law, only usable for the financing of the services for which they are collected. The height of the revenue is not dependent on the ideology of the municipality council. This is due to both the above-mentioned restriction by law and several geographical factors, such as population density and location. Therefore, this source of income is not interesting for this research.

The focus of interest is local taxes. All municipalities have property taxes (*onroerende zakenbelasting*) and some municipalities tax for example the stay of tourists (*toeristenbelasting*) and having dogs

(*bondenbelasting*). Around 90% of local taxes are coming from property taxes and therefore, this research will be limited to this taxation. Since the property tax is not bound by law, municipality councils have absolute freedom to determine the height of this tax. This makes property tax a great candidate for determining the power of the party. Municipalities are allowed to make different property taxes for three groups: one-person households, multi-person households, and property not used for living, but for the running of companies.

As mentioned above, local governments are responsible for the delivery of all kinds of local services. Municipality councils can prioritize different services over the others. They are also allowed to make budgetary prioritizations. The allocation is only limited by various legislation which states that a citizen has the right to a particular service and a minimum standard of this service. These obligations are foremost important in healthcare, education, and social security. However, even in these services municipalities can either do the bare minimum or choose to prioritize these services and spend more money on these services. The difference in spending on all the services is therefore in principle relevant for this research.

In the Netherlands, there have been some changes in the set of tasks given by the national government to the local governments. In 2015, municipalities got the responsibility for youth health services, home care for the elderly, and social security payments. Since the data for this research has been taken from 2010 till 2020, this change in the law has major consequences for the data on spending on these services. Therefore, this research will exclude spending on healthcare and social security from the dataset. This law does not have any influence on the height of local taxes since it is paid by the national government.

### 3.2.2 Fiscal Policy Data

The data on the property tax is retrieved from the Centre for research on local government economics (COELO). For this research, the data on property tax will be limited to the height of this tax in multi-person households and the taxation of property not meant for living. It must be said that the taxation of one-person households is also likely to change due to ideology. For example, Christian parties are likely to tax one-person households relatively more, since they believe in the importance of families, while liberal parties believe in the individual. In the Netherlands, however, this distinction does not follow a strict left-right position, but rather a liberal/religious distinction. Taxation of property not meant for living is also relevant since this tax might be lower when local commerce is deemed important and stimulated by a political party. The combining of both household taxes and company taxes might be relevant to check whether different parties choose different places to get their revenues.

This research uses data on the actual amount paid by households and stores instead of the percentage of property tax. This choice has been made because municipalities will likely base their percentage on the amount they want to receive from this tax so that they can finance their wishes. When property is on average more worth because of its location (for example Amsterdam), the percentage of property tax may therefore be lower, since the amount needed does not change. This research, therefore, views the property tax as a means to finance the municipality council's wishes.

The data on the budgetary allocation of municipalities is retrieved from Findo (2022), a databank on the finances of local governments. To consider the difference in population size, this research uses the amount spent on a service per capita.

The amounts on both property tax and budgetary allocations are all standardized to the price index of 2013, which is derived from CBS (2022).

This research is interested in changes in tax and budgetary allocations based on changes in political representations. Since the municipality council changes only once in four years, this research only needs to look at one point in time after this council change. In the first year after the election, the old council still made budgetary decisions. In the fourth year after the election, the council might be tempted to make popular decisions, because of the coming elections. Therefore, this research looks at the second year after the election. This means the data on taxes and allocations are from 2012, 2016 and 2020.

Table 3 Descriptive statistics on revenues and expenditure (N=906)

Variables	Mean	Standard deviation	Minimum	Maximum
Property Tax for households	289.38	67.59	165.49	535.13
Property Tax for stores	2072.85	579.80	1110.76	3992.19
Governance and support	722.33	424.79	197.35	2599.63
Public order and safety	118.52	69.31	38.95	509.67
Traffic	192.95	100.95	75.51	677.52
Economy	40.31	49.20	0.87	293.09

Education	148.88	107.47	50.03	808.95
Sports & Culture	348.38	204.87	112.99	1059.72
Housing & Environmental management	344.41	289.11	56.92	1911.58

As can be seen in table 3, actual spendings on different policy areas differ quite a bit between municipalities. While most variables will be clear, the governance and support variable needs some explaining. These spendings include among other things the costs for municipality staff and administration duties for municipalities (such as passport issuing and the approval of licenses). While it is likely that costs for administration duties are somewhat similar between municipalities, municipalities are allowed to decide how much staff is needed and how “big” the local government should be. Is the local government merely needed for the basic tasks or will they have more extended services of a higher quality? Municipalities spend on average the most of their budget to these costs. An important note which must be made is the fact that this data covers all spending and not merely current spending. This might occur due to an investment a certain municipality made in one year. This is not done by choice, but due to a lack of data. Because of this, outliers will be excluded from the data set. The outliers are dealt with by winsorizing the data which means excluding the observations which are in the 1<sup>st</sup> and 99<sup>th</sup> percentile of all observations. The most extreme observations will therefore be excluded on both sides of the distribution.

Table 4 Descriptive statistics on the budgetary allocation (N=906)

Variables	Mean	Standard deviation	Minimum	Maximum
Governance and support	0.389	0.126	0.0134	0.910
Public order and safety	0.071	0.048	0.002	0.588
Traffic	0.109	0.042	0.028	0.321
Economy	0.022	0.028	0	0.239
Education	0.081	0.027	0.013	0.369
Sports & Culture	0.143	0.043	0.034	0.309

Housing & Housing & Environmental management	0.184	0.105	0	0.658
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Table 4 tells a similar story to table 3, in that the budgetary allocations differ a lot. This has the same reason and therefore outliers will be excluded here as well.

### 3.3.1 Electoral framework and party ideology

All government structures in the Netherlands have proportional representation based on their elections. This means that the percentage of votes roughly amounts to the number of seats a party gets. The grouping of representatives in a political party is not obligated by law. People are therefore allowed to take a seat in a council by themselves. This, however, does not happen due to elections, but due to split-offs. The seat allocation method for municipality councils starts by counting the number of votes a political party got at the elections. A corresponding number of seats is given based on the number of voters. Since the number of seats is limited, the allocation does not perfectly represent the number of votes. After the seats are allocated to parties, individual council members are chosen, based on both preference voting and list order. Individual council members are, however, irrelevant to this research since the research examines the power of the party.

After the municipal council is chosen, the bigger parties will start forming a coalition. This coalition will provide the members of the executive power, the alderman. Together with the (unelected) mayor, the aldermen form the cabinet of the municipality, *college van burgemeester en wethouders*. This cabinet will in principle determine the fiscal policies, but the municipality councils will have the right of amendment and the right of final (dis)approval.

The Netherlands knows many parties due to the proportional representation system. Over time the bigger parties got smaller and especially in local elections, the parties are very fragmented. The Netherlands has all kinds of political ideologies represented: liberal (VVD, D66, Volt, JA21), Christian (CDA, ChristenUnie, SGP), social (PvdA, SP), green (GroenLinks, Partij voor de Dieren), and populist (PVV, Forum voor Democratie). Next to these ideologies, some parties do not fit into a group such as DENK, BIJ1, and 50PLUS. This is especially important for local elections since undefined local parties participate as well. These local parties are extremely important for local governments. In 2018, 28.65% of all votes went to local parties. In comparison, the biggest party, VVD, got 13.50% of all votes in the same elections. Therefore, local parties will not be excluded from the data. In the following subsection, this will be further explained.

For this research, the parties will be grouped in either left- or right-wing. The left-right position of a municipality council is used to create the independent variable, party control, which is used to test the hypotheses and further explained in section 4 methodology.

### 3.3.2 Data on elections

Data on municipality council elections was retrieved from the Databank Election-outcomes (Kiesraad). This data gave the total number of seats in a municipality and the allocation of seats to different parties for elections in 2010, 2014 and 2018.

With this data, the left-right position of a municipality council could be determined. However, to achieve this, it was important to classify a political party as either left- or right-wing. This assignment caused two problems. Firstly, national parties which are seen as either left- or right-wing do not necessarily have the same position on a local level. Secondly, local parties are at first glance different in every different municipality. To tackle these problems my allocation will be based on research done by Otjes (2021). In his research, he classified both national parties and local parties as either left- or right-wing based on their local party programs. Despite this research, there is a fair chance that some local divisions of national parties will diverge from this left-right position. However, this research assumes that all local divisions are the same as the qualification made by Otjes. Otjes also tackles a big part of the local party problem. A lot of local parties share the same name and the same left-right position. They could be seen as part of a bigger family. Some party names are nearly always right-wing (Gemeentebelangen, Leefbaar, Hart voor, Ondernemend, Liberaal) and some are nearly always left-wing (Solidair, Groen, Progressief, Ouderen, Student). The appendix has an overview of the classification of national parties and local party names families. Based on this research, most of the local parties were classified. For the remaining few exceptions, the party program was examined to classify the party, following the research design used by Otjes. The same assumption as described above is also true for the classification of local parties.

Table 5 Party Control in Dutch local governments

Period	Number of left-wing majorities	Number of right-wing majorities
2010-2013	116	186
2014-2017	122	180
2018-2022	99	203
Sum 2010-2022	337	569

Table 5 shows the number of left-and right-wing majorities in municipality councils in all three election periods. In general, there are more right-wing majorities than left-wing majorities.

## 4. Methodology

In this section, the methodology which will be used to investigate the effect of party control on fiscal policy will be discussed. Estimating the power of the party without bias is a challenging identification problem. This is due to the basic principles of democracy. Parties are not randomly selected to govern but chosen by voters. This leads to an omitted variable problem. The omitted variable is the preference of the voters. Since it is not possible to control for voters' preferences due to the lack of data on these preferences, a correlation between fiscal policies and does not necessarily indicate causation. The endogeneity of party control leads to a challenging identification problem. Therefore, an Ordinary Least Squares Method for example does not identify the causal effect. The causal effect could be convincingly estimated when party control was to be randomized. Since it is impossible to create such an experiment, this research will use a quasi-experimental method.

To identify a possible causal effect, this research uses a regression discontinuity design (RDD). The identifying information used is vote share. Party control, the independent variable, changes discontinuously at 50% of the vote share. This threshold means that it is possible to use RDD. The basic idea of RDD is to compare units (e.g., municipalities) whose value of an underlying targeting variable (e.g., vote share) is just below and just above a fixed threshold (e.g., 50% of the votes) because they on average will have similar characteristics except for the treatment (e.g., party control). The different sides of the threshold will be the counterfactual to each other. The similarities of the counterfactuals result in an as good as randomly assigned treatment, party control.

### 4.1 Regression Discontinuity Design

To implement RDD, there needs to be a continuous variable. In this research, the left-right position of the municipality council will be this variable. The left-right position is defined by the seat allocations to both leftwing and rightwing parties as defined by the method from Otjes (2021). This leads to the following definition:

$$I_{mt} = \left( \sum_{p=1}^{p=P} Q_{pmt} \cdot S_p \right) / N_{mt} \cdot \quad (1)$$



Here,  $I_{mt}$  stands for an index which indicates the left-right position on a scale of 0 to 1 of the municipality council of a municipality  $m$  in election period  $t$ .  $Q_{pmt}$  denotes the number of seats that party  $p$  has in municipality  $m$  in election period  $t$ .  $S_p$  is 1 when a party  $p$  is right-winged and 0 when a party is left-winged (based on the previously described data section). This number of right-wing parties is then divided by the total number of seats  $N_{mt}$  in municipality  $m$  in election period  $t$ .

This research will use a sharp regression discontinuity design since there is a clear cut-off at 50% of the vote share. In a sharp design, there exists a treatment status, which is based on the discontinuous variable:

$$T_i = T(x_i) = 1[x_i \geq \bar{x}] \quad (2)$$

$T_i$  is the treatment status for unit  $i$ .  $1[x_i \geq \bar{x}]$  is an indicator function and  $x$  is a continuous variable.  $\bar{x}$  is a treatment threshold creating two mutually exclusive groups by dividing units into those receiving treatment ( $T=1$ ) and those which do not receive treatment ( $T=0$ ).

In this research, the continuous variable  $x$  is the index of left-right positioning  $I_{mt}$ . The threshold  $\bar{x}$  is 50%, which determines majorities. This leads to the following treatment.

$$T_{mt} = T(I_{mt}) = 1[I_{mt} \geq 0.50] \quad (3)$$

Here,  $T_{mt}$  is the treatment status for municipality  $m$  in election period  $t$ . It turns 1 when a municipality council is right-winged and 0 when a municipality council is left-winged.

Now that the basic definitions have been set, it is important to explain the implementation of the RDD. RDD has two commonly used ways of implementation. Firstly, there is the non-parametric use of RDD and secondly, there is the parametric use of RDD. A non-parametric approach uses a linear local estimate in a small neighborhood around the threshold. It has been used by a wide variety of (non)economic studies (Thistelwaite & Campbell, 1960; Van der Klaauw, 2002; Angrist & Lavy, 1999; Hahn, Todd, & Van der Klaauw, 2001). It creates a counterfactual by fabricating a very small bandwidth. The major disadvantage of this use of RDD is the need for a high number of units inside this small neighborhood to have a valid estimation (Hahn, Todd, & Van der Klaauw, 2001). The parametric approach uses all data available, but controls for the continuous variable and some low-order polynomials of this continuous variable, sometimes differentiating between both sides of the threshold. The control variable will capture any correlation between treatment and error term and therefore the treatment will yield an unbiased estimate of the treatment effect

(Pettersson-Lidbom, 2008). Since the parametric approach can use all data points, it is used by research that lacks an appropriate amount of data, such as is often the case with political economy (Pettersson-Lidbom, 2008; Albouy, 2009; Lee, 2008; Fiva, Folke, & Sorensen, 2018). Noting that this research has the same problem, namely a lack of data in a small neighborhood around the threshold, the parametric approach will be the starting point for this research. This dataset only has 43 municipalities within a bandwidth of two percentage points around the threshold and 167 municipalities within a bandwidth of five percentage points. However, as argued by Lee and Lemieux (2010), these implementations should not be viewed as a substitute, but rather as a complement to each other. Therefore, the starting point will be a parametric approach and the non-parametric approach will be used as a robustness check.

To estimate a possible causal effect using the parametric approach, the following regression will be used:

$$Y_{mt} = \alpha + \pi T_{mt} + \rho(I_{mt}) + \epsilon_{mt} \quad (4)$$

$Y_{mt}$  is a fiscal outcome (e.g., property tax per capita, spending per capita) in municipality  $m$  in election period  $t$ .  $\pi$  is the treatment effect,  $\rho(I_{mt})$  is the control function. The control function is a low-order polynomial of the right-wing vote share on each side of the threshold. Coefficient  $\rho$  is completely irrelevant since the control function is permitted to correlate with the error term  $\epsilon_{mt}$ . As argued by (Gelman & Imbens, 2019), high-order polynomials should not be used in this RDD, since it leads to noisy estimates, sensitivity to the degree of the polynomial and poor coverage of confidence intervals. Therefore, this research will not use polynomials higher than the third degree. Since graphical analysis is an essential part of RDD and a start to checking whether there is a difference around the threshold and understanding the method used, these are shown in figures 1 and 2 in the appendix (Lee & Lemieux, 2010).

## 4.2 Robustness Checks

An important assumption behind RDD is that treatment should be as good as randomly assigned when controlled for (Hahn, Todd, & Van der Klaauw, 2001). To check whether this assumption holds, some control variables will be added to (4) to see whether the inclusion of these covariates significantly affects the estimate of our treatment variable. This leads to the following regression:

$$Y_{mt} = \alpha + \pi T_{mt} + \rho(I_{mt}) + \sum_{b=1}^{b=B} C_{bmt} + \epsilon_{mt} \quad (5)$$

These controls will be characteristics important to the municipality, but not influenceable by the treatment, such as population, the proportion of young people (younger than 18), the proportion of old people (older than 65), and income per capita. When the adding of control variables leads to a significant change in our treatment effect, it is a sign that our treatment is not as good as randomly assigned.

Another way to check whether the treatment status is as good as randomly assigned is to regress party control on the pre-treatment variables. All estimates should not significantly differ from zero. The following regression, therefore, will be used:

$$T_{mt} = \alpha + \sum_{b=1}^{b=B} C_{bmt} + \epsilon_{mt} \quad (6)$$

As stated before, this research will also use the non-parametric approach of RDD to check for robustness. To implement this approach, the following regression will be used for bandwidth (8):

$$Y_{mt} = \alpha + \pi T_{mt} + \beta_1(I_{mt} - \bar{x}) + \beta_2 T_{mt}(I_{mt} - \bar{x}) + \epsilon_{mt} \quad (7)$$

$$\bar{x} - h \leq I_{mt} \leq \bar{x} + h \quad (8)$$

The regression will run within bandwidth  $h$ . In principle the estimation outcome should be the same for both forms of RDD, since the bandwidth in non-parametric RDD could be extended to the same level as parametric RDD (no limits), resulting in the same estimation (*Lee & Lemieux, 2010*). The problem with non-parametric RDD comes from sampling variability. Therefore, multiple bandwidths will be used. It should be stated though that it is not likely that a very narrow bandwidth will lead to significant and similar results due to the lack of observations. Therefore, the non-parametric RDD is used as a robustness check.

## 5. Results

In this section, the results of this research are presented. In subsection 5.1 the main results are presented which robustness are checked in subsection 5.2.

### 5.1 Main results

Table 5 shows the results from the regression discontinuity design resulting from the use of equation (4). This equation is used for the results in columns 1-3. Since the robustness of parametric RDD builds on the correctness of the control function, there are several specification checks included in the main results. Firstly, all polynomials used are presented in the table to test whether the estimate for having a right-wing majority is sensitive to the use of different polynomials. In columns, 4-6, equation (5) is used. This means that several pre-treatment control variables are added to the RDD. This checks whether party control is still systematically related to any variables once the main control function, the continuous variable, has been added. The adding of these pre-treatment control variables should not lead to a different estimate, it should only reduce the standard errors. The estimates shown are the spending per capita in a municipality in euros. An estimate of 20 would for example mean an increase in the spending of 20 euros per capita in a right-wing controlled municipality in comparison to a left-wing controlled municipality. The validity which can be assigned to an estimate is dependent on the level of significance. All tables in this section show the significance level at which this estimate is significant. A significance level of 1% ( $p$ -value  $< 0.01$ ), for example, means that there is a one percent chance that the variables are not related, but that the correlation is based on coincidence.

Table 6 Main Results

	(1)	(2)	(3)	(4)	(5)	(6)
Property Tax	-13.986*	-13.936**	-13.179**	-14.175*	-14.155**	-13.427**
Households	(7.601)	(6.733)	(6.059)	(7.548)	(6.699)	(6.045)
Property Tax	-138.322**	-151.624***	-171.889***	-138.456**	-151.523***	-171.605***
Companies	(66.703)	(54.348)	(49.755)	(61.591)	(54.170)	(49.596)
Governance and support	-102.414**	-128.769***	-130.024***	-103.349**	-129.484***	-130.645***
	(49.764)	(44.515)	(40.432)	(49.807)	(44.559)	(40.424)
Public order & Safety	-29.731	-25.069	-12.712	-33.196	-27.759	-14.835
	(22.663)	(17.378)	(12.099)	(24.893)	(19.347)	(13.394)

Traffic	13.654 (13.291)	0.200 (11.744)	-5.946 (10.807)	13.303 (13.255)	0.089 (11.709)	-5.851 (10.772)
Economy	7.281 (5.053)	7.469* (4.478)	8.082** (4.038)	7.255 (5.035)	7.500* (4.444)	8.160** (4.000)
Education	-49.947*** (14.276)	-50.236*** (12.563)	-47.842*** (10.800)	-50.967*** (14.001)	-50.944*** (12.447)	-48.345*** (10.794)
Sports & Culture	-29.393*** (10.784)	-36.395*** (9.732)	-39.775*** (8.715)	-29.430*** (10.729)	-36.972*** (9.619)	-40.021*** (8.582)
Housing & Environmental Management	-33.262 (38.066)	-49.805 (33.018)	-55.211* (30.354)	-32.165 (37.961)	-48.268 (33.004)	-53.290* (30.172)
Polynomial	First	Second	Third	First	Second	Third
Controls	No	No	No	Yes	Yes	Yes

\*\*\* p-value < 0.01, \*\* p-value < 0.05, \* p-value < 0.10

The table shows interesting results for the taxation policy. Firstly, it is very likely that property tax for households is lower under right-wing governments in comparison to left-wing governments. The estimate following a linear regression is significant at a 10%-significance level. Households pay around fourteen euros less under right-wing governments. The estimates following quadratic and cubic regressions are even more significant at a 5%-significance level and are respectively fourteen and thirteen euros less. When adding the control variables, the estimates hardly differ which means that it is very likely that party control is as good as randomly assigned when controlled for the continuous variable. This is true for all other significant estimates. The only notable change adding control variables causes is that the estimates will always be higher for positive estimates and lower for negative estimates. However, this change is minimal, so the results seem to be robust for adding controls. The revenues from the property tax for companies are also lower under right-wing governments. The estimate from linear regression is significant at 5 percent and from both quadratic and cubic at 1 percent. The estimates range from 138 to 171 euros less tax revenue with right-wing party control.

The table also shows several interesting results for the spending policies of municipalities. At a significance level of 10 percent following a linear regression, municipalities with right-wing party control spend less on governance and support costs than with left-wing party control. According

to the quadratic and cubic regressions, this is significant at the 5 percent significance level. The estimates range from 102 to 130 euros less spending on governance and support costs per capita. The results are not significant for public order & safety and traffic expenditures per capita. The spendings per capita on the economy differ depending on the polynomial used. The estimate is not significant when executing a linear regression, is significant at the 10%-significance level when executing a quadratic regression, and significant at the 5%- significance level when executing a cubic regression. This points to the idea that municipalities with right-wing party control spend more per capita on the local economy than with left-wing party control. However, this cannot be seen as concluding evidence. Spendings per capita on education and sports & culture are significant for all regressions at a significance level of 1 percent. There is a reduction in spending per capita on education ranging from 48 to 50 euros under right-wing party control. There is also a reduction in spending per capita on sports & culture ranging from 29 to 39 euros under right-wing party control. The spending per capita on nature & environmental management is not significant, except for a cubic regression where it is significant at a 10% significance level. This, however, can only be seen as very weak evidence.

These results implicate that there is a difference in tax policy between right and-left wing majorities, meaning that parties do have power since voters' preferences, seen and unseen, are controlled for. Left-wing governments are very likely to tax more property tax on both households and companies, while also spending more money on governance and support costs, education, and sports & culture. There is some reason to believe that right-wing governments spend more on the economy, but this is not conclusive. However, since left-wing majorities are very likely to tax more and therefore have more budget to spend, it is valuable to look at the budgetary allocation to see whether priorities are different.

Table 6 shows the results for the budgetary allocations. As with table 5, all used polynomials and the addition of control variables are also shown. The estimates in table 6, however, show the change in budgetary allocation. An estimate of 0.05 for example would mean that right-wing controlled municipalities allocate five percentage points more from their total budget to a given area. The budget does not cover all costs municipalities make, since as stated in the data sections health and social insurance costs are excluded.

Table 7 Main results budgetary allocation

	(1)	(2)	(3)	(4)	(5)	(6)
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Governance and support	0.016 (0.014)	0.012 (0.012)	0.011 (0.011)	0.013 (0.013)	0.010 (0.011)	0.010 (0.010)
Public Order and Safety	0.009** (0.005)	0.011*** (0.004)	0.012*** (0.004)	0.010** (0.004)	0.012*** (0.004)	0.013*** (0.004)
Traffic	0.030*** (0.005)	0.027*** (0.004)	0.025*** (0.004)	0.032*** (0.004)	0.030*** (0.004)	0.027*** (0.004)
Economy	0.009*** (0.003)	0.010*** (0.002)	0.010*** (0.002)	0.009*** (0.003)	0.011*** (0.002)	0.012*** (0.002)
Education	-0.008* (0.004)	-0.006* (0.004)	-0.006* (0.003)	-0.007* (0.004)	-0.006* (0.004)	-0.006* (0.003)
Sports & Culture	-0.023*** (0.005)	-0.021** *(0.004)	-0.021*** (0.004)	-0.021*** (0.005)	-0.020*** (0.004)	-0.020*** (0.004)
Housing and Environmental Management	0.007 (0.012)	0.007 (0.010)	0.006 (0.009)	0.007 (0.012)	-0.007 (0.010)	0.007 (0.009)
Polynomial	First	Second	Third	First	Second	Third
Controls	No	No	No	Yes	Yes	Yes

\*\*\* p-value < 0.01 \*\* p-value < 0.05 \* p-value < 0.10

The table shows interesting results once again. Except for the allocation to governance and support costs and housing & environmental management, all estimates are significant for a certain level. The estimates for budgetary allocations to traffic, economy, and sports & culture are all significant at a significance level of 1 percent for the linear, quadratic, and cubic regressions. Safety is also significant at the 1 percent level for quadratic and cubic regressions. In a linear design, the estimate is significant at the 5 percent level. For all these estimates, there is strong evidence that there is a difference in budget allocation between right- and left-winged controlled municipalities. Right-wing controlled municipalities allocate more budget allocations to public order and safety, ranging from 0.9 to 1.2 percentage points. Right-wing-controlled municipalities also allocate more to traffic (ranging from 2.5 to 3 percentage points) and economy (ranging from 0.9 to 1 percentage points). On the contrary, left-wing-controlled municipalities allocate more to sports and culture (ranging from 2.1 to 2.3 percentage points). Finally, allocation to education shows estimates which are significant at the 10% significance level for all regressions. This is, of course, weaker evidence.

Nevertheless, left-wing controlled municipalities allocate 0.6 to 0.8 percentage points more to education spending than right-wing controlled municipalities.

These results are also robust to the addition of the control variables. The estimations hardly change. It is only the standard errors that are lower. This means that party control is likely to be as good as randomly assigned when controlled for right-wing seat share.

The combined result of both the actual spending per capita and the budget allocation also makes sense. When it is true that left-wing controlled municipalities raise more tax revenue, they could spend more on certain areas, such as governance and support costs. They, however, do not allocate relatively more budget to this area. Although they have a higher total budget and spend more on a certain area, they do not prioritize these areas more by allocating more budget. On the contrary, right-wing-controlled municipalities do not spend more on safety and traffic but do allocate more from their budget to these areas.

## 5.2 Robustness check

Apart from adding pre-treatment control variables as in (5), there is another robustness check this research implemented. As described in the methodology, it is also useful to check what a regression of a nonparametric form of RDD will do. Following (7) and (8), a nonparametric RDD compares values on both sides of the threshold and gives a linear local estimate. Table 7 shows the results of these regressions for different bandwidths (2, 5, and 10 percentage points). As can be seen in table 7, the number of observations is way lower than in the original regression. The estimates differ greatly from each other. This is due to variability bias and a great way of showing why the parametric RDD is preferred. Due to the bias, it is very hard to determine the exact bandwidth, thus preferring a more standardized design. This robustness check should therefore be seen as a way of giving means to either doubt or confirm the main results.

Table 8 Results on spending from non-parametric RDD

	(1)	(2)	(3)
Property Tax Households	-26.401 (20.382)	-22.385** (10.062)	-14.059** (6.899)
Property Tax Companies	-205.733 (184.931)	-104.004 (84.6371)	-252.25*** (58.621)
Governance and support	-92.830 (84.519)	-22.043 (66.267)	-68.859 (49.067)



Safety	-17.785 (16.443)	-18.533 (24.385)	5.151 (6.142)
Traffic	6.298 (21.943)	38.866 (12.081)	5.768 (11.0237)
Economy	-25.547 (60.736)	17.243 (16.643)	5.222 (10.112)
Education	-64.602** (23.958)	-27.640* (16.388)	-47.600*** (11.504)
Culture	-57.358** (21.364)	-59.013*** (13.260)	-75.847*** (9.354)
Housing and Environmental Management	-172.072* (90.360)	-86.183 (61.426)	-64.783* (34.894)
Bandwidth	$\pm 2$ percentage points	$\pm 5$ percentage points	$\pm 10$ percentage points
Observations	43	176	336

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\*\*\* p-value < 0.01 \*\* p-value < 0.05 \* p-value < 0.10

The results of table 8 are interesting. Starting at tax revenues, property tax for households' estimates are significant at a 5%-significance for both a bandwidth of  $\pm 5$  and  $\pm 10$  (percentage points). They are, however, not significant at the  $\pm 2$  bandwidth. This is support for the main results. Property tax for companies is only significant at the 1%-significance level at the  $\pm 10$  bandwidth. This gives some reason to doubt the main results. However, it does not reject the main result, especially since the  $\pm 10$  bandwidth is highly significant. On the contrary, there are no significant results for governance and support spending. This means that the results do not give full evidence that governance and support costs are different under right-wing controlled municipalities in comparison to left-wing controlled municipalities. For safety and traffic expenses there are no different results. The results for economy give us reason to further doubt a causal effect of party control on economy spending per capita. The results for education and sports & culture are significant for all bandwidths and thus give support to the main results. Housing & environmental management are significant at the 10%- significance level for the  $\pm 2$  and  $\pm 10$  bandwidths. This result differs from the main results which were not significant at all. This gives reason to suspect that there is a difference in housing & environmental management spending between right-wing and left-wing controlled municipalities.

The same robustness check has been done for the main results of the budgetary allocation, which can be seen in table 8.

Table 9 Results on budgetary allocation of non-parametric RDD

	(1)	(2)	(3)
Governance and support	0.012 (0.036)	0.008 (0.018)	0.012 (0.014)
Safety	0.017 (0.008)	0.010** (0.005)	0.008* (0.004)
Traffic	0.023** (0.009)	0.028*** (0.006)	0.017*** (0.005)
Economy	0.08 (0.006)	0.002 (0.002)	0.003 (0.003)
Education	-0.016* (0.009)	-0.016*** (0.005)	-0.018*** (0.004)
Culture	-0.008 (0.012)	-0.029*** (0.006)	-0.028*** (0.005)
Housing and Environmental Management	-0.021 (0.034)	-0.004 (0.016)	0.006 (0.011)
Bandwidth	$\pm 2$ percentage points	$\pm 5$ percentage points	$\pm 10$ percentage points
Observations	43	176	336

\*\*\* p-value < 0.01 \*\* p-value < 0.05 \* p-value < 0.10

Table 9 shows similar results as the main results. The estimates for the allocation to governance and support costs are not significant as the main results. Allocation to safety estimates is significant at the 5%-significance level at the  $\pm 5$  bandwidth and significant at the 10%-significance level at the  $\pm 10$  bandwidth. This gives evidence to believe that the main results hold. The same is true for the allocation to traffic expenses. The estimates are significant for all bandwidths. A bandwidth of  $\pm 2$  is significant at a 10%-significance level, while the other bandwidths are significant at 1%. This supports the main results. The results for allocation to economy are not significant. This gives reason to doubt the main results. However, the allocation to economy is around 3 times lower than for example safety allocation. Due to the lack of observations, significance is harder to achieve. The estimates of education spending are all significant. A bandwidth of  $\pm 2$  is significant at a 10%-significance level, while the other bandwidths are significant at 1%. This supports the main results. Allocation to culture spending is significant at the 1%-significance level at bandwidths of  $\pm 5$  and  $\pm 10$ . This supports the main results. Finally, housing & environmental management allocation are not significant. This is in line with the main results.

Overall, these robustness checks seem to support the main results.

As a final test to check whether the variable for party control is as good as randomly assigned, a regression of party control on the pre-treatment control variables is run as described in equation 6. As seen in table 9, none of the control variables have a significant effect on party control. Moreover, the F-test is 1.39 with a p-value of 0.236, which means that the coefficients are not jointly significant. This supports the assumption that party control is as good as randomly assigned.

Table 10 Regression of party control on pre-treatment control variables

	(1)
Population size	-3.61e-07 (2.55e-07)
Proportion of young people (18-)	0.345 (0.394)
Proportion of old people (65+)	0.522 (0.379)
Income	-5.46e-07 (1.24e-06)

\*\*\* p-value < 0.01 \*\* p-value < 0.05 \* p-value < 0.10

## 6. Conclusion and discussion

This research examined the effect of party control on several fiscal policies by implementing a Regression Discontinuity Design. To investigate and judge this effect, the following three hypotheses were addressed:

**H1:** The estimated effect of Party Control on Divergence of Tax Revenues is not significantly divergent from zero.

**H2:** The estimated effects of Party Control on the Divergence of Actual Spendings on policy areas are significantly divergent from zero.

**H3:** The estimated effects of Party Control on Divergence of Budget Allocation on policy areas are significantly divergent from zero.

Starting at **H1**, this research found a significant effect of party control on both the amount of property tax of households and the amount of property tax on companies. Under a right-wing government, households pay an expected 13 to 14 euros less property tax. Companies pay an expected 140 to 170 euros less under the same party's control. This leads to a rejection of **H1** since the research finds a significant divergence from zero.

Judging **H2**, this research found significant effects of party control on spending in several policy areas. Municipalities under right-wing party control spend significantly less on governance and support costs, education, and sports & culture, while there is a bit of evidence saying that they spend more on economy. Right-wing controlled municipalities are expected to spend 100 to 130 euros per capita less on governance and support costs than left-wing controlled municipalities. They are also expected to spend around 50 euros per capita less on education and 30 to 40 euros per capita less on sports & culture. There is no significant difference in spending on public order & safety, traffic, and housing & environmental management. On the other hand, they are slightly expected to spend around 8 euros per capita on economy. Due to the multiple significant divergences, **H2** cannot be rejected.

Finally, for **H3**, this research found significant effects of party control on the budget allocation to several policy areas. Right-wing controlled municipalities allocate significantly more of their budget to public order & safety, traffic, and economy. Left-wing controlled municipalities allocate significantly more of their budget to education and sports & culture. Municipalities under right-wing control are expected to allocate 0.9 to 1.2 percentage points more on public order and safety, 2.5 to 3 percentage points on traffic, and around 1 percentage point to economy. Municipalities under left-wing control are expected to allocate 0.6 to 0.8 percentage points more to education.<sup>1</sup>

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<sup>1</sup> Significance is lower than the other results (10%-significance level).

They are also expected to allocate 2.1 to 2.3 percentage points more to sports & culture. There is no difference in allocation to governance and support costs and housing & environmental management. Due to the multiple significant divergences, **H3** cannot be rejected.

All results were tested by several robustness checks which did not have major consequences on the results. Combining the judgments of the hypotheses, it can be concluded that different party control leads to different fiscal policies and that political parties, therefore, do diverge.

These findings have several implications. Firstly, it is very interesting for the policymakers of municipalities in the Netherlands. This research finds that it does matter what party is in control of the creation of several fiscal policies. This contradicts the latest research on the height of local taxes which states that different control does not lead to different policies (Allers & Rienks, 2021). There are several reasons possible why this research has different results than the previous studies. It is possible that the difference comes from the different time period which was used. Allers & Rienks studied data from 1998 till 2021 while this research studied data from 2010 till 2022. It is, however, more likely that the difference stems from the use of another methodology. Allers & Rienks employ a linear regression design, which causes a risk of creating omitted variable bias (see Methodology). The Regression Discontinuity Design analyses the observations close to the threshold. This method shows what a slight majority does. This might mean that municipalities will choose a different policy especially when they have a small majority, since they have an incentive to show the voters that they diverge from their competition, while they do not have this incentive when they have a big majority. Secondly, the findings have implications for the understanding of electoral competition. These results reject the median voter theorem. All findings point to divergence instead of convergence. It is, therefore, not true that the supply side of the policy equilibrium, political parties, is completely elastic. However, these results do not necessarily state that the supply side, therefore, is completely inelastic. It cannot be tested whether there is complete divergence or partial divergence. This is especially hard, because of the complexity of political systems and electoral outcomes. It might be expected that close-call elections, which were the identifying source for this research design, will lead to more convergence than landslide victories.

Of course, this research also must deal with its limitations. First, there exist several assumptions underlying the research. It is assumed that local divisions of national parties have the same ideological stance as the national party. It is also very likely that some local parties were wrongly classified as either left-or rightwing. To solve this issue, future research could classify parties into their stance on different policies instead of just the classification into right-or leftwing in general. Another limitation is the exclusion of some data. Since a lot of municipalities were rearranged,

several municipalities were missing. This is, however, an integral part of political economy research and hard to deal with. It would, however, be interesting to do the same research on the missing fiscal policies social insurance, and health, since these are important to distinctive groups, namely poor and older people. Another limitation has got to do with the institutional setting itself. This research chose the party control of the municipality council as the main independent variable. For the Netherlands, it is, however, not the municipality council that makes the first draft of fiscal policies, but the alderman and the mayor (the cabinet). Coalition building is an important part of Dutch local government. The choice made is, however, still valid since the council does have the final say and the amendment right. There is a way to solve this issue that went beyond the scope of this paper. Instead of running a sharp regression discontinuity design, it would be a great idea for future research to run a fuzzy regression discontinuity design where the party control in the municipality council would be the predictor for the cabinet and that cabinet ideology would be the predictor for fiscal policy. This takes the actual coalition into account. Another design that is likely to capture the effect of a difference in party control even more closely is the comparison of municipalities with themselves when they had a turnover in party control. This was not possible for this research, because there was a lack of data in the Netherlands. It would have to extend a greater amount of election periods.

Concluding, this research finds very strong evidence that party control affects fiscal policies. Right-wing controlled municipalities tax less property tax, spend less on governance and support costs, education, sports & culture, and more on economy. They allocate more money from their budget to safety & public order, traffic, and economy, while less to education and sports & culture. Parties, therefore, do have power.

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## Appendix

Table 11 Left-Right distinction of national and local parties

Left-wing	Right-wing
<i>National Parties</i>	<i>National Parties</i>
D66	VVD
GroenLinks	CDA
Socialistische Partij	PVV
Partij van de Arbeid	Forum voor Democratie
ChristenUnie	50PLUS
Denk	SGP
BIJ1	
<i>Lokale partijen</i>	<i>Lokale partijen</i>
FNP	Gemeentebelangen
Progressief	Absoluut
Senioren	Liberaal
Studenten	Leefbaar
Solidair	Christelijk
3D-partij	Hart voor
Natuurlijk	Zelfstandig
	Ondernemend
	Staatkundig

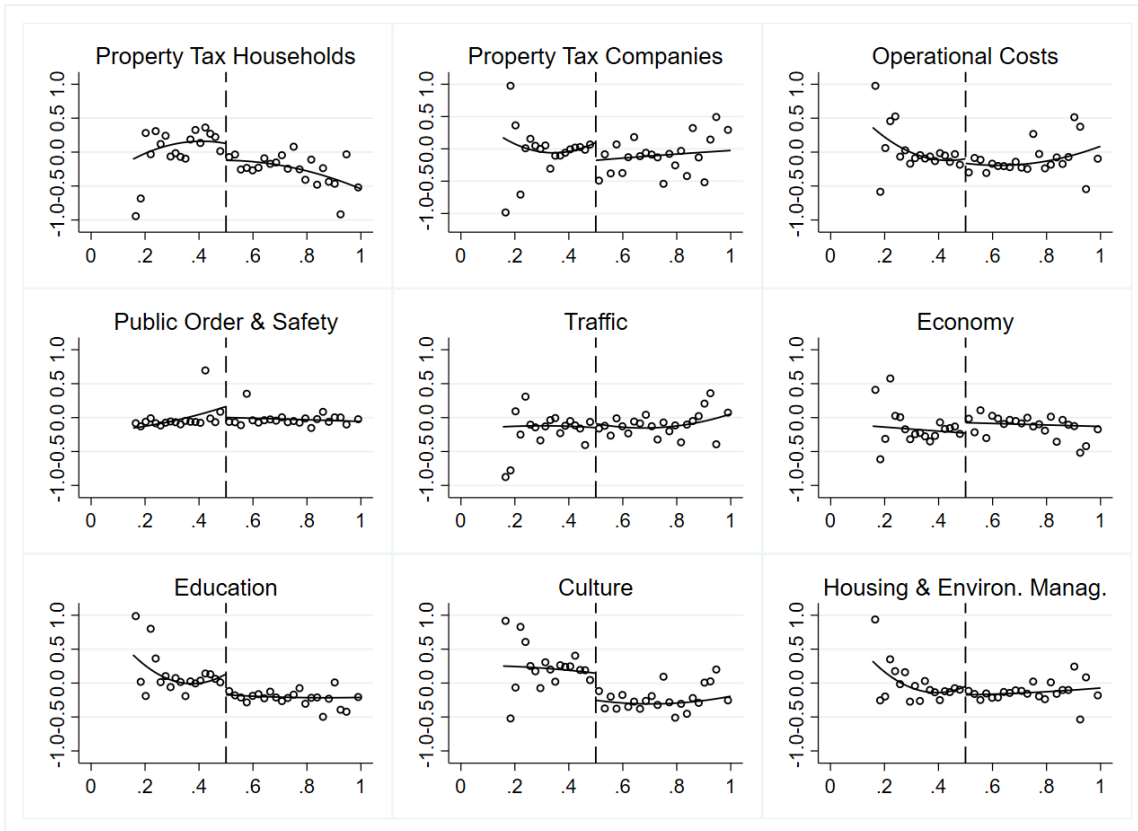


Figure 1 Graphical Analysis of revenues and spending per capita

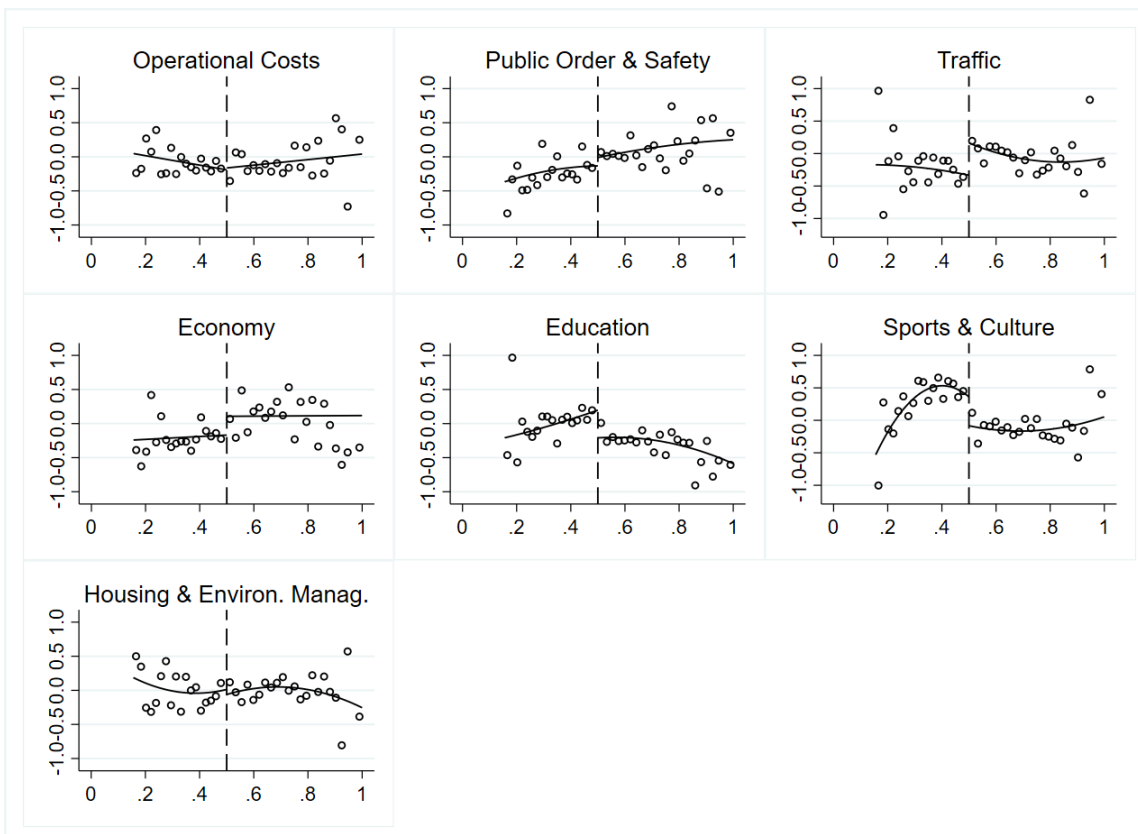


Figure 2 Graphical Analysis of Budget Allocation