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Briefings

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The allocation of grants to Brussels municipalities:

the effect of partisan alignment

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Het Vlaams Instituut voor Economie en Samenleving, VIVES, is een economisch onderzoekscentrum dat via fundamenteel en toegepast onderzoek wil bijdragen tot het maatschappelijk debat inzake de economische en maatschappelijke ontwikkeling van regio's, in het bijzonder van Vlaanderen. VIVES is als onderzoekscentrum wetenschappelijk en juridisch geïntegreerd binnen de KU Leuven. VIVES werkt ook samen met research fellows uit andere universiteiten.

The allocation of grants to Brussels municipalities: the effect of partisan alignment¹

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Abstract

This paper is one of the first to our knowledge to investigate the politicisation of intergovernmental grants *per individual party* in a coalition. Rather surprisingly it finds that municipalities of the Brussels Region that are party-politically aligned with one of the *smaller* parties in power at one or more of the Brussels municipalities' subsidising levels –i.e. with Ecolo- receive *more* discretionary grants than municipalities that are aligned with *larger* parties.

We also find that municipalities in which that same smaller party –Ecolo- is in power receive significantly *less* grants when Ecolo does *not* participate in coalitions at one of the subsidising levels. We could consider this latter effect a kind of "reverse" alignment effect, or "punishment of Ecolo municipalities" effect. Moreover we find that the aligned allocation of grants in favour of municipalities in which Ecolo is in power does *not* suffice to compensate for the "punishment" of Ecolo municipalities by subsidising governments in which Ecolo is not in power. Hence, we find that, as a whole, municipalities governed by Ecolo receive not more but *less* grants.

Methodologically speaking, the paper attempts to find a way around the problem of endogeneity of being in power. However the Regression Discontinuity Design that is often used to solve the endogeneity issue in the current "2nd generation" literature on politicisation of grants seems ill-suited to the context of the Brussels municipalities. The paper's strategy is therefore to instrument being in power at the municipal level with cases of being in power after the formation of an anti-coalition, i.e. a coalition from which a dominant party in a municipality has been excluded, and with cases of 1st ever municipal coalition participation of a political party, both deemed exogenous to grants received and to time-variant unobservables that are also correlated with grants.

¹ This paper is a substantially reworked version of an earlier version written in Dutch (October 2011). Major changes are the increased sample size, the operationalisation of politicisation of intergovernmental grants as *party-politically aligned* allocation of grants between government levels, and an empirical strategy dealing with possible endogeneity of our independent variable of interest, i.e. partisan alignment.

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1. Introduction

Belgium is a federal country with 3 important layers of government, the Federal government, the Regional and Community governments, and the Municipal governments². Moreover the Belgian system of fiscal federalism is heavily grants-based, when compared internationally. (see e.g. Jennes 2014)

Grants financing of lower level governments has advantages over its alternative, i.e. tax autonomy for the governments receiving the grants. The most important ones seem that grants from government to government avoid the negative tax externalities that tax autonomy may generate, and that they enable the same level of public goods provision in all jurisdictions. However, intergovernmental grants also have major drawbacks, such as the flypaper effect (i.e. their tendency to increase public spending), the soft budget effect (i.e. their tendency to increase government debts), and politicisation. The recent literature –see e.g. Bordignon e.a. (2013) for Italy and Brollo e.a. (2013) for Brazil- has added 2 more disadvantages of intergovernmental grants compared to tax autonomy, i.e. an increase in corruption and a decrease in the quality of politicians –i.e. in their professional other than political skills.

This paper is the first one to our knowledge to investigate the politicisation of intergovernmental grants in Belgium. So far evidence was only anecdotal (for the Brussels municipality level see e.g. Le Vif/L'Express 2011). The paper's attempt is to be part of the second generation papers in fiscal federalism investigating politicisation of grants, i.e. to find a way around the problem of endogeneity of being in power. Grants may not so much be determined by politics, rather it may be that grants determine political outcomes. Alternatively, grants may be determined by unobserved factors also determining political outcomes. Our strategy will be to instrument being in power³ in a municipality –deemed potentially endogenous- with cases of being in power after the formation of an anticoalition and with cases of 1st ever being in power of a particular political party in a particular municipality. The latter 2 kinds of power participation are deemed exogenous to grants (as well as exogenous to other determinants of grants), i.a. because the formation of an anti-coalition seems to be motivated by other concerns than previous grants received, and as we argue that 1st ever municipal coalition participation of a particular party –i.e. Ecolo- cannot be caused by grants obtained during previous municipal coalition participation.

We will operationalise politicisation as partisan –i.e. party-political- alignment. We will try to answer the question if municipalities that are party-politically aligned with the subsidising government level(s) receive more grants. The "partisan alignment hypothesis" differs from –and is more sophisticated than- the so called "standard partisan hypothesis". (see Migueis 2013 p. 2) The latter

² The Belgian Regions and Communities are the equivalent of the "states" in other federal countries. The 3 Belgian Regions (Flanders, Wallonia and Brussels) have geographical borders and are mainly in charge of infrastructure, economic policy, and local government. The 2 major Belgian Communities do not have clear borders as both the Flemish and the French Community are active within the –officially bilingual- Brussels Region. The Flemish and the French Communities are mainly in charge of education and care for the young and the elderly, resp. benefiting the Dutch-speaking and the French-speaking Belgians. The 3rd Belgian Community is the German speaking Community, but it only accounts for 0.7% of Belgian population.

³ By "being in power" we mean either being the largest party in power or being a junior partner within the governing coalition.

assumes that parties do not per se favour aligned lower governments with intergovernmental grants but that they simply favour lower governments levels where they obtain a lot of votes, whether those lower governments are aligned or not. The standard partisan hypothesis –at least with respect to *intergovernmental* grants⁴- may rather be simplistic and naïve as trying to favour voters directly by means of intergovernmental grants may be inefficient for any given political party in power at the subsidising level if one or more *other* parties are in power within some of the lower level governments. We distinguish 4 reasons for the relative inefficiency of trying to favour sympathetic *voters*, or otherwise stated: for the relative efficiency of trying to favour aligned lower level *governments* in view of a subsidising government's re-election:

- 1) The party in power at the lower level *instead of* the party in power at the higher level could *claim the credit* towards the favoured voters for the public goods provided thanks to the extra grants that are allocated⁵. The party in power at the higher level however would rather like to see "its" local politicians claim the credit for the extra grants. This is because the former expects that the latter's obtaining extra grants would *signal* high ability to voters, and hence increase the probability of the latter's re-election, which in turn would reflect favourably on the party as a whole, including at the subsidising level. (Bracco e.a. 2012 p. 5)
- 2) If unaligned, party in power at the grants-receiving level could even try to deviate the benefits of the extra grants to its *own* voters.
- 3) Brollo and Nannicini (2012) and Migueis (2013 p.2) put forward an explanation completely different from credit claiming in favour of partisan allocation: extra grants would not be meant to enhance credit claiming towards *voters* in view of the next elections at the subsidising level, but rather to increase the gratitude of *local politicians* towards their party. Hence the extra grants could help to *to ensure that local politicians will mobilise more voters* to support the party at the next elections *at the subsidising level*. Larcinese e.a. (2006 p. 453) give the example of US state governors who are aligned with the party of the President, and their presumed ability to "deliver" the vote of their state in presidential elections⁶.
- 4) In line with Migueis' reasoning, Baskaran and Hessami (2014 p. 7) hypothesise that the strength of a party at the lower government level would be one of the determinants of the strength of that party at the higher government level(s) for still another reason: the more lower level governments are aligned, the easier a party in power at the subsidising levels

⁴ In contrast, there exists a lot of evidence that higher level governments favour lower level government levels where the higher level government obtains a lot of votes with extra *non-intergovernmental* grants. Examples are the studies by Knight (2005, 2008) and Albouy (2011), who find that Committee membership resp. majority status in US Congress determine which districts and states receive more discretionary grants.

⁵ This is because, as Bracco e.a. (2012 p. 5) point out, an essential feature of *intergovernmental* grants is that they prevent the local voters to distinguish between the resp. lower level government's and higher level government's contributions to public good provision. Using the wording of Arulampalam e.a. (2009 p. 104): the grants receiving government *stands "between"* the grants providing government and the voters at that grants receiving government level. Or using the wording of Dasgupta e.a. (2004): when the electoral returns from spending are shared between state and central government, then transferring funds to a government of the opponent party generates a "leakage" effect whereby the central government loses part of the electoral benefit from spending.

⁶ However, Erikson e.a. (2014) find that a presidential candidate's vote share is **reduced** by 3 to 4 percentage points in states with a governor from the same party. They suggest as an explanation that voters may wish to **balance** their state government with the federal government. Their finding is similar to the one by Schelker (2011).

may be able **to implement its policies at the lower level(s)**. The less resistance to its policies a party governing at the higher level may experience, the more successful that party may be at the next elections at the subsidising level. Indeed, there is empirical evidence that lower level governments benefit electorally **themselves** from being aligned. Curto-Grau e.a. (2012) find that aligned municipal incumbents in Spain gain 10% more votes in municipal elections, which may be thanks to the fact that aligned municipalities receive more grants. Bracco e.a. (2014) find that aligned municipal incumbents in Italy have a 20 to 35% higher chance to get re-elected. Migueis (2013 p. 23) finds that

The traditional partisan alignment hypothesis –motivated above- implicitly assumes that the subsidising levels rather than the subsidy receiving levels are the "acting" levels within "the game of aligned allocation of grants". However, of course the *subsidy receiving levels themselves*, rather than the subsidising governments could be the major player within the aligned allocation of grants, as they could be particularly able/motivated to lobby a subsidising government for extra grants in case they are aligned with this government. This is a possibility that seems to have been neglected in papers related to ours (Bracco e.a. (2012), Brollo and Nannicini (2012), and Curto-Grau e.a. (2012)). An exception is Migueis (2013 p. 20), who hypothesises that the fact that the partisan alignment effect on grants to Portuguese municipalities he finds is entirely attributable to PSD (and not to PS) could be due to the larger power of PSD *local* politicians over PSD leadership compared to PS. Another exception is Sørensen (2003), who explains empirically part of the disparities in grants allocated to municipalities by the Norwegian central government with lobbying by municipal council members⁷.

In a multi-level government setting such as Belgium's, the partisan alignment question seems particularly interesting as Belgian municipalities are not only subsidised by the Regional government and the Community government whose jurisdiction they belong to, but also by the Federal government. Hence, Belgian municipalities can be fully non-aligned, partially aligned or fully aligned, depending on their alignment with none, one, two or three of the subsidising levels.

This paper focuses on the intergovernmental grants to the 19 municipalities of the Brussels Capital Region only. With 1,119,088 inhabitants in 2011, the Brussels Region is the smallest of the 3 Regions of Belgium. We motivate our focus as follows⁸:

1) As illustrated by table 1 for the year 2009, the Brussels Region appears to be a Belgian Region in which municipalities receive a large amount of special purpose grants from higher-level governments as a share of total grants to municipalities. Most of these special purpose grants are discretionary, i.e. distributed not according to a pre-agreed formula voted into a law. Its high share of special purpose grants implies that the Brussels Region scores rather low compared to other Belgian Regions as for the share of –rather formula-based- general purpose grants –i.e. mainly grants out of the Municipality Fund- in the total budget⁹. One – but probably not the major- reason for this high share of discretionary grants is that over our

⁷ Also see Khemani (2007 p. 707-708) for a discussion of Indian states lobbying the central government.

⁸ Apart from these reasons, we see no reasons not to extend our research to the Flemish and the Walloon Region in the future.

⁹ The rather low share of **total** grants in the **total budget** of Brussels municipalities is mainly to be explained by the high revenues out of municipal real estate taxes in the Brussels Region. The latter explain the high share of tax revenues in the total budget of the average Brussels municipality.

sample period the Federal government has increasingly allocated discretionary grants to Brussels municipalities which are not (or only to a lesser extent) allocated to municipalities of the other 2 Regions of Belgium (see below).

Table 1: Importance of formula-based and discretionary grants within municipal budgets,compared between Belgian Regions (2009)

| | Total grants (% of budget) | Formula-based grants (% of total) | Discretionary grants (% of total) |
|-----------------|----------------------------|-----------------------------------|-----------------------------------|
| Flemish Region | 36 | 72 | 28 |
| Walloon Region | 41 | 59 | 41 |
| Brussels Region | 35 | 57 | 43 |

Source: Belfius (2010)

- 2) The Brussels Region as a whole (i.e. municipalities + the Brussels Regional Government taken together) is the best funded region of Belgium on a per capita basis (grants + own tax revenues taken together). (see Algoed 2009) Moreover it receives substantial extra grants from the Federal government following the fiscal federalism reform that was voted in 2013, amounting to an extra 461 million real euros in 2013 terms per year. As a consequence of this reform, the extent to which the Brussels Region is grants-funded has increased considerably.
- 3) Cattoir e.a. (2009 p. 32) criticise discretionary grants to Brussels municipalities for the reason that in Brussels a relatively large number of municipal politicians are simultaneously a member of the Brussels Region's parliament and/or government. This is also due to the combination of Brussels' small size –consisting of 19 municipalities only- and it being a full-fledged Region of Belgium. The Brussels Regional has competencies and institutions very similar to the 2 larger Regions of Belgium (Flanders and Wallonia). Politicians combining local and Region-wide offices may increase their influence over the allocation of discretionary grants to their municipality. Some observers describe the level of the Brussels Region as a mere level for "dispensing cash" to the Brussels municipalities.
- 4) The Brussels Region is a political battleground, i.e. for the 4 major political parties of the Brussels Region –MR, PS, CDH and Ecolo- several Brussels municipalities are "swing" municipalities. In several municipalities, being in power, once gained, is often expected to be at risk during the next municipal election, as has been illustrated by newspaper articles over our sample period (1995-2011) (see e.g. Le Vif/L'Express 2006b), and as is shown by table 2 below. In particular the 2 smaller parties, CDH and Ecolo, have witnessed changes in being in power in on average about half of the 19 municipalities during each of the 2 municipal elections included in our sample period. Municipalities of the Brussels Region have traditionally been dominated politically by MR. MR is the alliance that existed from 1992 until 2011 between the 2 Francophone Belgian parties PRL and FDF, including at the municipal level (though the name MR only dates from 2002)¹⁰. Within the Brussels Region,

¹⁰ Moreover the 2 parties ran on 1 single list from the 1999 Federal, Regional and Community elections onwards, and –with some exceptions- from the 2006 municipal elections onwards. Where PRL and FDF ran on separate lists in the 1994, the 2000, and even the 2006 municipal elections, this was not necessarily to be

MR has over the last 20 years steadily lost electoral ground to PS, both in municipal and in Brussels Regional elections. Both within the Brussels Region and in Francophone Belgium as a whole¹¹, PS and MR are the 2 largest parties¹². Moreover, Brussels is the Region of Belgium where Ecolo, the Belgian Francophone Green party and one of the largest Green parties of Europe over our sample period, is the strongest. Finally, CDH, which was until 2002 known as PSC¹³, and which is the Francophone Belgian party that has been most often in power at the various subsidising levels during Belgian history, has had to defend its –rather limited-power base within Brussels municipalities over our sample period. In spite of the steady decline of the income per capita position of the Brussels Region compared to the 2 other regions of Belgium over our sample period¹⁴, parties covet being in power in the capital region of Belgium, as this brings extra visibility at the Federal level.

Table 2: Number of municipalities (out of a total of 19) in which being in power changed after the 2000 and the 2006 municipal elections, per individual party (4 major Brussels parties only)

| | MR | PS | CDH | Ecolo | Total |
|------|----|----|-----|-------|-------|
| 2000 | 6 | 6 | 11 | 9 | 32 |
| 2006 | 8 | 6 | 6 | 11 | 31 |

Sources: CRISP (2001 and 2007).

interpreted as if the alliance did not function, as in several occasions running on 2 separate lists had to serve a tactical purpose. In most occasions over our sample period where both PRL and FDF had obtained seats, PRL and FDF were either both part of a municipal government or were both in opposition. However, in particular during the first years of our sample period there were a number of exceptions to this rule.

The exceptions at the municipal level were Etterbeek, Oudergem, Schaarbeek, Sint-Joost-ten-Node, and Sint-Pieters-Woluwe (5 municipalities) after the 1994 elections, Sint-Agatha-Berchem and Sint-Joost-ten-Node (2 municipalities) after the 2000 elections, and Jette and Oudergem (2 municipalities) after the 2006 elections. For the sake of simplicity, we therefore assume that MR was only party of the coalition in those of the abovementioned Brussels municipal legislatures in which the part of the alliance that was part of the coalition had obtained a higher vote share than the part of the alliance that was not part of the coalition. Either assuming that MR was part of the coalition in all of the abovementioned municipal legislatures or in none of them hardly changes the below regression results.

The exception at the subsidising levels is the 1989-1995 Brussels Regional government, of which FDF was part, while PRL was in opposition. Because PRL is the more important part of the MR alliance at the subsidising levels, we assume that MR was not part of the Brussels Regional government until and including 1995. Also earlier in Belgian political history, PRL and FDF had formed alliances.

¹¹ Though the Brussels Region is administratively bilingual, for the sake of simplicity we mean by Francophone Belgium the Walloon and the Brussels Region combined. This is because. e.g. in the 2006 municipal elections Flemish parties campaigning on a separate list obtained no more than 10% of the total vote (CRISP 2007 p. 20).

¹² Political parties in Belgium are split along linguistic and therefore largely along geographic lines. No single party in Belgium wins seats both in the Dutch-speaking Flemish Region and in Francophone Belgium. Exceptions are the few seats Flemish parties have (until 2010) won in the Brussels Region and the few seats Francophone parties have (until 2010) won in Halle-Vilvoorde. Halle-Vilvoorde is the Flemish part of the Federal electoral district Brussel-Halle-Vilvoorde. Brussel-Halle-Vilvoorde is the only Federal electoral district that has ever straddled 2 Regions, i.e. until and including the elections of 2010, after which the district was split into Brussels and Halle-Vilvoorde.

split into Brussels and Halle-Vilvoorde. ¹³ For the sake of simplicity we will refer to PSC with the acronym CDH also with respect to the period before PSC changed its name into CDH.

¹⁴ In real 2011 terms, income per capita in the Brussels Region only increased from 12,459 to 13,612 euros over our 1995-2011 sample period.

The main finding of our investigation will be that -rather surprisingly- municipalities of the Brussels Region that are party-politically aligned with one of the *smaller* parties in power at one or more of the Brussels municipalities' subsidising levels –i.e. with Ecolo- receive more discretionary grants than municipalities that are aligned with *larger* parties.

The remainder of the paper is structured as follows. First we briefly explore the party-political context of the Brussels municipalities as well as of their subsidising governments. Next we give a description of our dependent variable, i.e. discretionary grants to Brussels municipalities. Thereafter we situate our investigation of party-politically aligned allocation of grants to Brussels municipalities into the existing empirical literature. In a following chapter we provide arguments why a Regression Discontinuity Design (RDD) is ill-suited to the context of grants to Brussels municipalities. In the key part of our paper we then develop and test an alternative empirical strategy, i.e. a traditional IV estimation strategy based on partisan alignment as a result of the formation of an anti-coalition and as a result of 1st ever municipal being in power of Ecolo, one of our 4 major Brussels parties. In a final section we draw a number of conclusions and sum up remaining puzzles.

2. The political context of the Brussels Region

2.1. An overview of coalition politics at the level of the Brussels municipalities

An important part of our identification comes from changes in the party-political composition of the 19 municipal governments of the Brussels Region over the 1995-2011 period –our sample period-, i.e. caused by the municipal elections of 2000 and 2006. In Belgium, seats in the municipal council are awarded proportionally to the vote share obtained after municipal elections, and the mayor is chosen by the parties that manage to form a coalition consisting of a majority of the council seats¹⁵. Both the 2000 and the 2006 elections caused a lot of changes in the coalition composition of the Brussels municipalities. Our sample period is a period in which municipal elections became more competitive. This is demonstrated by the evolution of the vote shares of the 4 largest political parties at the level of the Brussels municipalities (table 3). Gradually PS has come closer to the vote share of MR, the traditionally dominant political party in the Brussels Region. Simultaneously Ecolo has caught up with CDH, the traditional 3rd party in the Brussels Region.

Table 3: Average vote shares of the 4 largest political parties (%) in the Brussels municipalities in the 1994, 2000, and 2006 municipal elections

| Election | MR | PS | CDH | ECOLO | Total |
|---------------|------|------|------|-------|-------|
| 1994 | 34.2 | 18.8 | 14.6 | 8.4 | 76.1 |
| 2000 | 35.6 | 20.6 | 11.1 | 17.7 | 85.0 |
| 2006 | 34.7 | 25.4 | 13.1 | 13.3 | 86.5 |
| Total average | 34.8 | 21.6 | 12.9 | 13.1 | 82.5 |

Sources: http://www.ibzdgip.fgov.be/result/nl/main.html, http://www.bisa.irisnet.be/themas/verkiezingen#.UqXcgDsjJSQ, own calculations.

¹⁵ One could hence say that Belgian municipalities are governed by a "parliamentary" system, as opposed to a "presidential" system. This is similar to the Belgian government levels that subsidise Belgian municipalities.

From table 3 it can also be derived that by limiting our analysis to the 4 major Francophone Belgian parties¹⁶, we include on average 82.3 % of the total vote in the Brussels municipal elections of 1994, 2000, and 2006. The remainder of the vote was obtained by local Francophone Brussels parties, by the Flemish and Francophone far right parties –fully excluded from power over our entire sample period-, and by the 5 Flemish parties that both participated in some of the municipal coalitions and in some of the coalitions at the subsidising levels over our sample period.

We do not show the evolution of average vote shares obtained by those 5 Flemish parties. This is because these vote shares are in general small, as well as decreasing over our sample period. The same holds for the number of separate lists submitted by Flemish parties. E.g. in the 2006 municipal elections those Flemish parties that submitted a separate list, together obtained less than 10% of all votes. (CRISP 2007 p. 20)

Convergence of vote shares of the 4 major parties has been reflected in convergence of their number of coalition participations, in particular of Ecolo, as shown by table 4¹⁷. Part of the coalition participations of the 4 Francophone parties shown in table 4 were after having campaigned on a joint list with other Francophone parties¹⁸. For details on coalition composition per individual municipalities, see tables in annex 1.

Table 4 also shows the number of coalition participations of the 5 Flemish political parties that were coalition members at one or more subsidising government levels over our sample period. Overwhelmingly, coalition participations of Flemish parties occurred after the latter had campaigned as junior members on a joint list with Francophone parties. While the Flemish parties CD&V and SP.A secured about as many municipal coalition participations as Ecolo, Ecolo never campaigned on a joint list with other parties, and its average vote share over our sample period is much higher. We only include political variables for the 4 major Brussels political parties into the regression equations of which we report the results below. When, as a robustness check, we also include political variables for the 5 Flemish parties of table 4 into the regression analysis reported below, none of the 5 extra coefficients of interest is significant, and their inclusion does not appear to change the size and the significance of the coefficients of interest for the Francophone parties¹⁹.

¹⁶ It were these 4 parties that over our sample period have pleaded in favour of extra financing for the Brussels Capital Region. Such extra financing materialised during the 2001 decentralisation round, and much more substantially, during the 2013 decentralisation round.

¹⁷ For the sake of simplicity, we will use the coalition compositions of the outgoing municipal government in municipal election years of our sample period. At the municipal level, elections always took place in October over our sample period.

¹⁸ Our regression results below are very similar if we do not count as coalition participations those by junior coalition partners that *ran on a joint list* with a senior coalition partner.

¹⁹ One could argue that this result is not surprising, as the interest of Flemish parties in power at subsidising levels in aligned allocation of grants to Brussels municipalities is limited. E.g. in the 2006 municipal elections Flemish parties campaigning on a separate list obtained less than 10% of the total vote. (CRISP 2007 p. 20) Also in the IV regression analysis (see below) we will disregard the Flemish parties, essentially because we cannot instrument Flemish coalition participation at the municipal level as none of the 5 Flemish parties in question campaigning on a separate list ever got involved into the formation of an anti-coalition as a "perpetrator" or as a "victim". No single of our 57 cases was a case in which one of the 5 Flemish parties participated for the 1st time in a municipal coalition either, except for the only separate coalition participation of the Flemish Green party over our sample period.

Table 4: Number of Brussels municipal coalition participations per political party (that has alsobeen in at least one coalition at the subsidising level(s) over our sample period) after the 1994,2000, and 2006 municipal elections²⁰

| Election | MR | PS | CDH | Ecolo | CD&V | VLD | SP.A | Groen | VU |
|----------|----|----|-----|-------|------|-----|------|-------|----|
| 1994 | 16 | 12 | 9 | 2 | 6 | 4 | 5 | 0 | 1 |
| 2000 | 14 | 11 | 7 | 11 | 7 | 3 | 5 | 0 | 1 |
| 2006 | 15 | 13 | 9 | 6 | 5 | 4 | 10 | 1 | 0 |
| Total | 45 | 36 | 25 | 19 | 18 | 11 | 20 | 1 | 2 |
| Maximum | 57 | 57 | 57 | 57 | 57 | 57 | 57 | 57 | 57 |

Sources: CRISP (2001 and 2007).

2.2. An overview of coalition politics at the government levels that subsidise the Brussels municipalities

Another important part of our identification comes from changes in the party-political composition of the 3 governments subsidising the Brussels municipalities at which one or more of our 4 major coalition parties are in power. These changes were in turn caused by the various Federal, Regional, and Community elections over the 1995-2011 period. In Belgium, seats in the Federal, Regional, and Community parliaments are awarded proportionally to the vote share obtained after the corresponding elections. Table 5 shows the resp. participation of the 4 major Brussels parties in coalitions at the various subsidising levels (1 = coalition participation as a result of the election mentioned in the same row)²¹, as well as total simultaneous coalition participations after *any* election (Federal, Regional, and Community).

Table 5 shows that PS was in power at every subsidising level over our entire sample period (as a matter of fact ever since 1988). The level at which MR was most often participating in power is the Federal level. Compared to MR, power participations of CDH and Ecolo are more evenly spread over government levels. From the bottom row of table 5 it appears that overall power participation of CDH at subsidising levels has on average been slightly higher than that of MR. From table 5 we can also derive that overall, alignment increases over our sample period, as the average number of

²⁰ Coalition participations as a junior member of a "Liste du Bourgmestre" –i.e. a joint multi-party list led by the party of the outgoing mayor- were fully counted as coalition participations, but this decision does not affect our regression results below.

For MR the number of coalition participations is 16 from 2010 onwards, as it entered the coalition in Jette halfway the legislature. For PS the number is 12 from 2010 onwards, as it left the coalition in Jette halfway the legislature.

²¹ For the sake of simplicity, we will use the coalition composition of the outgoing government in election years of our sample period. At the subsidising levels, elections always took place in May or June over our sample period. Using the coalition composition of the outgoing government in election years has the additional advantages that it takes into account the possibility of a political "business cycle", i.e. that parties in power may concentrate their aligned allocation of grants in a period right before an election, and that it takes into account that subsidising levels decide on their budgets –including discretionary grants- for year t already in year t-1 (and more generally, that subsidising levels may need some "lag time" to make discretionary grants arrive at the intended municipal level).

coalition members per subsidising government increases over our sample period. From 2010 onwards, all 3 subsidising levels considered are governed by coalitions in which 3 of the 4 major Francophone parties are present.

| Election | PS | MR | CDH | Ecolo |
|-------------------------|----|-----|-----|-------|
| 1995 Federal | 1 | 0 | 1 | 0 |
| 1999 Federal | 1 | 1 | 0 | 1 |
| 2003 Federal | 1 | 1 | 0 | 0 |
| 2007 Federal | 1 | 1 | 1 | 0 |
| 2010 Federal | 1 | 1 | 1 | 0 |
| 1995 Brussels Region | 1 | 1 | 0 | 0 |
| 1999 Brussels Region | 1 | 1 | 0 | 0 |
| 2004 Brussels Region | 1 | 0 | 1 | 1 |
| 2009 Brussels Region | 1 | 0 | 1 | 1 |
| 1995 French Community | 1 | 0 | 1 | 0 |
| 1999 French Community | 1 | 1 | 0 | 0 |
| 2004 French Community | 1 | 0 | 1 | 0 |
| 2009 French Community | 1 | 0 | 1 | 1 |
| 1995 Total | 3 | 1 | 2 | 0 |
| 1999 Total | 3 | 3 | 0 | 1 |
| 2003 Total | 3 | 3 | 0 | 0 |
| 2004 Total | 3 | 1 | 2 | 1 |
| 2007 Total | 3 | 1 | 3 | 1 |
| 2009 Total | 3 | 1 | 3 | 2 |
| _2010 Total | 3 | 1 | 3 | 2 |
| Average per single year | 3 | 1.6 | 1.7 | 0.8 |

Source: Wikipedia

3. A look at our dependent variable: discretionary grants to Brussels municipalities

Discretionary grants to Brussels municipalities is our dependent variable. We focus on discretionary special purpose grants rather than on formula-based general purpose grants, as the former seem more prone to steering for (party-)political reasons²². Graph 1 shows the evolution of the 3 major funding categories of the Brussels municipalities –i.e. own tax revenues, formula-based general purpose grants, and discretionary special purpose grants- over our sample period 1995-2011, which are the years for which we have obtained data on grants to Brussels municipalities²³.

Following observations can be made from graph 1:

- Discretionary grants to Brussels municipalities have increased (in real terms) over our sample period.
- Over our sample period discretionary grants –on average 16% of total municipal revenue in the Brussels Region- almost caught up with formula-based grants –on average 21% of total municipal revenue in the Brussels Region. Formula-based grants have remained more or less constant over our sample period.
- Own tax revenues of the Brussels municipalities outweigh formula-based and discretionary grants combined as a revenue source over our entire sample period (and have increased by about the same amount as discretionary grants). As stated above, this is particularly due to the large revenues generated by the municipal real estate tax in Brussels, which is the capital Region of Belgium.

Legend of graph 1:

Red vertical bars: 1995, 1999: concurrent Federal, Regional and Community elections

Green vertical bars: 2000, 2006: municipal elections only

Blue vertical bars: 2003, 2007, 2010: Federal elections only

Black vertical bars: 2004, 2009: concurrent Regional and Community elections

²² Indeed whenever we replace discretionary grants as the dependent variable by total discretionary + formula-based grants in our regression analysis below, coefficients of our variables of interest become smaller, while their significance hardly changes.

²³ The source of our grants data is Belfius, formerly known as Dexia, which is a bank specialising in lending to local governments. Belgian municipalities report about their finances to Belfius on a voluntary basis.





Source: Belfius

Graphs 2a and b show discretionary grants per capita received **by individual municipal governments**. Graph 2a shows only those 6 municipalities that were governed by an "anti-coalition" over our sample period. "Anti-coalitions" will be important for our empirical strategy. Graph 2b shows the other 13 municipalities. For several municipalities, the considerable variation over our sample period (as well as between municipalities) is striking. Note that the municipality receiving on average the most grants per capita is the City of Brussels (which is the largest of the 19 municipalities of the Brussels Region²⁴).

Legend of graphs 2a and 2b:

Red vertical bars: 1995, 1999: concurrent Federal, Regional and Community elections

Green vertical bars: 2000, 2006: municipal elections only

Blue vertical bars: 2003, 2007, 2010: Federal elections only

Black vertical bars: 2004, 2009: concurrent Regional and Community elections

²⁴ See annex 3 for number of inhabitants (and for income per capita) per Brussels municipality.



Graph 2a and b: Discretionary grants (in 2011 euros per capita) received over time and per municipality

Source: Belfius

The large standard deviations per municipality in table 6 confirm the rather erratic behaviour of discretionary grants to several municipalities.

| Municipality | Mean | Standard deviation |
|------------------------|-------|--------------------|
| | | |
| Anderlecht | 214.9 | 65.0 |
| Brussel | 437.1 | 75.2 |
| Elsene | 229.7 | 71.5 |
| Etterbeek | 259.7 | 64.5 |
| Evere | 264.6 | 77.9 |
| Ganshoren | 109.5 | 36.1 |
| Jette | 210.5 | 82.4 |
| Koekelberg | 194.1 | 38.2 |
| Molenbeek | 203.9 | 44.6 |
| Oudergem | 125.9 | 49.2 |
| Schaarbeek | 190.2 | 50.5 |
| Sint-Agatha-Berchem | 150.0 | 43.3 |
| Sint-Gillis | 317.4 | 106.4 |
| Sint-Joost-ten-Node | 394.8 | 108.6 |
| Sint-Lambrechts-Woluwe | 107.7 | 18.8 |
| Sint-Pieters-Woluwe | 175.4 | 40.6 |
| Ukkel | 112.6 | 37.2 |
| Vorst | 278.6 | 68.8 |
| Watermaal-Bosvoorde | 163.2 | 48.4 |
| | | |
| Total | 216.7 | 107.8 |

| Table 6: Discretionary grants (in 2011 euros per capita) received per municipality (average an | d |
|--|---|
| standard deviation per municipality) | |

Source: Belfius

Unfortunately our data do not enable us to distinguish between total discretionary grants *per individual subsidising government*²⁵. We hence have no information of the relative magnitudes of Federal, Regional, resp. Community government subsidies to Brussels municipalities. As in Belgium "oversight of and support to municipalities" as an expenditure responsibility was largely decentralised to the Regions in 1988, we would expect Federal subsidies to municipalities to be rather limited compared to Regional subsidies over our sample period. Although we of course know which political party was in power at which subsidising level in which years, this aggregate nature of our grants data will pose a hurdle to finding out in our regression analysis below which kind of

²⁵ Exceptions to this inability are the following. 1) We have obtained somewhat more detail for the years 2008 until 2011 of our sample, but this is only a limited subperiod that is moreover characterised by hardly any changes in partisan alignment. 2) We have obtained separate data for the –substantial- *Brussels Region's* "contrat de quartier" discretionary grants as well as for the –equally substantial- *Brussels Region's* "extra grants to police zones" discretionary grants. 3) We have obtained separate data for the –rather small- *Federal government's* "Fund for Large Cities" discretionary grants. When conducting the below regression analyses separately for grant categories 2) and 3), we do not find any partisan alignment effect.

partisan alignment –Federal, Regional, or Community government alignment- potentially drives grants allocation to municipalities.

There exist some anecdotes suggestive of party-political steering of particular grants categories comprised in our data. Examples for *the Federal level* are the following:

- the Federal wage subsidies to municipalities for staff that has been hired after having been unemployed for a long time (over our sample period part of this subsidy has been partly decentralised to the Regions however); in recent years the press reported about party-political distribution of these subsidies
- 2) the Federal "Fund for Large Cities", established in 1999 and of which several Brussels municipalities have benefited directly; in December 2007, the Belgian national audit office published an audit of the functioning of the "Fund for Large Cities" between 2005 and 2007, reporting of "non-transparent allocation" of grants, including towards the Brussels municipalities²⁶ (Rekenhof 2007)
- 3) subsidies for extra policing services motivated by the fact that the Brussels Region is the capital of the EU: these are the so called "security contracts" and the "European summits" grants (the latter however only amount to 7.5 million nominal euros per year for all beneficiary municipalities taken together)

An example for *the Brussels Regional level* are the "contrats de quartier" (urban renewal contracts), a municipal subsidy category established in 1994, cumulatively amounting to 408 million nominal euros for all beneficiary municipalities taken together over our sample period. In 2012 a Francophone Belgian weekly, "Le Vif/L'Express" (2012), reported extensively on a complaint of Emmanuel De Bock, an MR member of the Brussels Regional parliament and councillor in the municipality of Ukkel. Ukkel is situated in the richer, MR-dominated southeastern part of the Brussels Region. De Bock's complaint was that since the establishment of the Brussels Region in 1989²⁷ the distribution of several grants categories to Brussels municipalities would have become skewed against the south-eastern municipalities. Some prominent special purpose subsidies allocated by the Brussels Regional government, such as the "contrats de quartier", would have benefited the same non-south-eastern, and less MR-dominated municipalities ever since²⁸. De Bock

²⁶ The Federal ministry in charge of the Fund for Large Cities provided us with the annual amounts allocated to the 7 benefiting Brussels municipalities over the entire 2000-2013 period: Anderlecht, the City of Brussels, Molenbeek, Schaarbeek, Sint-Gillis, Sint-Joost-ten-Node, and Vorst. On average these 7 municipalities taken together have benefited from 15.0 million (nominal) euros per year since the establishment of the Fund. This boils down to about 23.9 (nominal) euros per capita per benefiting municipality. However, the benefiting Brussels municipalities have remained constant since the inception of the Fund. The same holds more or less for the between variation in their grants received. Hence, it is hard to imagine that the Fund for Large Cities would be an important driver of our below regression results. This is confirmed when we repeat the regression analysis presented below for the Fund for Large Cities separately.

 ²⁷ Since its establishment in 1989 the main political party in power at the level of the Brussels Regional government has always been PS, with the exception of MR from 1999 until 2004. (see table 5)
 ²⁸ The 10 municipalities that have benefited from one or more "contrats de quartier" since their inception are

²⁸ The 10 municipalities that have benefited from one or more "contrats de quartier" since their inception are Anderlecht, the City of Brussels, Elsene, Jette, Koekelberg, Molenbeek, Sint-Gillis, Sint-Joost-ten-Node, Schaarbeek, and Vorst. On average these municipalities have benefited from an annual "contrat de quartier" amount of 30.7 (nominal) euros per year. See annex 2 for a graphical overview of the "contrat de quartier" grants. The erratic evolution of "contrat de quartier" grants allocation visible from annex 2 is due to their presentation on a commitment basis (rather than on a disbursement basis, used for our overall discretionary

further complained that "contrat de quartier" grants would have gone hand in hand with wage subsidies for the hiring of long-term unemployed.

We have not found any anecdotes suggestive of possible party-politically aligned allocation of the grants of *the French Community level* to Brussels municipalities. Our data suggest that these concern mostly –large- education and childcare grants. Strikingly, when conducting our below regression analysis while leaving the French Community level out of the composition of our partisan alignment variables of interest, our regression results stay the same. Regression results *do* change if we leave out the Federal level or the Brussels Regional level.

4. Situation of our study within the literature

In what follows we will investigate if the fact of a Brussels municipality becoming better aligned politically with one of the subsidising levels, brings more grants to this Brussels municipality. We define partisan alignment of a municipality as this municipality having at least one political party in its governing coalition that is also governing at least one of the subsidising levels. Hence our study is related to the many studies that have found that the distribution of grants to lower-level governments is determined by the latter's partisan alignment status, such as Larcinese e.a. (2006) for US states, Solé-Ollé and Sorribas-Navarro (2008) for Spanish municipalities, Veiga and Veiga (2013) for Portuguese municipalities, Rodden and Wilkinson (2004), Khemani (2007) and Arulampalam e.a. (2009) for Indian states, and Rodden (2005 p. 181-221) for German states. Rodden (2005) and Khemani (2007) investigate the effect of partisan alignment on states' *deficits* rather than on *grants* received, but find a correlation between deficits and extra grants received as a consequence of these deficits²⁹.

Interestingly, Rodden and Wilkinson (2004) investigate the partisan alignment effect per individual party. They find that parties that are small but pivotal at the central level –i.e. parties that are needed in view of obtaining the support of a majority of seats- obtain more grants for their state in case of partisan alignment than the 2 dominant parties in India (Congress and BJP). As interestingly, Khemani (2007) finds that it is only partisan alignment of an Indian state with the *dominant* party in

grants data shown in graphs 2a and b). When conducting the below regression analyses separately for the "contrats de quartier" grants, we however do not find any partisan alignment effect.

²⁹ In Rodden (2005 p. 222-265)'s Brazil chapter, Rodden similarly finds evidence that state governors' alignment with the president's coalition increase the extent to which a state benefitted from the 1997 **bailout** (that did not take the form of straightforward intergovernmental grants, but rather of debt relief). However, Rodden finds an *in*significant governor alignment coefficient with respect to the 1993 bailout, as well as with respect to state deficits over the 1990-2000 period (when including state fixed effects). (An obvious drawback of Rodden's analysis of the individual Brazilian bailouts is that it by definition prevents a panel regression.) Also, Arretche and Rodden (2003) find *in*significant coefficients when regressing intergovernmental *grants* to Brazilian states on a dummy measuring similarity between the party of the federal president and the party of a state's governor, resp. a dummy measuring if the party of the state's governor belongs to the federal coalition supporting the president.

power –not with junior coalition members- at the central level that is associated with higher deficits³⁰.

However, none of these $-"1^{st}$ generation"- studies takes into account possible endogeneity of being in power. Therefore, our study is even more related to the increasing number of $-"2^{nd}$ generation"papers that attempt to control for endogeneity of being in power by means of using an RDD with respect to election results and being in power as independent variables. This is because also in our study we will make an attempt to find a way around the problem of the endogeneity of being in power.

Pettersson-Lidbom (2008 p. 2) motivates an RDD as follows: "The general idea of the RDD is to compare the outcomes for units (e.g., political jurisdictions) whose value of an underlying targeting variable (e.g., vote share) is "just below" and "just above" a fixed threshold (e.g., 50 percent of the votes) since they will, on average, have similar characteristics except for the treatment (e.g., party control). In other words, those units slightly below the threshold will provide the counterfactual outcome for those units slightly above, since the treatment status will be "as good as randomly assigned" in a neighbourhood of the treatment threshold. The inference from a regression discontinuity analysis can therefore be as credible as that from a randomised experiment. In particular, the regression discontinuity approach shares the same attractive feature as a randomised controlled trial, namely that it can actually be tested whether treatment status is likely to be "as if" randomised."

Or in the wording of Migueis (2013 p. 16) applied to party-politically aligned allocation of grants in Portugal: "A possible discontinuity of the function relating transfers to margin of victory/loss at 0% must be driven by a causal effect of partisan alignment between municipalities and the central government on transfers received by municipalities, as, for values close to 0%, the outcome of elections should be seen as essentially random, given that the party in power nationally cannot precisely control the outcome of the elections".

Curto-Grau e.a. (2012) refine the Solé-Ollé and Sorribas-Navarro 2008 paper by focusing on vote margin within an RDD framework. Using a (fuzzy) RDD setup they find an even stronger positive effect of party-political alignment on grants received by municipal governments than in their 2008 study. Curto-Grau e.a. define their vote margin variable as the vote share that the block of the incumbent party at the subsidising level has to win (lose) to obtain (lose) the majority of the votes at

³⁰ When replacing the dependent variable –grants received- in our IV regressions below with the budget balance, we find that PS, Ecolo and CDH alignment significantly deteriorate the budget balance, while – strangely- MR alignment significantly improves the budget balance. However, the PS coefficient is much smaller than the CDH and Ecolo coefficients and fails to be significant at the 0.1 level (p value of 0.16). These results suggest that municipalities, once aligned with PS, but in particular once aligned with CDH and Ecolo, let their budget balance deteriorate in the hope of receiving more grants. However, none of these coefficients is significant anymore when including the lagged budget balance as a regressor. Moreover, as the budget balance equals revenue net of expenditures –each of which is an endogenous variable itself-, it is a more complex and less straightforward variable than grants received. Also, it may suffer from measurement problems. Finally, when estimating the budget balance's determinants, there may be a high risk of omitted variable bias. Moreover, this would also hold for tax revenues and expenditures as alternative dependent variables. In what follows, we therefore prefer to estimate the effect of partisan alignment on grants rather than on the budget balance. An alternative would be the strategy used by Bracco e.a. (2014), who regress expenditures and tax revenues on grants, while instrumenting grants with exogenous cases of alignment.

the municipal level. This approach is suited to Spain's system essentially being a 2-party system (only 30% of Spanish municipal governments are coalition governments, moreover these are coalitions along ideological lines).

The Portuguese situation seems even more straightforward than the Spanish one. The Portuguese blocks constructed by Migueis are a block dominated by PSD and a block dominated by PS. Towards the end of Migueis' sample period, the governments of 269 out of 305 Portuguese municipalities were either dominated by PSD or by PS. PSD and PS appear never to be in a coalition together, neither at the central government level, nor at the municipal level. In contrast to Spain moreover, the Portuguese party winning the most votes, always gains power, so Migueis is able to make use of the sharp RDD, which is more simple than the fuzzy RDD.

Curto-Grau e.a. (2012) find that newly aligned municipalities that have been won by a narrow margin are especially *rewarded* with more grants, while previously aligned municipalities that have been lost by a narrow margin are especially *punished* with less grants. Brollo and Nannicini (2012) come to the same finding with respect to less grants to narrowly lost aligned municipalities in Brazil. Migueis (2013) comes to the same finding with respect to grants to aligned and non-aligned municipalities in Portugal, but irrespective of the vote margin. The paper by Bracco e.a. (2012) on Italian municipalities resembles the one by Brollo and Nannicini (2012) as for research question and empirical strategy, but it not only finds a positive effect of alignment on grants received, but also a negative effect on local tax revenue. Both the study on Brazil and the study on Italy manage to make use of an RDD as both manage to assign each individual party to either a leftwing or a rightwing block.

Hence because the papers by Bracco e.a., Brollo and Nannicini, Curto-Grau e.a., and Migueis all explain grants to municipalities by partisan alignment while finding a way around the problem of the endogeneity of alignment, these papers are the ones that are most closely related to our paper.

5. Limitations of an RDD within the Brussels municipalities context

There seem to be a number of major handicaps that the context of our study -the political system of the Brussels municipalities- poses to the use of an RDD, compared to the context of the related studies overviewed above -the political systems of the Brazilian, Italian, Portuguese, and Spanish municipalities³¹.

A first handicap is our limited sample size (312 observations = 19 municipalities * 17 years, minus 11 observations missing due to missing financial control data for a number of municipalities and years). It implies that there are few observations around any "being in power" kink/threshold, while an RDD particularly makes use of these observations.

A second handicap is that assigning parties active at the Brussels municipality level to either a leftwing or a right-wing block in view of verifying which block took the hurdle of the 50% seat share threshold -as Bracco e.a., Brollo and Nannicini, Curto-Grau e.a., and Migueis did- seems ill-suited to

³¹ We disregard the criticism that *generally* can be directed at RDDs on the basis of close vote shares or close seat shares. See e.g. Folke (2013 p. 5-6 and 29) and Baskaran and Hessami (2014 p. 11).

the Brussels context. Over our sample period we did not find any preference pattern for ideological composition of municipal coalitions in the Brussels Region³², as demonstrated by the behaviour of the 4 largest political parties at the Brussels municipal level over our sample period³³.

This should be obvious from table 7 below³⁴. It shows the number of municipalities in which a particular party was selected as a junior coalition partner by the major coalition party, as a share of total municipalities in which the latter was the major coalition party. For the major party, the sum of all shares may be larger than 1 as in several municipalities coalitions consist of more than 2 parties. Table 7 shows e.g. that although MR is usually thought of as rather right-wing and PS and Ecolo are usually thought of as rather left-wing³⁵, e.g. MR-PS and MR-Ecolo coalitions are rather frequent. In general, it shows the absence of coalition preferences between the 4 major Brussels parties. The only conclusions about preferences that may be derived from table 7 is that after the 1994 elections, MR and PS preferred each other as coalition partners –which is of course helped by the fact that these 2 parties generally collect the most votes-, and that after the 2000 elections, MR, PS and CDH all preferred Ecolo as a coalition partner –which was of course helped by the steep rise in vote share of Ecolo in the 2000 elections.

| Major party | | MR | | | PS | | | CDH | |
|----------------|------|------|-------|-----|-----|-------|-----|-----|-------|
| Junior partner | PS | CDH | Ecolo | MR | CDH | Ecolo | MR | PS | Ecolo |
| 1994 | 6/10 | 3/10 | 1/10 | 4/5 | 1/5 | 0/5 | 1/3 | 1/3 | 0/3 |
| 2000 | 4/11 | 1/11 | 4/11 | 2/5 | 3/5 | 3/5 | 1/2 | 1/2 | 2/2 |
| 2006 | 4/9 | 3/9 | 4/9 | 3/8 | 3/8 | 1/8 | 2/2 | 1/2 | 1/2 |

| Table 7: Number of municipalities in which a particular party was selected as a junior coalition |
|--|
| partner by the major coalition party (as a share of municipalities dominated by the latter) |

Sources: CRISP (2001 and 2007)

Because of the abovementioned limitations, we have developed an alternative RDD focusing on close races at the municipal level. Following Bracco e.a. (2012 p. 32) we define a close race as a vote difference of 5% points or smaller between *the largest and the second largest party*, i.e. as a close race *not* between a right-wing and a left-wing block, but between individual political parties. The result of this approach (not presented due to space limitations but available on request) is that we do not find any significant effect of alignment on grants, except a *negative* effect for MR in 1 of our 2 preferred specifications.

But also our alternative RDD poses a number of –probably insurmountable- methodological problems. A first one is that the availability of very few observations close to the threshold for becoming the largest party. A second one is that we cannot implement an RDD for Ecolo, as it was the largest party in only 1 municipality over our sample period. Ecolo was only once the largest or 2nd largest party over our sample period, and only once the largest party in power. However, Ecolo –as

³² For the same reason, Folke (2013 p. 5) also sheds doubt on the appropriateness of an RDD in the Swedish proportional electoral system.

³³ We would not claim that such lack of preferences would be typical for the Brussels municipalities in Belgium.

³⁴ Besides, the same lack of coalition preferences appeared at the subsidising levels over our sample period.

³⁵ With CDH being a centre party until 1999, the year in which it was excluded from federal, Regional and Community governments for the 1st time since World War II. Since then, CDH has pursued a rather leftwing course.

the 4th largest party at the level of the Brussels municipalities- has arguably been an important "player" in Brussels coalition politics over our sample period.

An third problem with our alternative RDD within the context of the Brussels municipalities is that almost all Brussels municipal governments are *coalition* governments³⁶. This means that being the largest party is *not crucial for being in power*. The RDD threshold used –i.e. a small positive vote margin between the largest party and the runner-up– is not a suitable threshold for being in power *overall* at the Brussels municipal level, either as a senior or a junior coalition partner. If we could measure the *overall* effect of being in power–and hence of alignment- on grants received, we could draw more general conclusions than with an RDD. An RDD approach would only enable us to measure the effect of being in power –and hence alignment- *of the largest party* in power at the municipal level. A priori, there seems no reason why a party at the subsidising level would *only* favour with extra grants those municipalities where it is the largest party in power. In particular for PS, CDH and Ecolo, this would mean that they would have tried to favour with extra grants only a minority of Brussels municipalities in which they are in power over our sample period, as shown by table 8.

| Election | MR | PS | CDH | Ecolo |
|----------|----|----|-----|-------|
| 1994 | 13 | 5 | 3 | 0 |
| 2000 | 11 | 5 | 2 | 1 |
| 2006 | 9 | 8 | 2 | 0 |
| Total | 34 | 16 | 6 | 1 |

| Table 8: Number of municipal elections (out of 57 = 3*19) after which a major Brussels party was |
|--|
| the largest party in power |

Sources: CRISP (2001 and 2007), http://www.ibzdgip.fgov.be/result/nl/main.html, http://www.bisa.irisnet.be/themas/verkiezingen#.UqXcgDsjJsQ.

³⁶ A context of –changing- *coalition* governments could be the reason that also Arulampalam e.a. (2009) do not make use of an RDD to estimate the effect of partisan alignment of Indian states on the allocation of discretionary grants.

6. Alternative empirical strategy to an RDD: alignment after the formation of an anti-coalition and after 1st ever municipal coalition participation as IVs for overall alignment

Because of the limitations of analysing partisan alignment of grants to Brussels municipalities with an RDD, we develop an alternative empirical strategy. It consists of an IV regression set-up with alignment after the formation of an anti-coalition and after 1st ever municipal coalition participation as IVs for overall alignment.

6.1. IV for MR, PS, and CDH alignment: alignment after the formation of an anti-coalition

Also in the case of the Brussels municipalities, alignment –and more in particular a party's coalition participation (or the absence of such participation) at the municipal level- could be endogenous to grants received. Coalition participation could be fostered by past grants –or by a lack thereof (see e.g. Fiva and Halse 2014 p. 12)-, e.g. via an increased share of the vote, at the expense of or in combination with the reverse effect. Moreover our finding that the 4 major parties at the Brussels municipality level do not seem to have strong coalition composition preferences over our sample period³⁷ seems to increase the probability of reverse causality. Also, there could be –observable or unobservable- time-variant determinants **both** of municipal coalition participation of a particular party **and** of grants received that have been omitted from our regression specification.

But rather than to find a way around the problem of endogeneity of alignment by means of an RDD, we resort to a -more traditional- IV regression set-up. The instrument we will use is the coming to power –and the expulsion from power- of a political party within a Brussels municipality *after the formation of an anti-coalition*. We will use the latter as an instrument for the coming to power of a political party in a Brussels municipality in general.

While we suspect that (not) coming to power in a municipality is endogenous to past grants received by that municipality³⁸, or to time-variant omitted variables both related to municipal being in power and past grants received, we may assume that (being prevented from) coming to power by means of an anti-coalition is rather a "coincidence", i.e. not related to past grants received by the municipality in question. In other words: grants received by municipalities after the formation of an anti-coalition *by a particular party* should and can be compared to grants received by municipalities after the formation of an anti-coalition *from which that same party was excluded, and* the difference between them can be attributed to being in power³⁹.

³⁷ Implying i.a. that ideological proximity does not seem a predominant driver of coalition composition.

³⁸ In spite of the fact that we will include vote share obtained as a control variable. We will include vote share as a control because grants may be expected to impact gaining power via an increase of the vote share obtained.

³⁹ Rather than that coming to power can be attributed to the difference in grants received.

Statistically speaking this implies that our instrument is not correlated with the residual of the ordinary OLS regression of grants on partisan alignment. Coming to power in a municipality (and subsequent alignment) as such may be correlated with the residual of a regression of grants on coming to power as such (i.e. with those

Table 9 gives an overview of all anti-coalitions we identify over our sample period. The vote shares of the largest party participating into the anti-coalition as well as of the largest party that was excluded from the anti-coalition are indicated in columns (3) till (6), with the vote share of the "perpetrator" of the anti-coalition indicated in bold. We characterise 8 coalitions as anti-coalitions, out of a total of 57 coalitions (= 19 municipalities * 3 municipal election years).

Compared to column (7) "Motivation/effect" of table 9, we provide following more quantitative definition of an anti-coalition (or an "anyone eligible but" coalition): an anti-coalition is a coalition from which either the largest or second largest party —in terms of vote and seat share- has been excluded, *while these 2 parties taken together have a majority of seats at their disposal so that these 2 parties could form a municipal coalition already by themselves*. The latter should be clear from the final column of table 9. As a result of the formation of the anti-coalition the governing coalition consists of more parties —i.e. on average of 3.3 parties as shown by column (8) of table 9-compared to the case in which the second largest party would not have been excluded —i.e. 2 parties. The only exception is the anti-MR coalition in Vorst, but also this coalition has far less seats at its disposal —only 1 seat more than required for a majority- than a coalition between the 2 largest parties in terms of seats would have had⁴⁰. As a consequence the party that "falls victim" to an anti-coalition is *large* in terms of vote share. Table 9 shows that the smallest "victim" of an anti-coalition obtained 23% of the vote⁴¹.

We argue that anti-coalitions are "coincidence", i.e. hard to foresee or anticipate. We assume them to happen rather unexpectedly to a traditionally dominant party, possibly *in spite of* having secured extra grants to its municipality in the legislature preceding the election after which the anti-coalition was formed. We also assume them to happen rather unexpectedly to the party that –instead of the excluded party- becomes the dominant coalition party thanks to assembling the anti-coalition, because an anti-coalition typically requires the agreement of more parties than the average municipal coalition (see column (8) of table 9).

Using the terminology of Banzhaf (1968), a large party is hard to exclude from a coalition, because the larger the party the higher its (coalition formation) power index⁴². The latter measures the number of feasible coalitions in view of obtaining a majority *in which a particular party is needed*, as a share of the total number of feasible coalitions (see below). In the wording of Laver and Shepsle (1996 p. 186): "(...) large parties figure more conspicuously in the decisive structure of the government formation game. They participate more frequently in winning coalitions (an "opportunities" advantage), and if other parties try to assemble a winning coalition that excludes a large party, negotiations are more prolonged and difficult (a "transaction cost" advantage)". The time-component of the latter is empirically investigated by Martin and Vanberg (2003 p. 330), who

factors causing grants except coming to power as such). But coming to power *after the formation of an anticoalition* can be argued *not* to be correlated with the residual of a regression of grants on coming to power as such.

⁴⁰ There have been some other cases where the 2nd largest party was excluded, but this did not cause the coalition to consist of more parties, as the 2nd largest party was much smaller than the largest party. An example is the Molenbeek coalition after the 2000 elections.

⁴¹ When comparing this share to the average vote shares of the 4 major Brussels parties over our sample period (see table 3), we notice that only the average vote share of MR is higher.

⁴² In the wording of Folke (2013 p. 4): a larger party is more likely to be pivotal, and hence to be part of a governing coalition.

find a significantly positive effect of an increase in the number of coalition parties on coalition bargaining duration. Browne and Franklin (1973 p. 462) add as another disadvantage of an anti-coalition that the more coalition parties there are, the larger the extent to which the dominant coalition party will have to cede control over public policy becomes.

Perhaps the 2 Jette anti-coalitions included into our series of 8 anti-coalitions may be an exception to these disadvantages. This is because these anti-coalitions are the only ones that did **not** cause a **change** into the previously existing coalition with respect to the exclusion of the major party in question. As the 2 Jette anti-coalitions were more or less a continuation of the existing coalition, they may not have implied higher assembly or maintenance costs. If we leave out the 2 Jette anti-coalitions the only considerable change in our coefficients of interest in table 16 below is that the significance of the PS alignment coefficient decreases somewhat further (to a p value of 0.17).

Therefore we assume that being excluded from power by means of an anti-coalition, and conversely, being -by far- the major party in power thanks to having assembled an anti-coalition is exogenous to grants as well as to other unobservable factors that may both be correlated with grants and being in power at the municipal level.

We only consider as exogenous the power statuses of the *major* excluded party and the *major* included party in our IV regression analysis based on anti-coalitions. We therefore assume that a "grand coalition" of these 2 largest parties would not have been feasible in our anti-coalition cases, i.e. that each of these 2 largest parties wanted to avoid the other large party as a coalition partner⁴³. Also, the *major* excluded party and the *major* included party are both the most *vital* parties to an anti-coalition: an anti-coalition is an anti-coalition precisely because a large party has been excluded *and* another large party has delivered the vote share that is indispensable (though not sufficient) for a majority without the excluded large party. Another reason to neglect the junior partners of an anti-coalition is that the seats of some of them were not even needed in view of providing the anti-coalition with a majority of seats (see last column of table 9). A final reason is that we assume that these smaller parties would have stood an equally good chance of being included into a coalition by the excluded dominant party, in case a reverse anti-coalition would have been formed⁴⁴.

In annex 4 we provide more contextual detail on every single of the 8 anti-coalitions detected, to additionally motivate our labeling of them as an anti-coalition.

⁴³ E.g. in Jette, CDH wished to avoid MR –by far the 2nd largest party, lagging CDH only 4%points in vote shareas a coalition partner after the 1994 and 2000 elections apparently for ideological reasons. Reportedly, the CDH mayor preferred a "progressive" coalition, even if such a coalition would need more parties. Jette would hence constitute an exception to our finding that ideology is not a decisive factor in the composition of coalitions within Brussels municipalities.

In contrast, in a number of other cases a "grand coalition" did **not** appear to pose a problem: the most striking cases are Anderlecht after the 1994 and after the 2006 municipal elections, where the vote difference between the 2 largest parties –MR and PS- was only 3%, resp. 1%, and where they **did** govern together, hence minimising the number of coalition partners. Another case is Molenbeek after the 1994 and 2006 elections, where the vote difference between the 2 largest parties –again MR and PS- was 6%, resp. 7%, and where they **did** govern together.

⁴⁴ If we assume that coming to power as part of an anti-coalition is not only exogenous for the largest party of the anti-coalition **but also for the other members**, all partisan alignment coefficients are insignificant. The exception is the coefficient for Ecolo, which remains large, positive and significant as before (see below). The latter is not surprising, as we use a different instrument for Ecolo power participation. (see below)

| election | municipality | MR (%) | PS (%) | CDH (%) | Ecolo (%) Motivation / effect | Coalition parties (#) | Coalition seats (%) | Seats "perpetrator" + "victim" (%) |
|----------|--------------|--------|--------|---------|--|-----------------------|---------------------|------------------------------------|
| 1994 | Brussel | 28 | | 23 | Dispose of Demaret + Vanden Boeynants (CDH) | 4 | 62 | 74 |
| 1994 | Jette | 24 | | 28 | Continue CDH led "progressive" coalition, despite Thys' forced resignation as Brussels Regional minister | 4 | 58 | 64 |
| 2000 | Anderlecht | 30 | 28 | | Break with 50 years' PS dominance | 3 | 53 | 67 |
| 2000 | Brussel | 28 | 23 | | Revenge for Anderlecht anti-PS coalition formed in 2000 | 4 | 57 | 62 |
| 2000 | Elsene | 40 | | | 29 Wish of local PS and CDH to break with past and to form "progressive" coalition with Ecolo | 3 | 51 | 78 |
| 2000 | Ganshoren | 33 | | 29 | Break with 40 years' CDH dominance + Beauthier mayorship, after his death (1999) | 3 | 64 | 68 |
| 2000 | Jette | 23 | | 27 | Continue CDH led "progressive" coalition, despite death of Thys, 1977-99 mayor | 3 | 64 | 61 |
| 2006 | Vorst | 40 | 31 | | Revenge for exclusion of PS after 2000 elections? | 2 | 54 | 80 |
| | Averages | | | | | 3.3 | 57.9 | 69.2 |

Table 9: Anti-coalitions formed after the 1994, 2000, and 2006 municipal elections⁴⁵

Note: vote shares of individual parties that gained power shown in bold

Sources: CRISP (2001 and 2007), http://www.ibzdgip.fgov.be/result/nl/main.html, http://www.bisa.irisnet.be/themas/verkiezingen#.UqXcgDsjJsQ

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⁴⁵ Municipal elections were always held in October of the election year in question.

The 8 anti-coalitions described above are the **only** coalitions over our sample period we are able to consider as anti-coalitions on the basis of our above criteria. Table 10 gives an overview of the number and share of anti-coalitions involved in per party. All 4 major political parties at the Brussels municipality level experienced anti-coalitions, either as "perpetrator" or as "victim". Remarkably, MR was involved in all of these. As MR is the dominant party in the Brussels Region, this is not completely surprising. PS was involved only in 3 of the 8 anti-coalitions, and CDH in only 4, while Ecolo was only involved in 1 of them.

| | Anti coalitions involved in | Share of total coalitions (%) | Anti coalition "perpetrator" | Share of total coalitions (%) | Anti coalition "victim" | Share of total coalitions (%) | Total coalitions |
|-------|--------------------------------|-------------------------------|---------------------------------|-------------------------------|----------------------------|-------------------------------|------------------|
| MR | 8 | 14 | 3 | 5 | 5 | 9 | 57 |
| PS | 3 | 5 | 2 | 4 | 1 | 2 | 57 |
| CDH | 4 | 7 | 2 | 4 | 2 | 4 | 57 |
| Ecolo | 1 | 2 | 1 | 2 | 0 | 0 | 57 |
| Total | 8 | 14 | 8 | 14 | 8 | 14 | 57 |

Table 10: Number and share of anti-coalitions involved in (either as "perpetrator" or as "victim") per party (1994-2006)

Per individual party the number of anti-coalitions involved in are few -except for MR-, and the number of anti-coalitions "perpetrated" resp. "suffered" of course even fewer. As anti-coalitions are central within our strategy to identify the effect of partisan alignment on discretionary grants – except for Ecolo (see below)-, their limited number for PS and CDH is a weakness of our strategy. The smaller their number, the higher the risk that the effect identified by means of them is instead due to coincidence. E.g., if we drop either one of the 3 anti-coalitions PS was involved in from our regression analysis below, the significance of the PS coefficient in our preferred regression specifications behind columns (1) and (3) in table 16 below considerably diminishes⁴⁶.

One could additionally argue that a fact providing for extra variation is that *within* several legislatures governed by an anti-coalition, the degree of partisan alignment with the subsidizing level changes. Table A5 in annex 5 shows that 5 of our 8 anti-coalitions identified -3 anti-coalitions led by MR and 2 led by CDH (i.e. the 2 CDH led anti-coalitions in Jette)-, experience change in the degree of partisan alignment *within* the legislature during which they govern. Additionally, one could argue that the 8 identified anti coalitions comprise no less than 47 observations (= 6 observations for each of the 7 anti-coalitions after 1994 and 2000, and 5 observations for the one anti-coalition detected after 2006). However, while it is true that most discretionary grants -our dependent variable- are (re-)allocated during every single year after an election has been held, it is not true that the anti-coalitions in any single year of a particular legislature.

⁴⁶ However, the significantly positive Ecolo alignment effect that we find below –as well as the significantly negative effect of municipal coalition participation of Ecolo as such that we find below - is robust against *only* instrumenting Ecolo municipal power participation (while not instrumenting municipal power participation of the other 3 major parties). These Ecolo effects are found by means of an IV for Ecolo municipal coalition participations –i.e. 11 new Ecolo coalition participations- than the anti-coalition IVs considered per individual party. (see below)

However, being excluded from power resp. being the largest party in power due to an anti-coalition appears a valid and relevant instrument in our IV regressions below including a lagged dependent variable (table 16), based on the result of the Hansen J test and based on the p values and the F-test of our first stage regressions. This sheer fact should suffice as a motivation for our IV strategy⁴⁷.

6.2. IV for Ecolo alignment: alignment after 1st ever municipal coalition participation

Ecolo was the largest member of an anti-coalition or its "victim" in only 1 instance over our sample period, which seems too few to construct an IV. However, we assume we cannot afford to leave the 4th largest party at the Brussels municipal level out of our analysis of partisan alignment⁴⁸. Partisan alignment with Ecolo may be correlated not only with grants received but also with alignment with one or more of the other main political parties, as municipal power participation of Ecolo can be expected to reduce the probability of municipal power participation of the other 3 major parties. Therefore, we consider it more prudent to develop a different instrument for alignment with Ecolo, which is moreover based on more observations⁴⁹.

Ecolo is the only of the 4 major parties that gained power in several Brussels municipalities for the 1st time in its history over our sample period. After the 1994 elections it joined municipal coalitions for the first time ever within the Brussels Region, as it acquired power in the City of Brussels and in Schaarbeek. After the 2000 municipal elections, it managed to remain in office in the City of Brussels and in Schaarbeek, and moreover entered into 9 more municipal governments (see table 11; also see table A11 in annex 1).

| 1994 | 2000 |
|------------|---------------------|
| | |
| Brussel | Anderlecht |
| Schaarbeek | Elsene |
| | Ganshoren |
| | Jette |
| | Molenbeek |
| | Sint-Agatha-Berchem |
| | Ukkel |
| | Vorst |
| | Watermaal-Bosvoorde |

| Table 11: 1 st ever municipal coalition participations of Ecolo after the 1994, resp. the | e 2000 |
|--|--------|
| municipal elections | |

Source: CRISP (2000 p. 86)

⁴⁷ Also, it is the purpose to update this paper as soon as the data for the municipal grants received after 2011 are available from Belfius. This update will increase the number of anti-coalition observations, as municipal elections have been held in 2012, with no less than 5 anti-coalitions as a result (in Jette, Molenbeek, Watermaal-Bosvoorde, and Sint-Pieters-Woluwe).

⁴⁸ Regression coefficients reported below change considerably when leaving Ecolo out of the analysis.

⁴⁹ However, the IV regression results below do not change markedly if we replace our "broader" IV for Ecolo alignment with our IV based on the *single* anti-coalition Ecolo got involved into over our sample period.

One could well argue that these 11 new coalition participations —as well as the several considerable vote share increases that preceded and facilitated these coalition participations- are exogenous to previous grants received by the municipalities concerned, for 2 reasons:

1) The new Ecolo municipal coalition participations either preceded or more or less coincided with 1st ever Ecolo coalition participations at the subsidizing levels. Hence they could hardly have been fostered by grants steered to municipalities by subsidizing governments in which Ecolo was in power. One could argue that the 9 extra coalition participations gained in 2000 could have been fostered by extra grants obtained by these municipalities thanks to Ecolo entering the federal government coalition for the 1st time in history after the 1999 Federal elections⁵⁰. This was the 1st time in history that Ecolo entered a government that subsidises the Brussels municipalities⁵¹. Although the only senior minister and the only junior minister Ecolo obtained in the 1999-2003 Federal government were both elected in the Brussels Region⁵², it seems hard to believe that Ecolo already managed during the 1st year of its 1st ever Federal coalition participation to favour certain Brussels municipalities with extra grants, which in turn would have "bought" more votes for Ecolo during the 2000 municipal elections. Firstly, as argued above, the parties in power pre-2000 in those municipalities instead of Ecolo at the subsidizing level could have succeeded in claiming the credit for (the public goods provided with) such grants. Reverse causality between grants and municipal coalition participation seems therefore to imply a *negative* relationship between grants and coalition participation: less rather than more grants to a municipality could foster the coming to power of a former opposition party. However, the sign of sum -not shown- of the Ecolo municipal coalition participation coefficient and the Ecolo alignment coefficient is positive (although insignificant) instead of negative in column (2) of table 16, which shows the regression results of grants on alignment of municipalities in which Ecolo had come to power for the 1st time. Secondly, responsibilities of both federal Ecolo ministers – resp. Federal transport policy and Federal energy policy- hardly seem related to the Brussels municipalities. Thirdly, as "local government" mainly belongs to the competencies of the Brussels Regional government, we suspect that the possibilities to steer Federal grants to particular Brussels municipalities are rather limited⁵³. However, possible endogeneity of municipal coalition participation with respect to previous grants is the reason that we do leave out of our instrument the 31st ever coalitions participations of Ecolo as a result of the 2006 municipal elections (Etterbeek, Oudergem and Vorst), as they could have been

⁵⁰ These 9 coalition participations are vital to our IV strategy. If we only use the 2 1st ever municipal coalition participations of Ecolo after the 1994 municipal elections for the construction of our Ecolo IV, the significance of the Ecolo alignment variable disappears from column (3) of table 16 below onwards.

⁵¹ Only in 2004 Ecolo entered for the 1st time the government of the Brussels Region and only in 2009 it entered for the 1st time the government of the French Community. (see table 5)

⁵² Isabelle Durant, Vice-Prime Minister, resp. Olivier Deleuze, secretary of state.

⁵³ When we add as a check to our preferred specification in column (3) of table 16 below the interaction of the Ecolo alignment variable with the 2000 year dummy, this added variable shows an insignificant and even negative coefficient. However, as Ecolo participated only in 2 municipal coalitions before the 2000 municipal elections, this result is not relevant for most of the municipalities we use to construct our Ecolo municipal power IV.

More instructive is that column (8) of table 16 shows that Ecolo participation to the Brussels Regional government –from 2004 onwards- rather than to the Federal government –from 1999 onwards- explains the Ecolo alignment effect.

endogenous to previous grants steered by subsidising governments in which Ecolo was in power⁵⁴.

2) Moreover, the steep increases in vote share that facilitated the 9 new Ecolo coalition participations in 2000 can be argued to be a case in point of previous research that finds that local elections are decided on the basis of national or federal preferences for certain political parties. This is the "tide effect" or "trend effect" that e.g. Allers and Merkus (2013) find for municipalities in the Netherlands. In such cases municipal coalition participation would be exogenous to previous municipal grants received. Table 12 shows this 2000 Ecolo "tide effect" to be more likely than any "tide effects" for other parties. While both at the Federal and the Brussels Regional level, Ecolo more or less doubled its share of the Francophone vote between 1995 and 1999⁵⁵, at the Brussels municipal level, Ecolo also more or less doubled its average share of the vote between 1994 and 2000. Hence the Ecolo 2000 municipal result seems to have benefited from the Ecolo 1999 country-wide results⁵⁶. For the other 3 parties we cannot discern such a tide effect, except possibly for CDH, which may have experienced a decrease in vote share at the 2000 municipal elections because of the loss in vote share at the preceding 1999 Federal and Brussels Regional elections⁵⁷.

| | 1991 Federal | 1994 municipal | 1995 Federal | 1995 Regional | 1999 Federal | 1999 Regional | 2000 municipal |
|-------|--------------|----------------|--------------|---------------|--------------|---------------|----------------|
| MR | 25.9 | 34.2 | 28.5 | 42.6 | 29.0 | 42.7 | 35.6 |
| PS | 36.5 | 18.8 | 32.9 | 26.1 | 29.0 | 19.9 | 20.6 |
| CDH | 20.8 | 14.6 | 21.3 | 11.3 | 16.8 | 9.8 | 11.1 |
| Ecolo | 13.8 | 8.4 | 11.0 | 11.0 | 21.0 | 22.7 | 17.7 |

Table 12: The tide-effect on the Ecolo and CDH 2000 municipal election results in terms of vote shares (%)

Therefore we will instrument the total of 19 Ecolo municipal coalition participations over our sample period (see table 4) with the 11 Ecolo municipal coalition participations that were the 1st ever per

⁵⁴ If we include these 3 2006 cases into the cases of 1st ever Ecolo municipal coalition participations in view of the construction of our Ecolo instrument, the coefficient of our Ecolo alignment variable in our preferred specification shown in column (3) of table 16 is large and positive but just fails to be significant (with a p value of 0.13). The size, sign, and significance of the coefficients of our other variables of interest remain virtually unaltered.

⁵⁵ As vote share evolutions of elections for the Francophone Community were similar to the Federal vote share evolutions, we do not show the former for the sake of brevity. The 1995 and 1999 Federal, Community and Regional elections took place simultaneously.

⁵⁶ Another reason why a "tide effect" seems more likely to have occurred for Ecolo than for other parties is that in municipal elections Ecolo always campaigned under the name "Ecolo" over our sample period, i.e. under the same name as at the subsidising levels. This stands in contrast to other parties. Ecolo never joined joint lists over our sample period –except with the Flemish Green party-, nor did it ever campaign under the – rather neutral- name "LB", i.e. "Liste du Bourgmestre", in contrast to what MR, PS, and CDH sometimes did. ⁵⁷ However, Ganshoren is the only municipality in which CDH disappeared from the governing coalition after the 2000 municipal elections in which CDH suffered a considerable loss of vote share (from 41.5 to 29.3%). Instrumenting CDH municipalities where CDH was no longer part of the coalition after the 2000 municipal elections therefore does not seem a suitable strategy.

municipality in its history⁵⁸. Our instrument for Ecolo looks more solid than our anti-coalition instruments for the other 3 main parties, as the Ecolo instrument is based on more observations, and as the phenomenon of an anti-coalition seems somewhat more complex and prone to judgment than the phenomenon of a 1st ever coalition participation.

6.3. Construction of the regression equation as an alternative to an RDD

In our alternative regression equation our independent variables of interest are the interaction variables "MRmungovt*subsgovt" for MR, "CDHmungovt*subsgovt" for CDH, "ECOLOmungovt*subsgovt" for Ecolo, and "PSmungovt*3" for PS. The resp. "mungovt" variables included as separate regressors are dummies taking value 1 if the party in question is part the municipal coalition. The resp. "subsgovt" variables included as separate regressors are count variables -counting in how many subsidising governments the party simultaneously participated (as in table 5 above)-, hence taking a value between 0 and 3⁵⁹. Our interaction variable in question hence measures per individual party the *degree* of partisan alignment between a municipality and the subsidising government levels. Construction of the alignment variable as a count variable rather than as a dummy is a novelty within the literature on partisan alignment (Bracco e.a., Brollo and Nannicini, Curto-Grau e.a., and Migueis).

There is no need to interact "PSmungovt" with a count variable measuring the number of subsidising governments PS is taking part in, because PS was over our entire sample period simultaneously in power at every subsidising government. Therefore we simply multiply our original "PSmungovt" dummy by 3⁶⁰. Hence our PS interaction of interest only takes values 0 and 3.

Graph 3 below shows descriptive statistics for our constructed 4 interaction variables of interest, i.e. their *means* over time. These means take maximum values of 3 and minimum values of 0. Years in which these alignment variables are able to change are years following an election year, indicated with a vertical bar⁶¹. The only exceptions are small changes in average PS and MR alignment after 2009, following a mid-term coalition change in Jette. As expected, average alignment is highest for PS, 2nd highest for MR, 3rd highest for CDH and lowest for Ecolo.

⁵⁸ Regression results below are very similar if we –instead of the 11 1st ever coalition participations- only consider the 9 1st ever collation participations after the 2000 elections only, i.e. only those presumably resulting from the 1999 "tide effect".

 ⁵⁹ As we do not know the resp. shares of the 3 subsidising levels in total discretionary grants, we simply increase our count variable by 1 for each extra subsidising level at which a particular party is in power.
 ⁶⁰ If we would not multiply "PSmungovt" by 3, the related coefficient would be 3 times as large, and hence not comparable to the coefficients of the variables of interest for the other parties.

⁶¹ Because of the combination of our small sample size and the fact that election years over our sample period follow each other so closely, in particular the election years resulting in major changes in alignment -1999, 2000, 2004, and 2006-, we have not attempted to find out *which* elections drive the party-politically aligned allocation of grants which appears from our regression results below, i.e. *before* which type of elections the aligned allocation of grants is concentrated. In contrast, Brollo and Nannicini (2012) find for Brazil that (years preceding) municipal elections drive their alignment effect, rather than (years preceding) federal elections.

Legend of graph 3: Red vertical bars: 1995, 1999: concurrent Federal, Regional and Community elections

Green vertical bars: 2000, 2006: municipal elections only

Blue vertical bars: 2003, 2007, 2010: Federal elections only

Black vertical bars: 2004, 2009: concurrent Regional and Community elections

Graph 3: Means of partisan alignment of Brussels municipalities for the 4 largest political parties



Sources: Wikipedia, CRISP (2001 and 2007)

We also note considerable variation **over time** in mean alignment for each individual party, except for PS⁶². Unsurprisingly, the years after the 2 municipal elections show large overall changes in mean alignment. But also the year 2000 shows large changes in mean alignment, as it is the year after the concurrent Federal, Community, and Regional elections of 1999. As a result of these elections PS exchanged CDH for MR and Ecolo as coalition partners in the Federal government and CDH for MR in the Brussels Regional government. Also the year 2005 -the year after the Community and Regional elections of 2004- shows large changes. After these elections, PS exchanged MR for CDH and Ecolo in the Brussels Regional government, and MR for CDH in the French Community government.

Note that graph 3 shows *mean* alignment per party, while our interest lies in the alignment of *individual municipalities* per party. Many municipalities experience more variation over time in their alignment than that the variation of the mean shows (but some experience less). Table 13 shows summary statistics for alignment per individual municipality. It confirms that *relatively speaking*, our 57 municipal legislatures differ the least from each other in terms of PS being in power (and hence in

⁶² This rather stable mean PS alignment is due to its constant coalition participation at the subsidising levels. In contrast, table 2 shows considerable variation in PS coalition participation at the municipal level.

terms of PS alignment), and the most in terms of Ecolo alignment⁶³. Overall, it shows that our variables of interest vary considerably (when considering between and over time variation together).

| | Mean | Standard deviation |
|-----------------------|------|--------------------|
| MRmungovt*subsgovt | 1.2 | 1.0 |
| CDHmungovt*subsgovt | 0.8 | 1.2 |
| ECOLOmungovt*subsgovt | 0.3 | 0.5 |
| PSmungovt*3 | 1.9 | 1.5 |

Table 13: Summary statistics of partisan alignment of Brussels municipalities for the 4 largestBrussels political parties

Sources: Wikipedia, CRISP (2001 and 2007)

After the construction of our interaction variables "MRmungovt*subsgovt",

"CDHmungovt*subsgovt", "ECOLOmungovt*subsgovt", and "PSmungovt*3" we can also easily check how grants are distributed over Brussels municipalities according to alignment status. Table 14 shows that the more aligned an Ecolo and a PS municipality is, the more grants it obtains. Strangely, the reverse holds for MR, while there is no clear pattern for CDH. However, the differences in grants obtained according to alignment status are not significant.

Table 14: Summary statistics of grants distribution (in euro per capita) according to alignment ofBrussels municipalities with the 4 largest Brussels political parties

| Alignment variable | Alignment value | Mean | Standard deviation | Observations |
|-----------------------|-----------------|-------|--------------------|--------------|
| MRmungovt*subsgovt | 0 | 251.8 | 127.7 | 77 |
| MRmungovt*subsgovt | 1 | 212.7 | 94.2 | 170 |
| MRmungovt*subsgovt | 2 | | | 0 |
| MRmungovt*subsgovt | 3 | 188.5 | 106.2 | 71 |
| CDHmungovt*subsgovt | 0 | 214.0 | 111.0 | 216 |
| CDHmungovt*subsgovt | 1 | | | 0 |
| CDHmungovt*subsgovt | 2 | 201.6 | 102.5 | 57 |
| CDHmungovt*subsgovt | 3 | 249.3 | 93.2 | 45 |
| ECOLOmungovt*subsgovt | 0 | 213.1 | 108.1 | 231 |
| ECOLOmungovt*subsgovt | 1 | 222.4 | 113.3 | 75 |
| ECOLOmungovt*subsgovt | 2 | 251.1 | 51.0 | 12 |
| ECOLOmungovt*subsgovt | 3 | | | 0 |
| PSmungovt*3 | 0 | 169.4 | 66.3 | 121 |
| PSmungovt*3 | 3 | 245.9 | 117.7 | 197 |
| Total | | 216.7 | 107.8 | 318 |

⁶³ High variation in Ecolo mean alignment is mainly due to high variation in Ecolo coalition participation at the *municipal* level (see table 2).

As a next step we construct our IV. First we construct an anti-coalition dummy variable for each major party except Ecolo, for which we construct a "1st ever in municipal power" dummy. Subsequently we will *interact* both dummies with the abovementioned "mungovt*subsgovt" interaction variables of interest, to obtain our IV⁶⁴.

The above will enable us to instrument "alignment as such" –a presumably endogenous interaction variable- by "alignment after the formation of an anti-coalition only", and for Ecolo by "alignment due to 1^{st} ever municipal power"– presumably exogenous interaction variables.

Hence our alternative IV regression equation estimated in table 16 below can be summarised as follows:

$grantspc_{it} =$

 $\propto_i + \propto_t + \propto_1 subsgovt_{it}$

 $+ \alpha_2 \left(\begin{array}{c} mungovt_{it} + mungovt_{it} * subsgovt_{it} \\ = anticoalition_{it} * mungovt_{it} + anticoalition_{it} * mungovt_{it} * subsgovt_{it} + anticoalition_{it} \end{array} \right)$

 $+ \alpha_{3} \begin{pmatrix} Ecolo \ mungovt_{it} + Ecolo \ mungovt_{it} * Ecolo \ subsgovt_{it} \\ = \ new \ Ecolo \ mungovt_{it} + \ new \ Ecolo \ mungovt_{it} * Ecolo \ subsgovt_{it} \end{pmatrix}$

$$+ \propto_4 X_{it} + \varepsilon_{it}$$

With:

 \propto_i a municipality fixed effect,

 \propto_t a year fixed effect

With $subsgovt_{it}$ the count variable measuring being in power in subsidising governments, taking integer values between 0 and 3, resp. for MR, CDH and Ecolo⁶⁵

⁶⁴ Hence we use mere *subsets* of the original and possibly endogenous independent variables as the IVs. This is an IV strategy similar to the one implemented by Dahlberg et al. (2008) when investigating the flypaper effect for Swedish municipalities. They use a *census-determined* (i.e. partial) change in grants to instrument their endogenous independent variable, i.e. the *actual* (i.e. total) change in grants received by Swedish municipalities.

⁶⁵ We do not develop an IV strategy to take into account possible endogeneity of the "subsgovt" variables. We hence implicitly assume that the "subsgovt" variables are exogenous with respect to past grants received at the municipal level, as opposed to the "mungovt" variables.

This assumption seems reasonable for the Federal government and the French Community government. Indeed, parties may gain power at the Federal and French Community government level only to a limited extent because a number of Brussels municipalities received more grants, due to which subsidising parties would increase their vote share during subsequent Federal and French Community elections. E.g. in the 1999 Federal election only 11 of the 59 Francophone seats in the Federal House of Representatives were provided by the electoral district including the Brussels Region. This reasoning is in line with e.g. Albouy (2013 p. 127), who notes for US Congress that "since party control of the majority is determined nationally, with each state's representative having only a small chance of affecting that control, changes in the majority status of legislators can be considered exogenous at the state level".

But this reasoning of course does not hold for the Brussels Region elections. One can easily imagine that grants steered to Brussels municipalities by the Brussels Regional government could considerably affect the outcome of Brussels Regional elections. However, the composition of the coalition at the Brussels Regional level differed

With:

 $\begin{pmatrix} mungovt_{it} + mungovt_{it} * subsgovt_{it} \\ = anticoalition_{it} * mungovt_{it} + anticoalition_{it} * mungovt_{it} * subsgovt_{it} + anticoalition_{it} \end{pmatrix}$

a sum including as terms:

- the "party in municipal power" dummy instrumented by the "party in municipal power *after the formation of an anti-coalition*" interaction variable, resp. for MR, CDH and PS
- 2) the interaction variable of interest, i.e. the "aligned party in municipal power" interaction variable instrumented by the "aligned party in municipal power *after the formation of an anti-coalition*" triple interaction variable, resp. for MR and CDH; for PS the variable of interest is just the PS "party in municipal power" dummy multiplied by 3

In contrast to our approach, it is striking that neither the "1st generation" nor the "2nd generation" literature on partisan alignment constructs the alignment variable of interest as an interaction variable. Because it does not study the effects of alignment of a lower level government with individual political parties, it also seems rather impossible for the existing literature to construct the alignment variable of interest as an interaction variable. E.g. for the several alignment studies that only consider a leftwing and a rightwing block both at the lower and higher government level, it seems impossible to construct their alignment variable as the interaction of a single dummy measuring being in power of a particular block at the lower government level with another single dummy measuring being in power of a particular block at the higher government level. Exceptions are Migueis (2013 p. 20) and Fiva and Halse (2014 p. 12), who study the effect of a municipality being aligned with individual political parties in Portugal resp. Norway.

However, we believe it is an important value added of our analysis to the literature that we construct alignment as an interaction, additionally including the factors that compose the interaction as separate regressors. Such inclusion is possible as we consider the alignment effects of individual parties. If we would not include these separate regressors, a significant coefficient of our interaction variable may even represent a spurious correlation⁶⁶. (see e.g. Brambor e.a. 2005 p. 66-71 and 79)

⁶⁶ Still, one could argue that our dataset of only312 observations would rather warrant a more parsimonious specification, i.e. without including the factors which compose the interaction as separate regressors.

only after 2 out of the 4 Regional/Community elections comprised by our sample period from the coalition composition at the French Community level (of which the French speaking voters living in Brussels only make up about 20%), i.e. only after the 1995 and after the 2004 Regional/Community elections. (see table 5) In contrast, after the 1999 and 2009 Regional/Community elections the coalition compositions at the Brussels Regional and at the French Community level were the same, suggesting that *Francophone-Belgium wide* considerations determined these coalition compositions, rather than the particular vote shares of the resp. parties in the Brussels Regional elections.

In 2004 however, PS exchanged MR for CDH only at the French Community level, but exchanged MR for CDH *and Ecolo* at the Brussels Region level. But as Ecolo's vote share had been halved in the 2004 Brussels Regional elections compared to the 1999 Brussels Regional elections, the inclusion of Ecolo in the Brussels Regional government could still have been for reasons orthogonal to grants provided to municipalities. Hence the most likely case of endogeneity is the coalition participation of MR after the 1995 elections, which was against the then Francophone-wide trend of PS-CDH coalitions. MR came out of these elections as by far the largest political party in Brussels, so MR's participation in the 1995 Brussels Region's coalition may have been a consequence of past grants steered by MR to Brussels municipalities.

Also the inclusion of alignment variables for multiple *individual parties* into one single regression is exceptional compared to the existing "2nd generation" empirical literature on partisan alignment (Bracco e.a., Brollo and Nannicini, Curto-Grau e.a., and Migueis)⁶⁷.

With:

$\begin{pmatrix} Ecolo mungovt_{it} + Ecolo mungovt_{it} * Ecolo subsgovt_{it} \\ = new Ecolo mungovt_{it} + new Ecolo mungovt_{it} * Ecolo subsgovt_{it} \end{pmatrix}$

a sum including as terms:

- 1) the "Ecolo in municipal power" dummy instrumented by the "Ecolo *new* in municipal power" interaction variable
- the "Ecolo aligned party in municipal power" interaction variable instrumented by the "Ecolo aligned party *new* in municipal power" count variable

⁶⁷ This inclusion seems feasible as the alignment variables for our 4 major parties are not correlated, as opposed to what could have been expected. The highest correlation is a negative correlation between MR alignment and CDH alignment of -0.15.

Moreover, we do not find any statistically significant relationship between grants and partisan alignment *when considering coalitions rather than individual political parties*. This contrasts with the finding of Brollo and Nannicini (2012), who find a stronger aligned allocation of grants when considering alignment of a Brazilian mayor with the President's *coalition* than with the President's *party*.

To this effect, we have operationalised our independent variables of interest as the degree of alignment –i.e. the degree of similarity- between the 5 kinds of *coalitions* that have been in place at the various subsidising levels over our sample period (see table 5) and the various municipal coalitions. (This approach is similar to the one of Rodden (2005 p. 201-202) for German states.)

Alternatively, we have *weighted alignment of individual parties for coalition composition*, i.e. we have increased the extent of alignment in case of a single party municipal government, and we have decreased it with the number of other parties that are part of the municipal coalition.

As a third alternative, we have simply added up our 4 municipal coalition participation dummies (one dummy per party), after which we have added up our 3 subsidising level being in power count variables (one count variable per major party), and increased this sum with 3 to take into account the constant presence of PS at all subsidising levels. After multiplying these 2 resulting factors, we have obtained **one single alignment variable for all 4 parties taken together**.

However, in none of these 3 cases a statistically significant relationship shows up, possibly because these 3 alternative alignment variables –given their more aggregate nature- show less variation over time than that alignment per individual political party does. Another cause of such statistical insignificance may be that – rather than governing **coalitions- individual parties** in power would be relevant actors in the "aligned allocation of grants game" in the Brussels Region.

Moreover, in none of these 3 cases we were able to come up with an IV approach. As a fourth alternative, we therefore have measured the degree of alignment of a municipal coalition according to the alignment status of the largest party in this coalition only. As a result, we had to drop the Ecolo political variables from our regression equation, as Ecolo is only the largest party in 1 municipality over our sample period. In the regression results of this fourth approach, again no single statistically significant relationship shows up. We have not tested the alignment hypothesis according to the way Arulampalam e.a. (2009) operationalise alignment, i.e. rather crudely as a simple dummy taking the value of 1 if an Indian state has at least one party in power in common with the centre, i.e. irrespective of the number of parties in common.

Remarkably, such a specification makes all coefficients of interest in our regression analysis below turn insignificant, with the PS coefficient just failing to be significant with a p value of 0.13 as a result of the IV regression in first differences in column (3) of table 16 below. This is in line with the finding of Brambor e.a. (2005 p. 79) that omitting constitutive factors of the interaction variable as separate regressors may either overestimate or underestimate the coefficient of the interaction variable.

And with X_{it} a set of financial, demographic and political control variables

Regression results for our alternative strategy are shown in a stepwise way by means of tables 15 and 16 below.

7. Regression results

7.1. Fixed-effects within regression results

As a start, table 15 presents the simple OLS Fixed Effects Within (FEWI) regression results of grants on alignment. All regressions reported in table 15 include municipality and year dummies, the estimates of which we do not report, for reasons of space.

Column (1): FEWI regression

- column (1) shows the regression results without including any control for endogeneity of our alignment variables of interest (except that we included year and municipality dummies); of the 4 alignment variables (indicated in bold), the CDH and Ecolo coefficients of interest are positive and almost significant (resp. p values of 0.11 and 0.15), but the MR coefficient of interest is very negative and significant (and the PS variable is also negative, but small and statistically insignificant)
- the coefficient of the MR variable of interest should be interpreted as a grants *de*crease of 31 real euros per capita and per year for every municipality in which MR is part of the coalition, when MR joins a coalition at a subsidising government level⁶⁸; this result for MR does not change markedly in all other regression specifications of which the results are shown in table 15; the negative sign of the MR coefficient of interest is hard to interpret; one possibility is that a *decrease* in grants to municipalities in which MR is not part of the coalition, leads to MR becoming part of the coalition; however, the negative sign persists also in most of our IV analysis below, which attempts to isolate the *causal effect of partisan alignment on grants*⁶⁹

⁶⁸ Alternatively, the coefficient of the MR variable of interest could be interpreted as a decrease of 31 real euros per capita and per year in grants that are allocated by a subsidising government level at which MR is part of the coalition, to a municipality once MR joins the coalition in that municipality.

⁶⁹ The negative sign of the MR coefficient may be related to the fact that MR has been a –sometimes uneasyalliance of 2 parties, rather than a single party, which may have weakened its alignment effect. As noted above, over our sample period some municipal legislatures were characterized by PRL being part of the coalition and FDF being part of the opposition, or vice versa. Alternatively, it is sometimes said of Belgian center-right parties such as PRL and MR that they lack the organizational strength of the centre and centre-left parties. The degree of political professionalism seems to be higher in rather leftwing parties. E.g. already within PRL taken separately, there happened to be rather more internal conflicts and breakaway movements in several municipalities over our sample period than within the other 3 parties. However, this could be an explanation for an insignificant coefficient rather than for a significantly negative coefficient. Another possible explanation for the negative sign is suggested by Baskaran and Hessami (2014). In their study of the effect of partisan alignment on intergovernmental grants to municipalities in the German state of Hesse, also Baskaran and Hessami (2014) similarly find that rightwing state governments favour unaligned municipalities at the expense of aligned municipalities. Their explanation is that in their panel only few municipalities are aligned with rightwing state governments, due to which these state governments would
Columns (2) and (3): FEWI regression with financial and demographic, resp. also political controls

- column (2) additionally includes a number of rather standard financial and economicdemographic controls at the municipal level, similarly to the controls used by e.g. Bracco e.a. (2012 p. 18); in all regressions reported in the remainder of this paper, the 3 economicdemographic variables included are "unemployedpc", "under18pc", and "over65pc", i.e. the number of unemployed, young, and elderly expressed per 100 inhabitants, and the 3 financial variables are "incomepc", "debtpc", and "taxrevenuepc", i.e. private income, municipal debt and municipal tax revenues expressed in 2011 euros per capita⁷⁰
- remarkably, none of the added financial and demographic controls appears significant, nor do they considerably change the size and significance of our variables of interest; this could be due to the discretionary nature of the grants considered, i.e. the special purposes for which they are meant –e.g. urban renewal- could make their attribution rather unrelated to our control variables; alternatively, it could mean that political and tactical considerations dominate needs considerations with respect to the allocation of discretionary grants; the low significance of our control variables, also compared to our variables of interest, persists in our IV analysis (see below)
- column (3) additionally includes controls for the resp. municipal vote shares "munvote"⁷¹; effectively, partisan alignment could be endogenous with respect to vote share: a particular party could have gained power at the municipal level thanks to the popularity of its local candidates, who provided their party with a high vote share, possibly because they managed to attract many grants, possibly for other reasons; the interactions of "munvote" and "subsgovt" are meant to check if extra grants are rather caused by incumbents at the subsidising levels favouring municipalities where they obtain high vote shares during municipal elections (the standard partisan hypothesis)

http://www.ibzdgip.fgov.be/result/nl/main.html and

http://www.bisa.irisnet.be/themas/verkiezingen#.UqXcgDsjJsQ.

have to "buy off" the support of unaligned municipalities for general policy with more discretionary grants (possibly reserving other kind of benefits than discretionary grants for aligned municipalities). Such an explanation may apply to the situation of the Brussels municipalities too: while table 4 shows that MR is the party that participated most in Brussels municipal coalitions (45 times), the 3 leftwing and centre (or centre-left) parties *taken together* participated *more often* (80 times). However, as we could not detect an ideological pattern in these 4 parties' coalition preferences (see table 7), Baskaran and Hessami's explanation may a priori hold for *any* of our 4 parties, as any of them participated only in a minority of the coalitions over our sample period.

⁷⁰ Unemployment data have been obtained from the Federal Ministry of Employment; demographic and income data have been obtained from Statistics Belgium (<u>www.statbel.fgov.be</u>); debt and tax revenue data have been obtained from Belfius.

When expressing all financial, economic and demographic variables in absolute amounts, rather than per capita, sign and significance of our coefficients of interest in the regressions reported below are not affected.⁷¹ In what follows, data on vote shares and vote margins have been obtained from

Table 15: FEWI regression of discretionary grants (in 2011 euros per capita) on partisan alignment⁷²

| | (1) Grantspc FE | (2) Grantspc FE, financial and demographic controls | (3) Grantspc FE, financial, demographic, and political controls |
|------------------------|--------------------------------|--|--|
| MRmungovt | 47.90 (29.07) | 43.45 [*] (24.87) | 26.59 (21.29) |
| MRsubsgovt | -35.26 (28.24) | 42.44 [*] (21.07) | 0 (.) |
| MRmungovt* subsgovt | -30.78 [*] (14.78) | -30.97** (12.75) | -26.58** (12.49) |
| CDHmungovt | -23.59 (19.57) | -21.88 (17.75) | -33.14 (22.01) |
| CDHsubsgovt | -39.19 [*] (19.60) | 6.007 (27.81) | -58.27 ^{**} (26.05) |
| CDHmungovt*subsgovt | 12.09 (7.266) | 11.19 (6.912) | 12.73 [*] (6.399) |
| ECOLOmungovt | -26.74 (21.64) | -26.99 (23.11) | -32.97 (26.36) |
| ECOLOsubsgovt | 34.57** (13.24) | 5.313 (30.71) | -17.30 (28.71) |
| ECOLOmungovt*subsgovt | 28.97 (19.31) | 29.66 (19.12) | 25.33 (19.89) |
| PSmungovt*3 | -2.378 (4.206) | -1.830 (4.299) | -2.481 (5.211) |
| incomepc | | 0.0209 (0.0234) | 0.0125 (0.0207) |
| unemployedpc | | 16.12 (20.99) | 14.16 (21.05) |
| under18pc | | 8.689 (7.643) | 12.86 (8.684) |
| over65pc | | -1.093 (6.468) | -0.971 (7.371) |
| debtpc | | 0.00818 (0.0159) | 0.0111 (0.0143) |
| taxrevenuepc | | 0.0366 (0.0689) | 0.0496 (0.0633) |
| MRmunvote | | | 1.104 (1.148) |
| CDHmunvote | | | -2.176 [*] (1.143) |
| ECOLOmunvote | | | -5.761 (4.292) |
| PSmunvote | | | -2.044 (1.226) |
| MRmunvote*subsgovt | | | -0.391 (0.273) |
| CDHmunvote*subsgovt | | | 0.396 (0.393) |
| ECOLOmunvote*subsgovt | | | 3.795 (2.221) |
| N | 318 | 312 | 312 |

Notes: Robust standard errors clustered at the municipality level in parentheses Municipality and year dummies included * p < 0.10, ** p < 0.05, *** p < 0.01

 72 A coefficient of zero means that the variable in question has been dropped because of collinearity.

- again, hardly any of the added control variables appears significant, and they do not appear to make our regression results more or less supportive of the party-politically aligned grants allocation hypothesis than the results in column (1), except that after adding the political controls the (positive) coefficient of the CDH variable of interest becomes significant (p value of 0.06), and the Ecolo variable of interest becomes less significant (p value of 0.22)⁷³
- hence on the basis of our FEWI regression analysis, we would conclude that evidence for the partisan alignment hypothesis is weak, with even a –hard to explain- significantly negative association between MR alignment and grants, and –rather surprisingly- the 2 smaller parties CDH and Ecolo showing the most consistently positive association between alignment and grants

7.2. IV regression results, with alignment after anti-coalitions and 1st ever Ecolo coalition participation only

As a 2nd step, we use alignment status after the formation of anti-coalition, and –for Ecoloalignment status after 1st ever coalition participations as an IV in a regression of grants on overall alignment status. Table 16 presents the results. In contrast to table 15 and for reasons of space, it does not show the –mostly insignificant- coefficients of the economic, demographic and financial control variables, although they are included in every specification of which table 16 shows the results.

⁷³ In this and all following specifications where we control for municipal vote *shares*, results are very similar if we instead control for municipal vote *margins* –i.e. the vote differences between the party in question and the largest party in absolute value. The variant of the standard partisan hypothesis underlying the use of vote margin as controls states that parties in power at the subsidising levels would favour municipalities where their municipal vote difference with the largest party -or in case they themselves are the largest party: with the runner-up- is small.

Table 16: IV regression of grants on alignment, with anti-coalitions and 1st Ecolo coalitions as IVs

| | (1) Grantspc | (2) Grantspc | (3) D grantspc | (4) D grantspc | (5) D grantspc | (6) D grantspc | (7) D grantspc | (8) D grantspc |
|--|---------------------------------|--|--------------------------------|---------------------------------|---------------------------------|--------------------------------|-------------------------------|----------------------------------|
| | Grantspe | FEWI for subset | IV again, but | Being in | Being in | Being in | Separating | Distinguishing Ecolo |
| | | of anticoalitions and 1 st Ecolo | now including | power weighted for | power weighted for | power weighted for | coalitions in which Ecolo | alignment with Regional from |
| | | coalitions only | LDV as a regressor | municipal vote <i>share</i> | municipal vote <i>margin</i> | municipal power index | replaced MR | alignment with Federal level |
| (D.)L.grantspc | | | 0.333 (0.347) | 0.533** (0.257) | 0.427 (0.332) | 0.733** (0.340) | 0.249 (0.549) | 0.364 (0.268) |
| (D.)MRmungovt | -83.18 (84.29) | 35.60 (42.14) | 99.40 (201.3) | 6.094 (4.535) | 2.274 (1.417) | 1.689 (1.877) | 136.6 (227.6) | 114.9 (224.2) |
| (D.)MRsubsgovt | -32.99 (40.00) | 15.73 (37.17) | 113.6 [*] (63.01) | 3.146 (45.21) | 86.92 (94.46) | 32.24 (29.97) | 111.6 (84.24) | 49.19 (170.6) |
| (D.)MRmungovt*subsgovt | 36.04 (46.07) | 11.23 (9.665) | -150.2 (130.6) | -2.645 (2.495) | -1.319 (1.106) | -0.326 (1.005) | -130.6 (180.4) | -117.7 (130.1) |
| (D.)CDHmungovt | 16.02 (83.07) | 0 (.) | -303.2 (276.0) | -0.323 (4.782) | -1.424 (2.260) | 1.579 (2.002) | -252.1 (394.3) | -214.9 (227.3) |
| (D.)CDHsubsgovt | -75.78 ^{**} (38.10) | -54.72 (42.08) | -49.84 (56.22) | 7.435 (17.91) | 96.68 (67.10) | 3.158 (22.77) | -46.29 (68.70) | -118.8 ^{**} (57.50) |
| (D.)CDHmungovt*subsgovt | 2.858 (30.51) | -6.709 (9.044) | 123.4 (106.7) | 2.942 (2.563) | 0.968 (1.044) | 0.476 (1.168) | 109.3 (155.3) | 112.2 (120.5) |
| (D.)ECOLOmungovt | -73.29** (29.45) | -13.61 (25.74) | -202.8*** (64.24) | -10.75*** (3.800) | -2.043** (0.838) | -0.854 (0.889) | -156.8*** (54.81) | -187.8 ^{***} (55.41) |
| (D.)ECOLOsubsgovt | -28.38 (32.76) | -10.86 (30.08) | -47.82 (64.22) | 13.88 (58.29) | 124.7 (81.39) | -18.26 (72.38) | -16.68 (47.09) | |
| D.ECOLOfedgovt | | | | | | | | -87.16 (118.8) |
| D.ECOLOreggovt | | | | | | | | -113.2 (222.8) |
| D.ECOLOcommgovt | | | | | | | | -134.0 (163.3) |
| (D.)ECOLOmungovt*subsgovt | 56.65*** (21.61) | 31.40 (22.35) | 95.80 ^{**} (44.31) | 8.334 ^{***} (3.141) | 1.420 [*] (0.752) | 0.904 [*] (0.542) | 67.76 [*] (38.09) | |
| D.ECOLOmungovt*subsgovt *punishedmungovt | | | | | | | 121.2 [*] (69.65) | |
| D.punishedmungovt | | | | | | | -42.31 (138.4) | |
| D.ECOLOmungovt*fedgovt | | | | | | | | 54.14 (43.82) |
| D.ECOLOmungovt*reggovt | | | | | | | | 141.8 [*] (76.07) |
| D.ECOLOmungovt*commgovt | | | | | | | | 111.5 (608.9) |
| (D.)PSmungovt*3 | 13.05** (6.398) | 70.72 ^{****} (20.39) | 19.82 (12.48) | 1.458 [*] (0.783) | 0.284 [*] (0.163) | 0.676 ^{**} (0.306) | 13.90 (19.94) | 21.19 ^{**} (10.62) |
| (D.)MRmunvote | 3.740 ^{**} (1.890) | 1.955 (1.127) | -2.436 (6.020) | -2.561 (4.738) | -2.344 (3.442) | 0.632 (3.695) | -1.860 (8.568) | -1.918 (5.127) |
| (D.)CDHmunvote | -1.020 (1.468) | -2.131 [*] (1.223) | -4.248 (7.245) | 2.418 (2.582) | 1.959 (2.241) | 2.509 (2.894) | -3.361 (8.434) | -0.996 (5.069) |
| (D.)ECOLOmunvote | -5.922 (4.976) | -10.89 ^{**} (4.491) | -15.30 (13.36) | 4.977 (6.880) | 1.591 (3.515) | -0.139 (9.084) | -13.08 (17.41) | -12.53 (12.03) |
| (D.)PSmunvote | -3.109 (2.054) | -1.224 (1.121) | -9.479 (9.052) | -3.733 (3.553) | 0.792 (3.163) | 1.696 (3.576) | -6.759 (8.085) | -5.086 (6.413) |
| (D.)MRmunvote*subsgovt | -0.964 [*] (0.509) | -0.615 ^{**} (0.220) | 0.185 (1.005) | 2.411 (2.820) | 0.00683 (0.853) | 0.137 (1.822) | 0.0760 (1.166) | -0.204 (0.777) |
| (D.)CDHmunvote*subsgovt | 0.614 (0.469) | 0.591 ^{**} (0.272) | -0.617 (0.866) | -2.383 (1.840) | -1.842 (1.279) | -1.056 (2.107) | -0.304 (0.804) | -0.798 (0.802) |
| (D.)ECOLOmunvote*subsgovt | 4.293 ^{**} (2.005) | 4.865 ^{**} (1.957) | 4.443 (3.685) | -0.377 (3.715) | -1.426 (1.343) | 4.756 (4.566) | 3.332 (2.735) | 4.462 (6.479) |
| N | 312 | 312 | 255 | 255 | 255 | 255 | 255 | 255 |
| Hansen J statistic (p value) | 0.05 | | 0.93 | 0.71 | 0.68 | 0.24 | 0.83 | 0.64 |
| r-test of joint significance of IVs in 1 st stage (p values) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Number of IVs | Q | | 11 | 11 | 11 | 11 | 11 | 11 |

Notes: Robust standard errors clustered at the municipality level in parentheses; clustering at the municipality-legislature level generates highly similar regression results; economic, demographic, and financial controls included; year dummies included; municipality dummies included only in columns (1) and (2); p < 0.01, **p < 0.05, ***p < 0.01

Column (1): IV regression, with alignment after the formation of an anti-coalition and after 1st ever Ecolo municipal coalition participation as IVs

- we instrument –as explained above- the –presumably endogenous- "mungovt" variables of table 15 with the –arguably exogenous- "anti-coalition" - "mungovt" resp.
 "newECOLOmungovt" variables defined above
- likewise we instrument –as explained above- our actual variables of interest, i.e. the presumably endogenous- "mungovt"- "subsgovt" interaction variables, with the –arguably exogenous- " anti-coalition" "mungovt" "subsgovt", resp. "newECOLOmungovt"- "subsgovt" interaction variables defined above; we also include the resp. anti-coalition dummies measuring if a party ended up into the formation of an anti-coalition or not, into our set of excluded instruments, because whenever we include an interaction variable as a regressor, we also should include the components of the interaction variable as separate regressors⁷⁴
- the change in our coefficients of interest compared to the FEWI regression outcomes of table 15 is considerable:
 - \circ $\;$ the coefficient for the variable of interest for MR turns positive and insignificant
 - the coefficient of the CDH variable of interest remains positive, but turns insignificant
 - the coefficients of the PS and Ecolo variables of interest turn significant at the 0.01, resp. 0.05 level with the expected sign, and their magnitudes increase considerably; however the size of the Ecolo coefficient is far larger than the size of the PS coefficient, which is surprising given the large positive difference between PS and Ecolo municipal vote share as well as between PS and Ecolo coalition participation at all municipality-subsidising levels over our sample period
- all coefficients of interest in column (1) are larger than the FEWI coefficients in table 15, except the CDH coefficient; this is surprising, as we would expect OLS estimates to be upwardly biased, mainly because of simultaneity, i.e. reverse causality between grants and being in power; however, the reverse causality bias of our above FEWI analysis may be small given the even larger variation in our independent variables of interest compared to the variation in our dependent variable of interest (as can be concluded from a comparison of standard deviations of table 6 and table 13)
- moreover the higher coefficients resulting from our IV regression could be explained by the nature of our IVs⁷⁵; also, although alignment after an anti-coalition or because of a 1st ever

⁷⁴ As shown at the bottom of table 16, the number of excluded instruments is nevertheless only 9 and not 10. There are 3 excluded instruments for each party except for Ecolo, for which there are only 2 excluded instruments, which makes 10 in total. But the PS anti-coalition dummy is dropped because of collinearity. Similarly, when instrumenting the LDV with its 2nd and 3rd lag from column (3) onwards, the number of excluded instrument does not increase to 12, but to 11.

⁷⁵ An additional explanation could be the ability of IV estimation to eliminate measurement error typical of OLS estimation. Such measurement error biases OLS coefficients towards zero.

In their regression of discretionary grants to Canadian electoral districts on political-economy variables, also Milligan and Smart (2005 p. 15-16) obtain higher coefficients for their political variables of interest when instrumenting them. They are equally puzzled when trying to explain this result. Similarly, as said above, when refining the Solé-Ollé and Sorribas-Navarro 2008 paper by replacing an OLS design with a (fuzzy) RDD –which implies performing an IV regression-, Curto-Grau e.a. (2012) find an even stronger positive effect of partypolitical alignment on grants received by municipal governments than in their 2008 study.

municipal coalition participation can be argued to be exogenous to previous grants received, subsidising governments may ex post particularly favour "anti-coalition municipalities" and "1st ever" municipalities with extra grants; otherwise stated, *exogeneity* of our instruments does not guarantee full *comparability* of the observations on which our instruments are based; the coefficients of interest in column (1) may hence be an overestimation⁷⁶

- the interpretation of the PS resp. Ecolo coefficients of interest is that PS resp. Ecolo –when having gained power at one of the subsidising government levels- steer extra grants to any Brussels municipality in which they were already in power, and that PS resp. Ecolo –when having gained power in a Brussels municipality-receive extra grants from those subsidising governments at which level they were already in power; this estimation result hence provides support for the partisan alignment hypothesis rather than for the standard partisan hypothesis: as the PS vote share variable has an insignificant coefficient, it is the fact that the **PS party** is in power at the municipal level that determines if the PS party in power at the subsidising levels steers extra grants, rather than the presence of many PS voters; still otherwise stated: the presence of many PS voters does not seem to be sufficiently reassuring for PS to steer extra grants, because if the municipality was non-aligned in spite of many sympathetic voters, PS would e.g. fear that either the extra grants may not reach those voters or that the party (parties) in power at the municipal level may claim the credit for the extra grants rather than PS at the subsidising level (who caused the extra grants to be provided in the first place); because our dependent variable concerns -cruciallyintergovernmental grants, PS -when in power at the subsidising level(s)- is only reassured of "being awarded the credit" if PS is also in power in the municipality in question
- calculating the average alignment effect by summing up the 4 alignment coefficients of column (3) –after weighting each of them for the number of subsidising governments participated in- does not seem meaningful to us, as in very few municipalities all 4 major parties are part of the coalition; neither does such a sum after additionally weighting for relative frequency of municipal coalition participation seem to make sense, as the sum of total municipal coalition participations by our 4 parties is of course larger than our sample
- therefore, to be able to compare with alignment effects found in the partisan alignment literature, we calculate our average effect of partisan alignment as follows: for Ecolo we take the sum of its alignment coefficient (as shown in column (1)) and of that same alignment coefficient multiplied by 2, after weighting each of these 2 terms with the relative frequency of Ecolo being in power at 1 subsidising level, resp. 2 subsidising levels, i.e. {56.7*(170/312)}+{(56.7*2)*(38/312)}; this sum amounts to 44.8 euros (with a standard deviation of 17.4 euros and a p value of 0.01), or 20.7% of the annual per capita grant amount of 216.7 real euros of an average municipality (see table 6); for PS the average alignment effect is obviously 13.1 euros, or 6.0% of the annual average per capita grant amount of 216.7 real euros
- these amounts compare to
 - an increase of 19% in targetable transfers that Migueis (2013) finds due to municipal-Central government alignment in Portugal

⁷⁶ However, Folke (2013 p. 7) explains that the direction of the –downward or upward- bias in OLS estimations of a policy outcome variable on a political variable is hard to predict, because of the complexity of the entanglement of political variables and factors correlated with these variables, while both types of variables may have policy effects

- an increase of 26 euros per capita of overall intergovernmental grants Bracco e.a.
 (2013) find due to municipal-Central government alignment in Italy
- an increase of between 26 to 41% in Federal infrastructure transfers Brollo and Nannicini (2012) find due to municipal-Federal government alignment –more in particular between the mayor and the President- in Brazil
- an increase of 16% in discretionary transfers Arulampalam e.a. (2009) find due to state-centre alignment in India –provided that a state is a swing state-
- and an increase of no less than 83% in earmarked capital transfers Curto-Grau e.a.
 (2012) find due to municipal-Regional alignment in Spain
- the preceding interpretation of the coefficients of the interaction variables of interest assumes that the subsidising levels rather than the municipal levels are the "acting" levels within "the game of aligned allocation of grants"; however, as argued already above, the *municipalities themselves* could be the major player, rather than the subsidising governments; within the Brussels Region, municipalities and their mayors are reported to be powerful compared to the Brussels Regional government, and over our sample period several ministers at the Regional level have apparently even preferred to give up their position to become mayor of a -in some cases even small- Brussels municipality⁷⁷; in this respect Cattoir e.a. (2009 p. 32) criticise discretionary grants to Brussels municipalities for the reason that in Brussels a relatively large number of municipal politicians are simultaneously a member of the parliament and/or of the government of the Brussels Region⁷⁸, thus increasing their influence over the allocation of discretionary grants to their own municipality; moreover, as opposed to e.g. Norwegian municipal politicians lobbying the central government as analysed by Sørensen (2003), Brussels municipal politicians are geographically very close to all their subsidising governments; indeed, the Brussels Region hosts the governments of -evidently- the Brussels Region, and also of the Belgian Federation as well as of the French (and of the Flemish) Community
- however we should draw a different conclusion from the PS coefficient of interest obtained in column (1), because we are not able to distinguish any subsidising-level-induced effect of a change in PS alignment; indeed, over our sample period, PS has always been in power at every single of the 3 –fully or partly- Francophone subsidising government levels; for PS the conclusion should perhaps simply be that municipalities that include PS in their coalition obtain more grants, whether PS is also in power at the subsidising level(s) or not; this could be because PS could simply (be able to) attract staff at the municipal level that is particularly able to obtain grants from the various subsidising levels, or particularly motivated to do so

⁷⁷ A peculiar illustration is the case of François-Xavier de Donnéa, a leading MR politician in the Brussels Region over our sample period and mayor of the City of Brussels from 1994 until 2000, who was "consolated" with the post of Prime Minister of the Brussels Region after having lost the post of mayor of the City of Brussels due to an anti-coalition formed by PS in 2000.

⁷⁸ This is also due to the combination of Brussels' small size –consisting of 19 municipalities only- and it being a full-fledged Region of Belgium. It has Regional –as well as municipal- competencies and institutions very similar to the 2 larger Regions of Belgium (Flanders and Wallonia). The entanglement between the government of the Brussels Region and the Brussels municipal governments has recently also been criticised in a book about the functioning of PS in Brussels, itself written by a formerly leading PS politician in Francophone Belgium, Merry Hermanus (2013 p. 372-373).

because of the preferences of its voters⁷⁹; in other words: the PS coefficient of interest may not be a correct measure of the effect of partisan *alignment*, but rather a measure of a different kind of politicisation of grant allocation⁸⁰

- also the *"mungovt" component* of our MR, CDH, and Ecolo "mungovt" "subsgovt" interaction variables included as a separate regressor can be interpreted: the coefficient of the "mungovt" variables for those 3 parties shows the effect of entering into a municipal coalition on grants *in cases where there is no alignment at all* with the subsidising levels; the expectation is that the "mungovt" coefficients be negative, as a party in power at a subsidising level seems to have an incentive to direct grants *away* from municipalities in which it is not in power; hence the "mungovt" coefficient is confirmed by most coefficients concerned in table 16 except for MR; however, if some parties when in municipal power were particularly skilful or motivated compared to other parties to *attract* grants even from a "non-friendly" subsidising government, we would expect a *positive* coefficient of the "mungovt" variable of this party
- the "ECOLOmungovt" coefficients in the resp. columns of table 16 appear exceptional, as they are the only ones that are *significantly* negative in almost every column; this implies that when a municipality takes Ecolo into its coalition while Ecolo is not in power at any of the subsidising levels, it receives significantly *less* grants compared to when this municipality would not have taken Ecolo into its coalition⁸¹; this effect can be interpreted as lower Ecolo skills or motivation to attract grants when in municipal power –possibly due to Ecolo's inexperience, a factor which may be accentuated by the fact that we instrument Ecolo municipal coalition participations with *first ever* Ecolo municipal coalition participations **only**³²-; alternatively, this effect can be interpreted as some sort of "punishment" of municipalities in which Ecolo is in power by subsidising levels that are "not friendly with Ecolo"; one explanation of such "punishment" could be that of our 4 parties Ecolo is the youngest political party and is perceived the "non-traditional" party of the 4 parties considered; the 3 other political parties may view Ecolo as an "intruder", that threatens their "share of the market for votes", and against which a decrease in discretionary grants may be meant as a "barrier to entry"; the size of the "ECOLOmungovt" coefficients is even larger than the size of our Ecolo coefficients of interest⁸³

⁷⁹ Such a more modest conclusion might also fit the study of Curto-Grau e.a. (2012). It studies the effects of party-political alignment between Spanish Regions and municipalities only during the 2000-2007 period. It does not make clear if there has been considerable variation with respect to party-political government composition at the Regional level over this period. In contrast, Brollo and Nannicini (2012) and Migueis (2013) do make clear that their sample periods experience considerable variation with respect to party-political government composition at the Brazilian Federal, resp. the Portuguese Central level.

⁸⁰ Alternatively, one could argue that it is precisely the constant hold on power of PS in any subsidizing government since 1988 that causes the significantly positive PS coefficient of interest in column (1). This coefficient could mean that PS has gained strong knowledge with respect to the tactical –i.e. partisan-allocation of discretionary grants to municipalities.

⁸¹ In case the "ECOLOmungovt" variable would not be exogenous however, its negative coefficient could mean that a *decrease* in previous grants to the average municipality *increases* the chances of participation of Ecolo into the current municipal coalition.

⁸² Another possibility could be different ethical standards of Ecolo politicians, as Ecolo is also known for its objectives concerning "a more clean political culture".

⁸³ This fact may even have contributed to the loss in Ecolo vote share during the 2006 municipal elections (from on average 17.7 to 13.3%, see table 3).

although the "mungovt" variables are not our primary variables of interest, they may measure a kind of "reverse alignment"; also they enable us to calculate -rather than the alignment effect *in isolation*- the *average effect of a municipality "taking a particular party* into its coalition" on grants received (although this effect is not the primary interest of our study); the calculation of this effect is shown in table 17, and follows the method suggested by Brambor e.a. (2005 p. 72-74): in column (1) of table 17, we simply repeat the regression results for the "ECOLOmungovt" coefficient in column (1) of table 16; in columns (2) and (3) of table 17 we calculate the average effect of taking Ecolo in one's municipal coalition if -in contrast to column (1)- Ecolo is also present in 1 resp. 2 subsidising government(s) (over our sample period Ecolo was never in power at the 3 subsidising levels simultaneously); this latter effect is the sum of the "ECOLOmungovt" and "ECOLOsubsgovt*mungovt" coefficients of column (1) in table 16 -with the "ECOLOsubsgovt*mungovt" coefficients multiplied by 2 in column (3) of table 17; finally, in column (4) we obtain the average effect of a municipality "taking Ecolo into its coalition" on grants received, by summing up the coefficients of columns (1) until (3) after weighting each term by its sample share (bottom row in table 17); the conclusion is that this average effect is negative but insignificant, so that "on a net basis" municipalities in which Ecolo is in power do not receive more or less grants, as the subsidising level(s) at which Ecolo is in power manages to compensate for the loss of grants Ecolo municipalities experience whenever Ecolo is not in power at any of the subsidising levels⁸⁴

| Table 17: Average effect of a municipality taking Ecolo into its coalition on grants received over |
|--|
| our sample period |

| | (0) average alignment effect in isolation | (1) total effect if "ECOLOsubsgovt" = 0 | (2) total effect if "ECOLOsubsgovt" = 1 | (3) total effect if "ECOLOsubsgovt" = 2 | (4) average total effect |
|-----------------------------|--|--|--|--|-----------------------------|
| coefficien t standard | 44.8 | -73.29 | -14.1 | 42.7 | -26.2 |
| error | 17.4 | 29.45 | 29.6 | 39 | 29.4 |
| p value sample | 0.01 | 0.04 | 0.63 | 0.27 | 0.37 |
| share | 312/312 | 104/312 | 170/312 | 38/312 | 312/312 |

- at first sight, also the coefficients of the *separate "subsgovt" component* of our MR, CDH, and Ecolo "mungovt" – "subsgovt" interaction variables included as a separate regressor seem fit for interpretation: these coefficients seem to show the effect of a particular party entering a coalition at some subsidising government level on grants to municipalities in which this party is *not* part of the coalition; i.e. at first sight these coefficients seem to be an indicator of parties' ability or willingness to "punish" non-aligned municipalities with less grants; however, our 3 "subsgovt" count variables are collinear with one or more of our year dummies included into our regression specification; this is because –evidently- all of our "subgovt" count variables only vary over time –i.e. they do not vary at all between municipalities-, similar to our time dummies; as a result a number of our time dummies are dropped in each of the regression outcomes presented in table 16⁸⁵; hence, the 3 "subsgovt"

⁸⁴ When repeating this calculation for MR and CDH the coefficients in all columns of table 17 are insignificant. ⁸⁵ The dropped time dummies are evidently no longer being dropped if we no longer include the 3 "subsgovt" count variables as separate regressors into our specification. The latter –evidently- does not change the value of any of our estimated coefficients of interest.

count variables may pick up **other** influences on grants apart from the effect of a change in coalition participation of a particular party at the subsidising levels; however, the fact that we cannot interpret the coefficients of our "subsgovt" variables should **not** prevent us from interpreting the coefficients of our actual variables of interest, i.e. of the alignment interaction variables, as these interaction variables **do** consist of a variable that varies between municipalities (i.e. our "mungovt" variable)

- all our anti-coalition instruments are relevant; this is noticeable from the 1st stage of the IV regression –not shown in table 16- in which the p values of their (positive) coefficients are 0.000, as well as the p values of the F-tests of joint significance of the IVs -shown at the bottom of table 16-; however the Hansen J test does not allow us to reject the hypothesis that our instruments are endogenous, with a p value of 0.05⁸⁶
- because of the latter result, we will run an alternative IV regression in columns (3) until (6) of table 16, including a lagged dependent variable (LDV); this will be our preferred specification, as the Hansen J test it produces does allow us to reject the hypothesis that our instruments are endogenous

Column (2): FEWI regression of grants on alignment after the formation of an anti-coalition and after 1st ever Ecolo municipal coalition participation only

- as a side-step, column (2) presents the results of regressing grants per capita on alignment after the formation of an anti-coalition only (for MR, PS and CDH), resp. due to a 1st ever municipal coalition participation only (for Ecolo); because our IVs are simply subsets of our overall variables of interest, we would expect the coefficients of our IVs (as opposed to most other IVs) to be significant (with a positive sign) in a simple FEWI OLS regression of the dependent variable (in our case grants) on our IVs
- in column (2) our resp. variables of interest for MR and CDH are the triple interaction variables presented in section 6.3 above: they interact (1) an anti-coalition dummy taking value 1 if the party in question was involved in the formation of an anti-coalition, (2) a "mungovt" dummy taking value 1 if the party in question entered the municipal coalition either after the formation of an anti-coalition or not-, and (3) a "subsgovt" count variable counting in how many subsidising governments that same party simultaneously participated-, hence taking a value between 0 and 3; our triple interaction hence measures the degree of partisan alignment between the subsidising levels and a municipality after the formation of an anti-coalition; for reasons of space, we present these variables of interest in column (2) under the names of the variables of interest of column (1) (indicated in bold)
- for PS however such a triple interaction does not make much sense as PS *always* participated over our sample period in *all* 3 subsidising governments it is able to be part of, so for PS our variable of interest is simply the interaction between "PS anti-coalition" and "PSmungovt", while multiplying the original "PSmungovt" dummy by 3 (analogous to what we did to obtain our PS estimates of interest in column (1))
- as explained above, because Ecolo only participated in 1 anti-coalition over our sample period, we have constructed an alternative IV for Ecolo: it is the simple interaction of the "newECOLOmungovt" variable –a dummy taking value 1 during a legislature which is the 1st

⁸⁶ We are able to implement the Hansen J test as there are more excluded instruments than instrumented variables, thanks to the inclusion of our " anti-coalition" dummies into our set of excluded instruments.

ever during which Ecolo is part of the municipal coalition- and the "ECOLOsubsgovt" variable –the count variable described above

- column (2) shows that the coefficients of the interaction variables of interest are insignificant for MR and CDH⁸⁷; the Ecolo coefficient of interest has the expected positive sign but –somewhat surprisingly- fails to be significant with a p value of 0.17; the largest and most significant coefficient is the PS coefficient of interest; these sizes contrast with the resp. coefficient sizes in table 15, as well as in column (1) of table 16; although it is based on PS involvement into 3 anti-coalitions only, a PS coefficient of interest that is more significant and larger than an Ecolo coefficient of interest corresponds better to our expectations; this is because the large difference in vote shares and experience in power at the subsidising levels between PS and Ecolo
- being well aware that the number of anti-coalitions in which PS was involved is small, the result shown in column (2) can be interpreted in 3 ways:
 - 1) PS -for every single subsidising government level at which it is in power- steers extra grants to those Brussels municipalities in which it is the major party in an anticoalition, compared to municipalities in which it is the major excluded party of an anti-coalition; similarly for Ecolo, 1st ever municipal coalition participations are bolstered with extra grants in case Ecolo is also party of a coalition at the subsidising levels (though the Ecolo coefficient of interest fails to be insignificant at the 0.1 level); additionally, the fact that the coefficient of PS -the party that was most often in power at the subsidising level(s)- is significant, in contrast to the other coefficients of interest, could be testimony of a learning effect experienced by the party in power at the subsidising level: it may mean that the more often a particular party is simultaneously in power at the subsidising level(s) and in municipalities, the more successful it could become in steering extra grants to municipalities in which it has won the formation of an anti-coalition, or in taking away grants from municipalities in which it has been excluded from an anti-coalition
 - it could also be that PS when having managed to assemble an anti-coalition against a historical incumbent and Ecolo when having gained power for the 1st time in a particular municipality, are *more motivated to lobby for grants* at the level of the aligned- subsidising governments
 - 3) a final possible explanation is that similar/comparable Brussels municipalities obtain more grants due PS simultaneously being in power at the municipal level and at one or more subsidising levels, assuming that situations in which PS manages to lead an anti-coalition are representative of situations in which PS is part of the municipal coalition in general; an analogous reasoning seems to hold for 1st-time-ever Ecolo municipal coalition participations (though the Ecolo coefficient is not significant): those coalition participations are representative of all cases in which Ecolo secured a coalition participation, because 1st ever Ecolo coalition participations may be assumed exogenous to past grants received; this 3rd explanation assumes that neither gaining municipal power after the formation of an anti-coalition nor 1st ever municipal coalition participations are particularly rewarded with extra grants

⁸⁷ For reasons of space and because these are not of interest to us, column (2) does not show the coefficients for the separate "mungovt" and "anticoalition" dummies, although they have been included as separate regressors into the regression behind column (2).

compared to being in power in general (as opposed to explanation 1); it seems that only in case the 3rd explanation holds we are allowed to use the interactions of interest in column (2) without any reservations as instruments in an IV setup; in the other 2 cases participation in an anti-coalition and 1st ever municipal coalition participation –though possibly **exogenous** to past grants received- are **different** from, i.e. not 100% comparable to, the other municipal coalition participations⁸⁸

Column (3): IV regression, but now including the LDV as a regressor

- graphs 2a and b show that our dependent variable evolves over time in a rather erratic way for *several* municipalities; indeed, intergovernmental *special purpose* grants to a particular municipality can be expected to be characterised by a smaller degree of persistence than say- the formula-based general purpose intergovernmental grants such as the Municipality Fund of the Brussels Region⁸⁹
- nevertheless, we generally may suspect even discretionary intergovernmental grants to be characterised by an important extent of persistence/stickiness; being (in)eligible as a municipality or (un)skilful as a political party in power with respect to obtaining grants in year t may be explained to an important extent by being (in)eligible or (un)skilful with respect to obtaining grants in year t-1; graphs 2a and b indeed show that our dependent variable evolves over time in a rather smooth way for *several other* municipalities; also, when we conduct the Wooldridge test for autocorrelation of error terms in panel data, we have to strongly reject that there would not be first order autocorrelation in the error term (p value 0.00); however, municipal eligibility or party-specific skill with respect to obtaining grants we have included so far into our regression specifications
- still, adding an LDV as a regressor may make sense, because including an LDV takes into account the possibility that a past *increase (decrease)* in grants may cause a current *increase (decrease)* in grants, i.e. it may capture a possible *trend* in grants received not captured by municipality dummies; therefore, as an alternative to the IV regression without an LDV, we now include the LDV into our IV regression
- however, as is well known that such a regressor is endogenous, we need to instrument it; we instrument the LDV with its 2nd and 3rd lag⁹⁰, as is common practice; however, as is well known, for those 2nd and 3rd lags expressed in levels to be valid instruments, we should first express the original regression specification in first differences rather than including municipality dummies (the latter being equivalent to conducting a FEWI estimation)⁹¹;

⁸⁸ Note the relationship between the above reasoning and the limited external validity of an effect established on the basis of an RDD: municipalities in which an aligned party has just won or lost a close race may be different from other municipalities (as e.g. acknowledged by Brollo and Nannicini (2012)).

⁸⁹ Grants out of the Municipality Fund are allocated according to a municipality's population size and density, surface, tax revenues, number of pupils, number of unemployed and number of poor. These criteria are confirmed annually by means of the voting of a law by the parliament of the Brussels Region. (see e.g. Belgisch Staatsblad 1998). However, the criteria are changed rather seldomly. The most recent changes to the criteria date from 1994 and 1998.

⁹⁰ This is why our IV regression including an LDV makes us of 2 more instruments than our IV regression without an LDV (see bottom of table 16).

⁹¹ Therefore, from column (3) onwards we no longer include municipality dummies.

therefore, before conducting an IV regression including the LDV, we conduct a First Difference transformation (shown in table 16 by "D." from column (3) onwards), including of the instruments themselves (not shown in table 16)

- as opposed to our IV regression without an LDV in column (1) however, the Hansen J test now *does* allow us to reject the hypothesis that our instruments are endogenous, with a p value well over 0.1; the Hansen J test is also favourable for the remainder of the specifications with an LDV shown in table 16
- somewhat surprisingly, the coefficient of the LDV is insignificant; however when (1) including this LDV, (2) instrumenting it -which makes us lose 3 years of observations⁹²-, as well as (3) conducting the First Difference transformation rather than adding municipality dummies, the sign, size and significance of our variables of interest change remarkably compared to column (1):
 - $\circ~$ the MR coefficient changes from positive and insignificant to negative and insignificant
 - the CDH coefficient becomes large but remains insignificant
 - the Ecolo coefficient of interest stays positive and significant and increases in size; however the coefficient of the "mungovt" dummy for Ecolo increases even more in size⁹³; the significance and sign of the Ecolo "mungovt" and the Ecolo alignment coefficients are robust against excluding any single municipality from our sample, except that the p value of the Ecolo alignment coefficient increases to 0.16 if we omit Sint-Agatha-Berchem
 - the PS coefficient increases in size but changes from significant to just not significant anymore (p value 0.11)
 - an overall increase in size of our coefficients of interest compared to the IV regression without an LDV is as expected, because our coefficients of interest now only measure the short-term effect of a change in alignment, instead of the entire long term effect as in column (1); however it is puzzling that on closer inspection the increase in coefficients appears to be caused even more by the First Difference transformation than by the addition of the LDV
 - the fact that our dependent variable "discretionary grants" appears to evolve quite erratically over time for some municipalities may explain that the coefficient of our LDV is insignificant
- the coefficients of the "CDHmungovt" variable and of the CDH variable of interest mirror each other similarly to the Ecolo coefficients concerned, though they are both insignificant
- the coefficients of the "MRmungovt" variable and of the MR variable of interest seem to mirror each other in a *reverse* way: a negative coefficient of interest seems to be compensated by a generally positive "MRmungovt" coefficient; however both coefficients are insignificant as well
- similar to column (1), to be able to compare with alignment effects found in the partisan alignment literature, we calculate our *average* effect of partisan alignment over our sample: for Ecolo this average effect amounts to 92.4 euros –i.e.
 - {95.8*(170/255)}+{(95.8*2)*(38/255)}- (with a standard deviation of 42.7 euros and a p value of 0.03); in words: 92.4 euros is the sum of 95.8 –the coefficient of the Ecolo alignment

⁹² I.e. 57 (=3*19) observations.

⁹³ The coefficient of the Ecolo "mungovt" dummy even becomes very large when compared to the average per capita discretionary grant amount of 216.7 euros a Brussels municipality annually receives.

variable in column (3)- weighted for the relative frequency of Ecolo being in power at **1** subsidising level- and 95.8*2 –double the coefficient of the Ecolo alignment variable in column (3)- weighted for the relative frequency of Ecolo simultaneously being in power at **2** subsidising levels-, the average amount of 92.4 euros is about twice the long-term effect of 44.8 euros of column (1) and is 42.6% of the annual per capita grant amount of 216.7 real euros of an average municipality (see table 6); for PS the average alignment effect is obviously 19.8 euros (though just not significant at the 0.1 level), or 9.1% of the annual average per capita grant amount of 216.7 real euros

- similar to the coefficients of column (1), the coefficients of column (3) enable us to calculate the *average effect of a municipality taking Ecolo into its coalition on grants received*; the calculation of this effect is shown in table 18, and is fully analogous to the calculation in table 17; the conclusion from table 18 –in contrast to the conclusion from table 17- is that the extra grants received thanks to Ecolo alignment by far do not seem to suffice to compensate for the decrease in grants due to non-aligned municipal coalition participation of Ecolo; *"on a net basis"* municipalities in which Ecolo is in power as a consequence receive 110.4 euros less grants⁹⁴

Table 18: Average effect of a municipality taking Ecolo into its coalition on grants received over our sample period, regression with LDV

| | (0) average alignment effect in isolation | (1) total effect if "ECOLOsubsgovt" = 0 | (2) total effect if ''ECOLOsubsgovt'' = 1 | (3) total effect if ''ECOLOsubsgovt'' = 2 | (4) average total effect |
|-----------------------------|--|--|--|--|-----------------------------|
| coefficien t standard | 92.4 | -202.8 | -107.0 | -11.2 | -110.4 |
| error | 42.7 | 64.24 | 55.2 | 76.7 | 54.9 |
| p value sample | 0.03 | 0.01 | 0.05 | 0.88 | 0.04 |
| share | 255/255 | 47/255 | 170/255 | 38/255 | 255/255 |

- despite the very large coefficient of the Ecolo "mungovt" dummy, measuring only the short term effect, column (3) is our preferred regression specification, not only because it shows that the instruments used are valid and relevant, but also because it is the most general specification, as it includes an LDV
- the –already feeble- significance of the PS coefficient produced by the specification in column (3) appears further to deteriorate when excluding either one of the 3 anti-coalitions that PS was involved in *or* either one of the Ganshoren and Jette anti-coalitions⁹⁵

Column (4): IV regression, but with municipal coalition participation weighted for municipal vote share

- the specification behind column (4) differs from the IV regression behind column (3) in that it attaches more weight to municipal coalition participation of large parties, assuming that there is a stronger association between grants and large coalition parties than between

⁹⁴ Again, when repeating this calculation for MR and CDH the coefficients in all columns of table 18 are insignificant.

⁹⁵ We expect such sensitivity of our results to the exclusion of individual anti-coalitions to reduce once we are able to expand our sample with the observations for 2012 and 2013, hence taking into account the political changes due to the 2012 municipal elections.

grants and small coalition parties; we perform this check by *multiplying municipal coalition participation with the municipal vote share*

- of course when multiplying our variable of interest with municipal vote share, coefficients of interest become much smaller; an increase of them by 1 euro should now be interpreted as an increase with 1 euro in the association between grants and municipal coalition participation of a party for every percentage point increase in the vote share of this party
- the effect of this multiplication is that the PS coefficient turns significant at the 0.1 level; also the coefficient of the LDV turns significant (with the expected sign), but it remains small

Column (5): IV regression, but with municipal coalition participation weighted for municipal vote margin

- the specification behind column (5) attaches more weight to municipal coalition participation of parties with a small vote margin, i.e. whose vote share is close to the vote share of the largest party in a municipality⁹⁶, assuming that there is a stronger association between grants and a "close" coalition party than between grants and a "none-close" coalition party⁹⁷; we perform this check by *multiplying municipal coalition participation with (100 minus the absolute value of the municipal vote margin)⁹⁸*; we also take care to replace all our "munvote" control variables (in the bottom half of table 16) by "munvotemargin" control variables (this replacement is not shown in table 16 for reasons of space)
- similarly to column (4), an increase of a coefficient of interest with 1 euro should now be interpreted as an increase with 1 euro in the association between grants and municipal coalition participation of a party for every percentage point decrease in the vote margin of this party
- the effect of the interaction of our variables of interest with a vote margin measure is that the Ecolo coefficient becomes insignificant (with a p value of 0.18) and that the MR coefficient turns negative and significant, which is hard to interpret
- similarly to column (4), the major effect of the interaction of our variables of interest with a vote margin measure compared to column (3) is that the PS coefficient becomes significant again; compared to column (4), and that the same variables of interest are significant but that the size and the significance of those variables is smaller
- vote margin is a measure of the "swing status" of a government level and interacting an alignment variable with a vote margin variable has been inspired by Arulampalam e.a. (2009)⁹⁹; Arulampalam e.a. (2009) find that *only* those aligned Indian states that are *also*

⁹⁶ Or in case the party in question is itself the largest party: whose vote share is close to the vote share of the second largest party in a municipality.

⁹⁷ In most cases over our sample period, both the largest and the 2nd largest party were part of the municipal coalition. Hence, alternatively, this specification could be considered as an attempt to measure if coalitions composed of rather equally strong partners generate more partisan allocation of grants than rather unequally composed coalitions. Likewise, Huber e.a. (2003) investigate if coalitions in which power is less dispersed generate higher budget deficits.

⁹⁸ Of course simply multiplying municipal coalition participation with the absolute value of the municipal vote margin instead of with (**100 minus** the absolute value of the municipal vote margin) would add **less rather than more** weight to "close" parties.

⁹⁹ Arulampalam e.a. (2009) use the same definition of vote margin as we do, i.e. (the absolute value of) the vote difference with the largest party.

swing states receive more discretionary grants¹⁰⁰; in contrast, we rather find that aligned Brussels municipalities that are core instead of swing municipalities for a particular party receive more discretionary grants; indeed, overall significance of our coefficients of interest in column (4) is higher than overall significance of those coefficients in column (5)

it should be noted that for most parties the correlation between municipal vote share and (100 minus the absolute value of the municipal vote margin) is strongly positive (0.72 for CDH; 0.48 for Ecolo; 0.46 for PS); this is understandable as parties obtaining a lot of votes have a higher chance of coming close in votes to the party obtaining the most (or the second most) votes; hence it is well possible that parties in power simultaneously target aligned "core" *and* "swing" municipalities with more grants; only for MR the correlation is (strongly) negative (-0.45); the latter is probably due to the fact that MR is over our sample period several times *by far* the largest party, resulting in a very large vote margin and hence "none-closeness" (also see table 3)

Column (6): IV regression, but now with being in power in a municipality weighted for municipal power index

- in column (6) -and also in column (7)- we try to find an explanation of the fact that in column (3) the alignment coefficient of Ecolo, the smallest of the 4 major parties, is the largest and the most significant; our finding reminds of the finding of Folke (2013) that in Swedish municipal coalition politics the small Swedish Green party has a large effect on environmental policy and the small Swedish anti-immigration party New Democracy has a large effect on immigration policy; to this effect we broaden our hypothesis that aligned municipalities *per se* receive more grants, i.e. that the subsidising rather than the municipal level is the major actor; instead, *municipal intra-coalition features within a context of partisan alignment* –rather than partisan alignment as such- could provide some –aligned-coalition members with disproportionately more grants¹⁰¹; in this respect, we are inspired by the political science literature, which has focused on the consequences of intra-coalition power relations for the distribution of ministerial posts, rather than on their consequences for the distribution of grants to lower governments (see e.g. Browne and Franklin 1973 and Laver and Shepsle 2000)
- a first reasoning is that Ecolo's **voting power** –i.e. its importance for the formation of a municipal majority- could be larger than its **vote share**; because of this, a municipality governed by Ecolo may receive more grants because Ecolo would have been able to use its municipal coalition formation importance as a bargaining tool to obtain more grants from the municipal formateur party, supposed that this formateur party itself would be aligned and would be able to use its alignment to obtain more grants, which it could in turn pass on to its coalition partner; in this bargaining process, Ecolo politicians at the municipal level

¹⁰⁰ Similarly, Brollo and Nannicini (2012) and Curto-Grau e.a. (2012) find by means of an RDD that the subsidising level favours (punishes) particularly those municipalities with extra (less) grants that are barely aligned (unaligned).

¹⁰¹ However, while below we will find some evidence that *municipal intra-coalition features* determine that municipalities aligned with Ecolo receive more grants, it appears that partisan alignment as such remains a *necessary precondition* for political allocation of grants. This becomes clear when we conduct a regression of grants on our "mungovt" variables only, omitting the "subsgovt" variables as well as our "mungovt – subsgovt" interaction variable of interest. In such a regression, the coefficient of the "ECOLOmungovt" variable is significantly *negative*.

may usefully have been assisted by Ecolo politicians governing at one of the subsidising levels; in other words, the *aligned municipal coalition partner itself* –in this case Ecolo at the local level- may be the relevant actor (a bottom-up explanation of grants received thanks to partisan alignment¹⁰²), rather than the *aligned coalition partner* –in this case again Ecolo*at the subsidising level* (the classical top-down explanation of grants received thanks to partisan alignment)

- in other words: to understand the distribution of grants to the Brussels municipalities from a
 political economics perspective, perhaps the *partisan alignment* hypothesis needs to be
 complemented with the *coalition bargaining* perspective; coalition bargaining seems to be
 rather important at the Brussels municipal level:
 - from 2006 onwards no single Brussels municipality was governed by a single party, and the average number of our 4 largest parties taking part in any municipal coalition rose from 2.1 to 2.3 over our sample period (also see annex 1)¹⁰³
 - table 2 already showed that coalition changes are frequent in Brussels municipalities and table 7 already showed that their coalition composition is generally rather unpredictable, i.e. rather non-ideological
- we test the possibility that the rather strong impact of Ecolo alignment on grants may be due to a possibly high Ecolo power index in some cases by replacing the municipal vote shares in column (2) as weights with the municipal *power indices*; we define the latter as the (relative) Banzhaf power indices (Banzhaf 1968): the Banzhaf power index is the number of coalitions in which a particular party is decisive for a majority -i.e. in which this party is *needed* expressed as a share of all possible coalitions that command a majority of the votes¹⁰⁴
- table 19 shows averages and standard deviations per party for vote shares (taken from table 3) as well as for power indices, while considering both variables only in case a party was part of a municipal government; table 19 also shows the correlation between vote share and power index; we note the following from table 19:
 - as expected, the correlation between vote share and power index is strong: the higher the vote share of a party, the more municipal coalitions in which that party is decisive; however, the weakest correlation is the one for Ecolo, which could mean that Ecolo's voting power was relatively high in a number of municipalities despite its relatively low vote share (as Ecolo only rarely obtained a high vote share); an example is the 2006 municipal election result in Vorst: MR, PS, and Ecolo obtained resp. 40, 31, and 19% of the vote, and were the only parties that obtained seats in the municipal council; as a result these 3 parties' Banzhaf voting power was *equal*,

¹⁰² In fact, this is a 2nd possible bottom-up explanation of partisan allocation of grants. The 1st one is the one suggested above: local politicians lobbying politicians of the same party in power at a subsidising level for extra grants.

grants. ¹⁰³ From table 5 it can be derived that also the average number of coalition members at the *subsidising* government level has increased over our sample period.

¹⁰⁴ In fact, that we have found in column (2) that partisan allocation of grants increases with municipal vote share -which we have used as weights in column (2)- could already be an indicator that grants increase with a coalition party's importance for the formation of a municipal majority –i.e. with its **voting power**-, rather than with its **popularity as such at the municipal level**. This is because voting power mostly increases with vote share (see below).

i.e. 0.5¹⁰⁵, despite the fact that MR obtained twice as many votes as Ecolo; in other words, all 3 parties were vital to the same number of coalitions commanding at least 51% of municipal seats; this reminds of the high voting power of small parties that has already been analysed by e.g. Laver and Shepsle (2000 p. 118), with the FDP in postwar Germany and the PSDI in postwar Italy given as examples of "very strong" small parties¹⁰⁶

- unsurprisingly, for all parties the average power index (and its standard deviation) is higher than their average vote share (and its standard deviation) –about twice as high-; this is because a party may well be decisive in **100%** of all possible coalitions even when having collected **less than 50%** -but nevertheless a very high share- of the vote
- a little more surprising is that on average the power indices of the 2 smaller parties are *substantially lower* than the power indices of the 2 larger parties, in line with their lower average vote share

Table 19: Relationship between municipal vote shares and municipal power indices (in cases in which parties are part of a municipal coalition)

| | | MR | PS | CDH | Ecolo |
|-------------|--------------------|------|------|------|-------|
| Vote share | Mean | 37.6 | 26.6 | 12.9 | 16.0 |
| | Standard deviation | 15.6 | 14.3 | 9.6 | 5.4 |
| Power index | Mean | 72.4 | 54.6 | 31.7 | 31.6 |
| | Standard deviation | 36.5 | 40.4 | 40.0 | 25.6 |
| Correlation | | 0.83 | 0.91 | 0.83 | 0.37 |

- the rather low average voting power of Ecolo seems to imply that differences in power indices do *not* explain the differences in grants received that were found in column (3); still, the weak correlation between Ecolo vote shares and Ecolo voting power suggests that it may remain worthwhile to weigh a party being in power at the municipal level with its power index rather than with its vote share
- we show the regression results following such a weighting in column (6)¹⁰⁷; the coefficients of interest in column (6) show that the regression specification with weighting for coalition formation power generally fits *less well* the partisan alignment hypothesis than the specification in column (4) weighted for vote share; the 2 coefficients of interest that are significant in column (4) –the one for Ecolo and the one for PS- remain significant in column

¹⁰⁵ I.e. 2 (the number of coalitions in which the party is vital) divided by 4 (the total number of feasible coalitions).

¹⁰⁶ However, Abedi and Siaroff (2010) analyse the weakening of the pivotal role of FDP in Germany –both at the federal and state level- that had started in the 1980s: the reported rightward evolution of FDP enabled the German Green party to take over part of the traditional "pivotal bonus" of FDP.

In contrast to the examples given by Laver and Shepsle (2000) and Abedi and Siaroff (2010), Ansolabehere e.a. (2005) find empirically that it is mostly the *-larger*- formateur party rather than the *-smaller*- pivotal party that is able to secure disproportionally more resources. Ansolabehere e.a. (2005) hence find empirical support for the well-known legislative bargaining framework developed by Baron and Ferejohn (1989), in which the formateur is able to obtain more resources thanks to his proposal power.

¹⁰⁷ In the specification behind column (6), we have included the individual power indices of our 4 parties as separate regressors, but do not show their coefficients to save space.

(6), but the coefficient of the larger party –PS- increases in significance while the coefficient of the smaller party –Ecolo- decreases in significance; moreover, both coefficients decrease in size; in other words, municipal coalitions into which Ecolo participated may have obtained more grants thanks to the voting power of Ecolo, but Ecolo's vote share seems to be a better explanation of extra grants obtained (as shown by column (4)) than its voting power¹⁰⁸

- next to the voting power reasoning, there is a second reasoning that takes into account municipal intra-coalition features to explain the large and significant Ecolo coefficient despite the small vote share of Ecolo; this reasoning is that municipalities with Ecolo in power could receive more grants precisely because Ecolo is small; Browne and Franklin (1973) found empirical evidence –which has been confirmed by Schofield and Laver (1985)that sheer smallness of coalition parties increases their "spoils of office", in particular their ministerial posts in central governments, at the expense of large coalition parties¹⁰⁹; Browne and Franklin (1973 p. 461) suggest that smallness may provide extra payoffs not because small coalition partners would be more likely to be pivotal¹¹⁰, but because they are less likely than large coalition partners to be able to inhibit the activity of the dominant coalition party; complementarily, because the major coalition party often controls more than the absolute majority of all ministerial postings as well as public policy itself¹¹¹, it could well afford to surrender one or two "bonus" ministerial postings; however, another way of looking at the above is that the lack of control over public policy a junior coalition partner may experience could provide it with an extra motivation to bargain for extra ministerial postings as a compensation (Browne and Franklin 1973 p. 461)
- we however cannot find confirmation of junior coalition partners to be able to "punch above their weight", in terms of the results of a regression specification (not shown) in which we have added a dummy "major" for each of our major parties, taking the value of 1 in case a party is the *major* –i.e. largest- coalition party¹¹²; ironically however, for Ecolo we cannot

¹⁰⁸ We also weighted being in power at the *subsidizing* level(s) with the respective power indices at the *subsidizing* level(s). However, we have opted not to show the regression results with such weighting, because it causes none of the coefficients of interest to remain significant.

¹⁰⁹ Browne and Franklin (1973) find that large parties on average contribute 6% more parliamentary or council seats to a coalition that that they receive ministerial posts. Similarly, Rodden and Wilkinson (2004 p. 10 and 17) and Arulampalam e.a. (2009 p. 117) suggest that it is bargaining between large and small coalition partners in Indian politics, that results in extra "pork barrel" expenditures to the benefit of states in which those small parties are in power. Moreover, they suggest that such bargaining additionally results in public sector appointments, subsidised borrowing and regulation favouring those small parties and their "home states". However, our findings are at odds with Khemani (2007), who finds a partisan alignment effect for Indian states only with respect to the **dominant** party in power –not with respect to junior coalition members. Another difference is that Khemani uses not grants to but deficits run by Indian states as the dependent variable. General differences between our study and the Indian studies are that the studies on India investigate bargaining at the **central** government level rather than at the municipal level, and also that the small pivotal Indian parties appear to be **open** about the extra resources they secured, explicitly claiming the credit for them in the media, thereby facilitating the analysis of partisan alignment effects. (see Rodden and Wilkinson 2004 p. 28)

 $^{^{110}}$ Which they are on average **not**, as Browne and Franklin (1973 p. 461) correctly argue that a **large** party has a higher probability to be pivotal than a small party.

¹¹¹ Both the dominant coalition party and the junior coalition party may hence obtain "spoils of office". Only, their resp. advantages of holding office may be of a different nature. The findings by Laver and Shepsle (2000) –spoils for small parties- therefore do not necessarily contradict those of Ansolabehere e.a. (2005) –spoils for the formateur party. (see above)

¹¹² Unsurprisingly, this dummy variable is strongly positively correlated with vote share.

test the "sheer smallness" hypothesis as Ecolo only was the largest party in one municipality/legislature over our sample period again

- a third reasoning that takes into account municipal intra-coalition features to explain the large and significant Ecolo coefficient despite the small vote share of Ecolo is Browne and Franklin (1973 p. 462)'s extra research finding –confirmed by Schofield and Laver (1985)that smaller coalition parties may only disproportionally reap extra benefits from coalition participation compared to formateur parties in case the *number* of small coalition parties is small; Browne and Franklin (1973 p. 462) suggest 2 motivations for this latter finding: (1) the less junior parties there are to receive "bonus ministries", the more feasible such a distribution is from the perspective of the dominant coalition party; (2) the more coalition parties there are, the more likely the dominant coalition party will lose control over public policy, and hence will possess less "surplus ministries" to distribute; Schofield and Laver (1985 p. 152) add a third possible reason: (3) in large coalitions, the dominant party controls less "surplus ministries" in the first place
- hence, perhaps municipalities with Ecolo in the governing coalition receive more grants because coalitions with Ecolo would happen to be coalitions with few parties; however, the average number of parties composing a coalition of which Ecolo is part happens to be *rather large*, i.e. 2.0¹¹³, compared to 1.6 for coalitions with PS as one of the junior partners, 1.4 for coalitions with MR as one of the junior partners, and 1.2 for coalitions with CDH as one of the junior partners; we test this hypothesis generally -i.e. not only for Ecolo- by interacting our alignment variables with a count variable measuring the number of parties making up a coalition in which a particular party is a junior partner (results not shown); we cannot find confirmation of the Schofield and Laver hypothesis as all coefficients of interest produced by the regression specification concerned are insignificant

Column (7): IV regression, but taking into account the rivalry between MR and PS to become the dominant party in the Brussels region over our sample period

_ a *fourth* possible explanation of the large and significant Ecolo coefficient despite the small vote share of Ecolo is the following: after the 2000 municipal elections newspapers reported that PS had "punished" MR for its choice to form a coalition without PS in the large municipality of Anderlecht; PS reportedly implemented this "punishment" by replacing MR with Ecolo as a PS coalition partner in other municipalities, with Philippe Moureaux, the then president of the PS Brussels federation and mayor of Molenbeek as the architect of this "punishment" (see e.g. De Morgen 2000); from table A11 in annex 1 it can be derived that such replacements effectively could have happened¹¹⁴ in Brussels, Elsene and Molenbeek¹¹⁵; Ecolo may have requested -or may have been promised- additional grants during coalition

¹¹³ Even 2.2 if only first ever Ecolo coalition participations are taken into account.

¹¹⁴ We are of course not able to *prove* that the replacement of MR by Ecolo in the Brussels, Elsene and Molenbeek coalitions after the 2000 elections (1) has been implemented by PS (2) as a "punishment" of MR. Also if such replacements effectively happened, they would have been facilitated by the very good result of Ecolo in the 2000 elections. Instead we are relying on newspaper articles and table A11. Also table 7 above is suggestive of a "PS replacement-of-MR-by-Ecolo strategy" as it shows that after the 2000 elections PS had indeed become the most frequent coalition partner of Ecolo: no other of our 3 other parties than PS was present more often in coalitions in which Ecolo was present. ¹¹⁵ In Brussels and Elsene MR was even expelled from power by means of an anti-coalition.

negotiations¹¹⁶, in which Ecolo politicians active at the municipal level may have been supported by Ecolo politicians active at the subsidizing level; such an Ecolo bargaining strategy may have been bolstered by PS having publicly committed itself to governing without MR in these municipalities

- however, an alternative explanation for the extra grants within this same framework may have been that, "freed" of its major competitor –MR- in these 3 municipalities, PS may have rewarded them with extra grants even without Ecolo requesting this; however this explanation does not answer the question why simultaneous coalition participation of Ecolo at the municipal and at one of the subsidising levels appears *a condition* for such extra grants
- column (7) shows the results of our test if PS "rewarding" Ecolo with additional coalition
 participations in 2000 would provide an explanation for Ecolo alignment of municipalities
 leading to extra grants; to conduct such a test, the specification behind column (7)
 comprises an additional "PSpunishment" dummy, taking only the value of 1 for the 3
 abovementioned municipal legislatures after the 2000 elections; additionally we interact this
 dummy with our original variable of interest "ECOLOmungovt*subsgovt"
- the coefficient for the Ecolo variable of interest interacted with the "PS punishment" dummy is larger than –and as significant as- the original Ecolo variable of interest¹¹⁷; this result provides some indication that the PS punishment strategy would constitute part of the explanation of the significantly positive sign of the coefficient of the original Ecolo variable of interest; however, the difference between the coefficient of the Ecolo alignment variable interacted with the punishment dummy and the coefficient of the original Ecolo alignment variable is not statistically significant

Column (8): IV regression, but distinguishing between municipalities aligned with Ecolo at the Federal level and municipalities aligned with Ecolo at the Brussels Regional level

- further doubt on the explanation for the Ecolo alignment effect suggested by column (7) is cast when we explore if there is any of the different subsidising levels which is the "driving force" behind the Ecolo alignment effect; we can check the latter more easily for Ecolo because Ecolo's participations to the various subsidising governments overlap less than other parties' (see table 5); to this effect, we interact the Ecolo alignment variable of interest with 3 dummies, each taking the value of 1 only when Ecolo participates in the coalition at the Federal, Brussels Regional resp. French Community level, as shown in table (8)
- the results suggest that it is Ecolo's participation to the *Brussels Regional* government coalition that drives the effects, as the only Ecolo alignment interaction that shows a significantly positive coefficient (with a p value of 0.06) in column (8) is the one for the Brussels Regional government; as we suspect that it is the Brussels Regional government which provides the most grants to the Brussels municipalities, as Ecolo is traditionally stronger in the Brussels Region than in the whole of Francophone Belgium, and as this

¹¹⁶ Hence, the PS punishments may rather be cases of grants causing (Ecolo) municipal coalition participation, rather than (Ecolo) municipal coalition participation causing grants.

¹¹⁷ However, the larger size could be due to the fact that 2 of the 3 municipalities in which PS punished MR after the 2000 elections –Elsene and Molenbeek- were precisely municipalities in which Ecolo became part of the coalition for the 1st time after these elections, and that 2 of the 3 municipalities –Brussels and Elsene- were precisely municipalities in which an anti-MR coalition was formed.

government level is the most intertwined with the Brussels municipal government level¹¹⁸, this result does not come as a surprise; also, Ecolo's participations to the Brussels Regional government coalitions over our sample period were its 2nd and its 3rd coalition participations at a subsidising level, so it may have benefited from a learning effect; however, the differences of the coefficients of the 3 Ecolo alignment interactions are not statistically significant

- the above finding that the Ecolo participation to the Brussels Regional government from 2004 onwards drives the Ecolo alignment effect additionally suggests that Ecolo when in power at the subsidising level(s) may well have *deliberately* attempted to compensate for Ecolo municipalities having been punished with less grants whenever Ecolo was *not* in power at any of the subsidising levels; this is because Ecolo's participation into the Brussels Regional government *succeeds* Ecolo's participation into municipal coalitions without Ecolo being in power at any of the subsidising levels
- this finding casts some doubt on the hypothesis that the Ecolo alignment effect would be driven by extra grants allocated by PS to municipalities in which it substituted MR for Ecolo as a coalition partner after the 2000 elections; this is because Ecolo only entered the Brussels Regional government after the 2004 Regional elections, which may have provided Ecolo with insufficient time –i.e. only 2 years before the 2006 municipal elections- to lobby PS to allocate more grants to those municipalities where Ecolo came to replace MR
- when distinguishing between the 2 Ecolo participations in the Brussels Regional government over our sample period (not shown in table 16), it appears that the 2004-2009 participation drives the Ecolo alignment effect¹¹⁹, rather than the 2009-2014 participation; however, this should perhaps once again not come as a surprise as our sample period only includes 2 years of the Ecolo 2009-2014 participation (i.e. 2010 and 2011)¹²⁰

¹¹⁸ As said above, several politicians in Brussels occupy office both at the municipal level and at the Brussels Regional level.

¹¹⁹ When considering the individual years of the 2004-2009 legislature at the Brussels Regional level, the years 2006 and 2009 show the strongest Ecolo alignment effect. 2006 shows a coefficient of 62 euros with a p value of 0.10; 2009 shows a coefficient of 81 euros with a p value of 0.03. This is suggestive of a political business cycle, as 2006 is a municipal election year and 2009 is a Regional election year.

¹²⁰ The 2004-2009 Brussels Regional government included Evelyne Huytebroeck as the Ecolo minister, who simultaneously was a municipal councillor in the municipality of Vorst. While Huytebroeck became in charge of urban renewal and the "contrats de quartier" in the Brussels Regional government after the 2009 Regional elections only, Ecolo joined an anti-MR coalition with PS in Vorst after the 2006 municipal elections. Meanwhile, graph 2a above and the top graph in annex 2 below show a clear post-2006 increase in grants received by Vorst. (see also Le Vif/L'Express 2012, 2012b and 2012c, in which the weekly accuses Huytebroeck of favouring her municipality Vorst with extra subsidies during her tenure as a Brussels Regional minister)

8. Conclusions

The conclusion from this paper is that the subsidising levels of Brussels municipalities do not favour those municipalities with grants where **voters** are aligned with the subsidising levels –as predicted by the standard partisan hypothesis-, but rather where **political parties in power** are aligned with the subsidising levels – as predicted by the partisan alignment hypothesis. Hence grants are not so much politicised in that they are **directly** oriented to sympathetic voters, but in that they at most are only **indirectly** oriented to sympathetic voters, via the favouring of sympathetic municipal governments.

Therefore our paper is in line with the findings of a number of other empirical papers on the partisan alignment of grants. Major differences between most of this literature and our paper are not only that our paper investigates –and finds- alignment effects of *individual* political parties¹²¹ rather than of party blocks, but also that our paper investigates alignment effects for *junior* coalition partners compared to *dominant* coalition partners. In contrast, the RDD approach used by current literature on partisan alignment only allows to investigate alignment effects of the dominant party in the coalition or of the coalition as a whole. Moreover, we point at another considerable limitation to the use of the RDD approach for measuring the effect of partisan alignment, as we demonstrate that in the Brussels region, perhaps just as in several other democracies with a proportional electoral system, parties cannot be easily classified into one out of 2 blocks.

We find that *individual* parties that are part of the governing coalition at the subsidising level(s) are able to steer grants to municipal governments that are aligned with those *individual* parties. This finding implies that *individual parties within a municipal coalition* would be able to claim the credit for (the public goods provided thanks to) grants received by a municipality. Moreover, we find rather surprisingly that partisan alignment of municipalities with the smaller party Ecolo at their subsidising levels generates more discretionary grants than alignment with the larger parties MR and PS¹²². As for PS, the alignment effect just fails to be significantly positive in our preferred specification of column (3) of table 16. Moreover we find a *negative* MR effect, though it is not significant in most specifications.

A priori we would not have expected these differences, although asymmetric effects have been found in other countries too. While Rodden (2005 p. 214-215) finds that party-politically aligned German states expect to receive more bailout grants, **both** if they were aligned with CDU and if they were aligned with SPD, Migueis (2013 p. 20) finds his alignment effect to be entirely attributable to one particular Portuguese political party (PSD), not finding any effect for the other major Portuguese party in power at the central government level (PS). Migueis hypothesises that the difference could be attributable to the possible preference of PSD voters –of whom many are small business owners

¹²¹ Such individual party effects seem interesting as Folke (2013 p. 2 and 6) writes: "Despite the prominence of the assumption that parties matter there is no systematic evidence on how the representation of individual parties affects policy outcomes in proportional representation systems.", as well as "{Within a governing coalition} we need to look to the power of individual parties to understand how policy is formed on secondary policies".

¹²² As said above, the Ecolo alignment effect is also robust against conducting an IV regression **only** for the Ecolo alignment variable (while not instrumenting the alignment variables of the other 3 major parties).

and countryside dwellers- for local programs over national programs, and to the possible larger power of PSD local politicians over PSD leadership compared to PS.

Perhaps the most surprising finding of our paper is that the most consistently significant and positive alignment effect is the Ecolo effect. This finding is surprising for 3 reasons:

- 1) Ecolo is the smallest of our 4 parties studied, and therefore also the party that has been least in power over our sample period.
- Most Ecolo coalition participations at the municipal as well as at the various subsidising levels over our sample period were Ecolo's 1st ever, i.e. inexperienced ones.
- 3) Over our sample period, Ecolo only provided a minister in charge of grants to Brussels municipalities from 2009 onwards: this was the minister in charge of urban renewal at the level of the government of the Brussels Region.

In contrast to other studies on the effect of partisan alignment on grants, we have investigated **why** alignment of a municipality with a particular party generates more grants than with another party. In particular, we have explored a number of possible explanations why of our 4 parties alignment of a municipality with Ecolo generates the most extra grants:

- 1) Firstly, we have found that these extra grants are *not* explained by relatively higher Ecolo voting power in municipal coalition negotiations.
- 2) Secondly, the "Ecolo bonus" could be due to the sheer smallness of Ecolo, as large parties find it relatively easier to compensate small parties with extra "spoils of office" (see Browne and Franklin 1973). A related consideration is that Ecolo is the smallest of the 4 dominant parties at the Brussels, due to which it possibly had to make use of the "levers of power" at its disposal particularly efficiently, e.g. by making sure that the discretionary grants it could influence were carefully steered towards aligned municipalities (following the reasoning of Browne and Franklin (1973 p. 461)). Therefore the strong relationship we find between Ecolo alignment and discretionary grants is perhaps an indicator of potential *weakness* of Ecolo, i.e. of the possibility that discretionary grants —which by definition can also more easily be withdrawn- would be one of the few "levers of power" on which it has to rely¹²³.

¹²³ This also reminds of Browne and Franklin (1973 p. 468)'s finding that small coalition parties that receive "bonus ministries" also happen to receive a disproportionate quantity of *less valued* ministries. Conversely, a larger party may derive other –perhaps more important but less visible- benefits than extra discretionary grants from holding municipal office in coalition with a smaller party, such as a more exclusive control over public policy in general. In the context of Swedish municipal coalition politics, Folke (2013 p. 4) writes that "larger parties focusing on primary policies {such as taxing and spending} could win the support of small parties by supporting them on secondary policies {such as environment and immigration}", while admitting that such trading of support is hard to measure (p. 31).

We find a grants-related example of such more general advantages of holding office at the Brussels Regional level, i.e. at a level that subsidises the Brussels municipalities: PS has been a major coalition party in the government of the Brussels Region *ever since* the establishment of the Brussels Region in 1989. Already in 1994, i.e. during the 1st ever legislature of the Brussels Region government (1989-1995), PS managed to reform the Brussels Municipality Fund. At that time PS was the largest governing party at the Brussels Region level and provided the prime minister, who was also in charge of local government, while PRL, the main component of MR, did not take part in this government and opposed the reform. PS managed to change the allocation formula of the Municipality Fund so that poorer municipalities –concentrated in the west and the centre of the Brussels Region and traditionally dominated by PS- benefited more from it, at the expense of the richer, southeastern and MR dominated municipalities. (De Bock (2010) documents the financial consequences of the more poverty-oriented distribution of the Municipality Fund over our sample period.) This reform was

However, as Ecolo has never been the largest coalition partner over our sample period except in one municipality/legislature, we were not able to test this possibility.

3) A 3rd possibility we explored is that Ecolo may have negotiated extra grants in favour of municipalities aligned with Ecolo because PS may have needed Ecolo to replace MR as a coalition partner in a number municipalities after the Brussels federation of PS declared after the 2000 municipal elections that it would exclude MR from as many municipal coalitions as possible. We find some empirical evidence in favour of this 3rd possible explanation of the significantly positive Ecolo coefficient. However, at the same time we find some indication that the 2004-2009 participation of Ecolo in the Brussels Regional government drives the Ecolo alignment effect, which seems rather hard to reconcile with the "post-2000 rewarding of Ecolo municipalities by PS" hypothesis.

An additional explanation for the strong Ecolo effect may be an inverse –and non-linear- experience effect. Paradoxically, it may precisely be **because** Ecolo was inexperienced –i.e. new- in power over our sample period, both at the subsidising and at the municipal levels, that it managed to obtain more grants. I.e. its inexperience may have meant that it was particularly **motivated** to lobby -either within the subsidising coalition, or from the municipal to the subsidising level- for extra grants to municipalities in which it was in power¹²⁴. We found empirical evidence for this explanation, at least at the **municipal** level, as occasions in which Ecolo is new in the government of a particular municipality precisely make up our IV for Ecolo. While the Ecolo coefficient of interest (just) fails to be significant in our FEWI regression in table 14, it is very significant in our IV regressions in table 16.

However, the most important motivation for Ecolo to request extra grants may have been that municipalities governed by Ecolo while Ecolo is *not* governing at any of the subsidising levels may have been punished with less grants by its competitor parties at the subsidizing levels. Indeed, we find that municipalities in which Ecolo participates in the coalition received significantly *less* grants whenever Ecolo was *not* part of any of the subsidising government coalitions. In this way, the established parties may have tried to build a "barrier of entry" against a relative newcomer such as Ecolo on the "political market". Hence the Ecolo alignment effect on grants we find could merely be an attempt to compensate for the decrease in grants that municipalities governed by Ecolo experience if Ecolo is not in power at any of the subsidising levels. We even find that the positive Ecolo alignment effect on grants does not suffice to cancel out the negative effect of Ecolo participating in municipal government without it participating in a subsidising government. We were

¹²⁴ This explanation reminds of the uncertainty argument of Persson and Tabellini (2000 p. 345-351) with respect to deficit financing of expenditures: the more a governing party is *uncertain* of its hold on power after the next elections the more it will overspend in the current legislature. Table 2 shows that Ecolo's coalition participation was the most volatile of the 4 largest Brussels parties over our sample period. This volatility may have provided ex ante an extra motivation for Ecolo to bargain for extra grants to municipalities in which it was in power.

apparently supported by PS's then coalition partners, FDF and CDH. Such support may have been part of the coalition formation agreement (and possibly also the provision of more discretionary grants to municipalities aligned with CDH and FDF). (Remarkably, in 1998 the poverty-oriented distribution of Municipality Fund grants was increased once again, although both PRL and FDF were part of the Brussels Regional government coalition at that time.)

It may be the fact that the allocation criteria of the Brussels Municipality Fund were only changed twice over our sample period that explains why we do not find any partisan alignment effect on the allocation of formulabased grants (see above). Also, we do not know if the 2 reforms of the Brussels Municipality Fund were implemented gradually.

able to come to this result because –in contrast to most other studies- we have modelled our alignment variable as an interaction variable, consisting of the multiplication of a dummy variable measuring municipal power and a count variable measuring power at the subsidising level.

A remaining puzzle is why we have not found a CDH alignment effect of similar size and significance as the Ecolo effect. CDH has been a party of similar size as Ecolo over our sample period, the number of coalition participations of CDH over our sample period was about as large as the number of Ecolo coalition participations, and these coalition participations changed almost as often for CDH as for Ecolo over our sample period. Perhaps the leftward evolution of CDH over our sample period weakened its pivotal position in coalition formation at the level of the Brussels municipalities to the benefit of Ecolo, i.e. it may have made CDH as a coalition partner interchangeable with Ecolo.

We end our conclusion with 3 warnings against the results we obtained. *Firstly*, with respect to PS a complication is that we are not sure if we can ascribe the effect we have found to alignment, as there is no variation in PS coalition participation at the subsidising levels over our sample period. The only PS variation is in coalition participation at the municipal level. Hence the PS effect could be attributable to skill, experience and/or motivation of local PS politicians to obtain more grants. Because of the little variation in PS alignment, it could be rather surprising that we still find a PS effect in the first place -that just fails to be significant in our key regression specification-, also given our limited number of observations and the fact that we control for a multitude of time-varying observables and non-time-varying unobservables. Should we have been able to exploit variation in PS coalition participation at the effect we have found in this paper¹²⁵. PS has by far the largest number of politicians at the Brussels municipality level with thorough government experience at the subsidising level. Additionally, PS almost constantly occupied ministerial postings at the Brussels Regional government level that are in charge of financing municipalities.

A *second* handicap our analysis had to deal with from the start is that our data are not conducive to ascribing the alignment effects found to a particular subsidising level, as opposed to e.g. the analysis of Curto-Grau e.a. (2012) for Spain, who find the Regional level, rather than the Federal level, to be active in aligned allocation of grants. This is because we had to face the important disadvantage - compared to e.g. the similar study for Spain- that our data generally do not allow us to distinguish between Federal, Regional, and Community grants to the Brussels municipalities. Hence our finding that partisan alignment determines grants could even be coincidental, i.e. we may have found a correlation between changes in coalition composition at *some* subsidizing level and changes in grants provided by *some other* subsidizing level.

A *third* warning is that grants received by municipalities governed by an anti-coalition perhaps should *not* be compared with grants received by municipalities in general. This is because aligned (unaligned) subsidising level(s) may precisely reward (punish) those "winners" with extra (less) grants, in order to decrease the probability of once again having to form (suffer from) an anti-coalition after the *next* elections. A similar reasoning may hold for 1st ever municipal coalition participations in the case of Ecolo. Hence the conclusion of our findings could be that the partisan

¹²⁵ Likewise, the Ecolo alignment coefficient even turns negative -and very insignificant- when we do not include the components of the Ecolo alignment variable as separate regressors into our preferred regression specification in column (3) of table 16 (as stated already above).

alignment hypothesis holds over our sample period at the expense of the standard partisan hypothesis, but with the nuance that municipalities that are aligned as a result of an anti-coalition and/or 1st ever Ecolo municipal coalition participations are more favoured than other aligned municipalities.

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Annex 1: Coalition composition of Brussels municipalities (1995-2012)¹²⁶

| | Coalition au pouvoir 1994 | Coalition au pouvoir 2000 |
|--|--|---|
| Anderlecht | LB (PS, SP) – PRL – FDF | PRL-FDF – Écolo – ANDERL (CVP, indép., |
| Auderghem Berchem-Sainte-Agathe Bruxelles Etterbeek Evere Forest Ganshoren | FDF – PS LBG (PSC, CVP, indép.) – FDF PRL – PS – FDF – Écolo – CVP-VLD PRL – PSC – PS PS-SP PRL – PS – FDF LBRB (PSC, CVP, indép.) | FDF - PRL LBG (PSC, CVP, indép.) - FDF - Écolo PS - Écolo - PSC-CVP - Agalev LB (PRL, FDF) - PS PS-SP - Écolo PRL-FDF - PSCVP - indép. PRI - FDF - CAPTURE (PSC - P, M, D, i, K, A) |
| Ixelles Jette | LB (PRL, FDF) – PS LBJLT (PSC, indép.) – PS – LRG (SP, CVP, indép.) – VLD-VBJ | Écolo PS — Écolo — API-PSC LBJ (PSC, CVP, indép.) – PS-SP – Écolo |
| Kockelberg Molenbeek-Saint-Jean Saint-Gilles Saint-Josse-Ten-Noode Schaerbeek | LB (PRL, VLD, PSC, CVP, indép.) – PS LB (PS, SP) – PRL – FDF LB (PS, SP, indép.) – PRL SJTN (PS, PSC) – PRL – PLU (cartel flamand) LB – FDF – Écolo – PS – PSC | LB (PRL, VLD, PSC, CVP, indép.) – FDF LB (PS, SP, PSC, CVP, indép.) – Ecolo LB (PS, SP, indép.) – PRL LB (PS, PRL, SP) PRL FDF – Écolo – PS |
| Uccle Watermael-Boitsfort Woluwe-Saint-Lambert Woluwe-Saint-Pierre | LB (PRL, VLD) – FDF FDF – GM (PSC, indép.) – PRL LB (FDF, PRL) LB (PRL) – PSC – WOLUWE (CVP, VU) | PRL - Écolo - PS - FDF $LB (FDF, PRL) - Écolo$ $LB (FDF, PRL) - Écolo$ $LB (FDF, PRL)$ $LB (PRL) À FDF$ |

Table A11: Coalitions after the 1994 and 2000 elections resp.

Source: CRISP (2000 p. 86)

Table A12: Coalitions after the 2000 and 2006 elections resp.

| | Coalition au pouvoir 2000 | Coalition au pouvoir 2006 |
|---------------------|--|--|
| Anderlecht | PRL-FDF – Écolo – ANDERL (CVP, indép., VU, VLD) | LB (MR, VLD) – PS-SP.A-CDH |
| Auderghem | FDF – PRL | LB (FDF) – Ecolo |
| Berchem-Ste-Agathe | LBG (PSC, CVP, indép.) – FDF – Écolo | LBR (CDH, CD&V) – MR |
| Bruxelles | PS – Écolo – PSC-CVP – Agalev | PS – CDH – sp.a-spirit-groen! |
| Etterbeek | LB (PRL, FDF) – PS | LB (PRL, FDF, VLD, SP.A, CD&V, indép.) – Ecolo – PS |
| Evere | PS-SP – Écolo | PS-SP.A – MR |
| Forest | PRL-FDF – PSCVP – indép. | PS – Écolo |
| Ganshoren | CARTHE (PS, SP, VLD, indép.) – PRL- FDF – Écolo | LB (PS, SP.A, FDF, VLD, divers) – CDH |
| Ixelles | PS – Écolo – API-PSC | LB (PS, SP.A) – MR |
| Jette | LBJ (PSC, CVP, indép.) – PS-SP – Écolo | LBJ (CDH, CD&V) – PS – Ecolo – FDF- RJ |
| Koekelberg | LB (PRL, VLD, PSC, CVP, indép.) – FDF | LB (MR, VLD, SP.A, CDH, CD&V) |
| Molenbeek-St-Jean | LB (PS, SP, PSC, CVP, indép.) – Écolo | LB (PS, SP.A, CDH, CD&V) – MR |
| Saint-Gilles | LB (PS, SP, indép.) – PRL | LB (PS, SP.A) – MR |
| St-Josse-ten-Noode | LB (PS, PRL, SP) | LB (PS, SP.A, divers) – CDH |
| Schaerbeek | PRL-FDF – Écolo – PS | LB (MR) – Ecolo |
| Uccle | PRL – Écolo – PS – FDF | MR – PS |
| Watermael-Boitsfort | LB (FDF, PRL) – Écolo | LB (MR) – Ecolo |
| Woluwe-St-Lambert | LB (FDF, PRL) | LB (MR, CDF) – PS – IC-GB |
| Woluwe-St-Pierre | LB (PRL) – FDF | LB (MR) – CDH |

Source: CRISP (2007 p. 47)

¹²⁶ Tables in annex 1 are in French; "Forest" (French) = "Vorst" (Dutch); "Ixelles" (French) = "Elsene" (Dutch); "LB" = "Liste du Bourgmestre", a joint multi-party list led by the party of the outgoing mayor; "PSC" = former name of CDH

Annex 2: "Contrat de quartier" grants for benefiting municipalities (in 2011 euros per capita) (1995-2011) (commitment basis; vertical bars = election years)



Source: Ministry of the Brussels Region in charge of urban renewal

| Municipality | Population | Income per capita |
|------------------------|------------|-------------------|
| | | |
| Anderlecht | 94000.6 | 11551.7 |
| Brussel | 142591.8 | 11370.0 |
| Elsene | 76090.2 | 13286.8 |
| Etterbeek | 41165.5 | 12645.8 |
| Evere | 32833.9 | 13646.9 |
| Ganshoren | 20782.8 | 15195.9 |
| Jette | 42162.3 | 14400.9 |
| Koekelberg | 17535.7 | 12498.2 |
| Molenbeek | 77543.2 | 10057.5 |
| Oudergem | 29540.0 | 16656.1 |
| Schaarbeek | 111056.8 | 10794.6 |
| Sint-Agatha-Berchem | 19959.9 | 15257.4 |
| Sint-Gillis | 44058.7 | 10158.6 |
| Sint-Joost-ten-Node | 23452.1 | 7668.3 |
| Sint-Lambrechts-Woluwe | 47893.0 | 15841.3 |
| Sint-Pieters-Woluwe | 38268.1 | 17440.7 |
| Ukkel | 75589.1 | 17073.5 |
| Vorst | 47515.6 | 13302.9 |
| Watermaal-Bosvoorde | 24472.0 | 17333.1 |
| Total | 52974.3 | 13483.2 |

Annex 3: Table A5: Average population and income per capita (in 2011 euros) of Brussels municipalities (1995-2011)

Sources: Belfius, Statbel.

Annex 4: Description of individual anti-coalitions

Before describing the 8 identified anti-coalitions in detail, we provide characteristics of an anticoalition that are additional to the short definition of an anti-coalition given above. We provide these characteristics by means of table A.6 below, which is an elaborate version of table 9 above.

An anti-coalition is a coalition that:

- excludes either the party that has won the most votes or the one that came close to it; vote shares of the 2 largest parties are shown in the 3rd until the 6th column of table A.6; the "victim" of an anti-coalition in no case obtained less than 5% points of the vote than the "perpetrator" of the anti-coalition (and in 3 of our cases even obtained considerably more votes); hence our anti-coalitions show characteristics of close races¹²⁷,
- is characterised by a major party's exclusion that is typically facilitated or precipitated by some *event* deemed exogenous to grants (or by a major party's loss of vote share deemed to be due to some event exogenous to grants),
- 3) following a legislature during which the excluded party was the largest incumbent party,
- 4) needing the support of more political parties than if no anti-coalition would have been formed, and needing the support of more political parties than average¹²⁸; absolute and relative number of coalition parties are shown in the 8th resp. the 9th column of table A.6; our average anti-coalition consisted of 3.3 parties, which is considerably more than 2.3, the overall average number of coalition parties over our sample period; the Brussels 1994, Ganshoren, and Jette 2000 anti-coalitions are even *oversized* coalitions –also called surplus coalitions or supermajorities- (see Volden and Carrubba 2004 p. 521): the Brussels 1994 and Ganshoren coalitions contained 2 more parties than necessary for a seats majority and the Jette 2000 anti-coalition contained 1 more party than necessary¹²⁹
- 5) resulting in an opposition consisting of (very) few parties (absolute number of "democratic" opposition parties are shown in the 10th column of table A.6): in all 8 of our anti-coalition cases, the opposition consisted at most of 1 single –very small- "democratic" party except the "victim" of the anti-coalition ; the average number of opposition parties in case of an anti-coalition is only 1.9, as opposed to the total average number of opposition parties of 2.3

¹²⁷ Likewise, for Italian municipalities Bracco e.a. (2012 p. 32) define close races as races in which the vote share of the largest party did not exceed by more than 5% points the vote share of the runner-up.

¹²⁸ When comparing table A.6 with tables A11 and A12 in annex 1, one is able to notice that we appear to have labeled all coalitions consisting of 4 or more parties as anti-coalitions (although we also have labeled some coalitions of only 3 –and in the case of Vorst 2006, of only 2- parties as anti-coalitions). The exception is Jette after 2006: its coalition consisted of 4 parties after the 2006 elections. Nevertheless, we prudently only classified its 1994 and 2000 coalitions as anti-coalitions. This is because after 2006 even FDF was included into the coalition despite the MR alliance consisting of PRL and FDF, so that MR was no longer the 2nd largest party: MR without FDF had obtained 6 seats while PS had obtained 7 seats.

¹²⁹ These oversized coalitions contrast with the anti-coalitions in Jette (1994), Elsene, and Vorst, which were only supported by 50% +1 of the council seats. I.e. maintenance of these anti-coalitions may have been difficult as defection of 2 councillors was sufficient to bring down the coalition.

Table A.6: Anti-coalitions formed after the 1994, 2000, and 2006 municipal elections¹³⁰

| elect ion | munici pality | MR (%) | PS (%) | CDH (%) | Ecolo (%) | Motivation / effect | Coalition parties (#) | Coalition parties (%)* | Excluded parties (#)** | Coalition vote (%) | Coalition seats (%) | Seats "perpetrator" + "victim" (%) | Power ''victim'' | Power "perpetrator " | Power 2nd "perpetrator" |
|--------------|------------------|-----------|-----------|------------|--------------|--|--------------------------|---------------------------|------------------------|-----------------------|------------------------|---------------------------------------|---------------------|----------------------------|----------------------------|
| 1994 | Brussel | 28 | | 23 | | Dispose of Demaret + Vanden Boeynants (CDH) | 4 | 67 | 2 | 58 | 62 | 74 | 0.50 | 0.57 | 0.50 |
| 1994 | Jette Anderl | 24 | | 28 | | Continue CDH led "progressive" coalition, despite Thys' forced resignation as Brussels Regional minister | 4 | 57 | 2 | 53 | 58 | 64 | 0.50 | 0.83 | 0.50 |
| 2000 | echt | 30 | 28 | | | Break with 50 years' PS dominance | 3 | 60 | 2 | 54 | 53 | 67 | 0.58 | 0.75 | 0.58 |
| 2000 | Brussel | 28 | 23 | | | Revenge for Anderlecht anti-PS coalition formed in 2000 | 4 | 57 | 3 | 53 | 57 | 62 | 0.75 | 0.58 | 0.58 |
| 2000 | Elsene Gansho | 40 | | | 29 | Revenge for Anderlecht anti-PS coalition formed in 2000 Break with 40 years' CDH dominance + Beauthier mayorship. | 3 | 75 | 1 | 52 | 51 | 78 | 0.55 | 0.18 | 0.18 |
| 2000 | ren | 33 | | 29 | | after his death (1999) | 3 | 75 | 1 | 64 | 64 | 68 | 0.50 | 0.83 | 0.50 |
| 2000 | Jette | 23 | | 27 | | Thys, 1977-99 mayor | 3 | 60 | 2 | 55 | 64 | 61 | 0.50 | 0.83 | 0.50 |
| 2006 | Vorst | 40 | 31 | | | Revenge for exclusion of PS after 2000 elections? | 2 | 67 | 1 | 50 | 54 | 80 | 0.50 | 0.50 | 0.50 |
| | Averag es | | | | | | 3.3 | 64.7 | 1.9 | 54.9 | 57.9 | 69.2 | 0.55 | 0.63 | 0.48 |

Note: vote shares of individual parties that gained power shown in bold

* = number of coalition parties as % of number of "democratic" parties that won at least 1 seat

** = total number of "democratic" parties (that obtained at least 1 seat) excluded by the anti-coalition

*** power index: number of possible coalitions in which the party in question is needed as a share of total number of possible coalitions

Sources: CRISP (2001 and 2007), http://www.ibzdgip.fgov.be/result/nl/main.html, http://www.bisa.irisnet.be/themas/verkiezingen#.UqXcgDsjJsQ

¹³⁰ Municipal elections were always held in October of the election year in question.

6) the last 3 columns of table A.6 display a number of Banzhaf voting power indices; the last-but-2 column of table A.6 shows that in cases in which an anti-coalition was formed, the excluded party was needed in on average 55% -i.e. more than half- of the possible coalitions. This is only marginally less than the share of coalitions in which the largest party of the anti-coalitions was needed (63%) (last but one column), and more than the share of coalitions in which the second largest coalition party was needed (48%) (last column); in all anti-coalitions, the power index of the "victim" was 50% or more

Note that all our anti-coalitions correspond to characteristics (1) and (2), but that 2 of them –Jette 1994 and 2000- do not correspond to characteristic (3), that one of them –Vorst 2006- does not correspond to characteristic (4), and that one of them –Brussels 2000- does not correspond to characteristic (5).

Below we provide more contextual detail on every single of the 8 anti-coalitions detected, to additionally motivate our labeling of them as an anti-coalition.

The first component of our anti-coalition definition is the most strikingly fulfilled for 3 elections shown in table 10: the municipal elections of 2000 in Brussels, of 2000 in Elsene, and of 2006 in Vorst. After all these elections, MR was - by far in the cases of Elsene and Vorst- the largest party, but nevertheless was excluded from power. Moreover, MR was also the historical incumbent, as it was both the largest party and the largest party in power in these 3 municipalities after the 1994 elections (not shown in table 10, except for Brussels), *and* in the 1988 elections, for which we however need to take into account the vote share of PRL only (as in 1988 the MR alliance between PRL and FDF had not yet been created). The 1988 exception is the City of Brussels, when PRL was the close runner-up to CDH. Additionally, after the elections concerned in Elsene and Vorst, *all* remaining parties that obtained seats entered into the municipal coalition. But also in the City of Brussels, the number of coalition parties (4) was well above the average number of coalition parties per municipality over our sample period (2.3).

What is extra special about the Elsene anti-coalition is that it is the only anti-coalition in which Ecolo was the "perpetrator". After it came out of the 2000 election as the 2nd largest party with 29% of the vote –its largest vote share in a Brussels municipality over our sample period-, it managed to convince PS to break its pre-electoral agreement with MR. (CRISP 2002 p. 31-32) This was after PS announced to the media that it would retaliate given that MR had just opted for a coalition without PS in Anderlecht.

What is extra special about the Vorst anti-coalition is that it was assembled by PS after MR had excluded its previous coalition partner PS –i.e. its partner during the 1994-2000 legislature- from the coalition in 2000. The 2000 exclusion of PS was despite PS's stable vote share. It was made possible by 2 PS councillors defecting from PS to MR after the 2000 elections. The 2000 exclusion of PS reportedly happened after PS had broken its pre-electoral coalition agreement with MR after the 2000 elections and had tried to form an anti-MR coalition¹³¹. (CRISP 2002 p. 29-30)

The other 5 anti-coalitions we have perceived over our sample period are somewhat less obvious anti-coalitions, as they excluded not the largest party but the runner-up¹³². However in all of these cases the vote share of this runner-up was relatively close to the vote share of the largest party –the closest of our entire sample period. This closeness provides the elections preceding these anti-coalitions characteristics of the "close" elections used for identification in

¹³¹ Hence, because MR had excluded PS from the coalition in 2000, the 2006 anti-coalition could be less exogenous to grants than most of our anti-coalitions, as MR may have *expected* "retaliation" by PS.

¹³² When however we exclude these 5 anti-coalitions from our IV, the coefficients of all our variables of interest are insignificant in our IV regression results below.
RDDs, as a small vote margin implies a –more or less considerable- degree of randomness of (not) gaining power¹³³. Apart from the fact that these remaining anti-coalitions exclude the second-largest-party-by-a-whisker –and hence perhaps would have failed if the *second largest* party would have been the *largest*-party-by-a-whisker-, they are characterised by the fact that the runner-up was the largest party *both* in terms of overall vote share *and* in terms of vote shares of the parties in power in the period *preceding* the election in question (except in Jette). Also, the runner-up was excluded from a coalition which comprised a higher number of parties than average (see table A.6). Finally, the runner-up was excluded for reasons reportedly exogenous to grants received, typically the desire to break with its historical dominance and/or –in 4 of our 5 occasions- unexpected events like a recently deceased or discredited previous mayor.

We provide following extra context information to motivate our characterisation of these 5 coalitions as anticoalitions:

- 1) In the City of Brussels after the 1994 elections, CDH –then still known under its former name CDH- was excluded from the coalition reportedly because it had Paul Vanden Boeynants and Michel Demaret prominently on its list¹³⁴, 2 very experienced CDH politicians. (CRISP 2001 p. 63) The former had been prime minister of Belgium from 1966 until 1968, and minister in the Belgian government until 1979. In 1986 he had been convicted of tax fraud, because of which he could not realise his ambition to become mayor of Brussels. Instead, he reportedly supported Demaret to become mayor of Brussels, an ambition which the latter only managed to fulfil from 1993 till right before the 1994 elections, when he was forced to resign because of corruption charges. Both CDH "heavyweights" were hence tainted by "scandal", because of which the coalition parties of CDH during the 1988-94 legislature wished to "free themselves" from CDH on the occasion of the 1994 election. Also part of the 1994 Brussels context was that CDH had come out of the 1988 elections as the largest party, closely followed by PRL (the PRL-FDF alliance only was established in 1992). However, CDH had opted for a coalition with the smaller PS, granting PS the post of mayor. For this reason, also the coalition formed in the City of Brussels after the 1988 elections can be considered an anti-coalition. Possibly, in 1994 –though CDH had still come out of the elections as the 2nd largest party (and as by far the largest party if considering PRL and FDF separately, as the latter had run on separate lists)- MR (in fact PRL) saw an opportunity to "turn the tables" compared to 1988 – by means of assembling no less than 4 parties (5 parties when considering PRL and MR separately)- into a coalition. (see CRISP 2002 p. 14) This anti-coalition even included the Flemish "sister party" of CDH, which in the run-up to the 1994 elections had broken away from CDH with a separate list precisely because of the composition of the CDH list¹³⁵. (CRISP 2001 p. 63)
- 2) In Anderlecht after the 2000 elections, MR collected for the 1st time in 50 years' time more votes than the historical incumbent PS (even when adding up the votes of PRL and FDF before the establishment of their alliance in 1992). It is the narrowest vote difference between the largest party and the runner-up over our sample period. Though PS had governed Anderlecht in a coalition with PRL and FDF ever since the elections of 1988, MR saw its election victory of 2000 as an opportunity to form a coalition without PS. Anderlecht is

¹³³ However, while closeness in terms of a small vote margin seems rather exogenous to grants, an anti-coalition as such seems even more exogenous. This is because a close election may not only have been close *ex post* but also *ex ante*. That is, parties may have *suspected* already well before the race had been run that the race would be close (e.g. in case the *previous* election or opinion polls were close). Hence, they could have tried to influence the race with extra grants *before* it had been run, therefore possibly making being in power after the formation of an anti-coalition endogenous to grants. This is a risk which is hardly acknowledged in the literature using an RDD based on close races.

¹³⁴ I.e. the first and last "slots" on the list had been allocated to Demaret and Vanden Boeynants resp., which in Belgium are both visible spots on the list.

¹³⁵ Because PSC had excluded PRL from the coalition in 1988, the 1994 anti-coalition could be less exogenous to grants, as PSC may have *expected* "retaliation" by PRL.

one of the largest Brussels municipalities and a traditional PS bulwark, so it is no complete surprise that newspapers reported following the exclusion of PS from the Anderlecht coalition by MR, that PS would try to retaliate by forming coalitions without MR in as many Brussels municipalities as possible. From table A11 in annex 1 it can be derived that such replacements of MR effectively happened in Brussels and Elsene (see above) (as well as in Molenbeek, but MR was of smaller importance in Molenbeek than in Anderlecht or Elsene). (see CRISP 2002 p. 26)

- 3) In Ganshoren CDH was not any longer the largest party after the 2000 elections for the 1st time in 40 years. CDH saw its vote share decrease in the 2000 municipal elections from 41.5 to 29.3%. This was related to the death of Richard Beauthier in 1999, which had moreover caused 2 CDH aldermen to leave the governing coalition and hence the slim absolute seats majority of CDH already to disappear before the 2000 elections. In 1999, Beauthier had been mayor of Ganshoren for CDH for 40 years. His party had obtained an absolute majority of seats from the 1964 elections until and including the 1994 elections, allowing it to govern the municipality without ever forming a coalition. MR saw an opportunity in it becoming the largest party of Ganshoren after the 2000 elections –obtaining 4%points more than CDH- to assemble all parties that had gained seats except the historical incumbent into a coalition¹³⁶. A price MR had to pay was to grant the post of mayor to the 3rd largest party PS. (see CRISP 2002 p. 8 and 31)
- 4) The coalitions formed after the 1994 and 2000 elections in Jette are the ones that probably resemble least an anti-coalition: they are our only anti-coalitions led by a party that was the largest party in power **both** in the legislature in which the anti-coalition was formed **and** in the preceding legislature. After the 1994 and 2000 municipal elections in Jette, CDH managed to remain the largest party, and managed to continue to govern by means of a similar coalition. This was against the odds for a number of reasons:
 - Thys had also been "secretary of state", i.e. junior minister, in the Federal government in charge of Brussels from 1985 until 1989, and subsequently minister of public works and transport in the first ever government of the Brussels Region, from 1989 until 1994. In 1994 he had to resign as a minister because of corruption allegations with respect to procurement contracts. He however stayed on as mayor, but from 1994 onwards his prosecution was Belgium-wide news on several occasions.
 - In 1999, Jean-Louis Thys died. Until then he had without interruption been mayor of Jette for CDH since 1977.
 - The 2000 municipal elections were marked by a rival "Liste du Bourgmestre" competing with the actual "Liste du Bourgmestre de Jette" (LBJ) of the late Thys, still dominated by CDH.
 - The vote differences in Jette after the 1994 and 2000 elections between the largest party LBJLT and LBJ resp. –joint lists dominated by far by CDH- and the runner-up MR -4%points- are among the smallest of our sample.

For all these reasons, the coalition outcomes of the 1994 and 2000 elections in Jette could be considered rather random. These outcomes were slight decreases of the vote share of CDH only, and a continuation of a broad coalition in which CDH was by far the dominant party, with the 2nd-largest-party-by-a-whisker MR remaining in opposition¹³⁷. In other words the surprise in Jette is –given the events preceding the 1994 and 2000 elections- that *CDH* –rather than MR- was *not* relegated to being only the second largest party, and therefore was *not* excluded from power after the 2000 elections.

¹³⁶ Hence one could say that the exogenous event –the resignation as a minister resp. the death of a long standing mayorcaused the anti-coalition *via* the loss of the mayor's party's status of being the largest party, rather than *directly*.

¹³⁷ Hence one could say that in spite of the exogenous events –the resignation as a minister, resp. the death of a long standing mayor- an anti-coalition against this mayor's party failed to materialise *via* the failure to relegate the mayor's party to being the largest party, rather than *directly*.

Annex 5: Graph A5: Within-municipal-legislature changes in partisan alignment of 4 municipalities governed by an anti-coalition



Notes:

- the dotted line for Ganshoren fully coincides with the dashed line for Anderlecht, and is therefore invisible from table A6
- vertical bars mark municipal elections years