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Soft budget constraint but no moral hazard? The Dutch local government bailout puzzle

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Abstract
The fiscal federalism and public choice literatures stress that government bailouts should be avoided as they increase the probability that governments incur unsustainable debt levels or take excessive risk (moral hazard problem). The current problems in the euro area seem to confirm this view. However, in the Netherlands, the law explicitly stipulates that local governments that are unable to balance their books will be bailed out. Surprisingly, this does not seem to create problems. Only few local governments apply for bailout, and the amounts they receive are modest. We analyze the Dutch case and discuss possible explanations for this apparent anomaly. We test empirically if voters punish financial mismanagement in local governments, but find no evidence for this hypothesis.

1. Introduction
In many countries across the globe, government has become more decentralized in the last decades. Decentralization has been promoted based on different arguments: democracy and good governance, preservation of cultural and ethnic identity, and economic rationales (Rodríguez-Pose and Sandall, 2008). In what Oates (2005) has coined the first generation theory of fiscal federalism, fiscal decentralization is considered beneficial as it improves the allocation of publicly provided goods and services (e.g., Oates, 1999). Both the public choice literature and the second generation theory of fiscal federalism favor decentralization as well, because it is thought to limit public sector growth and improve democracy (Brennan and Buchanan, 1980; Weingast, 1995; Qian and Weingast, 1997). However, the realization has grown that decentralization may create a common pool problem. In some cases, local or regional governments succeed in shifting part of the burden of their public services onto the national taxpayer. Many subnational governments effectively operate under a soft budget constraint.

The concept of soft budget constraints goes back to the seminal work of Kornai (1980), who used it to explain why state-owned enterprises under communism had no incentive to perform
well. When a subnational government faces a soft budget constraint, it expects a higher level of government to support it in case of financial distress. This expectation may be based on formal institutions or regulations, or on informal practices. A soft budget constraint weakens a subnational government’s incentive to avoid excessive borrowing or risk taking. This results in an inefficient allocation of resources.

Regulation aimed at preventing subnational governments from getting into trouble, like constraints on deficits or on borrowing, may be useful but often comes with loopholes (e.g., Von Hagen, 2000; Ahmad et al., 2004). The current European sovereign debt crisis illustrates that this is true for national governments as well. Studies of the effectiveness of borrowing constraints reach different results (e.g., Ter-Minassian and Craig, 1997; Jin and Zou, 2002; Rodden, 2002; Singh and Plekhanov, 2005, Broyles et al., 2009). Much stress is laid in the literature on the difficulty of potential rescuers to credibly commit themselves to a no-bailout policy ex ante (e.g., Dewatripont and Maskin, 1995; Goodspeed, 2002; Kornai et al., 2003; Rodden, 2006). Even if subnational governments are themselves to blame for getting into financial difficulties, bailouts often happen. That is because there is a lot of pressure to prevent public services like health care or education from disappearing as a result of local government bankruptcy.

With the literature in mind, the Dutch policy regarding local government fiscal distress seems rather foolish. Dutch law explicitly states that local governments which are no longer able to balance their books may apply for bailout. This bailout takes the form of a gift, not a loan. Bailouts are guaranteed even in cases of local fiscal irresponsibility. The amount is calculated to enable the local government to regain its fiscal health as soon as possible. Contrary to what the theory would predict, however, this system seems to be perfectly sustainable. In fact, few Dutch municipalities need to be bailed out. The total amount spent on bailouts is modest. After being bailed out, municipalities tend to improve their financial situation fairly rapidly, without the need for new bailouts later on. The bailout system does not appear to give municipalities a strong incentive to misbehave.

The purpose of this paper is to shed some light on this apparent anomaly. Bailouts may be beneficial if financial distress is caused by factors truly outside the control of subnational administrators. In that case, timely bailouts may be cost effective and avoid unacceptable damage to public service provision. Building a new local government organization from scratch after a bankruptcy is a costly affair. Moreover, a strict no-bailout policy is not always optimal because it can provide excessive incentives for high effort, or discourage investment that is socially efficient (Besfamille and Lockwood, 2008). Maskin (1999) shows that ex post bailouts may be a part of an optimal fee schedule designed to incentivize agents to put more effort in ex ante project screening. Thus, if a bailout system without perverse incentives for local administrators exists, it is important to know what it consists of.

One mechanism that could possibly help to restrain irresponsible fiscal behavior, pressure from creditors (e.g., Rodden et al., 2003), can quickly be ruled out in the Dutch case. Because bailouts are guaranteed by law, local governments never go bankrupt. This allows them to
borrow cheaply and easily.\textsuperscript{1} The Dutch central bank has pronounced municipal debt as risk-
free or ‘without affecting solvency’. This means that banks do not need to set aside capital if they lend to municipalities. The two Dutch banks specializing in loans to local governments, BNG and Waterschapsbank, enjoy triple-A ratings. Thus, we cannot expect local governments to be disciplined by credit markets.

We describe the mechanism that has been put into place in order to prevent local financial crises in the Netherlands. This starts with vertical financial supervision, carried out by provinces. Provinces routinely check whether budgets are balanced, and when in doubt may place municipalities under a more stringent form of supervision. If this fails, a bailout procedure may be started up. During such a procedure, which can take several years, the municipality is under forced administration. It cannot take steps that lead, directly or indirectly, to increased spending or lower revenues. It must cut back spending, and, if local tax rates are below a certain threshold, they have to be raised. Consequently, local politicians have very little leeway to put their political programs into practice. This makes bailout unattractive for local politicians. Together with provincial supervision, this is thought to prevent local governments from behaving fiscally irresponsible.

However, there may exist alternative explanations why Dutch municipalities refrain from abusing the bailout system. We identify and test two of these. The first is that local government borrowing may, in effect, be restricted. Dutch local governments are legally required to balance their budgets. Moreover, although there is no explicit legal debt ceiling, there are restrictions on the term structure of local debt. These could, in practice, act as a brake on borrowing. Thus, debt financing might not be possible, limiting the risk of fiscally irresponsible behavior. We investigate whether this is the case.

The second mechanism that may prevent abuse of the bailout system is democratic oversight. The local government operates under supervision of the municipal council, whose members are elected every four years. Conceivably, members of the council try to prevent financial mismanagement in order to avoid scandals that threaten their own re-election. Bailouts are widely reported in the media, and may damage a municipality’s reputation. In order to test empirically whether the democratic system punishes financial mismanagement, we study the effects of bailouts, and the disciplinary step that precedes actual bailouts, on the re-election of local administrators in the elections of 2002, 2006 and 2010. We also check whether local administrators are forced to step down when they are bailed out.

The purpose of this paper is twofold. First, we describe how Dutch municipalities are supervised financially and how the bailout procedure works. Second, we test two hypotheses that may explain why municipalities do not seem to abuse the bailout system. The paper is structured as follows. Section 2 discusses the literature. Section 3 describes the relevant fiscal institutions, and shows that these do not seem conducive to prevent bailouts. Section 4 shows

\textsuperscript{1} Feld et al. (2013) show that lower risk premia for jurisdictions which are potentially bailed out imply higher risk premia for jurisdictions that potentially bail out. In the Dutch case, however, it is the collectivity of municipalities that pays for bailouts. The Dutch bailout system may be seen as a mutual insurance, lowering risk premiums overall.

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that bailouts are nevertheless rare in the Netherlands, and that the amounts involved are small on a national scale. Section 5 describes how provincial oversight works and why the loss of budgetary sovereignty associated with bailouts is thought to be an important element of the success of the Dutch bailout system. We then test two alternative hypotheses explaining the lack of abuse of the bailout system: the existence of binding borrowing restrictions and the political costs of bailouts. Both hypotheses are rejected. Section 9 concludes.

2. Decentralization and fiscal discipline
In the traditional fiscal federalism literature, subnational governments are portrayed as autonomous decision making units, responsible for their own set of tasks, and operating under a hard budget constraint (Musgrave, 1959; Oates, 1972). Revenues are provided mainly by subnational taxes and user charges, supplemented by modest intergovernmental transfers to account for externalities. Administrators are accountable to local voters. As a result, they have an incentive to operate efficiently.

In few countries, however, subnational governments operate as fiscally autonomous jurisdictions. In practice, task assignment is rather murky, with many tasks effectively shared between different levels of government (Rodden, 2006), which reduces transparency, and, as a result of that, accountability. Moreover, national governments tend to limit subnational governments’ ability to raise taxes or their freedom to borrow or spend, while providing grants in order to finance public service provision which is partly mandated by the center. Often, subnational jurisdictions are, effectively, creatures of the center, even in federations. Under such circumstances, it is only natural that voters, creditors and local administrators expect the central government to solve any subnational insolvency problems. As Rodden (2006) states it, “when the center dominates the power to tax and takes on heavy obligations to fund subnational governments, it cannot credibly commit to withhold bailouts in the event of a local fiscal crisis”. This, in turn, creates a moral hazard problem. If some of the costs of local services can be shifted to other jurisdictions, why be frugal and responsible?

In the literature, we find two possible ways to avoid this from getting out of hand. The first is to convince all concerned that there will be no bailout. The second is to limit subnational governments’ freedom to get into trouble.

No-bailout policy
According to Rodden (2006), only Switzerland, Canada and the United States have credibly committed themselves to a no-bailout policy. Although such a policy may be optimal in the long run, it is difficult to maintain. Exceptions cannot be made, because these would set a precedent which would immediately revise upwards the bailout expectations of creditors and subnational governments. A local default can be very painful, involving closed-down schools, hospitals and other essential facilities (Singh and Plekhanov, 2005). Refusing bailout can, therefore, be politically costly. Empirical evidence (e.g., Von Hagen et al., 2000) shows that central governments are more likely to grant bailouts if refusing to do so puts at risk the orderly provision of public services which are regarded to be especially sensitive, and that
central governments grant bailouts to subnational governments more willingly if the latter are closely connected to them through party affiliations or ideologies.

In many, especially European, countries, national law requires subnational governments to provide nationally uniform levels of essential public services as part of an attempt to guarantee equal standards of living to all citizens of the country, regardless of where they live. In order to provide a minimum level of public services, local governments must be provided with the proper financial resources. If local governments’ revenue capacities and spending needs differ widely, as is often the case (Ladd and Yinger, 1994), this calls for some degree of fiscal equalization, usually through intergovernmental grants. The role of local taxation is limited as a result, which weakens fiscal accountability.

Fiscal externalities may also result in pressure to bail out subnational jurisdictions. A default by one jurisdiction may raise the cost of borrowing for others in the same country, or even threaten the creditworthiness of the entire country, especially if subnational debt is held by foreign lenders (McKinnon, 1996). This seems particularly likely for big jurisdictions or capital cities, which command a lot of media attention. Such jurisdictions are also more likely to provide services that benefit other jurisdictions. As a result, big subnational governments may be expected to be too big to fail (Wildasin, 1997). There is not a lot of empirical evidence that bears this out, however. Case studies by Von Hagen et al. (2000) in Australia, Germany, Italy and Sweden, e.g., failed to support the too-big-to-fail hypothesis.

A credible no-bailout policy requires that a sufficiently large share of subnational government spending is financed by own-revenues, i.e., taxation. What matters is not just the ratio of own resources to total revenues alone, but especially subnational government’s room for maneuver in raising local tax rates (Von Hagen et al., 2000). That is because subnational governments must be able to increase revenues if necessary to cope with fiscal setbacks. If they do not have that option, seeking bailout is often the only alternative, as spending usually cannot be reduced drastically in the short run. In Sweden, local government bailouts occurred only after the central government, in its attempt to resolve the national financial crisis of the early 1990s, restricted the municipalities’ right to determine local tax rates (Von Hagen et al., 2000). In many countries, subnational tax autonomy is rather limited (Blöchliger and King, 2006), reducing the scope for a credible no-bailout policy.

Many countries have a formal no-bailout policy, while in practice bailing out subnational governments when needed. Sometimes, local governments look for bailouts from a regional, not the central, government. According to Seitz (2000), German regions (Länder) formally rule out bailouts of local governments, but have secretly stashed away funds in case such a bailout is needed.

Irrespective of the official bailout policy, creditors, voters and subnational politicians form expectations about the probability that a subnational government will be bailed out. Bailout expectations are based on past behavior of higher-level governments and on fiscal institutions. A no-bailout reputation must be earned through costly action, as demonstrated in the United States in the nineteenth century (Rodden, 2006). With regard to fiscal institutions, the extent to
which subnational governments depend on grants seems to be the most important determinant of the central government’s commitment problem. This is reflected in the guidelines used by credit rating agencies (Rodden, 2006). There are two reasons for this. First, high levels of intergovernmental grants signal a willingness of the center to fund local public services, which may be in danger in case of local default. Even though subnational governments provide such services, the center is held responsible if their provision is threatened by default. Secondly, as mentioned above, subnational governments which rely heavily on intergovernmental grants can less easily raise extra taxes to stave off insolvency.

Several empirical studies have analyzed the effects of bailouts on subnational jurisdictions’ fiscal discipline. Such studies seem to confirm the theoretical expectation that bailout expectations weaken fiscal discipline. Pettersson-Lidbom (2010) finds that the expectation of being bailed out (based on grants supplied to neighboring jurisdictions) increased local public debt of Swedish municipalities by 20% in 1979–1992. Bordignon and Turati (2009) find that bailout expectations increased regional public health care expenditures in Italy in 1990–1999. Garcia-Milà et al. (2001) argue that Spanish regions that expected more additional grants incurred higher levels of in 1984–1995.

In an ideal world, voters would punish subnational politicians for being bailed out. For this to happen, voters must place the blame at the correct level of government, and they must be unwilling to shift part of the burden on other jurisdictions. If the national government obliges subnational governments to provide a standard level of public services, it seems likely that the center is held responsible for its continued provision, especially if it provides grants to finance them. Subnational politicians can easily claim that their grants are insufficient. Local voters might even reward their politicians for receiving bailout grants, because this shifts part of the burden of local finance on outsiders. On the other hand, bailouts may also be seen as a signal of incompetency, and been punished by voters. The empirical evidence is limited. According to Von Hagen et al. (2000), even if they were successful obtaining bailouts, Australian state governments paid a high political price for what voters obviously perceived to be fiscal profligacy. Brender (2003) found that Israeli local politicians were punished for running deficits and incurring debt during the 1998 elections, but not in the elections of 1989 and 1993. Brender indicates that this may the result of a hardening of the local government budget constraint after 1993.

**Fiscal rules**

If a credible no-bailout policy is difficult to adhere to, fiscal rules may seem an attractive means to limit the need for bailouts. Spending ceilings, balanced-budget rules or borrowing restrictions may reduce the risk that subnational governments get into trouble. There is some empirical evidence that countries where subnational governments rely heavily on intergovernmental grants tend to restrict those governments’ borrowing autonomy (Von Hagen and Eichengreen, 1996; Rodden, 2006).

The flip side is that such rules limit the options open to subnational governments faced with unexpected economic downturns. There seems to be a trade-off between strict rules and the
flexibility needed to cope with fiscal shocks (Milesi-Ferretti, 2003; Singh and Plekhanov, 2005). Thus, rules cannot be too strict, as a result of which they tend to be easy to circumvent by creative accounting. Moreover, the much-touted benefits of decentralization are only likely to materialize if subnational government is given sufficient autonomy. Aghion and Tirole (1997) and others after them demonstrate that, in order to strengthen incentives to require relevant information and to promote initiative in a decentralized organization, the center must credibly limit its own information and control. This applies to government tiers as well (Rodden, 2006).

Many studies document the ways fiscal rules are dodged in practice. If spending restrictions apply to current balances, e.g., expenditures can be reclassified from current to capital (e.g., Ter-Minassian, 1997). Von Hagen et al. (2000) show that borrowing restraints cannot be relied on to prevent excessive debt accumulation, because administrative and budgeting procedures do not always create clear responsibilities and accountability. Borrowing restrictions can, e.g., be evaded using sale-and-lease-back operations (Jørgen and Pedersen, 2002; Granof, 1984). If restrictions do not apply to off-budget items, intermunicipal organizations or enterprises owned by local governments, debt is likely to accumulate there (e.g., Craig, 1997). Even in China, where regional governments must run balanced budgets and borrowing is prohibited, regions succeed in accumulating substantial hidden off-budget debts (Ahmad et al., 2004).

3. Institutional arrangements

Local government finance

Although it started life in 1588 as a federal state (Hendriks and Schaap, 2011), the Netherlands nowadays is a unitary country. Subnational government in the Netherlands consists of 12 provinces and 415 (in 2012) municipalities. According to the literature, the institutional arrangements in the Netherlands at first glance do not seem to be conducive to prevent subnational government financial distress. Formally, municipalities have a considerable amount of autonomy regarding public service provision. In practice, however, there exists a lot of public and political pressure to provide an implicit ‘minimum level’ of public services. Municipalities falling behind may be singled out in press coverage fueled by pressure groups, or they may be the subject of questions in Parliament (even though the minister to whom such questions are addressed has no formal authority over local choices). Such pressure could easily result in financial problems for cash-strapped municipalities. However, in the Netherlands, fiscal disparities are to a large extent equalized through an elaborate grant system. Thus, municipalities are able to provide similar service levels at similar tax rates. The equalization grant is formula-based and does not contain discretionary components. The variables in the allocation formula were chosen with an eye to preventing municipalities from influencing the amount of grant they receive.

Dutch municipalities depend heavily on funds provided by the central government, with little power to raise taxes (Allers and Elhorst, 2011). This vertical fiscal imbalance makes it difficult for subnational governments to handle financial setbacks. As we have seen, countries
with a high degree of vertical imbalance often impose borrowing restrictions on subnational
governments, in order to protect the central government against bailouts.
In the Netherlands, there are two legal restrictions with respect to subnational government
borrowing. Both apply to the term structure of government debt, not to total debt levels. The
short-term debt ceiling (kasgeldlimiet) holds that, for municipalities, the average net short
term debt (i.e., due within one year) is limited to 8.5 percent of budgeted spending for each
quarter of a fiscal year. The long-term debt ceiling (renterisiconorm) limits the amount of long
term debt (with a maturity of one year or more) for which the interest rate is subject to change
in a given year (because it reaches maturity, or because the interest rate is not fixed) to 20
percent of budgeted spending.
Municipal administrators are supervised by the municipal council (horizontal supervision),
which is elected through proportional representation every four years. The Municipality Law
states that the council must ensure that a municipality’s budget is balanced. An exception may
be made if budget balance may be expected to balance in one of the subsequent years, but this
seldom happened in the period we study.
Municipal councils are not normally composed of persons with much financial expertise.
Councils cannot be expected to provide detailed financial supervision. Therefore, provinces
are assigned the task of supervising municipal finances (vertical supervision). If needed,
provinces can supply signals that enable the municipal council to take measures to reign in
administrators. Provinces cannot force municipalities to take certain measures, however.

Bailout rules
Already in 1933, a law was introduced which stipulated that municipalities in need may
receive bailout grants (Havermans, 1984; Van Zaalen, 2002). The current system was
introduced in the Financial Relations Act (Financiële-verhoudingswet) of 1960. Although
procedures have been revised repeatedly, bailout arrangements have not changed
fundamentally since then.\(^2\) Article 12 of the Financial Relations Act stipulates that a
municipality may receive a supplementary grant if revenues are significantly and structurally
insufficient to cover necessary outlays, while local tax rates are sufficiently high. The grant
money is taken from the Municipality Fund, from which general (unconditional) grants to all
municipalities are paid out. Thus, grants to other municipalities, not the budget of the central
government, suffer when a municipality is bailed out.
Whether or not a municipality is bailed out is decided by the central government. The
municipality must apply for bailout itself. The central government is guided by advice from
the relevant province, by specialists from the Ministry of the Interior and by the Advisory
Council on Financial Relations (Rfv). The application procedure is described in the Appendix.
A municipality applying for bailout is obliged to do everything within its power to restore
financial health. In practice, the local government loses its budgetary autonomy. It cannot take

\(^2\) Rules concerning eligibility and obligations are detailed in Besluit financiële verhouding 2001 and Regeling aanvullende uitkering gemeentefonds. An overview is given in the Article 12 Manual (Handleiding Artikel 12 Financiële-verhoudingswet).
decisions that lead, directly or indirectly, to increased spending or reduced revenues, except when this would lead to unacceptable problems. Whether such an exception can be made is decided by the central government. The municipality has to formulate a cut-back budget, detailing which services will be cut and by how much. This process is overseen by an Inspector from the Ministry of the Interior.

A municipality has to fulfill certain requirements before it can successfully start the application procedure for a bailout grant. As mentioned, it needs to have a significant and structural deficit in order to be eligible for the grant. A significant deficit is defined as a deficit that is larger than 2% of the sum of the general (unconditional) grant and the local property tax capacity. The latter equals the hypothetical property tax revenue that would be generated at a certain standard tax rate. The deficit is defined as structural if the municipality is unable to balance its budget for the next fiscal year, and if the forecasted budget balance for the three years after that is negative as well.

On top of the structural and significant deficit, the municipality must also have ‘above-average’ local tax rates. Revenues of the user charges for waste disposal and sewerage should equal the costs of these services. Additionally, there is a minimum requirement concerning the local property tax rate. From 1994 until 2002, the minimum tax rate was set at 140 percent of the national average. As from 2002, it is defined as 120 percent of the national average. The municipality should comply with these rules for the entire period covered by the bailout procedure.

4. Local government bailouts in practice

In 1967, the first year bailout grants under Article 12 of the Financial Relations Act were provided, 143 out of 941 municipalities (15 percent) had to be bailed out. As the number of small municipalities was reduced steadily, and the fiscal equalization system was refined, bailout gradually became less frequent, as shown in Figure 1. In 1998-2010, just eight different municipalities were bailed out, and received bailout grants for an average of three to four years per municipality. In a single year, an average of less than four municipalities (about 1 percent) received a bailout grant in this period.

Since the introduction of an elaborate new grant equalization system in 1997, bailout has become a rare event. Note that this equalization grant is formula-based, and designed to prevent any influence of local governments on the grant they receive. Thus, implicit bailouts through this grant do not happen (unlike, e.g., in Germany, as reported by Fink and Stratmann, 2011).

Before the new equalization scheme was in place, bailouts were often believed, rightly or wrongly, to result from insufficient means, combined with nationwide minimum standards for local public services. Since 1997, each municipality is supposed to be able to finance the standard package of local services while levying a standard tax rate. Of course, equalization is
never complete. Nevertheless, municipalities needing to be bailed out after 1997 are much more likely to bear responsibility. Therefore, we focus on this period.

Figure 2 here

Table 1 here

The average per capita grant received differs considerably across municipalities (Table 1 and Figure 2). Typical amounts vary between 150 and 300 euro per inhabitant per bailout year. Over the entire bailout period, this amount can get as high as 2,700 euro per inhabitant (Boskoop). At the end of the bailout procedure, when the municipality is handed back its fiscal sovereignty, it usually receives a final ‘farewell’ grant to solve any remaining budgetary problems and to enable the municipality to start again with a clean sheet. Although bailout amounts are sometimes large in local per capita terms, as a percentage of the municipal fund, from which they are financed, they are not. In 1998-2010, bailouts accounted for 0.14 percent of the municipal fund on average.

Financial problems seem restricted to small or medium-sized municipalities. None of the bailed-out municipalities had more than 75,000 inhabitants, while the majority had less than 25,000 inhabitants (Table 1). This indicates that none of them were ‘too big to fail’.

Not all bailout applications are approved. We have identified one municipality (Ravenstein) that unsuccessfully applied for an article 12 grant, while others that were denied bailout once were successful at a later moment. Ravenstein was refused bailout because the fiscal deficit was not deemed structural. A bailout procedure usually stops when the municipality and the central government agree that the financial position in the long-run is healthy again. Since 1998, only one municipality re-applied for bailout after successfully ending its previous period of support (Ouderkerk).

One of the conditions for bailout is that local property tax rates are sufficiently above the national average, as described above. As local taxation is relatively unimportant in the Netherlands, however, it is doubtful whether this acts as a potent signal to voters. Since 2002, tax rates must be at least 20 percent above the national average in order to be eligible for bailout. In 2010, this meant that, on average, taxes had to be 22 euro above average per home-owning household (other households do not pay property tax but this tax may be included in

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3 Ravenstein (8,500 inhabitants) applied for bailout for the year 2000. The municipal council found its financial situation no longer sustainable as it believed it had ‘above-average’ expenses on their local facilities due to the specific local characteristics (historical town center, a large number of many small villages). For fiscal year 2001, the council lacked the political will to increase taxes enough to balance their budget again. After being rejected bailout in 2000 because of doubts whether the deficit was structural, the municipal council decided to start merger negotiations with neighboring municipalities. In 2003, it merged with a considerably bigger neighbor.

4 After having received bailout grants in 1995-1998, the budgetary problems in Ouderkerk were never really resolved. However, it used the proceeds of the sale of a municipal-owned enterprise to fill the budgetary gaps of the early 2000s. Ouderkerk then re-applied for bailout, which was denied at first but a later application, for fiscal year 2008, was granted.

5 Local taxation accounts for about 7 percent of local revenues, on average. Source: Statistics Netherlands.
their rent). Such a trifling sum can hardly be expected to deter local politicians. Note that bailout grants are usually much higher (Table 1). Moreover, in practice, tax rates do not seem to be raised during bailouts. Most municipalities already had higher than average local taxes before their first successful bailout application. See Figure 3.

Figure 3 here

If the central government believes that the fundamental reason for the troubled financial position of a municipality is local mismanagement, bailout is still granted. In such a case, however, it may require tax rates above the normal minimum rates. We identify four such cases (out of a total of eight, see above). These municipalities strived to provide overambitious local service levels and ran into financial problems as a result. Local taxes above the normal minimum rates were then deemed to be a fair price to pay for these municipalities’ own mismanagement. Still, the amounts involved seem too small to bother voters sufficiently to act as a deterrent.

Bailout is meant as a final measure, applied after others have failed. The province can apply ex ante financial supervision if it is not convinced that a municipality’s budget is fundamentally sound (see next section). As can be seen from Table 1, however, not all municipalities applying for bailout have been under ex ante financial supervision. The average duration of ex ante financial supervision prior to a bailout is 1.5 years.

5. Do provincial oversight and bailout conditions prevent financial crises?

From the above, it should be clear that, on theoretical grounds, the risk of fiscal irresponsibility on the part of Dutch municipalities, and of frequent bailouts, is substantial. The national government is widely considered to be ultimately responsible for the (continued) provision of local public services. Municipalities depend to a very large extent on intergovernmental grants, and have little leeway to increase tax revenue. Bailouts are guaranteed provided financial problems are big enough, even in cases of obvious mismanagement. The price in terms of higher-than-average tax rates is modest. However, we have also seen that bailouts do not happen often, and the amounts needed are modest. Here we describe how financial supervision and the bailout procedure itself aim at preventing local financial crises. In the next section, we test two alternative explanations.

Normally, provincial supervision is ex post. Every autumn, municipalities must send the budget for the coming fiscal year to the province. The budget must include forecasts for the three years after the relevant fiscal year. In case the province is not convinced that a municipality’s budget is structurally balanced, or if it foresees financial problems in the future, it may choose to impose ex ante financial supervision (preventief toezicht). Ex ante supervision may be imposed as well if a municipality fails to submit its annual budget in time, which is often a signal of financial difficulty. A third reason to impose ex ante supervision is a

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(coming) merger or amalgamation. This is to prevent municipalities from going on a final spending spree and saddling the merged or amalgamated municipality with the consequences. The decision to impose ex ante supervision is communicated to the municipality before the start of the fiscal year in which ex ante supervision is introduced.

The criteria for imposing ex ante financial supervision may differ between provinces. The decision to impose ex ante financial supervision is made public, and is often reported in the local or regional press. Municipalities under ex ante supervision must submit their annual budget, and every supplementary budget, ex ante to the province for approval. The province will not accept proposals that it deems insufficient to ensure a timely return to a healthy financial position. It will try to coax the municipality to take the budgetary measures it deems necessary. It has no power to impose such measures, however.

In the Netherlands, there has been some discussion whether provincial oversight is unnecessary strict and, therefore, overly costly in terms of time and money. Recently, two provinces experimented with less strict forms of financial supervision.

The province of Noord-Brabant has experimented with a less hands-on procedure for financial oversight. The experiment was carried out in 2007-2010 and was subsequently evaluated (Vink and Karamat Ali, 2010). Six municipalities declined to take part in the experiment, arguing that they valued the province’s supervision or that they felt their financial position did not allow a reduction. Consequently, 62 of the 68 municipalities in Noord-Brabant were included. During the experiment, no municipality was placed under ex ante supervision. The province continued to monitor the municipalities’ budgets, but less detailed than before. Moreover, it did not publish its judgment on the soundness of local budgets. During or after the experiment, no participating municipality asked to be bailed out. In 2011 and 2012, after the experiment, only one participating municipality was placed under ex ante supervision, and for one year only. The financial position of participating municipalities does not appear to differ from that in the rest of the country.

The province of Limburg carried out a different experiment in 2005-2010, which was also evaluated (Provincie Limburg, 2010). Once, every municipality’s finances were investigated in depth. If no problems were found, ex post supervision was implemented for the next four years. During this period, the municipality was monitored only lightly. As in Noord-Brabant, no municipality applied for bailout during or after the experiment. The financial position of the municipalities does not appear to have worsened during the experiment. Neither experiment was designed to study whether provincial oversight is responsible for the small number of municipalities that apply for bailout. Both experiments lasted a relatively short period. Thus, we cannot conclusively answer the question whether provincial oversight prevents bailouts. It seems, however, that local politicians have not taken the opportunity to let fiscal policy get out of hand during the four consecutive years they were monitored only lightly.

Apart from provincial oversight, the Dutch system involves a second mechanism that may help avoiding bailouts. That is a bailout procedure which greatly reduces local autonomy.
During the bailout procedure, which usually takes several years (Table 1), the municipality is under forced administration. It cannot take steps that lead, directly or indirectly, to increased spending or lower revenues. It must cut back spending, and, if local tax rates are below a certain threshold, these have to be raised. Consequently, local politicians have little leeway to put their political programs into practice. This may give them an incentive for prudent fiscal policy. If this really is the case depends on their time horizon. The time lag between excessive risk taking or borrowing and a possible bailout seems likely to be at least several years. Municipal councils are elected every four years. If aldermen do not expect to keep office after the next elections, they might not care that the municipality’s budgetary freedom is endangered. The same holds for members of the council.

However, Dutch municipalities are governed by coalitions. After the elections, one or more of the old coalition parties are usually included in the new government. We investigated how often this happens. After the municipal elections of 2010, 64 percent of the parties that were part of the former coalition also became part of the new coalition after the elections. In 2006, this percentage was even higher (68). In 2010, in just 12 percent of all municipalities the new government did not contain one or more of the former coalition members. In 2006, this percentage was 10. This means that the time horizon of local politicians is likely to be long enough to care about the effects of bailout on budgetary autonomy. This supports the hypothesis that the fear to lose financial autonomy is an important reason for the fact that bailouts are rare.

6. Is borrowing restricted?

However, there may be different reasons for this. In this section, we look at borrowing regulations. The next section considers the political costs of bailouts for local administrators.

At first glance, it seems that debt financing is prohibited for Dutch municipalities. They must balance their budgets, and there exist two legal restrictions with respect to borrowing. International comparisons usually list the Netherlands under countries where subnational borrowing is restricted (e.g., Rodden, 2006). If debt financing is effectively ruled out, the need for bailouts may not arise. But a closer look reveals that debt financing is not only permitted, but applied on a large scale.

Dutch law stipulates that municipalities’ budgets must balance. There are two reasons why that doesn’t rule out deficit financing, however. In the first place, municipalities use accrual accounting. Expenditures to acquire assets do not appear on the budget in the year of acquisition, but are spread out over the economic life of the assets, in the form of interest and depreciation, in a way similar to that in business. Thus, a municipality may borrow heavily while at the same time presenting a balanced budget.

A second reason why deficit financing isn’t ruled out by the balanced-budget rule is that budgeted spending and budgeted revenues are not necessarily realized. Both may change as a result of exogenous developments or decisions of the local government. In the final accounts, an initial deficit (or surplus) is simply balanced by a corresponding change in the municipality’s general reserve. By definition, this makes total revenues (including funds taken
from the general reserve) equal to total spending. In 2010, e.g., 32 percent of municipalities ran an initial deficit. Consequently, the balanced budget rule is consistent with debt financing. Recall, however, that there are two legal restrictions with respect to subnational government borrowing. The short-term debt ceiling puts a upper limit of 8.5 percent of budgeted spending on net short term debt. The long-term debt ceiling limits the amount of long term debt for which the interest rate is subject to change in a given year to 20 percent of budgeted spending. Neither limit puts a ceiling on total borrowing. If the short-term debt ceiling is in danger of being broken, a municipality can substitute long-term debt for short-term debt. If the long-term debt ceiling is in danger of being broken, debt nearing maturity can be rescheduled. Whether this is possible of course depends on market conditions and creditworthiness. It banks are not prepared to supply long-term credit, total municipal borrowing may be effectively restricted by these rules.

We investigated whether the borrowing restrictions limit the amounts municipalities can borrow in practice. For a sample of 100 municipalities, we checked whether the short-term debt ceiling or the long-term debt ceiling was binding in 2010. In this year, credit (especially long term credit) was relatively scarce as a result of the credit crisis which started in 2008. We found that the short-term debt ceiling was broken by 38 percent of all municipalities in the sample in at least one quarter of 2010 (Table 2). It seems that some municipalities benefitted from the fact that, in this period, short-term debt was considerably cheaper than long-term debt. Apparently, breaking this rule does not immediately result in sanctions from the province, which acts as supervisor. Sometimes, permission for breaking this rule is granted, if it results from an exceptionally large cash flow connected to a specific investment. Most municipalities in our sample could increase their short-term debt considerably before hitting the legal ceiling.

Table 2 here
Table 3 here

As for long term debt subject to interest rate changes, municipalities on average had used up only 7 percentage points of the available 20 percent of budgeted spending (Table 3). Thus, they could increase such debt by 13 percent of budgeted spending and still be within legal borrowing restrictions. Most municipalities (73 percent) could more than double their debt before hitting the legal ceiling.

We conclude that Dutch law does not put restrictions on municipal debt that are effectively binding. This is not just a theoretical nicety. In 2010, total municipal debt varied from 4 percent of total spending (or revenue) in Leusden to a staggering 252 percent in Bernisse. On average, municipalities’ debt amounted to 73 percent of total spending. The aggregate EMU-deficit incurred by municipalities was 0.8 percent of GDP. Municipalities borrow considerable

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7 Source: Statistics Netherlands.
8 Source: Statistics Netherlands.
amounts. Moreover, they could borrow much more if they wanted to without breaking any laws. The only limit on borrowing is the need to finance interest and depreciation through the budget. If it is no longer possible to balance the budget, a municipality may apply for bailout.

7. Are bailouts or ex ante financial supervision politically costly?
Whether local administrators are self-seeking budget maximizers, well-meaning idealists or driven by other motives, they need to win power and keep it if they are to govern. Therefore, any political costs associated with bailout or ex ante financial supervision might discourage local administrators from taking unwarranted risks and from exploiting the bailout system. Such reasoning assumes that local voters care about sound fiscal policy. That is not necessarily true. After all, if things get out of hand, bailout grants are received to prevent local services from collapsing, passing on the bill to the rest of the country. Still, voters could read bailouts or increased provincial oversight as a signal of incompetence on the part of the local government.

Here, we look into the effects of bailouts or ex ante supervision on the careers of local administrators. First, we investigate whether members of local governments have been forced to step down relatively often in periods preceding bailouts. Then, we test empirically whether re-election of local politicians has been affected by bailouts or the imposition of ex ante provincial supervision.

Administrators stepping down
In the Netherlands, a single party seldom collects enough votes to be able to form a local government on its own. Coalition governments are the norm. Coalition parties choose the local administrators (aldermen), which, since 2002, have no seat in the council. Together with the mayor, the aldermen form the local government. The mayor is not elected but appointed by the national government, and has relative weak executive powers.

If the municipal council no longer supports the local government, it can force one or more aldermen to step down. Political crises do not result in elections; the local election calendar is set nationally. In the absence of amalgamations, local elections are held every four years. In 1998 – 2010, 28 percent of aldermen stepped down (Castenmiller et al., 2010). Most of them seem to have stepped down for political reasons, but the exact share is unknown.

We counted the number of aldermen who stepped down in municipalities which received bailout in 1998-2011. For each municipality, we limit our count to the year the bailout grant was received, plus the three preceding years. That is because it usually takes some time for a financial crisis to result in bailout. In municipalities receiving bailout, 31 percent of aldermen stepped down in non-election years. This percentage is above the national average of 28, but the difference is not statistically significant.

Of the eight municipalities that were bailed out in 1998-2010, four had to raise their tax rates to a higher level than is normally the case, because of local financial mismanagement (see

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above). The consequences for incumbents were no different, however: in these municipalities, 31 percent of aldermen stepped down as well. Thus, we find no evidence that bailouts result in immediate political casualties.

**Re-election of local governments**

Even if local administrators are seldom forced to step down after a bailout, it is possible that voters punish them at the polls. We test empirically whether re-election of coalition parties has been affected by bailouts, or by the imposition of ex ante provincial supervision, using data from the local elections in 2002, 2006 and 2010.

As the dependent variable we use the (relative) change in the vote share of the parties that form the local government.\(^\text{10}\) The number of local administrators is limited, depending on population size. As a result, it is not unusual for small municipalities to have minority governments, because the fragmentation of the municipal council sometimes means that the minimum number of parties needed for a majority coalition exceeds the number of seats available in the local government. For this reason, using a dummy variable indicating re-election of the previous coalition government is not practical.

As the independent variables of interest, we use dummies for bailout and ex ante financial supervision in the election year and the three preceding years. We include ex ante supervision for municipalities deemed to have financial problems and for municipalities who fail to submit their budget in time. We exclude ex ante supervision imposed as a result of a pending merger, however. This is not a signal of fiscal incompetence. Moreover, mergers and amalgamations often create public discontent, which may influence election results. Including this reason for ex ante supervision would bias our results.

It seems likely that it is not the status regarding bailout or ex ante supervision as such that signals incompetence to voters, but a change in this status for which the current administration is responsible. After all, mismanagement by a previous government cannot be blamed on the current one. Therefore, we also defined dummy variables with value one if the municipality is involved in bailout or ex ante supervision in the election year or one or two years before the election, but not three years before the election.

Among our control variables is the share of the coalition parties in the local council before each election. A high vote share in the previous elections makes it more difficult to win extra votes, and vice versa. Thus, we would expect a regression towards the mean, resulting in a negative sign.

A second control variable is the relative increase in the local tax burden in the election year.\(^\text{11}\) Presumably, tax hikes are unpopular with voters. The literature on political business cycles has produced some empirical evidence that, for this reason, tax rates are sometimes reduced in election years (see, e.g., Aidt et al., 2011 and the literature cited therein).

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Table 4 here

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\(^{10}\) Source: COELO.

\(^{11}\) Source: COELO.
Additionally, we use year dummies to control for nationwide sentiments that may influence the urge to punish local governments. We also introduce dummy variables which take the value of one if a certain party is part of the local coalition government, and interact these with year dummies. Thus, e.g., the dummy ‘cda2002’ takes the value of one if the Christian Democrat party (CDA) was part of the local coalition in 2002. These dummies are designed to pick up national trends in party popularity. We use such dummies for the three main parties CDA, VVD (Conservatives) and PvdA (Social Democrats). Table 4 presents descriptive statistics.

Table 5 presents results of the full model, both with the absolute change in the vote share of the coalition and the relative change of the vote share of the coalition as the dependent variable. As the dependent variables are proportions, OLS is not an appropriate method here. Instead, we ran logistic regressions (Papke and Wooldridge, 1996). This means the coefficients should be interpreted as log-odds ratios. Variables reflecting national trends seem most important to explain the vote share of local coalitions. This is consistent with previous research finding that local elections are often decided on the basis of national party preferences (Boogers et al., 2010; Boyne, 1996; Dunleavy, 1980). The local characteristics included in our regression play a minor role. Year dummies turn out to be quite significant, suggesting that in both 2002 and 2006, coalitions were more likely to lose votes than in 2010. Coalitions with Christian Democrats did well in 2002 and 2006; coalitions with Conservatives did well in 2010 and coalitions with Social Democrats did well in 2006 and badly in 2010.

The share of the coalition in the previous council has a significant coefficient, which is negative, as expected. The change in the local tax burden has no effect on the vote share of the local coalition. This does not mean that local administrators can safely increase tax rates at will. Previous research suggests that local governments are reluctant, for political reasons, to let their tax rate deviate much from tax rates in neighboring municipalities (Allers and Elhorst, 2005). In our dataset, the local tax burden for households rose 4 percent (20 euro) on average in election years (Table 4). That may be too little to be noticed by voters.

Ex ante supervision or bailout in the election year or the two years before do not seem to affect the coalition’s vote share (Table 5). In order to distinguish between different periods between supervision or bailout on the one hand and elections on the other, we ran some additional regressions. Table 6 shows the results for bailouts, and Table 7 for ex ante supervision. These regressions include the same control variables as those in Table 5, but these coefficients are not reported as they are similar to those in Table 5. In just one case we

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Because vote shares can both increase and decrease, dependent variables are in the range [-1, 1]. In order to be able to run logistic regressions, we recoded the values to be in the range [0, 1].
find a coefficient that differs significantly from zero: ex ante supervision in the year before the elections seems to reduce electoral success of the coalition. This coefficient is only significant at the 10-percent confidence level, however (Table 7). Ex ante supervision in the election year or two years before an election does not significantly diminish the coalition’s vote share.

Table 6 here
Table 7 here

Our results do not provide convincing evidence that voters punish financial misbehavior. The number of bailouts in the period under study is rather low, however. This may explain the lack of significant effects on vote shares. The number of municipalities under ex ante supervision, and the variation over time, is much higher, however (Table 4). Arguably, this variable is a better indicator of democratic supervision than bailout, because any effect of ex ante supervision on election results may give local administrators an incentive to prevent financial mismanagement. The fact that we do not find much of an effect suggests that there must be something else that prevents Dutch municipalities from abusing the bailout system.

8. Conclusions
We analyze the Dutch system which bails out local governments in case of fiscal difficulties. We show that this system is rather unusual, explicitly guaranteeing bailout even in cases of obvious financial mismanagement. This goes against every advice available in the literature. Nevertheless, we show that bailouts are rare and the amounts needed insubstantial. How is this possible?
We describe the system of provincial oversight and the bailout procedure which are designed to prevent local financial crises. The bailout procedure temporarily robs municipalities of their fiscal autonomy. This may give the parties forming the local government coalition a strong incentive to avoid bailout, provided their time horizon is long enough. We provide evidence that shows that, in the Netherlands, coalition parties may realistically hope to be part of a new coalition after elections. This supports the hypothesis that local politicians are sufficiently forward-looking to have an incentive to avoid financial crises.
We test two alternative hypotheses that may explain the lack of abuse of the bailout system. The first is that borrowing is effectively constrained. Because Dutch municipalities depend heavily on grants from the central government, and have little tax autonomy, one would expect borrowing to be restricted in order to limit the number of bailouts. We show, however, that the existing borrowing restrictions are not binding in practice, and that the balanced-budget requirement does not rule out borrowing. Municipalities borrow considerable amounts, and could borrow more if they wished to.
As a second hypothesis, we test whether local politicians face political costs for fiscal mismanagement. First, we examine the number of local administrators that stepped down in the year bailout was granted, or in one of the preceding years. As a percentage of the number of aldermen, this is not higher than in other municipalities. Thus, we find no evidence that
bailouts result in immediate political casualties. Next, we investigate the effect of bailout or the implementation of strict financial supervision on the chances of re-election of local governments. No such effect is found.

We conclude that (1) there is no convincing evidence that financial misbehavior is associated with political costs, and (2) that regulations do not prevent Dutch municipalities from borrowing. We cannot reject the hypothesis that provincial oversight, backed up by loss of budgetary autonomy in case of a bailout, keeps down the number of municipal fiscal crises in the Netherlands even in the face of an explicit bailout policy.
References
Allers, M.A., Hoeben, C. and Veenstra, J., 2012, Toereikendheid huidige kasgeldlimiet en renterisiconorm, Groningen: COELO.
Feld, L.P., Kalb, A., Moessinger, M.D., Osterloh, S., 2013, Sovereign bond market reactions to fiscal rules and no-bailout clauses – the Swiss experience, CESifo working paper, 4195.


Appendix. Bailout application procedure

Application for bailout in year t takes the following steps:

- Before the 1st of December in year t-1, the municipality has to notify the province and send a request to the responsible central government ministries on the basis of their proposed budget.
- The province then has 2.5 months to investigate the financial situation of the municipality and write a report which has to be sent to the relevant ministries and the municipality before the 15th of February.
- An inspector of the Ministry of the Interior starts an investigation and checks whether the municipality fulfills all requirements. The inspector will also report any missing, yet necessary information for the full report. He/She will send the ministry, the municipality and the Advisory Council on Financial Relations a preliminary report by the 1st of March and the full report before the 1st of December of year t.
- Both the municipality and the province have the opportunity to react to the report made by the inspector before the 1st of February in the year t+1.
- The Advisory Council on Financial Relations gives its opinion before the 1st of April of year t+1.
- The responsible ministers will then decide whether or not to supply a bailout grant by the 1st of June of year t+1.

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13 These are the Ministry of the Interior and the Ministry of Finance.
Table 1. Municipalities receiving bailouts, 1998-2010

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Bailout period</th>
<th>Years ex ante provincial supervision preceding bailout</th>
<th>Total bailout grant (in 1,000 euro)</th>
<th>Average grant per capita per year (euro)</th>
<th>Inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boarnsterhim</td>
<td>2010-</td>
<td>2</td>
<td>3,580</td>
<td>185</td>
<td>19,357</td>
</tr>
<tr>
<td>Loppersum</td>
<td>2008-</td>
<td>1</td>
<td>4,026</td>
<td>127</td>
<td>10,702</td>
</tr>
<tr>
<td>Neder-Betuwe</td>
<td>2004-2006</td>
<td>0</td>
<td>7,834</td>
<td>117</td>
<td>22,289</td>
</tr>
<tr>
<td>Nieuwkoop</td>
<td>2004-2006</td>
<td>1</td>
<td>4,880</td>
<td>146</td>
<td>11,092</td>
</tr>
<tr>
<td>Simpelveld</td>
<td>2003-2007</td>
<td>1</td>
<td>15,648</td>
<td>275</td>
<td>11,448</td>
</tr>
<tr>
<td>Boskoop</td>
<td>2000-2010</td>
<td>0</td>
<td>40,621</td>
<td>243</td>
<td>15,106</td>
</tr>
<tr>
<td>Winschoten</td>
<td>1999-2003</td>
<td>1</td>
<td>9,142</td>
<td>98</td>
<td>18,695</td>
</tr>
<tr>
<td>Ouderkerk</td>
<td>1998 and 2008</td>
<td>na</td>
<td>678</td>
<td>42</td>
<td>8,214/8,156</td>
</tr>
<tr>
<td>Gouda</td>
<td>1998-2001</td>
<td>na</td>
<td>112,366</td>
<td>391</td>
<td>71,544</td>
</tr>
<tr>
<td>Reiderland</td>
<td>1998-2000</td>
<td>na</td>
<td>3,690</td>
<td>177</td>
<td>6,688</td>
</tr>
<tr>
<td>Schoonhoven</td>
<td>1998-2000</td>
<td>na</td>
<td>9,026</td>
<td>255</td>
<td>11,804</td>
</tr>
<tr>
<td>Purmerend</td>
<td>1998-1999</td>
<td>na</td>
<td>16,047</td>
<td>119</td>
<td>66,922</td>
</tr>
<tr>
<td>Scheemda</td>
<td>1998-1999</td>
<td>na</td>
<td>3,081</td>
<td>108</td>
<td>14,337</td>
</tr>
<tr>
<td>Geldermalsen</td>
<td>1998</td>
<td>na</td>
<td>4,722</td>
<td>200</td>
<td>23,610</td>
</tr>
<tr>
<td>Zaltbommel</td>
<td>1998</td>
<td>na</td>
<td>9,974</td>
<td>900</td>
<td>11,086</td>
</tr>
</tbody>
</table>


Years of ex ante supervision: prior to first bailout grant; na = not available.
Table 2. Percentage of municipalities that broke the short-term debt ceiling in one or more quarters of 2010

<table>
<thead>
<tr>
<th>Number of quarters ceiling was broken</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of municipalities</td>
<td>61%</td>
<td>14%</td>
<td>8%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Description</td>
<td>Percentage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average room to increase debt (% of budgeted spending)</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of municipalities with debt at 0-50% of ceiling</td>
<td>73%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of municipalities with debt at 50-75% of ceiling</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of municipalities with debt at 75-100% of ceiling</td>
<td>8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of municipalities with debt above ceiling</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>N</td>
<td>Mean</td>
<td>St.dev.</td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----</td>
<td>------</td>
<td>---------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Change of vote share coalition parties</td>
<td>1272</td>
<td>-0.066</td>
<td>0.112</td>
<td>-0.538</td>
<td>0.385</td>
</tr>
<tr>
<td>Relative change of vote share coalition parties</td>
<td>1272</td>
<td>-0.102</td>
<td>0.183</td>
<td>-0.875</td>
<td>0.740</td>
</tr>
<tr>
<td>Bailout in election year, or one or two years before election</td>
<td>1272</td>
<td>0.010</td>
<td>0.101</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Bailout in election year</td>
<td>1272</td>
<td>0.009</td>
<td>0.097</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Bailout one year before elections</td>
<td>1272</td>
<td>0.011</td>
<td>0.104</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Bailout two years before elections</td>
<td>1272</td>
<td>0.011</td>
<td>0.104</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Supervision in election year, or one or two years before election</td>
<td>1272</td>
<td>0.083</td>
<td>0.275</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Supervision in election year</td>
<td>1204</td>
<td>0.033</td>
<td>0.179</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Supervision one year before elections</td>
<td>1142</td>
<td>0.047</td>
<td>0.212</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Supervision two years before elections</td>
<td>1074</td>
<td>0.061</td>
<td>0.240</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Change in tax burden</td>
<td>1272</td>
<td>0.040</td>
<td>0.047</td>
<td>-0.138</td>
<td>0.402</td>
</tr>
<tr>
<td>Vote share coalition in previous elections</td>
<td>1272</td>
<td>0.632</td>
<td>0.104</td>
<td>0.259</td>
<td>0.968</td>
</tr>
<tr>
<td></td>
<td>Absolute change in vote share coalition</td>
<td>Relative change in vote share coalition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------</td>
<td>------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bailout in election year, or one or two years before election</td>
<td>-0.012 (-0.19)</td>
<td>-0.027 (-0.28)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision in election year, or one or two years before election</td>
<td>-0.020 (-0.92)</td>
<td>-0.048 (-1.32)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in tax burden</td>
<td>-0.021 (-0.16)</td>
<td>-0.015 (-0.07)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vote share coalition in previous elections</td>
<td>-0.476*** (-7.20)</td>
<td>-0.502*** (-4.31)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>year2002</td>
<td>-0.133*** (-2.82)</td>
<td>-0.227*** (-2.82)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>year2006</td>
<td>-0.126** (-2.55)</td>
<td>-0.210** (-2.39)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cda2002</td>
<td>0.146*** (5.20)</td>
<td>0.250*** (5.20)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cda2006</td>
<td>0.123*** (3.97)</td>
<td>0.196*** (3.44)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cda2010</td>
<td>0.023 (0.97)</td>
<td>0.044 (1.11)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vvd2002</td>
<td>0.018 (0.82)</td>
<td>0.033 (0.92)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vvd2006</td>
<td>-0.007 (-0.32)</td>
<td>-0.010 (-0.27)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vvd2010</td>
<td>0.052*** (2.61)</td>
<td>0.096*** (2.84)</td>
<td></td>
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</tr>
<tr>
<td>pvda2002</td>
<td>0.033 (1.44)</td>
<td>0.055 (1.50)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pvda2006</td>
<td>0.193*** (8.40)</td>
<td>0.322*** (8.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pvda2010</td>
<td>-0.100*** (-3.79)</td>
<td>-0.176*** (-3.88)</td>
<td></td>
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</tr>
</tbody>
</table>

Logistic regression estimates; 1152 observations; robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1
**Table 6. Effect of bailout on relative change of vote share of coalition parties**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bailout in election year, or one or two years before election</td>
<td>-0.066</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bailout in election year</td>
<td></td>
<td>-0.019</td>
<td></td>
<td></td>
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<tr>
<td>Bailout one year before elections</td>
<td></td>
<td></td>
<td>0.041</td>
<td></td>
</tr>
<tr>
<td>Bailout two years before elections</td>
<td></td>
<td></td>
<td></td>
<td>0.043</td>
</tr>
</tbody>
</table>

Logistic regression estimates; 986 observations; robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1
Control variables not shown
Table 7. Effect of ex ante supervision on relative change of vote share of coalition parties

<table>
<thead>
<tr>
<th>Supervision in election year, or one or two years before election</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervision in election year</td>
<td>-0.042</td>
<td>-0.081</td>
<td>-0.095*</td>
<td>-0.012</td>
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<tr>
<td></td>
<td>(-1.14)</td>
<td>(-1.18)</td>
<td>(-1.82)</td>
<td>(-0.27)</td>
</tr>
<tr>
<td>Supervision one year before elections</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision two years before elections</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Observations 1,152 1,114 1,052 986

Logistic regression estimates; robust z-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Control variables not shown
Figure 1. Municipalities with bailout grants or under ex ante supervision
Figure 2. Number of bailouts and per capita amount, 1998-2010

Average per capita bailout (2010 euro's; left axis)

Number of municipalities receiving bailout
Figure 3. Local tax burdens before and after bailout (national average = 100; t is year of bailout)
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