Vermogensstructuur van decentrale overheden

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Summary

Chapter 1 Introduction
Two articles in Binnenlands Bestuur (Moerkamp 2001 and Bekkers 2001a) made both media and politicians aware of the large amount and fast growing equity of Dutch local governments. In the media and in parliament a discussion started about what to do with the equity. How much equity do the local governments really have? How much equity is desired? Should there be regulations and perhaps a redistribution of the equity? Or should the national government skim the surplus of equity? Surprisingly, there is very little research published which attempts to answer the question of why local governments need equity and how much they need. While there are several empirical studies of local government debt, a good analysis of the optimal capital structure is lacking. Debt theories for national governments and capital structure theories for firms do not apply to individual public institutions. In this study, an attempt is made to fill this gap.

The central question of this study is:

What is the actual and optimal capital structure of Dutch local governments?

The total amount of capital needed depends strongly on the size of the government and the choice how to spend it (capital versus consumption goods). After all, a government needs capital to finance its assets. This study takes the size of a government, and therefore also the total amount of capital needed, as given. The reason why this research is focusing on the Dutch local governments is that local governments (in different countries) are too diverse. In chapter 2 a model to determine the optimal capital structure is formulated which is applicable for public organizations (excluding central governments) in general. The other chapters are specifically focused on the Dutch provinces and municipalities.

Outline
This study is organized as follows: In chapter 2 an attempt is made to develop a theory of the optimal capital structure for local governments. Subsequently, a generalised framework to calculate and evaluate the (optimal) capital structure is presented. Chapter 3 analyses how the Dutch local governments account for their financial transactions and situation, such as their annual balance sheet. Subsequently,
the influence of bookkeeping regulations on the equity as presented in the annual reports is discussed. In chapter 4, an inventory is made of equity levels of the Dutch provinces and municipalities according to their annual accounts. Furthermore, an attempt is made to find out to what extent the equity is over- or underestimated. Chapter 5 tries to determine which factors contributed to the differences in the level of equity of the Dutch municipalities.

At the moment, it is not possible to determine which Dutch local governments have a surplus of equity and how large the surplus is. But as shown in chapter 4 the Dutch local governments do have a lot of equity and this equity is not distributed equally. Chapter 6 discusses the policy options local governments and the central government have. What can an individual local government do with its surplus and what can the central government do with the surpluses?

CHAPTER 2  THE OPTIMAL CAPITAL STRUCTURE OF LOCAL GOVERNMENTS

In chapter 2 a theory of the optimal capital structure for local governments is developed. Theories about the optimal capital structure are virtually non-existent and debt theories for national governments and capital structure theories for firms do not apply to individual public institutions.

Debt theories deal with the influence of the choice between tax or debt on welfare and the distribution of welfare over time. The choice between debt and tax determines the capital structure. The influence of individual local governments is generally too small to have any significant influence on the capital market or economy. Furthermore, local governments are very often bound to national regulations and have only limited possibilities to set their own ones.

Theories for companies can neither be applied to local governments. The risk of a company going bankrupt is acceptable as long as the expected return rate of the invested capital is high enough. Furthermore, a firm that goes bankrupt changes its owners. The creditors become the new owners and the production process can go on, if possible. Creditors of public debt cannot take over the ownership of public organizations and bankruptcy of public organizations is not seen as an option in many countries. This means that to ensure its continuity, a local government needs to be able to raise debt or have direct access to cash at all times.

Another difference between public organizations and firms is that public organizations are income-spending entities, whereas companies are income-earning entities. Firms cannot cut back costs when efficiency is already optimal, because decreasing production or quality reduces income by at least the same amount. Public organizations can often reduce costs by adjusting quantity and/or quality of provided services without their income decreasing commensurately. Many public organizations are also able to increase their income without increasing costs because they often have a monopoly on the provided services or can raise taxes and/or levies.
Because the existing capital structure and debt theories are inapplicable, a new theory of the capital structure specifically for local governments needs to be developed. The capital structure of a local government is optimal when the cost of capital (equity and debt) is minimal, given that its continuity is ensured. Creditors have no problem lending money against a favorable interest rate when the continuity of the local government is ensured. The dimension of the total debt does not have influence on the interest rate. When the continuity is not secured however, the marginal cost of debt increases. After all, the creditors’ risk increases when changes of bankruptcy increases (see red line in figure 7.1, page 191).

Local governments do not pay interest on their equity or pay dividends. This doesn’t mean the cost of equity is zero. Equity can be seen as savings from its citizens. When a citizen does not have to provide the capital for the government’s equity, he could invest or put the money in his savings account. A surplus of equity can lead to agency costs, but also a shortage of equity can bring extra costs. A surplus of money can lead to inefficiency and makes government finance less transparent. An organization with a surplus of equity can, without endangering its continuity, invest in less viable projects and/or spend money on projects which go beyond their duties and tasks. A shortage of equity can lead to higher costs due to additional financial justification. Furthermore, it will be more difficult to smooth taxes. The blue line in figure 7.1 shows the costs of equity.

The cost of capital is minimal when the marginal cost of equity equals the marginal cost of debt (point Kmin in figure 7.1). In this point, the capital structure is optimal when, and only when, the restriction that continuation of the public services is secured, is satisfied. If the restriction is not satisfied, then the optimal capital structure depends on the minimal level of equity needed to secure continuation.

As mentioned, a public body needs to be able to raise debt or have direct access to cash to ensure its continuity at all times. Creditors only provide capital to an organization if they can reasonably expect that the loan will be paid back with interest, or that liquidation of the public organization’s assets generates enough money to pay off the loans. To guarantee the continuity of operations, the financial resilience needs to be sufficient to withstand future setbacks at all time. Financial resilience is the financial capacity of a public organization to cover its risks. Figure 7.2 (page 192) shows the relation between risks and the financial capacity of an organization.

The financial capacity of a public organization consists of several elements. The first element is equity. The more equity an organization has, the less risk creditors run. Furthermore, public organizations can, in general, increase their income or cut back on costs to counter setbacks. Thus, unutilized income capacity and ability to cut expenditures are also a part of the financial capacity of public organizations. The last element of financial capacity is “guarantees”. For example, when a third party takes over an organization’s financial commitments if that organization cannot uphold its obligations.
Public organizations deal with a large variety of risks. For determining the financial resilience, only those risks which can have financial consequences are relevant. When estimating the total risk, it is important to recognize that not all risks incur at the same time, and that some risks can be correlated. Information on probabilities and magnitude of risks is generally not readily available. A discussion about the difficulties of quantifying the risks of public organizations goes beyond the scope of this study.

Financial resilience is traditionally calculated as the ratio of the net present value of the financial capacity and the net present value of the risks. By calculating the net present value, a large amount of information is lost. The net present value method, after all, only calculates the financial resilience of a public organization at a certain point of time, and does not show the dynamics over time. In chapter 2, a model is introduced in which the financial capacity at time $t$ ($\text{FC}_t$) is written as an array, therefore capturing time dynamics in a model. This model also enables public organizations to analyze the impact of proposed new policies or changing risks on their financial resilience.

Chapter 3 How to Calculate Equity and the Influence of Bookkeeping Regulations on the Balance Sheet of Dutch Local Governments

Chapter 3 discusses the way Dutch local governments do their bookkeeping and which problems arise when calculating the level of equity. Theoretically the level of equity is easy to calculate. It can be calculated by subtracting liabilities from the total value of the assets. Problems arise when one needs to decide which assets should be valued and at what value. Depending on the purpose, different choices can be made. In this study we want to calculate the minimum of equity a local government needs to guarantee the continuation of its public services. Therefore, only assets which can be sold or pay a profit are relevant. After all, these assets together with other elements of the financial capacity give creditors the security that the local government can pay back the loan.

Regulations prescribe Dutch local governments to include an analysis of their financial resilience in their annual account and budget. Unfortunately the bookkeeping rules do not accommodate which assets to activate and for which value by way of strict regulations. Local governments can and do account for identical assets differently. Chapter 3 gives an overview of the (present and past) regulations and its influence on the balance in their annual reports.

Chapter 4 Equity of Dutch Municipalities and Provinces

In spite of the fact that equity in the annual report does not give a good representation of the actual equity, chapter 4 gives an overview of level of equity of the Dutch municipalities and provinces. The municipalities saw their equity increase between 1985 and 2004 at an average of 6.3 percent per year up to over 25 billion euros. Equity as a percentage of expenditure of municipalities amounts to 63 percent in
2004; per capita municipalities have 1417 euros of equity. The equity of the provinces increased with an average of 3.1 percent per year over the period 1979 to 2005 up to 3.2 billion euros. This equals 69 percent of the total provincial expenditures and 198 euros per capita. The differences between individual local governments are substantial. The level of equity varies from 1 euro per capita to 5306 euros in 2004. In terms of percentage of expenditure, it varies from 0 to 248 percent. Many assets are valued lower or higher than the actual value. Buildings and shares are generally valued for the price they were originally bought for. The difference between the market value (the value it can be sold for) and the value according to the accounts is called the hidden reserves. In chapter 4 an attempt is made to inventory these hidden reserves. Unfortunately there is not enough information to make a good estimate of the hidden reserves in the material assets. The hidden reserves in financial assets could be estimated by taking the intrinsic value of the shares. The intrinsic value of the shares was for the municipalities about 5 times and for the provinces 31 times as high as the value in the annual reports. In 2000, municipalities had 405 euros per capita of hidden reserves on average, varying from -100 euros to 2193 euros. In 2004, provinces had 393 euros of hidden reserves per capita. Some provinces have hardly any hidden reserves while others have reserves which amount up to three and a half times their yearly budget.

Chapter 5 Determinants of the Equity Levels of Dutch Municipalities

The large differences in equity raise the question of why some local governments have large levels of equity and others have not. Which factors contribute to these differences? Until now no empirical research has been published on the equity levels of local governments, but there have been several recent articles trying to explain the differences in debt between local governments. Explanations for the differences were sought in political (ideology, fragmentation and stability), demographic and institutional characteristics. The results in the different papers are ambiguous. Variables which are significant in one paper are not significant in some other papers. Sometimes the coefficients even have an opposite sign.

Besides an overview of the empirical studies on debts of local governments, chapter 5 examines which factors explain the differences in equity levels of Dutch municipalities. Factors such as ideology, fragmentation and stability of the city council, several demographic characteristics and specific characteristics of the municipalities were taken as variables in the regression. The outcome of the regressions gives little information. Many variables are not significant or the outcomes are not robust. Together with the specification problems (heteroscedasticity, multicollinearity and influential outliers), limited explanation of the model (low R²) and problems finding good data for the explanatory variables (chapter 3) are the reasons why the outcomes are not very useable.
CHAPTER 6  POLICY OPTIONS: WHAT TO DO WITH SURPLUSES

The eminent dimension of the equity of the Dutch local governments, the oblique distribution over the individual municipalities, the large book profits in the last decades and the possibly even larger book profits in the coming years raise several questions. What should be done with the surplus of equity? Should the municipalities and provinces accumulate this equity, consume it or return it to the citizens? Or should the central government interfere by skimming the surplus, redistributing it or regulating it by formulating legal standards?

The local governments have three possibilities to deal with a surplus of equity. First, they can spend it; the danger of this possibility is that they don’t spend it wisely. A surplus might be spent on goods which otherwise would not be bought. This “flypaper effect” can lead to higher government expenditures than optimal. Using the surplus of equity for financing additional public goods and services can lead to a structural increase of taxes in the long-run. The new goods and services might not be abolished after the surplus runs out.

Local governments can also return the surpluses to their citizens by lowering taxes incidentally or structurally; the problem here is to determine how to divide the surplus, for it is not always the taxpayer who paid for the surplus. A surplus can arise from private activities, from money from third parties or by the increased value of assets, as in the case of Dutch local governments’ shares in electricity companies.

The third option is to accumulate equity. Budget surpluses or book profits can be used to invest, to pay off debt or can be put aside. This increases the financial resilience of the government and less debt is needed. By having less interest cost or additional income from the invested equity, taxes can be lowered or more goods and services can be offered. An advantage for the local government of having more equity is that it is less sensitive to policy changes by the central government or meddling by its governmental supervisors. The disadvantage of a surplus of equity is that it can may lead to an inefficient use of funds. A ‘rich’ government investing inefficiently, ignoring risks or not securing risks will face less consequences than ‘poor’ governments.

Another point of view is that of the central government. The large surplus of equity and the oblique distribution might not be desired. The central government can decide to skim surpluses, redistribute the equity or make regulations. A reason for central government to intervene is that local capital structure might interfere with national policy and legislation. A central government can also intervene to protect its citizens against inadequate local governments. Furthermore, the central government could be the cause of the oblique distribution, i.e. by allowing some municipalities to build houses and gain profits while forbidding others to do the same.

One of the principle arguments against central government interference is the intrusion on the autonomy of the local governments. After all, the local government receives a mandate through elections. Another common argument is that it is unfair that local governments which accumulate equity by having higher taxes than needed to
finance their expenditure are punished in favor of municipalities who “squandered their money”. Most arguments are of a more practical kind. At the moment, information to determine how much equity Dutch local governments need (chapter 2) and have (chapter 3) is insufficient. Furthermore, regulations and fear for redistribution and skimming of surpluses can lead to undesirable and harmful reactions.

**SUGGESTIONS FOR FURTHER RESEARCH**

The concept of financial resilience is already embraced in Dutch local government accounting standards. In practice, most attention goes to equity and risks, while other elements of the financial resilience might play an even more important role than equity does. This study focuses mainly on the equity of local governments and the influence of the other elements on the financial resilience. Although this study shows the influence of risks and the ability to cut expenditures on the financial resilience, sufficient information about the dimension of the risks and the ability to cut expenditures is lacking.

**POLICY RECOMMENDATIONS FOR THE CENTRAL GOVERNMENT**

At the moment there is insufficient insight into financial resilience. As mentioned, information about risks and ability to cut expenditures is lacking. Furthermore, the financial data of individual Dutch local governments is difficult to compare. The present bookkeeping regulations offer local governments too much leeway for interpretation. In the short run, the central government can stimulate municipalities and provinces to be more transparent about the choices they make in their bookkeeping. In the long-run, bookkeeping regulations should be made stricter so that it will be easier to compare financial data of local governments.

In spite of insufficient insight into financial resilience, some recommendations regarding the present policy can be made. When the central government is of the opinion that local governments need sufficient financial resilience, they should also give the local governments the means and possibility to get it. The government should not only focus on the equity and risks of local governments, but also take the other elements of the financial resilience into account. The policy of the last few years has hurt the financial resilience of the local governments more than it has aided it. The ability to raise taxes by municipalities has been reduced, while on the other hand tasks and risks have been handed over to the municipalities.

**POLICY RECOMMENDATIONS FOR THE MUNICIPALITIES AND PROVINCES**

Based on the present information, it is not possible to tell which local government has an equity surplus. The amount of equity some local governments have (more than their yearly budget) and the oblique distribution between the individual local governments hint that many local governments have large surpluses, especially when taking into account the expected sales of local government-owned shares (such as shares of electricity companies).
Local governments with a higher than average level of equity should ask themselves if the present level of equity is really needed. When a surplus is recognized, they should be careful not to accumulate more equity (compared to the size of their risks). When the surplus is considerable, the municipality should consider freezing its equity or even letting it gradually decrease, without spending it inefficiently.