

Contracting out: Dutch municipalities reject the solution for the VAT-distortion

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Abstract

In 2003, the Dutch government introduced a VAT-compensation fund in order to create a level-playing field for local governments with respect to Value Added Tax (VAT). By introducing this fund the tax difference between governments that supply services themselves and governments that contract out to the private sector was eliminated. This paper shows, however, that according to most of the municipalities differences in VAT treatment did not hinder the contracting out of public services. Therefore, the fund lacks a great deal of its legitimacy. More important, the fund is not effective, as the number of contracted public services has hardly increased since the introduction. In general, municipalities have a negative opinion about this fund. They state that more than the budgetary effects, other arguments are relevant in the decision-making on the outsourcing of activities such as the quality of services and the employment in the own municipality. As the budgetary position for a number of municipalities will decline in the near future, the fund still may stimulate the outsourcing of public services in future.

Keywords: VAT, Contracting out, Municipalities, Compensation fund

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1. Introduction

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Over the last two decades contracting out of government services has increased. A broad range of studies show that this policy may generate benefits as competition increases efficiency for public activities such as refuse collection, fire protection and cleaning services (Domberger and Jensen 1997; Tang 1997). However, as we will show, the VAT (Value Added Tax) system of the European Union favours public provision over contracting out. In many cases contracting out leads to higher costs for lower governments as the service has a VAT-obligation after contracting out only. Therefore, public authorities have less incentives to achieve maximal efficiency gains. As several other member states of the European Union, the Dutch government introduced a refund scheme to address this distortion in 2003 (Wassenaar and Gradus, 2004).

This paper analyses the effectiveness of the Dutch refund scheme for contracting out municipal activities in the Netherlands. The paper is structured as follows. Section 2 describes the possible benefits for public authorities of contracting out their activities and explanations for the differences between municipalities in the degree of contracting out. In section 3, the VAT-compensation regime in the Netherlands is described. Section 4 presents the data and methodology. Section 5 gives the results of an inquiry of the Dutch municipalities with respect to the extent of contracting out activities to the private sector. Section 6 shows the opinion of municipalities on the effectiveness of the fund. Section 6 offers the concluding remarks.

2. Contracting out government activities

A broad range of studies show that contracting out public activities may generate benefits because competition increases efficiency for public activities such as refuse collection, fire protection and cleaning services. Some overview studies (e.g. Domberger and Jensen (1997) and Tang (1997)) describe experiences with contracting out a broad range of government services indicating cost savings of about twenty percent without sacrificing the quality of services provided. However, recent meta-analyses show more mixed evidence on cost savings (e.g. Hirsch (1995), Boyne (1998a, 1998b) and Hodge (2000)). Bel and Warner

(2006) find in a meta-analysis on all published econometric studies of water and waste production little support for a link between privatization and cost savings. They explain these findings by the existence of market failures (monopolistic production respectively weak competition or collusion) and conclude that skepticism of cost savings under privatization is warranted. Therefore they suggest that if privatization is chosen as a tool for reform, governmental regulation and market structuring is necessary to ensure cost savings occur and sustain over time. As an example, Dijkgraaf and Gradus (2006) conclude that in the Netherlands cost advantages of contracting out refuse collection deteriorated in the period 1998 – 2005, partly due to the transition of the market from a competitive to a more monopolistic one. Although contracting out can lead to regional concentration, the authors still find lower costs for contracting out.

Despite the potential cost savings from contracting out government services, public authorities differ in the extent of contracting out public activities. A number of studies have tried to relate the choice for self-supply or contracting out to differences in municipal characteristics. However, in a meta-regression analysis Bel and Fageda (2006) conclude that the explanatory power of most studies is quite low.

Lopez-de-Silanes et al. (1997) examined the determinants of the decision to contract out or provide services in house. They investigate three leading theories (efficiency, political patronage and ideology) explaining the mode of providing government services. The evidence presented in this article indicates that clean government laws and state laws restricting county spending encourage privatization, whereas strong public unions discourage it. This suggests that political patronage and taxpayer resistance to government spending plays an important role in the privatization decision. Dijkgraaf, Gradus and Melenberg (2003) studied the contracting out of waste collection in the Netherlands. They find evidence that a high level of monetary transfers by the central government (the wealth argument) or a high level of unemployment (the interest group argument) raises the probability of contracting out to the private sector. Moreover, smaller municipalities are more likely to

choose a private waste collector as they can profit more from scale economies. Remarkably, ideological factors seem to play only a minor role. Christoffersen and Paldam (2003) studied the market orientation of the Danish municipalities, based on an analysis of the mode of production of 12 municipal tasks. First of all, they find a large variation in the market orientation of municipalities. In various multivariate analyses, a number of municipal characteristics such as the population size (+), the market orientation in neighboring municipalities (+), the number of public sector employees (e.g. the share of voters added to the share of voters receiving main income from public transfers (-), and the relative net change in the population size (+) show a significant relation to the outsourcing of public services. In addition, ideological variables did not show significant relations. Ohlsson (2003) compared the costs of private and public firms for the refuse collection in municipalities. In this study, the author tries to explain the choice for a private or a public firm using a number of municipal characteristics. Just the share of single-family houses – as a proxy for conservative political preferences - shows a significantly positive impact on the probability that a private firm is chosen. Other variables, such as the existence of a left-wing majority in the municipality council, the income-level of inhabitants, the income of the municipality or the population size do not show significant correlations. In a study about the contracting out of waste collection in Catalonia, Bel and Miralles (2003) found that the higher the percentage of neighboring municipalities that already contract out, the more likely it is that the municipality will decide to contract out the service. An ideological variable and municipal budget restrictions do not show a significant relation. Concomitantly, Dijkgraaf and Gradus (2006) conclude that a general finding in the political-economy literature is that there seems to be much ideological biases influencing politician's decisions, so that the decision about privatization is pragmatic and not ideological.

3. VAT-compensation in the Netherlands

As pointed out in the introduction, for member states of the European Union the VAT rules may be an important explanation for the resistance of public authorities to contract out. In

the case of self-supply, the public authority has to pay VAT just on the costs for the purchase of goods and services. The value added by the public authority – consisting mainly of the employee costs and about 90% of total costs – is not subject to VAT. In the case of contracting out to a private enterprise, VAT is charged on the full price. As a result, VAT costs are in general higher in the case of contracting out than in the case of self-supply. This effect occurs for most activities of public authorities and certain specified activities performed by both public as well as private suppliers. Several member states – Sweden, Denmark, Finland, the United Kingdom and Norway - have introduced refund schemes to address this distortion.⁴ By giving compensation for the total VAT-costs, in case of self-supply as well as in case of contracting out, a level-playing field for both options is created. Not surprisingly, in member states with a solution to this VAT-distortion, the percentage of private refuse collection is relatively high (Wassenaar and Gradus, 2004).

In the Netherlands, a VAT-compensation fund was introduced in the year 2003. The main reason for the introduction was the creation of a level playing field between self-supply and contracting out of public services. The scheme applies to both municipalities and provinces. Compensation is given for VAT on non-taxable activities, except the VAT for aid in kind to other organizations.⁵ The fund is financed by a structural reduction of the general grants for

⁴ Although Norway is formally not a member of the European Union, due to its membership of the European Economic Area, the Norwegian VAT system is comparable with the VAT system for EU-member states.

⁵ European VAT legislation – the VAT-directives – for public authorities distinguishes three types of activities: taxable activities, non-taxable activities and tax-exempt activities. All activities of both private supplier as well as public authorities in general are within the scope of VAT and are therefore taxable activities. With these activities, the VAT rate is charged and the input VAT can be recovered. There are two exceptions on this general rule. As described in Article 4(5) of the Sixth VAT directive, the first exception is made for activities of public sector bodies engaged in their role as public authority. The activities described in this article are called *non-taxable activities*. The second exception is made for specific activities listed in Article 13 of the Sixth VAT directive as for health, education and banking services. These activities are known as *tax-exempt activities*.

municipalities and provinces equal to the value of compensation in the year of introduction and by the addition of extra VAT receipts resulting from the growth in contracting out. By the design of the grant reduction, differences in cost-structure between municipalities and provinces are taken into account. Therefore, the fund has not lead to a significant redistribution of funds between individual municipalities and provinces (Wassenaar and Gradus, 2004).

Due to the introduction of the fund, an increase of the contracting out of public services might be expected. Exclusively for waste collection, data about the outsourcing to private firms are available. The share of municipalities that contracted out the waste collection to private firms decreased from 38% in 2002 to 34% in 2005 (Dijkgraaf and Gradus, 2006). Therefore, a first global evaluation shows that the introduction of the VAT compensation fund has had no effect on the contracting out of waste collection.⁶

4. Data and methodology

Spring 2006, more than three years after the introduction of the refund scheme, we investigated the effectiveness of the VAT-compensationfund. Therefore, we asked all municipalities by e-mail six questions about the extent of contracting out, the effect of the introduction of the fund on the outsourcing of activities and the opinion of the municipalities on the fund. A representative group of 209 (46%) municipalities answered this survey (see appendix A).⁷ As data are not available for 11 municipalities, our final database consists of

⁶ In the same paper, the authors see as available explanations for this effect the general erosion due to decreasing competition in the market as the cost advantages of the private sector have decreased over time and the possible price increase of private competitors due to the introduction of the VAT compensation fund.

⁷ The group is representative in terms of the number of inhabitants. Although the average municipality size of our sample (nearly 40,000) is somewhat higher than that of all municipalities (nearly 36,000), we have a nearly equal distribution of municipalities across size classes. It should be noted, however,

198 (43%) of all municipalities. We estimate in this paper two sets of equations. First, we test the relation between the extent of contracting out and a vector of exogenous variables. Second, we use the same set of explaining variables to test the relation with the judgements of the VAT-fund. Our main specifications are characterized by:

$$Y_i = f(\text{Size, Income, Unemployment, Political variables})$$

Y_i is our endogenous variable and is equal to:

- A dummy with value 1 if municipality i contracts out a specific service. Eight different services are included: cleaning services, canteen services, security, salary administration, automation, social policy, waste collection, and building of infrastructure. Results are in column 3 till 10 in Table 3.
- An ordered probit variable ranging from 0 to 8 calculated as the sum of the just described eight dummies. Results are in column two in Table 3.
- A dummy with value 1 if the municipality agrees to the following four statements about the fund (four separate equations are estimated for the four statements):
 - VAT hindered the choice to outsource municipal activities;
 - The introduction of the VAT-compensation fund caused a managerial discussion;
 - The introduction of the VAT-compensation fund caused the outsourcing of activities;
 - For the next years, the outsourcing of municipal activities is expected, thanks to the introduction of the VAT-compensation fund.

Results are in Table 4.

- A dummy with value 1 if municipality agrees to the following three judgements of the fund (three separate equations are estimated for the three judgements):

that municipalities which do not appreciate the fund might have more incentives to answer our enquiry.

- The fund is useful;
- I'm indifferent about the fund;
- The fund is redundant.

Results are in Table 6.

The four groups of explaining variables are:

- **Size.** We include the number of inhabitants, its square and the density of municipalities. Reason to include these variables are that (i) size might influence the attractiveness of contracting out as smaller municipalities can profit more from scale economies, and (ii) size might influence the administrative burden as larger municipalities might find it easier to handle the administrative demands of the fund.
- **Income.** We include the average income of inhabitants and of the municipality. The average income of inhabitants is equal to the disposable income. The income of municipalities is measured by (i) the general grant from the central government, (ii) the height of municipal taxes, and (iii) the height of the real estate tax. With higher income levels it might be that municipalities have less incentives to contract out and to neglect the VAT compensation fund.
- **Unemployment.** The number of unemployed people (per 1000 inhabitants) is included as high unemployment levels might give municipalities an incentive to provide services themselves.
- **Political parties.** The number of votes (as a % of total votes) are included for all parties to test whether ideology influences contracting out. Note that we exclude the share of local parties as they are our benchmark.

For the explaining variables we use municipal data from Statistics Netherlands for the latest available year (CBS, Appendix A). For the political variables this is 2002, for other variables it is 2005. The equations are estimated using standard software (Eviews) with the applicable ordered or binary logit. It shows that for all specifications many explaining variables are insignificant. This might partly be due to the skewedness of the endogenous variables. To increase the probability that we do not neglect significant relations due to statistical

problems, we decided to exclude the variable with the highest probability of being insignificant and to repeat this till only significant coefficients are included. To prevent exclusion of significant variables we used a rather large cut-off point (10%).⁸ All equations are estimated with a constant.

<insert table 1 here>

5. Contracting out by Dutch municipalities

The second column of table 2 shows for eight activities that are eligible for compensation the share of municipalities that had outsourced the activities before the introduction of the fund. Relatively high shares are found for cleaning services, waste collection, and building of infrastructure.⁹ Furthermore, the other columns again show that the fund was not very effective to increase contracting out. Only 4% of the municipalities think that without the fund the decision about contracting out was distorted in the case of waste collection. For the other services this is zero or only 1%. Even less municipalities (1%) have contracted out services since the introduction of the fund. Although outsourcing is expected in some municipalities for the coming years, most of the municipalities state that this has nothing to do with the introduction of the VAT compensation fund.

<insert table 2 here>

⁸ Note that this procedure has drawbacks as results might be path dependant. However, inclusion of all variables did not result in plausible estimations.

⁹ The share for waste collection (69%) cannot be compared with Dijkgraaf and Gradus (2006). Probably, in the answers to the questionnaire municipalities have included the outsourcing of this activity to *public* firms.

For a number of municipal activities, we find a relation between the share of municipalities that outsources an activity and the municipal characteristics (table 3).¹⁰ However, not only the number of significant coefficients is low, also the explaining power of the estimations is in general not very high.

The variables describing the size of the municipality show in most cases a positive relation with the outsourcing of activities (if an effect is found). In three cases a positive relation is found between income of the municipality and the share of contracting out. The negative sign between waste collection and the level of the general grant is consistent with Dijkgraaf, Gradus and Melenberg (2003). For the correlation between the political composition of the municipal council and outsourcing we find different results. As in other literature, we see in general a negative relation with most left-wing parties (Progressive Liberals, Greenleft and the Social Democrats). The right wing party ‘Conservative Liberals’ shows a positive relation. Remarkably, the right wing Christian Democrats show negative signs and the (extreme) left wing socialist party does not give significant relations.

<insert table 3 here>

6. Opinion of the Dutch municipalities

The VAT-compensation fund was introduced to create a level-playing field between self-supply and contracting out of public services. Therefore, the introduction is based on the assumption that the decision-making by municipalities about the outsourcing of activities is influenced by the effect of the levying of VAT. To test this assumption we asked all municipalities whether the VAT previously had hindered the choice to outsource municipal activities. Of all municipalities, 92% answered negatively.¹¹ As a consequence, the VAT-

¹⁰ Differences between these shares might also be explained by differences in market structure, for example the lack of competition (compare section 2). Further research is necessary to test this hypothesis.

compensation fund lacks a great deal of its legitimacy as this assumption proves not to be accurate. In addition, we asked whether the introduction of the fund had caused a managerial discussion about the application of the fund. To this question, 95% of the municipalities answered negatively.

<insert table 4 here>

For both questions, we tested whether the answers correlate with municipal characteristics (table 4). The results are hardly significant, maybe due to the dominance of negative answers. Significant correlations for both questions are found for the level of the general grant (+) and for the first test with the real estate tax (+). Besides, for the first question a negative relation is found with the votes for the social Democrats at the last elections for the municipal council. Finally, a positive relation is found between the share of the votes of the Conservative Liberals and the managerial discussion on the effects of the fund.

<Insert table 5 here>

We asked the municipalities that did not start a discussion about outsourcing for an explanation (table 5). About 26% of the municipalities states that most of the municipal activities that are eligible for compensation are already outsourced. Besides, about 32% of the municipalities answers that other – non-budgetary – arguments are more relevant for the decision making on the outsourcing of activities. They mention the qualitative and quantitative capacity of the municipal organization, the legal status of the municipal employees and the care for the employment in the municipality. Some municipalities state that the discussion has taken place implicitly as the comparison between self-supply and contracting out is made without the effects of the levying of VAT.

The fourth column of table 2 shows that since the introduction of the VAT refund scheme, just a small number of municipalities have decided to outsource activities. Remarkably, for the activities the VAT hindered outsourcing (the third column), the introduction of the VAT compensation fund did not have any effect.

Effectivity of the introduction of the fund

In accordance with the other findings, almost all municipalities (96%) answered negatively on the question whether the introduction of the VAT-refund scheme had led to the contracting out of activities. Therefore, not only is the assumption underlying the fund inaccurate, the opinion on the outsourcing of public activities has not changed since the introduction of the VAT-compensation fund. Also for the answers to this question, we tested whether the answers correlate with municipal characteristics. As the negative answer dominates, none of the variables are significant (table 4). The negative answer on the question whether outsourcing of activities is expected thanks to the introduction of the fund, is not significant for any of the characteristics.

For the next years, 88% of the municipalities do not expect an increase in the outsourcing of their activities thanks to the introduction of the VAT-compensation fund. The answers are not correlated to any of the municipal characteristics (table 4). The fourth column of table 2 shows the activities municipalities may decide to outsource.

Final opinion

Finally, we asked a general opinion on the introduction of the VAT-compensation fund. In accordance with the other findings, just 7% of the municipalities gave the judgment 'useful', 20% were indifferent and 72% assesses the fund as 'redundant'. These results doubt the legitimacy of the fund. As table 6 shows, municipalities with a higher number of inhabitants judge the fund as useful and the smaller municipalities are indifferent. Besides, the answers have a correlation with the income of the municipalities. Municipalities with relatively high

income from the general grant or the real estate tax are indifferent about the fund, as municipalities with a lower tax income regard the fund as redundant.

<insert table 6 here>

The municipalities with a negative judgment gave different explanations to their opinion (table 7). However, the small group of municipalities with a neutral or positive judgment notice comparable drawbacks.

<insert table 7 here>

Municipalities state that other – non-budgetary – arguments are more relevant for the decision making on the outsourcing of activities. They mention the optimal size of the own organization, the necessary knowledge for specific activities or the lack of capacity in the own organization. In addition to the answers of the first question, a remarkably high percentage of municipalities complain about the relatively high administrative burden. However, the administrative obligations of the VAT-compensation fund are comparable to the VAT rules for regular firms although the exceptions for compensation might complicate procedures.¹²

7. Conclusion

In 2003, the VAT-compensation fund was introduced to create a level-playing field between public provision and contracting out of public services. However, as is shown in this paper,

¹² As analyzed by EIM (2006) the structural administrative costs for the public authorities are about € 9.4 mln. The incidental costs related to the introduction of the fund were € 55.6 mln. Compared with the annual payments of the fund, the incidental and structural costs amount just 0.5% and 3.0%. The public authorities receive every year a payment for administrative costs of € 24.8 mln (1.3%). In 2006 the payments of the fund amount € 1,884 mln

for most of the municipalities, VAT did not hinder contracting out of public services.

Therefore, the fund lacks a great deal of its legitimacy.

In general, municipalities have a negative opinion on this fund. Besides, as far as information is available, the introduction of the fund did not cause a significant increase in contracting out. Municipalities state that other arguments than the budgetary effects are leading the decision-making process on outsourcing. This is consistent with recent literature, which is more sceptical about cost savings of privatisation. Municipalities mention as other arguments the optimal size of the own organization, the necessary knowledge for specific activities, the lack of capacity in the own organization, the qualitative and quantitative capacity of the municipal organization, the legal status of the municipal employees and the care for the employment in the municipality.

In this paper the extent of contracting out and the opinion of municipalities on the VAT compensation fund are related to municipal characteristics. In general we do not find evidence of these relations. Most estimated coefficients are insignificant.

For both the contracting out of activities as the opinion on the fund, we find a correlation with some political variables. In general, the right wing Conservative Liberals favour contracting out and in municipalities with a large share of this party in the municipal council, the introduction of the VAT-compensation fund had some effects. Both attitudes are also shown in municipalities with relatively high taxes or income from grants. As the budgetary position of a number of municipalities will decline next years, the fund may give an impulse to outsourcing.

In 2006, the tax regime for the real estate tax has changed radically. The real estate tax consisted of four separate taxes, based on residences (I) and other buildings (II) and levied on the owner (*) and the occupant (**). In 2006 the real estate for the occupants of residences (I**) was abolished and the budgetary possibilities of the other three taxes (I*, II* and II**) were diminished radically by the introduction of the both maximum tariffs and maximum increase percentages. As this system change will cause a less prosperous budgetary position for a large share of municipalities, this may lead to an increase of the

outsourcing of municipal activities and therefore an improvement on the opinion on the fund (compare Lopez-de-Silanes, 1997).

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Table 1 Explanatory variables

Inhabitants	Number of inhabitants (* 10.000)
Inhabitants^2	Square of the number of inhabitants (*10.000)
Density	Average number of addresses, per 500 m ²
Disposable income	Disposable income, in euro per inhabitant
General grant	General grant, in euro per inhabitant
Municipal taxes	Municipal taxes, in euro per inhabitant
Real estate tax	Real estate taxes, in euro per inhabitant
Unemployment	Number of unemployed persons with an unemployment benefit per 1000 inhabitants
Orthodox Protestants (a)	Percentage of votes for the Orthodox Protestants (a) (SGP)*
Orthodox Protestants (b)	Percentage of votes for the Orthodox Protestants (b) (CU) *
Conservative Liberals	Percentage of votes for the Conservative Liberals (VVD) *
Christian Democrats	Percentage of votes for the Christian Democrats (CDA) *
Progressive Liberals	Percentage of votes for the Progressive Liberals (D66) *
Social Democrats	Percentage of votes for the Social Democrats (PvdA) *
Greenleft	Percentage of votes for the Greenleft (GL) *
Socialist Party	Percentage of votes for the Socialist Party (SP) *
Local	Percentage of votes for the Local parties*

* At the last election for the municipal council. In most municipalities, this was in 2002.

Table 2 Outsourcing of municipal activities, in % of all municipalities

	Outsourced the activity before 1/1/2003	VAT distorted outsourcing	Has outsourced the activity since 1/1/2003, till spring 2006	Outsourcing expected in the next years
Cleaning services	86	2	0	3
Canteen services	31	1	0	2
Security	60	0	1	2
Salary administration	61	0	1	1
Automation	16	0	0	3
Social policy	8	0	1	1
Waste collection	69	4	0	3
Building of infrastructure	91	0	0	1

Table 3 Outsourcing of municipal activities and municipal characteristics

	All	Cleaning services	Canteen services	Security	Salary administration	Automation	Social policy	Waste collection	Building of infrastructure
Inhabitants				0.292*	-.0399**				
Inhabitants^2				0.00026*	0.00020**	0.00093***			
Density			0.001***					-0.001***	
Disposable income					0.344**				
General grant								-0.003*	
Municipal taxes		0.005*							
Real estate tax								0.007*	
Unemployment			0.064**						
Orthodox Protestants (a)									
Orthodox Protestants (b)					0.072**				
Conservative Liberals				0.034*					
Christian Democrats	-0.0139*			-0.045**					
Progressive Liberals							-0.162*		
Social Democrats	-0.0153**	0.048**		-0.040**					
Greenleft					-0.093***	-0.196***			
Socialist Party									
Local parties									
LR-index (pseudo R ²)	0.01	0.05	0.17	0.08	0.10	0.11	0.04	0.09	0.00

Note: Coefficients with */**/** are significant at 90%/95%/99%. All other coefficients are insignificant.

Table 4 Opinion on the introduction of the VAT-compensation fund

	VAT hindered the choice to outsource municipal activities	The introduction of the VAT-compensation-fund caused a managerial discussion	The introduction of the VAT-compensationfund caused the outsourcing of activities	For the next years, the outsourcing of municipal activities is expected, thanks to the introduction of the VAT-compensationfund
Yes	8%	5%	4%	12%
No	92%	95%	96%	88%
Inhabitants				
Inhabitants^2				
Density				
Disposable income				
General grant	0.0017*	0.002**		
Municipal taxes				
Real estate tax	0.0040**			
Unemployment				
Orthodox Protestants (a, b)				
Conservative Liberals		0.034*		
Christian Democrats				
Progressive Liberals				
Social Democrats	-0.031*			
Greenleft				
Socialist Party				
Local parties				
LR-index (pseudo R ² or McFadden R ²)	0.04	0.08	0.00	0.00

Note: Coefficients with */**/** are significant at 90%/95%/99%. All other coefficients are insignificant.

Table 5 Why didn't cause the introduction of the VAT-compensation fund a discussion about outsourcing of municipal activities ?¹

Most of the municipal activities that are eligible for outsourcing have already been outsourced	26%
The outsourcing of municipal activities is not a political item	18%
Other – non-budgetary – arguments are more relevant for the decision making on the outsourcing of activities	32%
The VAT-compensation fund is too technical for politicians	4%
Other	31%

1. We categorized the municipal answers to this open question. As municipalities could give more than one answer, the percentages do not count up to 100%.

Table 6 Judgment about the introduction of the VAT-compensation fund.

	Useful	Indifferent	Redundant
	7%	20%	72%
Inhabitants	0.0021*	-0.0069**	
Inhabitants^2			
Density			
Disposable income			
General grant		0.003**	
Municipal taxes			
Real estate tax		0.005***	-0.004**
Unemployment			
Orthodox Protestants (a,b)			
Conservative Liberals			
Christian Democrats			
Liberal Democrats			
Social Democrats			
Greenleft			
Socialist Party			
Local parties			
Constant	-1.60***	-3.26***	1.31***
R ²	0.02	0.07	0.02

Note: Coefficients with */**/** are significant at 90%/95%/99%. All other coefficients are insignificant.

Table 7 Why is the introduction of the VAT-compensation fund redundant ?

Relatively high administrative burden	79%
The VAT-compensation fund is just a shifting of funds	21%
Budgetary effect / budgetary risks	16%
Other – non-budgetary – arguments are more relevant for the decision making on the outsourcing of activities	23%
The VAT-law should be changed	4%
Other	6%

1. We categorized the municipal answers to this open question. As municipalities could give more than one answer, the percentages don't count up to 100%.

Appendix A Descriptive statistics database

	Mean	Minimum	Maximum	Std. Dev.
<i>answers</i>				
VAT hindered the choice to outsource				
municipal activities	0.08	0.00	1.00	0.27
The introduction of the VAT-compensation- fund caused a managerial discussion	0.05	0.00	1.00	0.21
The introduction of the VAT-compensation- fund caused the outsourcing of activities	0.05	0.00	1.00	0.21
For the next years, the outsourcing of municipal activities is expected, thanks to the introduction of the VAT- compensationfund	0.04	0.00	1.00	0.20
Useful	0.07	0.00	1.00	0.26
Indifferent	0.21	0.00	1.00	0.41
Redundant	0.71	0.00	1.00	0.45
<i>Characteristics</i>				
Inhabitants	39,929	4,305	742,783	73,107
Density	942	112	5,992	744
Disposable income	12.8	9.0	19.2	1.3
General grant	594	246	1,415	127
Municipal taxes	406	219	963	93
Real estate tax	189	94	538	57
Unemployment	18	5	36	6
Orthodox Protestants (a)	2.88	0.00	36.29	7.03
Orthodox Protestants (b)	3.30	0.00	28.29	5.72
Conservative Liberals	15.83	0.00	52.44	8.23
Christian Democrats	23.53	0.00	70.68	9.24
Progressive Liberals	3.35	0.00	26.31	4.48
Social Democrats	14.03	0.00	42.20	9.31
Greenleft	3.73	0.00	24.14	5.14
Socialist Party	1.78	0.00	38.40	5.16
Local parties	31.04	0.00	85.91	18.78

Number of observations: 198