Chapter 3
Contracting Out Refuse Collection
in The Netherlands

E. Dijkgraaf, R.H.J.M. Gradus and B. Melenberg

Abstract In this chapter we seek an explanation for the reservations of local authorities toward contracting out. Although empirical evidence suggests that contracting out results in a significant cost decrease, a majority of Dutch municipalities provide waste collection services themselves. Based on theoretical insights we model the choice between private, public, in-house, and out-house refuse collection. The models are estimated using a database comprising nearly all Dutch municipalities. We find evidence that the number of inhabitants, the transfer by central government, and interest group arguments are important explanations. Interestingly, ideology seems to play a minor role. Compared to earlier studies we estimate more general models. Although the same qualitative results are found for parametric and semiparametric models, we find strong statistical evidence that a parametric specification is far too inflexible. Differences between the parametric and the semiparametric marginal effects are substantial. Thus, more attention is needed for the implications of model specification.

Keywords Refuse collection · institutional choice · ideology · interest groups · semiparametric estimation

E. Dijkgraaf
SEOR-ECRi, Erasmus University Rotterdam, P.O. Box 1738, 3000 DR Rotterdam, The Netherlands
e-mail: dijkgraaf@few.eur.nl

R.H.J.M. Gradus
Faculty of Economics and Business Administration, VU University Amsterdam, De Boelelaan 1105, 1081 HV Amsterdam, The Netherlands
e-mail: rgradus@feweb.vu.nl

B. Melenberg
Tilburg University, K 615, P.O. Box 90153, 5000 LE Tilburg, The Netherlands
e-mail: b.melenberg@uvt.nl
3.1 Introduction

There seems to be evidence that contracting out government services saves taxpayers money, and sometimes a lot of money, compared to public provision. In an overview, Domberger and Jensen (1997) show that contracting out a broad field of government services might result in cost savings in the order of 20% without sacrificing the quality of services provided.

Also Tang (1997), in a critical assessment of several studies, comes to the conclusion that the private sector is found to be more efficient in refuse collection, fire protection, cleaning services, and capital intensive waste-water treatment, while in sectors as water supply and railways the results are more mixed.

Especially, the cost savings of private refuse collection have been discussed at length in the literature. Kitchen (1976) estimates a cost decrease of Canadian $ 2.23 per capita when private firms collect household waste. Stevens (1978) arrives at a cost decrease between 7% and 30% due to contracting out for the USA, where the magnitude of the effect depends on the size of the municipality. Based on UK-data Domberger, Meadowcroft, and Thompson (1986) published a study on the effects of contracting out household refuse collection in the United Kingdom. They concluded that there are cost savings of 22% for contracting out to private companies. Szymanski and Wilkins (1993) and Szymanski (1996) have confirmed these results, based on an extension (in years) of this database. Dijkgraaf and Gradus (1997) show similar cost savings between 15% and 20% for the Netherlands, in case Dutch municipalities are contracting out refuse collection. Moreover, Ohlsson (1998) reports almost the same estimations for Sweden. Recently, Bosch, Pedaja, and Suarez-Pandiello (2000) presented Spanish data for 73 municipalities in Catalonia. They pointed out that the framework for which the service is provided is more relevant than the public private dichotomy. In a recent contribution Reeves and Barrow (2000) pointed out cost savings of around 45 % in Ireland.

Although the practice of contracting out refuse collection has become more popular, it is still less common than in-house provision. In the United Kingdom only 30% of the contracts for refuse collection is placed out-house (see Szymanski, 1996). According to Reeves and Barrow (2000), in Ireland in 39 % of the studied cases private providers were contracted to provide refuse collection. In the Netherlands 40% of the municipalities use private collectors for refuse. However, due to the fact that private collectors are especially active in small villages, only 20% of total tonnage is in private hands (see Dijkgraaf & Gradus, 1997). Only Ohlsson (1998) finds for the Swedish case that private provision is slightly more common than public provision.

Furthermore, a study by López-de-Silanes, Shleifer, and Vishny (1997) shows the reservations of local authorities toward contracting out. Based on data in 1987 and 1992 for 3042 counties for twelve services like water supply, landfills, libraries etc. only 25% of the services in 1987 and 35% in 1992 had been placed out-house. Moreover, in this chapter a nice empirical investigation of the mode of providing government services is given, where three leading theories (namely efficiency, political patronage, and ideology) are investigated. The evidence presented in this chapter indicates that clean government laws and state laws restricting county spending