

# **The Problem of Predatory Bidding in Competitive Tenders – a Swedish Case Study<sup>1</sup>**

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## **Introduction**

Competitive tendering is growing in importance in Europe. It has become established as *the* procurement procedure for public authorities, believed to be an efficient way to save taxpayers' money, to increase competition between suppliers (and encourage new entry), and to avoid corruption. According to NOU (2002) public procurement in Sweden alone amounts to 400 billion SEK annually. In Sweden, as in some other European countries, the introduction of competitive tendering during the 1990's has been an important factor behind structural changes in the transportation sector. For example, tendering has opened up the former national railway markets to foreign entry.

In recent years, several cases of very low bids in tenders have been observed, in the transportation industry as well as in other industries, contributing to a growing concern for negative effects of competitive tendering at the national and regional level. In this paper, we intend to explore the possible reasons why companies place low bids, and the consequences from both the short and the long run perspective. Since national and European legislation appear to have difficulties dealing with the problem, we suggest that procuring entities need methods for early detection of bids that are unreasonably low. Based upon historical data from the Swedish railway industry, we sketch out a method with this purpose. One much debated case, the Connex bid in the tender of train services in the north of Sweden, is used to illustrate some of the issues of the paper.

## **Low bids in tenders – is there a problem?**

Why do firms place very low bids in tenders? In the desirable case, the explanation is that some firms do have a unique competence or innovative ideas on production methods that imply a completely different cost structure or possibilities for additional income compared to their competitors. One important factor may be that some firms are able to gain from economies of scale or scope.

In addition to this, there are a couple of explanations for low bids (in some cases they may not even cover the supplier's costs), that are less attractive from a socio-economic point of view:

1. To oust out competitors

2. A subsidiary to the procuring organisation places a bid that, if it turns out to be impossible to fulfil, presupposes more money from the owner
3. Carelessness or ignorance

In the first case, the firm may practice dumped prices with a consciously calculated loss, or is able to use profits gained in other branches of its business through cross subsidisation. In journals of economics as well as journals of law, the existence of *predatory pricing* has been a lively debated subject for a long time. One major problem is the difficulty to separate predatory pricing from the sometimes fierce but healthy price competition between firms. While industrial economists have based their analyses on historical evidence, advocates of the Chicago School have claimed that predatory pricing should be rare – if existing at all. Their main argument is that such a strategy is seldom or never rational from an economic point of view, since it is costly (compared to e.g. acquiring competitors) and often difficult to recoup by future monopoly profits due to entry of new competitors.<sup>2</sup> However, during the past 20 years, the views on predatory pricing have changed. The development within the fields of decision theory and game theory has shown that the strategy may be rational in the presence of asymmetric information between different actors, for instance between incumbents and entrants or between management and investors. Under certain circumstances, small firms with very competitive and innovative products appear to be particularly prone to successful attacks of predatory pricing.<sup>3</sup> Moreover, aggressive pricing and other practices may function as strong signals to new firms, deterring entry to certain markets.<sup>4</sup> If predatory pricing is a rational strategy or not will ultimately depend on the objectives of the practising firm. Something that appears to be irrational from a profit-maximising perspective may be rational when other objectives are taken into account.<sup>5</sup>

Predatory pricing generally hits competitors first, making them exit the particular market. In the second phase, consumers are affected. After having enjoyed a period of temporarily low prices, they come to face higher prices and a deteriorated supply. With few exceptions, the literature on predatory pricing presumes that a large

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<sup>2</sup> See for example Kate and Niels (2002)

<sup>3</sup> Grout (2000)

<sup>4</sup> Roberts (1986)

<sup>5</sup> Kate & Niels (2002)

incumbent firm practises the strategy in order to force minor new entrants to exit.<sup>6</sup> Sometimes the firm is dominant on other parts of the market than the one where the practice is applied.

The second type of explanation may be viewed as a special case of the first. Competitors usually describe this as an attempt to “compete with the help of taxpayers money”. A related accusation is that low bids from companies owned by municipalities or county councils are based upon lower expected rates of return compared to competing private firms.

It also happens that firms do more or less serious mistakes when calculating their bids. Some mistakes may be due to shortcomings of the internal information systems, producing false impressions of costs and revenues. The basic data provided by the procuring authority may sometimes contain incomplete or incorrect information on the tendered business, leading to faulty calculations. In this third category of explanations we also include firms that have unrealistic expectations on the possibility to perform changes in a certain business, or underestimate the development of costs in the industry. This is probably more common among new entrants than incumbent firms. In auction theory the concept of *winner's curse* is used to explain why winning bids may be based upon judgmental failures. Without pre-emptive actions, in particular *common value auctions* – in which the participating bidders value items differently based upon their judgement of uncertain prospects – tend to be won by the bidder with the most optimistic estimate of the item's value.<sup>7</sup> This line of reasoning was first used to explain the low profitability among companies that had won oil lease auctions,<sup>8</sup> later followed by cases from several other industries.

The special circumstances related to public procurement imply some specific problems that are rarely observed on ordinary markets. The procuring entity has a strong position as a buyer, sometimes close to a monopsonist. Its purchases and buying behaviour determine the range and limits of the actual market. A supplier that wins a tender enjoys a monopoly-like position during the contract period, but its actual powers are often very restricted, e.g. in terms of its possibilities to influence prices and supply. The end consumers (when present), are bound to use the supplier

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<sup>6</sup> One exception is a recent article by Lindsey and West (2003), who discuss predatory pricing on markets characterised by imperfect competition and differentiated products.

<sup>7</sup> See e.g. Kagel & Levin (1986).

<sup>8</sup> Capen, Clapp & Campbell (1971)

chosen by the procuring entity. If problems arise, shifting to another supplier is seldom an option in the short run, not even for the procuring entity.

Bids that imply low profitability or even losses create a risk that the supplier will not be able to fulfil the conditions of the contract. Sometimes this will become obvious already when the shift from the former to the new entrepreneur is about to take place. In the short run, this may cause sudden interruptions in delivery, implying considerable consequences for services like public transportation. The procuring authority may be forced to purchase the goods or services from another firm, sometimes at considerable additional costs. When this is not an option, end consumers, such as bus and train passengers, will face big transportation problems, which may have negative socio-economic and environmental effects. In a longer perspective, the confidence for the supply of goods and services is deteriorated, and firms that contribute to a healthy competition may leave the industry. Thereby, the future price competition as well as the innovativity of the industry may be harmed.

Problems of low bids in tenders may be underestimated since affected firms may not complain as often as they should.<sup>9</sup> This can partly be explained by the fact that everyone knows that a new tender will come along and therefore rather chooses to wait. Moreover, many firms may lack appropriate knowledge to analyse the reasons behind differences between bids, for example when there are no functioning markets for some factors of production.

## **The legislator's view on low bids in tenders**

The development of laws against predatory pricing, together with practising in actual legal cases, partly reflect the theoretical development, particularly in the U.S. and Canada.<sup>10</sup> However, the increasing consciousness of predatory pricing as a real problem in recent years has yet to affect the law in these countries. The focus is upon dominant firms acting against new entrants. Since predatory pricing – according to the influential Chicago School – presupposes the possibility of recoupment by monopoly pricing in the future, an analysis of market structure is critical when judging whether or not predatory pricing has occurred. For example, if entry barriers are low,

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<sup>9</sup> Otherwise, the literature on predatory pricing generally assumes that complaints are many but seldom well-founded.

<sup>10</sup> Niels and Kate (2000) discuss the international development of laws and practices.

predatory pricing is assumed not to be economically rational. Therefore, neither the objectives of the accused firm, nor its pricing related to costs may even be considered worthy of investigation. Consequently, it has become very difficult to prove before an American court that predatory pricing has actually occurred.

EU legislation does not consider predatory pricing as such. Instead, it focuses on price reductions as one of several practices related to abuse of dominant position. EU case law, and especially the work of the European Commission in recent years, has resulted in a different view compared to the U.S. This is also reflected in Britain's new Competition Act. The European Commission consider price reductions to be a serious matter (even if they don't imply prices below costs) whenever they are practised by dominant firms and aimed at specific competitors, implying price discrimination or cross-subsidisation, regardless if the strategy may succeed or not.<sup>11</sup> When it comes to firms that are not dominant it is more difficult to find relevant regulations. Closest is the view on price promotions. The European Commission rejected some national experts' call for a harmonised EU prohibition on prices below costs. Among other things, it was argued that such a strategy is an efficient marketing tool not least for minor firms and that possible negative consequences could be avoided through tougher demands for transparency in pricing towards competitors and end consumers.<sup>12</sup>

Two Swedish laws, both based upon EU legislation and directives, are relevant for handling the occurrence of very low bids in tenders: the Competition Act (1993:20) and the law (1992:1528) on public procurement (hereafter abbreviated LOU). The 19<sup>th</sup> paragraph of the Competition Act prohibits abuse of dominant position. In one case attracting much attention, pricing below costs in a tender was considered to be abusive. The case concerned a tender for regional railway services in the counties of Jönköping and Halland in 1993 – a tender won by SJ in competition with the incumbent operator BK Tåg. The final verdict in this case did not come until early 2000, when a special court, Marknadsdomstolen, found SJ guilty.<sup>13</sup> The court focussed on the intent behind the pricing practice and the relation between price and costs. SJ's behaviour was considered to imply such a risk of deterioration of future competition that SJ later would have been able to recoup the financial losses caused

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<sup>11</sup> Niels and Kate (2000), Grout (2000)

<sup>12</sup> Commission of the European Communities (2001), s 12-13

by the bid. A key issue was if SJ could be considered to have a dominant position on the relevant market, and what that market was. In this case the relevant market was defined as the market for contracted railway services in Sweden, on which SJ was a dominant player. The prerequisite of market dominance on the relevant market is a critical limitation, making the law difficult or even impossible to apply when a very large firm, without previous business in the country, places a bid aimed at forcing other actors to exit the market.

LOU includes a paragraph (§22) stating that [in our translation] “A procuring entity shall accept either: 1. the bid that is the economically most advantageous, or 2. the lowest bid. When evaluating which bid to be the economically most advantageous, the entity shall consider all circumstances such as price, time of delivery, operating costs, quality, esthetical, functional and technical characteristics, service, technical support, environmental effects etc.” These circumstances shall be specified by the procuring entity. The 23<sup>rd</sup> paragraph says: “A procuring entity may reject bids that it considers to be unreasonably low, but only after having requested a printed explanation to the low bid without receiving a satisfactory answer.”

Of central interest here is what is meant by an “unreasonably low” bid. The law itself does not state when a bid is “unreasonably low” and there appears to be no Swedish preparatory work for guidance. This lack is due to the fact that the Swedish legislation is based upon EU regulation and directives.

### *Two previous legal cases*

There are only a few actual cases where procuring entities have rejected bids with reference to them being “unreasonably low”. One case attracting a fair amount of attention concerned the rebuilding of a service centre in the municipality of Heby in 1994. The Supreme Court found that the municipality had acted clearly against the law.<sup>14</sup> In its invitation for tender, the municipality had stated that it would choose the bid that, taking all circumstances into account, was considered to be the most advantageous. The Supreme Court found that according to LOU, and since the municipality had not specified what circumstances to be considered in addition to the price, it had to choose the lowest bid. The municipality had chosen a higher bid,

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<sup>13</sup> Marknadsdomstolen (2000)

<sup>14</sup> The description of this case is based upon Svenska Dagbladet (1996) and Lex Press (1999).

arguing that the lowest bid (being 70-80% lower than most other bids) was unreasonably low. The Supreme Court rejected this since the municipality had not requested an explanation to the low bid. The court also found that a bidder that was entitled to damages should be compensated as if the procuring process had been completed correctly.

Another case attracting attention was a tender for laundry services in the county council of Örebro in 1999.<sup>15</sup> The council faced criticism regarding two issues. Firstly, the council had at an early stage excluded a bid from one firm with reference to it being too low. The firm chose not to sue, but Hans Sylvén, chief lawyer at the committee for public procurement (NOU), claimed that LOU provides no support for the rejection of a bid with reference to pricing below costs : “As a buyer you may not kick out a supplier due to the price being too low. If I believe that the technical ability and quality is fulfilled, the bid must be taken into consideration... There are also firms that calculate with losses and dump prices in order to enter the market. This is not prohibited either.”<sup>16</sup>

Secondly, the county council, accepted that the winning firm, referring to miscalculations, lowered its bid after the bidding deadline. This was also incorrect according to Hans Sylvén: “It is only possible [to correct] if it concerns obvious clerical errors, such as when a zero or a decimal point has been placed incorrectly. If however, you have forgot to include something in the calculations, you have to take the consequences.”<sup>17</sup> In a settlement following the legal consequences of the tender, the county council agreed to pay SEK 4.7 million to the bidder that had placed the lowest bid.

The two examples above show that LOU in itself does not specify any economic measures for when a bid is unreasonably low. The view of NOU is that a reasonable explanation is sufficient to avoid categorising a bid as “unreasonably low”. According to NOU, even dumping prices to enter a market is an acceptable justification. What LOU stipulates is that a bid may not be “unreasonably low” in relation to the evaluation of the circumstances considered important by the procuring entity. This implies that checking bids against the invitation to tender is of great importance.

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<sup>15</sup> The description of this case is based upon information in Nerikes Allehanda (1999), (2000), (2002) and SAF-tidningen (1999).

<sup>16</sup> Nerikes Allehanda (1999)

<sup>17</sup> Nerikes Allehanda (1999)



## **A recent case: the tender for train services to Northern Sweden**

On the 25<sup>th</sup> of June 2002, the national authority Rikstrafiken decided that Connex, a large French transportation company, had won the tender for night trains to Northern Sweden, for a period of five years beginning in June 2003. The outcome of the tender was determined by the large difference (on average 42% for the whole period) between Connex' bid and the bid of the incumbent operator Tågkompaniet.<sup>18</sup>

Tågkompaniet reacted by reporting the tender to the county court of Västernorrland. Among other things, the company claimed that the bid from Connex was "totally unrealistic" and had to be based upon price dumping.<sup>19</sup> The court decided to temporarily stop Rikstrafiken from completing the tender, thereby preventing the signing of a contract with Connex.<sup>20</sup> Rikstrafiken replied in a writ to the court that Connex, upon request had presented satisfactory explanations to the low bid.<sup>21</sup> Tågkompaniet added by accusing Rikstrafiken to have given up the basic preconditions in its invitation when accepting several reservations in Connex' bid.<sup>22</sup> Rikstrafiken replied that Connex had accepted the basic conditions and had made elucidations, giving the authority the impression that Connex would bear any risk if "the calculation prerequisites" would deviate from the basic demands.<sup>23</sup> In a final plea, Tågkompaniet demanded that Connex' bid was rejected as unreasonably low or that a new tender was performed. The company continued to claim that Rikstrafiken had failed to act in accordance with LOU when it accepted Connex' calculation prerequisites and that Connex had not presented a satisfactory explanation to the low bid.<sup>24</sup> However, in late August the county court decided (without trial) to give Rikstrafiken clearance for signing a contract with Connex,<sup>25</sup> which then took place in mid September.<sup>26</sup> In parallel to this process, Tågkompaniet also tried to get the National Competition Authority to take action. The company argued that Connex' bid was based upon information produced by means of a prohibited co-operation between

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<sup>18</sup> Rikstrafiken (2002-06-25a)

<sup>19</sup> Gärde Wesslau Advokatbyrå (2002-06-28), s 2

<sup>20</sup> Länsrätten i Västernorrlands län (2002-06-28)

<sup>21</sup> Rikstrafiken (2002-07-29)

<sup>22</sup> Gärde Wesslau Advokatbyrå (2002-07-26)

<sup>23</sup> Rikstrafiken (2002-08-19)

<sup>24</sup> Gärde Wesslau Advokatbyrå (2002-08-27)

<sup>25</sup> TT (2002-08-30)

<sup>26</sup> Dagens Nyheter (2002)

SJ and Connex in a tender for the same services in 2001. SJ and Connex had then placed a common bid, but Rikstrafiken chose not to complete that tender, with reference to unclear legal circumstances.<sup>27</sup> In October 2002, the Competition Authority decided to leave the matter unattended, after failing to find sufficient support to investigate any possible violation of the Competition Act.<sup>28</sup>

When Rikstrafiken and Connex had signed the contract, the tender could no longer be tried in the county court. Instead, Tågkompaniet started to prepare for suing the state in Sundsvall's local court, based upon its view that Rikstrafiken had made several formal faults during the tendering process and that Connex' bid should have been rejected since price dumping had occurred. In June 2003, Tågkompaniet revealed that its demands amount to SEK 53 million, equalling the lost prospected profits during the contract period 2003-2008.<sup>29</sup>

The legal consequences after the tender have so far not implied an actual trial of whether or not Connex' bid is "unreasonably low". In our opinion, the question is of such importance for future tenders of train services and other goods and services, that a more thorough analysis is called for. Therefore, based upon accessible information, we have made our own assessment of the reasonability of Connex' bid. As previously cited cases have shown (and not least the view of NOU), such an assessment must start in the conditions specified in the procuring entity's invitation to tender. The first question to ask be therefore if this invitation admits that very low bids, for example due to price dumping, yet can be accepted.

Rikstrafiken has in its invitation specified the circumstances of guidance for the tender. Under the headline "The procurer's objectives" it is stated that "The overall objective for the transportation policy is to secure a socio-economically efficient and long-term sustainable provision of transportation for the citizens and industry all over the country."<sup>30</sup> Since Rikstrafiken tries to obtain socio-economic efficiency, the authority should not accept bids that may be explained by price dumping or cross-subsidisation. Such bids imply a bad allocation of resources both statically and dynamically – i.e. one chooses a firm that in the short run does not have the lowest costs of production, causing another firm to exit that would have been able to offer a

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<sup>27</sup> Rikstrafiken (2001-06-14)

<sup>28</sup> Konkurrensverket (2002-10-07)

<sup>29</sup> Dagens Nyheter (2003)

<sup>30</sup> Rikstrafiken (2002-01-21), Bilaga 1, s 1

sustainable lower price. Moreover, there is a risk that the chosen bidder will not be able to fulfil its obligations, which will also have negative socio-economic effects. Consequently, we argue that bids that presumably are based upon price dumping or cross-subsidisation shall be considered “unreasonably low” and thereby rejected by Rikstrafiken.

Rikstrafiken’s tender for the train services to northern Sweden is a tender for a net cost contract, i.e. the bidder must calculate both future revenues and costs. Net contracts therefore imply a higher degree of risk taking for the bidder than the gross cost contracts normally in use for local and regional services. In the tenders for the latter, the bidder only has to calculate its costs. In a net cost contract, the difference between the calculated revenues and the costs (with addition of the calculated profit) becomes the bid of asked subsidies from the bidder.

Tågkompaniet has run the services since January 2000 with an annual subsidy of (on average) SEK 114 million. When SJ operated the traffic in 1999 it cost the state close to SEK 144 million per year.<sup>31</sup> SJ did not place any bid in the latest tender, making it the first tender of some importance without SJ’s participation.

A comparison between Connex and Tågkompaniet in terms of demanded subsidies in the actual tender is presented in Table 1.<sup>32</sup> As is evident from the table, the firms calculate completely different needs for subsidies. On average, over the five-year-period, the difference amounts to SEK 45 million annually in lower payments to Connex. Compared to the subsidy received by Tågkompaniet during the traffic year 2002/03, preceding the next contract period, Connex’ bid would imply a decrease of the annual subsidies by 43 million on average. This is the starting point of the upcoming analysis.

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<sup>31</sup> The data originates from *Delegationen för statens köp av viss kollektivtrafik* and the bid from Tågkompaniet.

<sup>32</sup> Rikstrafiken (2002-06-25b)

**Table 1: Connex' and Tågkompaniet's bid to Rikstrafiken for the period 1/7 2003-30/6 2008 (all figures in million SEK)**

Traffic year	Connex	Tågkompaniet
2003/04	75	105
2004/05	65	105
2005/06	60	114
2006/07	55	109
2007/08	55	104
<b>Total</b>	<b>310</b>	<b>537</b>
<b>Annual average</b>	<b>62</b>	<b>107</b>

### *Costs, revenues and subsidies in detail*

In order to do a detailed comparison of the calculations of Tågkompaniet and Connex, it is necessary to make their differences clear regarding the views on the development of revenues and costs. Tågkompaniet has published the firm's prognosis for revenues and costs over the contract period, forming the basis for its bid. For Connex' part, we have made estimations based upon assumptions and Rikstrafiken's presented information on the company's explanations.

A basic precondition in our calculations is that the starting point is the information on today's train services. It is also assumed that Tågkompaniet's prognosis for the traffic year 2002/03 is a decent approximation of the current situation. For this traffic year the following holds:<sup>33</sup>

- Forecasted costs: SEK 346.3 million
- Forecasted revenues (tickets and other): SEK 253.0 million
- Subsidies from the state: SEK 105.0 million
- Forecasted profit: SEK 11.7 million

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<sup>33</sup> Tågkompaniet (2002-03-25)

In order to estimate Connex' forecast on revenues we have used the information from Rikstrafiken that Connex expects an annual 2% increase in revenues.<sup>34</sup> For the estimation of the forecasted cost development we make the following assumptions:

- Every year's decrease in the amount of subsidy needed, compared to today's level, must be fully covered by larger revenues and/or cost cuts during the same year.
- Connex calculates with the same average profit margin (2.7%) as Tågkompaniet.

The results of these calculations are presented in Figure 1, in which we have plotted the forecasted development of costs and revenues for Tågkompaniet as well as for Connex, along with the demanded subsidies for each and every year.

A first observation to be made is that Connex' forecast on the development of revenues is rather modest compared to the one of Tågkompaniet. The biggest difference between the bids lies on the forecasted costs. While Tågkompaniet appears to assume that the development of costs is closely related to the revenues, Connex believes that it is possible to immediately cut costs to a lower level, and keep them relatively stable for the rest of the contract period. Thereby, Connex may demand substantially lower subsidies already in the first year, while Tågkompaniet calculates on practically unchanged subsidies for the whole contract period.

Compared to today's situation, Connex bid implies a decrease in the annual subsidies amounting to SEK 43 million on average. The calculations forming the basis for figure 1 show that higher revenues may explain 15.6 million of these savings, while 24.7 million must be achieved through lower costs.<sup>35</sup>

How will Connex achieve these cost savings? Experiences have shown that many costs are impossible for the railway operator to influence, since there is only one supplier of certain services.<sup>36</sup> The charges for renting vehicles are fixed by a contract between SJ and Rikstrafiken; maintenance may only be performed by a special workshop; Banverket sets the track fees, and the costs for electricity depend upon current prices on the electricity market. Connex has also publicly declared that it will not cut down on staff or change the working conditions.<sup>37</sup> With this in mind,

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<sup>34</sup> Rikstrafiken (2002-08-19), s 3

<sup>35</sup> The rest, 2.7 million SEK, relates to a decrease in projected profits.

<sup>36</sup> Mikael Prenler, former director at *Delegationen för köp av viss kollektivtrafik* claims this in Gärde & Wesslau Advokatbyrå (2002-08-27, bilaga 4).

<sup>37</sup> Connex (2002b), Connex (2003a)

practically the only remaining things to consider are the costs for selling tickets, serving meals onboard, cleaning and some minor “other” costs. For these things, Tågkompaniet calculates that costs will increase from today’s SEK 108 million to (on average) 114 million during the contract period. Connex therefore has a need to save on average 25 million on things that today cost 108 million (a 21% decrease), provided that the parts of the costs that are difficult or impossible to influence are kept unchanged (but for which Tågkompaniet also calculates on increased costs).

The cost calculation of Connex becomes especially remarkable when taking into account that the company simultaneously calculates on increased revenues, regardless of their modest magnitude. This is because the increase in revenues will not be possible to obtain primarily through higher ticket prices, since Rikstrafiken gave Connex and Tågkompaniet the same evaluation marks for the ticket price level.<sup>38</sup> Instead, increased travelling is needed. This increase is to be obtained without increased costs for marketing or selling of tickets – on the contrary large savings must be achieved on precisely these parts of the business. In comparison, Tågkompaniet assumes that increased travelling implies a demand for additional trains and leads to increased costs in all areas.

One circumstance making Connex’ bid difficult to evaluate, is the fact that it is based upon what Connex calls “assumptions making up prerequisites of calculated compensation and prices”.<sup>39</sup> Although the complete bid has not been made public, these passages appeared during the county court’s handling of the case. Among Connex’ “assumptions” it should be noted that the company a) has chosen not to take account for the need for revision of vehicles during the contract period, b) assumes that no track maintenance of some magnitude must occur if it implies substantial influence on revenues, and 3) expects that no local deals above central agreements leads to higher staffing costs.<sup>40</sup> Rikstrafiken has chosen to call these assumptions “calculation prerequisites” and has argued that if they would imply a deviation from the basic conditions of the tender, Connex alone bears the risk.<sup>41</sup> However, Connex has not officially declared that the company shares this view. Tågkompaniet was not

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<sup>38</sup> Rikstrafiken (2002-06-25b)

<sup>39</sup> Connex (2002a), s 3

<sup>40</sup> Connex (2002a), s 3

<sup>41</sup> Rikstrafiken (2002-08-19), s 2

given the opportunity to make the same reservations, and has calculated that Connex' assumptions correspond to about SEK 29 million annually in lower costs.<sup>42</sup>

The analysis of the differences between the forecasts behind the bids can only lead to the conclusion that it is very hard to treat Connex' bid as realistic. To perform such an analysis may be difficult for a procuring authority, but we will therefore present another method. It is based upon the studying of historical data on previous tenders, providing guidance and rules of thumb that may help a procuring entity willing to reveal the existence of unreasonably low bids. Already today, rules of thumb play an important role in both European and American competition law, and may often be traced back directly to related theoretical and applied research.<sup>43</sup>

### *What do previous tenders of train services show?*

In this section we will consider the economic results for the train operators winning gross and net cost contract tenders during the past 15 years.<sup>44</sup>

In Figure 2 we have plotted some tenders for gross cost contracts implying large savings in costs for the procuring traffic authorities. In Figure 3 we present how the state's subsidies have developed in some tenders of net contracts. In both cases, we have studied a sequence of tenders for a specific traffic.

The tenders of gross cost contracts in Figure 2 may be divided into two groups: contracts implying a profit for the winning bidder, and contracts resulting in losses. The first time a specific traffic is put out to tender, a large reduction in costs is generally achieved. Later tenders will typically lead to minor savings. Historically, a critical limit seems to occur when cost saving have amounted to 20%. BK Tåg successfully managed to cut cost by more than 20% for the regional services of *Länstågen* in the counties of Jönköping and Halland, following the tender in 1989. One important explanation was that the company succeeded in expanding the tasks performed by the drivers and altering their schedules. This resulted in considerably lower costs compared to the previous situation. Thereafter, two other operators, firstly

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<sup>42</sup> Gärde Wesslau Advokatbyrå (2002-08-27), s 15

<sup>43</sup> See for example Niels and Kate (2000), Grout (2000).

<sup>44</sup> The data has been collected through direct contacts with traffic authorities and the predecessors to Rikstrafiken, i.e. *Förhandlaren för statens köp av persontrafik på järnväg* and *Delegationen för köp av viss kollektivtrafik* More detailed information on the sources may be obtained in Alexandersson et al (2000).

SJ and secondly BSM Järnväg, have failed to bring down costs even further, to a level 40% below the starting point. In a special court SJ had to admit that its costs were higher than its bid placed in the tender of 1993, resulting in BK Tåg losing the contract. BSM Järnväg won the contract in the third tender with a bid somewhat higher than SJ's, but it nevertheless turned out to be unprofitable. A fourth tender (not plotted in figure 1) resulted in substantially higher costs for the procuring authority, although a direct comparison with previous years is impossible to do due to changed conditions in terms of supply and vehicles.

Another case of a tender resulting in large reductions of the public subsidies but implying losses for the train operator, is the tender for the *commuter trains* of Stockholm. The county council enjoyed lower costs in the magnitude of SEK 300 million annually, corresponding to about 32%. But the winning bid from Citypendeln turned out to be based upon unrealistic assumptions on the possibilities to change the working conditions of the drivers. Considerable disruptions in the services occurred when the shift of entrepreneur took place, and several problems remained for almost a year. Citypendeln now runs the services with a loss – in the year 2001 it amounted to SEK 67 million.<sup>45</sup>

The tenders for the train services on *Västerdalarna Line*, *Österlenaren*, *Kinneulle Line* and *Upptåget* have resulted in contracts on reasonable levels for the train operators. In the cases of Västerdalarna Line and Österlenaren the winning operators (BK Tåg and Sydtåg, respectively) were after the first tender able to take advantage of having limited personnel, specialising in driving only the services in question. Sydtåg did do bankrupt before the contract period ended, but this was due to problems related to the firm's freight services rather than the passenger services. Kinneulle Line has recently been tendered for a third time (not plotted in Figure 2). After several years of short-term extensions of the contract (with negative economic effects for the operator BK Tåg), the latest tender implied a slight increase in costs (with adjustment for the fact that the contract is turned into a net cost contract) when Connex took over in June.<sup>46</sup>

The tenders of the net cost contracts in figure 3 are harder to divide into groups, partly because there are fewer examples possible to compare over time. The possibilities for

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<sup>45</sup> Citypendeln (2002)

<sup>46</sup> Västtrafik (2002)



the train operator also to influence ticket revenues appear to imply that larger reductions of subsidies are feasible, or at least that some bidders believe so. The *West Coast Line* is an extreme case. The companies behind Sydvästen, the firm that won the tender for the services of the year 2000 with a radical zero-subsidy bid, assumed that it would be easy to increase travelling and find many additional premium customers by means of a higher service level.

Sydvästen both succeeded and failed with its intentions. The number of passengers increased, but most of them did not generate any additional revenues – it was people that started to use their already purchased travel cards (issued by the traffic authorities) more frequently. Therefore, the calculation did not hold, and the company went bankrupt after only four months. Other factors contributed to this rapid development. For instance, only a couple of days after Sydvästen had started its services, the Government decided that SJ would get back the traffic after the one-year-contract had ended, without having to win a new tender. When the bid was placed, the bidders expected that the services would continue to be tendered. The changed conditions made it pointless for Sydvästen to endure the whole contract period once the economic problems had become apparent.

In the third tender for Vättertåg, BSM Järnväg came out as the winner, with a bid that was more than 35% lower than the subsidy before the first tender, and substantially lower than SJ's winning bids in previous tenders. BSM's bid turned out not to be profitable, and when the contract period ended, the firm chose not to use the option for a prolongation. On short notice, Rikstrafiken was therefore forced to perform a new tender.

A package of lines in Bergslagen has been won by SJ in all tenders. Actual competition in the first two tenders initially resulted in a reduction of subsidies by more than 20%, followed by a period of stability until competition became weaker. A fourth tender (not plotted in Figure 3) preceded a substantial expansion of the services and the introduction of new trains. SJ won this tender with a low bid, turning out to be a source of annual losses of SEK 35-40 million for the firm.<sup>47</sup>

The train services to the northern part of Sweden have not been affected by important innovations related to the rolling stock and track investments have not resulted in any

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<sup>47</sup> Göteborgs-Posten (2003)

major gains of travel time. The first competitive tender (regarding the traffic year 1993/94) reduced the state's subsidy by almost 20%, although SJ continued as the operator. Corresponding cost reductions appeared on the other tendered lines this year (all of them won by SJ). One explanation for this is that SJ adapted its demanded level of compensation, following a sensed real threat of entry from competitors. In the next tenders, actual competition for these services weakened, and the state's subsidies tended to increase. However, the tender resulting in the entry of Tågkompaniet implied a substantial reduction of the state's subsidies, initially about 20% (or 25% below SJ's original level in 1992). This was possible by means of a number of actions, of which perhaps the most important were two innovations in the supply. The company reduced the number of passengers travelling for free (e.g. former SJ employees), a group that used to be so large that it may have crowded out the paying passengers. Moreover, Tågkompaniet increased the service level and strengthened the co-operation with tourism organisations. During 2001-2002, the subsidies to Tågkompaniet increased (following renegotiations rather than proper tenders), partly to compensate for higher track fees. On average, the subsidies to Tågkompaniet have been about 21% lower than during the last year with SJ.

Connex' bid would imply that subsidies are to be reduced by 42% compared to the current level (or more than 45% below Tågkompaniet's average level for the past years), while Tågkompaniet's calculations assume a more or less unchanged need for subsidies. When studying previous tenders of train services, it becomes clear that no bids implying cost reductions similar to those of Connex, have been possible to carry out without losses for the train operator. This has not even been possible when train services have been tendered for the first time, and this case refers to services that have already been tendered six times – at least twice with evident competition between several bidders.

### *Some remarks*

The study of historical data leads to the same conclusion as the detailed analysis of forecasts for the development of costs and revenues: Connex' bid is extremely low and is probably based upon unrealistic assumptions, price dumping and/or cross-subsidisation. The bid would be possible to explain by means of a radical cost

reducing reorganisation of the business, but any signs that this is the case have yet to appear.

A benevolent interpretation of Connex' bid is that it is based upon faulty calculations, due to carelessness or ignorance. This implies the question whether it is reasonable or not to demand a realistic bid from a company like Connex. In the court's decision concerning the case of SJ's pricing below cost in a tender for regional services, it was claimed that SJ in its calculation of costs should be expected to have "performed a reasonably thorough and realistic calculation".<sup>48</sup> In our view, there is no reason for having lower demands on Connex' forecast on costs and revenues. Connex is Europe's biggest private passenger transportation company, having 55.000 employees and an annual turnover of 3.4 billion Euro.<sup>49</sup>

Modern economic theory stresses the importance of what signals a firm transmits and how they influence inter-firm relationships. One way to look upon Connex' bid is to consider it to be a clear signal to present and future competitors that the firm from now on views the train services to northern Sweden as its own business. SJ seems to have accepted this, demonstrated by the fact that the firm did not even place a bid in the latest tender.

## **Discussion and conclusions**

The recent tender of the trains to northern Sweden is of principle importance, both for the industry and for the current system of competitive tendering in general. It has put Rikstrafiken in a very delicate situation and will probably influence how the authority performs tenders in the future. Even in the case of a successful implementation of Connex' bid, the authority is risking further criticism and legal actions. There are two reasons for this.

Firstly, from a socio-economic perspective, the authority should clearly have motivated *why* it considered Connex' bid not to be "unreasonably low". Rikstrafiken confined itself to declare this view (after having received explanations from Connex).

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<sup>48</sup> Marknadsdomstolen (2000), s 23

<sup>49</sup> Connex (2003b). Data refers to the whole Connex group, operating in Europe, North and South America, the Middle East and Australia. Connex Sverige (previously Linjebuss) is a part of Connex Transport, a subsidiary responsible for the contracted services in Northern and Eastern Europe. Connex Transport has about 18.000 employees and an annual turnover of about 760 million Euro (Connex, 2003c).

The authority did not discuss the risk of Connex dumping prices or cross-subsidising the train services – practices that should not be allowed following the demands for socio-economic efficiency stipulated by Rikstrafiken. Secondly, the authority accepted bids bearing such differences that they appear difficult to compare. We here refer to what Rikstrafiken calls “calculation prerequisites” in Connex’ bid. Resembling restrictions, they should at least have implied a new resetting of the bids. Rikstrafiken should reconsider its routines for procurement, especially since the authority has been criticised by Riksrevisionsverket for previous tenders.<sup>50</sup>

Already, procuring entities need to acquire considerable knowledge on the goods and services that they are expected to purchase. Our analysis of historical data is a first step towards rules of thumb, showing when it is justified to thoroughly consider whether a bid is reasonable or not. Perhaps, there is also a need for complementary changes in the model of procurement. The current model is a kind of hybrid between a beauty contest and a reverse closed auction in which the lowest bid wins. Experiences from auction theory on alternative practices may be of use, although it is probably difficult to eliminate the presence of unreasonably low bids entirely. The net cost procurement of passenger rail services is similar to a common value auction, in which the participating bidders value the prospects differently, for instance based upon different expectations of patronage development. In such cases, an open English auction, in which the bidders continuously follow the bids of their rivals, may stimulate aggressive bidding but yet decrease the risk of too optimistic bids and the related winner’s curse (Milgrom och Weber 1982). However, there is an increased risk of collusion in open auctions (see e.g. Robinson 1985). As, among others, Rothkopf and Harstad (1994) have pointed out, the theoretical auction models need some revision in order to become usable in practical decision making.

As follows from our two types of analyses, it is likely that Connex’ bid is based upon price dumping and/or cross-subsidisation, and there is a risk that the company will ask for more compensation if the “calculation prerequisites” are not met. This may turn out to be a very costly deal for Rikstrafiken and the state. In the worst case, Rikstrafiken may have to bear the additional costs due to changed prerequisites, and also pay damages to Tågkompaniet. Although Tågkompaniet only asks for SEK 53

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<sup>50</sup> Riksrevisionsverket (2002)

million (equalling the lost prospected profits), previous court rulings suggest that considerably higher amounts might be possible.

Our concluding judgement is that there is a need for a Swedish re-interpretation of the law on public procurement and of the Competition Act. Within the framework of EU regulations, they should provide better guidance to the procuring entities as well as to the Competition Authority. The case of the northern train services shows a number of problems with today's legislation and regulations. Firstly, the Competition Act is unsatisfactory for dealing with large international firms entering the Swedish market, due to the limitations of the concept "relevant market". According to the Act, Connex is not a dominant firm – and may therefore dump prices – despite the fact that the group is bigger than all bus and railway operators in Sweden taken altogether. By use of complementary market definitions – the national market and the international – it may be possible to reduce the risk of predatory pricing in competitive tenders. Secondly, mistakes made by procuring entities in tenders may lead to legal cases concerning very large damages. Clearer rules and better routines may reduce the amount of formal mistakes in tenders, and thereby also reducing the risk of costly legal consequences. Thirdly, legislation and regulations do not pay proper attention to the risks of disturbance and disruption of delivery connected to low bids in tenders, having very negative effects on the end consumers of certain goods and services.

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## **Appendix**

Figure 1: Comparison between Tågkompaniet's and Connex' calculations

Figure 2: Tenders of gross contracts – effects on costs for procuring entities

Figure 3: Tenders of net contracts – effects on costs for procuring entities

**Figure 1: Comparison between Tågkompaniet's and Connex' calculations**

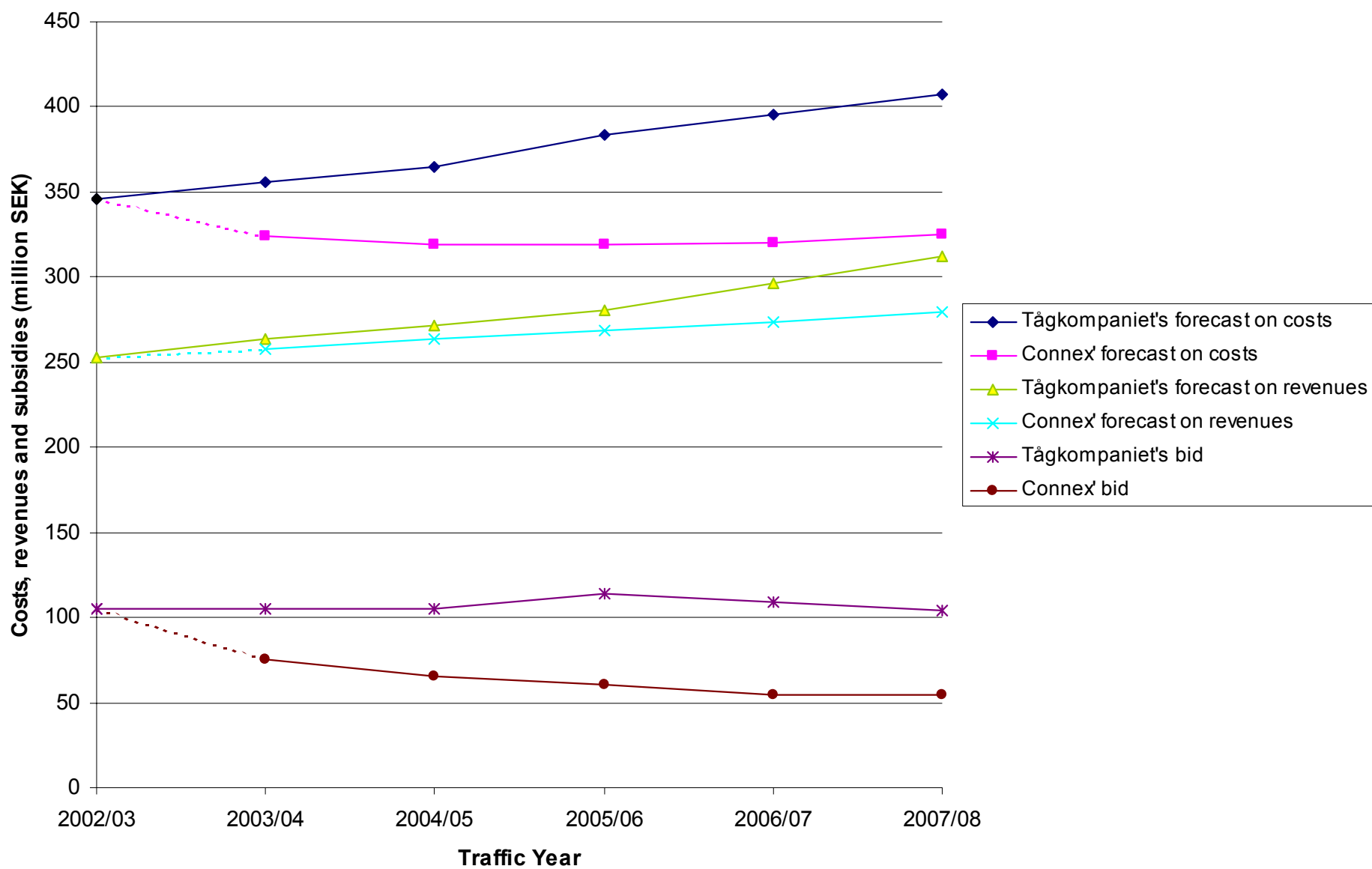


Figure 2: Tenders of gross contracts - effects on costs for procuring entities

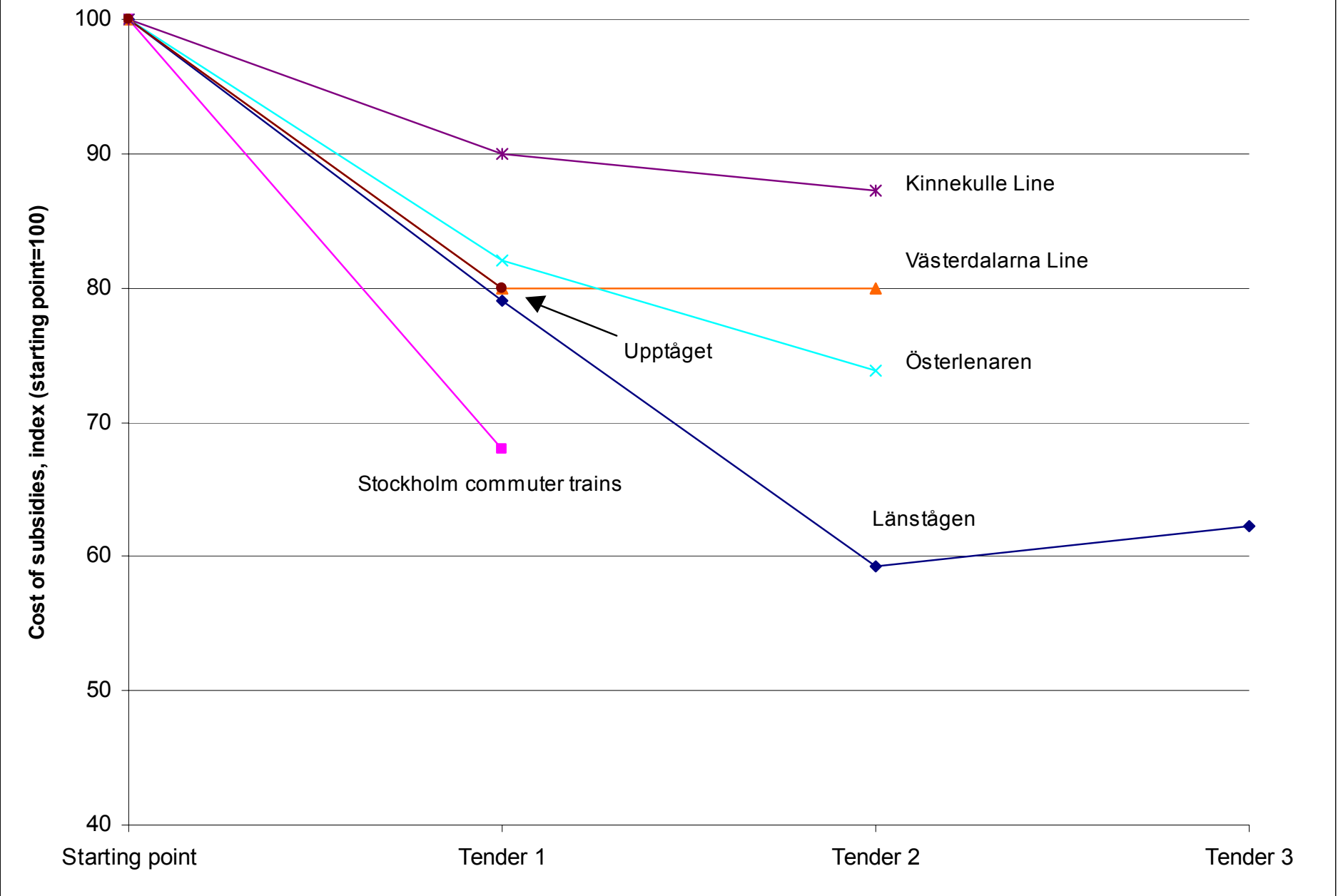


Figure 3: Tenders of net contracts - effects on costs for procuring entities

