Competitive tendering for local bus services is growing in popularity in many countries. It represents one alternative mechanism for promoting the forces of competition to achieve in an essentially regulated environment, the results expected from economic deregulation. In this paper we assess the recent experience in London with competitive tendering and consider why LT changed its mind on competitive tendering as a singular basis for determining the supply of scheduled route services. We draw on the economic theory of market dominance to highlight the role of information asymmetry and strategic firm behaviour as two forces contributing to the sub-optimality of competitive bidding in the absence of the opportunity for unrestricted competition.
INTRODUCTION

Competitive tendering for local scheduled bus services has become a competitive alternative for many Governments attracted to the international mood of economic deregulation and privatisation. The implementation of competitive tendering carries the belief that planners remain the ultimate arbiters of resource allocation but that gains in productive efficiency can be achieved by some degree of competitive regulation. Inviting bids on a predetermined service with the offer of a cost-only contract has enabled the tendering authority to dictate the nature and timing of change.

In this paper we argue that competitive tendering can be an appropriate competitive instrument if implemented properly and especially where it complements economic deregulation. In this context, CT is suitable where market forces fail to achieve commercial registration and where the planning agency deems a 'social gap' in the level of service. The resulting competitively-tendered contract would be minimum-subsidy in the global sense of 'minimum'.

The paper is organised as follows. We begin with a synthesis of the approach adopted in London for the selection and administration of the 'competitive' bids. The London experience provides a useful empirical framework for highlighting some of the difficulties experienced in competitive regulation. Three issues which dominate the bidding process are information asymmetry, strategic behaviour of firms, and the rigidity of tendering. The paper concludes with some comments which support the move to economic deregulation with gap-filling competitive tenders. This approach has the advantage of utilising market forces without jeopardising social objectives, and avoids the difficult task of implementation.

In evaluating the London experience, however we must emphasise that the concerns with competitive tendering have a strong 'case-specific' component, such that any criticisms must not be interpreted as a blanket rejection of competitive tendering.

RECENT DEVELOPMENTS AND EXPERIENCES IN LONDON

The United Kingdom has recently provided an interesting contrast between two ways of using competition among bus operators to increase the benefits for consumers. Both constituted departures from the traditional way of organising local bus services, which was to licence single operators to supply bus services on routes, at fares and frequencies approved of by the traffic commissioner. This system in place and virtually unchanged from the early thirties had in effect granted monopoly rights to incumbent operators, who in recent years became recipients of important and rapidly growing subsidies, both general and directed to classes of consumer, principally old age pensioners.

The first of the new policies stemmed from the London Regional Transport [LRT] Act of 1984, enacted as part of the Government's moves to eliminate the Greater London Council, the owner and operator of London buses and the underground. The Act nationalised those assets in LRT, requiring LRT to set up operating and wholly owned limited liability companies to operate buses [LBL Ltd.] and the underground [LUL Ltd]. LRT was given the duty to "provide and secure" the provision of public...
passenger services for Greater London. It was obliged to “coordinate” passenger services in concert with British Rail, a major provider of commuter rail services in Greater London. LRT had to plan this coordination, its subsidiaries’ services, and in carrying out its task of coordination it had powers to arrange for and agree to continued services, and to exercise control over fares and frequencies. A separate section of the Act obliges LRT “in the case of activities carried on by them” as “they may determine to be appropriate” to invite tenders to carry on those activities, and might require this of their subsidiaries also.

With respect to bus services, LRT interpreted their duties to set up a plan for progressively tendering bus routes. It commenced tendering in July 1985, intending to cover 25 percent of route mileage by the end of the 1980’s, and to continue the policy without limit. The routes to be tendered for were defined by LRT planners; routing and frequency were specified; some flexibility was allowed in buses used; and all contracts were cost oriented — the competition was to bid for the lowest tender, consistent with meeting the specifications and being a reputable supplier. LRT thus carried out literally its obligation to “secure” services by defining the services, and following its powers to set fares, arrange for through ticketing etc., and to decide the degree of subsidy to be allowed, as well as collecting the fares from the successful bidder. Three year contracts were awarded at the route level in order to encourage a sufficiently large field of potential competition.

The general pattern to developing tendering progressively was to start in suburban locations and move later to services in the denser more central areas. This form of competition with bidding on costs for a specified route determined by planners and resulting in a single supplier for that route protected from entry, quickly gained a great deal of interest and approval from economists and operators throughout the world.

In 1985 the Transport Act ushered in a rival model for application outside London, but taking powers to extend it to London by order of an unspecified later date. The Act effectively deregulated local bus supply entirely; privatised the National Bus Company, a major supplier of such services outside of London, and mandated a quite different species of subsidy, namely for specified routes or services not commercially supplied and subject to free entry. From February 1987, when the interim process of defining commercial routes and setting up subsidy systems had been accomplished, any operator was free to enter or leave a route on 42 days notice. This model has received an equal interest, but far more misgivings among some economists and nearly all operators.

The starting point for the present paper is that in August 1987, LRT abandoned its plan to continue with the 'London Model'. Instead it decided that the 1985 Act model, involving deregulation and privatisation of LBL Ltd., should now be official policy. To some extent, this about turn was an outcome of Government pressure, reinforced by the general election result. To an important extent, it was also due to the advocacy of Mr John Telford Beasley, the Chairman and Managing Director of LBL Ltd. Quite unusually among incumbent bus operators, he was convinced of the merits of the 1985 Act model.

LRT had been supporting its London model with the argument that its
duties under the 1984 Act conflicted with the application of the 1985 Act to London. New legislation to clean up anomalies was needed, as it had used this obstacle to keep alive the notion that the London model could still be deemed, on government reflection, to be superior. After August, this tactic was dropped; instead the argument became whether it would be more efficient and incur less competition for Parliamentary time, to proceed without fresh legislation. At the time of writing, this has still to be resolved.

The chief interest here, however, is the question - how far did the way in which the 'London model' work in practice contribute to this reversal of policy? No official reasoning has been offered, but we may reasonably speculate as follows. There are two groups of reasons - those concerned with the general strategy for introducing 'competition' into London and those concerned with the techniques of bidding.

An Assessment of the London Approach

It can be argued that the 1984 Act was itself flawed, in that it never resolved the latent conflict in obliging a nationalised owner of assets (LRT) to practice privatisation by the back door of tendering. LRT had to treat its own subsidiary, LBL Ltd., at a distance for tendering. To do this it had to establish costing conditions [e.g. about proper allocation of joint overheads] and to maintain credibility as a tendering authority for whom would-be competitors would be willing to incur the cost of entering the auction, had to create a Chinese Wall between itself and its subsidiaries. That there were, with very few exceptions, active competitors for tenders speaks volumes for LBL's integrity as a tenderer. But this in itself was maintained at a cost - namely of extremely rigid tender processes - to be reviewed later. The basic strategic problem, also never resolved, was that if privatisation by the back door was not to result in LBL's ultimate demise, LBL had to get down to the much lower cost levels associated with its smaller competitors. [All around London, the impacts of deregulation and privatisation were making themselves felt, chiefly in lower costs]. But could it do so without the political impact [on union contracts etc.] of deregulation? The Chairman of LBL Ltd. had no doubt whatsoever of this; the answer was no, certainly not in time to prevent a very rapid decline of LBL.

In the early rounds of tendering, for single routes of values up to about 300,000 pounds a year, LBL Ltd. maintained a success rate not too threatening to its long term prospects. By the end of 1986, however, it was clear that rulings on cost attribution were emerging which implied that LBL had to shoulder more costs. Subsequently some routes were called back in for retendering, in which LBL's success was much lower. LBL also found the cost of tendering for particular services onerous. Whether fortuitously or not, LRT shifted its tendering policy towards the inclusion of restructuring and regrouping of routes, resulting in tenders for up to 25 routes of yearly values of six million pounds. In these LBL's success was much higher; at mid 1987 it had captured around 85 percent of such work. But there was still the question of whether over the longer run, LBL could sustain this level of bidding. As its scale shrunk, could costs be shed fast enough? Tenders would eventually reach the dense core, where two man operations or the familiar open backed red bus were still important. Plans for conversion to one-man operation are going ahead, but this involves further potential shrinkage.
of revenue because of inferior service characteristics. Deregulation of bus management offered a way out of these dilemmas, an argument in effect accepted at the LRT level.

Work to break up LBL Ltd. into 14 or 15 self-contained operators has begun, with a view to privatisation around the end of 1990. It is also apparent that this strategy is linked to the objective of establishing a credible threat to break the power of the labour unions in order to achieve cost savings.

An important reason for moving towards area networks was the opportunity for the planners to restructure services; there is relatively limited scope at a route level. An important feature of this strategy is that it opens up more opportunities to introduce a mix of bus sizes the bidders fleet, especially a mix of double-deckers and mini-buses. The support [and general success] of mini-buses outside London. (White 1987, White and Turner (1987, 1987a) suggests a role in London. The mini-bus 'boom' elsewhere in Britain is tied up with frequency of service, unit cost and a mechanism to deter entry if an incumbent can stock up with small buses before any potential entrant (Gwilliam 1987).

But the experience with area-wide bids has been very disappointing in terms of competitive offers. LBL was the only operator who on each occasion put in a bid for the entire network. There have not been enough sufficiently large non-LBL potential competitors, limiting the basis of competitive tendering. For this reason and the fact that LBL have economies of scale on prices, giving them an advantage as the bidder for the entire auction set, LRT moved to limit tendering to bids with a two-million pound ceiling. At the beginning of 1988, 3.5 million bus miles per annum were tendered as combinations of routes.

A feature of the British experience to date has thus been the presence of much more competition for services outside of London where commercial registration in a deregulated market occurred, than in London where competitive tendering with cost-only contracts existed. Originally in adopting CT, The potential risk was thought to be greater under deregulation than under CT, and hence that more competition would be attracted in London. Why this did not eventuate is an important question since it may well hold the explanation for the decision by LRT to change its mind and move to economic deregulation. Some of the possible influencing factors are:

- The size of the incumbent [the dominance hypothesis].
- The historical association of the incumbent with the tendering authority [the information asymmetry hypothesis]. This argument can be countered by the great merit of CT as a procedure for ensuring that all bidders have equal information on the tendered services, something which deregulation does not provide. By contrast, however, deregulation enables more diversity in product offering, - CT imposes homogeneity on the product - which may then remove the only avenue for non-incumbency advantage.
- The greater uncertainty in establishing the full costs of operating in a mega-metropolis, in contrast to regional and local towns.
- The general disdain for participation in a process which involves a
LOT OF PAPERWORK' IN CONTRAST TO DeregULATION WHICH REQUIRES A RELATIVELY SIMPLE REGISTRATION PROCEDURE [THE 'SIMPLE-FOOL' HYPOTHESIS].

LRT HAVE MAINTAINED THE COST-ONLY CONTRACT [COC] FORM OF COMPETITIVE TENDERING THROUGHOUT. THEY CLAIM THAT COC'S HAVE RELATIVELY EFFECTIVE PENALTIES FOR ANY IMPROPRIETORY. COST-ONLY CONTRACTS ALSO PROVIDE AN AUTOMATIC CASH TRANSFER AND GET AROUND THE PROBLEM OF REVENUE ALLOCATION IN THE CONTEXT OF AN INTEGRATED FARE SYSTEM.

A REVENUE-RELATED FACTOR INFLUENCING LRT'S CURRENT SUPPORT FOR FULL ECONOMIC DeregULATION IS THE APPORTIONMENT BETWEEN LRT AND LONDON UNDERGROUND IN WHICH LRT CLAIMS IT COMES OFF SECOND BEST. THIS EFFECTIVELY MEANS THAT INTEGRATED FARE SYSTEMS WILL ONLY CONTINUE IF THE DeregULATED OPERATORS WISH TO ADOPT THEM. THERE IS VERY CLEAR EVIDENCE IN LONDON THAT IN PRACTICE THE TRAVELLING PUBLIC USING INTEGRATED FARES [E.G. A TRAVEL CARD] TEND TO TRAVEL ON A SINGLE MODE FOR THE GREAT MAJORITY OF THEIR LONDON TRIPS. HENCE THE PRINCIPAL ARGUMENT OF HAVING CT COST-ONLY CONTRACTS IN ORDER TO PRESERVE THE INTEGRATED FARE SYSTEM IS IN PRACTICE NOT SUSTAINABLE.

EXPERIENCES WITH THE BIDDING TECHNIQUE

FROM THE COMMENCEMENT OF COMPETITIVE TENDERING IN LONDON IN JULY 1985, UNTIL THE SUMMER OF 1987, APPROXIMATELY 330 BIDS FOR ABOUT 70 CONTRACTS TO OPERATE INDIVIDUAL BUS SERVICES OCCURRED. THE EXPERIENCE WITH SUCH A LARGE NUMBER OF BIDDING OCCASIONS HIGHLIGHTS THE COMPLEXITY OF CONTROLLED PROCEDURES AS A MECHANISM FOR PURSUING A COMPETITIVE SOLUTION TO THE SUPPLY OF BUS SERVICES.

THE BID PRICE IN LONDON WAS DEFINED IN TERMS OF 'POUNDS PER BUS MILE'. THE CONTRACTS WERE WRITTEN IN TERMS OF POINTS TO BE SERVED AT SPECIFIED MINIMUM FREQUENCIES AND MINIMUM CapacITIES AT THE VARIOUS TIMES OF DAY AND WEEK. THE BIDDER IS PERMITTED TO SUGGEST HOW HE WILL MEET THE SPECIFICATION AND CAN PROPOSE VEHICLE TYPES AND SIZES.

THE MAJOR ISSUES ARISING FROM THE LONDON EXPERIENCE CAN BE GROUPED UNDER THE FOLLOWING HEADINGS:

1. COST-SIDE TENDERING
2. RIGID TENDERING
3. INFORMATION ASYMMETRY

1. COST-SIDE TENDERING

BIDS LEADING TO COST-ONLY CONTRACTS ARE IN THE MAIN INCENTIVE INCOMPATIBLE. SUCH BIDDING SYSTEMS ENCOUNTER PERVERSE INCENTIVES. DURING THE PERIOD OF THE CONTRACT THE OPERATOR BECOMES THE SOLE SUPPLIER OF A GIVEN SERVICE. THERE ARE NO PENALTIES FOR FAILING TO REACH THE TENDERER'S EXPECTED REVENUE FROM THE SERVICE, WHICH IN ANY CASE DEPENDS ON NEGOTIATION ABOUT SHARES OF INTRA-MODAL TICKETING. CARRYING FEWER PASSENGERS HAS FAVOURABLE EFFECTS ON COSTS.

2. RIGID TENDERING

A VERY RIGID APPROACH WAS ADOPTED BY LRT ARISING FROM THE NEED TO
maintain legitimacy in both a legal and an evaluative sense. The rules defining the bidding process did not permit second bids or negotiation after submission of a bid. Estimates of a number of important parameters defining each route (such as required annual service miles) are predetermined from the prior experience of LBL Ltd.

This approach exposes the process to vulnerability to game playing especially by 'big' bidders. Strategic offers are a common phenomenon in any contest [Dixit 1987], which accompany serious bids. An extension to network bids increases the degrees of freedom in a bidding strategy (subject to bidder resources). For example, a strategic-offer can accompany bids for a network of routes in order to increase the attractiveness of the package to the tendering authority. The introduction of such bidding strategies complicates the evaluation process, since it reveals less about the underlying cost structure (which is the basis of assessment and selection) than the opportunities for 'playing the system' to secure both a positive outcome and to deter potential competition. Small operators are placed at a disadvantage because of the resource commitment required to deliver strategic-offers. With the move to area-wide bids and the opportunity to submit bids on any combinations of routes, as well as contingent bids [e.g. $x for route Y if route Z is awarded], the evaluation process for LRT may have become quite unwieldy.

The rigidity of the approach allowed no flexibility to award a contract to independent operators whose bids came very close to success. Thus a means of demonstrating the success of independent operators and encouraging the emergence of competition had to be foregone.

Further, the tendering approach did not support the notion of a competitive learning process, through the publication of the results of the bids or through feedback to unsuccessful bidders. The lack of knowledge on how close one's bid was to the awarded bid adds to the risk of participation in subsequent tendered route offers and hence the erosion of any accumulating competition. With bid prices being inversely related to the number of bidders and the uncertainty of particular routes, the lack of ex post information is detrimental to the competitive process. While it is feasible for anyone to ride the buses of the incumbent and observe sales on a sample of services, this information-gathering procedure is less relevant for a cost-side contract than for a revenue (net subsidy) contract [Hensher 1988]. It is not clear why LRT adopted the no-disclosure rule. Possibly disclosure might have been seen to be difficult to handle while the rules governing LBL bids were still being developed.

3. Information Asymmetry

Competitive tendering is placed at a great disadvantage where historical incumbency is represented by a monopoly with the joint responsibility for planning and operating the bus system. The accumulated knowledge of the elements of the system which are offered for tender together with the established personal networks enhances the prospects of the incumbent when the market is freed up in a controlled way. The issue of market dominance is addressed in more detail in a later section; however this feature of the pre-CT phase of London bus supply has clearly been a major limiting factor in the smooth implementation of cost-side contracts [even if matters of administrative inefficiency are ignored].

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The decision to privatise LBL Ltd will aid the process of removing incumbent information advantage given the experience in other areas that this is followed fairly soon by a turnover of senior staff.

By contrast, the experiences with competitive tendering in other contexts such as refuse collection [Domberger et al 1986] where there existed a sizeable number of incumbents prior to CT suggests that information asymmetry is less threatening. The refuse collection application is however less complex than the supply of bus services. This also aids the competitive process.

These experiences have contributed to the debate leading to the decision to deregulate the London bus market, and soon after to privatise it [Beesley and Glaister 1985, Hensher 1986, Beesley 1987].

THE ECONOMICS OF LARGE MARKET SHARE

The inability of the competitive tendering process in London to attract 'sufficient' bids from non-incumbents so as to create a real competitive environment is due not only to a history of public monopoly incumbency, but also to the very nature of the competitive tendering process in the absence of economic deregulation. The effectiveness of the CT process is linked to the rules of the [bid] game, especially the level of uncertainty and risk attached to a positive outcome, and the amount of information available to each potential entrant (Hay and Vickers 1987).

Competitive bidding by definition must be precise in its specification of what is being 'auctioned'; by contrast economic deregulation is imprecise in its definition.

It is the precision of the product and service definition in the auction process which enhances the chances of the incumbent, who by taking advantage of information asymmetry in the well-defined game can develop informationally strong strategies to out-maneuvre potential competition. By contrast, the game under economic deregulation is not well-defined and consequently the information gain of an incumbent is significantly weakened. The markets for deregulated supply are more entrepreneurial and innovative, giving greater heterogeneity to the specification of service.

The statement on out-maneuvrability does not imply that large market share will not occur in deregulated markets. In fact it is quite probable. What it does mean is that it is contested by a larger set of competitors. Such a scenario must produce higher efficiencies than those from the bidding process. This issue is linked to the idea of the emergence of competition. The evidence via competitive tendering in London is that the emergence is stifled by the asymmetry of information when the product is strictly defined. LBL has very strong links with LRT and indeed the former supply benchmark criteria to LRT for the evaluation of the bids [e.g. unit cost data]. What we have is an example of the principal-agent problem with the agent being selected from competitively tendered agents with asymmetrically informed bids. By contrast, the actual emergence of competition in a deregulated market is likely to be slow, but will enter importantly into expectations.

A consequence of economic deregulation is that the market is likely to be quite unstable for a relatively long period until information gathering and strategic behaviour of firms establishes some equilibrium
in the market. This is evident in the market in the U.K. outside of London. Not only do entrepreneurs already in the industry have to learn about what profitable behaviour is after many years of a completely rigid market, many other adjustments upstream of bus services have to take place, for example in the leasing market for buses, many of which will have new specifications. This is a recognised short-run cost of the dynamics of competitive processes. However, provided the magnitude of such costs are not sufficient to outweigh any predictable long-run benefits, the process leading to unfettered competition is justified. In fact, both critics and enthusiasts for U.K. deregulation now agree that costs have fallen by some 25-30 percent as a result.

An important feature of liberalising the path to unfettered long-run competitive stability is that the component of the market for bus services which is sustainable by commercial registration requires no external financial support. The remaining part of the market qualifies for revenue-support if it is deemed to be gap-filling with respect to social objectives. Although one may question the basis for deciding on whether a service is essential, an appropriate mechanism for filling the social-need gap is to invite competitive bids for the well-defined services. In a climate of economic deregulation where the opportunity for profits has already led to entrepreneurial sussing-out of the market, the level of subsidy support is expected to be considerably lower than that allocated under previous regimes. In the U.K. this has been the case for services outside of London. Over 80 percent of route miles outside of London are commercial registrations, well above the initial pre-deregulation forecast of 65 percent. The level of social obligation which is not commercially viable is considerably lower than Governments claim, resulting in substantial savings in revenue support.

CONCLUSION

This paper has assessed some aspects of competitive tendering of local bus services in London. Many lessons have been learnt from the London experience which have resulted in the decision to replace tendering with deregulation and privatisation as the major competitive weapons. The experience with setting the market free outside of London suggests that if there are profits to be made then competition will occur, something which appears to be stifled to a large extent by the present competitive tendering process in London. The high percentage of commercial registered mileage outside of London and consequent low percentage of competitively tendered 'social services' is testament to the inherent competitive nature of the industry. Market forces are able to satisfy much of community need without the interference of the Government sector. The two critical issues which emerge from the U.K. experience are: [i] the need to eliminate constraints which act to prevent anyone from sussing out a market, [ii] the need to not stifle entrepreneurship, and [iii] the importance of a credible threat [deregulation] in lowering costs.

In accepting the profit maximising objective as a valid basis for determining the supply in the main of bus supply, it must be recognised that it is not the only objective currently promoted in the climate of economic deregulation [outside of London] in the U.K.: any social need is fulfilled AFTER commercial registrations are completed. Consequently any welfare arguments in support of filling a social need gap are accommodated. The use of commercial registration in a freed up dynamic
market setting in the first instance ensures that only route mileage which is not commercially viable but necessary should receive revenue support. The benefits to the community are on balance quite evident.

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