3. THE PITFALLS IN COMPETITIVE TENDERING: ADDRESSING THE RISKS REVEALED BY EXPERIENCE IN AUSTRALIA AND BRITAIN

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SUMMARY

Introduction

The objective of this paper is to analyse policy and experience with competitive tendering. The context of this review is the European Commission's proposal to revise Regulation 1191/69, which sets out the terms for public service provision. The proposal would require compulsory competitive tendering wherever public transport receives subsidy or has exclusive operating rights (ECMT 2005, p. 54). This paper seeks to provide insight into competitive tendering and to highlight tendering designs that undermine the tendering objectives. My focus is on passenger rail franchising models and experiences in Britain and Australia.

I look at the British Government's tendering of British Rail (BR) passenger services from the mid-1990s and the equivalent tendering of Public Transport Commission (PTC) services by Australia's Victorian State Government in the late-1990s. In both cases, services are loss-making and their continued operation relies on public-funding. While there are well-known rationales for that support, "...proving a case for government intervention [in service provision] does not imply that there should be government production". (Kain 1981, p. 81) Government production is argued to be inefficient due to "principal–agent" problems. BR and PTC, as government agents, did not face the commercial pressures to be "efficient".

Competitive tendering may provide a way of providing the services at less net cost to the public. Here, a private agent provides passenger train services on behalf of the government and, crucially, bears commercial risk for so doing. The competitive pressures arising during auctioning of the rights for private agents to provide these services then commits the winning bidder to find cost reductions to seek additional revenue.

Because the British and Australian competitive tendering contracts transfer a significant degree of revenue risk the contracts are described as "franchises". The principles of franchising contrast with commercial (or management) contracting, where an agent accepts the cost risk but takes little or no revenue risk; it also contrasts with regulated monopoly provision.[1] Because revenue risk is transferred, the franchisee has stronger incentives to deliver appropriate service quality thereby reducing the franchising agency's need to monitor standards and devise revenue protection mechanisms.

First impressions of train franchising in Britain seem encouraging. Since train franchising commenced in 1996, revenue has exceeded bid projections, passenger traffic has reached a post-war record high, train service levels have increased significantly and large numbers of new rolling stock have been introduced.

Nonetheless, despite these apparent achievements, the British franchisor has acknowledged that surveys of passengers pointed to growing passenger disenchantment reflecting that "...service quality and overall reliability has worsened" (SRA 2002). Further, from the late 1990s, around one-half of the franchises have had to be financially rescued. Rather than offer a defence for undertaking such rescues, one franchising director instead attacked the franchising model that was originally applied, saying that the type of franchising model that was originally used "...is now not suitable"; the franchises were not as financially stable as they should have been because "...the model was flawed" (Bowker in *Hansard*, 26 Nov. 2002, para. 45).

However, I note the comment of the director-general of the franchisees' umbrella organisation (Association of Train Operating Companies, ATOC), implies that there is a fundamental fault with applying franchising principles to train operations because risk cannot be permanently shifted to the agent: "It's a realisation of the fundamental truth...the underlying risk always comes back to the person who wants it–the outsourcer".[2]

So, what are the pitfalls in franchising passenger rail services–are the problems rooted in applying franchising principles to passenger train operations or are the problems related to the specifics of the model applied?

This paper reviews the experience and policy evolution of franchising in Britain and then in Australia. I then identify the shortcomings of rail franchising, identify lessons about where and how to franchise and consider the merits of the emerging franchising model relative to alternatives. An appendix is attached that includes a review of the principles of franchising, with some reference to rail franchising.

Principles of Franchising

This section considers why and how franchising is undertaken and how franchises are designed. Practical examples are given, notably from passenger train franchises, to place the issues in context.

Why franchise?

We distinguish between two types of franchise: the Chadwick-Demsetz "natural monopoly" franchise and the "brand" franchise. Both franchising types provide incentives that are intended to remove principal-agent problems.[3] For brand franchising–like global cola drinks, internationally-branded fast food operations and (for instance) Scottish Islands airline services (franchised by British Airways to local airlines)–the key aspect of the franchise is to tightly specify the product and often the price. That is, in essence, the entrepreneurial skill and innovation lies with the franchisor. The franchisee's role is to provide a product that matches that specification, such that its quality is indistinguishable from other franchises and the franchisor's in-house product. Thus, in Britain, the British Franchise Association describes the operation of (non-rail) franchises thus:

> *Each business outlet is owned and operated by the franchisee. However, the franchisor retains control over the way products and services are marketed and sold, and controls the overall quality and standards of the business.* (British Franchise Association, web site).

Brand franchisees therefore deal with the local and day-to-day issues. However, they have an incentive to do it in an efficient way because they have the freedom for "initiative and autonomy" (according to a survey of franchising participants conducted by Lewin-Solomons). The brand franchisor's role involves looking at (inter)national aspects of the business and determining the brand, marketing, pricing and strategic development of the product. Commercial risk is shared: The franchisee relies upon this imposed business plan to ensure that consumers buy the product; equally, the franchisor relies on consistent product quality (for brand protection) across franchisees.

For natural monopolies, a single firm can usually meet demand at a lower cost than multiple firms. Passenger train provision displays characteristics associated with a natural monopoly product. At the prevailing level of demand, average costs are typically still declining, with short-run marginal costs below average costs. Further, it is usually impractical or not commercially viable for multiple train operators to provide competing services due to limited prevailing passenger traffic levels, economies of density[4] in train operation and finite track capacity. Pricing at efficient short-run marginal costs would therefore result in the firm incurring losses. This has usually led to the services being publicly-funded–but also publicly-provided.

Single-firm provision can lack the necessary commercial pressures to ensure that the service is provided efficiently. Whether the services are publicly- or privately-provided, financial underwriting by the State and the absence of competitive forces is likely to lead to x-inefficiencies in provision.

This arises because of principal–agent behaviour. The service provider's activities could be scrutinised and regulated by an independent government agency. For effective regulation, that regulating agency would need detailed cost and demand data. In general for monopoly operations where supernormal profits can be earned, RPI-x or rate-of-return caps may be applied, albeit with the attendant drawbacks of such regulatory tools.

An alternative solution is to use franchising competitions to introduce competitive pressures that should drive down monopoly rents and provide incentives to reduce costs and optimise quality and revenue.

The principles of franchising goods or services that have natural monopoly characteristics were developed originally in the 1850s by Chadwick and later by Demsetz in the 1960s. Chadwick stated that "...where competition on the ground is impossible, an auction allows competition for the ground" (Chadwick 1895). It is important to stress that franchising is advocated here as a *substitute* for regulation. Williamson observes that the advocates see the process as "...a market solution that avoids many of the disabilities of regulation" (Williamson 1976, p. 77). By contrast with regulation, Chadwick's approach requires less information because, in principle, franchise bidding by itself can provide all the necessary impetus to achieving production efficiency.

In the late 1970s Crain and Ekelund reviewed Chadwick's principles and found that Chadwick and Demsetz differ in one important respect. Chadwick does see a powerful regulatory role *for the franchisor*, over "a wide array of activities" akin to "that of the modern U.S. regulatory commission" (Crain and Ekelund 1976, pp. 159-160). Chadwick was specifically considering the supply of railway services as an explicit application of his principles (Ekelund and Price, p. 218). It would be a government franchisor that would "...determine optimal investment and the introduction of innovations in railways and let out these activities to private entrepreneurs (Ekelund and Price 1979, p. 222). As Ekelund and Price note, however, such franchising does not improve incentives:

> The civil servants would be in the same position as the hired manager; neither is able to reap the rewards of successful innovation but both are responsible for failure. (Ekelund and Price, p. 229).

By contrast, Crain and Ekelund observe that Demsetz "...seems to imply that commission regulation is rendered unnecessary with the institution of competition for the field". Crain and Ekelund themselves argue (as we observe in practice) that reliance on franchising does *not* remove the necessity of regulation (*Op. Cit*, p. 160). Thus, we should note that Chadwick–Demsetz franchising is not a clear-cut approach; that some form of franchisor oversight is required; and that this can come to strongly resemble a regulatory function. At the same time, however, the greater the oversight the less will be the potential entrepreneurial gains.

In the 1990s, Britain and Australia (amongst a number of countries) applied the principle of franchising to the supply of passenger rail services. Welsby and Nichols[5] interpreted the British Government's rationale for private production of railway services as arising because:

> "... private sector entrepreneurialism would yield a far more innovative approach to development of the railways than public sector management, who were seen as being insulated from the demands of the market place." (Welsby and Nichols 1999, p. 68).

The second-half of the sentence is important, as it implies that the Demsetz (no regulation) approach is intended rather than the Chadwick (central planning) approach. As we discuss further below, Welsby and Nichols observed that the franchising had actually led to tightening of service

specification (and this trend has continued in the years since their paper was written). While the authors accept (as Crain and Ekelund do) that some form of intervention is necessary to ensure that government gets value for its subsidy, nonetheless they see a "...substantial risk that potential efficiency gains will be suppressed" (Welsby and Nichols 1999, p. 69).

Competition design

Demsetz (1968) developed a franchise bidding framework that is intended to provide competition that will drive out excessive profits arising from monopoly provision and identify efficient providers. Demsetz saw franchising as an alternative to the need to regulate–he was specifically concerned with providing a viable alternative to the regulation of utilities.

The franchising framework involves auctioning. Demsetz concluded that:

> If the number of bidders is large or if, for other reasons, collusion among them is impractical, the contracted price can be very close to per-unit production cost. (Demsetz 1968, p. 57).

Competition is based on inviting interested firms to submit bids. This usually involves submitting multiple bids, for a range of service and quality options. Multiple bidding is intended to expose cost and efficiency profiles. At an advanced stage in the process, bidding is likely to involve cross-table negotiation between franchisor and short-listed bidders (and, ultimately, the preferred bidder) over specific details.

While these principles provide an idealised solution to service provision, the success of this process depends on a number of practical factors:

- The specific approach adopted in auctioning.
- Establishing a robust set of criteria to assess the bids.
- Attracting and retaining the competitive market "for the ground" for future competitions.
- Ensuring that bidding transaction (competition) costs are not so large as to offset the anticipated franchising benefits.
- Being able to specify the required output and to monitor and enforce adherence to the committed output.
- Structuring the franchise contract to handle risk and unanticipated events (that is, uncertainty).

Each of these factors is now considered.

Bidding process

Although Demsetz set out the principle for auctioning, there are different approaches to holding an auction. At a practical level, a key decision is to decide whether the bidding will occur through the *open-bid* or the *sealed-bid* approach. In the normal open-bid system that most people associate with auctioning, the bidding for, say, a painting, is an interactive process between bidders, with rivals knowing each others' offer price. At the outset, the auctioneer sets a price that interested parties are invited to offer. If a bidder is prepared to pay that price, the auctioneer then invites higher offer prices.[6] Bids are made sequentially. The price is increased until there are no further, higher, counter-bids. The winning bidder ends up paying their final bid price, (which is the equivalent of the second-highest bidder's price plus an increment that guarantees victory).

However, rail franchising uses a sealed-bid auctioning approach. This is because the complexities of franchise contracting makes open-bidding impractical–while the franchisor is selling monopoly rights for train service the franchisor is also buying a stream of services and commitments, and not just simply selling a good. Under sealed bidding, the bid price and details are not disclosed to other bidders and interested parties bid simultaneously. We should note that here the winning bidder pays their own final bid price–the "first-price sealed bid" level. Because the level of the bids is not revealed, the winning bidder's price is not the equivalent of the open-bid price (the second-highest bidder's price plus a margin). If the firm is keen to win the competition, however, the winning bid is more likely to be over the odds just in order not to be trumped by other bidders.

This first-price sealed bid may result in the winning bidder paying more than the goods are worth or, in the case of rail franchising, making heroic assumptions about revenue growth or cost cutting so as to win the bid. An alternative auctioning design, which attempts to eliminate this outcome, involves the winning bidder paying the second-highest bidder's price, which may be argued to be akin to the open-bid outcome.[7] Thus the winning bidder pays the "second-price sealed bid" level, and is also known as a "Vickrey" auction. Of course, if the second price is *also* unduly optimistic, even this approach will not (without active franchisor scrutiny) prevent a winning bidder "winning" a franchise with financial terms that are unsustainable. Vickrey auctioning does not really help here because the approach is still a sealed-bid–open bidding allows bidders to observe other bidders dropping out, which can be useful information.

Thus, in open bidding, the insights into the business gained through rivals' bidding *may* convey information about the "true" value or potential of goods or service being auctioned. Such insights reduce the likelihood of contract default. The new market for rail franchises from the 1990s was relatively ignorant or naive about the potential for efficiency gains, cost reductions and revenue improvements in service provision. Inevitably, then, sealed-bid designs convey less information to bidders, heightening the likelihood that the winning bidder will be over-optimistic. Vickrey auctioning can reduce the likelihood of this outcome. However, Vickrey auctioning (applied to selling goods rather than purchasing services) is difficult with rail franchising as bidders are often proposing different packages of services that cannot be directly compared. As a consequence, the second price does not necessarily establish an appropriate level for the winning bidder.

Thus the choice of auctioning design influences the information that the bidder receives about the service they are bidding for. This information, in turn, can determine the success of the auction. In the case of sales of goods, the auctioneer will quickly learn if a winning bidder has over-extended their credit. In essence, the bid can be taken at face-value because, if the credit-line is there and the reserve-price has been met, the auctioneer will be content. However, in the case of bidding to provide future service commitments, such as rail franchising, the consequences of over-optimistic bidding are not apparent to the auctioneer (the franchisor) *or* to the franchisee until well into the service contract. It means that the auctioneer needs to establish much more than simply the ability of the winning bidder to pay for the goods.

So the rail franchising auction involves assessing the services offered by each bidder and whether the bidder can deliver on the promises. In general, if franchise evaluations choose the winning bid simply on the basis of the highest bid price or the lowest subsidy then the firm offering the lowest quality would be awarded the franchise. Evaluations will include assessing the proposed service quality, investment proposals and optional extra features, as well as the risk of defaulting.

These issues generate problems for the auction design because, to varying degrees, the bid proposal attributes can be qualitative rather than quantitative. As a result, unless *quantitative* weights of importance of different qualitative attributes can be applied, the choice of the winning bid may be

highly-subjective. It is not always straightforward to numerate or, indeed, to apply weights to that numeration. At an extreme, a bid can be entirely subjective, for instance with an architectural design competition. In such cases, the bidding competition is called a "Beauty Contest" rather than an auction with price being either not relevant to the decision or is only one part of the subjective decision-making. (Janssen 2004, p. 10) Unless based entirely on cost-minimisation/premium maximisation, it is inevitable that rail franchising will contain elements of the Beauty Contest.

Qualitative assessment

Selection criteria need to be transparent when the bidder is chosen for reasons other than simply highest premium/lowest subsidy. Rail franchises inevitably have service quality attributes that have to be assessed in the wider quantitative analysis; this includes an incumbent franchisee's past performance. In such circumstances, it is fundamental to the success of auctioning that the franchisor advises bidders of the weights (value) that is attached to different attributes of a bid.

Unless the selection criteria are made transparent, there is the potential for adverse outcomes:

- The wrong bidder is chosen.
- There is the potential for selection through favouritism and corruption.

The winning firm may be the bidder that most accurately second-guesses the franchisor's weighting, thereby offering a price–service quality package that maximises that weighting. Where bidders have to guess what the franchisor values most, the competition does not necessarily lead to the most efficient bidder being chosen. Gómez-Ibáñez also notes that for the franchising of Argentina's railways, the government "...announced clear selection criteria in advance for both stages so as to increase the transparency of the process and reduce opportunities for favoritism and corruption". (Gómez-Ibáñez 2003, p. 93).

Choice of bid "price" parameter

The bid price parameter is likely to be the pivotal factor in choosing the successful bidder. As noted above, some areas of business latitude, such as prices, are specified closely at the outset. Nonetheless, "price" can take a number of forms, influencing franchisee behaviour in different ways. For instance, the parameter can be:

- *Profit-sharing*. This approach can encourage the franchisee to adopt strategies or accounting reporting that can minimise its reported profit.

- *Revenue-sharing.* Bids are assessed on the basis of the revenue that would be shared between franchisee and franchisor. The franchisee pays an initial fee and a periodic "royalty"–a percentage of the gross revenue. Given the value of such a bid to the franchisor depends on both the level of revenue as well as the share of that revenue, the successful bidder may be required to pursue that stated strategy that would deliver the revenue generation. An alternative risk strategy might be for the royalty (or revenue support) to cut-in when revenue rises above (or below) a given level. In the past, the selection criteria for British ITV (Channel 3) broadcasting licences has included offers for given advertising revenue (the expected value of which depends on each bidder's projection of advertising revenue). Most brand franchising is based on revenue sharing. (See Lewin-Solomons 1998, p. 2.).

- *Fixed price*. Here, the bidder sets out the price(s) for supplying a product. An example is cable television supply in the USA. By contrast with the other pricing parameters, this approach leaves the risk entirely with the franchisee. As a result, with this criterion, firms should have an incentive to submit relatively bearish bids.

As Williamson notes,

> "... awarding an exclusive franchise to the noncollusive bidder who will pay the largest lump-sum fee to secure the business effectively capitalizes the monopoly profits which accrue... To avoid this outcome, the franchise award criterion of lowest per unit price is favored." (Williamson 1976, p. 76).

In the case of rail franchising in Britain and Australia, however, fixed price was the approach, though the Australian model incorporated a significant variable element of subsidy that was paid to the franchisee once the firm reached a given (agreed) revenue target (reflecting government aspirations to increase use of public transport).

Competitive Market

Successful auctions depend on the seller's ability to attract a sufficient number of serious, eligible, bidders. For Chadwick–Demsetz franchising it is crucial both to attract and to *maintain* that competitive market of bidders. Maintaining the competitive element is essential for ensuring the incumbent faces real competition and deterring "opportunistic hold-up" behaviour.

While there is no clear evidence on how many bidders constitutes such a market, it might be assumed that there is less competition with fewer bidders as well as greater likelihood of collusion. The generation and maintenance of a competitive market can be impeded by barriers to entry and exit. These barriers include the scale of business being franchised, the availability of appropriate expertise and staffing, the need for ancillary infrastructure and other capital equipment, and the duration of the contract. These aspects are now considered.

Scale of business

One important factor that determines the level of bidder interest in the sale of a good or the rights to supply a service is the likely price of the goods or the size of the service undertaking. Thus, a small number of bidders may result if the scale of operation being offered exceeds the resources of most would-be bidders. To attract a sufficient number of bidders, a business may need to be repackaged into bundles of a size that would not place financial, operational or management strain on the typical bidding firm.

For this reason, a single business may be franchised in smaller pieces. The size of the pieces is an issue as is how the business is split up. For instance, British Rail was offered as 25 separate franchise businesses. In some cases the split was geographically-based so, for instance, Anglia Railways operated London commuter services as well as InterCity long-distance services. For some other franchises, however, the split was business-based, such as with InterCity services into London Paddington being operated by a Great Western InterCity franchise and local commuter services into the same terminal being operated by a Thames franchise. In this case, then, the size and nature of the split focused on operational benefits (with a geographical split) or marketing benefits (with a franchise being framed around a particular service type, such as InterCity trains). A pragmatic compromise may be necessary.

However, we should note that splitting an organisation to broaden the bidder market can lead to important compromises in efficiency. For instance, there can be strong network benefits from a unified, single management (with lower transaction and co-ordination costs between individual parts of the operation). There can also be economies of scale that may only be optimised at a larger scale of operations.

Management expertise and staffing

Bidding might be subdued if there is a scarcity of the required human resources–particularly where the activity is not a traditional private-sector business. In his landmark paper on franchising, Demsetz stated that an important assumption was that the

> "*... inputs required to enter production must be available to many potential bidders at prices determined in open markets. This lends credibility to numerous rival bids*." (Demsetz 1968, p. 58).[8]

The issue was particularly relevant to BR's passenger train operations, which were newly offered to outside management in 1995-97; and in the 1999 rail franchising in Australia. It is important to note that in both of these competitions the winning firms did not need to recruit operational staff because the winning bidder effectively took over a public company, and so took on the labour force from the previous business manager.[9]

But the bidders must have relevant expertise in order for the auction to be efficiently undertaken in the first place. Such expertise may come from in-house management teams, equivalent businesses from other countries, and other related businesses. For instance, initial British passenger train franchise competitions attracted local bus and coach operators (see Kain 1998, pp. 254-56), offering some of the public transport skills needed for assessing the potential of rail businesses, and subsequent management of those businesses. Subsequent competitions have attracted foreign railway bidders. The later Australian competition drew on the pool of firms developed in the United Kingdom market for establishing a competitive market.

If senior management skills and firms of sufficient size/financial muscle are scarce, it might encourage the formation of consortia of companies with complementary skills and funding. The blending of such skills can enhance the consortium's bid but the development of a consortium itself can undermine the objective of fostering competition from a deep pool of potential bidders. If the market then coalesces into a few, large, consortia, it could be argued that collusion between rival bidders will be more likely.

Capital equipment

As in any area of the market, the need for large capital investments can impede market entry. This affects market competition and contestability. Barriers are relatively low where assets can be readily leased–and where there are easy lease-breaks. This is the case, for instance, with passenger train assets when there is a strong rolling stock leasing market, which can reduce barriers to market entry and exit. But this does mean that the success of franchising can depend strongly on the efficacy of that external leasing market.

Contract length

Franchising generally does not involve an open-ended contract–fixed terms are set. The rationale for periodic re-franchising is that, while bidding introduces incentives for bidders to consider cost

savings and quality improvements, such focus can decline over time. Periodic re-franchising is intended to ensure that competitive pressures are maintained.

However, there is a balance to be drawn in the franchise length. Factors that encourage longer contracts include:

- **Franchise efficiency.** It is desirable that the incumbent firm gains insight into the operation by experience and deepening the skills base.

- **Investment incentives.** Longer terms may encourage investment as they provide more time for the payback on investments.

- **Competition costs.** There is more time to recoup bidding costs, including management time, that the franchisee (and franchisor) incurs during the franchise competition.

Factors that encourage shorter contracts include:

- **Incumbent advantage.** The longer the firm has a contract, the more that business insight gives the incumbent an inherent advantage in future franchise competitions. This is particularly the case where rival firms perceive that the incumbent has performed reasonably well, thereby dampening interest in the competition.[10]

- **Incumbent performance**. To the extent that the incumbent is never too far from a re-franchising competition, a short contract can encourage contract compliance. Indeed, Affuso and Newbury argue that short-term contracts actually encourage franchisees to invest relative to longer contracts, in order to demonstrate commitment. They also note, however, that franchisees also use such financial commitments to raise potential rivals' barriers to entry, thereby muting re-franchising competition–see page 75).

- **Franchisor and bidder uncertainty**. Setting long-term contract commitments can be undesirable for both franchisor and bidder. Unforeseen circumstances alter the franchisor's preferred service delivery while the franchisee may face adverse outturns relative to cost/revenue assumptions. These circumstances are more likely, the longer is the contract.

As a consequence, setting a franchise term that retains a competitive market involves a range of trade-offs and, also, a degree of conflicting evidence on how the different terms impact on franchisee incentives.

Bid Assessment

In considering bid assessment issues, we can draw upon literature that assesses the use of franchising principles in the award of cable television licenses. Here, the bids are essentially assessed in terms of an assumed product quality, with a minimum price for a specified cable package. The specified "quality" may include the technical standard of the signal, its reliability and the type and number of television channels on offer to households. There are some similarities between this process and rail franchising.

In the USA, the cable television contract is typically awarded on the basis of supplying a cable television package (physical cable and basic television channels) to the consumer for the lowest unit price. Similarly, the *key* parameter used in awarding a rail franchise is the firm offering to supply services to government for the lowest subsidy. However, by contrast with cable contracts, because

government (rather than the consumer) is the primary rail service customer, it has a strong vested interest in close oversight of rail service supply and this influences both the degree to which franchise terms are specified and the bid assessment task.

Thus, before the franchise competition begins, the operating environment (including the degree of franchisee latitude) needs to be established. An important parameter is the supply price; to the extent this parameter is set, it establishes a common business relationship within which all interested parties will set their bidding terms; this common environment then influences the ease with which bids can be assessed. For instance, long-term cable franchises are likely to include a provision for adjusting the agreed supply price over time, to reflect changes in costs and demand conditions (Viscusi, *et al*., 2000, p. 423). Thus, as Prager notes, laying out this price-setting process can improve bid assessment to the extent that

> "*... regulation of rates will tend to reduce the extent of opportunistic behaviour exhibited by firms by both limiting the prices they can charge ex post and limiting the promises firms are willing to make ex ante*." (Prager 1990, p. 217).

In principle, a similar approach can be adopted for rail service supply and for bid assessment. Thus (arguably), the ability to undertake opportunistic behaviour in rail services in Britain is limited, because around 40-45%[11] of rail fares are regulated and unregulated prices are generally regarded as price-elastic.[12] This means that the range of plausible revenue projections that the franchisor would need to consider would be somewhat constrained.

For rail franchising in Britain, having set the operating environment, franchise task and business latitude, the franchisor invites sealed bids for the annual subsidy level[13] that would-be operators will require for a range of service levels and standards. The range is intended to identify firms with the lowest average costs and (in this case) effectiveness in generating revenue. The lowest subsidy level is likely to be the principal criteria for choosing the winning bidder. To account for the opportunity cost of annual subsidy payments that vary over the franchise term, one basis for assessing the bids is to consider the Net Present Value (NPV) of the future subsidy/premium profile. Thus, even though bidders will inevitably submit different subsidy (or premium) profiles, the NPV can "standardise" the financial stream.

There are two other important assessment parameters:

- Quality.
- Risk transfer/business plan risk.

Unless the service quality is adequately defined, there is a strong likelihood that competition will drive down the quality as well as the price.[14] Thus rail franchisees in Britain and Australia are required to supply a minimum service level. Franchisees are also required to meet other service attributes (such as train cleanliness and punctuality), that can be measured and monitored to varying degrees of precision. Specific investments may also be required.

Arguably, the service level and "measurable" quality specifications can form a common basis to compare bids, to avoid the competition turning into a Beauty Contest. The bidder may offer a higher standard of service or investment beyond the base specification; such factors will form a separate stage in the bid assessment. Thus, other qualitative factors may include:

- Promised additional service levels or higher quality services.
- Optional commitments to invest (especially in taking out long-term train leases).

Assessments also need to consider the business plan risk. As discussed earlier, unlike traditional auctions, franchises for service provision need to consider, in particular, franchisee default.

An important issue in such assessments is that the bidder and the public franchisor will differ in their risk-averseness to business failure–their willingness to take on the risk, which for the public entity is the risk of service disruption if the franchisee becomes bankrupt. Even if the risk is completely transferred to the franchisee, if the franchisor places great value in service continuity, it will face additional costs from the financial failure of the franchise. Such costs would include installing an alternative operator to fill the service gap; there would also be additional refranchising costs.

The knowledge that the franchisor is risk-averse in this way can lead to moral hazard behaviour.[15] This likelihood can be (or at least should be) a challenge for bid assessments. Knowing the franchisor has this aversion, the bidder has an incentive to submit a "bid-winning" business plan that is, very optimistic and so has a strong chance of being unsustainable. The franchisee would subsequently then seek additional funding knowing that the franchisor is likely to underwrite the firm in order to avoid service disruption. In this context, then, it is essential to test the bid proposal for its robustness.

To assess the risk of financial failure, franchisors will need to be assured of each bidder's:

- Financial resources.
- Track record and relevant skills and experiences.
- Plausibility of (ability to fulfil) the financial and other commitments and projections.

This list is not exhaustive. Nonetheless, it is such "quality" and risk items (rather than service level–subsidy options) that move the choice of winning bidder away from relatively unambiguous quantitative "minimum subsidy" criteria, and towards normative judgement.

Benchmarking criteria can be useful to both franchisor and bidder alike. NERA note that this approach was used by the Independent Television Commission (ITC) in its auctioning of commercial television licences. The ITC was concerned that some bidders were willing to accept a level of risk (of financial failure) that was higher than the ITC was willing to accept. ITC identified a "low revenue scenario"; a bid was considered financially sound if the firm could survive that scenario. While this approach has theoretical appeal, NERA note that it has less practicality as an assessment tool where there is high demand uncertainty: in such circumstances it will be difficult to establish just what the likely worst-case revenue level is. (NERA 1995, p. 6).

The low scenario tool can be of benefit to the bidder, who gains an insight into the degree of financial soundness that the franchisor requires. However, as discussed earlier, it is important that the franchisor should communicate its attitude to risk-taking to bidders, to ensure that they appreciate what business attributes are being sought. Failure to communicate such assessment criteria will unnecessarily disqualify bidders, reducing the competition and potentially eliminating the most efficient firms. NERA note that this deficiency arose with ITC's competition and they concluded that as a consequence ITC probably lost money because the level of competition was reduced. (*Ibid.)*

Competition Transaction Costs

Bidding transaction costs are important in determining the success of the franchising competition and in treating contract non-compliance. Other things being equal, if the transaction costs are "high",

they can compromise the success of the competition and the subsequent execution and enforceability of the contract.

At the highest level, we can say that high transaction costs of holding the competition reduce the net benefits of franchising. Further, if those competition costs are substantial, it compromises the development of a healthy bidding market as it discourages bidding–firms are more likely to conclude that the costs are too high relative to the probability of winning.

High transaction costs also influence the way the bidding competition is conducted. There may be a temptation to discourage bidding or to move to a short-list at too early a stage. This moderates transaction costs but this can undermine the efficacy of the competition.

Where there are sufficient serious bidders, a short-list of bidders can be established from an initial assessment. In the case of rail franchising in Britain, the list has been between three and five bidders. Narrowing the competitive field at this stage is essential to reduce evaluation complexity, time and administrative costs. After further analysis and negotiation, a preferred bidder is chosen and a Head of Terms agreement is reached. Nonetheless, to maintain competitive pressure (to discourage the preferred bidder from squeezing out last-minute concessions), the franchisor is likely to retain a fall-back bidder.

High transaction costs impact on franchising objectives even when the franchise is operational. This can happen in two important ways:

- **Weaker sanctions and contractual arrangements**. The franchisor may decide to retain a financially- or operationally-non-performing operator to avoid the refranchising costs. As a result of this inhibition, the franchisor's ability to levy effective sanctions is weakened. If the franchise is financially non-performing, it encourages the franchisor to ease operational requirements, to reduce premium payments or to increase subsidy payments. To the extent that firms recognise that this consideration gives them leverage to renegotiate the franchise terms, it provides them with a further incentive to bid with overoptimistic business plans.[16]

- **High costs can compromise franchise design**. High costs encourage longer-than-desirable franchise periods by franchisor and franchisee seeking a long stream of financial benefits to recoup the large, up-front transaction costs. As discussed above, lengthening the franchise period raises incumbent advantage in re-franchising, thereby discouraging competition.

Thus transaction costs can be pivotal in the operational and financial success of franchising.

Specifying, Monitoring and Enforcing Outcomes

As with all other contracts, it is important that franchise contracts are robust. The following three elements are critical to the successful implementation of the contract:

- **Franchise specification**. It must be possible to specify the winning bid contract so that, in particular, cost and revenue risk lie where it is intended.

- **Service delivery** The franchisor must be able to develop a *practical* process for franchise monitoring, to ensure that the franchisee delivers what is promised.

- **Viable sanctions** There must be viable sanctions for non-compliance. Performance regimes (carrot-and-stick bonuses and penalties for delivery/non-delivery) encourage compliance as

> does setting a relatively short franchise period. Ultimately, it must be practical to revoke the contract for persistent non-compliance.

Specification is a pivotal issue and at its heart lies defining just what a "franchise" is and whether setting a high degree of franchise specification turns the operation into a conventional regulated entity. In most of the foregoing literature (notably, that of Demsetz), franchising was intended to replace a regulated private supplier with a competition for the exclusive provision of a product or service; in the case of rail services, the franchising was seen as an efficient alternative to government operation. But commercial freedom is central to bidding strategy, delivering efficiencies and marketing plans. It is inevitable that franchising such as cable television, terrestrial television licensing and rail service franchising will be subject to regulatory scrutiny to ensure that the promised services and quality standards are delivered. Nonetheless, there is an issue as to how far such specification and monitoring goes before the franchise resembles conventional regulation.

Arguably, the defining attribute that distinguishes simple, regulated (and subsidised) monopolies from brand franchises and from gross-cost contracts[17], is the franchisee's commercial freedom (albeit that such freedom is not part of Chadwick's original principles). However, the franchisor can impose stringent financial and operational criteria. This can result in a degree of consistency in behaviour (and thus in risk-taking), making bid assessments relatively easy, but such constraints and the close oversight that tends to come with it curbs the operator's financial freedom. This has implications for the original objectives of franchising:

> "Extensive supervision is costly both in terms of the out-of-pocket costs of monitoring and in terms of the sacrifice of the benefits of the provider's presumed expertise…" (Goldberg 1976, p. 444).

We should also note that because the specification is centrally-determined, by default the revenue risk largely remains with the franchises (through the bidding process), or drifts back to the franchisor. In this way it becomes difficult to distinguish franchise oversight from direct regulation or gross cost-based contracting. In this way, persistent and detailed intervention diminishes the net benefits of franchising.

Risk and Uncertainty

The key parameter of franchise design is risk allocation, for it is from the risk transfer that the principal–agent problem is to be overcome. So in designing a service contract we need to consider the extent of risk transfer, the type of contract that will deal with unanticipated or non-quantifiable (uncertain) risks, and whether risk can be successfully transferred to the contracting party.

If a competitive tender is let out as a "gross cost" contract, the contracting agent transfers the cost risk but retains the revenue risk. (As discussed in the Introduction, this is not classed as a "franchise".) More often–and usually with the rail franchising–a "net subsidy" contract is signed; the franchisor transfers the revenue risk to the winning bidder. Relative to costs, revenue is very unpredictable. This is particularly the case with passenger rail services–where exogenous factors may adversely affect patronage or whether franchisee initiatives will generate the predicted traffic growth.

Clearly, the less initiative the franchisee takes, the lower will be the risk. Put another way, when the franchisor sets a high degree of specification, it reduces the bidders' own risk-taking. This makes the business more attractive to would-be bidders. Thus, as Toner notes, the more precisely the contract is specified (e.g., service frequencies and fares), the greater the bidding and the lower the price. But this comes at its own price:

> "*... the more fixed things are, the less the opportunity for market-led innovation and the less flexibility to respond to changing market conditions*." (Toner, 2001, p. 7).

Those uncertain market conditions need to be considered when establishing the contract design because changing circumstances can be as undesirable for the franchisor as for the franchisee. Thus, as Goldberg notes:

> "*Entering into a contract will generally entail placing restrictions on the contracting parties' future options. Freedom of contract is the freedom to impose restrictions on one's future behaviour*." (Goldberg 1976, p. 428).

Gómez-Ibáñez provides the example where urban passenger services in Buenos Aires were franchised. Traffic growth was considerably greater than had been projected, while the government faced unanticipated fiscal difficulties. The contract was deficient as the franchised railways now required more investment than had been committed to, while the government was unable to fulfil its subsidy commitments. The government defaulted on its payments to the franchisees. (Gómez-Ibáñez 2003, pp. 105-06)

Williamson (1976, p. 79) identifies three ways in which franchise contracts are designed to cope with unanticipated (uncertain) events:

- "Once-for-all" contracts, where mechanisms are put in place at the outset, to deal with future events.
- "Incomplete, long-term" contracts, where unanticipated events are accounted for by re-negotiation, subject to penalties.
- "Recurrent, short-term" contracts, where the unanticipated events are accounted for at the refranchising stage.

The once-for-all specification locks both parties in to the contract. To the extent the contract terms seek to cover all likely events, they will be relatively difficult to write and may lock either franchisor or franchisee in to undesirable outcomes. Conversely, the recurrent shorter-term contracts incur bid competition costs more regularly and may reduce franchisee commitment (including less investment) in the business.[18]

More generally, however, and irrespective of the length of franchise that is adopted, it is plausible that at some stage the franchisor will desire to make changes to the contract, to reflect unforeseen events such as (in the case of train services) the emergence of demand that differs significantly from those embodied in the contract terms. Similarly, the franchisee may find that owing to events beyond its control, it is unable to achieve the cost savings (or efficiency gains) and revenue growth that underpin its business plan.

Given that such "unanticipated" events are, by their very definition, random, the longer the franchise term, the more likely it is that franchisor or franchisee will seek to renegotiate the contract terms. It is important that such events could not have been expected. If other firms (especially firms that bid to provide the services) perceive the apparent unanticipated event as having arisen from the incumbent's intended or unintended underbidding, it may encourage other franchises (or would-be bidders) to bid recklessly or accept unsustainable terms, in the expectation that their contract could be renegotiated–the moral hazard behaviour discussed earlier. Demsetz suggests that penalties can be included when renegotiations are sought, to discourage this behaviour. (Demsetz 1968, p. 64)[19]

It may be preferable, given firms' risk-averseness to unanticipated events, that not all contingencies are written into the contract–the "incomplete, long-term" contract. If it is preferred (or perceived, for various reasons, necessary) to have long franchise lengths, there are several approaches to handling the uncertainty at the outset, or during the franchise term):

- ***Break points***. Contracting parties may agree in advance to build in contract break points. This permits either party to opt out of further commitments, at a relatively low level of compensation.

- ***Negotiated contract revision***. Again, there is the possibility that such open-ended contracting will encourage a successful bidder to seek renegotiation (a strategy sometimes called "lowballing"), knowing the franchisor will wish to avoid the cost and disruption of a fresh contest. The franchisor's retaliatory mechanisms for such blackmail may include penalty clauses and threats to award that franchise (or of other franchises) to other firms when they fall due for re-franchising.

- ***Profit-sharing***. A form of contract might be drawn up to profit-share the financial gains that would arise from the revised conditions (e.g., the revenue from running additional train services).

- ***Cost-plus contracts***. Where contracts are subject to considerable uncertainty, remuneration may be based on a "cost plus" formula rather than a fixed charge. Williamson notes, however, that this approach faces severe problems of auditing costs and builds in "defective incentives". (Demsetz 1968, p. 82).

Williamson argues, further, that contracts such as the "cost plus" begin to closely resemble those associated with monopoly regulation. Inevitably, whichever approach is taken, the greater is the degree of uncertainty, the more likely it is that the contracts will be gravitating towards regulatory characteristics. Indeed, for incomplete long-term contracts (which are more likely with relatively high levels of uncertainty), Viscusi, et. al., argue that

> "*... franchise bidding differs from regulation as a matter of degree and not of kind... as we introduce product quality and uncertainty, franchise bidding begins to look more and more like regulation. The apparent advantages to franchise bidding become less outstanding." (Viscusi et. al. 2000, p. 409)*.

But even with a contract resembling regulatory prescription, will the contract guarantee that the franchisee does bear the risk? Williamson argues that, because of refranchising costs and possible litigation costs, the franchisor is disinclined to allow franchisees to fail and inclined to undertake intense monitoring. This "then joins the winning bidder and the franchising agency in a quasi-regulatory relationship". (Williamson 1976, p. 83) More to the point, though, such a relationship undermines the original objective of transferring the risk. Because risk is not transferred, bidding strategies are biased and incentives to behave efficiently are undermined. Kain (2002) examined this strategy with Britain's awarding of the Private Finance Initiative (PFI) contract for the Channel Tunnel Rail Link, noting that the government faced heavy sunk transaction costs (from the auction costs) and had essentially underwritten the contractor's commercial risks. This generated tactical bidding. Thus, having set up an Agreement that did not transfer risk,

> "*... the private partner knew it could cry "pauper" with impunity due to the financial penalty of accumulated debts [of the private partner that the government would incur] and heavy*

> *PFI transaction costs of rebidding. The private partner could seek renegotiation after becoming entrenched*." (Kain 2002, pp. 57-58).

So a general issue of franchise design and application is what risk can be transferred, the process by which it is transferred, and whether it can, in fact, be successfully transferred. As the PFI example here illustrates, the government may seek to avoid high auction costs (including time/delay costs) through renegotiation. Another factor that can undermine successful risk transfer is "public interest": government may rescue a franchise if the firm's failure would lead to supply disruption: this is pertinent to rail franchising and is discussed further, below.

Experiences with Rail Franchising in Britain

In this section, I consider the experiences of passenger rail franchising in Great Britain. The franchising followed a period of restructuring of British Rail (BR). During the 1980s, BR was divided into three passenger businesses, or "sectors": *InterCity* [high-speed main line operations], *Network SouthEast* [NSE, London and Home Counties services, dominated by commuting] and *Regional Railways* [provincial and rural services]. In the early 1990s, this split was formalised, with the three sectors forming three vertically-integrated (train and track) businesses under the BR umbrella. This structure was barely established when the government decided to vertically-separate the business, with Railtrack (now Network Rail) being responsible for infrastructure management and selling track access to ("above-rail") passenger and freight operators.[20] The passenger operations were divided into 25 "shadow" government-owned Train Operating Company (TOC) businesses, based around 19 BR profit centres (which were essentially sub-sets of the three passenger sectors).

The TOCs were transferred to the private sector as franchises. Auctioning of the TOC businesses commenced in 1995, with bids sought *only* from private firms–the Franchising Director did not permit BR to bid. The first franchised TOC commenced operation in February 1996. By April 1997, all the BR services had been franchised.

The first part of this section sets the scene for the analysis of the franchising policy and implementation by assessing whether the franchising has achieved its objectives. Subsequent sections consider how franchising policies have evolved, reviews the competition design, bid assessment, the franchise market, the competition's transaction costs, the degree of franchisee latitude with services and the extent to which risk and uncertainty are transferred.

Has rail franchising achieved its aims?

In considering the primary objective of franchising–delivery of the passenger railway at a lower cost to the exchequer–it seems that the cost (including infrastructure provision) has risen. For the entire railway that was "BR", the crude estimate made in the late 1990s was that the cost had doubled, although it is unclear if this accounts for the expansion in passenger rail services (with 17.7% more train miles in 2002-03 than 1996-97). While not challenging the estimate, however, Welsby and Nichols argue that:

> *Privatisation has fundamentally changed the financial flows within the system, so that in many ways they are now a closer approximation to long-term economic costs, in that subsidies should now be providing for the opportunity cost of capital in a way that was previously absent*. (Welsby and Nichols, 1999, p. 75).

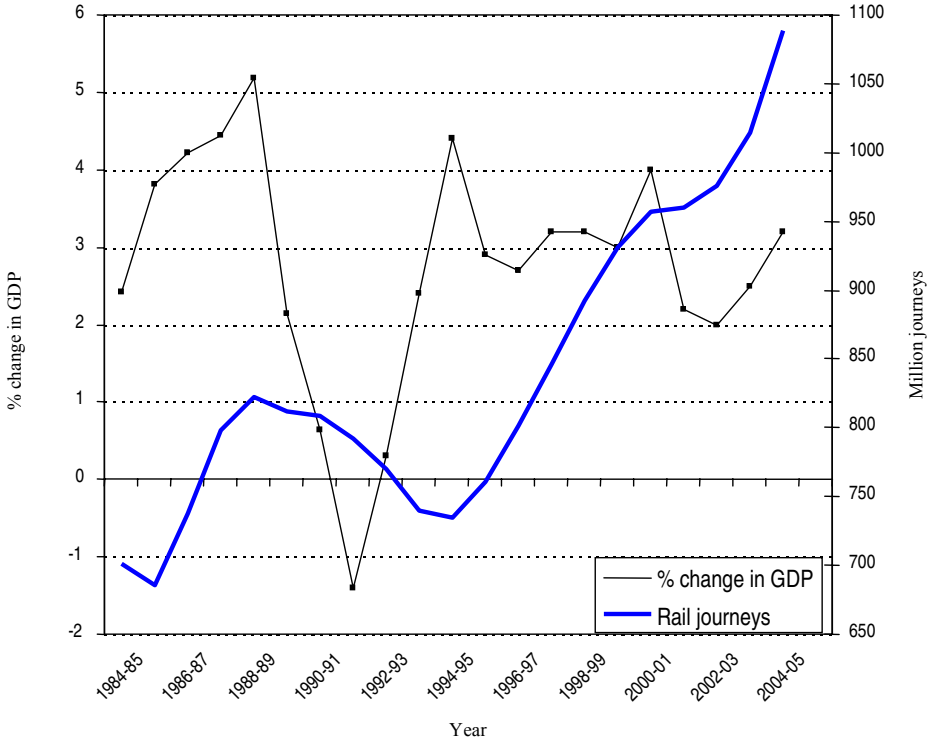
What of the promised gains from franchising passenger train services? The decline in (nominal) net subsidy to franchisees was from £2.0 billion in 1996-97, to £0.9 billion in 2002-03 (Kain 1998, p. 257). Because the franchises' service delivery has increased, in concert with growing demand, with

new rolling stock and against a background of rising costs of infrastructure provision, there is no definitive answer.

We can still make some clear observations and conclusions, however. The passenger rail industry has been buoyant since franchising. The SRA reported that:

> "*In the period since 1994-95, rising economic prosperity has delivered the longest and most sustained growth in rail passenger usage in the last 50 years-36% in the seven years from 1994-95 to 2001-02. ... Strong growth in employment in London (up 17% since 1994), increased road congestion, a fares policy that has led to regulated fares decreasing in real terms and the increase in fuel prices in the late 1990s have all played a key part. Although poor performance has affected some rail markets recently, overall growth has continued, albeit at a slower pace.*"[21] (SRA 2003, p. 24).

Figure 1. **Franchised Rail Passenger Journeys and Change in GDP**



Source: Department for Transport, *Transport statistics Great Britain* (various issues).

The long-run growth in passenger journeys and changes in economic growth (GDP) are illustrated in Figure 1; the dependence of patronage growth on changing economic activity is clearly evident.

The attributions of the traffic growth here are interesting–the franchisor attributes the growth to *exogenous* factors rather than to the managerial and entrepreneurial flair of the franchisees. Undoubtedly, the franchisor's interpretation is not the full story, though, with service quality being improved in two important ways–increased service frequency and new rolling stock. As column 9 of Table 3 shows, there were 17.7% more train kilometres run in 2002-03 than 1996-97. Further, by June 2003, new passenger rolling stock totalling 4 385 vehicles, had been ordered or delivered, mostly

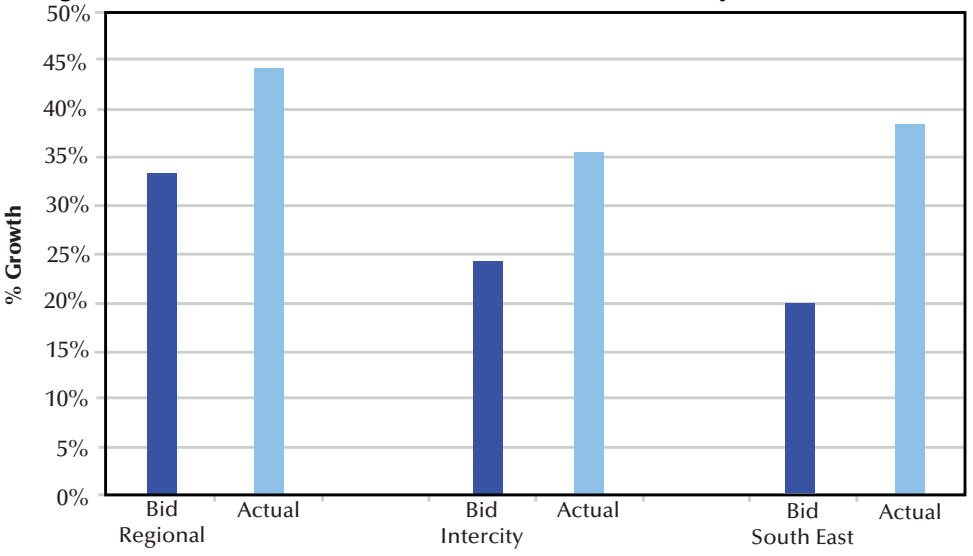
through the leasing companies; this represented 38% of the stock in existence in the last year of full BR operation (11 483 vehicles). (Rail Business Intelligence 2003, Issue 200 supplement p. 4; Department for Transport 2005, p. 107) But, *to varying degrees*, these service enhancements were requirements of the franchise contract, which therefore received higher subsidy reflecting such a commitment. (See endnote 46 for an illustration of the impact of such commitments on subsidy payments.) That is, to the extent that endogenous–service improvement–factors underlie traffic growth, it has much to do with the Treasury loosening its purse strings in the subsidy payments.

However, to the extent that the increased service frequency was a unilateral decision of the franchisee, it was by no means costless. Comparing the buoyant traffic and revenue trends with the cost trends shows that franchising *has* failed to deliver its promised business improvements. It may be that the TOCs chased revenue by supplementing train services that drew in more resources, i.e., their marginal costs were high. The financial performance of the franchises is summarised in Table 4. Thus:

- At face value, the record on delivering revenue growth has been exceptional. Taking into account the exceptional (and unanticipated) exogenous traffic growth, the aggregated revenue for the TOCs rose by 25.8% between 1997-98 and 2001-02 (SRA 2003d, p. 10). Indeed, aggregate revenue growth for all three business sectors (InterCity, London & South East, Regional) *exceeded* the revenue growth projections set out in the bid projections–see Figure 2.[22]

- However, as the SRA highlighted in 2003 (SRA 2003, pp. 48-49) the cost side of the ledger has shown a similar upwards trend. There was a 24.5% *growth* in "staff costs" and "other costs" for the same period.[23] However, simply matching cost growth rates with revenue growth rates was often insufficient for business stability, if only because, for a number of the TOCs, the bestowed level of operating costs was considerably greater than the revenue. For instance, Scotrail's passenger revenue in 1996/97 was £118 million but costs were £363 million so, for instance, a 10% rise in revenue would be £11.8 million but a 10% rise in costs would be £36.3 million. So, other things being equal, the financial performance of some TOCs' would have worsened considerably.

Figure 2. **Actual and Bid-Assumed Revenue Growth, by Business Sector**



Source: SRA 2002, p. 6.

But other things are not equal with rising costs and declining subsidy forming a pincer movement on the firms' viability. A large number of the winning bidders had undertaken to operate in later years with considerably less subsidy–the winning bidders had undertaken to work with 41% less subsidy for the 1997-98 and 2001-02 period–see rows 8b and 9 of Table 4.[24] So, for the TOCs in aggregate, the operating ratio (costs relative to revenue, row 11) deteriorated.

Some franchisees had committed to relatively conservative reductions in subsidy while others committed themselves to subsidy reductions that were considerably greater than 41% average. Table 2 sets out the very challenging improvements in performance that many of the franchises had committed to achieve. These improvements were not met because, despite the exogenous-sourced revenue growth, there was considerable cost inflation. Thus, by January 2003, the franchisor was reporting that the expected financial gains from franchising were not being realised and that a significant degree of the TOCs had negotiated terms that departed from the agreed franchise contracts:

> "Over a third of the TOCs are now operated under management contracts or other special arrangements under which franchises are provided with higher levels of support and bear considerably less risk than under the original agreements. The result is that the benefit that the public purse initially received after privatisation is being outweighed by the need to increase support levels." (SRA 2003, p. 47).

The financial status of the initial franchise contracts is listed in Table 2. It is against that background that we now review Britain's franchising policy, design and application.

Overview of Franchising Policy

Following its re-election in 1992, John Major's Government set about privatising British Rail (BR), which was the last significant business remaining in public ownership. Track infrastructure ownership was transferred to a new entity, Railtrack, though the company was placed in administration in 2001. In 2002, the assets were transferred to Network Rail (NR), a government-owned and guaranteed, 'not-for-dividend' company. Passenger train rolling stock was transferred to three new Rolling Stock Leasing Companies ("ROSCOs") that were then privatised.

The above-rail passenger train services were franchised in Britain. The government's franchising agent was the Office of Passenger Rail Franchising (OPRAF). It was primarily responsible for running the franchise auctions and monitoring the subsequent compliance with the terms of the contract. After the Labour government was elected, OPRAF morphed into the Shadow Strategic Rail Authority (with the "shadow" label being dropped after enabling legislation was passed in 2000). The SRA was more than just a name change for OPRAF. As is discussed below, the SRA's establishment reflected the greater "strategic" role. This included ensuring that franchise investments occurred, that use of track capacity was optimised and greater service and rolling stock specification–akin to a regulatory role. In 2005, SRA's role was subsumed within the Department for Transport.

The government's decision to use franchising to supply services was not unusual. Franchising of natural monopolies has been adopted in various industries, such as Britain's National Lottery, the 3G mobile telecom and television broadcasting licenses and, since the early 1970s in the USA, cable television provision.

There were two features of the rail franchising competition that feature in these other government franchises to varying degrees. Government franchises tend to have an element of "public interest" that finds its way into franchise specification. For instance, television licenses often have a qualitative aspect in the service provision, with given types and "qualities" of programme being specified. For

passenger trains, there is arguably a strong political need for the Government to ensure that franchisees will deliver certain minimum service standards. Thus, although the franchisees are expected to provide services with entrepreneurial flair, the contracts nonetheless require TOCs to provide specified minimum service levels. On average, these Passenger Service Requirement (PSR) services approximated between 75% and 90% of the BR timetable.

The second, related, feature of the rail franchising, which sets it apart from most other government franchising, is that, at current traffic and revenue levels, most operations have insufficient revenue to cover their costs, especially as the costs are based on "commercial" track access and rolling stock leasing charges. Thus, in most cases, the *predominant* criteria for choosing the winning firm was not based on the *highest bidder* but, rather, identifying the firm that offered to operate a given business for the lowest subsidy.

The franchising competition has the following core features:

- To foster interest in bidding, to lower potential barriers to entry, to discourage incumbent advantage and to facilitate the transfer of physical assets at the refranchising stage, physical assets were sold to other entities, who then offer the use or lease of those assets. Thus one consequence is that, while the total industry turnover is around £4 billion–£5 billion, the level of equity and financial debt of the franchisees is less than £200 million. (NERA 2004, p. 19). Thus, with minimal asset ownership, franchisees:
  - Pay a track access charge to NR.
  - Lease stations, which are owned by NR (except in London, although NR still manages most of the terminals).
  - Lease rolling stock from ROSCOs.[25]

Take over the TOC business from government/previous incumbent for a peppercorn amount–and, crucially, this acquisition includes staff from the previous operator.

- Most initial franchises were let for a period of 7 years although TOCs that would have to commit to leases in large numbers of new rolling stock were given terms up to 15 years.
- The franchise would tend to be awarded to the bidder seeking the lowest aggregate subsidy (measured in Net Present Value, NPV) over the franchise term, although a bidder offering additional service benefits might influence the outcome.
- In exchange for the subsidies, the franchisee takes on the revenue risks.

While government franchising for the provision of other services provided design principles for rail franchising, passenger railways nonetheless have their own unique balance of public interest, risk-taking and incentives. Because there were few comparable examples of passenger rail franchising elsewhere, Britain's rail franchising design started in uncharted waters. We can identify three Phases in how franchising policy and design evolved from the initial franchising period.

Phase I–Short contracts, low specification, high risk transfer (1995-1998)

A feature of the first contracts was the prevailing assumption that operators could significantly reduce reliance on subsidies over time. This bullish outlook pervaded the awarding of contracts and was based on a perception that strong efficiency gains and traffic and revenue growth could be

achieved. As a consequence, firms signed up to provide the PSR (and other) services, generally on a declining annual subsidy profile or rising premium.

Franchised operations were given protection from direct competition by other new, third-party operators that might otherwise "cherry-pick" the franchises' most lucrative operations. This "moderation" of competition was intended to be phased out during 1998-2002. The moderation was intended to give TOCs breathing space to achieve efficiency gains and revenue growth. Moderating competition also reduced franchisees' revenue risk: they had greater certainty about their revenue stream which would result in a lower risk premium being built into the franchise subsidy.

Phase II–Long contracts, higher quality specification, high risk transfer (1998-2002)

Until elected in 1997, the Labour Opposition was hostile to railway privatisation, including franchising. However, all 25 franchise contracts had commenced by the time Labour came to power in May 1997. In due course, the Labour Government embraced franchising; it became a cornerstone of the Labour Government's transport policy, as heralded in the 1998 Transport White Paper.[26]

This White Paper led to (what I call) "Phase II" franchising policy. The Paper identified faults in the franchising design, with specific concerns about the service specification, about investment incentives and about the service bundling:

- **Varying service standards** The franchise contracts did not have mechanisms that would enable the franchisor to raise service standards. The government considered service quality to be deficient. However there was nothing in the contracts that would force TOCs to raise their standards.

- **Investment incentives** *At the time* of the White Paper there was little evidence that franchisees were committing themselves to signing up for leasing new rolling stock. The unanticipated economic growth added urgency to developing a transport policy that would be seen to be delivering new investment: investment in rail was needed to illustrate that government was providing a viable alternative to road congestion (exacerbated by the economic growth). The Government's view was that short-term franchise lengths were inhibiting long-term planning and investment by operators". (para. 6.7, cited in House of Commons Select Committee on Transport, Local Government and the Regions 2002, para. 12) The policy was therefore to establish longer franchise terms. The longer terms were intended to encourage franchisees to commit to long-term leases in new rolling stock to encourage investment by extending the payback period on other long-term investments. As a related issue, because SRA believed that larger firms had greater capacity to fund investment it indicated that it would bias its bidder choice towards large bidders.

- **Franchise bundling** Because the quality and investment objectives required terminating franchise contracts early, the opportunity was to be taken to rethink a number of the bundles of services forming each TOC. One aspect of this was to strengthen service geographical cohesion. For example, this phase led to the Welsh and Borders franchise and the Wessex franchise. Not entirely consistent with this focus, however, was the establishment of a franchise based on a service corridor, the TransPennine Express.[27]

However, unless the variations could be negotiated into the existing franchises, the new policy would only have effect after a considerable time lag because the franchises still had a number of years to run. Rather than seek to renegotiate the franchise terms, the franchisor was instructed to refranchise all the contracts, starting with the contracts that were due to expire in the 2001-2004 period.

We should note that another major policy issue emerged for the government. Due to the over-optimistic nature of many of the TOCs' business plans, financial crises developed in a number of the TOCs as the declining subsidy profile began to hit the franchisees' finances. Refranchising would give those TOCs an opportunity to walk away from their ruinous contracts and give the franchisor a way to avoid either bailing out or terminating the franchise. Indeed, while there were stated investment and quality objectives for refranchising, Affuso and Newbery refer to the refranchising objective as "...a phase of contract 'replacement' (basically renegotiation with a more neutral name) with the aim of changing some contractual conditions". (Affuso and Newbery 2004, p. 393).

Despite considerable efforts during the period 1998-2002, only one franchise (Chiltern Railways) was ever renegotiated. Indeed, the Commons Select Committee responsible for transport reported that by the end of December 2001, none of the 18 short-term TOCs had been refranchised and "...the franchise replacement programme floundered". (*Ibid.,* para. 18).

There were other major problems that made refranchising difficult:

- Railtrack was put in administration one year after the October 2000 Hatfield accident that generated significant on-track turmoil, spotlighting the poor quality of Railtrack's infrastructure management. The consequent uncertainty would have made it difficult to establish new, long-term franchises embodying infrastructure enhancements.

- The government, through the Department of Transport, was reluctant to sanction the awarding of the new 20-year InterCity East Coast franchise. This, the then-CEO of the SRA concluded, was "a major source of difficulty" (House of Commons Select Committee on Transport, Local Government and the Regions 2002).

Phase III–Short, renewable contracts, high specification, low risk transfer (2002 onwards)

By July 2001 the government changed tack, seeking instead two-year extensions to franchises, with the Secretary of State declaring that early replacement of the franchises should be the "...exception rather than the rule". (*Ibid.*, para. 21) By this time it was evident that there was another rethink on franchising policy.

The new policy was set out in SRA's "Strategic Plan 2003". This again sought to specify higher and rising performance levels and service standards; contracted risk transfer was reduced, franchise lengths reverted to short terms (with extensions for good performance) and, again, service bundling has been reconsidered. The policy has increased the extent to which the franchises have been "micro-managed", notably in service specification and financial oversight.

Phase III policy was a response to franchises' deteriorating financial performance. While the Hatfield derailment in October 2000 led to widespread service disruption and loss of revenue for TOCs, it merely deepened and hastened the existing financial crisis faced by a large number of the TOCs.[28] This arose because of poor financial management (as discussed earlier). SRA's Strategic Plan for 2003 highlighted the ongoing shortfall in TOC performance and service quality and the rising costs of providing passenger services (and rail infrastructure). (SRA 2003, p. 10) The new policy has sought to correct what SRA's CEO believed was "...a fundamentally flawed franchise agreement" (*Hansard*, 26 Feb. 2003, para. 642). Thus the key changes were:

- **Revenue (and profit) sharing.** An important distinction between Phase III and earlier policies is that revenue risk now being shared by the franchisor; profit can also be shared.[29] The franchisor makes up a proportion of any "revenue shortfall" and takes a proportion of

any "excess revenue". In a sense, this policy formalises the way that that the franchisor had already been filling the breach when TOCs incurred losses.[30]

- **Business oversight.** To justify topping up TOCs' income when shortfalls arise, the franchisor closely monitors TOCs' costs. In so doing, however, the franchisor has reverted to a to a revenue- or profit-regulatory arrangement, or to the principal–agent relationship that underlay British Rail's supply contract with government–with which franchising was intended to dispense.

- **Service specification.** Crucially, Phase III policy saw the franchisor's role as being "...the strategic specifier of the railway" (SRA 2003, p. 12). This is a return to central (government) planning, in lieu of, for example, "...unplanned growth of services [that] has led to train path congestion in critical locations.[31] (*Ibid.,* p. 62) Thus, while SRA said it did not "...wish to stifle private sector flair by 'micro managing'" (SRA Nov. 2002), its strategy implies just that. The SRA, and the successor, DfT, benchmark TOCs' efficiency, specify the service levels, timetables, equipment and standards, set and monitor financial models and intervene in the business if costs drift significantly.[32]

- **Franchise length.** Phase III policy back-flips on franchise length. With new rolling stock being delivered (despite the apparent impediment of "short-term" franchises remaining), it is perhaps not surprising that "short" franchises were not seen as impediments to long-term commitments. Thus, franchise policy reverted to short (around seven-year) franchise terms, but with possible extended terms being flagged at the outset.

- **Franchise bundling.** Franchise bundling continues to be reviewed and restructured. ECMT (2005, p. 54) argues that a primary argument in favour of competitive tendering is that it "...permits the preservation of an integrated network of services". Nonetheless, in Britain, this "integration" has been somewhat strained and Phase III franchising once again seeks to recast the service bundling. The policy rethink again seeks to overcome inefficient use of track capacity and difficulty in resolving TOC differences at their operational interfaces. For instance, where services into a London terminus are managed by only one TOC, it is believed that the operator will find it easier to resolve conflicts within the organisation. Thus, reconfiguring the franchise bundling could enhance capacity utilisation. As a result, some franchises (notably, Central Trains) are being absorbed into neighbouring franchises and to a new West Midlands franchise while other franchises have being restructured or merged so that each London terminal has only one TOC. For instance, the "Greater Western" franchise is being formed by merging the former "Thames", "Great Western" and "Wessex" TOCs operating from London Paddington station.

Conclusions

The design parameters of the franchising system during its first decade have changed, largely *reacting* to the emerging issues in franchise service provision. Foster, an advisor to the Transport Secretary during BR's privatisation, commented in 2004 that:

> "To date, the Government's initiatives and ad hoc interventions have generally added further confusion to the contractual and incentive framework for the industry, increased costs, and have moved the industry towards re-nationalisation by shifting the risks in the industry away from industry operators and their customers and back to the taxpayer." (Foster and Castles 2004, p. 7).

When we remember these reactive responses and then consider (below) how rail franchising bears only a vague resemblance to franchising principles, it is clear that *rail* franchising is less of a "model" than a "fumble in the dark". We identified, for instance, that policy has evolved (though in a direction *away* from franchising principles) and that some design specifications have vacillated. These policy changes were generally responses to apparent design failures embedded in the original–and subsequent–franchise designs. The consequence of these changes has been repeated franchise competitions, or new interim contracts. This should not have occurred had the auctioning design *and application* been appropriate.

Consistently over this first decade the government has sought to strengthen service standards and performance. Following franchise cost escalations, network congestion and financial failures of a number of franchises, there is now greater service specification and greater financial oversight–micro-management–and so less opportunity for firms to pursue their entrepreneurial flair. There has been considerable vacillation over the length of franchises, to the extent that "short" terms were first adopted (with exceptions), then "long" terms were thought to be most appropriate, and have now reverted to "short" terms (with optional extension where performance meets certain criteria).

Finally, there has been considerable uncertainty over the appropriate bundling of franchise services or their appropriate size, with BR profit centres, marketing products, regional and London-terminals all forming the basis for TOC service bundles to coalesce; franchising competitions and yet more franchising competitions has been the consequence. If the franchisor has thought it necessary to repeatedly review TOC re-bundling–to optimise capacity and ease capacity allocation problems–it implies that it is more difficult than perceived to introduce franchising while still preserving an integrated network of services.

Competition Design

Franchising is based on an auctioning system for the exclusive right to operate given services. Most TOC businesses that were on offer involved subsidy payments to the franchisee rather than premiums to the government–see Table 3. At the outset, the following principles were adopted:

- Revenue and cost risk was borne by franchises.
- Moderation of third-party (non-franchised) competition.
- While track access charges are regulated by the Rail Regulator, increases in charges are essentially compensated by supplementary (or "flow-through") payments from the franchisor.
- Agreements on standards of performance by train operators, ROSCOs and the infrastructure manager are set in "performance regimes". These regimes formalise the physical and financial interdependence between segments of the railway industry as well as with the franchisor. The regimes seek to compensate–reduce the risk of heavy loss–arising from under-performance by other industry players.
- Train operators were to accept industrial disputation risks.
- Government accepts service level risks–the risk that contracted (PSR) service level will be required for the terms of the franchise. Government would face heavy penalties for varying the specification.

- Franchisees accept the risk of defaulting on their service contract–in the event of such a default, they would lose the contract bond, initially set at around 15% of the first-year turnover (and subsequently raised).

Most Phase I franchises excluded break-points; they were complete contracts, although some franchises had optional extensions to the franchise term if the franchisee undertook specified investments. It was originally intended that Phase I franchising would include "profit-sharing"–"excessive" profits or losses would be shared between the contracting parties.[33] While the relevant ministers at the time ruled this out, it has been introduced to Phase III franchising–along with revenue sharing.

Bidding process

In Section 2, I considered the options for franchise bidding, noting that first-price sealed bidding, in particular, can lead to over-bidding. Unless firms are bidding aggressively, Vickrey (second-price sealed bid) auctioning can temper the effects of the knowledge vacuum of sealed bidding. Affuso and Newbury report that, for the rail franchising,

> "…the original idea was to allocate rail service operation by a second-price sealed-bid Vickrey auction where each operator would submit a timetable. All the bids would then be combined and the timetable with the highest overall value would be chosen. The winners would then pay the second highest price. This option however was regarded as too complex and it was therefore rejected in favour of a simpler competitive system." (Affuso and Newbury 2004, p. 392).

We should note, therefore, that the auctioning was undertaken in an environment where firms were making bids "blind" to the values of other firms and, therefore, without the moderating effect of observing those firms' behaviour.

Qualitative assessment

As discussed in Section 2, I noted that auctioning can take the form of formal lowest/highest bid auctions, where qualitative elements of the bid are quantified; or the process can be essentially a "Beauty Contest", where qualitative elements dominate. However, the subjective aspects of judgement required in Beauty Contests can make the assessment difficult.

Leaving aside the issues of how well the Phase I assessments were undertaken (notably, the plausibility/sustainability of the business plans), the process was relatively straightforward: Phase I competition had largely ignored "quality" issues, focussing "...primarily on lowest costs and the maximum amount of risk which a bidder is prepared to take" (SRA Nov. 2002). In principle, given quality was largely overlooked, this should have made the task easier.

Phase II franchising embodied the stronger "strategic" focus on franchising service provision, sought to raise service delivery standards, to increase investments and to refranchise the numerous franchises that were encountering financial difficulties. The latter concern in itself would have been an assessment challenge in itself, in seeking to put right the assessment failures of Phase I. But Phase II also had the ambitious–but unspecified–objectives in investment and performance and the competitions resembled Beauty Contests. The transport Select Committee noted that the SRA failed:

> "… to state clearly what it wanted from bidders. The Authority produced its first guide to franchise replacement only after bidders had pre-qualified for the first replacement franchise

> round. That was followed by a revised version of the guide only a few months later. … According to Great North Eastern Railway, bidders were invited to embark on "a costly journey without knowing the conditions of carriage and unclear of the final destination". … The [transport] Department considered that the Strategic Rail Authority's approach of, by and large, leaving train operators to make proposals on matters such as rolling stock replacement had resulted in a range of incomparable bids that were difficult for the Authority to evaluate. (House of Commons Select Committee on Transport, Local Government and the Regions 2002, para. 19)."

In this context, it is easy to appreciate why the Phase II re-franchising got bogged down. The SRA sought to address "quality" but not giving guidance on the relative ranking of different attributes or understanding itself how to compare bids with high qualitative assessments.

Transparency and clarity in selection criteria is important for both franchisor and bidders. If it was the case that the weightings attached to the Beauty Contest characteristics of the franchise competition became clearer to the *franchisor* after Phase II franchising, it was still apparent one year later that the *bidders* were not necessarily any clearer on those values. In 2003, the rail franchisee, First Group, failed to be short-listed for the Greater Anglia rail franchise, a new franchise bundling that was subsuming its apparently well-run "Great Eastern" franchise. First Group considered appealing to the High Court over its exclusion. The SRA responded by indicating that its franchising process had changed. *The Guardian* paraphrased the SRA as saying that "The company had lost out in a fair competition, in which applications were graded on criteria ranging from reliability to rolling stock, investment and ambition" (The Guardian 2003) First Group subsequently acknowledged that it had not appreciated the new selection criteria. But, contrary to the principles of franchise competitions, the selection criteria weightings are not provided to bidders:

> "Nicola Shaw, the SRA's operations director, insists there is still more to it [bidder selection] than price. A panel of experts assesses each proposal for "deliverability", she says, considering whether the train operator can do what it promises. They give each bid a set of scores, usually out of 100, in a "complex matrix" taking in everything from rolling stock to train frequency, staffing and risk." (The Guardian 2004).

However, "...the scoring system is confidential [and] applicants are therefore bidding blind". (Modern Railways 2003) As I noted earlier (page 50), given that the success of the auctioning depends on bidders knowing the weights applied to the different attributes of an auction, we cannot have any confidence that the auctioning process was choosing the most efficient firm. It should also be noted that the success of the franchising depends on the winning bidders delivering what they promise. But, as noted later in this paper, franchisees do not always deliver specified service standards. Consequently, one qualitative selection criteria should include an assessment of the incumbent's track record.[34]

By contrast with the Beauty Contest characteristics of Phase II, the Phase III bidding process sets a high degree of specification, making bids easier to compare. For example, bidders are required to submit a core proposal, which would make the bids directly comparable; bidders may also provide separately-costed optional extras. Of course, this high specification restricts entrepreneurial activities because it leaves the business planning with the franchisor. However, the specification makes it easier to compare bids and to establish their robustness and plausibility. In this maturing environment, with most participants now having considerable franchising experience, we might expect more realistic bids.[35]

I note that the franchisor has promised that Phase III bid evaluations and contract negotiations will be "...conducted more expeditiously" (SRA Nov. 2002). This might mean lower bidder costs, thereby increasing interest in bidding. Further, unlike Phase I, the franchisor intends to disperse future competitions so as to reduce participants' fatigue (thereby increasing competition) and smoothing franchisor resource needs. (SRA 2003, p. 65).

Competitive Market

Scale of business

To facilitate the market for rail franchises, it was necessary to horizontally separate the BR business. By splitting the business, the TOCs offered for franchising would be of a scale that would not be beyond the financial or operational managerial capabilities of bidding groups.[36] It might also be argued that having small TOCs limits the impact of franchise failure.

I have noted already that the policy on service bundling has prevaricated, being based on BR profit centres, business markets (e.g., InterCity routes), single-terminals and, now, on matching below-rail (Network Rail) regional mapping. I have also noted that ECMT (2005, p. 54) considers a virtue of franchising is that it "...permits the preservation of an integrated network of services". Perhaps because Britain's network is complex, this principle is less easy to apply in practice.

There are two related issues here, which have become manifested in operational experiences of the franchised railway:

- The size of network that captures economies of scale.
- The effect of network economics.

Economies of scale

Preston (1996, p. 10) notes that operators such as BR exhibited decreasing returns to scale but increasing economies of density. He then concludes that the optimum break-up of BR would be around three to four network operators, so based on that research we could conclude that the carve-up into 25 franchises is excessive. SRA acknowledged the "...view within the industry that the creation of so many privatised entities has exhausted the supply of high quality managers that the industry needs to be successful". (SRA 2002, p. 7) Nonetheless, carrying out the SRA's rationalisation plan would still leave 19 TOCs. Apart from this insight here, the economies that can be captured from having just a handful of operators arise due to "...better use of terminal facilities, vehicle and crew as more services are operated." (*Ibid*).

Network economics

While Preston is uncertain as to the change in the level of transaction costs that arises with the split into 25 TOCs (*Ibid*, p. 5)–it seems logical to assume that different TOCs will have profit self-interest that will be stronger than the internal transaction activities they replace. Thus the "excessive" horizontal separation of the above-rail activities increases transaction costs at the point of physical interface between the TOCs.

It is also the case that each firm seeks to optimise its operation rather than optimise network usage and this has an impact on transaction costs and on competing network capacity demands (which could result in protracted negotiations to try to resolve). This behaviour has been exacerbated by track access charges that encourage network usage. From 1995-96 to 2004-05, loaded train kilometres on

the track rose by over 22%. (DfT 2005). Access charges are largely invariant with usage; the low marginal access charge has encouraged operators to operate "marginal" trains. Because firms then optimise their own track usage and operate marginal trains, the network has become very congested in key areas such as London terminals.

Recognising these problems, one role identified for SRA, which took it beyond a mere franchise awarder and monitor, was to ensure that railways were planned and operated as "...a coherent network, not merely a collection of different franchises". (House of Commons Select Committee on Transport, Local Government and the Regions 2002, para. 6). Two consequences of the capacity problems have been for the franchisor to adopt a more interventionist approach to capacity utilisation, by increasingly specifying each TOC's service levels on key routes. This network-based approach to allocation and use of track capacity is formalised in the franchisor's Capacity Utilisation Policy (CUP) and Route Utilisation Strategies. The CUP is driven by the franchisor and it aims to optimise the use of existing rail capacity. The SRA described it as:

> "… a return to joined-up planning, route by route, in place of the first-come, first-served philosophy that led to the network being over-stretched." (SRA 2003b, p. 62).

The other policy action on capacity utilisation has been to move to single TOCs for each London terminal, notably at Liverpool Street and Paddington. The SRA believed that this would enhance network utilisation by "...facilitating optimum use of capacity, provide a simplified, more understandable and impartial day-to-day interface with the passenger and improve recovery from service disruption" (SRA 2002). For similar reasons, there has been re-bundling of other franchise services, to establish more single-usage of infrastructure, thereby reducing transaction costs and making capacity allocation easier.

This re-bundling task is not straightforward, however, and network synergies and market patterns may be damaged in order to streamline the horizontal and vertical interfaces between TOCs and Network Rail. Thus, at formation, Railtrack/Network Rail moved its structure from the business-based vertically-integrated InterCity, Network SouthEast [London] and Regional Railways, to geographical regions. *Modern Railways* notes that "DfT policy now is to align franchises with NR routes". (Modern Railways 2005) Thus, this specific franchise re-bundling will reduce the complexities at the interfaces but will take away the market-based focus underlying the origins of franchise bundling, with its roots in the sector-business focus of the 1980s.

Bidder interest

As in the case of any other auctioning, the success of the bidding comes from attracting sufficient interest in TOC businesses. An important consideration for attracting firms to consider bidding was whether or not to allow BR to bid for the businesses. Thus, we should note that, as a major departure from typical competitive tendering policy on continental Europe, the franchising director did not permit BR to bid.[37] Exclusion meant leaving BR–an experienced train operator–out of the competition (although ex. BR management teams did bid and were part of a few of the winning consortia). Further, exclusion reduced the potential number of bidders for any TOC. However, if BR was out of the competition, it might have encouraged firms to bid if they believed that an incumbent government operator would have unfair advantages arising, for instance, because of BR's better insights into the TOC operation or potential to cross-subsidisation of the franchise from elsewhere in BR. Whether it was a game of bluff or not, NERA notes that:

> "Several bidders prepared affidavits stating that they would have been severely discouraged from bidding or would not have bid if the ban had not been in force." (NERA 2004, p. 22).

In April 1997 the Phase I franchising process was completed. There were 4 or 5 groups interested in bidding for the first two franchises but interest rose as the franchising process proceeded and one of the last franchise auctions attracted 8 bidding groups. The initial hesitancy in bidding probably reflected the general uncertainty about the ability to influence business performance. This is particularly the case because franchising transfers revenue risk as well as cost risk–in general, it is presumed that operating costs can be influenced more easily than passenger train revenue. (See NERA 1993, p. 12).

The number of bidding groups in itself does not necessarily reflect the level of competition and, no matter how many firms initially bid, the short-list tended to be reduced to a manageable number of three to five bidding groups. However, for Phase I bidding it seems that as successive franchises were awarded, the keenness to win–at any cost it seems–rose significantly. The first Franchising Director noted:

> "In each case the level of subsidy was ultimately set by competition and after people saw the first franchises sold, saw the reception of those sales on the stock market, saw that serious companies were interested saw the comment of the press, they became keener to bid and put in keener bids to me. (Salmon, cited in Shaw 2000, p. 123)".

Thus early bids were won with relatively generous subsidy profiles (subsequently borne out by profit levels) although given the subsequent exogenous growth was unanticipated, this does not mean the early assessments were deficient (as shown in Table 1). In Table 3 (columns 6 and 7), I show that the average improvement committed to in the first franchises to be awarded was considerably less than the improvements for later franchises. On the basis of the improvement sought and the financial outcome (Table 2) resulting, a plausible interpretation of these later franchises is that they were subject to "winner's curse". This "curse" arises because, in focusing purely on winning the competition, the winning firm behaves irrationally, bidding beyond what it is financially and operationally capable of delivering. Of course, we should also note that this is not irrational behaviour if the firm responds to moral hazard, confident in its belief that having won the competition it will be able to renegotiate on better terms.

In 1997, a superficial examination of the TOC commitments might have led to a conclusion that if there was any fault in the competition, it lay in insufficient competition for these first few franchises–because the required improvements for these TOCs were considerably less than the committed improvements of later contracts. However, as was noted above, it was these latter contracts that were based on implausible assumptions. Indeed, the National Audit Office (NAO) found that committed improvements of the initial contracts were close to the subsidy levels that the franchisor had estimated before the competition commenced. That is, if the *a priori* estimates are plausible, then the bidding process *was* competitive and the business plans *were* achievable. See Table 1. Thus, it seems that there was sufficient competition generated. ECMT (2005) notes that there has been only one auction when the contest has been halted due to insufficient competition. (ECMT 2005, p. 59) Undoubtedly, competition was relatively strong because the development of separate infrastructure and rolling stock markets reduced the barriers to entry.

Interest in subsequent refranchising competitions appears to have remained strong although the franchise holding consolidated.[38] While some bidders disappeared from the market due to mergers of market participants, new continental Europe-based firms entered the market. Market interest has also been retained despite financial difficulties arising in a large number of the TOCs–though it may be more appropriate to argue that interest in rail franchises has been sustained or even buoyed because government rescued the failing franchises.

Table 1. **Comparison of Annual Subsidy Estimates to a Priori Estimates, First British Franchises Awarded (£m)**

TOC	A priori estimate	Agreed average annual payment for 7-year franchise
InterCity Great Western	40.8	43.3
LTS Rail	27.0	23.2
South West Trains	46.2	49.0

Source: Based on table in *Local Transport Today*, 7 November 1996, p. 11, from NAO 1996.

The holding of a number of concurrent competitions and closely-following competitions could well have led firms to restrict their involvement, given their limited management resources. As noted, Phase III franchising will see the adoption of a "rolling franchise replacement programme of two or three franchises a year" to ensure that bidder interest is not dampened due to bidder fatigue.

Contract length

A central tenet of optimising contract length is that the incumbent can build more effective barriers to entry the longer the firm holds the franchise; this undermines the efficacy of the refranchising competition. As a consequence, a short franchise is preferred and has been a feature of Phase I and III franchising.

However, there are downsides to short franchises. First, if the franchise competition is costly (for franchisor and bidders) then a "short" franchise term requires those costs to be recovered over a shorter time period. Rail franchising bidding costs are not minor: one firm estimated its bidder costs were between £2 million and £4 million (€2.9 million - €5.8 million), with another citing cost of £3 million (€4.4 million). (House of Commons Select Committee on Transport, Local Government and the Regions 2002, footnote 53; Modern Railways 2002, p. 4) For the smaller franchises, such a cost might represent as much as 10% of a TOC's annual revenue (see column 4 of Table 3).

A less clear-cut downside of short-term franchising has been that it dampens incentives to invest. This was the thinking behind the setting of franchise terms for some franchises (such as the InterCity West Coast TOC), where longer contract terms were awarded in return for rolling stock investments. The short terms of Phase I franchises was put forward as a reason for TOCs and ROSCOs reluctance to commit to new rolling stock. There was a fear that stock (with a commercial life of, perhaps, 30 years) would not be required after the initial (7 year) franchise. However, as Welsby and Nichols observed in 1998:

> "... the potential asset owners [ROSCOs] have begun to understand that the risk that the network might be seriously reduced is very small and therefore a continuing market [for the stock] is highly probable." (Welsby and Nichols 1999, p. 74).

Consistent with these authors' perspective, it is notable that subsequently, when the SRA ordered some new south-of-Thames trains from manufacturers, the Authority used its powers (Section 54 of the Transport Act) to guarantee to rolling stock financiers that new franchisees would use the stock. In this context, NERA (2004, pp. 21-22) outlines the transfer of management of TOCs, noting that processes are established to ensure that liabilities are not transferred to the new management but that the outgoing firm can realise the remaining value in any of its investments. To the extent that

"...generally handovers have worked well" (NERA 2004, p. 21), it might be argued that long-term investment commitments would not be impeded by short-term contracts.

Further, Affuso & Newbury made an assessment of the franchise commitments and concluded that the short-term franchises are *more likely* to make investment commitments than long-term franchises because of the ever-looming bidding-competition threat. They analysed rail franchise investment patterns and identified "...a pattern of investment which increases in response to competitive forces [such as occurs with shorter franchise terms]" (2002, p. 91). Moreover, the authors argue that because the investment inevitably comes on-stream towards the end of such a franchise term, the investment inevitably raises rivals' entry costs.

Nonetheless, the apparent investment problems in the late 1990s (because TOCs and ROSCOs appeared reluctant to commit to new rolling stock) became an important rationale for the long franchise lengths embodied in Phase II franchising policy. The longer terms would have enabled TOCs to sign contracts with ROSCOs that gave extra time for TOCs to commit to new stock and to be around for long enough (when the stock is eventually delivered) to earn a return.

However, Phase III policy reverts to the relatively short terms of 5 to 8 years, but *with* possible extensions. It is essentially a hybrid of Williamson's incomplete long-term contract and the recurrent, short-term contract. Thus, the de facto break points provide the franchisor with planning flexibility and a bargaining tool to encourage TOCs to maintain good service standards; and provide TOCs with an opt-out if financial returns are too low. However, while the short terms maintain bidder interest by capping incumbent advantage, it may encourage firms to overbid in the initial competition: the optional extensions can make the contract appear like a long-term contract. That is, if the firm does not win at the outset, it may lose the opportunity to bid in the foreseeable future.

But British experience shows problems with contract inflexibility even when short-term franchises are used. The Phase I franchises caused problems for TOCs as well as for the service specifier (the government) when the assumed economic environment developed differently from assumptions made at the bidding stage. As noted by Gómez-Ibáñez in Argentina commuter rail franchising, unanticipated events can arise early in a franchise, whether it is a short-term or long-term franchise. Thus, in Britain, the very surge in economy-driven patronage in the late 1990s–contrary to rail reformers' expectations of continued subdued traffic that had been evident from the late 1980s–provided an urgent need for a strategy (pricing, investment, service levels) that was at odds with the franchise "levers" that could be used on the TOCs.

Even ignoring this hindsight, given the uncertainty surrounding the franchising market–the lack of knowledge about financial and operational performance, the incentive structures and the monitoring systems to deliver the service–we could argue that the "short" seven year franchises were still too long.[39]

Bid Assessment

The initial rail franchises were usually awarded to the bidder seeking the lowest subsidy (in NPV terms): "...the broad principle was that the bidder requiring the least subsidy was regarded as offering the best value for money and therefore won the franchise". (SRA 2002).

But there was an equally important concern: just *how* deliverable were the promises made in the bids? Welsby[40] notes that:

> "As a result of pressure on the privatisation timetable the Franchising Director undertook no systematic benchmarking of the levels of improvement that a franchisee could reasonably be expected to deliver... This was the case whether one looked at the issue from the point of view of what was offered by the franchisee or what was required from the Franchise Director to enable the franchisee to deliver, e.g., is the necessary capacity available." (Welsby 1997, p. 5) "…To the best of my knowledge no-one has added up all the aspirations of the franchisees to determine if they are deliverable on the supply-side." (*Ibid*, p. 7).

The pace of the initial franchising process probably prevented lessons to be learned. Had the process been spread over several years, the experiences arising from the initial franchises could have informed both franchisor and potential bidders about the pitfalls of the auctioning design and reduced the uncertainty around the potential for improving revenue and efficiencies, thereby enhancing the auctioning competition by broadening the bidder market.

One implication of this failure to assess the soundness of winning bids was that the franchisor was left exposed to the risk of franchise failure. Such failure can result in service disruption, the need to install a transition operator to maintain the service, and the need to incur the time and financial expense of refranchising. Inevitably, franchisor and franchisee will have different levels of acceptance of risk. Firms will be more likely to submit high-risk bids if they believe that the franchisor will seek to avoid the consequences of failure through contract renegotiation. As we noted in the previous section, in its television franchising, ITC applied a "low revenue scenario" to their risk assessment: the bid was deemed to be sound if the business survived. Welsby's insights imply that in Phase I the assessments fell far short of this approach.

Amazingly, the franchisor has subsequently passed up the opportunity to learn from what is achievable in bids–to judge private-sector operations–when SRA took control of the South Eastern TOC (after control was taken from Connex). Public operation of this TOC might have provided the franchisor with robust benchmarks. Such insights should be more reliable in bid assessment than artificially-assembled "public sector comparators".

As Welsby reveals, the initial bids were not accurately assessed for what could realistically be achieved financially and operationally; the subsequent decision not to use South Eastern insights suggests the franchisor still gives insufficient attention paid to understanding TOCs. Critically, this superficiality has led to a number of problems:

- Many TOCs were awarded to bidders who had made financially unsustainable commitments.
- Operationally, service levels were set at levels that would undermine the integrity of the national timetable.
- Specification of service standards (or "quality") was seen to be too lenient to operators.

Each of these problems is now considered.

Financial sustainability

A significant number of the TOCs were franchised to companies that had implausible business plans *from the outset*. Richard Bowker, former Chairman of SRA, stated"

> "It is just possible that the original privatisation model got it wrong. There were some amazingly heroic assumptions made about the costs that could be taken out and the income that could be grown." (The Daily Telegraph 2003).

As is indicated in Table 3 (column 6), there were very diverse commitments to improve the TOC's finances. Given a historical post-war perspective of static or declining traffic and the tight finances of the Thatcher years (which arguably provided strong impetus for productivity gains), it might be assumed that there were only modest opportunities remaining for revenue and cost improvements. Indeed, we could argue that while the subsequent failure of one-half of the original franchises looks bad, the outcome would have been considerably worse had the unanticipated economic growth not generated a surge in traffic.

The average improvement required for the franchise's net finances to remain unchanged between the initial year and 2002/03 can be compared to the order in which the TOC was franchised (Table 3, columns 6 and 7). It is clear that the financial commitments of the early franchises were far more cautious than later franchises. The conservative aim of the early bidding–reflecting genuine uncertainty about the businesses–is clear when it is observed that while Stagecoach committed to a very modest improvement of 2% per annum for South West Trains (compared to later winning bids) the highest bidder sought to more than double Stagecoach's subsidy (*Local Transport Today*, 1996, p. 11). This, again, shows the type of outcome resulting from sealed bids. This aspect of the original rail franchising approach has proven to have a pervasive effect over the experiences with the process.

Apart from exogenous (chiefly economic growth) factors that were beyond TOCs' control, financial performance could, to varying degrees, be improved with revenue growth through marketing and enhanced service quality. As column (8) of Table 3 indicates, there has been varied success in increasing traffic (measured in terms of passenger kilometres). On average, InterCity traffic rose 2.3% per annum through to 2002/03; the equivalent figures in the London & South East, and Regional services, were 4.7% and 3.2%, respectively.

In principle, revenue *might* be increased by raising fares. However, to do this, TOCs must be free to vary their prices; and the demand must be price inelastic. TOCs do not necessarily face these parameters. First, SRA price-regulates some types of product (as is typical of monopoly-type franchising), covering around 40-45% of fares. Season tickets and "Saver" return tickets, in particular, were regulated. SRA applied an RPI-X fare cap between 1995 and 2003. Over that period, London & South East TOCs' regulated real fares were virtually unchanged, as too were regional 2nd class fares. However, of unregulated real prices, "long-distance" 1st class fares rose by 36% and 2nd class fares by 15.2%. "Regional" 1st class fares rose by 12%.

Where fares increases are permitted, revenue will rise if demand is price-inelastic. However, one implausibility with TOCs' business plans was that the businesses with the most bullish financial projections ("Regional" franchises) were also the businesses with the least potential for pricing up. Most InterCity and London commuter TOCs were franchised before the Regional TOCs and, at the earlier stage in the franchising, bids were characterised by more cautious projections. Two features of the InterCity and London commuter TOCs are important. First, London commuter and InterCity areas are strongly influenced by economic growth (and this has worked in the franchisees' favour as economic growth has been strong). Secondly, London commuting is largely protected from car competition by ever-increasing road congestion, expensive inner-city parking charges and the central London Congestion Charge; InterCity is predominantly high yield traffic, competing with car traffic over medium distances and with airlines over long distances, but (according to research undertaken by Owen & Philips in the 1980s) is price-inelastic on a number of flows. For TOCs in these geographical/market categories, then, there is some justification for reasonable bullishness in revenue growth from unregulated tickets.[41]

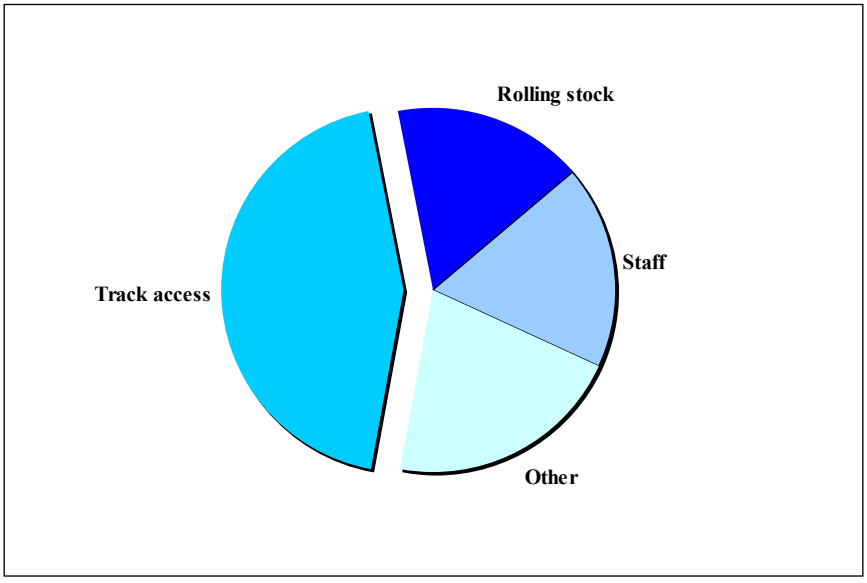
Regional TOCs do not enjoy the same GDP-based stimuli to demand or price insensitivity. It is counter-intuitive, therefore, to find that the most bullish financial commitments were made by firms

bidding for Regional TOCs. It is surprising that the franchisor accepted the bids. See Table 2. Regional operations are typified by cross-country, inter-regional flows, provincial city commuting and by rural branch line flows. The increasing dispersion of the labour market in cities, relatively subdued provincial economies, static rural movements and low rail service frequencies mean that the sector typically offers a significantly inferior product to the car and faces flat demand prospects. Volumes are low and yields–reflecting few business or full-fare ticket sales and increasing competition from the car–are also low. Given the relatively poor demand and pricing-up prospects, projections should be bearish. The relatively low levels of traffic mean that the cost recovery is low, as indicated in columns (4) and (5) of Table 3.

These prospects were not reflected in bidders' financial plans, which involved relatively high-risk business plans. For instance, the successful bidder for the Regional Railways North East TOC assumed it could make good a reduction of £77 million in its annual subsidy between 1996/97 and 2003/04 even though its total initial passenger revenue was only £76 million. In other words, short of a miraculous growth in revenue, the bidder placed a great reliance on a strategy based on achieving significant reductions in its initial £294 million costs per annum.

However, TOCs have relatively little room to adjust their costs–most of their costs are effectively fixed. In Figure 3, track access charges form around one-half of the TOCs' operating costs and (until 2001) around 90% of these charges were invariant with track usage.[42] Rolling stock leasing charges represent around one-quarter of their costs; they can be assumed to be fixed, although these costs are likely to rise significantly as new stock is introduced.[43] In effect, then, franchisees' variable costs were only around one-quarter of their total costs. Even here, there was only a limited degree to which staff numbers, salary levels and train maintenance costs could be varied–especially if many of the potential productivity gains from modern technology and work practices had already been exploited during BR operation. (For example, Monopolies & Mergers Commission (1987) provides comprehensive examples of the productivity enhancements achieved and in the pipeline in the late 1980s.) Even savings in rolling stock maintenance from new stock might be, at best, matched by increased leasing charges in the new stock.

Figure 3. **Average Franchise Operating Cost Profile (1996-97)**



Source: British franchise operating parameters. Data from Strategic Rail Authority, 2003, pp. 49-51.

Irrespective of the flaws in the assessment process, it might have been expected that a plausible benchmark of financial performance would have been that some modest reduction in costs would have been achieved. Thus, no assessment could have foreseen that the actual outcome was an *increase* in real total costs of 1.6% per annum between 1997/98 and 2001/02–see Table 4. There are two reasons for this:

- There has been an increase in real salaries (6.4%), itself probably a symptom of relatively strong economic growth.[44]

- There has been a significant increase in output (train-kilometres–see column 9 of Table 3). However, this has not been achieved simply by using existing resources more intensively. More resources have been brought in and this has increased costs. Thus, between 1997-98 and 2001-02, staff numbers actually rose by 8.3%, whereas the bid plans assumed a reduction in staff of 10.2%.[45] Consequently, by 2001/02, staffing was 28.9% higher than projected. To put these figures in context, this higher staffing level was far greater than the additional passenger kilometres (15.0%) or train kilometres (17.7%).[46]

While the cost drift might have been unexpected, it is nonetheless clear that the assessment process of Phase I business plans was deeply flawed and franchise failures were inevitable. Welsby notes that "...some [successful bidding] companies [were] offering over twenty-five times the subsidy improvement" made by another successful bidder despite the fact that Welsby believes that, if anything the conservative winning bidder had more potential to achieve improvement than the more optimistic bidders.

Nonetheless, the variance in the bids in an environment where there is limited scope to make dramatic improvements should make us suspicious as to whether the auctioning system achieves its aims of delivering a service of a specified standard while capturing excess profits from the winning bid. The answer hinges on whether bids should be judged on price alone, or whether "deliverability" should be part of the equation.

The National Audit Office indicates that the franchisor has learned from this lesson and incorporated the experience into how it assesses the bids:

> "The SRA learned from the experience of the earliest franchises, adopting a new policy of evaluating bids to take account of what was realistically deliverable..." (NAO 2005, p. 3).

However, as we illustrate below (p. 87) with the 2005 InterCity East Coast franchise, this lesson does not appear to have been learned. Further, in December 2005, Stagecoach conceded defeat in its bidding for two franchises, with its CEO describing the franchise replacement market as 'toppy', with Rail Business Intelligence (RBI) paraphrasing him as saying that "...bidders [are] prepared to submit aggressive bids to win business". (RBI 2005, No. 260, p. 8) It seems that a franchise can still be awarded on the basis of lowest cost/highest premium, but not "deliverability". Consistent with this, RBI (2005, No. 260, p. 8) reports that senior officials have stated that "...lowest cost is now the key determinant of success". NAO states that the franchisor is reconsidering its franchising policy, an aspect of which seems to give no protection at all for public assurance of deliverability, namely, the view of:

> "... the appropriateness of relying on civil servants and consultants to assess what is realistically deliverable, in terms of cost, revenue growth and service provision, rather than on bidders' own judgements based on their experience of running train and bus services." (NAO 2005, p. 54).

As noted above with ITC television licences (page 55), it is up to the *franchisor* to establish the deliverability and robustness of bids. It would seem that, on this issue alone, that if the franchisor does not have the wherewithal to judge the rigour of its bids, then rail franchising is fatally flawed.

Operational integrity

It is clear that Phase I franchising did not provide a process that ensured that the fragmented parts of the railways would come together as a network that operated in a coherent and complementary way. SRA's Franchising Policy Statement (November 2002) stated that:

> "... after an early improvement post-franchising, service performance and overall reliability has worsened. In part this is a reflection of the fact that the network is now operating at capacity on many strategic locations and routes."

Clearly, one consequence of having multiple TOCs at individual London termini meant that, *in the absence of access charges that were responsive to congestion*[47], track capacity would be unlikely to be optimally used. Nonetheless, there seemed to be a more immediate concern, with the bid assessment seemingly unaware of the future conflict. Again, Welsby commented in 1997 that:

> "To the best of my knowledge no-one has added up all the aspirations of the franchisees to determine if they are deliverable on the supply-side." (Welsby, p. 7).

Such aspirations, and subsequent unilateral service expansions, impacted on the way that the network performed so, to repeat the earlier observation, while ECMT (2005, p. 54) argues that the "...principle [sic] argument for competitive tendering is that it permits the preservation of an integrated network of services" while still introducing competitive services, nonetheless the franchising design needs to incorporate mechanisms to ensure that that constituent parts of the system can still coalesce into an efficient network.

Thus, one of the more notable examples to emerge was the conflict between TOCs on the West Coast Main Line, where Virgin's aspirations for increased train frequency clashed with other TOCs' service frequencies. Even where additional services could be squeezed in, this had its impact on service reliability. The SRA's CEO commented that "...the problem is that over the past five or six years a very significant number of additional services have been put on this network and it does not function correctly" (*Hansard*, 26 Feb 2003, para. 564).

Growth of patronage underpins the franchise business plans: some of that traffic must be accommodated on existing trains. This is especially relevant for London, where a significant number of commuter trains and lines might be assumed to have been close to (or at) capacity *prior to* the commencement of the franchise and the "winning" bullish traffic projections.

Service standards

Passenger satisfaction surveys conducted throughout the post-franchising period have pointed to increasing passengers' dissatisfaction with the quality of service. When products or services cannot be standardised, it is inevitable that bids will be assessed as if each bid's service is homogenous. Consequently, subsidy bids may vary because of differing standards.

Because Phase I franchise standards were neither assessed nor set substantively into the contract, it proved difficult to manage the contracts. Standards on punctuality, reliability, train length–backed to an extent by a "performance regime" of bonuses and penalties for exceeding or failing given

benchmarks–proved insufficient.[48] As Welsby and Nichols observed, "Significant problems arose in trying to ensure that franchisees faced incentives that would lead them to manage their operations in an appropriate manner" (p. 65).

Phase II re-franchising aimed for "more demanding performance standards". Bidders were not required to submit (what is now called) a "core proposal" and bids incorporated very diverse qualitative features. Consequently, the franchisor faced "...a range of incomparable bids that were difficult for the Authority to evaluate" (Select Committee on Transport, Local Government and the Regions, para. 19) and it became impossible to realistically rank the proposals. Phase II (re)franchising faltered. The franchisor has since acknowledged that it has not been able to achieve "...a universal improvement in quality of service". (SRA 2002).

Competition Transaction Costs

It is clear from the numerous refranchising auctions that have been undertaken since the late 1990s that the time (including crucial management time) and financial transaction costs involved in franchising are considerable. This has important consequences for the efficacy of franchising. Where competition costs are significant, it will temper the franchisor's resolve to levy the ultimate sanction of terminating a non-performing franchise contract and will have been a consideration in the franchisor's rescue of franchises from the late 1990s. The rescues gave it breathing space to consider other strategies, postponed or saved on the considerable time, management and legal resources of refranchising.

Arguably, the initial competition was undertaken in too short a time, with the first franchise commencing in February 1996 and the last in April 1997. Nonetheless, the National Audit Office found that the directly attributable cost of external advisers to support the franchisor in awarding the initial three franchises was £6.6 million, a not insignificant amount considering that in-house franchisor staff costs should be added to that amount (NAO 1996a).

However, as the first efforts to refranchise began in 1998, a year after the last Phase I franchise had been awarded, the time and, therefore, the cost involved in the franchising competition began to rise. As noted earlier (p.74), one spot estimate of a bidder's financial refranchising costs was in the order of £3 million. Another source reports costs of £1 million. (Jupe and Crompton 2006) The bidder must set such costs against the likelihood of winning–if the odds are long, such costs will diminish the bidder market.

At the start of Phase III policy, the SRA acknowledged that "...the costs of transactions, with teams of lawyers and accountants on all sides, have become far too high". (SRA 2003b, p. 60) The Phase III policy shift to greater franchise specification should reduce these costs by reducing Beauty Contest aspects of the bids. Greater consistency of bids should enable easier comparisons of bidders' proposals, reducing the interaction needed between bidders and franchisor. Nonetheless, the trade-off in this increased specification is less business latitude and, so, less net benefits of franchising.

Specifying, Monitoring and Enforcing Outcomes

A characteristic of the passenger rail service, which has a pervasive effect on the freedom with which business latitude is given, is that many of the TOCs are loss-making. Welsby and Nichols argue that this results, in the first instance, in greater specification; we can see that monitoring and enforcement then follow naturally from that:

> "Transferring a loss-making activity to the private sector meant that the specification of the service to be provided had to be much more tightly defined in order to prevent the new operator improving his financial performance simply by reducing output or reducing quality." (Welsby and Nichols 1999, p. 61).

Service specification

At the outset, franchisees were given considerable latitude in what and how they delivered train services, albeit that the core (PSR) service level was defined. Thus we can see a model that simply "...sought to create a set of business opportunities, subject to regulation, with obligations not to let services fall below specified base levels" (SRA 2002, p. 11). Operators might have committed in their bid proposals to provide additional services–at least for a trial period. Certain trains were required to be at least a specified capacity; TOCs were penalised for running shorter-than-specified trains. TOCs were also expected to add capacity to overcrowded trains (where and when feasible). The irony of the high degree of specification was not, however, lost on BR's Chairman who observed of the Phase I franchising that:

> "… it was plain that the specification of the outputs from the passenger railway would be much tighter in the private sector than in public ownership. This outcome was a remarkable contradiction in the light of the instruction that the Franchising Director has also been given to develop criteria for the allocation of subsidy, implying that the service patterns to be supported would be derived from objective criteria rather than a roll forward of the existing timetable." (Welsby and Nichols 1999, p. 66).

The consequence of TOC performance failing to meet specifications or to respond adequately to incentives has been that the franchisor has increased its service specifications. This was sought in the largely-aborted Phase II franchising. Thus, as part of Phase III franchising policy, the franchisor indicated that it

> "… will be more prescriptive than in the original model about the services that TOCs must operate. This covers both the timetable and train formations. New specifications will allow services to be enhanced where there is a sound business case for doing so, and reduced where they are crowding the network or are ineffective in cost–benefit terms." (SRA 2003, p. 64).

Thus, if we return to Welsby and Nichols' observation that the first franchising contracts involved greater specification than the previous BR operation, then the irony is even greater that such specification has increased yet further.

Performance

Despite this relatively high specification, it was apparent from an early stage that the mechanisms that encouraged compliance with the standards were proving to be either ineffective or deficient in delivering the contracted standard:

> "Significant problems arose in trying to ensure that franchisees faced incentives that would lead them to manage their operations in an appropriate manner." (Welsby and Nichols 1999, p. 65).

Where passengers are largely captive to the train service, franchisees do not face the consequences of poor service delivery, that is, where demand is price-inelastic. In any case, where

revenue is low relative to operating costs, the TOC may have more incentive to attempt to cut costs than to chase revenue. This is particularly the issue when the cost savings can be made on a feature of the service where performance is largely subjective, or where there are no performance measures or where the penalties for non-delivery on performance are less than the cost savings that can be made.

Nonetheless, the SRA concluded in 2003 that due, in part, to "poor management" and to "...deficiencies in the original franchise agreements", problems with poor standards persisted (SRA 2003, p. 26). Phase II refranchising had sought to issue new contracts with higher standards and specifications. However, Phase II also sought to lengthen franchise terms which, arguably, would have reduced the incentives to comply because incumbents would not face near-term loss of franchise in a forthcoming refranchise competition.

SRA argued that the original franchise agreements "...had set performance levels too low and lacked service quality standards" (House of Commons Transport Committee 2004, p. 39). As a consequence, Phase III policy sets graded levels of performance for punctuality, cancellations and train capacity.

This latest policy also links performance to franchise term, by offering an automatic three-year extension if the TOC *consistently* maintains the target level of performance; this may have a similar inducement to compliance as including past performance in the assessment of the incumbent's bid in any re-franchising (as discussed earlier). Ironically, however, Phase III revenue risk sharing between franchisee and government may blunt TOCs' performance incentives: at the point where the government takes on the bulk of the downside revenue risk, the TOC may find it more profitable to deliver a sub-standard (lower-cost) service than to further encourage revenue growth.

Business monitoring

There has been a trend towards closer financial oversight of franchises, reflecting, first, the onset of "management contracts" and "cost-plus" contracts that introduced subsidy to rescue the failing franchises; and, secondly, reflecting the introduction of revenue and risk sharing arrangements between franchisor and franchisee in the refranchised contracts. Thus, although the franchisor states the principle that TOCs are best able to control and manage cost risk, nonetheless their business performance is now closely monitored, with TOCs being required to supply cost data to the franchisor. Ultimately, the franchisor now has intervention rights if it observes a trend in costs moving in a way that would threaten the viability of the business.

This principle has already been applied as an enforcement mechanism. The South Eastern franchise that was managed by Connex is an example of plausible enforcement resulting from the business monitoring. In 2002, the company sought and received approval for additional subsidy of £58 million in return for an early ending of the franchise (2006 instead of 2011) and proof that the company was effectively financially managing the franchise. However, in June 2003 the SRA announced it would take the franchise back by the end of that year. SRA's reason for this was that it saw the franchise as having "botched management", citing a loss of confidence in the company's ability to manage its day-to-day cashflow, budgets and forecasts. An audit of the company had also identified non-compliance with the conditions that came with the additional subsidy funding. (Crompton and Jupe 2004, p. 12).

It is clear, then, that supplementing TOCs' subsidies and sharing risk means that the franchisor is now effectively buying into the business–and should therefore have reasonable claims for closer scrutiny of the business. However, this scrutiny nevertheless implies that the subsidy top-ups and risk sharing take the business performance incentives out of alignment with traditional "efficient", profit-

maximising strategies–the public sector partner does not trust the private partner. This oversight is therefore illustrates a further important departure of franchising principles from the original concept of private-sector flair and superior management.

Risk and uncertainty

The key parameter of franchise design is risk allocation. Franchising is intended to generate efficiency and revenue gains, and this relies on overcoming principal–agent problems. To achieve this, it is essential that the risk that has been ear-marked for transfer to the successful bidder is actually successfully transferred to the franchisee. In this context, it may not be appropriate to transfer *all* risk categories. In the Phase I franchises, revenue and cost risk was transferred to franchises, though not for all events:

- Not surprisingly, government regulatory and policy risk remained with the government.
- The franchisor retained the cost risk associated with track access charges–any increase in the charges not incorporated in a franchise agreement would be fully compensated by the franchisor.
- Franchisees retained the risk of revenue loss arising from industrial disputes.
- Franchisees retained the risk arising from *force majeure* events, though could claim dispensation from resulting performance breaches resulting from such events.

The introduction of "Performance Regimes" into the industry was one important area where, in principle, it was possible to "neutralise" the risk to the balance sheet arising from the actions of other industry players (other TOCs, Railtrack/NR or its contractors). For instance, TOCs relied upon Railtrack to provide the infrastructure for safe and reliable operation and so were compensated for the loss of revenue that arose out of the widespread disruption following the Hatfield accident. As with any other insurance compensation, there is inevitably debate over whether the compensation is adequate to completely neutralise the underlying risk to the balance sheet. There was evidence from an early stage that the Regimes were not correctly calibrated in order to prevent perverse behavioural incentives arising, such as one party preferring to accept or pay compensation rather than take even modest efforts to avoid a disruption. (Kain 1998, p. 260).

Should the franchisor seek to maximise risk transfer? Where bidders perceive that there are significant risks, it will be expected that the franchisees will build in heavy premiums for accepting those risks. In trying to transfer risk in some instances–notably, in the case an unproven new transport market–the degree of ignorance about the likely out-turn is so great that we are talking about *uncertainty* rather than risk. That is, the probabilities are unknown and we are essentially talking about an uninsurable level of risk. Here, a prudent private bidder (with limited means to avoid such risk) for such a business would set what could well be a prohibitively high risk premium. This might lead the government to base its planning on retaining the risk *or* by abandoning the activity entirely. In the case of the Channel Tunnel Rail Link construction public–private partnership, the revenue risk was transferred to the private partner but when the private partner could not fulfil its Agreement with the government as a result of the adverse (low) revenue outcome, the risk largely reverted to government, which had strong public interest considerations in ensuring the project was completed. (See Kain 2002).

However, where a track record of traffic and revenue performance can be identified–and here we can include passenger train franchising–it should be possible to transfer revenue risk to the successful

bidder. This is particularly the case where the traffic and revenue performs in a consistent and predictable manner with road and airline competition being primary factors influencing travel trends and economic growth being the primary driver of short-term fluctuations in travel.

Nonetheless, understandably, when the TOCs were franchised in 1996-97, there was *initially* caution over the likely success of franchising. Because risk transfer was embodied in the level of subsidies that would-be franchisees required, government realised that it could influence the perceived risk and, therefore, the risk premium sought. Phase I franchising policy incorporated three primary ways to reduce the level of risk:

- The policy of "moderation of competition"–restricting and postponing the onset of on-track competition by open-access TOCs–reduced the threat to TOCs' revenue from non-franchised, "open access" competing services.

- Relatively modest franchise length (7 years) reduced risk arising from the increasing uncertainty of the passenger train market as the time scale moves further into the future.

- TOCs bear little risk of stranded assets at the end of a franchise because they own so little capital (accessing Railtrack/Network Rail track and leasing rolling stock).[49]

Despite the attempt to ensure that risk was transferred, the evidence is that ultimately the risk has remained with the public sector–so we should stress that the government has paid a premium for franchises to take on risk that they ultimately did not shoulder. Although the risk categories remain essentially with the party stipulated in the original franchising, it is apparent that policy evolution has led to greater "sharing" of those risks to further moderate the risk-taking borne by the franchisee.

Experiences with risk transfer

As discussed earlier, around one-half of the original franchises subsequently received additional subsidy, reduced premiums or ended up with cost-based management contracts, in lieu of taking the revenue risk. The franchise rescues have included additional subsidy, with either "stabilisation" funding or the "cost-plus" provision of services. This, Glaister argues, is "...a method of procurement that has long been recognised as unsatisfactory in other areas of public service provision" (Glaister 2005, p. Ev 326). Indeed, Glaister argues that the onset of the cost-plus contracts has reduced TOCs' incentives to undertake their business at the lowest cost and may therefore be a reason why costs in the industry have risen–see Table 4. Glaister then concludes that either TOC operations need to revert to public production or the government needs to:

> "... try to recover the incentive structure which existed before, which is harder now that the private sector has learned that the public sector is rather reluctant to enforce contracts." (House of Commons Transport Committee 2005, p. Ev 49-50).

The most fundamental change from the risk-allocation conceived in Phase I therefore has been that franchises have *not* been allowed to fail–they have not been subject to the discipline of market forces. This issue is core to the success of franchising:

> "A fundamental principle was, and remains, that both infrastructure providers and train operators would be given incentives to be efficient–and thus reduce the call on the taxpayer–by being made to suffer the financial consequences of their inefficiencies. ... The question must now be posed as to whether this philosophy can be effective, given the manifest

> inability or unwillingness of government to enforce risk transfer..." (Glaister 2005, pp. Ev 326-27).

The ramifications of the government's failure to impose the risk transfer include that:

- Because the overly-bullish firm is not penalised for gambling in its business model, firms will have incentives to continue to adopt moral hazard strategies–to submit optimistic bids at subsequent franchise auctions, merely in order to win the franchise, and to be bailed out subsequently.[50]

- The firm will not face the necessary incentives to pursue efficiency and revenue gains.

- The public's financial gains expected from franchising have been reduced.

In understanding whether the franchising model is a practical way of ensuring the provision of government-specified rail passenger services, it is essential that we should understand the impediments that might prevent the franchisor from enforcing the terms of the contract. We could surmise a few reasons:

- **To retain the bidder market.** As most of the existing players in the franchising market were guilty of overbidding, a harsh penalty on their TOCs might also have undermined ("soured") the market for franchising. Nonetheless, rescuing these businesses increases the likelihood of tactical bidding and penalises the firms that did put forward realistic bids.

- **To ensure that franchising is maintained as a credible policy tool.** Widespread franchise failures would have undermined the credibility of government's use of franchising to provide rail services–even if rescuing a franchise in itself undermines franchising principles.

- **To avoid competition transaction costs.** The refranchising transaction costs may be so high as to discourage the franchisor from refranchising.

- **To avoid disruptions to TOC services.** The franchisor may have preferred to minimise the disruption that arises with franchise failure and subsequent refranchising. Through the political process and subsidy outlays, government has an *active* public interest (or "stewardship" duty) in ensuring that rail continues to provide a level and standard of passenger service.[51]

The rescuing of the franchises appears to be occurring because the franchisor seeks to protect "public interest". Language used by the franchisor gives credence to this factor. Thus, for example, SRA's Chairman explained that rather than replace failed operators, they actually sought to have the franchisee "locked in" to the franchise (*Hansard* 2002, para. 24), even where, in the specific instance of Virgin Trains, additional subsidy was being given "...to protect both passengers and the taxpayer" (*Hansard* 2002, para. 69).

As we noted in the Introduction, the most pessimistic view on the ability to transfer risk to the franchisee comes from an industry insider. Following the announcement that ScotRail and Central Trains would be bailed out, George Muir, ATOC's director-general, concluded that the limits of privatisation were now clearer:

> "It's a realisation of the fundamental truth...the underlying risk always comes back to the person who wants it–the outsourcer." (*The Financial Times*, 7 March 2002).

We need to be very clear as to why the franchisor found it essential to rescue failing franchises if, as Glaister warns, tactical bidding is not to undermine the auctioning process: the most brazen bid wins over the most efficient bid.

Developments in risk policy

Apart from this tendency to bail out franchises, there have been some important changes in franchise design in relation to risk. While, in 2002, SRA's CEO assured the Transport Select Committee that Phase III policy would mean that "...the risks of cost and the risks of revenue are properly taken by the franchise operating companies" (*Hansard* 2002, para. 177), the policy had changed by 2004:

> "Train company contracts will also ensure that the balance of risks between the train companies and Government is sensible. Train companies will continue to take revenue risk, but there will be arrangements to share this with the Government. This will help to make franchises more stable. Where an operator does start to fail financially, they should expect to have to surrender that franchise, rather than receive any additional Government support." (SRA 2004, p. 6).

The key developments in franchise design concern two aspects of risk:

- Risk-sharing: this has been adopted in Phase III "franchise templates" for awarding contracts, and can take the form of both profit-sharing[52] and revenue-sharing risk.
- Risk-apportionment: there has been a drift towards the franchisor accepting the financial consequences for events such as industrial disputes.

Risk Sharing

Can the franchise competition and subsequent franchisee behaviour be structured in a way that does not generate tactical bidding while still ensuring that risk is transferred? Recent franchise awards illustrate that the new franchise template *still* embodies a risk-sharing structure that encourages tactical bidding for subsidies or for premium payments. The specific franchise award also ensures that the weight of the risk associated with bid-winning optimistic projections is left with government.

The necessary tactical approach is evident from the way the risk is shared. The franchise template introduces an element of revenue risk sharing after the fourth year of the franchise. After that time, if the franchisee's revenue falls below 94% of the franchisee's projected level, then the deficit is shared 20% to the franchisee and 80% to the government. Between 94% and 98% of the projection, the shortfall is shared equally. If revenue is between 102% and 106% of the projection, the franchisee keeps 60% of the "excess" revenue above the projection and keeps 40% of the "excess" when the revenue is above 106% of the projection.

There is evidence that bidders have responded to this "cap-and-collar" approach to risk-sharing through tactical bidding. The InterCity East Coast franchise was awarded to the incumbent operator, Great North Eastern Railway (GNER), in March 2005. This is one franchise where the operator pays a premium to the government so the choice of the winning bidder will be strongly influenced by the NPV of the premium payments. Although GNER won the bid by a large margin, it heavily "back-loaded" its premium payments (i.e. premium payments start low and rise sharply in the later years of the franchise).[53] After year 4, the government rather than GNER faces most of the risk of revenue shortfall.

> "These factors are reflected in the premium profile which is heavily backloaded. In the first four years, when GNER takes all the risk, the premium is conservative, falling in 2006-07 before starting to rise. But with cap-and-collar in place from the fifth year, annual premia increase in a straight line, reflecting GNER's forecast 8.7% annual compound revenue growth." (Rail Business Intelligence 2005, 5 May, p. 7).[54]

Thus, even though the franchisor has had a decade of accumulated experience and understanding of franchise bidding, the current franchising award design nonetheless retains a strong tactical basis for financial game play: in the past, the tactic involved simply maximising the NPV of the TOC's premium payments or minimising the NPV of the franchisor's subsidy stream.

While the franchise framework differs between the Phase I and Phase III systems, the outcome is the same: the bid-winning tactics bring about a moral hazard strategy (back-loading the revenue when government exposure to revenue shortfall is maximised) that leads the government to take a higher exposure to risk than could be expected from a non-tactical bid. As noted in Rail Business Intelligence:

> While unsuccessful bidders pointed out that GNER won on the basis of NPV by a margin of around £500m, the premium profile means that the commercial risk [for GNER] is significantly less than this base number implies. (*Ibid*, p. 7).

Reflecting again the difficulties with sealed bidding (discussed in Section 2), even if we assumed there was no tactics involved in the revenue profile, the franchisor should have queried a bid of £1.3 billion NPV premium payments, which was apparently around £500 million more than the nearest bidder–how robust could this be? (Rail Business Intelligence 2005, 5 May, p. 7).

Inevitably, of course, bidders would be fast to recognise the strategy and would copy GNER's approach for other franchise competitions–and Rail Business Intelligence promptly reported that bidders were pondering the use of such back-loading tactics for other franchise bids. (Ibid, p. 7) To the extent that all bidders adopted the tactic, it would neutralise one bidder relative to another but would inevitably leave the franchisor/Treasury with less premium (more subsidy payment) than the competition would signal. Further, the tactics would blur the ability of the franchisor to separate strategic projections from well-thought-out business plans.

A TOC's Attitude to Risk

"A FirstGroup spokeswoman said it had not taken any serious risks with the new [Greater Western, Thameslink/Great Northern] franchises. 'The risk profile has changed. The upside and the downside are shared with the government, so the new franchises are substantially de-risked'."

"Railing against FirstGroup's £1bn franchises", Scotland on Sunday, 18 Dec 2005.

With the new franchise template the "cap and collar" risk-sharing ensures that TOCs faces relatively little revenue risk.[55] Moral hazard behaviour (entrenched by franchise rescues and, now, risk sharing) almost inevitably leads bidders to submit (and win) on the basis of tactics that are odds-on to require more generous terms for the TOC.

Thus, even if we can assume that bid appraisal has matured and so bids have become more realistic, bidders' moral hazard behaviour will lead government to incur disproportionately more risk than a competition that does not encourage tactical bidding. If service specification is largely determined by government, and government is the primary holder of downside revenue risk, is this simply a cost-based contract?

Risk Apportionment

The other area where risk apportionment has changed lies in the revenue consequences of industrial disputes. Originally the risk was apportioned to the franchisee. Implicitly, if we take the premise that risk should be apportioned to the party that is best placed to manage that risk, then it might (arguably) imply that the franchisee should bear the risk.

Nonetheless, in recent years there is evidence that the franchisor has, on occasion, taken the risk.[56] For instance, in March 2002, the SRA met the lost revenue arising out of a strike that affected nine TOCs in 2003 (RBI 195, p. 2). In another case in 2002, the SRA met ScotRail's lost revenue (RBI 194, p. 1). With SRA having been abolished, industry is concerned that the new franchising agency will alter its approach to accepting disputation risk. (RBI 239, p. 10).

Experiences with Rail Franchising in Australia

This section considers the rail franchising experience in the State of Victoria, in south-eastern Australia. Three areas of passenger rail operation were franchised: a regional Victorian franchise (V/Line passenger), the light-rail (tram) operation in Melbourne and the heavy-rail operation in Melbourne. In this paper, I focus on the heavy-rail franchising in Melbourne albeit that much of the data do not split heavy-rail from light-rail franchising.

Melbourne is a city with a population of 3.4 million people. Three electrified railways radiate from the city centre, with 17 separate main line or branch line termini from these spokes–see Figure 6 (p. 115), which is a schematic map (not to scale) of the network. From 1989, the Public Transport Commission (PTC) managed the urban bus, tram and train services and V/Line regional trains. However, during the 1990s the bus operations were privatised, railway stations were de-staffed and tram conductors were withdrawn. Staffing dropped from 18 000 in 1992 to 8 400 in 1997. (Department of Infrastructure 2005, p. 5) In late 1997, the Government of Victoria announced it would privatise the railway operations. In mid-1998, the PTC operations were split into five businesses, with the V/Line operations, two tram operations and two urban heavy-rail operations. The urban heavy rail businesses were Bayside Trains (the operations serving central Melbourne from the south and west–the lines closest to Port Phillip Bay) and Hillside Trains (the operations serving central Melbourne from the hills to the north-east).

A Transport Reform Unit was established in 1998 from within the State's Treasury department to undertake the franchising. In June 1999, the five successful bidders were announced and the franchises commenced management at the end of August 1999.

As with the British review, subsequent sections consider whether the franchising has met its objectives, the evolving franchising policies, the franchise competition, design and costs.

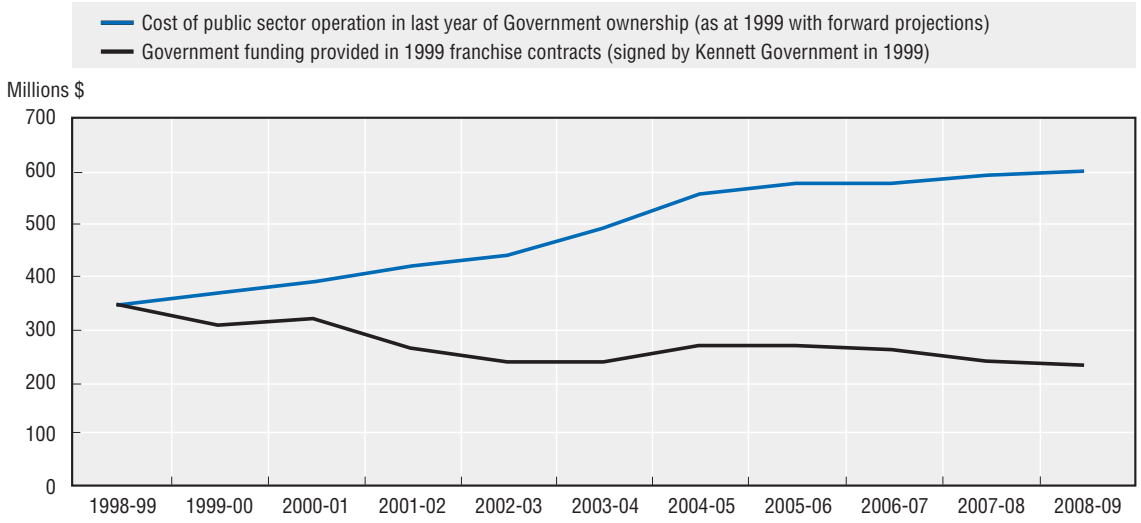
Has rail franchising achieved its aims?

The government's franchising objectives included "...to minimise the long term costs of public transport to the taxpayer", "...to transfer risk to the private sector", to improve service quality and "...to secure a substantial and sustained increase" in patronage. (Department of Infrastructure (DOI) 2005, p. 6). When the franchising process was completed, it would have seemed, from the promises made by the winning firms, that these objectives would be realised.

While there is some argument over the estimation of cost savings that would be achieved (see, in particular, Mees 2005, pp. 442-44), the savings to the taxpayer *relative to a "public sector*

comparator" over the (10-15 year) life of the five franchises was between $A1.1 billion and $A1.8 billion. The latter value is illustrated in Figure 4 as the gap between the government funding of the franchises and the franchisor's public sector comparator estimate.

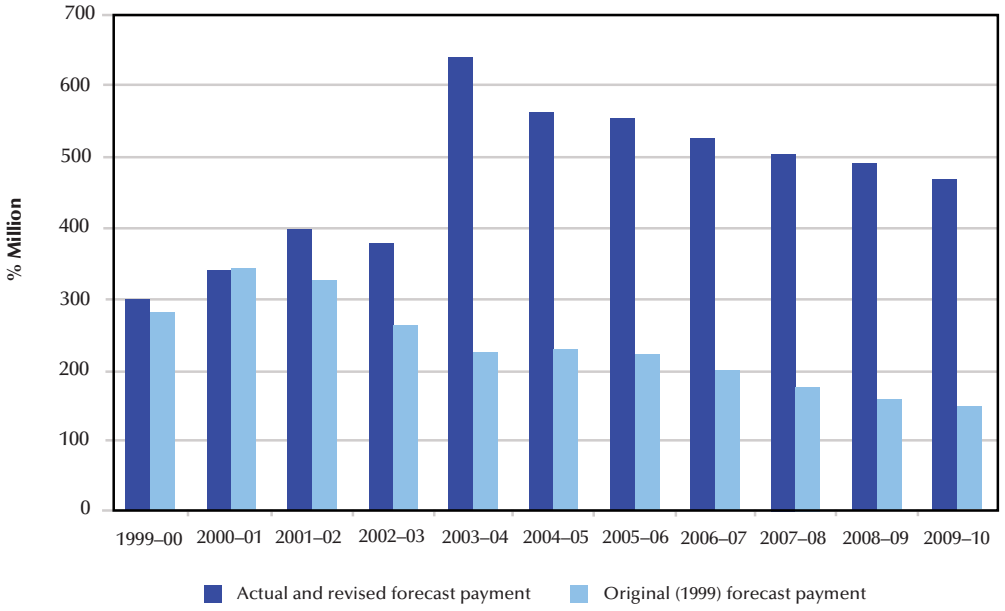
Figure 4. **Projected Public Savings from Victorian Franchising (Millions AUD per year)**



Source: Slide, as presented in Betts 2005.

However, these were the promises and the reality was somewhat different. Less than two years after the franchises had commenced, "...franchisees began to raise serious concerns with the Government about their financial viability" (DOI 2005, p. 12). Supplementary short-term funding was provided by government but the government's new "Franchise Review Task Force subsequently concluded that the franchises "...were financially unsustainable and could not be rescued by marginal contractual changes or short-term financial fixes". (DOI 2005, p. 13) The Task Force arranged "Interim Operating Agreements" with two of the franchisees but the third franchisee, National Express (managing the Bayside Trains, Swanston Trams and V/Line Passenger) could not come to agreement and withdrew from its Victorian rail operations, forfeiting its Performance Bonds. New agreements were then negotiated with the two remaining operators. Connex, the Hillside Trains operator, absorbed the Bayside Trains operations and the new agreement commenced in April 2004.

Figure 5. **Melbourne's Train and Tram Subsidy Profile–Payments to Private Operators (2004-05, AUD)**



Source: Auditor-General Victoria 2005, p. 25.

As is evident in Figure 5, the new agreements have resulted in much greater payments to franchisees than the original franchising. There is also much less risk transferred. We may assume that the 10-month 1999-00 and 2000-01 payments to franchisees are roughly similar to the equivalent funding for the public sector. If this assumption is correct, though, it means that the new payment stream from 2003-04 is considerably higher than public-sector funding would have been. That is, the new agreements are costing the taxpayer more than public sector operation. It is certainly evident that the new agreements will not achieve cost reductions (Figure 7).

As is clear from this experience, although the franchises were implicitly paid a premium to accept risk, in practice it was not transferred. Patronage growth was stronger than the immediate period before franchising and service quality did improve after franchising. However, we should note that the immediate pre-franchising period was subject to disruption caused by the splitting of the operations and management of the train and tram systems that was required for franchising.

The overall conclusion is that the initial franchising in Victoria did not achieve its objectives nor do the new agreements offer obvious gains.

Overview of franchising policy

In the previous section I noted the objectives of the 1999 franchising competition. The lessons apparently learned from that franchising led to a redirection for policy in the 2004 agreements. Government was concerned about achieving managerial stability, following the division of the businesses and corporatisation in 1998-99 and the subsequent franchising difficulties. Market-testing in 2002-03 concluded that the "market" had lost interest in bidding for the franchises due to the difficulties evident in Victoria and emerging in Britain around that time. The government also concluded that the competitive tendering market would be weakened by incumbent advantage: "... potential bidders were acutely conscious that they would be bidding against incumbents who were

performing well and who had strong local knowledge" and commercial and legal uncertainty was greater for new entrants than incumbents. (DOI 2005, p. 15) Indeed, the government seemed to want to stay with the incumbents as they

> "... were already familiar with the environment of the Victorian rail industry. Normal commercial practice would be to deal with incumbent suppliers, tapping into their knowledge base, and not seek a change of supplier at a sensitive stage in the development of the public transport system." (DOI 2005, p. 16).

As a consequence, the government decided to negotiate with the surviving incumbents–"single source negotiation"–with the two train franchises being absorbed into a new, larger Connex train operation. The heavy-rail contract awarded in 2004 was for a term of 5 years (with an 18 month optional extension and a negotiated extension beyond then), by contrast with the 15 year term for the 1999 franchises. Further, with the new contract, government shares revenue risk and profit sharing and has taken back some risks (such as insurance).

Clearly, the outcome of the restructured process here ("single source negotiation") cannot be called "franchising"–there is no competitive tendering process. However, as discussed below, some of the reasons the government put forward for not proceeding with the competition here (incumbent advantage and continuity of supplier) are actually clear rationales for never undertaking franchising. Because the promised gains from the 1999 competition were not delivered, and there was not a competitive market for the subsequent re-contracting, then there is a strong argument for saying that competitive tendering policy in Victoria has failed.

Competition design

As with the British model (on which the Victorian franchising was based), the competition held in 1998-99 was an auctioning system for the exclusive rights to operate given services. In a departure from its parent, however, the franchise was also responsible for the infrastructure and the rolling stock, albeit that the stock was to be bought by the franchisees then sold to leasing companies and then leased back (Greig 2002, p. 242). A vertically-separated model had been considered, but rejected due to "...complaints emerging in countries where the model had been adopted" (Greig 2002, p. 241). It was argued that the integration can "...avoid some unproductive monopoly problems" such as negotiating access charges, and that giving the franchisee control of the track "...allows it to optimise its operating environment". (Government of Victoria 1998, p. 7).

Undoubtedly, the transfer of infrastructure and stock would make it harder to refranchise due to the risk attached to the condition of the assets; this issue was noted when the 2002-04 contract negotiations were underway and was given as a reason for not holding another competitive tender. As a director within the franchising agency, Greig notes that the potential for the franchisee to run the assets down was recognised. The agency's response was to "...have a belt-and-braces regime: annual asset management plans, an asset condition survey... key performance indicators..." and a franchisee account from which money would be released to the operator when the government was satisfied with the maintenance standards.

The design attempted to capture lessons learned from British franchising. Thus, at that time there was a move to longer franchises in Britain (Phase II) so it is no surprise that Victoria's heavy rail franchises were for 15-year terms. Like the British counterparts, the revenue and cost risks were transferred to franchisees as was "industrial relations risk"; fares were largely regulated; subsidy was provided in exchange for exclusive rights to operate passenger services on given lines, subject to minimum service specifications (which was generally the service level existing before franchising).

Unlike the British model, however, the subsidy consisted of two main components. First, as in Britain, there was the agreed subsidy level and bidders invariably had this on a declining level to reflect the impact of their initiatives. The second element, however, was a variable patronage-growth incentive payment.[57] The consequence of this latter conditional payment was that instead of dampening a train operator's financial failure to meet revenue targets, it amplified it. Thus, while the fixed subsidy declined over time, the failure of traffic to materialise (measured by revenue growth) would suppress the variable payment.

As in Britain, the bidding competition was based on first-price sealed bidding. The data presented in Table 5 illustrate how this form of bidding can result in very different outcomes, for arguably two very similar urban passenger operations (similar size, patrons and exogenous environment). We can compare the winning National Express and Connex bids for Bayside Trains and Hillside Trains, respectively. We can observe how much more aggressive the National Express bid was than the Connex bid (which, in itself, was highly optimistic). In Section 2, I noted that open bids have the feature that seeing other bidders dropping out of an auction might moderate the remaining bidders' behaviour. But in every respect the National Express was substantially more optimistic than the Connex bid–notably, in the small fixed subsidy relative to the volume-based subsidy, the rate of decline in subsidy, the assumed revenue growth in the first five years and the assumed 15-year revenue growth.

This contrast suggests that "plausibility" of bid was not one of the selection criteria and, arguably, nor does default risk appear to have been adequately considered. There is no information available on the extent to which the franchising was conducted as a lowest-cost auction or whether it contained Beauty Contest problems. That said, we can speculate that there was very modest interest in the competition and that the choice of franchise was clearly based on the lowest-cost bid. Thus, Greig says that "...most of the bidding interest was from consortia associated with train or tram services in the UK or northern Europe" but the fact that three of the five franchises went to National Express suggests that the market may have been thin.[58] We note, in any case, that only the Yarra Trams franchise had any Australian interests (Transfield, holding 50% of the consortium interest). Of course, this may have simply been because National Express was consistently the most aggressive bidder–as illustrated in Table 5.

Competitive market

As in Britain, the franchise bundling has been problematic. In preparation for franchising, the single PTC heavy rail operation was split into two geographic areas: the area around Port Phillip Bay (hence Bayside Trains) and the railways to the north-east of Melbourne (Hillside Trains). The objective of this split was to introduce "competition by comparison", where the heavy (and two light rail) operations would act as a performance comparator.[59] (DOI 2005, p. 7). The Transport Reform Unit commissioned a study into economies of scale of train and tram operations and concluded that those economies "...flattened out well below the size of the divided businesses" (Greig 2002, p. 240).

However, this conclusion seems to overlook the core issue of network economies and the inter-relationship between different parts of the same network. It is one question to ask if a large rail operation has scale economies relative to a small rail operation; it is another question as to whether two rail entities are as efficient as one entity. Intuitively, two rail entities on a network generate considerable transaction and co-ordination costs. Thus it is unsurprising that, after the franchisees failed, it was concluded that "...the benefits of two train and two tram companies never really materialised" (DOI 2005, p. 18). The split had increased the number of interfaces, making decision-making more difficult, duplicated management resources and required duplicate spare equipment and rolling stock. In any case, the heavy-rail franchises turned their backs on network economies. For

instance, they each overhauled identical "Comeng" trains in different ways, making them incompatible. They also purchased trains from different manufacturers (Siemens and Alstom) that could not be operated together.

There is a more general issue: how competitive was the auction market? Greig notes that British franchising had created a bidder market so it is notable that most of the bidding interest was from European-based consortia.[60] (Greig 2002, p. 245). But, the DOI notes, these foreign consortia "...had little local knowledge" and were basing their forecasts on experiences from south-east England (DOI 2005, p. 9). So we should ask whether a sufficiently strong base of *suitable* bidding groups had ever existed in order for auctioning to succeed.

According to the DOI, the Victorian experiences took the gloss off the market as did the growing financial problems with British franchises–albeit, we know that the British refranchising market remained buoyant. But in justifying single source negotiation, the DOI actually presents a further strong case for why competitive tendering was probably never a viable option in Victoria, because a competitive market could not be sustained. They suggest that incumbent advantage (such as knowledge of the market and asset condition) was so strong that it was dampening market interest:

> "...potential bidders were acutely conscious that they would be bidding against incumbents who were performing well and who had strong local knowledge. As such, it looked unlikely that the Government would be able to attract a strong field of bidders in a retender" (DOI 2005, p. 15).

If such an assessment were accurate and applicable for rail franchises in other cities and countries, it would bode badly for competition-for-the-market. Incumbent advantage sets in as the franchisee becomes more familiar with the business–and this is an important reason for keeping franchise terms short. However it seems that, in just three years, the Victorian franchisees went from having "little local knowledge" to such an apparently-unassailable "strong local knowledge" that there was no longer a sufficiently competitive market to undertake competitive tendering.

Bid assessment

There is little information on how the bids were assessed. Table 5 sets out the basic parameters of the winning bids. As Greig (a director in the franchising agency, the Transport Reform Unit) wrote in 2002 before National Express's withdrawal, if the traffic forecasts were achieved "...this would bring patronage to above its highest historic level of the early 1950s, before there was widespread car ownership". Nonetheless, the "...case for optimism was bolstered by the experience of large patronage increases following privatisation elsewhere (for example, UK, Argentina". (Greig 2002, p. 245) Thus, here we can see that the *perception* of British patronage growth is filtering into probably *both* the bidder's financially-suicidal bids and the bid assessors' acceptance of the extremely bullish projections. Indeed, if we compare the figures in Table 5 with the outcome in Britain shown in Figure 2, the Victorian traffic growth was even stronger than the British projections (where already by 1999 the finances of bullish projections were causing difficulties).

Ironically, while the aura surrounding international companies bidding for the Victorian franchises may have led the assessors to accept wildly-optimistic forecasts (particularly with growth spurts in the early years of the franchises, mirrored by precipitous declines in subsidies), the DOI subsequently concluded that the forecasts had been:

> "...made by foreign bidders who had little local knowledge and who were basing their forecasts on experience of conditions in south-east England, where very high patronage

> growth was occurring at the time. ... It simply wasn't possible to replicate the British conditions in Victoria and reap huge cost reductions and patronage increases through changes to work practices and marketing." (DOI 2005, p. 9).

This recent interpretation suggests that a fault with the franchising lay with the bidders and (I could argue) the bid assessment (by not questioning these "foreign bidders"). However, *earlier* papers suggest that at the time of the franchising, the DOI itself took a bullish view (and this would have made it more likely that bid assessors would not reject the bullish bids):

> "DOI investigated the feasibility of achieving a 40 to 50% growth in rail patronage over the next 15 years. ... the results suggested developing a series of measures [such as new rolling stock, more frequent and faster services, better public transport interchanges...] would enable patronage growth to increase by around 50% over the next 15 years." (Government of Victoria 1998, p. 10).

Even on these precepts, however, the patronage growth for the winning bids was optimistic and, crucially, most of the growth was due to occur in the immediate few years after the commencement of the franchises–see Table 5. But more to the point, as I note in the British section of this paper, it is highly debatable that the patronage and revenue increases in Britain (which, incidentally, was greatest in the regions and not in the south-east) were endogenous, that is, due to the virtues of private sector management. For the SRA, that growth in Britain was due to exogenous factors, particularly the impact of economic growth, road congestion and fuel price rises and the level and timing of the Victorian patronage growth were considerably more bullish than those projections made by winning bidders in Britain.

Even on the cost side, the evidence was there that the bids were not being assessed in an informed way. As Mees notes, the Victorian Auditor General had concluded in 1998 that "...after years of cost-cutting and rationalisation of operations, there appears to be limited scope for further large savings" (Mees 2005, p. 442). Similarly, the DOI now acknowledge that it was "...an industry that was already relatively efficient after five years of down-sizing and offered only limited scope for further cost reductions". (DOI 2005, p. 9) whereas at the time it was argued that franchising could bring a range of opportunities to reduce a substantial cost base. (Government of Victoria 1998, p. 9)

Thus, given that franchises were let to firms who did not understand the market (hence their large patronage and revenue growth projections) and given there was little scope for cost reductions, it remains unclear how the bids could have been assessed robustly and just whether there was any business rationale for franchising.

Competition transaction costs

One indicator of the level of transaction costs in the franchising is that, in 2002, the government decided to increase its subsidy to the franchisees. *The Age* newspaper reported the Transport Minister saying that "...it was cheaper to bail them out rather than re-tender the contracts" (27 February, p. 1). Arguably, if these competition costs were this "high"–leading to bailing out rather than refranchising–then the transaction costs were *too* high.

Risk and uncertainty

As in Britain, these Australian franchises involved the transfer of cost and revenue risk to the franchisee. One divergence from the British model was that *force majeure* risk was retained by the government, being "...allocated to the party best placed to *bear* it". (Greig 2002, p. 244).

However, as is evident by the franchise failures, the public funding went to private companies who then did not accept the commercial consequences of their mismanagement. The government officials' own contorted logic is apparent in the decision to rescue the franchises:

> "The Kennett Government's aim had been a public transport system in which all key commercial risks were transferred to the private sector. Clearly this was no longer feasible in circumstances in which the operators' very viability was under threat." (DOI 2005, p. 12).

The risk to the franchises is financial losses and as stressed by Glaister (quoted above, p. 86), a fundamental principle of successful franchising is that the train operators need to "...be made to suffer the financial consequences of their inefficiencies". In particular, this principle should be adhered to when government intends to persevere with franchising. However, as Gómez-Ibáñez notes:

> "Most governments choose renegotiation... The immediate pain of inadequate service, or of one's contract being flagrantly violated, usually trumps more distant considerations of precedent." (Gómez-Ibáñez 2003, p. 107).

Ironically, in the light of the government's adoption of "single source negotiation", the earlier decision to assist the franchisees was made because the "...government feared that a messy end to a franchise would send a bad signal to other potential private partners, further reducing bidding interest". (Ehrhardt and Irwin 2004, p. 19) Again, the case for franchising is undermined when the ability to transfer risk is tempered by a need to protect rail services from disruption: "The government was concerned that, if a franchisee became insolvent or walked away from its contract, there could be serious disruption for passengers" although Greig notes that provisions were made to cover such events. (DOI 2005, p. 12; Greig 2002, p. 245) Given current pronouncements, though, it seems that it is impossible to transfer risk given such heightened public interest concerns.

Putting aside the fact that the new contract with Connex was not achieved through competitive tendering, it is notable that a shorter contract length has been adopted, recognising that "...long term contracts may also present high risks for private sector operators". (DOI 2005, p. 19) Williams, Greig and Wallis (2005, p. 47) also point to the "...difficulty that long concession periods pose for assessing likely revenue". We should note, however, that even if the 1999 franchises had been for five years rather than fifteen, the financial crisis would have arisen as the fault with the bids was their suicidal revenue/traffic growth projections (and cost saving) for the first few years, hence their financial crises within two years of the commencement of the franchises (Table 3). In this context, the decision to share the revenue risk (described in DOI 2005, pp. 59-61) seems to be more of an insurance for the private company against its own contractual optimism than against traffic and revenue uncertainty.

Pitfalls in Franchising

The verdict on franchising to date

We commenced this review of rail franchising by asking whether it had achieved its aims–gains in efficiency and revenue through the transfer of risk from government to franchisee. Despite the high potential cost of disruption of services, franchisors have agreed contracts where the likelihood of service delivery has been very uncertain. In Britain, the franchisor had a stroke of luck, however, because franchisees benefited from unanticipated strong economic growth. This contributed significantly to TOCs' strong growth in traffic and revenue. On average, this growth exceeded even their aggressive revenue projections. However, despite this, the promised drastically-reduced reliance on subsidy did not eventuate, principally because of severe cost escalation.

If the terms of the contract had been enforced, the risk transfer embodied in the British franchising should have led to severe financial distress or failure of at least 12 of the 25 franchises. In the event, the risk transfer was more illusory than real, with additional subsidies forthcoming to keep the franchises afloat. In most cases in Britain, these franchises became cost-based management contracts. In Victoria, the taxpayers were required to rescue the heavy-rail franchises (despite which one operator subsequently surrendered its contract even though it was offered substantial additional subsidy). A fresh contract was awarded to the remaining heavy-rail incumbent, without recourse to competitive tendering through "single-source negotiation".

Three conclusions can be drawn from this:

- Generally, we seem incapable of undertaking bid assessments that distinguish the unrealistic from the robust.
- Commercial risk was not successfully transferred to private operators.
- The financial deterioration (cost inflation) of most of the British TOCs suggests that the private operators did not materially enhance the financial operation of the businesses. With few achievable efficiency gains to capture but considerable franchising, transaction and co-ordination costs, we must conclude the outcome has been detrimental in both countries.

Some industry observers in Britain nonetheless suggest that franchising, *per se*, is at least responsible for delivering strong growth in passenger travel, with passenger kilometres rising by 3.7% per annum through to 2002-03.[61] TOC service enhancements, notably the new rolling stock and improved service frequencies (with a 17.7% increase in train kilometres), has undoubtedly stimulated traffic. However, it must be recognised that much of this is underpinned by publicly-funded franchise commitments to make such improvements. This is in stark contrast to BR, whose funding was heavily constrained by the Treasury.

Perhaps the major flaw in this popular attribution of growth to the introduction of franchising is that the analysis often ignores exogenous factors. For instance, SRA attributed the surge in passenger travel since the mid-1990s to employment growth, lower (regulated) rail fares, increased road congestion and higher fuel prices. For Melbourne, Mees concludes that franchising had no effect on patronage, though concedes that the outcome depends on the time series used and that patronage will be stimulated through the introduction of air-conditioned rolling stock (again a requirement of the franchise contracts).[62]

Either way, the widespread illusion that the additional patronage is due to the franchising sometimes distorts authorities' view of the perceived merits of franchising and, consequently, on how achievable their bidding promises are. That is, the aura of private management creates a blind faith in the superiority of franchising generally, and can even pervade the way that bids are assessed.

Even if British and Australian franchising had delivered on their financial promises, there are still costs beyond the competition costs to consider. First, franchising is *not* a riskless strategy for provision of services, with significant potential for disruption caused by financial failure (and the Victorian government was happy to undermine franchising efficiency in order to prevent disruption). Secondly, as Mees notes, because the government–private contracts are sometimes classed as "commercial-in-confidence", this commonly removes transparency in public funding and democratic accountability (Mees 2005, p. 445).[63] Finally, franchising can have significant adverse effects on the way the services operate (such as impacting negatively on network efficiency) and the Victorian government acknowledged this, quickly reintegrating the two rail operations.

Can we learn from the experiences?

The application of franchising principles inevitably involves trading off objectives–such as awarding longer franchises to encourage greater investment which then weakens competition-for-the-market. One result of this has been extensive policy fiddling, with three significantly different franchising frameworks in Britain and two in Australia. It has been the negative experiences of franchising that have driven these changes.

Nonetheless, the franchising frameworks have shown an amazing propensity to ignore the practical principles and the experiences of franchising. Thus, although below I list key issues in deciding if and how to franchise, these are more honoured in the breach, further undermining the case for pursuing franchise contracts.

The Australian franchising and Phase II and III franchising in Britain could draw on experience from the initial British franchising–but still did not learn their lessons. For instance:

- Phase II franchising was an attempt to address Phase I problems but, amongst other things, it failed to consider basic beauty contest issues in how the auctioning was structured–how to assess the relative merits of disparate bids that lacked common objectively-measurable elements.

- Phase III franchising adopts a system of risk-sharing, which bidders have already shown can be manipulated to their own advantage in the same way as the core subsidy/premium levels were in the initial franchising.

- There is still a wide dispersion in Phase III franchise bids–this should set alarm bells off because operators have a very limited ability to enhance the financial outcome so a wide dispersion in bids should be alerting assessors to excessively risky and/or tactical bidding.

- Australian franchise designers claimed to have learned from British experiences (Mees 2005, p. 446) but managed to produce a competition with few bidders (and, therefore, arguably little chance of reaping the hypothetic gains from competition in terms of minimising subsidy) and an outcome that was a spectacular failure due to implausible bidding and deficient bid assessment (a fault that had long been recognised in Britain).

- The current Victorian contracting uses "single source negotiation" under the guise of being "franchising". This abuses the very principles of franchising, notably using competition-for-the-market as the keystone for minimising subsidy requirements.

Perhaps one reason for the failure to take on the experiences is that government completely underestimates the skills required to design, implement and monitor such franchising systems. The experiences reviewed here give much credence to Mees' argument that rail franchising "...appears to require greater skill than is needed actually to operate a public transport system, either directly or using sub-contracting". (Mees 2005, p. 447) So if we are failing to manage the train operations ourselves, what hope have we of implementing a more complicated system?

The government franchisor will need to establish a competition that anticipates the inevitable tactical behaviour and draw up a contract that sets out appropriate incentives that successfully redress principal–agent problems. However, it may be argued that private negotiators have greater experience and stronger incentives than the government franchisor to draw up contracts to the franchisee's relative advantage. In particular, private sector negotiators will have strong corporate profit drive

and/or individual aspirations within the firm to ensure that contracts are drawn up to the firm's advantage. In this context, I argue there is validity in Mees' argument that the negotiating balance in Victoria was likely to favour the bidders, who were experienced, international firms. (Mees 2005, p. 446).

Where and how to franchise

Do the poor outcomes invalidate franchising as a cost-effective form of service delivery? Put another way, can franchising be structured to avoid adverse outcomes while still delivering the benefits? There are a number of issues to consider in deciding if, and how, the franchising can result in a successful outcome:

Performance of the public operator

If the incumbent public company is relatively well-managed, franchising would capture only modest improvements at best. In such circumstances, the chances of recouping the large fixed costs of setting up and managing the franchises would be small. Arguably, BR was already relatively efficient so the ledger of incremental efficiency gains relative to significant network and auction transaction costs makes franchising less attractive. Similar arguments are relevant to the Melbourne franchises: a reason given for the franchise failures is that the bidders assumed implausible cost reductions (Figure 7) so if the efficiency improvements are negligible, it severely weakens the case for franchising.

How competition for the market is introduced

Britain has introduced three major forms of franchising policy in less than a decade. The initial franchising competition was undertaken with considerable uncertainty, for franchisor and potential bidders alike. In response to emerging issues, there have been major changes in policies on contract length, service specification, risk transfer and performance. The initial high degree of uncertainty in the bidding competition and subsequent franchise performance could have been managed through a more cautious (gradual) awarding of franchises. This would have allowed policy and franchise design to evolve with successive franchises, in response to emerging issues, would have reduced the impact of design flaws and generated more realistic (efficient and sustainable) bids. In modern parlance, this is referred to as "real options analysis".

The franchisor's ability to assess bid deliverability

After a decade of franchising in Britain, the franchisor is considering whether it is appropriate for the deliverability of bid promises on costs, revenue growth and service provision to be made by civil servants and consulting advisors or, instead, rely upon bidders' own judgements. However, if the franchisor does not have the wherewithal to judge the rigour of the bids then, on this issue alone, rail franchising is fatally flawed. It is a basic principle that, in any contract signed for any purpose, both parties must be certain that the terms of the contract can be delivered and that it is the "best" contract– the franchisor should not sign a contract in blind faith.

The potential business latitude in franchise operation

"Public interest", risk, and network management concerns are significant. This reduces business latitude to innovate–even though innovation is a key franchising objective. Over the last decade, British franchises have been subject to greater controls in terms of service quality, level and performance specification and monitoring to guarantee public interests and (now) putting a brake on

risk levels. Further, to the extent that optimal capacity utilisation requires central co-ordination (especially evident when railways are highly-utilised), central network management and the high network utilisation itself may be major inhibitors to individual TOC management flair. Australian franchises were similarly highly specified.

Government risk averseness in train service provision

If government is shown to be not prepared to incur the service disruption or refranchising costs arising from a franchise collapse, then bidders are encouraged to be overoptimistic (in order to win the auction and "get the foot in the door"), knowing that they can subsequently renegotiate their contract. In such circumstances, risk transfer is less than what the government "bought" when it paid out the subsidies; it is also likely that the government has not chosen the most efficient operator. British franchising has shown a high propensity to rescue TOCs and this undermines the objectives of franchising because commercial disciplines for poor management are not penalised. Similarly, government risk-averseness in Victoria ensured that all efforts were made to rescue the franchises. No transfer of risk takes place if the government cannot tolerate the service collapsing.

Perverse outcomes in rail franchising

The key objective underlying franchising is to ensure the contracts are awarded to the most efficient operators. Under the systems employed to date, it is the willingness to gamble rather than to operate efficiently that is rewarded.

Bidders recognise that they do not win auctions by basing their bids on conservative forecasts (as shown in Britain and Australia). So, bidders take a gamble that financially-distressed operation will be rescued because government will not wish to face the political consequences of service disruption arising from franchise failure. Thus, the Victorian and initial British franchising competitions are characterised by bid assessments that may have acknowledged bid optimism but did not seek to seriously challenge the projections nor consider the consequences of the projections not being realised. Given the fantasy nature of some of the projections, it is difficult to believe that those negotiating on the government side genuinely believed that risk would be transferred successfully.

In subsequent franchising, to try to minimise bidders' chances of adopting such strategies, the British franchisor has tightened evaluations and business oversight and downgraded the extent to which they expect to transfer risk. It is an entirely appropriate to query how realistic or enforceable it is to achieve the complete transfer of revenue risk (especially over the more uncertain longer term) and when moral hazard behaviour shows government as being more risk-averse than the firm. To this end, revenue- or profit-sharing may be built into contracts for later years of a contract. However, this sharing also has the potential of blunting TOCs' incentives to be efficient.[64] Further, recent British experience with the "franchise template" shows that bidders may use the risk sharing structure for tactical bidding (incorporating revenue optimism) that can result in skewed bidder choice and (again) transferring the incidence of burden of the near-inevitable revenue shortfall back onto the government. So, again, revenue optimism is encouraged and incidence of any subsequent revenue shortfall again returns to government. So risk-sharing may simply change bidder tactics and may not be a panacea for desirable franchise outcomes.

Finally, it needs to be recognised that firms have only very limited control over patronage and hence will have difficulties working with inherent traffic forecasting uncertainties. Bidders might then be expected to heed caution in their revenue projections. However, it is also undoubtedly the case that winning bids are those where caution is thrown to the wind. In such circumstances it is not clear that

British "revenue-sharing" is anything more than taxpayer-funded insurance for tactically-aggressive, winning bidders–insurance for gambling.

Alternative forms of provision

The British and Australian experiences suggest there are very significant pitfalls in franchising that can limit the value in pursuing the model. Competitive tendering has been side-lined in Melbourne. In Britain, the response to each problem has skewed or muted the incentives that are pivotal to the success of franchising.

There are risks attached to the increasing prescription of rail franchises. Welsby and Nichols argue that:

> "…additional restrictions on the freedom of the operator inevitably carry the risk that the costs imposed–or cost savings foregone–in preventing change, outweigh the benefits to consumers. In the absence of clear criteria against which regulations can be evaluated, there is a substantial risk that potential efficiency gains will be suppressed." (Welsby and Nichols 1999, p. 69).

However, this risk to TOC "flair" needs to be balanced against the need for specification, for "public interest" (e.g., PSR service levels) and network economics reasons.

Such concerns notwithstanding, the increasing extent to which British franchise operations are being specified, and their risk-taking environment being tempered by cap-and-collar risk-sharing, means that the contractual relationship is increasingly a regulatory relationship–as predicted by Williamson and as Crain and Ekelund observe on Chadwick's original franchising ideas:

> "The principle (as stated by Chadwick) and the discussion of specific cases brings into question Demsetz's conclusion that the use of the principles would make government "regulation" unnecessary. Chadwick anticipated (correctly we believe) an elaborate "contract enforcement" body, composed of civil servants, as a necessary accoutrement to this scheme. … [and] In any practical example, contract design, specification and enforcement could easily create more subtle and complex difficulties for commissions than cost-plus pricing." (Crain and Ekelund 1976, p. 160).

Thus, as franchising has evolved it has begun to lose its distinguishing characteristics–the characteristics that made it superior to alternative forms of provision. In this circumstance, the main alternatives to franchising are, obviously, the retention of public sector production or undertaking gross–cost contracting (where only cost risk is transferred).

To the extent that so much of the revenue risk has reverted to government–by default or, now, risk-sharing contracts–there is a stronger case for making a clean break with net–cost contracts and shifting to gross–cost contracts. Of course, bids for gross-cost contracts still need rigorous reviewing for plausibility, remembering that it was unrealistic *cost* savings (as well as subsequent cost inflation) that was the main problem with the British franchises.

On one hand, purists will argue that gross-cost contracts do not give adequate incentives for operators to encourage patronage. However, modest incentive payments could be added to encourage such behaviour. In any case, even net-cost contracts often need supplementary incentive mechanisms to encourage compliance.[65] On the other hand, a sober analysis of the current franchising track record reveals extremely poor performance in getting all the other incentives right in a franchise–incentives

not to undertake tactical bidding, incentives to deliver a service to the standard expected by the franchisor and contract incentives that ensure that the franchisee takes on the risk it has committed to. In this context, the simpler, less ambitious gross cost contract looks a more realistic alternative to public provision than franchising.

Concluding comment

The flawed initial franchise competitions in Britain and Australia have undermined the application of the model. As a consequence, it may still be that there is merit in franchising–where it has been applied with *realistic* business plans and where risk has been successfully transferred. Nonetheless, it is unlikely that the risk can be successfully transferred–there *are* strong public interest concerns and network considerations in passenger rail service provision, which encourage government intervention in franchise rescues, network planning and service standard setting. Franchising policy has evolved to accommodate these factors but in doing so it undermines the principles, objectives and implicit superiority of competition *for* the market.

Avoiding the Major Pitfalls

Earlier in this paper, I considered the principles of competitive tendering in the awarding of contracts, with specific reference to rail franchising contracts. The tendering competition intends to deliver an outcome of rail services provided at lower net cost to the public. This requires that:

- Franchising design does not undermine underlying network economics.
- Winning firms are those that are capable of delivering the services most efficiently.
- The anticipated gains from the competition have a high probability of being realised.

Experience to date has not been encouraging, despite extensive ongoing adaptation of the "model" to deal with problems as they arose. However, it is possible that the approach has more merit when the incumbent public operator is perceived to be inefficient, simply because there is a greater chance of the potential gains outweighing the costs associated with franchising–including the risks involved.

Regardless of whether there are net gains to be captured, nonetheless a revision to EU Regulation 1191/69 may oblige authorities in Europe to undertake competitive tendering. So it is critical that authorities appreciate the lessons from past franchising and that they adopt competition designs and practices that will maximise the benefits of competition-for-the-market. Using British and Australian experiences, I set out what should be done–and what *must* be avoided.

What authorities should do

In the first instance, the authority should seek to adopt gross-cost contracting (as recommended in ECMT 2005, p. 64). There is considerable evidence that gross-cost contracting can deliver significant cost savings without the inherent revenue-based uncertainty pervading net-cost contracting and with less likelihood of contract default (See, for instance, NERA & TIS.PT 2001). Furthermore, this form of tendering can minimise loss of network economies. This is a significant factor.

However, if *net-cost* contracting (franchising) must be pursued, certain golden rules must be followed. The State contractor is risk-averse to service disruption. However, rescuing a failing franchise to prevent service disruption will undermine franchise incentives and this attracts firms to

submit bid-winning, but financially-unsustainable commitments. To avoid such a trade-off, winning bidders should be competent and their plans should be achievable: this requires franchisors to adopt a risk-averse strategy by *setting priority of security of service delivery over unknown quantities of supplier flair and innovation*. Thus, the franchisor must secure contracts that reflect government's risk-aversion, not bidders' objectives of winning the competition–tinged in irrational bid-fever and the moral hazard gamble that they will be bailed out. Thus, the following are preferred practices:

1. To avoid the loss of network economics

Set large service bundles. As much as possible, the network should be bundled into TOCs that capture economies of scale and maintain network efficiencies for operator and customer alike. This is likely to result in "large" service bundles. There is no definitive guide as to whether such bundles should be reflective of underlying infrastructure manager bundling, area bundling, route bundling or based on market coherence. But it is clear that they should avoid arbitrary network splits (as in Melbourne) that simply add interfaces for operators and customers alike.

Tightly define service specification. High service specification is required to protect "public interest" in service standards and to ensure network economics are not undermined by incompatible unilateral services. High specification is also needed to enable bids to be compared on a consistent basis (and so avoid beauty contest problems).

2. To ensure that the tendering process does identify the most efficient service provider

Make bid assessment criteria explicit. There are three key reasons for making bid criterion explicit:

- To be an efficient competition, assessment criterion must be explicit. Firms should not be bidding "blind". It is not an efficient outcome when the winning bidder is the firm that provides the best guess of what the franchisor wants rather than the firm offering the most efficient rail service package.

- *Making the criteria explicit facilitates transparency in the contracts awarding process.* Competition should not only be fair, but should also be seen to be fair. Thus, if there are "Beauty Contest" aspects of the competition, the qualitative elements should be quantified explicitly. Transparency is essential for ensuring that the competition has been conducted fairly. Revealing the bid assessment criterion ensures that no single firm has more insights than any other on what the franchisor values most in a bid. This can be particularly important if bidders perceive that the incumbent (particularly a state-owned entity) has better understanding of what the franchisor wants. In the same context, if post-auction debriefs with the franchisor are held, failed bidders will be able to appreciate how they rated relative to the winning bidder.

- *Revealing the weights can encourage incumbents to comply with their contract when they see how past performance is treated.* There is a tension between recognising past TOC performance in bid assessments and the desire to avoid "incumbent advantage". Including past performance will encourage good service delivery. However, this can undermine the efficacy of the competition because awarding bonus points for good behaviour gives the incumbent an additional head-start in the competition and so may discourage other bidders. A number of approaches could be considered that protect contestability while recognising performance. Good behaviour could be rewarded with (say) a berth in the bidder short-list.

Alternatively, the franchisor could restrict the weighting to "demerit points" for poor performances.

Ensure that barriers to entry are set low. British and Australian markets provided low barriers to entry, with low levels of capital and human resources needed for the winning bidder to commence operation. Both franchising systems incorporated different systems for leasing of rolling stock; neither proved to be undue impediments to contestability in the bidding competitions. We should note, however, that the Australian model incorporated the transfer of infrastructure to the franchise: this should be avoided as it adds unnecessary uncertainty on asset condition at the time of refranchising, and may conflict with other policy objectives, such as pursuing mandated access. Also, both markets incorporated incumbent staff transfer (apart from the winning bidding firm's own senior management). This feature enhances the bidding market by lowering barriers to entry relative to where the winning bidder has to draw in/recruit its own staff. Also, if the franchise fails, the low capital and human assets tied to the parent firm should minimise the disruption involved in the re-mobilisation of the resources to a successor operator.

Focus on keeping competition transaction costs low. Clearly, it is desirable to keep competition costs down, especially when short-term franchises are chosen. If the franchisor specifies exogenous patronage or revenue growth, this will reduce competition costs, with less need for franchisor-bidder dialogue.

Permit state-owned TOCs to bid. State-owned TOCs should be allowed to bid even though it gives bid assessors a more difficult task in ensuring propriety is maintained and cross-subsidisation does not occur. It may also depress bidder interest if the state entity is seen to have a strong incumbent advantage. Nonetheless, bid assessors should expect to find the incumbent's bid has a strong degree of consistency with its current operation: this will provide useful benchmarks for assessing deliverability of other bids. The state-owned TOC should also be the default operator if the bid market is not strong enough for a successful competition.

Set "short" contracts. Contract terms should be kept short. It is not possible to write all the (unknown) terms of partnership into a contract. Of course, this will reduce the time available to recoup the bidding costs but if most aspects of the bid are clear then those costs should be lower than when Beauty Contest-like competitions are held (as with Phase II British franchising). Optional extensions for good behaviour should be avoided if the re-franchising market is not to be undermined through incumbent advantage. Short contracts are favoured as they exclude the high degree of uncertainty of long terms though, as demonstrated with Australian franchises, an undeliverable bid will collapse whatever the contract length.

Aim for complete contracts. A closed (complete) contract should be preferred over an incomplete (open) contract–to avoid cost drift on "optional extras", incomplete contracts should be avoided. This is more practicable with short franchises.

3. To realise the anticipated gains from tendering

Set "high" performance bonds. The franchisor needs to hold a significant performance bond (notwithstanding that it sets a barrier to entry), to ensure franchisee compliance and as a mechanism to recover costs incurred in the event that the franchisee defaults (as arose with National Express in Melbourne). The bond raises the entry barriers but, as those barriers are relatively low and the costs of service disruption are high, a substantial bond is essential. A substantial bond is also a necessary complement to refusing bailouts: the failed TOC pays for the cost of poorly-considered and tactical bidding through the loss of the bond.

Do not undertake business monitoring. Phase III franchising has brought revenue- and profit-sharing to franchising, making the government a "sleeping partner" in the business and leading to considerable business monitoring. There is no need for extensive business monitoring if government is not a "business partner", if exogenous revenue risk is transferred to the franchisee and if the bid assessors focus more on whether the winning bidder's plans are deliverable.

Adopt a risk-averse, sceptical approach to bid assessments. Unless there is strong evidence to the contrary, the presumption should be that the bidders have relatively little leeway to affect costs and revenues. This presumption should have been more important in Britain and Melbourne, where substantial passenger rail reforms and rationalisations had already occurred and opportunities for cost savings were therefore limited. On this basis, the onus should be on *both* franchisor and bidders to demonstrate the rationale for variance from this interpretation. In this way, the collective bid fever may be minimised. *But a golden rule from auctioning theory is that if there is wide variation across the bids offered, something is wrong unless the discrepancy can be rationally explained. Further, if there is a wide variation of the bids from existing performance (or predicted outcomes), assume that optimism bias (poor management) or bid-winning behaviour is at work... until disproved.*

On this basis, a high degree of analysis and skill is a key requirement–astute bid assessors are essential and the following steps required:

- **Predict outcomes.** The franchisor should identify anticipated subsidy payments for all TOCs in advance (as illustrated in Table 1) This may prevent the franchisor being drawn into bidding fever optimism, though (as illustrated in Melbourne, with government's own prediction of patronage growth of up to 50% over 15 years) this is still no guarantee of franchisor rationality.

- **Use industry specialists to review costs**. Operating cost estimates and projections should be assessed at a detailed level by relevant ex-railway managers, not accountants.

- **Pre-determine exogenous patronage/revenue levels and calculate benchmarks for endogenous growth.** Bid assessment should be limited to assessing endogenous revenue growth; exogenous changes in traffic would be pre-determined by the franchisor for each TOC area. The franchisor would take the exogenous economic growth risk although, in practice, some (beneficial or adverse) risk would remain with the TOC to the extent that the estimated patronage–economic growth relationship differed from "reality". (In undertaking due diligence, a bidder could adopt a more pessimistic perspective but a winning bidder would have no recourse to government if it subsequently concluded the relationship was not to its advantage.) Revenue growth assessment would then be limited to assessment of endogenous growth projections. These should be assessed against benchmarks, such as those centrally-agreed parameters developed by British Rail, and presented in its Passenger Demand Forecasting Handbook.

- **Check bids for vulnerability to adverse outcomes.** Bids should be rejected where an assessment reveals that a firm becomes financially unsustainable when using endogenous growth projections that lie outside the implicit range of the centrally-set parameters. Bids should also be rejected if the business is shown to be unsustainable if the delivery time of improvements is delayed. This includes assessing whether the timing of cost cuts and revenue improvements is reasonable. The unrealistic timing of improvements was a major fault in all the winning bids in Australia. To enable this timing to be checked on a comparable basis, bids need to be normalised. (In the absence of evidence to the contrary,

assessors should presume that bidders are unlikely to have such control over costs and revenues that one bidder should have a markedly different time trend from another.) Undertaking this standardisation of timing would make direct comparisons easier and minimise bidders varying their timings to manipulate the NPV calculation.

- **Ensure that service proposals can be fitted onto the network.** Bidders' optional bid features should be checked against operational capability and consistency with network plans.

Ensure that cost risk and endogenous revenue risks are completely transferred. Cost risk should be transferred to the TOC (including the costs of industrial disputes, otherwise moral hazard behaviour would encourage the TOC to pursue disputes).

There is no evidence that exogenous (notably, economic growth) risk has been problematic for TOCs in Britain or Australia. That said, that growth has not been beneficial to the public purse. In particular, to the extent the British franchises were awarded on the presumption of low economic growth, the initial three TOCs (see Table 1) received windfall gains. If we take the view that risk should reside with the party best able to manage it, exogenous revenue risk should reside with government.

Various ways might be contrived to adopt competitive tendering with government still retaining the exogenous revenue risk. As noted above, centrally-determined economic growth risk would lie with government, with annual core subsidy and premium raised or lowered, depending on whether economic growth was above or below a pre-determined rate of growth. As a first approximation, it would be assumed that fuel price and road congestion levels would be "neutral" factors that would not be explicitly considered (although fuel prices could be factored into exogenous revenue risk indexing).

Bidders' revenue projections would therefore be identical prior to endogenous growth estimation. Endogenous growth risk is borne by the party that has greatest control over the risk. Franchisees would take on endogenous revenue risk themselves, including service quality improvements and unregulated fare variations. The revenue projections and subsequent assessments would then be limited to assessing entrepreneurial flair. This would result in the endogenous factors being more obvious and would enable greater scrutiny.

What authorities should <u>not</u> do

Scrutiny of the British and Australian rail franchising reveals that authorities have only superficially applied franchising principles to competition design and operation. Further, there has been patchy and retrospective recognition of important network economies: it *is* possible to design contracted servicing without surrendering those economies. However, this does require relegating franchisees' business latitude (such as service specification) where conflict between network economics and a TOC's entrepreneurial flair arises.

The list of key actions that franchisors should *not* do when adopting franchising is short, but crucial; the list is derived from the British and Australian experiences:

- Do not sign contracts that those with experience in the industry judge to be unrealistic.
- Contracts should be grounded in deliverability, not on wishful thinking.
- Avoid clustering franchise competitions, so as to learn from experiences, and to prevent franchisor and bidder exhaustion (undermining market interest).

- Avoid giving franchises too much leeway in influencing network interactions as this undermines network integrity.
- Avoid "cosy" relationships with the franchisee–this is regulatory capture in another guise.
- Avoid contracts that encourage moral hazard behaviour–especially risk-sharing contracts.
- Do not take back risks that have been contracted to the franchisee.
- Do not rescue franchises.

If authorities wish to ensure that the benefits of competitive tendering are realised then this list is "non-negotiable". Current British re-franchising is repeating earlier mistakes by ignoring franchising principles. Successful franchising relies upon the conduct of a fair competition. The fairness of that competition extends to the fair execution of the contract: rescuing franchises undermines the fairness and, probably, the integrity of the original competition. If authorities are required to adopt franchising but will not tolerate franchises failing due to the resultant service disruptions, they will need to have back-up processes that can quickly restore services should a franchise fail. *A key tenet of franchising is that failing franchises must be allowed to fail.*

ANNEXES

Table 2. **Average Required Annual TOC Financial Improvement[a], implied from Bids**

Train operating company	Average required improvement to 2002	Phase I: financial variance from contract
InterCity		
Great Western	2%	
Gatwick Express	4%	
East Coast (*Great North Eastern Railway)*	4%	
Midland Main Line	4%	
West Coast (*Virgin Trains)*	6%	Management contract
InterCity sub-total	**4%**	
London Commuting (Network SouthEast)		
South West Trains	2%	
LTS Rail (c2c)	3%	
South Central *(Southern)*	5%	
Chiltern Railways	8%	
South Eastern	7%	Management contract
Thames Trains *(FGW Link)*	10%	
Anglia Railways	12%	Management contract
Great Eastern	5%	
West Anglia/Great Northern	11%	Great Northern sub-franchise under management contract
North London Railways (Silverlink)	10%	
Thameslink	8%	
London sub-total	**6%**	
Regional: Non-South-Eastern Conurbation and Rural		
Cardiff	19%	Management contract
South Wales & West *(*Wessex)	14%	Management contract
Island Line	na	
Cross-Country *(*Virgin Cross Country)	11%	Management contract
MerseyRail	17%	Management contract
RR North East [Northern Spirit] Arriva Northern	16%	Management contract
North Western	19%	Management contract
Central Trains	13%	Extra subsidy
ScotRail	10%	Extra subsidy
Regional sub-total	**13%**	
Total: all franchises	**7%**	

Note: [a] The average improvement is defined as the change in subsidy over the period to 2002-03, divided by the number of years, relative to the 1996-97 turnover.

Table 3. **Franchise Profiles, Great Britain**

Train Operating Company (*Brand name*)	(*Previous*) Operators	Original franchise periods (*revised end-year*)	1996/97 Revenue	1996/97 Costs	Average annual improvement to 2002*	Order of franchising	Average change in pass. km *pa*, 1996/7 to 2002/3	Change in train-km, 1996/7 to 2002/3‡	Notes
InterCity									
Great Western	First Group	(a) 1996-2006	197	270	2%	=1	3.9%	22.0%	To Greater Western (2006)
Gatwick Express	National Express	(a) 1996-2011	34	31	4%	=2	3.1%	1.0%	
East Coast (*Great North Eastern Railway)*	Sea Containers	(a) 1996-2003 *(05)* *(b) 2005-15*	277	352	4%	=2	1.9%	16.8%	
Midland Main Line	National Express	(a) 1996-2006 *(08)*	83	110	4%	=2	7.8%	118.6%	Subsidy profile renegotiated; To East Midlands franchise
West Coast (*Virgin Trains)*	Virgin Trains	(a) 1997-2012 *(04?)*	249	364	6%	9	0.0%	4.4%	Renegotiating contract
InterCity sub-total					**4%**		**2.3%**	**23.4%**	
London Commuting (Network SouthEast)									
South West Trains	Stagecoach	(a) 1996-03 (04) (b) 2004-07	274	347	2%	=1	4.3%	22.1%	
LTS Rail (c2c)	(Prism to 2000) National Express	(a) 1996-11	54	85	3%	=3	7.6%	14.0%	
South Central *(Southern)*	(Connex to 2001) Go-Ahead/Keolis	(a) 1996-03 (b) 2003-09	179	281	5%	=3	4.2%	23.7%	

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Chiltern Railways	Laing	(a) 1996-03 (b) 2003-21	29	45	8%	4	10.5%	35.7%	Refranchised early
South Eastern	*(Connex to 2003)* SRA Govia (from 2006)	(a) 1996-11 *(06)(03)* (b) 2004-06 (c) 2006-12/14	256	382	7%	=5	3.1%	-2.6%	Franchise revoked, 2003. To Integrated Kent franchise
Thames Trains *(FGW Link)*	(Go-Ahead to 2004) First Group	(a) 1996-04 (b) 2004-06	64	104	10%	=5	5.2%	2.5%	To Greater Western
Anglia Railways	First (formerly GB Railways)	(a) 1997-04	42	84	12%	=6	8.3%	46.4%	To Greater Anglia
Great Eastern	First Group	(a) 1997-04	129	164	5%	=6	3.7%	29.0%	To Greater Anglia
West Anglia/Great Northern	*(Prism to 2000)* National Express	(a) 1997-04 *(/Great Northern 06)*	131	195	11%	=6	6.1%	14.1%	West Anglia to Greater Anglia; Great Northern to go to new (FirstGroup) Thameslink franchise
Greater Anglia *('One')*	National Express	2004-11							From Anglia, Great Eastern and West Anglia
North London Railways **(Silverlink)**	National Express	(a) 1997-04 *(07)*	61	114	10%	=8	5.1%	13.4%	Inner London (metro) services to new franchise managed by Transport *for* London; others to West Midland franchise
Thameslink	Go-Ahead/Keolis	(a) 1997-04 *(06)*	88	100	8%	=8	7.1%	14.9%	To FirstGroup Thameslink franchise (06)
London sub-total					**6%**		**4.7%**	**16.2%**	

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Regional: Non-South-Eastern Conurbation and Rural Railways									
Cardiff	(Prism to 2000; National Express)	(a) 1996-04	7	29	19%	=5	-		Dovetailed into Wales & Borders franchise by NE
Wales & Borders *(Arriva Trains Wales)*	*Arriva*	2003-2018							Services from Cardiff, North Western, Central Trains franchises
South Wales & West *(*Wessex)	*(Prism to 2000)* National Express	(a) 1996-04 *(06)*	48	135	14%	=5	-		To Greater Western
Island Line	Stagecoach	(a) 1996-01 (03) (b) 2004-07	1	3	na	=5	na	9.2%	To South Western
Cross-Country *(*Virgin Cross Country)	Virgin Trains	(a) 1997-12 *(07)*	122	242	11%	=6	5%	75.3%	Renegotiating contract
MerseyRail	*(MTL to 2000; Arriva to 2003)* Serco/NedRailways	(a) 1997-03 (b) 2003-28	23	82	17%	7	1.7%	-3.6%	Management contract until refranchised in 2003
RR North East **[Northern Spirit] Arriva Northern**	*(MTL to 2000; Arriva to 2004)*	(a) 1997-04	76	294	16%	=8	1.5%	5.7%	To TransPennine and Northern Rail franchises
North Western	First Group	(a) 1997-04	53	251	19%	=8	1.4%	5.9%	To TransPennine, Northern, Wales & Borders franchises
Northern Rail	Serco/NedRailways	2004–2011/13							
Central Trains	National Express	(a) 1997-04 *(06)*	78	259	13%	=8	3.0%	13.1%	To West Midlands, East Midlands, Cross-Country franchises

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ScotRail	(National Express) First Group	(a) 1997-04 (b) 2004-11/14	118	363	10%	10	2.6%	9.3%	
TransPennine	First/Keolis	2004-12/17				na	-		New franchise
Regional sub-total					**13%**		**3.2%**	**17.2%**	
Total: all franchises					**7%**		**3.7%**	**17.7%**	

* The average improvement is defined as the change in subsidy over the period to 2002/03, divided by the number of years, relative to the 1996/97 turnover.

‡ Where train-km are low, the estimate of change is especially subject to the degree of precision with which the mileage is reported in each year.

Sources: Kain 1998, Rail Business Intelligence (Issues 162, "£1m/week failed to deliver" p. 5; 166, "Refranchising will eliminate losses" "Cost plus piles up problems" p. 10; 172, "Anglia latest for intensive care" p. 5; 179, "SRA rescues Virgin franchises" p. 1; 183, "GB rebuffs bid" "NEG hit by subsidy profiles" "Regional woes threaten SRA budget" pp. 7-8; 195, "Savings elusive in fixed-cost franchises" p. 5; 201,"SRA clears the way for integrated Kent franchise", p. 1; 240, "Why the franchise was terminated" p. 1).

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Table 4. **British Franchise Operating Parameters (£m, nominal)**

	1997/98	1998/99	1999/00	2000/01	2001/02	% change, 1997/98 to 2001/02
1. Staff costs	869	876	934	1 026	1 110	27.7
2. Other costs	995	1 070	1 068	1 181	1 210	21.6
3. Rolling stock charges	811	794	782	798	927	14.3
4. Sub-total of costs	**2 675**	**2 740**	**2 784**	**3 005**	**3 247**	**21.4**
5. Access charges	2 107	2 135	2 133	2 096	2 135	1.3
6. Total operating costs	4 782	4 876	4 917	5 101	5 382	12.5
7. Passenger revenue	2 821	3 089	3 368	3 413	3 548	25.8
8a. Revenue support grants* (contract)	1 843	1 557	1 350	1 193	1 086	-41.0
8b. Revenue support grants* (actual)	1 804	1 533	1 343	1 130	1 037	-42.5
9. Total operating revenue (tickets plus subsidy) (7+8b)	4 625	4 622	4 711	4 543	4 585	-0.6
10. Net operating revenue (9-6)	-157	-254	-206	-558	-797	507.6
11. Operating ratio (6/9)	103.4	105.5	104.4	112.3	117.4	13.5
12. Staff numbers (Bid)	37 466	37 538	33 514	32 750	33 376	-10.9
13. Staff numbers (Actual average)	39 721	39 397	39 187	40 151	43 027	+8.3

* Central Government and PTE grants.

Source: Derived from data in SRA 2003, pp. 49-51.

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Table 5. **Victorian Franchise Parameters (1999 terms)**

Franchise	Franchisee	Operation	Franchise term	Patronage growth by 2014*	Revenue growth			Subsidy ($A m)		Net Present Value (NPV) of subsidies (A$ m)		
					2000-1	2000-5	2005-14	2000-1	2014	Fixed subsidies	Volume-based subsidies	Total
Bayside Trains †	National Express	Melbourne	15 years	+84%	15.5%	+64% (10.4%pa)	+29% (2.9%pa)	83	-19	354	353	707
Hillside Trains ‡	Connex	Melbourne	15 years	+64%	15.8%	+45% (7.7%pa)	+20% (2.0%pa)	91	25	612	259	880
V/Line Passenger	National Express	regional Victoria	10 years	+74%	na	na	na	78	46	476	98	574

* Patronage growth during the 1990s was between 1% and 2% per annum.

† In addition, the franchisee committed to $A400 million in new rolling stock; $A70 million in stock refurbishments; $A260 million in track upgrading (including extensions of electrification); and $A27 million miscellaneous investment.

‡ In addition, the franchisee committed to $A314 million in new rolling stock and $A75 million in stock refurbishments.

Sources: Mees (2005, p. 438, 448); Department of Infrastructure (2005, p. 9); Ehrhardt and Irwin (2004, p. 16); Productivity Commission (2001, p. 46); International Railway Journal (1999).

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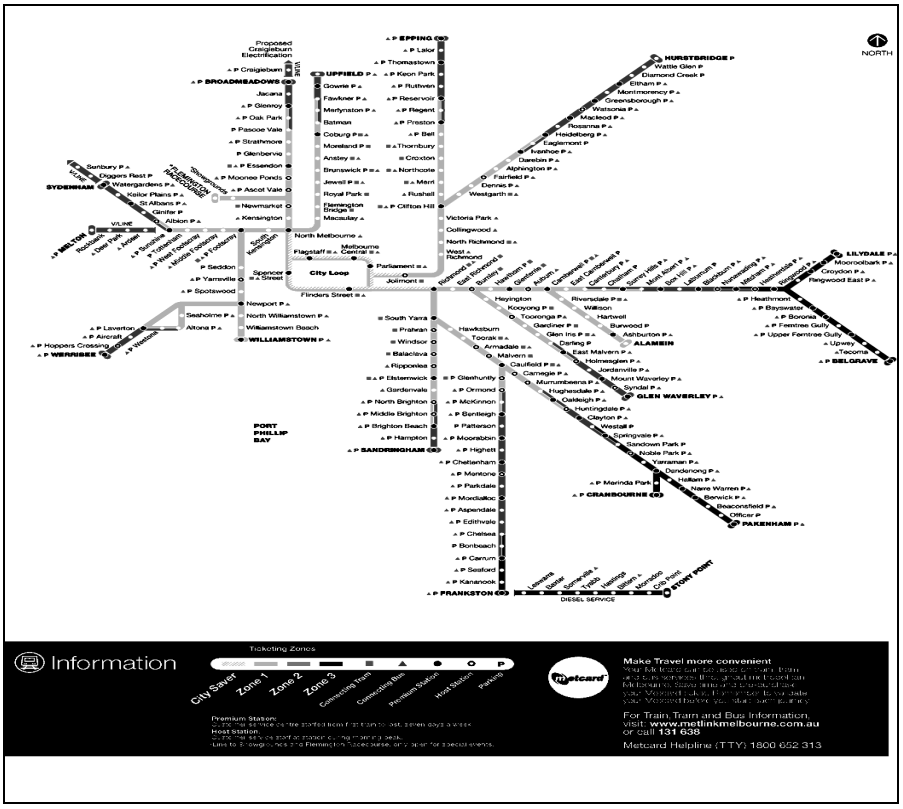
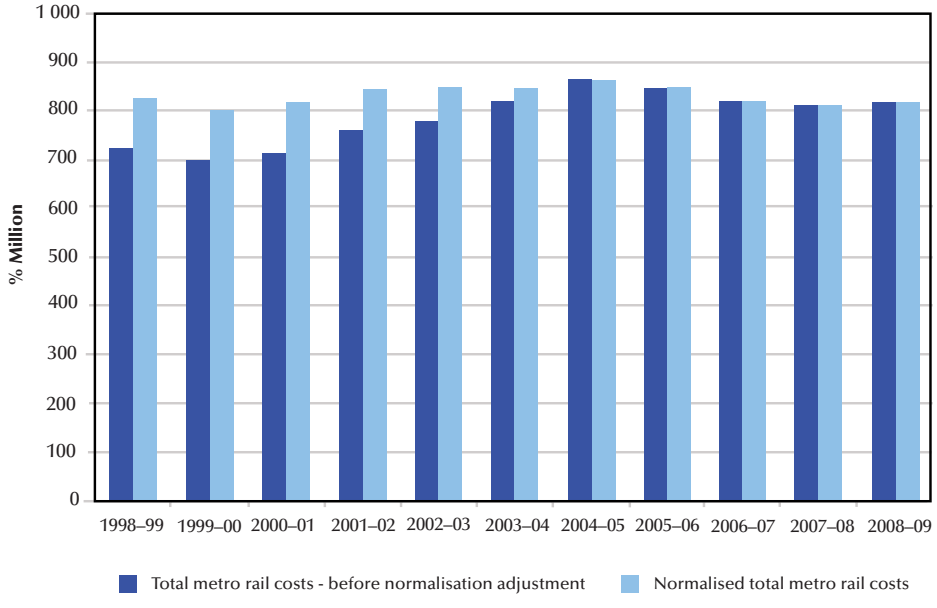
Figure 6. **Melbourne Urban Passenger Railways**



Source: *Metlink*, www.metlinkmelbourne.com.au/images/maps/metro_train_map_fullscale.gif.

Figure 7. **Total Cost of Operating Melbourne's Trains and Trams (AUD million per year)**



Source: Auditor General Victoria 2005, p. 24.

NOTES

1. NERA 1993, (p. 3) discusses this distinction further.

2. The director-general made this comment in March 2002 following the announcement that government would bail out two franchises. (*The Financial Times*, 7 March 2002).

3. Principal–agent problems can arise when one party (the agent) undertakes work on behalf of another (the principal). The agent may have no incentive to maximise efficiency if poor productivity cannot be substantiated or can only be proven at high cost. Where the potential for this problem is significant, an important discipline is to make the agent bear the risk.

4. This same product attribute–rather than economies of scale–underlies cable television monopolies. See Viscusi, et. al. 2000, p. 414. The same non-scale economy characteristics enable cable and train operations to be apportioned between firms along geographical lines without losing efficiencies.

5. At the time, Welsby was Chairman and Chief Executive of the British Railways Board while Nichols was its Director of Policy.

6. This "English" auctioning is based on bidding up the price; in "Dutch" auctioning, a standing price is announced, the price is then lowered and the winning bidder is the first person to bid a price.

7. ...but without the winning increment, unless the franchisor adds such a margin as part of the design.

8. For completeness, I note that Demsetz also states an (to him, important) assumption that the bidders do not collude, being discouraged by prohibitively high costs of so doing. This appears not to be an issue for train franchises so I do not place emphasis on it. (Demsetz 1968, p. 58).

9. For Britain, in any case, employees have employment protection regulations that ensure that employees are transferred across successor organisations, under TUPE–the Transfer of Undertaking (Protection of Employment) Regulations 1981.

10. Of course, incumbency can work against the firm, when the firm has performed poorly.

11. Bowker (Hansard 26 Nov 2002, para. 143) says that 40% of the fares are regulated with the formula RPI-1 (or, more generally, RPI-x, where x may be a positive or negative number).

12. The demand for some journey purposes and locations–notably, "saver" tickets and London commuting–are regarded as price-inelastic. The tickets for these flows are therefore subject to a regulatory price cap. Other journeys are regarded as discretionary and therefore price-elastic.

13. Or, in some cases, premium back to the government. For instance, the Gatwick Express franchise contract involved a premium from the outset.

14. As NERA & TIS.PT (2001, p. 235) note, the nature of public transport demand is that certain groups of passengers are captive to the service as they have no feasible alternative transport modes. Thus, a poor service can be provided but patronage/revenue will not decline significantly as the cost savings.

15. Moral hazard behaviour arises when the presence of a contract between two parties leads one party to alter its behaviour. For instance, where a person is insured against a given incident, the person may respond by

taking more risks, e.g., when the person insures themselves against theft, they may be less inclined to lock up their house.

16. The costs arising from businesses reverting to the government after failing to agree to a contract can be considerable and, depending on the contract, can far exceed just re-contracting costs. For instance, the British government was forced to restructure its PFI contract with London & Continental Railways (LCR) when LCR announced it could not fulfil the terms of its contract with the government. Had the contract been rescinded, government would also have acquired LCR's very substantial accumulated business losses and financing costs. See Kain 2002, pp. 56-57.

17. Such as have been adopted in some bus service tenders, such as London Buses and TransAdelaide services in Adelaide. Here, the cost risk is transferred to operators; the revenue risk is retained by London Buses (albeit that an operator may be given financial incentives to try to encourage patronage). See Toner 2001, p. 7.

18. Although we noted earlier Affuso and Newbury's research, suggesting that the shorter-term can also encourage investment by encouraging compliance and desire to show commitment to the business.

19. By way of example, when in 2002 Connex renegotiated the financial terms of its South Eastern franchise, the penalty was a much-shortened franchise term.

20. The framework for the restructuring and privatisation of BR operations was outlined in the 1992 White Paper, "New opportunities for the railways" (Cm 2012).

21. We should note, however, that rail fares overall (regulated plus unregulated) rose faster than inflation between January 1997 and January 2003 (SRA 2003d, p. 23).

22. That said, in the light of the prevailing economic conditions at the time of the bidding, we should not then assume that the revenue projections had been conservative. It is also relevant to note here that "The architects of rail privatisation did not anticipate the continuing growth in traffic from 1996" (SRA 2003, p. 56).

23. Access charges are excluded here as these are mostly invariant with traffic, and so are difficult for the TOCs to reduce. Similarly, rolling stock costs are largely outside of the TOCs' ability to vary much–though we observe in Table 4 that these stock costs rose significantly during this period. The increase in the staff, "other" and rolling stock charges for all TOCs was 21.4%–not far below the revenue growth rate but well below the decline in subsidy (rows 4 and 8b of Table 4).

24. We should also note that franchise revenue performance was also challenged by fare regulation. The price of 46% of rail tickets was capped at the rate of inflation for the first three years of franchising and then at one percentage point below the rate of inflation for the next four years.

25. Having the rolling stock leased reduces the capital requirements needed for entry into franchising; incumbent ownership of stock would also result in the incumbent having an advantage over rival bidders. However, we should note that TOCs have purchased their own stock in recent years.

26. See DETR 1998; also see the measures contained in the Transport Bill submitted to the House of Commons on 1 December 1999.

27. By the time Phase III policy was introduced in 2002, the Chiltern franchise had already been awarded while the TransPennine Express and Wales & Border competitions were "sufficiently advanced that they will remain on their current path" (SRA, *The Strategic Plan 2003*, p. 65).

28. For instance, by that time staff numbers were already 23% higher than bid projections, that is, TOC financial performance was already seriously adrift of plans. NAO (2005, p. 23) states that between 2000 and 2003, four TOCs were given additional subsidy due to the "adverse impact" of the disruption following the Hatfield accident on passenger income. Given the financial improvements required for the TOCs shown in Table 2**Error! Reference source not found.**, it is assumed this means *further* supplementary income.

29. Contracts with profit sharing may have different cost and revenue incentives. For instance, with the 2004–07 South West Trains franchise has relatively strong incentives to make marginal cost savings but only small incentives for revenue growth: the TOC retains 50% of greater-than-forecast cost savings but retains only 12.5% of greater-than-forecast revenue growth.

30. On this, the November 2002 policy statement comments about the earlier franchising that "the extent to which risk, in relation to costs and revenue, has in reality transferred to the private sector, is therefore questionable".

31. This point fails to recognise that a properly congestion-responsive track access charge could have been set so as to avoid this congestion–rather than set capacity allocation by administrative fiat.

32. An example of SRA's involvement in financial oversight of TOCs was SRA's decision in 2003 to revoke Connex's South Eastern franchise due to failings in the company's financial systems and controls (after those systems were put in place in exchange for the TOC being given additional subsidy.

33. See *Local Transport Today*, 7 November 1996, p. 11.

34. In the current franchising process, the track record accounts for 66% of the marks in the pre-qualifying assessment. (Modern Railways 2006, p. 24).

35. While recognising this, we do note that the bid assessment of the InterCity East Coast competition in 2004–05 contains what can only be regarded as implausible revenue projections. With current train loadings averaging upwards of 50%, *Rail Business Intelligence* calculated that an equivalent load factor of 90% would be required for the winning bidder's revenue projections to be realised. (RBI 243, "Sea Containers wins on growth", p. 6) See also p. 87 for a discussion of risk sharing in this franchise. It should also be noted that the winning bidder won on a basis of an NPV premium margin of £500 million–which should have led assessors to consider its plausibility. (Rail Business Intelligence 2005, Issue 245, p. 7).

36. Jupe and Crompton (2006, forthcoming) cite Foster (advisor to the then-Transport Secretary) as saying that "the number of TOCs was determined 'fairly pragmatically', ... indicating that the standard size and cost was kept down in the interests of successful auctions".

37. Eventually, after political intervention, this bar was removed during the franchising process. By this time, however, BR management had decided not to pursue any bids.

38. In 1997, the largest franchise operators (by number of franchises) were National Express (with 5) and Prism (with 4); in 2003, the equivalent operators were National Express (with 8) and First (with 4). New operators since the original franchising include Arriva (taking over MTL operations) and Serco and Dutch railway operator, NedRailways (operating MerseyRail and Northern Rail).

39. Crompton and Jupe (2004, p. 8) report that in Phase I franchising The Treasury had favoured 3 to 5 year terms.

40. Welsby, being BR Chairman at the time of Phase I franchising, might be assumed to provide authoritative insight.

41. Of course, the very reliance on economic growth to drive up revenue is, in itself, a significant risk. For instance, in the recession of the early 1990s, South West Trains lost almost 20% of its ridership (*Modern Railways*, January 1996, p. 17).

42. ... and currently around 70% fixed.

43. In Table 4, it is evident that rolling stock costs rose belatedly. This reflects the slow ordering of new stock and the protracted construction and commissioning process. Leasing costs from 2002/03 forwards are considerably greater than those for earlier years. For instance, for its new 3-year, South West Trains refranchise, Stagecoach is receiving around three times its previous annual subsidy, a substantial part of which funds the new rolling stock that will replace much of the TOC's fleet of "slam-door" trains. (Modern Railways 2003, p. 19).

44. … and, some have suggested, skilled workers and unions playing off one TOC against another, to increase wages.

45. Staff numbers were reduced *prior* to franchising. For the period of the franchise awarding (February 1996 to April 1997) I assume that there was no significant change to staffing, although I note that a number of train drivers from first franchise to be awarded, SouthWest Trains, were offered and accepted voluntary retirement packages in early 1997. However, most TOCs were franchised during 1996-97 and so (as SRA 2003 implicitly assumes), I am content to assume that the 1997-97 staff levels are indicative of the levels assumed in the bid plans.

46. The relationship between a change in train-kms and patronage change is noteworthy. TOCs shared revenue of "inter-available" ticketing (tickets valid for use on multiple TOCs); a principal determinant of the revenue split for these tickets is the relative service frequency of each TOC serving the relevant station origin–destination pairs. Thus, a strategy for a TOC to increase its revenue share is to increase its service frequency; this strategy might be relatively inexpensive to the extent that the 1996-2001 access charges had very low costs for track access beyond PSR service levels. Thus, TOCs had strong incentives to operate additional services–see column (10) of Table 3 train capacity has been supplemented by *extra* trains rather than *longer* trains. However, given the increase in staff costs (Table 4), it may be the case that the non-access-charge costs were not low. This has had significant impacts on track congestion, leading SRA in 2003 to adopt a Capacity Utilisation Policy, with specified service levels. At around the same time, the Rail Regulator has restructured access charges to make them more responsive to increased congestion.

47. This was certainly a problem with the structure of access charges prior to the April 2001 charges restructuring.

48. Even if the concept of performance regimes was robust, its efficacy depended on the right benchmarks for bonus or penalty being set at the outset. In any case, it seems that the transaction costs of running the scheme (the costs of performance monitoring and attribution) are very significant. Another mechanism used to encourage service quality delivery was to use an RPI-X mechanism to set a higher "X" for TOCs that were not delivering punctual and reliable services.

49. Although ROSCOs sought long leasing agreements. Further, the subsequent greater appreciation of industry risks has even led franchises to purchase their own stock, e.g., First Group's purchase of "HST" train sets in 2004. (RBI 2004, 7 October).

50. In December 2005, Stagecoach (operator of the South West Trains and Island Line franchises) stated that it was unlikely to win the new Integrated Kent, Thameslink or Greater Western franchises, saying that "bidding was at such a "fever pitch" that prices had reached unreasonable levels" (The Guardian 2005).

51. This point was acknowledged by SRA. TOCs receive additional subsidy through "agreements to provide additional support to ensure continuity of train services" (SRA 2003, p. 47) This interest is arguably

stronger than other franchising, such as television licensing, as train service customers are more severely influenced by train service disruptions than television channel problems.

52. By way of example, the three-year South West Trains franchise, awarded in 2003, incorporates profit-sharing. This seeks to use the source of the additional profit as an incentive lever: "With SRA concerned to cut overcapacity and cut costs, the profit-sharing deal differentiates between revenue gains and cost savings. For additional revenue earned above the level in the franchise plan SRA will receive 87.5%, but cost savings are shared equally. (RBI 2003, No. 202, p. 1).

53. By way of example, the NPV of premium payments for the first four years is 19% of the total 10-year payments, while the NPV of the last three years represents 47% of the payments.

54. See, also, endnote 35, which provides an example of the implausibility of the revenue projections.

55. Where profit-sharing is applied, such as the current SWT franchise, there is also cost risk sharing.

56. In one instance, on 25 March 2003, it was reported that the SRA would compensate TOCs for the cost of a train guards' walk-out: "We will not let the train companies take a financial hit on this because it is not within their power to stop it"; SRA argued that the walkouts were not justified. (*Ananova*, http://www.ananova.com/news/story/sm_764521.html?menu=).

57. The "Passenger Growth Incentive Regime". The operator would receive the equivalent of 50% of the fare for all passengers carried above a specified level of patronage.

58. Stagecoach indicated its intention to bid for the franchises (*The Age* (Melbourne), 24 September 1997).

59. There is no public statement that the split was undertaken in order to have the train operation at a size that could be absorbed by a private company.

60. DOI (2005, p. 15) suggests that the UK had been "the main source of bidders in the original franchising".

61. Welsby and Nichols take a more benign view of the root causes of improvements arising from instituting franchising: "Greater entrepreneurialism does appear to accompany privatisation, but this would appear to have less to do with the respective qualities of management than the substitution of private for public shareholding", particularly (they say) by letting existing managers freedom that would not have been forthcoming under public ownership. (Welsby and Nichols 1999, p. 69).

62. Mees notes that if the Treasury pre-franchising patronage series is used, the pre-franchising growth is around 1% whereas the Auditor-General of Victoria's equivalent value is around 2%–and the latter value is equivalent to the post-franchising average growth rate. (Mees 2005, p. 437).

63. Mees notes that the details of the Victorian franchises were released only after a successful Freedom of Information challenge (Mees 2005, p. 436); a similar FOI challenge was required in 2005 to extract the details of the InterCity East Coast franchise (Rail Business Intelligence 2005, 5 May, p. 7).

64. ...such as the 2005 East Coast Main Line franchise contract.

65. As NERA & TIS.PT (2001, p. 235) note, franchisees are penalised for poor quality through the reduced patronage but to the extent the patrons have no alternative form of transport, revenue loss may well be less than the cost savings. As a consequence, even franchises require additional quality incentives.

REFERENCES

Affuso, Luisa, and Newbery, David 2002, "Investment, reprocurement and franchise contract length in the British railway industry" *Centre for Economic Policy Research, Discussion Paper 2619*.

Affuso, Luisa and Newbery, David 2002, "The impact of structural and contractual arrangements on a vertically separated railway", *The economic and social review* 33, 1, Spring, pp. 83-92.

Affuso, Luisa and Newbery, David 2004, "Case study: the provision of rail services", Paper in Janssen, Maarten C W 2004 (ed.), *Auctioning public assets. Analysis and alternatives*, SEOR, Erasmus Universiteit Rotterdam, Cambridge University Press.

Auditor-General Victoria 2005, *Franchising Melbourne's train and tram system*, www.audit.vic.gov.au/reports_par/ptfranchising_report.pdf.

Bailey, Mark F 2003, "Railway regulation in 19th century Britain: the economic rationale and legacy of Gladstone and Chadwick", University of Ulster (draft of 4 July).

Betts, Jim 2005, "Passenger rail franchising in Victoria", *Presentation to Rail 2005 conference*, Sydney, March.

Chadwick, Edwin 1859, "Results of different principles of legislation and administration in Europe; of competition for the field, as compared with competition within the field of service", *Journal of the Royal Statistical Society* 22, 381-420.

Clark, Emily 1996, "Franchising", *Quarterly Report* May, OXERA Transport Group.

Clark, Rhodri 1998, "Lessons for railways in the High Street", in *Rail 340*, 23 September-6 October, pp. 32-33.

Crain, William Mark and Ekelund, Robert B 1976, "Chadwick and Demsetz on competition and regulation", *The Journal of Law and Economics* 19, 1, April, pp. 149-162.

Crompton, Gerald and Jupe, Robert 2004, "A deficient performance? The regulation of the train operating companies in Britain's privatised railway system" *Working paper No. 66, Canterbury Business School*, University of Kent.

Demsetz, Harold 1968, "Why regulate utilities?", *The Journal of Law and Economics* 11, April, pp. 55-65.

Department for Transport 2000, *Transport Ten Year Plan*, www.dft.gov.uk/stellent/groups/dft_about/documents/pdf/dft_about_pdf_503944.pdf.

Department for Transport 2005, *Transport statistics Great Britain*, www.dft.gov.uk/stellent/groups/dft_control/documents/contentservertemplate/dft_index.hcst?n=14605&l=3.

Department of Infrastructure 2005, *Public transport partnerships: an overview of passenger rail franchising in Victoria*, www.doi.vic.gov.au/doi/doielect.nsf/2a6bd98dee287482ca256915001cff0c/a32ae874bdd49651ca256fb9001270b3/$FILE/Rail_Franchsing_Overview.pdf.

Department of Environment, Transport and the Regions 1998, *A new deal for transport: better for everyone, Cm 3950*. (Transport White Paper).

Ekelund, Robert B and Price, Edward O 1979, "Sir Edwin Chadwick on competition and the social control of industry: railroads", *History of Political Economy* 11, 2, pp. 213-239.

Engel, Eduardo, Fischer, Ronald and Galetovic, Alexander 2002, "Competition in or for the field: which is better?", *Yale University Center Discussion Paper No. 844*.

Ehrhardt, David and Irwin, Timothy 2004, "Avoiding customer and taxpayer bailouts in private infrastructure projects. Policy towards leverage, risk allocation, and bankruptcy", *World Bank, Policy Research Working Paper 3274*.

European Conference of Ministers of Transport 2005, *Rail transport. Railway reform and charges for the use of infrastructure*, CEMT/CM(2005)18.

Ford, Roger 2002, "Franchising–right third time?", *Modern Railways*, December, pp. 16-17.

Foster, Christopher 2004, "Creating a viable railway for Britain - what has gone wrong and how to fix it", Paper presented to meeting of International Consulting Economists' Association, 8 July, www.icea.co.uk/archive/Creating%20a%20viable.doc.

Glaister, Stephen 2005, "Memorandum by Professor Stephen Glaister (FOR 51)", *Submission to House of Commons Transport Committee report, Future of the railway. Seventh report of session 2003-04. Volume II. HC 145-11.*

Goldberg, Victor P 1976, "Regulation and administered contracts", *The Bell journal of economics* 7, 2, pp. 426-48.

Gómez-Ibáñez, José A 2003, *Regulating infrastructure. Monopoly, contracts and discretion*, Harvard University Press, Cambridge MA, p. 45.

Greig, David 2002, "Rail privatisation in Victoria", *Agenda* 9, December, pp. 237-51.

House of Commons 2003, *Hansard*, 15 July, Columns 134-135.

House of Commons Select Committee on Transport, Local Government and the Regions 2002, *First Report. Passenger rail franchising and the future of the railway infrastructure*, http://www.publications.parliament.uk/pa/cm200102/cmselect/cmtlgr/239/23906.htm.

House of Commons Transport Committee 2004, *The future of the railway. Seventh report of Session 2003-04. Volume I. HC 145-1*.

International Railway Journal 1999, "Victoria expects save $A 1.8 Bn with the award of five franchises", August.

Janssen, Maarten C W 2004 (ed.), *Auctioning public assets. Analysis and alternatives*, SEOR, Erasmus Universiteit Rotterdam, Cambridge University Press.

Jones, Ian 1999, "Railway franchising: is it sufficient?", *Paper presented to Institute of Economic Affairs Regulation Lecture (Beesley) Series*, 9 November.

Jupe, Robert and Crompton, Gerald 2006, "'A deficient performance': The regulation of the train operating companies in Britain's privatised railway system", *Critical perspectives on accounting* 17, 2 (February).

Kain, Peter 1981, *A study of Adelaide bus operations in transition, 1967-81*, Unpublished thesis, Flinders University of South Australia.

Kain, Peter 1998, "The reform of rail transport in Great Britain", *Journal of Transport Economics and Policy* 32, 2, pp. 247-266.

Kain, Peter 2002, "Attracting public finance for infrastructure projects: lessons from the Channel Tunnel Rail Link", *International Journal of Transport Economics* XXIX, 1, February, pp. 43-62.

Lewin-Solomons, Shira B 1998, "Autonomy, contractibility, and the franchise relationship", *Working Paper*, University of Cambridge and Iowa State University.

Local Transport Today 1996, "Salmon departs OPRAF with a £1.7 bn bonus for the Treasury", 7 November.

Mees, Paul 2005, "Privatization of rail and tram services in Melbourne: what went wrong?", *Transport reviews* 25, 4, pp. 433-49.

Modern Railways 2002, "Death of the franchise", p. 4.

Modern Railways 2003, "Greater Anglia–franchise replacement gets nasty", May, pp. 17-20.

Modern Railways 2005, "Past imperfect" p. 3; "Franchise remapping–one task too many?", pp. 16-17.

Modern Railways 2006, "Franchising: buy now pay later", pp. 24-26.

Monopolies & Mergers Commission 1987, *British Railways Board: Network South East. A report on the passenger rail services supplied by the Board in the south-east of England*, www.competition-commission.org.uk/rep_pub/reports/1987/216british_railway_board.htm.

National Audit Office 1996, The award of the first three passenger rail franchises, HC 701.

National Audit Office 1996a, *National Audit Office Press Notice 69/96*, http://www.nao.org.uk/pn/9596701.htm.

National Audit Office 2005, *The South Eastern Passenger Rail Franchise*, http://www.nao.org.uk/publications/nao_reports/05-06/0506457.pdf.

NERA 1993, "Franchising passenger railway services", *NERA Topics (Occasional paper series)*.

NERA 1995, "Franchise auctions in uncertain market conditions–a toolbox of techniques", *NERA Topics (Occasional paper series)*.

NERA & TIS.PT 2001, *Models for the provision, regulation and integration of public transport services. A final report for the Public Transport Partnership Forum* (Ireland), http://www.transport.ie/upload/general/2575.pdf.

NERA 2004, "Encouraging bidding in the single licence National Lottery framework. *A final report to the National Lottery Commission*, http://www.natlotcomm.gov.uk/uploadedfiles/Enouraging%20bidding%20in%20the%20single%20licence.pdf.

Office of Passenger Rail Franchising 1996, *Passenger rail industry overview*, June.

Office of Passenger Rail Franchising 1997, *Annual report 1996/97*.

Prager, Robin A 1990, "Firm behaviour in franchise monopoly markets", *RAND Journal of Economics* 21, 2, Summer, pp. 211-225.

Preston, John 1996, "The economics of British Rail privatization: an assessment", *Transportation Reviews* 16, 1, pp. 1-21.

Preston, John 2001, "Franchising and refranchising of passenger rail services in Britain", *Transportation Research Record 1742, Paper No. 01-2425*.

Productivity Commission 2001, *Progress in rail reform*, http://www.pc.gov.au/inquiry/rail/finalreport/index.html.

Rail Business Intelligence (RBI) (various issues), *A Railway Gazette Newsletter*, Reed Business Information.

Riordan, Michael H and Sappington, David E M 1987, "Awarding monopoly franchises", *American Economic Review* 77, 3, pp. 375-387.

Select Committee on Transport, Local Government and the Regions 2002, *First Report. Passenger rail franchising and the future of railway infrastructure*, http://www.publications.parliament.uk/pa/cm200102/cmselect/cmtlgr/239.

Select Committee on Transport 2002, *Minutes of evidence, 26 November*, http://www.publications.parliament.uk/pa/cm200203/cmselect/cmtran/125.

Select Committee on Transport 2003, *Minutes of evidence, 26 February*, http://www.publications.parliament.uk/pa/cm200203/cmselect/cmtran/201.

Select Committee on Transport 2003, *Fourth Report*, http://www.publications.parliament.uk/pa/cm200203/cmselect/cmtran/782.

Shaw, Jon 2000, *Competition, regulation and the privatisation of British Rail*, Ashgate, Aldershot.

Strategic Rail Authority 2002, *Franchising policy statement*, November.

Strategic Rail Authority 2003c, *Annual Report 2002-03*.

Strategic Rail Authority 2003, *The strategic plan. Platform for success*. http://www.railwaysarchive.co.uk/documents/SRA_StratPlan2003.pdf.

Strategic Rail Authority 2003a, *Fares Review Conclusions* 2003.

Strategic Rail Authority 2003b, *The wider case for rail*.

Strategic Rail Authority 2003d, *National rail trends*.

Strategic Rail Authority 2004, *InterCity East Coast franchise. Stakeholder briefing document*.

The Daily Telegraph 2003, "Bumpy ride on Bowker's runaway train", 2 August.

The Guardian 2003, "FirstGroup anger at loss of franchise", 2 April.

The Guardian 2004, "When the best isn't good enough", 15 March.

The Guardian 2005, "Stagecoach turns away from pricey rail franchises", 8 December.

Toner, J 2001, "The London bus tendering regime. Principles and practice", Paper presented at *7th International Conference on Competition and Ownership in Land Passenger Transport ("Thredbo7")*, Molde, Norway, 25-28 June.

van de Velde, Didier 2003, "Regulation and competition in the European land transport industry: some recent evolutions", Paper presented to *8th conference on competition and ownership in land passenger transport ("Thredbo8")*, Rio de Janeiro, Brasil, 14-18 September, http://www.few.eur.nl/few/people/vandevelde/download/t8_european_trends_keynote_vdvelde.pdf.

Government of Victoria 1998, *Submission to the Productivity Commission's inquiry into progress in rail reform. Submission 82*, 26 November.

Viscusi, W Kip, Vernon, John M and Harrington, Jr, Joseph E 2000, *Economics of regulation and antitrust, Third edition*, The MIT Press, Cambridge, Massachusetts.

Welsby, John 1997, "What next in UK railways?" at *The Institute of Economic Affairs and London Business School, Lectures on Regulation Series VII*.

Welsby, John and Nichols, Alan 1999, "The privatisation of Britain's railways. An inside view", *Journal of Transport Economics and Policy* 33, 1, pp. 55-76.

Williams, Robert, Greig, David and Wallis, Ian 2005, "Results of railway privatisation in Australia and New Zealand", *The World Bank Group. Transport Papers*.

Williamson, Oliver E 1976, "Franchise bidding for natural monopolies–in general and with respect to CATV", *Bell Journal of Economics* 7, Spring, pp. 73-104.

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ABBREVIATIONS

AFI	Annual Financial Improvement
BOT	Build, Own and Transfer
BR	British Rail
CEO	Chief Executive Officer
CER	Community of European Railway and Infrastructure Companies
CN	Canadian National Railway Company
CPTA	County Public Transport Authorities
CUP	Capacity Utilisation Policy
DB AG	Deutsche Bahn AG (German Railways)
DfT	Department for Transports
DOI	Department of Infrastructure
DSB	Danish State Railways
EWS	English Welsh and Scottish Railway (freight operating company)
GDP	Gross Domestic Product
GNER	Great North Eastern Railway
GOVIA	Partnership of Go-Ahead and Keolis (train operator)
ITC	Independent Television Commission
MBO	Management Buy Out
MTL	Rail subsidiary of MTL Holding (operator of Merseyrail services)
NAO	National Audit Office
NEG	National Express Group
NERA	National Economic Research Associates
NPV	Net Present Value
NR	Network Rail
NS	Dutch National Carrier
OPRAF	Office of Passenger Rail Franchising
PSR	Passenger Service Requirement
PTC	Public Transport Commission
PTE	Passenger Transport Executive
RBI	Rail Business Intelligence
ROSCO	Rolling Stock Leasing Companies
RRPS	Regional Rail Passenger Services
SJ	Swedish State Railways
SRA	Strategic Rail Authority
TOC	Train Operating Company
WAGN	West Anglia Great Northern