

Annex 13

Estimates of the Intangible Value the Value of Attaining Mail by Entrants and Retaining Mail by Royal Mail

ESTIMATES OF THE INTANGIBLE VALUE THE VALUE OF ATTAINING MAIL BY ENTRANTS AND RETAINING MAIL BY ROYAL MAIL

Executive summary

This paper supplements the royalty rate approach previously submitted to Postcomm as evidence in support of an intangible value in the opening RAB for Royal Mail. The royalty rate approach primarily focused on the ‘rule of thumb’ commonly used to assess the rates a third party may be willing to pay to use the brand of Royal Mail. This approach gave an estimate of £1.2bn for the intangible value of Royal Mail and is documented separately in a report by Brand Finance and in the Royal Mail’s January 2005 submission to Postcomm.

This paper illustrates two approaches which use information specific to the postal sector. In the first approach it assesses the ‘cost of entry’ measured by the discount on Royal Mail prices necessary for entrants to *attain* market shares; this uses information of the UK postal sector from the switching functions obtained from customer surveys and used by Royal Mail within its Entry Pricing Model. In the second approach it assesses the ‘cost of entry’ measured by the benefit to Royal Mail’s cash position of *retaining* market share; this uses information of the size of the transferable market from the UK postal sector together an estimate of the overall long-run cost elasticity for Royal Mail. The analysis is illustrative rather than based on a model.

The paper indicates an intangible value of at least £1.3bn (and potentially as much as £2.6bn¹) within the RAB based on the ‘cost of entry’ measured by the discount on Royal Mail prices necessary for entrants to attain market shares.

It also indicates an intangible value of more than £1.3bn within the RAB (if not addressed elsewhere within the price control) as a means of ensuring the financial viability of the universal service provider in the presence of competitive ‘by pass’ entry capturing more than about 20% of the market share, based on the ‘cost of entry’ measured by the benefit to Royal Mail’s cash position of *retaining* market share. The adverse effect of the financial viability of in particular ‘bypass’, but also potentially ‘access’ if the access prices are not set at the appropriate level, has been well documented in the economics literature of the postal sector².

¹ This figure marginally reduced to £2.3bn with the EPM phasing of the transfer from start to end switching functions.

² See, for example, 2002, De Donder P, Cremer H, Rodriguez F, ‘Funding the Universal Service Obligation under Liberalisation: An Analysis of the Postal Sector’ in ‘Postal and Delivery Services: Pricing, Productivity, Regulation and Strategy’ edited by M.A Crew and P.R. Kleindorfer, Boston, MA: Kluwer Academics Publishers and 2004, De Donder P, Cremer H, Rodriguez F, ‘Access Pricing and the Uniform Tariff in the Postal Sector’ in ‘Competitive Transformation of the Postal and Delivery Sector’ edited by M.A Crew and P.R. Kleindorfer, Boston, MA: Kluwer Academics Publishers.

1. Introduction

Postcomm's June 2005 document states:

“To the extent that brand value is useful to Royal Mail then it enables it to retain more customers in a competitive market than would otherwise be the case” (7.68) 2005).

This paper illustrates two approaches to calculating the potential intangible value of Royal Mail, firstly from the perspective of the discounts entrants would be required to offer to *attain* mail volume and secondly from the cash benefit to Royal Mail for *retaining* mail volume. The paper provides preliminary estimates of both values. It also provides some further insight into the management of risk.

2. An approach from entrants' perspective.

This approach evaluates the reduction on Royal Mail prices for an equal quality offering necessary for entrants to capture market share from the incumbent. It uses the switching functions for direct mail, bulk mail and 'other' mail that are used in the Entry Pricing Model (EPM).

For an equal quality offering the switching functions indicate the reduction on Royal Mail prices necessary for entrants to capture certain percentages of the market. Indeed, for 'bulk mail and other mail, the switching functions are such that a certain proportion of mail are not transferable and remain with Royal Mail, irrespective of the price offering.

The calculation commences by segmenting each of the three markets into 10 equal segments and then identifies the discount on the revenue in each segment necessary for the entrant to capture that share of the market.

This is actually applied to two switching functions, one for start of market opening and one for the end. It is assumed that over the period of time from start to finish the entrants gain their own reputation as market players and hence offer less substantial discounts to retain and capture a segment of market share.

The approach establishes the discount that the entrant requires to make to capture 10% of market share each year for up to N consecutive years up to the point at which it has captured all of the market share that is transferable, and commencing with the share with the least discount. It is also assumed over this period of N years that the switching function transfers gradually from the state to end switching function.

The net present value of the sum of discounts over the N years provides an estimate of the value in terms of Royal Mail future revenues that an entrant needs to offer to capture the whole of the transferable market share from Royal Mail over a N year period. As such it represents an estimate (subsequently referred to as the 'main' estimate) of the intangible value of Royal Mail.

There are several assumptions that can affect the result including:

- (a) period assumed to capture the transferable market (N);

- (b) transfer from the start to end switching functions;
- (c) discount rate,

and it is noted that the value increases as the period N is decreased because the entrant's same discounts are 'present valued' over a shorter period.

However, perhaps the most critical one is the assumption of the end switching function. For the main estimate the entrant is still required to offer a significant discount on Royal Mail prices in year N even for the first 10% of the market that was captured by the entrants in year 1. This may be consistent with the EPM but may overstate the offer requirements of the entrants to retain mail. As a sensitivity, we assume that, after three years with entrants, a customer would remain with the entrant on an equal price and quality offering, thereby no longer offering a discount on Royal Mail's price for that sector (and is subsequently referred to as the supplementary case). This effectively says that the intangible value of Royal Mail within a particular segment is zero after three years with an entrant.

For the application to Royal Mail we assume the total revenue for direct mail, bulk mail and non-bulk mail is £5.1bn. We also assume the period to capture the transferable market (N) is 10 years, the transfer from the start to end switching functions applies linear weights and the discount rate is 10%. On this basis the approach derives a value of £2.6bn³ as the main estimate and then £1.3bn as the supplementary estimate.

3. An approach from Royal Mail's perspective

This approach is similar to the entrant approach, but instead focuses on the value to Royal Mail of retaining volume. In this approach, the base calculation assumes that all transferable mail (about 80% from the switching functions) moves to the entrant in year N.

For illustration we consider a static model (i.e. N=1) without access. We assume that Royal Mail's revenues would reduce by about 80%. However, its costs would reduce by less (we assume 50%⁴ though it could less) owing to the fixed network costs. This would lead to a significant loss. For example, if revenues and costs were initially £5.1bn, post-entry revenue would be about £0.9bn and costs about £2.6bn. The difference in cash flow is then about £1.7bn. If there was complete loyalty for Royal Mail such that no mail transferred to entrants then the value of retaining that mail compared to losing it all would be about £1.7bn. Conversely, if entrants take about a 80% share of the market, the Royal Mail's intangible value would be zero. The greater is the retention of market share by Royal Mail, the higher is the value of loyalty, and intangible value.

The introduction of access complicates and significantly affects the illustration because different access pricing rule could apply and different shares of transferable mail between entrant bypass and access. For illustration we assume that the access price that covers cost is 2/3rd of the Royal Mail end-to-end price and that the 50% of

³ This figure marginally reduced to £2.3bn with the EPM phasing of the transfer from start to end switching functions.

⁴ Assuming a cost elasticity of 0.6.

the transferable mail moves to entrant bypass and 50% of the transferable mail moves to access.

Developing the illustration with access, if revenues and costs were initially £6bn pre-entry, post-entry the Royal Mail revenue would be about £0.9bn from the end-to-end market plus £1.4bn from the access market (i.e. $0.66 \times 0.41 \times 5.1$); that is £2.3bn. The costs would be £5.1bn less the costs of £0.7bn avoided by access less the costs of £1.3bn avoided by by-pass (e.g. $0.41 \times 0.6 \times 5.1$); that is £3.1bn. The central estimate of the value of retaining mail would be about £0.8bn (i.e. £3.1bn-£2.3bn), within a range of £0-£1.7bn depending on the proportion of transferable mail that moves to bypass.

The adverse effect of the financial viability of, in particular ‘bypass’ (but also potentially ‘access’ if the access price is not set at the appropriate level) has been presented in the Economics literature.

The illustration can then be developed where all of the transferable mail moves to the entrants over N years. For example over a 10 year period, the central estimate would reduce linearly by £0.08bn per annum, thereby creating a value stream in consecutive years of 0.75, 0.67, 0.59, 0.50, etc. For a discount rate of 10% the NPV is £2.7bn.

There are several assumptions that can affect the result including:

- (a) the recovery of unavoided costs for access;
- (b) the share of transferable mail to bypass and access;
- (c) the profile of the transfer over the N years;
- (d) discount rate,

and it is noted that the value increases as the period N is increased because Royal Mail avoids losses through retaining mail over a longer period.

4. Conclusions

Both of the approaches illustrated in this paper consider the valuation of an intangible value for the movement of all transferable mail from Royal Mail to entrants over a 10 year period. The first assesses a ‘cost of entry’ measured by the discount on Royal Mail prices necessary for entrants to *attain* market shares. The second assesses a ‘cost of entry’ measured by the benefit to Royal Mail’s cash position of *retaining* market share.

The two values are different measurements and need not equate to one another. The main estimate for the first approach is £2.6bn⁵ and is marginally below the central estimate of £2.7bn of the second approach. The supplementary estimate for the first approach is £1.3bn and similar to a result using the second approach where about 20% of mail transfers to bypass and about 60% of mail transfers to access.

In conclusion, the illustrative analysis in this paper,

⁵ This figure marginally reduced to £2.3bn with the EPM phasing of the transfer from start to end switching functions.

- (a) indicates an intangible value of at least £1.3bn within the RAB based on the ‘cost of entry’ measured by the discount on Royal Mail prices necessary for entrants to attain market shares.
- (b) indicates an intangible value of more than £1.3bn within the RAB (if not addressed through other components of the price control) as a means of ensuring the financial viability of the universal service provider in the presence of competitive ‘by pass’ entry capturing more than about 20% of the market share, based on the ‘cost of entry’ measured by the benefit to Royal Mail’s cash position of *retaining* market share. The adverse effect of the financial viability of in particular ‘bypass’, but also potentially ‘access’ if the access prices are not set at the appropriate level, has been well documented in the economics literature of the postal sector⁶.

⁶ See, for example, 2002, De Donder P, Cremer H, Rodriguez F, ‘Funding the Universal Service Obligation under Liberalisation: An Analysis of the Postal Sector’ in ‘Postal and Delivery Services: Pricing, Productivity, Regulation and Strategy’ edited by M.A Crew and P.R. Kleindorfer, Boston, MA: Kluwer Academics Publishers and 2004, De Donder P, Cremer H, Rodriguez F, ‘Access Pricing and the Uniform Tariff in the Postal Sector’ in ‘Competitive Transformation of the Postal and Delivery Sector’ edited by M.A Crew and P.R. Kleindorfer, Boston, MA: Kluwer Academics Publishers.