

# **1. An Introduction to the Setting of Postal Tariffs**

## **1. Introduction**

THE Post is one of the organic bases of social relations and consequently, of civilisation. As an indispensable aid to the development of industry and commerce and as the most important agency for disseminating information among the people, it plays a predominant part in the economic life of our nation. The Post Office touches the lives of people more intimately than, perhaps, any other government agency.

Given the vital importance of the Office, it follows that the pricing of its services is a matter of serious concern. It also follows that pricing is only one facet of the economics of post offices. Quality and type of service, the ability to anticipate demand for various categories of postal services, the ability to absorb new technologies in the field of communication and transport, and the capacity to adjust to these and other changes and grow harmoniously are equally important indicators of the economic health of the postal system.

These are all extremely important aspects of the economics of postal services. Unfortunately, however, apart from some studies, and colloquia reports sponsored by the Universal Postal Union and a few other studies there does not exist much analytical/empirical work on these problems. Far too often there has been a tendency to study the problems of postal services within the framework of the theory of public utility services. Even so, such work for the Indian post office is almost non-existent.

While the study of postal problems within the theory of

public utilities has undoubtedly yielded some insights, most practical observers of the postal system would feel that the postal services have sufficient special characteristics to merit independent treatment.

In this report we concentrate mainly on the problems of pricing and related issues of postal services. We study trends in costs and output, efficiency and pricing mechanisms of the Indian Postal Department (IPD).<sup>1</sup> Moreover, we offer suggestions for improvements in the pricing structure by examining the problems of cross-subsidy-free/first best prices and second best prices for a public utility with revenue and equity objectives. Issues relating to demand are taken up within the context of second best Ramsey pricing. An eclectic view of pricing of postal services as a part of general revenue policies of the government is taken in a new approach outlined in this paper. We also offer some ideas on how to improve the data base of the Indian post office so that meaningful research can be carried on on a sustained basis.

In the present chapter we attempt a review of some of the principles of postal tariff fixing that have been discussed in the literature. The emphasis here is on a survey of issues involved and no attempt is made, in particular, to assess the performance of these principles in different contexts.

Broadly speaking, the problem of postal tariff fixing has been considered at two levels. First, there is what we shall call the aggregate or sectoral concern. Second is the more micro concern about pricing of individual items of the postal services and the relationship between such prices. We will discuss each of these issues in turn.

## 2. Aggregate Issues

The principal concern here seems to be whether the post office can "legitimately" earn a return over its cost. It is realised

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1. Henceforth in this text, IPD.

that in most instances the post office has a virtual monopoly over its services. It is possible, therefore, to have a tariff structure that will yield positive profits. The counter argument to this is that postal services are an indispensable tool of mass communication so that benefits from them are typically underestimated. A tariff structure that seeks to earn monopoly profits may stifle demand and thus have adverse effects particularly in a developing country like India. At colloquia organised by the Universal Postal Union, representatives of many countries have argued against the post office earning substantial profits. However, increasingly it is being realised that uncritical acceptance of large subsidies to the post office is also unjustified.

Enlightened post office administrators all over the world favour a postal tariff structure that yields "adequate" revenue and ensures maximum possible traffic. To some extent these goals are conflicting and there does not seem to be a well defined consensus on how to resolve this conflict. In appraising it, however, the following factors should be kept in mind.

If the postal department is, by virtue of the spread of mass communication argument, running large losses, these losses must be adequately justified. The policy maker/budget planner should be convinced that the public funds committed to covering the losses are being made good use of.

Secondly, the spread of mass communication argument should not be allowed to become a cover for inefficiency of the postal system. Unfortunately this has probably tended to happen in the Indian case. However, the nature of the technology of the postal services is such that because of joint production there are substantial economies of scale so that the inefficiency observed in the postal department is of the nature of scale inefficiency. This problem is examined in detail in our discussion of inefficiency in the Indian postal system in Chapter 3.

A general subsidy to the postal services ought to be sharply distinguished from cross-subsidisation within the postal services.

Whereas the former can be justified to some extent in terms of some of the arguments advanced above, it is, as has been argued repeatedly in this report, hard to justify the latter. A wrong pricing structure within the postal services might lead to a misallocation of resources within the postal services and lead to larger losses in the aggregate.

There is a popular fallacy that low postal rates (and hence large postal losses) are beneficial in that they facilitate economic development, while raising them to a level which will cover the real cost of the service, including depreciation and replacement of equipment, is inflationary. It is possible, however, that low rates by distorting demand and upsetting the balance between productivity and the real value of the service to the user, might actually fuel inflation. Similarly, one has to evaluate the inflationary impact of the subsidy given to the post office. The subsidies to postal services may result in a rise in the prices of some other commodities if such subsidies are financed by either increasing commodity taxes or deficit financing. One must also remember that the resulting inflation would penalise non-users as well, hence there would be some kind of inequity built into this.

### **3. Micro Issues**

Under this heading our principal concern is with the structure of prices and costs within the postal department.

Many commentators have observed that costing techniques need to be improved. For instance, there might be too much emphasis on estimated cost functions for calculating prices whereas, in reality it might be difficult to ascribe costs unambiguously. In other words, allocating costs among the various items of the postal service by estimating a cost function might be restrictive.

Several commentators have, therefore, suggested independent methods of allocating costs. For instance, the British administrators conducted periodic sampling to find out the allocation of overall staff hours among various items of the postal services. These percentages were then applied to the relevant salary bill. Similar

conventions were applied to working areas and vehicles, and in this way the costs were allocated. However, this example showed clearly that in a certain sense such information was not very useful because it could be demonstrated that eliminating one of those services had an insignificant effect on overall costs. All that was achieved was the elimination of a source of revenue without achieving a cut in expenditure proportional to that reduction in revenue. In an attempt to get out of this difficulty, a number of experiments were carried out; studies on the longer term evaluation of marginal costs were conducted throughout the UK with very detailed analysis of the work related to traffic levels and flows. A study was commissioned to produce a common classification for both variable and fixed costs. The results were not very encouraging and such detailed sampling techniques have been given up.

Given the agnosticism with respect to both econometric cost function estimation and detailed sampling, many observers have favoured the use of simple pricing techniques like marginal cost pricing or variable cost pricing. Nonetheless, over the years these econometric estimation techniques and sampling methods have led to the development of a suitable data base and better understanding of the cost structure of postal services. In India, however, considerable work needs to be done along these lines.

Our approach to pricing has been threefold. We have first reviewed pricing within the post office as a Pareto-optimizing exercise. Cross-subsidy-free prices have been estimated. The argument here is simply that unless each constituent service of the post office does at least as well as it would in a coalition of any smaller size it must be functioning inefficiently in the Paretean sense.

Another approach extends this idea to some extent. It is argued that there is a fundamental difference between cross-subsidy-free prices in the traditional sense and pricing in the postal services. Whereas efficiency within the postal service demands that cross-subsidy-free prices be used for accounting

purposes, our concern for mass information may require that consumers pay lower prices for some items and higher prices for some others. In this case we recommend that while cross-subsidy-free prices be used within the post office, the final consumer prices can be different and these differences can be looked upon as ordinary indirect taxes/subsidies. This is the so-called eclectic approach which we have discussed at length in Chapter 4.

Yet another approach to postal pricing that has been much discussed in the literature and also in this report is the so-called second best Ramsey pricing. Here there is a specific admission that Pareto-efficient pricing is being given up and one is functioning in the realm of second best. Standard second best formulae relating pricing of different products to their respective price elasticities of demand and redistributive objectives of government have been derived and used in several countries.

However, there are some problems with applying this approach in a simple manner. For instance, in Canada it has been discovered that there is a strong correlation between the size of customer and his sensitivity to prices. High-volume users often have considerable resources and, therefore, may opt for alternative means for the conveyance of information. Their demand is often quite price elastic. In Canada, and several other countries, the post office implemented quantity dependent prices. Such a policy does, of course, sound discriminatory but the counter-arguments that have often been put forward are: (i) This discrimination would help maintain a high level of traffic and optimise revenue. This was in the best interest of all. (ii) Since the provision of postal services invariably involves economies of scale, large-volume users effect some savings for the post office. It would be fair, it is argued, to return some of these savings.

Furthermore, demand for postal services is also sensitive to several other variables. In Germany it has been discovered that general economic trends, seasonal variations and dates of elections significantly influence demand. In India one could safely add the timing of the marriage season to this list.

Another problem with accurately estimating demand for postal services is that postal tariff rates change only infrequently. In Germany, for instance, postal prices are often termed political prices. In India, too, postal prices particularly of those items that are used in large measure by the less affluent sections of society, are difficult to increase because such increases, it is feared, may adversely affect the fortunes of the political party in power.

This kind of constraint has led to some discussion about the composition of the authority that regulates postal tariffs. In several countries the idea of setting up an independent authority to fix postal rates in the light of the public interest has been put forward. But even in such countries the constitution and rules of such an authority are governed by the appropriate legislative bodies. Some countries require these authorities to hold public hearings before postal rates are changed.

In India, however, no such authority exists and postal prices have remained "political prices" for long periods of time. There is certainly some need here to move in the direction of creating an authority that could oversee postal tariffs and costs in a more objective manner.

One must also realise that the setting of postal tariffs is only one aspect of the overall price and cost problems of the post office. Equally important problems are, among others, the absorption of new technology and the corresponding adjustment of prices and costs; and the forecasting of demand of existing and new (yet unknown) postal services.

To some extent the post office merely reacts to these changes. If trains run at greater speed the post gets delivered sooner. However, particularly in the area of designing new products and effecting improvements in office management technology, the post office has a responsibility. If the post is to compete successfully with newer means of communication, it has to, perhaps, be committed to serious and ongoing market research. In India we have been lagging behind in this respect. The post office could

easily have anticipated the boom in the courier service business much earlier, for instance.

The identification of new sources of demand can of course give some flexibility to the post office in setting rates. So can finer segmentation of the existing post. Thus, for instance, it may be possible to discriminate between ordinary book post and greetings cards and a higher tariff may safely be applied to the latter.

In these and other areas much work needs to be done in India. Unfortunately, the data base for analysing the performance of the postal services is quite poor and subject to wide margins of error. In this regard there is considerable work to be done. It is beyond the scope of the present report to comment on the structure of the data to be compiled and, indeed, for which a proper infrastructure still remains to be built.

#### 4. Conclusion

In this introduction to our report, we have discussed some of the considerations that have figured prominently in the academic and organisational literature on postal tariffs. It has been emphasised that both with regard to the pricing of individual items and the overall deficit/surplus position of the postal budget, there are a number of opinions. We have attempted an evaluation of some of these arguments and found that it is hard, *a priori*, to unambiguously favour one approach or the other. As a matter of fact, we have found that post offices in many countries have used different arguments.