coupled with effective financial monitoring arrangements based on target rates of return, should put downward pressure on costs. Thus, economic pricing needs to be addressed particularly with monopoly enterprises. Unfortunately, sound pricing arrangements do not lead to cost minimisation with these enterprises. Separate consideration needs to be given to that.

4.1 Efficient Pricing Strategies and Target Returns

General pricing strategy. *One approach to pricing of individual services of an enterprise in a way that recognises market realities is to ensure that prices just cover the full marginal long run economic costs of the individual services - the economic costs associated with increasing capacity in order to supply an additional customer.* That is, prices should cover not only current operating costs and the loss in value of associated assets but also the financial opportunity cost of capital tied up in the particular activity of the enterprise.[6] This is equivalent to the enterprise pricing its products and services such that the target rate of return is just achieved overall.

This might seem to be a practical, generally applicable pricing strategy. It has, however, a number of shortcomings relating to the efficient use of the existing capacity of some enterprises, particularly those whose investments are typically large lumpy investments or those subject to peak and off-peak demand. Apart from the central problem of a lack of pressure to minimise costs, it does not provide a sound economic basis for setting prices in the situation where the capacity of an enterprise to produce a particular service is out of line with the demand for that service. It is not appropriate, for example, to set prices on the basis of total long run economic costs, when that includes the costs of capital associated with a productive capacity which does not match demand at those prices. If capacity exceeds demand, pricing on the basis of total long run economic costs will unnecessarily choke off demand and leave capacity underutilised. The opposite is true if capacity cannot meet demand.

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6.   It does not matter whether economic costs are measured in real or in nominal terms, as long as both depreciation and the financial opportunity cost of capital are determined either on a nominal or on a real basis. Starting from a comprehensive nominal basis, the increase in depreciation needed to convert it from a nominal to real basis is exactly offset by the reduction in the financial opportunity cost of capital needed to convert it to a real basis. Problems arise if depreciation is measured in real terms with no adjustment to the financial cost of capital. Appendix 2 illustrates these points using a numerical example. The Victorian Department of Management and Budget (1986) has advocated measuring income and returns comprehensively in real terms for comparison against a real rate of return target (with prices set to cover real long run economic costs).

The above pricing strategy does not allow for differential pricing during slack and peak periods of demand for the enterprise's services. Demand may be so slack that even were prices set to cover only current operating costs the level of services demanded might be well short of full capacity. On the other hand, capacity could be so restrictive that pricing to cover not only current operating costs but also the loss in value of assets plus the opportunity cost of capital may still not ration available capacity appropriately. Significant excess demand might be present either for most of the time or at particular peak demand periods. Prices would not be high enough to cover the additional marginal opportunity cost of not supplying customers who would be prepared to pay much more for the service but are denied access because of the capacity constraint and because access is obtained ahead of them by customers who value the service less.

Alternative pricing strategy. An alternative approach is to price individual services flexibly so that available capacity just meets demand at all times without excessive queuing including during any peak or slack period (with the proviso that prices would not go lower than current operating costs when reducing prices to increase demand during slack periods). With this pricing strategy, the economic rate of return earned on each service would indicate whether new investment should be undertaken to increase capacity or whether capacity should be reduced. Capacity would be increased when sustainable economic returns above required rates of return were realised and capacity decreased when less than the required rate of return was realised. In general, if a business unit is part of the core operation of an enterprise, the required rate of return of the unit would correspond with the enterprise's overall target return. Differences would arise, however, if the market risk of the business unit were significantly different from the overall market risk of the enterprise (see Section 3.2).

This practical pricing and capacity strategy incorporates economic pricing principles by always aiming to achieve maximum utilisation of available capacity. Its operation is illustrated in Figure 4 (from Mayo 1989) under the simplifying assumptions that both operating costs and capacity (capital) costs of a service provided by a public enterprise remain constant with increasing output and no additional costs are incurred as the capacity limit is approached. Operating costs per unit of time are kept to a minimum at the level b and capital costs (including economic depreciation and the financial opportunity cost of capital) of c per unit time, allocated over the duration of the two demands, D_3 and D_2, which are sufficiently strong to exceed operating costs, b, at the capacity limit Q_1. Demand D_1 is so weak that it falls below b at the capacity limit.

competition in the market in which the enterprise operates. While competition may largely determine prices in the various segments of the market, the scope for inefficient cost practices depends on the degree of looseness in the owner government's financial monitoring of the public enterprise. The public enterprise's market share, for example, could be maintained despite cost inefficiencies simply because of the inability of financial monitoring procedures to emulate completely capital market pressures.

Summary. In short, global target rates of return cannot be regarded simply as rates of return to be achieved through price adjustments, or even to be exceeded *if possible.* With pricing strategies designed to allocate current capacity most efficiently, sustained returns of individual services *in excess of* targets - which reflect the market risk associated with those services - suggest that an increase in capital investment is economically justifiable. Sustained returns less than the targets point to a contraction in capacity being required. *Rather than being a passive minimum benchmark, the targets are central to investment decision making and enable the usually difficult question of whether the level of public infrastructure is adequate to be answered.*

Regardless of the approach taken to determine the global target rate of return for each enterprise, *the pricing of enterprise services should ideally be independent of the target and based on efficient pricing principles designed to make the best use of current capacity of each individual business unit. Pricing services so that the use of available capacity is, where possible, maximised during peak as well as slack period accords with these principles and with private sector practice.*

4.2 Price Caps

Pricing strategies based on efficient pricing principles (and competitive pressures in the market place) and the requirement to achieve target rates of return over time should help put pressure on many types of government business enterprises to earn commercial profits, reduce costs and increase productivity. However, for enterprises with monopoly power, these pressures for cost reductions and productivity improvements may not be strong.

Take, for example, the case of an enterprise, which is the monopoly provider of a particular service, operating in the situation where capacity is deficient compared with the long run optimal level - perhaps the situation illustrated in Figure 4 with capacity at Q_1. The discussion in the previous section suggested that this situation would give rise to a rate of return higher than the target thus signalling