Price falls just beginning

***Ian Martin**, Telecommunications Analyst, BZW Australia, examines the underlying reasons for ongoing reductions in the price of telecommunications services in Australia.*

Prices for a basket of basic telecommunications services including mobile services have fallen by around 22-25% since the introduction of network competition in 1992. On its face, these reductions have been in line with those required by price cap regulation on Telstra, and have flow on effects on Optus, Vodafone and service providers. However, competition has played a significant role in lowering and restructuring prices and is integrally linked with the success of the price caps through pressure to improve cost structures, increase traffic levels and rebalance prices.

It is difficult to separate the long term influence on prices of price cap regulation in a competitive framework, from price caps without competition. There is no doubt that higher price caps have been possible because of the impact of increased competition.

Price caps are a fairly blunt instrument, however, and there is some risk that they may inhibit competition and constrain long term price reduction. Although certain price caps will remain as a safeguard for a long period, competition is likely to increase in relative influence as competitive network services develop.

Building a network which is able to provide substantial competition against a well established monopoly incumbent takes many years. After four and a half years of network construction and $3.8 billion in capital expenditure (including the $800 million licence payment but excluding around $1,200 million in capital expenditure by Optus Vision), Optus Communications still pays nearly three times as much in intercarrier payments as it writes off in network depreciation. In five years time, even with Optus Vision's planned access network substantially in place, Optus' long distance services will still rely more on Telstra for customer access than on Optus Vision.

Although the price effects to date have been significant, the long term effect of network competition will be even more substantial. This is good news for consumers but also for many businesses, including those developing emerging services. The positive effects are likely to be profound on the high growth and high value added information, content and education services which are able to take advantage of lower prices to deliver services to consumers.

These types of service tend to have relatively higher usage of communications services. Those nations which best encourage competitive infrastructure provision - thereby encouraging new users and emerging services through lower cost structures and competitive pricing - will be in a stronger position to benefit from and be world leaders in emerging services.

In the current context of increased network competition, three basic factors are at work in reducing telecommunications service prices:

- reduced costs of owning and operating networks and providing services;
- increased demand levels and better service price structures; and
- the safeguard effect of price cap regulation.

Prices reflect costs...

Network and service provision costs include costs of capital (depreciation, interest and an appropriate return on equity) as well as operating, customer and administration costs. Productivity improvements reduce the pool of costs to be recovered.

Ongoing changes in telecommunications have led to significant cost reductions. Changes include new technology, network design and management and general management and work practices. Although some of these productivity improvements may well have occurred without competition, they have occurred more quickly, with more vigour and with greater customer focus as the level of competition has increased.

Around one third to one half of Telstra's costs are directly related to owning and operating the network, and the majority of this is in the customer access network. Network competition is therefore an important long term factor in ensuring improvements in overall network costs by encouraging the most appropriate technologies and network design and management on an ongoing basis.

Cable rollout in residential areas has certainly received 'bad press' and a negative reaction from many local councils and some residents. However, the balance between local amenity issues and broader local and national benefits is better assessed by the Federal Government than by local councils with their narrower interests. It was with considered foresight that the Australian Constitution was drafted to give to the Commonwealth Parliament the power under section 51(v) to make laws for 'good government of the Commonwealth with respect to...postal, telegraphic, telephonic, and other like services'.

...but demand is more significant than costs

While cost reductions are significant in contributing to lower prices, the demand factors are probably more significant. Demand affects prices significantly in telecommunications because there is such a high level of network, customer and overhead costs which are shared between services as well as between users. Sharing of these costs depends on demand levels and elasticity.

Demand levels have increased significantly since the introduction of competition. Over the last five years, timed traffic (ie, not counting local calls) has increased by close to 100%. The more traffic sharing a given amount of fixed network, administration and other costs, the lower is the average price paid by consumers. Traffic growth alone explains a large part of the 22-25% price reductions evidenced since the commencement of network competition.

Some traffic growth would have occurred without competition, but the impact of carriers' competitive marketing, targeted price plans, wider range of services and improved customer service has pushed traffic growth far beyond what would have occurred without competition, most notably in mobile services.

Also important is the changing structure of prices and services to better focus on consumer groups with different needs and demand patterns. Improved targeting of prices and service packages - still at a fairly initial stage - encourages calls and service use which might not occur if simple average prices were to apply. Structured pricing has wide reaching effects: over time, residential consumers benefit as lower prices offered to business users increases traffic and absorbs a relatively higher proportion of shared costs. In general, structured pricing encourages more traffic and better network utilisation, in effect lowering average costs per minute of traffic for all users.

A similar example occurs with geographic de-averaging of prices. Consumers of long distance services between major capital cities are likely to pay lower prices over a given distance than consumers of services over similar distances in areas with less traffic. However, this will lead to lower prices for both groups where shared costs are divided over a larger base of traffic.

Constraints on Telstra's pricing, including non-discrimination rules, have been useful to safeguard long term development of competition. These constraints are likely to reduce from July 1997, in effect increasing Telstra's price flexibility and increasing benefits for consumers.

Price caps more effective with competition

A good example of cost and demand benefits is demonstrated by the likely impact of ATM (Asynchronous Transfer Mode) network services currently being introduced by Telstra and Optus (ATM is an international standard for packet or cell based digital communications to allow prioritised switching in a high bandwidth network). These networks lower costs by improving utilisation of expensive switching equipment and by multiplexing signals for voice, data, video and other services. ATM service packaging and prioritising allows different service price packages for different business services and users and can increase demand significantly. Net long term price reduction for business users is estimated at around 50%, but increased business traffic will allow a greater sharing of joint costs with residential users with long term price savings for consumers.

As Telstra is the market price setter, it is worth considering the effect of the carrier's proposed partial privatisation. Price cap regulation has a good effect, encouraging productivity improvements, but it is a limited effect. In contrast, a degree of partial privatisation increases productivity effects as a diverse shareholder base influences Telstra management on a more specific, informed and ongoing basis. In combination with partial privatisation, competition and price regulation would ensure that a substantial part of improved performance is passed on in lower prices.

There may be some exceptions to increasingly market-based pricing rules, for instance, in the case of low income earners or high cost areas which the Government considers should be subsidised. Appropriate USO arrangements are needed to deal with these.

Also, competition takes time to develop and in some areas may take longer to become effective. The third factor, price cap regulation, plays an important safeguard role in these circumstances. Where competition is not sufficiently effective, carriers may not pass on the full benefit in price reductions and service improvements.

As competition develops, price caps are likely to continue for longer in areas or on services where competition is less developed so that all users share in the benefits of competition.

However, it should be clear that price reductions required by such price cap regulation only occur to the extent they do because increasing network competition has encouraged better technology, lower costs and improved focus on demand by carriers and service providers. With competition clearly increasing over the next few years, there will be significant ongoing price reductions across a wide range of services.❑