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Regulation and Competition

How Antitrust and Sector Regulation Affect Telecom Competition

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This is the third of three Notes evaluating how best to balance antitrust and sector-specific approaches in regulating telecommunications. The first assesses which deals more quickly and effectively with key regulatory issues. The second focuses on the regulation of interconnection.

Countries with fully liberalized telecommunications markets have adopted different mixes of antitrust and sector-specific regulatory instruments. Does the balance between the two approaches matter for competitiveness? Drawing on the experiences of Australia, Chile, New Zealand, the United Kingdom, and the United States, this Note finds that it does matter. Countries that get the balance right tend to have more competitive telecommunications markets.

The five countries whose experience is reviewed here have struck different balances between antitrust and sector-specific approaches to regulating telecommunications. The United States has relied primarily on sector-specific rules applied by a sector-specific institution. By contrast, New Zealand relied until 2001 almost exclusively on antitrust law. And Australia, Chile, and the United Kingdom chose combinations of antitrust and sector-specific regulation lying somewhere between those two extremes.

Experience in these countries suggests that sector-specific rules remain desirable for tackling some pricing and other operational issues in the sector (see box 1 and Note 294 in this series). Antitrust rules, for their part, are essential for preventing anticompetitive behaviors, ensuring merger reviews, and filling gaps in sector-specific regulatory regimes. Experience also suggests that a specialized entity—a sector-specific agency or an economywide antitrust entity that possesses sufficient expertise in telecommunications—is needed to deal with some of the most complex regulatory issues.

But what effect do the different combinations of antitrust and sector-specific regulation have on market share and on prices in different segments of the telecommunications market?

Fixed local services

New entrants have gained only a modest share of the market for fixed local services: 4 percent in New Zealand, 5 percent in Australia, and 8.5 percent in the United States. The market share of new entrants is highest in Chile and the United Kingdom—18 percent in both cases—but so are prices (figure 1).[1]

In this market it is not the balance between antitrust and sector-specific regulation that seems to account for the differences, but other, unrelated factors. All five countries have capped the prices of fixed local services. In some, the caps are so low as to substantially limit the profitability of providing services, and thus act as a

Box 1 When sector-specific rules are needed

- To specify interconnection prices and conditions, at least for a certain period following liberalization.
- To set the prices of wholesale services and perhaps the conditions under which the incumbent should provide unbundled access to the local loop.
- To allow number portability, carrier preselection, and roaming.
- To control end-user prices in market segments where competitive pressures remain weak.
- To impose certain types of structural remedies, such as vertical separation between different market segments.
- To define and fund universal service objectives and allocate rights to use the radioelectric spectrum.

deterrent to potential new entrants. This helps to explain why it is in the countries where the prices of local calls are highest—Chile and the United Kingdom—that new entrants strove to capture the largest share of the market.

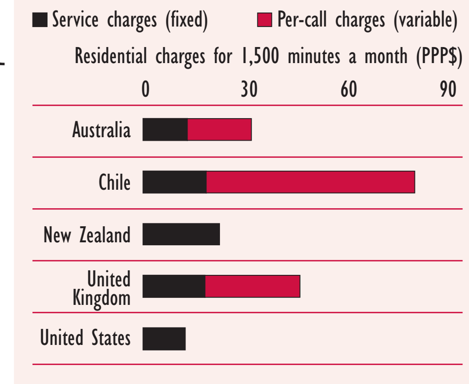
Long distance services

The provision of fixed national long distance services appears to be very competitive, especially in Chile, the United Kingdom, and the United States. In Chile the incumbent's market share had fallen below 50 percent as early as 1995, while in the United States AT&T's share had dropped to 38 percent by 2000. Price comparisons confirm that the Chilean, U.K., and U.S. markets are more competitive than the Australian and New Zealand markets (figure 2).

Competition is even more intense in the market for international services, with the incumbent's market revenue share well below 50 percent in all five countries. The United States boasts the lowest prices and by far the most competitors, while Chile and New Zealand have the highest prices (figure 3).

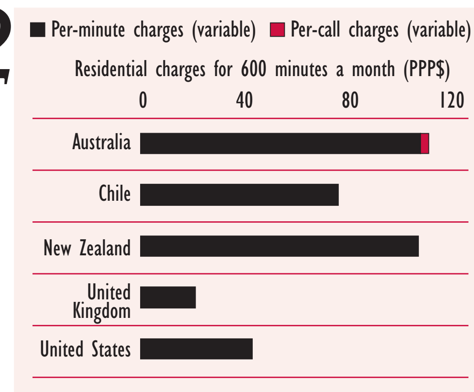
Differences in emphasis on antitrust or sector-specific regulation appear to explain at least some of the variation. Australia, Chile, the United Kingdom, and the United States all benefited from having specific pricing rules on long distance interconnection and specialized regulatory authorities to apply those rules.

Figure 1 Local call charges, November 2001



Note: Data for New Zealand are for September 2001.
Source: Authors' calculations based on published rates of main national carriers.

Figure 2 National long distance call charges, November 2001



Note: Data for New Zealand are for September 2001.
Source: Authors' calculations based on published rates of main national carriers.

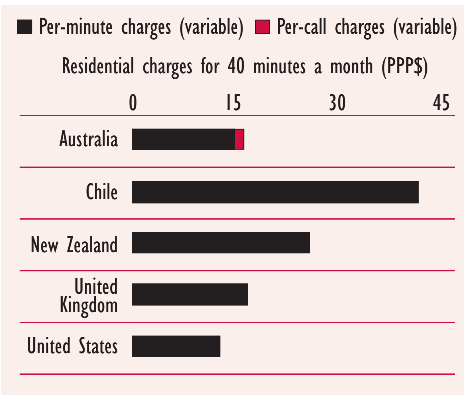
In Chile and the United States the vertical separation imposed between local and long distance markets prevented local incumbents from competing directly with long distance providers, which removed the incumbents' incentives to discriminate among those providers. Chile also greatly benefited from a sophisticated interconnection system, put in place since 1994, that enables users to choose their long distance carrier for each call.

In New Zealand, by contrast, competition in long distance has probably been hampered by the lack, until 2001, of clear interconnection rules and specialized regulatory authorities.

Mobile services

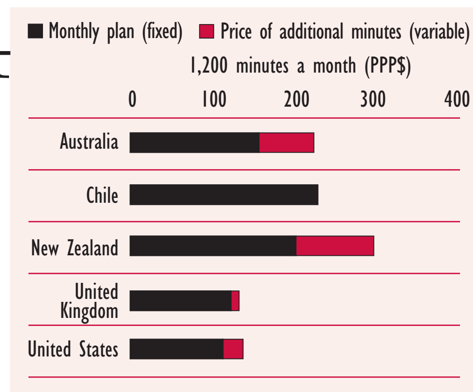
In mobile services competition is now fierce in four of the five countries. In Australia four oper-

Figure 3 **International long distance call charges, November 2001**



Note: Data for New Zealand are for September 2001.
Source: Authors' calculations based on published rates of main national carriers.

Figure 4 **Mobile call charges, November 2001**



Note: Additional minutes are the balance between the number of minutes covered by a monthly plan and the 1,200 minutes used to calculate costs.
Source: Authors' calculations based on published rates of main national carriers.

ators compete with one another, the market share of Telstra is now less than 50 percent, and prices have declined sharply. Four operators also compete in the United Kingdom, which has the lowest prices for mobile services in the five countries (figure 4). In Chile some consolidation is taking place (BellSouth sold its operations to Telefonica Moviles in 2004), but several operators remain active in the market. The United States also has seen recent mergers in the mobile segment, but most metropolitan areas still have at least five wireless providers. Competition has been markedly weaker in New Zealand: only two operators are active, and at the end of 2001 prices remained high and the penetration of wireless services low.

New Zealand's relatively poor performance in the mobile market is correlated with clear differences between its regulatory framework and that of the four other countries—particularly New Zealand's lack, until December 2001, of specific rules on fixed-to-mobile interconnection and of specialized regulators. The recent auction of 3G spectrum may promote the entry of new operators, however, and the two existing operators appear to be gearing up for a more competitive environment: penetration rates have been rising fast in recent years, and the incumbent's competitor, Vodafone, is rapidly increasing its market share.

Internet services

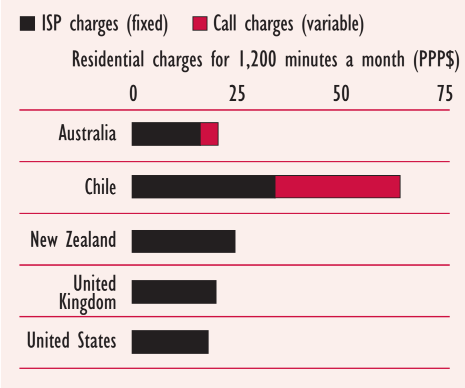
The United States and Australia arguably have the most competitive markets for dial-up Internet access: they have the most Internet service providers (ISPs) relative to population as well as the lowest prices for Internet access, and the ISPs affiliated with incumbent operators hold only a small share of the market (figure 5). The U.K. market appears to rank somewhat lower in competitiveness. The markets in Chile and New Zealand rank even lower: they have smaller numbers of ISPs and the highest prices for Internet access, and they are still largely dominated by the ISPs affiliated with incumbent operators.

Internet prices tend to be high in Chile in part because of the metered pricing of local calls (which means that users must pay for each call to connect to their ISP). Differences in emphasis on antitrust or sector-specific regulation also account to some extent for the variation among countries. For example, in the United States and to some extent in the United Kingdom strict interconnection pricing rules have fostered competition between ISPs: in the United States no interconnection charges are imposed on ISPs, while in the United Kingdom the regulator forced the local incumbent to provide interconnection services to ISPs at an unmetered (or flat) rate. And in Australia the regulator—responsible for applying economywide antitrust law as well as telecommunications-specific rules—has repeatedly prevented mergers that would have limited competition between ISPs.

Universal service targets

Chile pioneered the use of competitive mechanisms to allocate universal service subsidies to

Figure 5 Internet service charges, November 2001



Source: Authors' calculations based on published rates of main national carriers.

the operators requiring the lowest government payments to meet universal service targets in specific areas. Australia and the United States have both recently started to explore ways to introduce some competition in the provision of universal services. By contrast, New Zealand and the United Kingdom have introduced no competitive mechanisms, instead designating the incumbents as universal service providers.[2]

The cost of universal service objectives is lowest in Chile (table 1). The cost, measured as a share of sector revenue, is determined not only by the efficiency of the mechanisms used but also by the scope of universal service targets and the size of sector revenue. Chile may benefit from a narrow definition of universal service (based on one public phone in each rural community rather than individual phones). But it is clearly penalized by having the lowest sector revenue. Overall, Chile's competitive process to select universal service providers has been remarkably successful.

Conclusion

This brief review of competitiveness in different segments of the telecommunications market appears to confirm that the balance between antitrust and sector-specific regulation does matter: the countries that have kept most closely to the balance suggested here have, on the whole, more competitive telecommunications markets. The market for fixed local services is a different case, however. There, the balance between antitrust and sector-specific regulation

Table 1 Cost of universal service objectives

Country	Cost as a percentage of sector revenue
Australia	2
Chile	0.2
New Zealand	3.85
United Kingdom	0.2–0.3
United States	5

Note: Data are for various years in 1996–2001.
Source: Wellenius 2000; Telecom Corporation of New Zealand 2001.

matters much less than the fact that prices have in many cases been set below costs, eliminating the potential for competition.

Notes

1. Prices are measured in U.S. dollars adjusted for purchasing power parity. The figures are from Géradin and Kerf (2003), with prices as of the end of 2001. While telecommunications prices have changed since then, that has no implications for the discussion in this Note of the effect of different combinations of antitrust and sector-specific regulation on the competitiveness of telecommunications markets.

2. In the United Kingdom there is the small exception of the Hull area, where universal service is provided by an operator other than the incumbent, BT.

References

Géradin, Damien, and Michel Kerf. 2003. *Controlling Market Power in Telecommunications: Antitrust vs. Sector-Specific Regulation*. New York: Oxford University Press.

Telecom Corporation of New Zealand. 2001. "Telecommunications (Information Disclosure) Regulations 1999: Kiwi Share Obligation Loss Estimate." Wellington. March 31.

Wellenius, Björn. 2000. "Extending Telecommunications beyond the Market: Toward Universal Service in Competitive Environments." Viewpoint series, Note 206. World Bank, Private Sector Development Vice Presidency, Washington, D.C.

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