III.3

The Toppling of the Natural Monopoly Doctrine

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William Melody's early work on the economic theory of telecom competition was a major contributor to economic growth throughout the world in the latter part of the 20th century. In the 1950s and 1960s, the prevailing economic theory was that telecom was a 'natural monopoly' and therefore should be a government-regulated or government-owned monopoly.

In the United States the AT&T monopoly, familiarly known as Ma Bell, dominated all aspects of telecom. Other telephone companies did operate in geographic locations not served by AT&T, but they interconnected with AT&T for long distance services and did not compete with AT&T. Most economists who researched or wrote on telecom issues were supported financially by AT&T or accepted the prevailing natural monopoly theory.

Melody was foremost among the very few qualified and respected economists whose research, writing and public testimony challenged the prevailing dogma. What was new in the decades following World War Two was the emergence of a new telecom technology, microwave radio communication. Melody's then novel argument (later proven correct) was that when technology is changing, the assumption of natural monopoly is not correct. Melody's economic arguments were a key factor in persuading the US Federal Communications Commission to grant to a start-up entrepreneurial company called Microwave Communications Inc. (MCI) licences for microwave radio frequencies on the route between Chicago and St Louis and a licence to sell private line long distance services on that route.

AT&T understood the risks to its monopoly and vigorously opposed Melody's arguments at every opportunity. An AT&T executive was assigned to work full time on monitoring all of Melody's writings and oral public statements. (Since AT&T's regulated monopoly status permitted telephone charges to users that recovered all costs plus an allowed profit, AT&T users paid all of the salary and other costs associated with that executive's work.) The executive had the task of monitoring all statements by Melody and coordinating AT&T's public response to his novel arguments.

One of Melody's arguments was that if the provision of long distance telecom service by any and all technologies was a natural monopoly, then AT&T had nothing to fear from a risk-taking entrepreneurial company. If AT&T's natural monopoly assumption was correct, then the MCI experiment was doomed to failure. If the natural monopoly assumption was correct, there was no need to protect that monopoly with regulations barring competitive entry. If, as Melody believed, the assumption was false, there was no need for government regulations designed to protect a contrary-to-fact economic theory.

That early work by Melody was a major factor that led to the regulatory precedents that opened the United States telecom market to competition. The total investment in telecom infrastructure following those precedents increased because competitors made investments that the incumbent monopolist would not have made. The pressure of competition also forced the incumbent to invest in new technologies at a faster pace than would otherwise have been the case. The resulting increased investment in the telecom sector in the United States was a major contributor to the productivity gains and the growth of the United States economy in the last third of the 20^{th} century. A number of econometric studies have confirmed that telecom investment leads to economic growth (Parker et al. 1995; Hardy 1980; Cronin et al. 1991; 1992; 1993a,b).

The demonstrable success of telecom competition as an engine of economic growth in the United States led to competitive policy being emulated by other countries that were serious about growing their economies. Melody deserves credit as a major contributor to the resulting global economic growth.