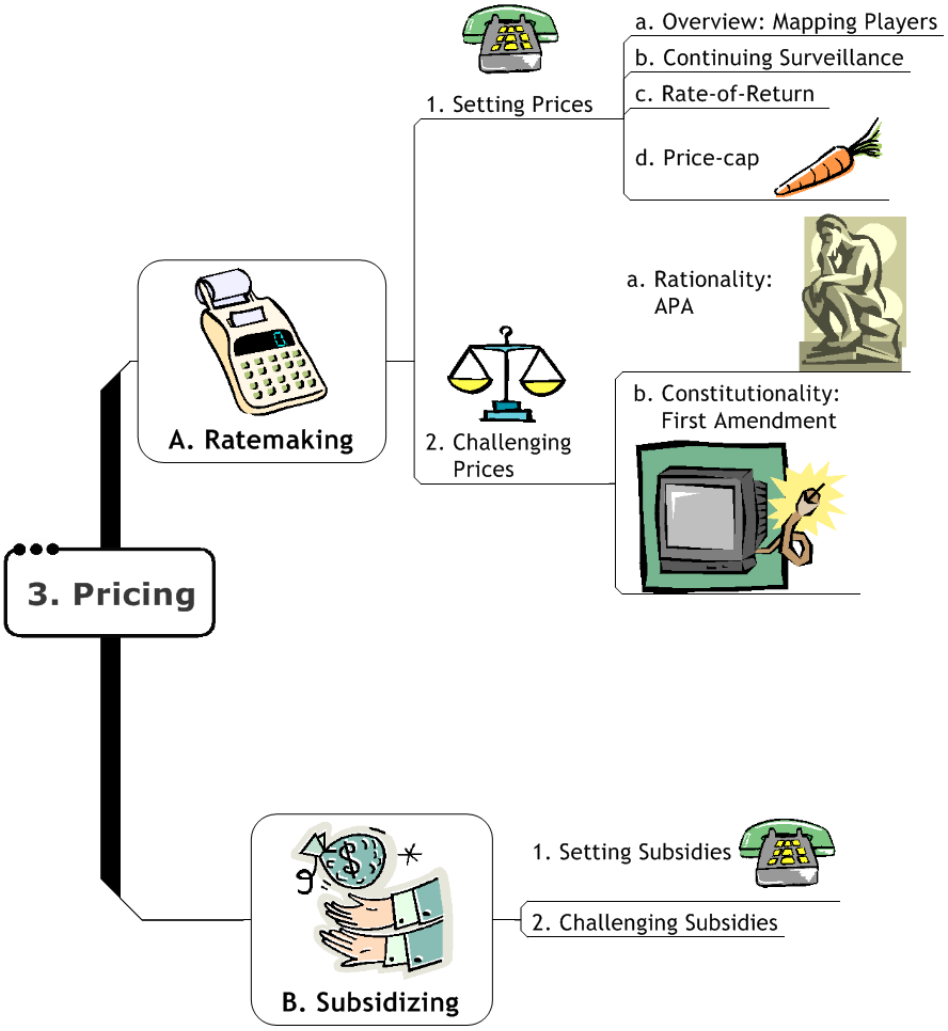
CHAPTER 3

Pricing



Once the firm has been allowed to enter the market, it must set some price for its communication service. Should the state get involved in setting that price? Further, does the justification for regulating entry necessarily justify regulating price?

Often the answer to these questions is no. For instance, just because a state can regulate the entry of lawyers does not mean that it can set lawyers' fees, at least within the bounds of conscionability. As another example, consider broadcast radio and television. Although the federal government regulates entry by licensing spectrum, it plays no role in regulating prices because broadcast stations do not charge viewers for broadcast content. Instead, broadcasters earn their profits by selling advertising time, which the FCC does not generally regulate. But what about the other industries studied in the previous chapter, such as telephony and cable television? To answer this question intelligently, we must apply some of the basic economic theory introduced in CHAPTER 1: POWER.

From that chapter, we know that in a market economy, prices are generally set by the marketplace. Moreover, in the idealized market, the price set will be efficient. However, in the real world, a firm may exercise enough market power such that we cannot trust the market's pricing mechanism. This is the principal justification for government ratemaking. Assuming that the justification for regulating prices has been made—for example, because of monopoly power—numerous legal and policy issues arise about how the government might set prices. Correlatively, how might firms challenge these prices if they think the government has gotten it wrong? We address these questions mostly in the context of telephony.

In the second part of this chapter, we address a different question that isn't prompted by monopoly power. Even in competitive markets, the price for some communications service might simply be too high for many people. In that case, we may choose to subsidize prices to increase participation and access, sometimes up to nearly universal levels. That subsidization can be done explicitly or implicitly, and its various methodological details can invite litigation.

Caution: This chapter will feel technical—both as a matter of technology and regulation. You may wonder whether the payoff is worth the effort. But know that the fundamentals you learn here about pricing and subsidies will be useful not only in the field of communications but also in any other rate-regulated industry. Moreover, a strong understanding of pricing in telephony will help you understand the Internet, a communications service that we formally introduce in the next chapter.

A. Ratemaking

1. Setting Prices

a. Overview: Mapping the Players

Although ratemaking takes place in various communication industries, such as cable television, this chapter focuses mostly on wireline telephony, which has the longest and most complicated history of rate regulation. (If you can master even the basics of telephony pricing, any other industry should be a cinch.) In order to understand how the government sets prices in certain sectors of telephony, we must first map the relevant players into a regrettably Byzantine techno-political geography.

Recall the technological introduction to the public switched telephone network (PSTN) in CHAPTER 2: ENTRY. The three basic elements of the telephone network are phone, line, and switch. The simplest phone call takes place when the caller and receiver connect to the same local switch. The basic connectivity to the local switch provided to customers like you and me is called *exchange service*, and the twisted-pair copper wire connecting the end-user to the switch is called the "local loop."

> **47 U.S.C. § 153(47). Telephone exchange service**
>
> The term 'telephone exchange service' means (A) service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge, or (B) comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service.

However, if the caller and receiver are far apart, the call must be transported from the switch servicing the caller to the switch servicing the receiver. The hauling of communications from one switch to another is called *transport service*; the fiber line connecting the two switches is called a "trunk." (See Figure 3.1, which depicts exchange services in vertical boxes, and transport service in a horizontal box.)

Until the 1980s, a single monopoly firm, AT&T, essentially provided all of telephony—including exchange service (customer to switch, except in some rural areas) and transport service (switch to switch)—in an integrated package. But competition was slowly permitted to grow in the transport sector, initially along a few high-volume routes. As competitors (e.g., "MCI") branched out to try to provide a complete alternative long distance service, they ran into a thorny problem: they needed cooperation from their archrival, AT&T. Although MCI could handle the transport service between switches, the caller and receiver were

themselves still connected to the PSTN through AT&T's exchange service. MCI thus needed access to the local exchange (*exchange access*) from AT&T in order to originate and terminate the long distance calls transported by MCI.

> **47 U.S.C. § 153(16). Exchange access**
>
> The term "exchange access" means the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services.

From the Department of Justice's perspective, AT&T refused to play nice with its competitors, in violation of federal antitrust laws. So the federal government sued and reached a settlement that broke up AT&T and severed exchange service from transport service.[*] Henceforth, a *local exchange carrier* (LEC) would provide the former, but an *interexchange carrier* (IXC) would provide the latter.

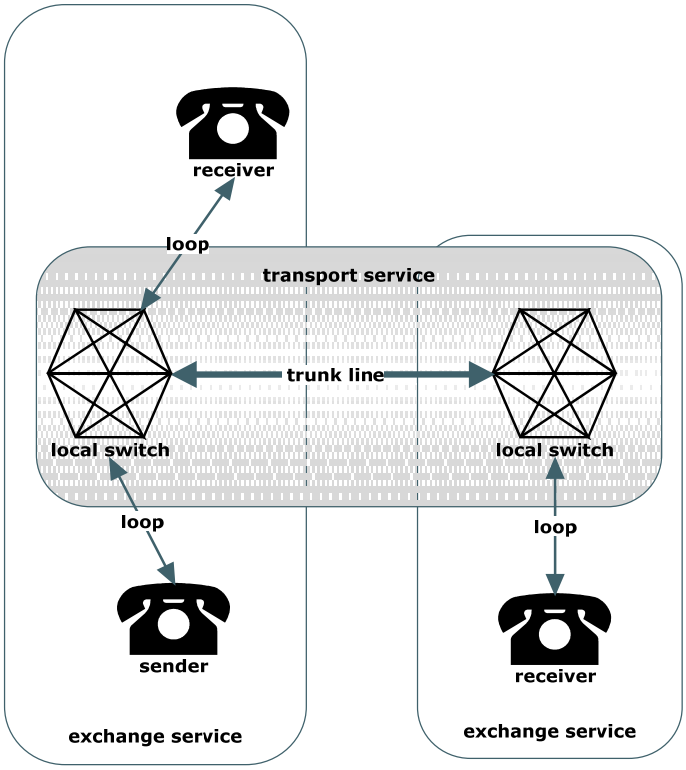


Figure 3.1: Exchange and Transport Services

> **47 U.S.C. § 153(26). Local exchange carrier.**
>
> The term 'local exchange carrier' means any person that is engaged in the provision of telephone exchange service or exchange access. Such term does not include a person insofar as such person is engaged in the provision of a

[*] We study the breakup of AT&T carefully in CHAPTER 7: ACCESS, *infra* p.559.