

RESALE ISSUES IN TELECOMMUNICATIONS REGULATION: AN ECONOMIC PERSPECTIVE

*Alexander C. Larson**

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I. INTRODUCTION

Resale is the ability of a firm to purchase a service on a wholesale basis, for the purpose of reselling that same service, either alone or in combination with other services or features, to end users in direct competition with the original service provider.¹ Resale of local telephone services as a telecommunications policy is currently among the most important and contentious issues facing regulators, legislators, and the industry.²

* Senior Economist, Revenues and Public Affairs Department, Southwestern Bell Telephone Company, St. Louis, Missouri. The opinions expressed in this article are those of the author and do not necessarily represent the opinions, policies, or business plans of SBC Communications Corp. or any of its subsidiaries. The author wishes to thank Tom Pajda, Margret Starkey, and Terry Schroepfer for their assistance in the preparation of this Article. Chris Graves served as research assistant to the project. This Article has been adapted from Alexander C. Larson, *Optimal Resale Policies in Telecommunications Regulation* (unpublished manuscript)(Nov. 1995).

1. The Federal Communications Commission has defined resale as "an activity wherein one entity subscribes to the communications services and facilities of another entity and then reoffers communications services and facilities to the public (with or without 'adding value') for profit." *In re Regulatory Policies Concerning Resale and Shared Use of Common Carrier Services and Facilities*, 60 F.C.C.2d 261 (1976), *modified* 62 F.C.C.R. 2d 588 (1977), *aff'd sub nom.* AT&T Co. v. FCC, 572 F.2d 17 (2d Cir.), *cert. denied*, 439 U.S. 875 (1978) (involving private line resale); *See also In re Regulatory Policies Concerning Resale and Shared Use of Common Carrier Domestic Public Switch Network Services*, 83 F.C.C.R. 2d 167 (1980), *aff'd sub nom.* National Ass'n of Regulatory Util. Comm'rs v. FCC, 746 F.2d 1492 (D.C. Cir. 1984) (involving switched network services resale).

2. Resale involves at least two distinct scenarios: (1) the resale or leasing of unbundled network components and functions of the local exchange carriers (LECs); and (2) "rebranding."

The resale of unbundled network components and functions is an arrangement in which alternate local service providers are given the ability to purchase network functions performed by an LEC as a wholesale service. This type of resale involves the leasing of LEC facilities or service elements to enable other carriers to combine them with their own facilities. The network functions involved could include, for example, the local loop, local switching, dedicated transport, common transport, and SS7 call setup, as Ameritech proposed in its "Customers First" plan. *Petition for a Declaratory Ruling and Related Waivers to Establish a New Regulatory Model for the Ameritech Region* (filed Mar. 1, 1993), at 13. The

The primary reason that regulatory agencies and legislators pursue resale policies is to foster increased competition in telecommunications markets where the current level of competition is considered inadequate to serve the public interest. Unrestricted resale of the incumbent local exchange carrier's (LEC's) local exchange services, or the network functions and facilities that make the provision of resold local exchange service possible, is viewed by policymakers and lawmakers as an essential component of the transition to effective local exchange competition. For example, it is an integral component of innovative plans to foster local exchange competition, such as the Rochester "Open Market" Plan,³ and it figures prominently in the recently enacted Telecommunications Act of 1996.⁴ Unrestricted resale, it is argued, is necessary to "jump-start" local exchange competition by allowing competitors to enter the local exchange market expeditiously and on a ubiquitous basis.

Similarly, it is argued that with a properly designed resale policy, entry into local exchange markets could take place with minimal investment, and without the delay of entrants having to deploy their own facilities or assume the risk associated with facilities-based entry into these markets. Thus, with a properly designed resale policy, competitors could quickly establish a customer base at minimal cost, and then begin

wholesale service could also include call detail and on-line access to all account-related databases and operational support systems, including directory assistance and operator services databases, so that customers can establish service with a reseller on the same basis as with the LEC (*i.e.*, service order and provisioning parity). The reseller would perform all retail functions, such as marketing, sales, and customer billing. Generic unbundling issues are discussed in Alexander C. Larson & Margarete Z. Starkey, *Unbundling Issues and U.S. Telecommunications Policy*, 6 STAN. L. & POL'Y REV. 83 (1994).

Rebranding is an arrangement in which the incumbent LEC makes available its local exchange telephone services at wholesale prices to other providers of telecommunications services. This arrangement allows firms to offer local telephone services packaged with long distance and other services. As such, they would be able to market themselves as full service providers offering an alternative to the extant LEC's local telephone services. Rebranding involves "one-stop shopping," where a carrier is simply packaging under its own brand name its own long distance service and a LEC's local exchange service, without making any local network investment. See Effect of Resale on Facilities-Based Competition in the Local Exchange Market (Teleport Communications Group)(Nov. 1995), at 1-2 (on file with the author).

3. *In re Rochester Telephone Corporation, Opinion and Order*, Cases 93-C-0103 & 93-C-0033, Opinion No. 94-25, 160 PUB. UTIL. REP. 4th (PUR) 554, 1994 WL 728535 (N.Y.P.S.C. 1994).

4. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996), at § 251.

selective deployment of facilities in locations where they have sufficient customers to justify the investment.⁵

The purpose of this Article is to evaluate proposed resale policies from an economic perspective. Specifically, this Article evaluates whether mandated resale can be expected to lead to the benefits ascribed to it by its proponents. In addition, this Article identifies issues which must be addressed before an economically sound local service resale policy may be put into place.

II. LOCAL SERVICE RESALE ISSUES

A. *Conditions Under Which Resale Is in the Public Interest*

Resale as a policy is not automatically in the public interest, as legislators and regulatory agencies often assume. It can only be an effective policy if: (1) the competitive process in the retail market is impeded or forestalled somehow (with a resulting detriment to consumers via high prices, etc.) due to a lack of alternatives to the resold service; (2) direct regulation of retail prices is incapable of remedying the situation; and (3) industry cost conditions make resale conducive to welfare-improving competition. All three of these conditions are violated when applied to local exchange resale.

First, if alternatives to a resold service are generally available, resale is not a necessary component of sound public policy because there is no “problem” to correct in the first place. However, even assuming that there are no alternatives available, it is not clear that the competitive process in local exchange markets is impeded. One does not observe entry into this market because prices are subsidized; thus, while there are no alternative providers of local exchange service for residence customers and many small business customers, they are not paying overly high prices as a result. The reason that competition does not develop is due to low subsidized prices, which means that most prospective entrants to this market cannot expect to earn positive profits post-entry. Further, even if resale policies increase the number of retail suppliers, it does not necessarily follow that the competitive process in that retail market has been enhanced.⁶

5. See, e.g., Comments to the FCC, *In re* Telephone Number Portability (CC Docket No. 95-116) (filed by LDDS WorldCom on Sept. 12, 1995).

6. As an illustration, consider the analogous example of a market for bottled soft drinks. Assume that producing the raw flavored syrup for the soft drink is the “manufacturing” aspect of production, and that mixing the syrup with water, bottling it, advertising it, and selling it is the “marketing” aspect of production. Assume that an antitrust authority has deemed the competitive process in the retail market to be deficient, but that in

Second, it is clear that the direct regulation of prices in local exchange markets is possible. In fact, the low prices that regulators set for these services cannot be circumvented by the LECs and is probably the very reason that entrants are not observed. If more remunerative and hence more efficient prices were set by regulators, these would be the prices in evidence in these markets.

Third, preliminary studies indicate that the costs avoided by LECs by reselling instead of providing end-to-end service directly to end-users are relatively small. This, combined with the extremely low price elasticity of demand for local service, means that it is extremely doubtful that resale policies can lead to significant changes in consumer welfare. The "Catch-22" behind this characteristic of resale is discussed in more detail in the next section.

In summary, a regulatory authority should only mandate resale of local exchange services if resale will improve the economic performance of the retail market, and customers in the retail market will be made better off as a result. From an economic perspective, it is extremely doubtful that this scenario will occur. Section II(B), *infra*, discusses why resale is unlikely to lead to increases in economic efficiency.

B. *The Ability of Resale Policies to Result in Increased Economic Efficiency*

Local exchange service has an extremely low price elasticity of demand.⁷ The lower the price elasticity of demand for local exchange service, the greater the retail price decreases needed (as enabled by resale) to produce significant increases in consumer benefits in the form of increased consumer surplus.⁸ In other words, a large price reduction is necessary just to produce a modest increase in the demand for local service.

reality it is not. Given this, it improves neither the competitive process nor consumer surplus in such a market if the regulatory authority forces the incumbent firm(s) to resell the beverage itself to bottler franchisees. The end result may appear to be an increase in the number of vendors and may have the look and feel of "competition," but ultimately consumers are still getting the same soft drink, at a retail price that is no lower. The same soft drink is offered to consumers merely via a larger variety of bottled brands, and at additional cost to society to do so.

7. This has been estimated at -.04 or less. See generally LESTER D. TAYLOR, TELECOMMUNICATIONS DEMAND IN THEORY AND PRACTICE (1994).

8. Consumer surplus is an economic measure of consumer welfare defined as the difference in what a consumer is *willing* to pay for a given good, service, or commodity, minus what he *must* pay. See e.g., DAVID L. KASERMAN & JOHN W. MAYO, GOVERNMENT AND BUSINESS: THE ECONOMICS OF ANTITRUST AND REGULATION 49-50 (1995).

Yet the very nature of resale makes these price decreases unlikely. Resale allows new entrants to purchase the component of production of local service that they cannot provide, and requires them to furnish only the components of production (*e.g.*, retail sales operations) that are generally available to *all* firms. For this latter component of production, no single firm is likely to have a significant cost advantage. However, if resale is to bring the types of price reductions that can lead to significant increases in economic efficiency (via increases in retail market consumer surplus), it is this area in which entrants must have a significant cost advantage over the LEC, since these are the only costs resellers can control.

Somewhat of a “Catch-22” situation emerges—to yield significant increases in consumer surplus, resale must enable competition that leads to large decreases in local service prices; yet resale requires entrants to provide (aside from the resold service) only that factor of production for which no firm is likely to have a significant cost advantage. Further, the costs avoided by the incumbent LEC, if it cedes the marketing function to a reseller, are a relatively small component of the total cost of providing local exchange service. Thus, even if there were significant innovations (and resulting cost reductions) in this component of production, the probability of reducing the *overall* cost to society of local exchange service significantly is remote. Given this, resale is unlikely to result in a significant welfare improvement for consumers.

C. Optimal Pricing of Resold Services

When regulators decide to mandate resale, a significant dilemma can arise: establishing the optimal wholesale price for the services that are to be resold. Several largely anecdotal methods have been proposed for calculating a wholesale price for local service resale. For example, a “tops-down” approach has been proposed, in which the embedded costs of the retail elements of “bundled” services would be estimated, and would then be subtracted from the prevailing bundled price.⁹ Alternatively, a “bottoms-up” approach has been proposed, in which the LEC would identify the incremental costs of all services or components offered on a wholesale basis and add a fixed percentage of contribution to each service/component to establish the wholesale price.

9. *In re* Application for Certification to Provide Facilities Based and Resold Exchange Telecommunications Service in Those Portions of MSA-1 Served by Illinois Bell Telephone Company d/b/a Ameritech Illinois and Central Telephone Company: Hearings on Docket No. 95-0197 Before the Commerce Commission of the State of Illinois, at 34 (Jun. 21, 1995) (prefiled direct testimony of AT&T Communications of Illinois, Inc. witness Lee L. Selwyn).

Regarding such wholesale pricing, the overarching question for regulators is: Which of the proposed wholesale pricing methods is *optimal*, *i.e.*, what wholesale/retail price differential will maximize economic efficiency in the retail market? The issues surrounding determination of the optimal pricing method for resold services are not new; they are in large part a variation of the problems addressed in the economics literature on the pricing of access to so-called "essential facilities."¹⁰

Economics dictates that the optimal price for wholesale services purchased for resale is the current retail tariff rate, minus the avoided incremental cost of retail marketing, plus the incremental cost of wholesale marketing to the LEC.¹¹ Resellers should also pay a fixed charge designed to recover the fixed and per-firm set-up costs of making resale possible.¹² This method of pricing the wholesale service is equivalent to the well-known efficient component-pricing rule developed in the regulation and economics literature for the pricing of intermediate productive inputs.¹³ The ECPR serves as an economic brightline defining the point at which wholesale prices are "too high."

If local exchange markets were not the recipients of subsidies used to foster universal service, this wholesale pricing rule could be implemented directly. However, as Section II(D), *infra*, discusses in more detail, there are additional considerations when retail local exchange markets are subsidized. The pricing rule discussed above makes sense only if existing LEC tariff rates are compensatory retail prices that cover all relevant costs and provide an appropriate contribution to the common costs of the LEC.¹⁴

10. See, e.g., WILLIAM J. BAUMOL & J. GREGORY SIDAK, TOWARD COMPETITION IN LOCAL TELEPHONY (1994) [hereinafter cited as BAUMOL & SIDAK, COMPETITION]; William J. Baumol & J. Gregory Sidak, *The Pricing of Inputs Sold to Competitors*, 11 YALE J. ON REG. 171 (1994)[hereinafter cited as Baumol & Sidak, *Input Pricing*]; and JEAN-JACQUES LAFONT & JEAN TIROLE, A THEORY OF INCENTIVES IN PROCUREMENT AND REGULATION 255-258 (1993). The efficient component-pricing rule is also known popularly as the Baumol-Willig rule, the Baumol-Sidak rule, or the parity principle.

11. To make the discussion less complicated, this assumes that opportunity costs arising from other cross-elastic effects are not present.

12. This optimal method of setting wholesale prices for resold services is very close to what the *Telecommunications Act of 1996* requires: "For the purposes of section 251(c)(4), a State commission shall determine wholesale rates on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier." *Telecommunications Act of 1996*, Pub. L. No. 104-104, 110 Stat. 56 (1996), at § 252(d)(3).

13. BAUMOL & SIDAK, COMPETITION, *supra* note 10; Baumol & Sidak, *Input Pricing*, *supra* note 10.

14. *Common costs* are shared costs which result from products or services being produced jointly, but in variable proportions. Common costs often are unattributable costs

D. Resale and Subsidized Retail Markets

Local service rates have traditionally been held artificially low by regulators to foster universal service. This was initially achieved through *residual pricing* of local service,¹⁵ with long distance and other discretionary services priced relatively high to help support low local service rates. In addition, local service rates were geographically averaged over the entire service area to help keep prices low in high cost areas. There are also many explicit funding mechanisms used to support universal service objectives.¹⁶ Regulatory policy has thus resulted in rates for long distance services, discretionary services, and basic exchange service to businesses in metropolitan areas that are far above cost in order to hold rates for basic residential service below cost.¹⁷ With increased competition, many states adopted price ceilings or outright price freezes on basic local service rates. Thus, the prices a LEC charges today for local telephone service do not necessarily reflect market-based retail prices, and hence cannot serve as the starting point in developing wholesale prices.

Since retail prices in residential markets have been set at below-cost levels to pursue universal service objectives, it begs the question of why a regulatory agency would want to pursue resale in the first place. The overarching economic reason for resale is to enhance or enable the competitive process in the retail market, *if* the market failure in the retail market is caused by the lack of availability of the service to be resold (and if mandating resale can lead to increases in economic efficiency). Resale makes sense as a policy only if prices in the retail

which are incurred in common for all the services supplied by the firm, and which do not vary with the level of output. They are frequently understood to be only company-wide overheads that cannot be attributed to any one service or group of services, though overheads are not the only type of common cost a firm may incur. As an example, consider training for telephone operators, who may provide multiple services; their training is a common cost of the services they provide.

15. *Residual ratemaking* is the setting of the “residually priced” service rates so as to yield closure to an authorized revenue requirement after the rates for all other services have been determined. Thus, for a given service priced residually, its price is set so as to cover the “residual” revenue requirement not recovered by all the other services whose prices have already been determined. Residual pricing is typically used as a means of setting basic local exchange rates at low levels to foster universal service.

16. These include the Universal Service Fund, Long Term Support, Yellow Pages imputation, Lifeline offerings in the various states, the Link-Up America program, and Telecommunications Relay Services. For a more detailed description of the various sources of universal service funding, see Alexander C. Larson, *Pricing Principles in Telecommunications, in Telecommunications Law, Regulation and Policy* (William H. Read & Walter Saponov eds., forthcoming 1996).

17. Alfred E. Kahn, *A Free Ticket to Rich Telecom Markets*, WALL ST. J., Nov. 10, 1995, at A15.

market are too *high* (due to the possession of market power by the incumbent firm), if the competition that would result from resale would curb that market power, and if the direct regulation of retail prices is considered an ineffective means of correcting this problem.

A market in which the retail price has been set at levels below cost is *not* a market in which prices are too high due to market failure. If retail prices have already been set at levels below cost, then the direct regulation of downstream prices *is* a presumptively effective policy tool, and the reason that competition from alternate suppliers does not take place is that prices have been set so low in the first place, with regulatory sanction. At the subsidized retail price, entry is unlikely to occur anyway, and it is inappropriate to apply resale policies.

Entry into the subsidized residential and small business markets would not occur on the basis of profits from these markets alone. Such entry may be economically attractive only if it gives providers (the incumbent LEC and resellers alike) the first opportunity to obtain the business that is priced far above cost, such as vertical features and long distance services. In a “one-stop shopping” telecommunications environment, customers are likely to purchase most, if not all, of their telecommunications services from the same provider to which they subscribe for their basic local service. By requesting a discounted wholesale rate in a market that is already subsidized, prospective resellers are essentially demanding an equal opportunity at servicing the overpriced markets—where they could undercut the LEC’s artificially inflated prices that help support below-cost local service—without having to bear any of the costs that justify that overpricing.¹⁸ A wholesale rate which is below the actual cost of service will ultimately require the LEC’s customers or stockholders to subsidize the reseller’s customers. The remedy is obvious: prior to setting the wholesale price for resold local exchange services, it would be in the public interest for regulators to set the price of downstream retail services at an appropriate level exceeding cost (taking carrier-of-last-resort responsibility and related factors into consideration). Regulators could then observe that market to see if government intervention is necessary to result in a more efficient industry structure.

18. *Id.*

E. Resale and Antitrust Concerns

1. The Denial of Resale as an Anticompetitive Practice

It is sometimes argued that the failure of a LEC to offer services for resale, at prices allowing the reseller to earn positive profits, is anticompetitive. However, whether the lack of availability of services for resale is truly anticompetitive hinges on one question: is access to services via resale an “essential facility” in the antitrust sense? If the answer to this question is yes, then there may be a case for mandated resale policies. However, qualitative economic analysis indicates the most likely answer to this question is “no.”

Resale proposals implicitly treat LEC local exchange services as *de facto* “essential facilities,” in the antitrust sense. That is, they assume that for true competition to take place, a regulatory agency *must* mandate open access to the LEC’s local exchange services via resale. However, in economic terms, whether a so-called “essential facility” exists in a wholesale telecommunications market depends on its effect on the competitive process in the adjacent retail markets. The “essentiality” of resold services under the economic efficiency criterion requires at least four necessary (though not sufficient) conditions to hold true: (1) the absolute requirement that an entrant have physical access to the “essential” resold service to provide service at all; (2) a welfare-enhancing competitive process could not operate properly in the retail market unless efficient entrants have access to the resold services; (3) the “essential” resold service is available only from a monopolist or consortium of firms acting as a monopolist, and *no other source*; and (4) prospective entrants can earn positive profits post-entry when paying the efficient wholesale price for resold services, as discussed above. In economic terms, the essentiality of resold services requires the denial of resale to result in a von Weizsäcker entry barrier to the downstream retail market.¹⁹

19. Carl Christian von Weizsäcker, *A Welfare Analysis of Barriers to Entry*, 11 BELL J. ECON. 399, 400 (1980) (“A barrier to entry is a cost of producing which must be borne by a firm which seeks to enter an industry but is not borne by firms already in the industry and which implies a distortion in the allocation of resources from the social point of view.”). Von Weizsäcker’s analysis indicated that under some simple assumptions (*e.g.*, linear demand, Cournot entry, scale economies in all firms’ cost functions), the socially optimal number of entrants can be *smaller* than the equilibrium number of entrants. The fact that entrants beyond the socially optimal number may be precluded from entry does not harm economic efficiency. See Alexander C. Larson, William E. Kovacic & Douglas R. Mudd, *Competitive Access Issues and Telecommunications Regulatory Policy*, 20 J. CONTEMP. L. 419 (1994) (discussing the von Weizsäcker entry barrier and its relation to the concept of essential facilities).

Under the criterion of economic efficiency, the failure of a vertically integrated firm to make services available via resale to firms requiring them (as inputs to their retail service) is not a *prima facie* indicator that such services, as productive inputs, are “essential.” Further, under the efficiency criterion, the fact that prospective entrants to the retail market can increase their profits if resale policies occur is immaterial, since the existence of such entrants may or may not enhance economic efficiency. Nor is it necessary to expect the vertically integrated firm to increase its costs by engaging in resale just to make a retail service offering possible by its downstream rivals in the retail market.

At this point in the resale debate, it is clear that a lack of availability of resold services is not anticompetitive, for several of the economic conditions required for essentiality are violated in current telecommunications markets.

First, there is the absolute requirement that an entrant have physical access to the “essential” resold service to provide service at all. Though this may be true of some prospective entrants to the local exchange markets, it is not true for all of them; some prospective entrants have the ability to provide facilities-based service. As Areeda and Hovenkamp have argued, a resource is not essential if competitors can operate effectively without it. For a resource to be essential, it must be not just helpful, but *vital* to competitive survival.²⁰ It is important to note that in economic terms and in the eyes of the courts, an alternative to a productive input (*e.g.*, in the manner that facilities-based service is an alternative to resold services) is not necessarily infeasible simply because it is more expensive.²¹ Perhaps more importantly, the fact that access to a facility (*e.g.*, via resale) is merely more economical than other alternatives is not sufficient, in economic terms, to demonstrate that a given facility is “essential;”²² nor is the fact that with resale, a competitor could achieve savings (and hence increased profits) at the expense of the vertically integrated firm.²³

20. PHILLIP AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 736.2 (1989 Supp.). This constitutes broader criteria for essentiality than the economic criteria proposed above, since the failure of competitors to survive may not impair a market’s economic efficiency.

21. *Florida Fuels, Inc. v. Belcher Oil Co.*, 717 F. Supp. 1528, 1533 (S.D. Fla. 1989) (ruling that a facility is not essential where “. . . construction of [the upstream market’s fuel] storage tanks and pipelines is expensive. But, as both parties note, the [downstream South Florida bunker fuel] market is burgeoning and potentially lucrative . . . The potential economic gains to be reaped from an investment are substantial.”).

22. *Florida Cities v. Florida Power & Light*, 525 F. Supp. 1000, 1007 (S.D. Fla. 1981).

23. *City of Anaheim v. Southern California Edison Co.*, 955 F.2d 1373, 1381 (9th Cir. 1992).

Second, there is the condition that a welfare-enhancing competitive process could not operate properly in the retail market unless efficient entrants have access to the resold services. This condition is wholly inapplicable to local exchange markets, for they are subsidized markets. It is not yet possible to know if efficient competition is foreclosed in local exchange markets. This cannot be known until compensatory rates are set for local service. Once this is done, it would then be possible to observe the local exchange market and see if further government intervention is needed to foster efficient competition. Until that time, it is not possible to argue that competition is foreclosed in retail local exchange markets. It simply doesn't exist yet because universal service policies have required local service prices to be below cost, which makes it less likely that entry will be observed in this market. Competition is not foreclosed due to a lack of resold services—it simply doesn't exist yet in most markets because prospective entrants cannot earn positive post-entry profits, due to the low prices that have been set to meet universal service objectives.

Third is the condition that the “essential” resold service is available only from a monopolist or consortium of firms acting as a monopolist, and *no other source*. The fact that facilities-based competition is possible violates this condition.

Fourth, if resold services are truly essential, it must be true that prospective entrants can earn positive post-entry profits when paying the efficient wholesale price for resold services, as discussed in the previous section. This condition is necessary to ensure that prospective entrants are capable of engaging in welfare-increasing competition with the incumbent firm if all other impediments to entry are relaxed. The proper wholesale price is extremely important in determining if a given resale policy (or the lack of one) is anticompetitive.

The efficient wholesale price of resold services discussed above is an application of the efficient component-pricing rule (ECPR). Prospective entrants into local exchange markets may argue that overly “high” wholesale prices for resold services are a *de facto* denial of resale. The ECPR, however, serves as an economic brightline defining the point at which wholesale prices are “too high.” It serves as a screen against inefficient or opportunistic entrants seeking to gain entry to a market at rates subsidized by the incumbent firm's stockholders. As Baumol and Sidak have stated, “the [ECPR] offers the prospect of success to entrants who can add efficiency to the supply of the final product, while it ensures that inefficient entrants are not made profitable by an implicit

cross-subsidy extracted from the incumbent [firm].”²⁴ If (but for the unavailability of resold services) retail local exchange markets are not competitive, then prospective entrants capable of fostering the competitive process in those markets should be capable of paying the ECPR-based wholesale rate; if not, then a welfare-improving competitive process has not been foreclosed in the retail market, and neither a denial of resale nor a wholesale price for resold services at the ECPR level (or less) are anticompetitive. Prospective entrants that cannot pay an ECPR-based wholesale price, and earn positive post-entry profits, are irrelevant to the competitive process. It is not anticompetitive if the lack of a resale policy prevents the entry of such firms; nor is it anticompetitive if such prospective entrants fail to earn positive post-entry profits at the ECPR-based wholesale price.

One way in which resale policies *would*, in fact, be anticompetitive is if the wholesale price of resold service is based on an arbitrary fixed percentage of the incumbent firm’s retail price. This would needlessly eliminate the incumbent itself as a potentially efficient competitor. If the wholesale price is tied to the incumbent LEC’s retail price, the incumbent LEC can never compete on the merits of its retail pricing; each time it lowers its retail price, its competitors’ input prices also are lowered. Each time the incumbent firm attempts to compete on price, it faces competitors whose input prices have decreased by a proportion of its own retail price decrease. If the wholesale price is tied to the incumbent’s retail price, the incumbent firm will eventually be forced to exit the retail market (if legally allowed to do so), and become only a wholesaler, ceding the sale of the retail service to its competitors. If the incumbent LEC cannot exit the market (due to carrier-of-last-resort responsibility or other legal reasons), it will needlessly run deficits, and its stockholders would be subsidizing the entry of resellers.

2. Resale Policies Compared with Exclusive Franchises as an Antitrust Concern

Antitrust analysis has produced an analog to resale policies: the analysis of exclusive franchises and the conditions under which they may raise antitrust concerns. The issue in telecommunications is whether it is in the public interest (*i.e.*, whether it increases economic efficiency or mitigates potential antitrust concerns) to mandate integrated LECs to resell services to firms who would be the LECs’ downstream competitors; the analogous issue of exclusive franchises is whether there are legitimate antitrust concerns if a manufacturer inte-

24. Baumol & Sidak, *Input Pricing*, *supra* note 10, at 185.

grates forward into the marketing component of production vis-à-vis that same manufacturer selling its output to competitive dealers. In comparing the case of full integration of the manufacturing and marketing functions versus manufacturing by one firm, and distribution by competitive dealers, Fisher's analysis concludes that the nature of costs in the *marketing* component of production (the component avoided by the LEC when reselling) determines whether the integrated firm has interests that coincide with those of the public interest.²⁵

More specifically, Fisher concluded that if there are constant returns to scale in the marketing component of production, "then the fully integrated case and the competitive dealers case both yield the same outputs, the same retail prices, and the same profits to the manufacturer."²⁶ If, however, there are decreasing returns to scale in marketing, the competitive dealers case yields *lower* profits to the manufacturer and results in a *lower* output and a *higher* retail price than does the fully integrated case.²⁷ Thus, Fisher concluded that in choosing between the fully integrated case and the case of competitive dealers, the interests of the incumbent manufacturer coincide with those of society.²⁸ The relevance of this conclusion to resale policies in telecommunications is that, within the assumptions of the Fisher model, there is no compelling reason to mandate resale policies.

Fisher's analysis also compares the case of competitive dealers with that of a single monopoly dealer, and concludes that the competitive case always results in a greater output and a lower retail price than does the case of a monopoly dealer.²⁹ A failure to distinguish properly between the integrated supplier case and the monopoly dealer case may be the root of confusion about the benefits of resale policies. The case of the telecommunications industry is not that of a monopoly dealer versus competitive dealers—it is a case of an integrated supplier (*i.e.*, one that *de facto* has integrated forward from the manufacturing function into the marketing function) versus manufacture by one firm (with distribution and marketing handled by competitive dealers). In the latter situation (but not the former), the interests of a monopoly manufacturer coincide with those of society.

25. FRANKLIN M. FISHER, *Can Exclusive Franchises Be Bad?*, in *INDUSTRIAL ORGANIZATION, ECONOMICS AND THE LAW: COLLECTED PAPERS OF FRANKLIN M. FISHER* 154 (1991).

26. *Id.* at 160–61.

27. *Id.* at 161.

28. *Id.*

29. *Id.* at 163.

F. *Resale Policies Can Retard the Development of
Efficient Facilities-Based Competition*

In general, facilities-based competition is likely to be more efficient than competition that is based solely on resale policies. Though resale may spur innovation in the *marketing* of local exchange services, it will not do so for the *production* of the local exchange services themselves, as facilities-based competition will. As this Article has already pointed out, the costs to *market* local exchange services are relatively small in comparison with the corresponding costs to *produce* it. Resale provides incentives to lower a very small component of the costs of local exchange service, but unlike facilities-based competition, it does not provide incentives to engage in cost-reducing innovation where the reductions in costs are likely to be greatest: in the production of the service itself.

A poorly designed resale policy can lead to inefficient incentives for both prospective entrants and incumbent LECs, and in so doing, retard the growth of efficient facilities-based competition. In this regard, two problems with resale immediately unfold.

First, any prospective entrant knows that if there are network components it needs, it can attempt to gain access to them via resale policies in lieu of engaging in its own investment. Entrants thus have reduced incentives to develop vertically integrated production processes leading to the completion of a final product for sale to end users. A poorly designed resale policy will give entrants the incentive to engage only in the stages of production in which they can excel, but not the incentive to innovate and develop all stages of production required for completion of the final product.

Second, LEC competitors may seek to gain access to valuable network components at resale prices that do not reflect the true social costs of the access. Such entrants may be able to enter the market only if they are allowed access to these network components at advantageous resale rates and terms (in lieu of engaging in their own investment). Unfortunately, this is not what true competition is about, for entry that occurs in this way does little or nothing to yield the benefits to consumers of facilities-based competition.

A regulatory authority may pursue a mandated resale policy because it believes that by doing so, it can simulate the results of a so-called "contestable" market downstream by removing what it considers "barriers to entry" to the downstream retail market (*i.e.*, by removing sunk costs of producing the retail service). Thus, the intent of creating a "wholesale" local exchange service through resale policies may be to reduce the initial start-up costs of entering the local exchange market,

and to circumvent the large investments and associated risk required to build competing local distribution networks. If competition is based on resale policies in lieu of facilities-based competition, LECs would assume all the expense and risk of putting plant into the ground and of maintaining and upgrading it, while resellers could use this plant at a low price and walk away from it without losses if adequate consumer demand did not develop. Facilities-based competition for local exchange telecommunications services is far more likely to bring about the benefits of competition compared to “competition” based on resale. The prospect of competition has resulted in research, development, mergers, joint ventures, partnerships, and the trialing of innovative new technologies and new applications by diverse (and often non-traditional) companies, all in efforts to become viable and successful competitors in the emerging competitive telecommunications environment.

Thus, resale may seriously reduce incentives for LECs and other firms to engage in cost-reducing innovation or network modernization in the future, since the LECs must expect that they may be required to make components of their innovations available to competitors on terms that may not allow recovery of the investment. This type of “competition” cannot bring about real economic efficiencies and the type of competition that lowers total industry costs. Because resale cannot spur true local exchange competition (in the economist’s sense), “competition” from resellers will have no effect on the incumbent LEC’s incentive to increase quality or lower production costs. Since the non-facilities based reseller must purchase its primary productive input from the existing LEC, any quality improvement by the LEC will also be granted to the reseller. No competitive advantage would be granted to the LEC by improving the quality of its service. Similarly, the existing LEC will have no increased incentive to lower the cost of its service. Any cost savings achieved by the LEC would also be granted to the non-facilities based competitor through lower wholesale rates. The incumbent carrier would not realize any competitive advantage from lowering its costs.

Thus, resale provides misguided incentives to both incumbent LECs and to prospective entrants: it rewards innovative marketing (a small component of the total cost of local service), but unlike facilities-based competition, it offers prospective entrants no incentive to engage in cost-reducing innovation.

III. CONCLUSION

This Article argues that the benefits ascribed to mandated resale of local exchange services are unlikely to materialize, and poorly crafted resale policies may well have the opposite effect: retarding rather than fostering efficient facilities-based entry, and hence withholding from consumers the benefits of the efficiency of competitive local exchange service markets.

This Article arrives at the following conclusions:

(1) Resale as a policy is not automatically in the public interest, as legislators and regulatory agencies often assume. It can only be an effective policy if: (a) the competitive process in the retail market is impeded or forestalled somehow (with a resulting detriment to consumers via high prices, etc.) due to a lack of alternatives to the resold service; (b) direct regulation of retail prices is incapable of remedying the situation; and (c) industry cost conditions make resale conducive to welfare-improving competition.

(2) Resale is unlikely to result in a significant welfare improvement for consumers. For resale to yield significant increases in consumer surplus, it must enable competition that leads to large decreases in local service prices. Yet resale requires entrants to provide (aside from the resold service) only that factor of production for which no firm is likely to have a significant cost advantage. Further, if the costs avoided by the incumbent LEC (in ceding the marketing function to a reseller) are a very small component of the total cost of providing local exchange service, then even significant innovations (and resulting cost reductions) in this component of production has a low probability of reducing the *overall* cost to society of local exchange service significantly.

(3) The optimal price for wholesale services purchased for resale is the current retail tariff rate, minus the avoided incremental cost of retail marketing, plus the incremental cost of wholesale marketing to the LEC. Resellers should also pay a fixed charge designed to recover the fixed and per-firm set-up costs of making resale possible. This method of pricing the wholesale service is equivalent to the well-known efficient component-pricing rule developed in the regulation and economics literature for the pricing of intermediate productive inputs.

(4) Resale in subsidized markets is inappropriate. A market in which the retail price has been set at levels below cost is not a market in which prices are too high due to market failure, and hence which may require a resale policy.

(5) The failure of a vertically integrated firm to make services available via resale to firms requiring them (as inputs to their retail service) is not a *prima facie* indicator that such services, as productive inputs, are “essential facilities.” Further, the fact that prospective entrants to the retail market can increase their profits if resale policies occur is immaterial, since the existence of such entrants may or may not enhance economic efficiency.

(6) Facilities-based local exchange competition is more likely to lead to efficient retail pricing than the competition spawned by resale policies. A poorly designed resale policy can lead to inefficient incentives for both prospective entrants and incumbent LECs, and in so doing, retard the growth of efficient facilities-based competition.