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Duopolistic Competition in Cable Television: Implications for Public Policy

Thomas W. Hazlett†

Most cable television systems in the United States operate as monopolies, typically obtaining an exclusive franchise from a municipality to exploit consumer demand within a specified service area. Unlike most traditional public utility regulators, however, local municipalities cannot set the rates charged by the local cable monopolies that they establish. While exclusive franchises are the overwhelmingly dominant market structure in the cable television industry, direct competition between normally monopolistic cable television companies—a phenomenon referred to as an overbuild because both companies have placed cable systems in the same geographic area—currently occurs in at least three dozen jurisdictions nationally.

Overbuilding is an important form of market rivalry both on its own merits and because of the public policy considerations surrounding the regulation of the cable television industry. From an industrial organization perspective, overbuilds pit firms in duopolistic competition, characterized by geographically clear service areas, economies of scope and density, and non-salvageable investment. Even in this type of market environment, the policy alternative of free entry may still offer a mechanism for proconsumer discipline of local cable markets where rate regulation is either ineffective or infeasible. Furthermore, the practice of granting exclusive licenses to cable

†Assistant Professor of Agricultural Economics, University of California, Davis.

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1. See The Cable Communications Policy Act of 1984, § 2, 47 U.S.C. § 543 (Supp. V 1987). The Cable Communications Policy Act gives existing franchises two major advantages in negotiating with municipalities: (1) it effectively bars local governments from regulating rates, and (2) it shifts the franchise renewal burden to the municipality, which is now forced to prove that a contract should not be extended in order to deny franchise renewal. Both measures vastly reduce local governments ability to make demands upon cable firms or even to enforce compliance with existing terms. Municipal government discretion and influence have not been completely eliminated from the franchising process, but the plausible consumer welfare rationale for local regulation, i.e., rate controls to constrain prices beneath monopoly levels, has evaporated.

2. Duopolistic competition is defined as head-to-head rivalry between exactly two firms.

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television companies has been attacked as violative of First Amendment rights. Constitutional challenges to exclusive licensing in cable are prompting courts and juries to grapple with the issue of whether cable franchises are natural monopolies and to what extent consumer welfare would be affected by allowing competitive market forces to operate under a liberal franchising policy.3

This Article attempts to put the debate over the structure of the cable television industry in a public policy context; it analyzes the welfare implications of overbuilding using a public choice model that assumes rational political agents and takes into account the institutional realities of ongoing duopolistic competition in Community Antenna Television (CATV).4 This analysis concludes that the standard cost/benefit calculus overstates the cost of direct competition. Furthermore, it finds that the difficulties faced by competitive entrants in cable arise not so much from natural monopoly conditions as from the ability of incumbent suppliers to transfer monopoly rents to municipal officials so as to protect their exclusive franchise. As a result, the local franchising process is likely to be biased in favor of monopoly market structures such that a national policy which gives local authorities the ability to choose between free entry and monopolistic market structures generally will prove hostile to competition and to consumer interests. These results suggest that competitive entry in local cable television markets should be per se legal and actively encouraged by policymakers at the municipal, state, and federal levels.

This Article attempts to focus, sort, and critique current analysis of competitive issues in cable. Part I frames the problem. Part II presents three alternative frameworks used by economists to conduct such analysis. Part III amends the most promising of these three frameworks to include important public choice considerations. This approach uses the methods and basic insights of microeconomics and public choice theory to model the likely behavior of municipal franchisors in a variety of market environments. Parts IV and V use this amended model to analyze the cable industry. Part IV discusses the peculiar regulatory tools now available to franchising agents in the U.S. cable television marketplace. Part V describes two ongoing examples of duopolistic competition in CATV, highlighting the strategic


4. "Cable TV" refers to all wire delivery systems, including unfranchised SMATV (satellite master antenna television) systems. By contrast, this Article deals specifically with wire delivery cable television systems that require local government franchises because their wires cross public rights-of-way, often labeled "CATV."
and regulatory issues. The analysis concludes by comparing the public policy implications associated with giving local franchisors substantial discretionary authority (the status quo) with the alternative proposed in this Article of constraining their authority with fixed rules favoring open entry.

I. The Existence and First Amendment Importance of Duopolistic Competition

According to U.S. cable industry sources, CATV overbuilds exist in over forty jurisdictions. The economic feasibility of such head-to-head rivalry, though in dispute, is of profound legal significance. The activities in which cable operators engage implicate First Amendment interests, and nonfranchised cable operators have challenged exclusive franchising as an infringement of their First Amendment rights. Municipalities have defended franchising by claiming that natural monopoly cost conditions exist in the local CATV market and that these conditions make exclusive franchising necessary.

Courts have responded to this contention in two different ways. Some courts have rejected this claim as a matter of law, relying on the holding in Miami Herald Publishing Co. v. Tornillo. There, the Supreme Court held that market power is an insufficient justification for the regulation of protected expression. Other courts, however, have found the issue of the existence of monopoly cost conditions to be an important factor in the analysis of First Amendment claims. Judges have requested that juries determine as a question of fact whether monopoly cost conditions existed in a particular locale, and juries have reached different conclusions in different cases. Where

it has been found that no monopoly cost conditions existed and "competition was feasible and sustainable," the municipality has been required to advance a substantial interest to justify awarding the exclusive franchise. Whether these investigations into the existence of monopoly cost conditions are relevant as a matter of First Amendment law has been seriously questioned by both sides of the franchising debate.

Advocates of franchise monopoly have argued that the small number of duopolies in the cable industry, out of a universe of 9,010 cable systems, stems from the financial irrationality of such rivalry. They interpret the infrequency of competition as a confirmation of the subadditive cost conditions present in cable, and proceed to build a defense of monopoly franchising by municipal governments on a natural monopoly rationale.

Some of the most vociferous advocates of franchise monopoly and the natural monopoly rationale are current cable franchise operators. Overbuilds are not popular in the CATV distribution industry. One commentator notes:

In almost all cases, cable operators are unanimous in their assessment that overbuilds do not work as a result of the large capital requirements needed up front and the necessity of cornering at least 40 percent of the market once the system is built in order to obtain a return on that investment.

A cable consultant voices the standard view that "overbuilds are really duplication," and goes on to assert that overbuilds are socially inefficient:

14. NATIONAL CABLE TELEVISION ASS'N, RESEARCH & POLICY ANALYSIS DEP'T, CABLE TELEVISION DEVELOPMENT 17 (Table)(Dec. 1989).
15. Subadditivity of costs is often given as the test for natural monopoly. It is defined as a market in which supplying the relevant quantity demanded is achieved more economically by one firm than by two or more: \( C(\sum_{i=1}^{n} q_i) < \sum_{i=1}^{n} c(q_i) \), for \( n \geq 2 \) where \( c(q) \) = total costs of producing \( q \) output. See W. Sharkey, The Theory of Natural Monopoly 62-67 (1982).
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Allegedly, this duplication of services is good for the subscriber, but it isn't because basic rates have to be higher to support both operators. And what usually happens is that one of the two operators goes down the tubes. The ultimate loser isn't just the overbuilder, but the subscriber as well.17

The cable industry's argument is refutable. As any duplication problem stems from the investment of sunk capital,18 duplication is only a problem for operators. Consumers must experience a heightened competition for their business when overbuilding occurs.19 While overbuilding an existing cable system can lower the profitability of the incumbent operator, it unambiguously improves the position of consumers who face prices determined not by historical costs, but by the interplay of supply and demand.

Critics of monopoly franchising have argued that local government policies rather than the economics of cable delivery have created monopoly conditions. As of October 1987, municipalities had issued only 165 multiple, overlapping franchise awards.20 Most of the remaining several thousand local cable markets were characterized by single franchises.21 Richard Posner, for example, was an early critic of municipal restrictions on entry in the cable industry, blaming the illegality of multiple entry as the factor substantially responsible for discouraging competition:

As the cable television business now operates, subscribers are rarely if ever given a choice between cable companies; only one company solicits their patronage. The immediate cause of this, however, is not any inherent characteristic of cable television but the fact that a cable company must obtain a municipal franchise

17. Moozakis, Range Wars, CABLE TELEVISION BUS., Sept. 15, 1985, at 20, 23 (quoting T. Alexander, president of Alexander & Assocs., a unit of Tampa, Fla.-based Communications Equity Assocs.).
18. Sunk capital refers to investments that, once made, cannot be easily and cheaply diverted to alternative markets. In cable, the sunk portion of investment is composed of those expenditures that are highly nonsalvageable, primarily expenditures for the cable plant construction.
19. Data support this analysis. A recent Touche Ross report found that, "where overbuilds have ended [because competitors have merged] . . . there is no evidence to suggest that, on the average, rates increased to a point that is higher than they would have been had no overbuild occurred." TOUCHE ROSS, REPORT ON OVERLAPPING CABLE FRANCHISE STUDY 40 (October 7, 1987) (study for Dade Co., Fla. Cable Comm'n). See also infra discussion in part V, section B., subsection 3 (competition among cable operators results in lower consumer prices).
21. Id. Incidence of multi-franchise markets (three or more franchises) is trivial.
municipalities do not grant more than one cable franchise in any area within their jurisdiction.\(^{22}\)

Federal case law reflects this disagreement over the existence and extent of natural monopoly conditions. In *Pacific West Cable Co. v. City of Sacramento*,\(^ {23}\) the first suit with a full hearing on the question of economic scarcity, the jury found that local cable television service in Sacramento was not a natural monopoly. In *Norwest Cable Communications Partnership v. City of St. Paul*,\(^ {24}\) however, the jury found that the St. Paul market could "support the existence of only one cable television company."\(^ {25}\) The verdicts in both cases were based upon the economic findings of the juries, Sacramento finding no monopoly conditions and opening the cable television market to non-franchised entry, and St. Paul finding monopoly conditions and leaving franchise barriers intact.

The possible presence of natural monopoly in the cable industry is of great legal importance because it constitutes a possible efficiency rationale for exclusive licensure in cable. Without the support of such a rationale, exclusive licensure would likely be held unconstitutional. In *Sacramento*, for instance, Judge Milton Schwartz observed that if the jury had determined that the Sacramento cable distribution market constituted a national monopoly, the verdict to open the market to all entrants would have been considerably affected:

"The jury's finding that cable television is not a natural monopoly is particularly important in this analysis . . . . If the jury had determined that cable television in the Sacramento area was indeed a natural monopoly and that competition would have "inevitably" resulted in a single firm controlling the market, then the impact of a single franchise policy on first amendment freedoms would have been much less."\(^ {26}\)


\(^{24}\) No. 3-93 Civ. 1228 (D. Minn., Sept. 1, 1988).

\(^{25}\) Id. at 4.

\(^{26}\) Sacramento, 672 F. Supp. at 1334-35. Clearly, Judge Schwartz viewed the natural monopoly issue as a question of overbuilding, that is, *actual* competition, not just *potential* competition. In the question he put to the jury on the matter, he asked: "Is 'head-to-head' competition among cable television systems unlikely to occur and endure in the Sacramento market?" In other words, is cable television a 'natural monopoly' in the Sacramento market?" The jury answered, "No." Id. at 1349.
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The question of duopolistic competition in CATV thus assumes great policy importance. In attempting to answer this question, economists have advanced three different theories.

II. Efficient Market Structure: Three Perspectives

In the recent economic policy debate over the franchising and regulation of cable television, three general perspectives have surfaced in the literature. All are aimed at estimating the magnitude of the net advantages of the prevailing monopoly market structure. The rival methodologies may be termed the Scale Estimate Approach, the Franchise Efficiency Approach, and the Cost/Benefit Approach. The findings of each methodology will be reviewed in sequence.

A. The Scale Estimate Approach

This methodology focuses on the relationship between the quantity supplied and cost, employing econometric estimates of the scale parameters bearing on subadditivity. Webb, Noam, and Owen and Greenhalgh reach varying conclusions as to the evidence. Webb finds large elasticities of scale, in the range of 4 to 10, which prompts Noam to comment that "the magnitudes of the [scale] elasticities are so vast . . . as to be unpersuasive." The information requirements necessary to estimate scale elasticities in an industry such as cable are clearly substantial, thus accounting for the range of opinion generated. Nevertheless, the estimates provided by Noam and by Owen and Greenhalgh are closer to the mark.

Noam estimates scale elasticities for three outputs: Homes Passed, basic subscribers, and premium subscribers. The measured

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29. Owen & Greenhalgh, Competitive Considerations in Cable Television Franchising, CONTEMP. POL'Y ISSUES 69 (1986).
30. WEBB, supra note 27, at 59. Generally, elasticities measure percentage changes in one economic variable per percentage changes in another. Here, elasticity of scale is defined as

\[ E_s = \frac{\% \Delta \text{Quantity}}{\% \Delta \text{Cost}} = \frac{\Delta Q}{\Delta C} \]

This is a measure of how much output rises per a change in costs.

Where this statistic is greater than one, output is rising relatively faster than costs, indicating that scale economies are present.
32. "Homes Passed" refers to the number of potential subscribers whose dwellings are physically passed by the system's cables.
elasticity for the physical size measurement "Homes Passed" turns out to be very small ($E_{i}^{H} - 1.020$), but more significant scale economies are found for the other two ($E_{i}^{B}=1.054$ and $E_{i}^{P}=1.072$).\textsuperscript{35} Using Noam's scale elasticities, one can calculate a benchmark "overbuild cost penalty"\textsuperscript{34} by reducing basic and pay subscribership to 60 percent of industry means,\textsuperscript{35} while leaving Homes Passed at mean size. This produces a unit cost penalty of about seven percent. Noam, however, characterizes local cable distribution as a natural monopoly market due to a distinct criterion: economies of scope.\textsuperscript{36} Total elasticity of scale ($=1.096$) is of greater magnitude than each of the individual measures, due to the interaction of scale economies.\textsuperscript{37}

Owen and Greenhalgh find unit cost penalties resulting from an overbuild to be higher, amounting to about fourteen percent for a typical system.\textsuperscript{38} However, they conclude that while "this is hardly negligible, it is within the range of monopoly markups that might be expected in the absence of competition or effective regulation."\textsuperscript{39} Interestingly, Noam and Owen and Greenhalgh crisscross in their empirical findings and policy conclusions. Noam finds smaller scale elasticities, yet leans towards a policy based upon monopoly market structure, a policy which Owen and Greenhalgh specifically avoid.\textsuperscript{40}

33. Noam, supra note 28, at 106.
34. "Overbuild cost penalty" is defined as the increase in unit costs experienced as a result of having two firms produce for a given market versus one firm.
35. Price competition and x-efficiency factors would tend to expand either duopolist's output beyond 50% of a comparable monopolist's. It appears reasonable to calculate the duopolist's unit costs not simply by halving monopoly output but by allowing for some (here, 20%) increase in output. X-efficiency entails the minimization of cost. This differs from so-called allocative efficiency, in which cost and demand conditions are held constant. There, competitive behavior involves the expansion of production until price equals marginal cost. Here, x-efficiency focuses on the competitive margin of lowering the cost curve itself. This concept, then, incorporates the dynamic process by which cost structures come into being over time, as opposed to the static view of the allocative efficiency concept, where cost conditions and technology are taken as given. See Williamson, Economies as an Antitrust Defense: The Welfare Tradeoffs, 58 Am. Econ. Rev. 18 (1968).
36. Noam, supra note 28, at 114-15. Scope economies are present to the degree a collection of product outputs can be produced jointly at lower unit cost than separately, and total elasticity of scale is the proportional response of multiple outputs per a proportional increase in scale. When scope economies are present, total elasticity of scale exceeds the weighted average of product-specific scale elasticities. See W. Baumol, J. Panzar & R. Willig, CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE 73-74 (1982).
37. Noam, supra note 28, at 106.
38. See Owen & Greenhalgh, supra note 29, at 76.
39. Id.
40. Noam, supra note 28, at 112-25; Owen & Greenhalgh, supra note 29, at 77-78.
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The ironic disparity between the conclusions reached by Noam and by Owen and Greenhalgh points to the weakness of the scale estimate approach. No bright line test exists that clearly identifies incontestable natural monopoly market structures. Similarly, no reliable estimate of the costs, as well as effectiveness, of any selected regulatory scheme has been developed. Although a quantifiable test for the existence of subadditivity is available, this test leaves the policy issue unanswered, for the cost increases from rivalry may be offset by the productive and allocative efficiency gains associated with competition. The analysis is complicated further by administrative and rent-seeking costs. Hence, scale elasticities do not permit the analytical and institutional richness that an analysis must have to provide a full understanding of the costs and benefits associated with a change from monopoly franchise to duopolistic competition.

B. The Franchise Efficiency Approach

The Franchise Efficiency Approach looks to the franchise regime itself as the appropriate unit of study. By analyzing the behavior and effect of regulators, the efficiency issues associated with duopolistic versus monopolistic regimes are placed in a more appropriate public policy context. Zupan has found franchising to add significantly to total costs, thus reducing welfare. Although this study also found that prices were significantly lower under municipal franchising regimes, subsequent federal price-deregulation has eliminated any potential

41. For example, does 14%, Owen & Greenhalgh's calculation of unit cost penalties resulting from an overbuild, see supra note 29, at 76, imply natural monopoly, duopoly, oligopoly, or just imperfect competition?
42. See supra note 15.
43. The literature typically refers to investments in procuring government franchises as rent-seeking costs, in that new output is not created as a result of the expenditures, but instead is transferred from some other potential recipient. This is wasteful, as resources are consumed while output is not increased for the system as a whole.
44. This argument is not meant to demean the analysts. They have produced useful information, but the central issues are inherently elusive and call for a more complex welfare analysis.
46. In the Cable Communications Policy Act of 1984, § 2, 47 U.S.C. § 543 (Supp. V 1987), Congress eliminated local government rate controls over basic cable services as of December 29, 1986, in all communities where "effective competition" was found to exist by the Federal Communications Commission (FCC). In April 1985, the FCC issued its conclusion that effective competition existed whenever three B-grade off-air TV station contours reached the cable system's area. See Implementation of the Provisions of the Cable Communication Policy Act of 1984, 50 Fed. Reg. 18,637, 18,650-51 (1985) (codified at 47 C.F.R. § 76.33 (1988)). This effectively deregulated 97% of all U.S. cable franchises. See UNITED STATES GENERAL
offset in the form of price restraint to the cost increases associated with franchising. In contrast to Zupan, Hazlett found that local price controls were not used to enhance consumer welfare, even prior to the era of federal deregulation, but were used primarily as leverage by governments to enforce cross-subsidy agreements between firms and franchisers.\(^4\) In the absence of price controls, cable firms could more easily renege on franchise agreements; the periodic requests for rate hikes were seen as a low-cost enforcement tool for municipalities.\(^4\) In a previous article, Hazlett reviewed industry litigation and found local governments acting purposefully to foreclose competitive challenges to cable, thus revealing a pro-monopoly, anti-consumer intent. In an econometric test of this hypothesis, Beutel discovered that cities were more likely to award franchises to firms with high output prices and concluded that political agents acted to maximize politically-appropriable rents, not welfare.\(^4\)

C. The Cost/Benefit Approach

Smiley\(^5\) has offered a third analytical perspective, one particularly appealing to economists, which seeks to assess the relative welfare trade-offs resulting from direct cable competition. The benefits of such competition include increased consumer choice stemming from the introduction of an imperfect substitute, and the reduction of prices from monopolistic to duopolistic levels, assuming a regime of laissez-faire pricing. Price reductions improve welfare by allowing fuller satisfaction of the demand curve lying above the marginal cost curve, but do not take into account transfers to consumers from the incumbent, price-lowering monopolist. The analysis calculates the cost

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\(^1\) Accounting Office, National Survey of Cable Television Rates and Services 4 (August 1989). In a recent ruling by the U.S. Court of Appeals for the District of Columbia, this deregulation—challenged by the National League of Cities among others—was upheld. See ACLU v. FCC, 828 F.2d 1554 (D.C. Cir. 1987) (per curiam), cert. denied sub. nom. Connecticut v. FCC, 485 U.S. 959 (1988).


48. Instead of using periodic requests for rate hikes as a tool to lower effective prices, municipalities employed such requests to police rent transfer bargains.

49. See Hazlett, Competition v. Franchise Monopoly in Cable Television, 4 CONTEMP. POL’Y ISSUES 80 (1986) [hereinafter Competition v. Franchise Monopoly].

50. See P. Beutel, Uncovering Cities' Selection Criteria in Monopoly Franchising: The Case of Cable Television (July 1987) (available, Dep't Econ., Miami U., Oxford, Ohio).

51. Id. at 16-17. Beutel’s sample was from the pre-deregulation era when rates were price-controlled locally.

52. A. Smiley, Antitrust Division, U.S. Dep't of Justice, Direct Competition Among Cable Television Systems (FAG Paper No. 86-9, June 5, 1989).
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of direct competition as the increase in expense associated with dual suppliers. This production inefficiency flows from imposing a quasi-competitive structure on a presumably subadditive industry cost curve.53

Smiley hypothesizes a plausible demand curve, applies a game-theoretic approach to approximate the likely price-reduction benefits of duopoly, and deduces duplication cost penalties from construction and operating costs suggested by informed industry sources. He then performs a simulation on benchmark cases for a typical cable system, finding that: (a) a franchise monopoly market structure produces less total welfare than either a simultaneous dual entry or a partial sequential entry scenario, while (b) a fully sequential overbuild will fail to materialize in view of the realization of negative profits by the second entrant. As expected, the monopoly scenario produces less consumer surplus than either of the duopoly outcomes, while minimizing supply costs. Moreover, under Smiley’s assumption of nondiscriminatory pricing, a complete overbuild is unnecessary to produce positive welfare effects because a partial overbuild also produces price reductions; the simultaneous entry scenario predicts an overbuild of only 9 percent of the market, yet the overbuild is accompanied by a price reduction of 7.62 percent, and a summed penetration increase of 14.03 percent.56

Sensitivity analysis reveals that the net welfare effects of duopoly are widely variable: "the degree of overbuilding is highly sensitive to market conditions and ... varies inversely with demand elasticity and costs."57 Yet, with a variety of assumptions, “under mandatory rate deregulation, it is reasonable to conclude that overbuild competition has a potentially significant welfare-enhancing role and that municipalities may opt for overbuilding more often than in the past."58

53. This approach can be thought of as derivative from the scale economies analysis but distinct in that it explicitly considers both sides of the market.
54. A fully sequential overbuild is realized when the first firm to enter has an absolute first mover advantage.
55. Penetration = numbers of subscribers / numbers of homes passed by cable.
56. A. SMILEY, supra note 52, at 24.
57. Id. at 32.
58. Id. at 35.
Table 1

Smiley's Benchmark Scenarios:
Monopoly v. Three Varieties of Duopoly

<table>
<thead>
<tr>
<th></th>
<th>Franchise Monopoly</th>
<th>Simultaneous Entry</th>
<th>Sequential Entry</th>
<th>Partial Sequential Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits$_1$(π$_1$)</td>
<td>$184,913$</td>
<td>$71,365$</td>
<td>$77,300$</td>
<td>$84,033$</td>
</tr>
<tr>
<td>Profits$_2$(π$_2$)</td>
<td>n.a.</td>
<td>$71,365$</td>
<td>-3,957</td>
<td>$30,909$</td>
</tr>
<tr>
<td>Consumer Surplus (CS)</td>
<td>$178,416$</td>
<td>$228,968$</td>
<td>$359,838$</td>
<td>$284,730$</td>
</tr>
<tr>
<td>Welfare (W)</td>
<td>$363,329$</td>
<td>$371,698$</td>
<td>$413,181$</td>
<td>$399,671$</td>
</tr>
</tbody>
</table>

*Negative profit for second firm compels single entrant solution, as shown in Column 1.

III. Franchisers as Maximizing Agents: A Public Choice Model

Smiley's framework is well-crafted to enable one to break out and quantify the trade-offs involved in monopoly versus duopoly market structure in a comparative statics exercise. Indeed, it encompasses the econometric estimation of duplication cost penalties in the scale elasticity approach, and, at least in form, frames the problem in terms of the welfare implications of the municipal decision to permit free entry. But the clarity of Smiley's framework makes more apparent
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three separate problems not addressed by using such a cost/benefit calculus to prescribe policy. First, the framework lacks any plausible public choice model of the municipal decision to award cable franchises. Second, it fails to allow profit-maximizing firms to internalize rationally the costs of duplication. Since firms can limit duplication costs through merger, limit pricing, etc., these costs should not be treated as externalities in the same sense as consumer surplus is seen as an exogenous benefit in the policy calculus. Third, such a calculus treats some sunk costs and simple pecuniary losses as marginal social costs. We deal with these problems in inverse order.

A. Sunk Costs and Simple Pecuniary Losses

If, following Smiley, the welfare question is viewed in traditional terms, net social benefits \( W \) are calculated as the sum of consumer surplus \( CS \) and industry profits:

\[
W = CS + \pi_1 + \pi_2
\]

where \( \pi_1 = P_1q_1 - AC_1q_1 \) and \( \pi_2 = P_2q_2 - AC_2q_2 \). Traditional economic analysis attempts to judge the effects of duopoly versus monopoly, i.e., to determine if the change in welfare, stemming from an increase from 1 to 2 in the number of suppliers, is non-negative: \( \frac{\Delta W}{\Delta N} \geq 0 \).

Consumer surplus must rise as entry takes place because of reduced prices and expanded output to consumers. Also, because firms do not enter markets when they anticipate that such entry will lower their profits, where entry is partially or wholly sequential, the profits of Firm 2 will be greater or equal to zero, i.e., \( \pi_2 \geq 0 \). Hence, total welfare \( W \) can only be diminished if an increase in the number of entrants \( N \) causes a dominating fall in the profits of the incumbent firm \( \pi_1 \) which outweighs the resulting increase in consumer surplus \( CS \) and the increase in the profitability of entering firms, i.e., \( \frac{\Delta \pi_1}{\Delta N} > \frac{\Delta CS}{\Delta N} + \pi_2 \) as \( N \) goes from 1 to 2. This merely says that duopoly lowers welfare

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61. Consumer surplus is a function of the number of suppliers, i.e., \( CS = f(N) \). Thus, the change in consumer surplus as the number of suppliers increases must be positive, i.e., \( \frac{\Delta CS}{\Delta N} > 0 \).

62. In that \( \pi_2 = 0 \) when \( N = 1 \), the change in Firm 2's profits due to entry is simply \( \pi_2 = \frac{\Delta \pi_2}{\Delta N} \).
only if the incumbent's loss in profitability from competition outweighs the gains to consumers and to the new entrant. Decreases in $\pi_i$ (the profit of the incumbent) attributable to declining revenues $(\frac{\partial \pi_i}{\partial \bar{N}} < 0)$, can be caused only by either a decline in $P_i$ (the price charged by the incumbent), in which case welfare increases, or a decline in $q_i$ (the quantity sold by the incumbent) as consumers shift to a preferred alternative. In terms of social welfare, both represent positive sum transactions.

Welfare declines only if the entry of Firm 2 raises the unit costs of serving those customers that a monopolist could alternatively serve without the duplication cost penalty. Graphically, we portray the typical case in Figure 1, where $q_m =$ monopoly output and $q_d =$ duopoly output. Consumers gain $\Pi_m - 2\Pi_d$ from duopolistic competition (where $\text{AC} < P_d < P_m$, consistent with plausible duopoly equilibrium assumptions), while the monopoly producer loses $(C) = (P_i - \text{AC}_m)q_m$. The entire quantity $(P_i - \text{AC}_m)q_m$ is included in Smiley's analysis as a welfare loss, though, while just the triangle $(A)$, and the profits of the second firm that are not transferred from the incumbent, are counted as efficiency gains. Smiley calculates the net benefit derived from competition as:

$$W_d - W_m = (A) + (B) - (C).$$

Smiley endorses multiple entry whenever this magnitude exceeds zero.

In other words, raising the per unit total costs of an incumbent results in lost rents or quasi-rents, but is not properly counted as a cost of entry. It may involve a pecuniary loss, as the market value of the sunk capital is reduced. However, such losses generally have not been included as social costs:

The person who loses wealth via transfer of goods or the reduction of their exchange value is suffering a real loss of wealth, but not a cost. That loss is different in principle, in kind, and in fact from a cost. From the private point of view both sources of loss of wealth are "bad" for him. Both are losses of opportunities to him, though only a cost is a loss to the community.

63. This assumes $P > MC$, a necessary condition for a profitable unregulated monopolist not practicing perfect price discrimination. However, even with a perfectly discriminating monopolist, welfare does not decline with price reductions; consumer surplus gains precisely offset producer surplus losses.
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Figure 1. Welfare Trade-offs: Monopoly v. Duopoly

Transfer to consumers from incumbent monopolist (CST)

(C) rise in per unit costs of $q_m$ due to duopoly (v. monopoly)

(D) transfer of profits to Firm 2

(A) consumer surplus allocative efficiency gain

(B) entrant's profit on marginal units

D_2 = AC_1 + AC_2
duplication cost penalty for duopoly

MC_1 = MC_2

P_0 = P_1

$\frac{q_d}{2}$ $q_d$

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as a whole. What he loses in the pure price revaluation case, someone else gains.64

Hence, given a municipality which already has a monopoly supplier and has no credibility problem,65 the procedure of summing consumer surplus and supplier profits is flawed by allowing a non-cost item to lower $\pi_1$ and, hence, $W$.

B. Cost Minimization Strategies of Entering Firms

In the simultaneous entry case, all costs are marginal and pre-entry. This raises the second criticism of the traditional cost benefit analysis. Rational entrants are likely to internalize and minimize duplication of capital costs as efficiently on average as franchising. Moreover, entering firms have several minimizing strategies available to them such as merging with competitors or using sustainable pricing.66 In the latter, one firm67 would credibly establish a long-run price ($P_l$), which realizes all scale economies, but does not compromise the consumer surplus gains associated with duopolistic competition. The establishment of a long-run price ($P_l$) would serve to deter Firm 2. However, the incentive to set prices below monopoly levels ($P_m$) arises only when a municipality pursues a nonexclusive franchising policy.

C. A Public Choice Model of the Municipal Franchise Decision

Obtaining a municipal policy of nonexclusive franchising is problematic, as our initial and most fundamental critique indicates. Total industry profits, as Smiley shows, and as intuition dictates, are maximized in the exclusive franchise scenario. A sole franchise has more than twice the value of either of two competitive franchises. Assuming that a municipality has a dual entry policy—a policy shown

64. A. Alchian, Cost, 3 Encyclopedia of the Social Sciences (1968), reprinted in Economic Forces at Work 301, 331 (1977) (emphasis in original).
65. A monopolist’s fixed investment may become important, instead, for analyzing the long-term credibility of commitments undertaken by the municipality. See infra text accompanying note 92.
67. The more efficient firm would have a lower cost of pre-emption, although the analysis abstracts from cost differences. Pre-emption is used here generically as any action undertaken by an incumbent or would-be incumbent to keep a rival from entering the market. In many cases, pre-emptive investments may be outlays undertaken to raise rivals’ costs. However, the action may include proconsumer behavior such as the limit pricing strategy discussed in the text. See id.
to be normatively optimal across a wide range of cases under the Smiley analysis—the rents associated with retaining a franchise monopoly are inevitably greater, assuming homogeneous firms, than the potential profits available to an entrant. As a result of this rent asymmetry between monopolies and duopolies, in either the simultaneous entry or sequential entry case, the incumbent/potential monopolist can outbid any equally efficient potential entrant in the political marketplace.

The public choice literature predicts that auctions for benefits distributed by the political process will produce a stable equilibrium when organized coalitions bid for the rents associated with a given policy regime. This result is clarified by contrasting the two inequalities that embody the economic welfare analysis and the public choice calculus:

The Normative Social Welfare Analysis Inequality: Is $A + B + CST > \pi_1^m - \pi_1^d$? This asks whether the consumer surplus allocative efficiency gain ($A$), and the gain transferred from the monopolist to consumers ($CST$), plus the profits gained by the entering firm ($B$), are greater or lesser than the loss in profits experienced by the incumbent monopolist ($\pi_1^m - \pi_1^d$), and

The Positive Public Choice Analysis Inequality: Is $\delta \pi_2 > \pi_1^m - \pi_1^d$? This indicates that whether the second firm will be allowed to enter depends upon whether the profit the second firm will make ($\pi_2$), discounted by a factor ($\delta$) to take into account the uncertainty that the firm, through competition, will actually achieve that profit, exceeds the loss to the incumbent monopolist ($\pi_1^m - \pi_1^d$).


69. The discount factor ($\delta$), where $1 \geq \delta \geq 0$, assumes that making profit in a competitive situation involves risk. In Pacific West Cable Co. v. City of Sacramento, 672 F. Supp. 1322 (E.D. Cal. 1987), for example, the entrant that filed suit and won the case by obtaining a ruling that franchise monopoly was unconstitutional, was not even the first to enter the post-monopoly cable market (see discussion part V, section B, infra). This occurred because the actual policy decision faced by municipal authorities is monopoly versus free entry, not monopoly versus duopoly; hence, the entering duopolist has acquired no special claim in return for resources expended in obtaining permission to enter.
Consumers are not likely to be able to organize themselves so as to contract collectively for CATV services or, alternatively, to effectively monitor their political agents who arrange such contracts. The transactions costs associated with informing and organizing consumers are likely to be high in cable TV markets. Indeed, this market failure forms the basis of the natural monopoly problem. As a result, the potential gains to consumers—the allocative efficiency gains and other benefits that could be transferred to consumers by the monopolist—are not included in the public choice analysis ($A + \text{CST} = 0$). Consumer demand is zero-weighted.

In a positive sense, then, policymakers would be expected to weigh the size of entrant profits, discounted by the inherent nonexclusivity associated with the multiple entry right, against the loss inflicted on an incumbent or potential incumbent by a second firm entry. As noted, industry profits are, ceteris paribus, greatest under monopoly. Thus, even if an equally efficient entrant captures one-half of industry profits under duopoly, its gain would necessarily be smaller than the resultant incumbent loss. That is, the inequality

$$\pi^w_1 - \pi^d_1 > \pi^d_2$$

would always hold. Only exceptional profits for a superior entrant or asymmetric expectations, both violations of homogeneity assumptions, would create incentives for a municipality to permit entry. Entry will be deterred not because of natural monopoly conditions, but because municipal franchisers do not adequately consider consumer interests.


71. If the incumbent monopolist starts with profits $= \pi_m$, and entry by a second firm reduces it to profits $= \alpha \pi^d$, where $\alpha = \text{proportion of total duopoly profits (or "share of the market")}$ earned by Firm 1 after the entry by Firm 2, then I assert: $\pi^m - \alpha \pi^d > (1-\alpha)\pi^d$ whenever $\pi^m > \pi^d$. This is clearly true for $N > 2$ as well.

72. We have assumed throughout, as is customary, that all firms have access to the same technology and managerial talent and hence are homogeneous. Allowing newer, superior methods to be employed by entrants would obviously introduce an additional argument for an open entry policy.

73. At an October 1987 industry seminar on overbuilding attended by the author, an attorney for the National League of Cities, a strongly pro-franchise monopoly association, questioned the viability of overbuilding on the grounds that entrants would always be bought off (via merger) by incumbents, given the fact that a monopoly system was inevitably worth much more than the sum of competitive ones. Touche Ross makes just this point in a case study. See supra note 19, at 34. The complaint is commonly made in trade gatherings that
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A final disequilibrium remains. When a municipality grants a limited number of franchises, the supracompetitive returns expected to be obtained by the grantee(s) inevitably provoke vigorous rent-seeking competition for the franchises. As a result, the cable television market has become notorious for the intensity and contentiousness of its franchise battles. The most common municipal practice is to auction just one cable franchise to the applicant promising the highest level of subsidies for uneconomic services and programming, or to the applicant with the most compelling political mix of equity owners. However, allowing for risk premiums and the asymmetric cost functions of competitors, the sum of lobbying expenses undertaken to secure a franchise will be approximately equal to the present value of the monopoly rent stream itself. This profoundly affects Smiley's welfare analysis by further offsetting the monopoly cost savings:

Welfare Analysis with Rent Seeking: Is \( A + B + CST > \pi^m_1 - \pi^d_1 - R \)?

where \( R \) = the discounted sum of all rent-seeking costs expended to obtain the monopoly. Here we compare the size of the gains from competitive entry, which accrue to consumers and the entrant, to the loss in profits suffered by the incumbent minus the rent-seeking cost attached to monopoly franchises. Tullock and Posner have postulated that, given plausible assumptions (primarily risk neutrality and homogeneous firms), \( R = \pi^m_1 - \pi^d_1 \). That is, the entire rent associated with the property right of monopoly will be spent by franchise bidders. This result is a long-run equilibrium condition. As long as \( R < \pi^m - \pi^d \), the expected value of a marginal investment in overbuilders are green-mailers, entering only to be purchased at a generous price by the incumbent. Of course, an incumbent that buys off all comers in open entry markets will soon be green-mailed down to zero quasi-rents. (Seen from the other side, an incumbent who charges a sustainable price is invulnerable to green mail). The principle that a monopoly return motivates a higher bid than does a less than monopoly return is correct; the sensible thing to bid on, however, is an exclusive franchise, not a free entry right.

74. See Private Monopoly, supra note 13.
securing the right would be positive and further rent seeking would occur.\textsuperscript{80}

Ironically, the major difficulty in including monopoly cost savings as a welfare gain, as Smiley's cost-benefit calculus does, is that such gains are easily appropriated by the franchising authority as a political unit, and then dissipated in the ensuing quest for private assignment. An open-entry policy would entail no political auction and would avoid such costs.\textsuperscript{81} Hence, in a public choice equilibrium, selecting a monopoly franchise policy whenever

\[ A + B + CST > \pi^m_1 - \pi^d_1 \]

is an elusive social maximum, for the policy choice is itself endogenous. In instances where the above inequality suggests monopoly efficiency, wasteful rent seeking of approximately \( R = (\pi^m_1 - \pi^d_1) \) will result. The rents saved by the monopoly franchise policy will be squandered in the competition for obtaining and defending the franchise itself.

\textsuperscript{80} Full dissipation is not necessary in the short-run when there are limits on the entrants to the rent-seeking competition, see Tullock, \textit{Efficient Rent Seeking}, in \textit{TOWARD A THEORY OF THE RENT-SEEKING SOCIETY} 97-112 (Buchanan, Tollison, and Tullock eds. 1980), or when some firms have lower costs in capturing the rents, see Flowers, \textit{Rent Seeking and Rent Dissipation: A Critical View}, 7 CATO J. 431, 437-38 (1987). Any excess profit will, however, encourage investment to achieve such returns over the long-run until the anticipated marginal return falls to zero. Moreover, Wenders argues that "rent-defending costs" may actually raise \( R \) above \( \pi^m - \pi^d \). Wenders, \textit{On Perfect Rent Dissipation}, 77 AM. ECON. REV. 457-58 (1987). Mills, in an apt demonstration of the importance of rent dissipation in a similar market, finds that whatever public goods zoning laws may supply, they are too easily wasted in rent seeking to obtain transfers to increase social welfare. Mills, \textit{Is Zoning a Negative-Sum Game?}, 65 LAND ECON. 1 (1989).

\textsuperscript{81} Smiley suggests that there exist rent-seeking costs associated with open-entry in the form of pre-emptive wiring built by firms in a race to cable neighborhoods before the entry of competitors. See A. SMILEY, \textit{supra} note 52, at 27. However, this rent seeking could be eliminated through relaxation of antitrust limitations on gentlemen's agreements. It would be in all rivals' interests to enter into market divisions if pre-emption led to inefficiencies. Indeed, at least two jurisdictions (Dade County, Florida and Columbus, Ohio) have supervised such "peace treaties" to facilitate the cabling of their cities by several firms possessing area-wide nonexclusive franchises. See \textit{infra} note 114 and accompanying text; BOOZ ALLEN, \textit{ANALYSIS OF OVERLAPPING FRANCHISES, OVERBUILDING AND DIVIDING URBAN MARKETS IN THE CATV INDUSTRY FOR CABLE ATLANTA, INC. AND GEORGIA CABLEVISION CORP.} app. (October 9, 1979). But where such agreements turn into rigged-bid collusions to gain franchise protection, antitrust action may result, as it did in Houston. See Affiliated Capital Corp. v. City of Houston, 735 F.2d 1555 (5th Cir. 1984).
IV. The Policy Relevance of Duopolistic Competition with Constrained Regulators

Duopolistic rivalry is generally analyzed by extrapolating from the study of monopolistic cable franchises. This complicates the analysis of competition in cable. Because the overwhelming majority of cable systems are not overbuilt, cost studies are performed on monopoly firms—firms that may differ systematically from duopolistic competitors.\(^2\)

However, analyzing the effects of competition in cable television is easier now that local municipal authorities have few regulatory powers over cable operators besides the power of regulating entry.\(^3\) Because federal law now prohibits local price control, the standard cost/benefit analysis has been simplified. The traditional economic approach evaluates monopoly franchise regulation by weighing the social benefits derived from controlling prices against the various costs associated with such a regulatory regime. This approach is clearly inappropriate when the regulators no longer control output prices. Franchise regulation can now be analyzed as an exchange of an entry right to the chosen monopolist for various favors, such as: contributions of cash grants to local foundations, stock equity and consulting contracts to political movers, and franchise fees or gifts in-kind to the franchise authority or its appointed constituencies.\(^4\)

Franchising without rate controls essentially involves just the transfer of rents. This actually promotes inefficiency because these redistributions are not, when done legally, enacted via direct money payments to individual decisionmakers, but are paid through public organizations via the political process.\(^5\) The current "deregulated"


83. See Shepherd, *Entry as a Substitute for Regulation*, 63 AM. ECON. REV. 98 (1973) (arguing that literature on entry under regulation has not taken into account scope and varieties of types of regulation).


85. For instance, the League of Women Voters has its political support purchased via a promise of zero-priced airtime and production facilities, rather than through an explicit monetary payment to its members.
franchise monopoly, then, promotes wasteful rent seeking, substitutes political selection for consumer selection of the monopolist or duopolist, and freezes out newer forms of technology and innovative organizations or delivery modes, while failing to offer even a plausible chance of welfare gains through price controls or rate-of-return regulation. Thus, we may characterize the franchising process as nakedly inefficient from a welfare perspective, although it does produce benefits for municipal franchisers.

The verdict just stated may be reached by focusing upon the limited outcomes available. In Table 2, we consider three possible outcomes from the policy decision to eliminate entry barriers. Because consumers cannot be worse off than under an unregulated monopoly, the open-entry policy scenarios present themselves as zero-cost alternatives insofar as consumer surplus is concerned. However, political decisionmakers sacrifice considerable benefits under the open-entry policy. This explains why the franchising process is so valued by political interests even when it is not in fact used to suppress price and expand welfare, and even when it cannot be used to do so, as in today's CATV market. Here the trade-off between a public franchising agent's direct access to the fruits of an auction for economic rents versus the possibility of garnering public accolades for promoting proconsumer competition, assuming the existence of such accolades for the sake of argument, is one in which the public interest constraint can be discounted almost completely.

86. See Tullock, supra note 78, at 231.
87. See Noam, Private Sector Monopolies: The Case of Cable Television Franchises, in PRODUCTIVITY AND PUBLIC POLICY 193, 208-12 (M. Holzer & S. Nagel eds. 1984). Noam finds such dynamic economies particularly pronounced in cable. Id.
88. This explains its overwhelming employment by municipal governments.
89. See Stigler, The Theory of Economic Regulation, 2 BELL J. ECON. & MGMT. SCI. 3 (1971). One possible benefit of open entry to political franchisers—a benefit not listed in Table 2—is the opportunity to avoid a decision between rival factions. This is the motive ascribed to municipal governments where overlapping franchises have been issued. See BOOZ ALLEN, supra note 81. It is counter-intuitive to model individual decisionmakers as preferring less to more on the grounds that it is difficult to make choices (and it is hence omitted in our analysis). If elected officials encounter difficulty in selecting a franchise, as is often the case, they can choose: (a) the highest offer, weighted to reflect all the political interests and personal tastes of the politician; (b) ask the top choices to merge their proposals and split the equity interests; or (c) divide the community into franchise areas, awarding exclusive franchises in each region. After a franchise battle running several years in Minneapolis, two cable companies of equal political clout simply decided to split the city in half, whereupon two franchises were issued; a merger then consolidated the systems. See P. Edwards, supra note 75, at 92-93.
## Table 2

Open Entry Policy Welfare Trade-Offs (v. Monopoly Franchise)

<table>
<thead>
<tr>
<th>Structure Result</th>
<th>Cost to:</th>
<th>Benefit to:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consumers Franchising Agents</td>
<td>Consumers Franchising Agents</td>
</tr>
<tr>
<td>No Second Entry</td>
<td>None</td>
<td>Rent transfers more difficult to distribute as monopoly rights are attenuated.</td>
</tr>
<tr>
<td>Entry Which Ends</td>
<td>None</td>
<td>Rent seeking transferred to economic marketplace from the public sector; competition for the franchise eliminated.</td>
</tr>
<tr>
<td>Entry Which Ends</td>
<td>None</td>
<td>Rent seeking transferred to economic marketplace from public sector; competition for the franchise eliminated.</td>
</tr>
</tbody>
</table>

The existence of a limiting case—unregulated monopoly—as the default value in the entry decision greatly facilitates our analysis. There is no confusion regarding the sign of the first derivatives as we go from a regime of protected monopoly to one of actual or potential duopoly: prices will fall and outputs will expand. Hence, the analysis of what actually happens post-entry need not be quantified to arrive at
a conclusion regarding the direction of consumer surplus effects. Entry cannot hurt; at worst, it will leave consumers unaffected.90

The constraints upon local regulators, particularly those which limit their inability to set rates, also serve to clarify and test a possible explanation for exclusive cable franchising: the efficient long-term contract paradigm. By creating certain economies in production and distribution, exclusivity could be used to strike a bargain between potential monopolists and franchising bodies that act as agents for consumers.91 Under this scenario, a property right to monopoly could well be in the global interests of consumers even if, ex post, it generated net costs (just as it may behoove one to abide by the terms of a contract even if a particular paradigm is no longer in one's narrow financial interest). Once a deal has been struck, abandoning it for a better option may be seen as opportunistic, and an agent's credibility in arranging bargains in future periods may be damaged.92

This situation is analogous to business dealings where exclusive territories are quite often protected by manufacturers for distributors so as to rationalize marketing systems. What must be present in this type of relationship, however, is a bona fide deal: consideration is required on both sides of the contract. Monopoly rights should not be tendered for a zero price. This is why the naked monopoly franchise scheme now predominant in municipalities fails to fit the efficient contract enforcement paradigm.93

90. A recent study of cable franchising by the National Telecommunications and Information Administration (NTIA) echoes this analysis. See NATIONAL TELECOMMUNICATIONS, supra note 84. In the study, the first extensive appraisal of cable regulatory policy by the federal government in fourteen years, the NTIA concluded:

The common occurrence of exclusive cable franchises does not serve the public interest. The franchising process has seriously impeded entry by competitors and imposes substantial costs on franchisees, cable subscribers, and the public. Municipalities could, instead, encourage competitive cable operators to service a franchise area which would result in greater choice, better service, and lower prices to consumers. In fact, many of the "market power" problems and issues we face today are direct outgrowths of a franchising process that has, and continues to, erect [sic] large entry barriers.

Id. at i.

91. See Goldberg, supra note 70; Williamson, supra note 70.

92. The whole idea of a patent, for example, is to protect future period creative activity by ensuring monopoly returns in the present period.

93. Another factor preventing the occurrence of an efficient contract enforcement scenario is that it is often illegal under state law, or of questionable legality under antitrust law, to explicitly award exclusive franchises. Hence, city governments claim that issuing a single, nominally "non-exclusive" franchise does not constitute the creation of a legal monopoly. Tucson Mayor Thomas Volgy, the Chairman of the National League of Cities Transportation and Telecommunications Steering Committee, recently noted that "cities don't award exclusive

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Consumers could conceivably receive consideration for countenancing monopoly in two basic ways: (1) exclusivity might promote cable investment where none would otherwise be forthcoming; or (2) consumers could arrange to share the monopolist’s scale economies in the form of lower prices. For the first condition to obtain, the service in question would have to evince some amortization difficulty (as when an idea without patent protection is copied). No such riskiness accompanies cable investments, which are immediately capitalized at several times investment book value, and which are readily undertaken in open-entry jurisdictions. Indeed, the franchise process has tended to delay, rather than to promote, proconsumer investments.

As for granting monopoly rights to receive lower prices, such an opportunity for municipalities no longer exists. Some might argue on fairness grounds that the Cable Communications Policy Act of 1984, which deregulated rates as of December 29, 1986, constituted an exogenous shock and should not be used opportunistically by municipalities as a justification for allowing new entry. However, the National Cable Television Association, the trade association of the cable industry, lobbied for years to secure passage of the measure. Hence, it is the cable operators who have behaved opportunistically vis-a-vis the municipal franchising authorities with respect to the regime switch.

Further evidence that the primary reasons for the existence of cable franchise monopolies are the benefits they provide to local franchising authorities is provided by the continued existence of monopoly franchises even after the decontrol of rates imposed by the Cable Communications Policy Act. Municipalities are not generally abandoning their now naked (i.e., lacking rate-regulation) franchise monopolies. As hundreds of franchises come up for renewal each year, the new policy regime of rate deregulation should be reflected in the elimination of franchise monopoly, of the assumed *quid pro quo*. The old arrangement’s purported *quid pro quo* of rate control has been removed, yet the *quid* of franchise monopoly remains.

It is not a mystery as to why. The cable franchise arrangement lacks consideration for consumers, but not for franchising authorities. In a

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94. See infra notes 121-28 and accompanying text.
95. See *Private Monopoly*, supra note 13, at 1372 n.130.
96. *Cities Fight Move to Curb Local Cable TV Regulation*, NAT’L J., May 9, 1981, at 1599-1600.
classic principal/agent problem, political actors maximize influence, power, or wealth by creating rent-seeking competitions between rival monopoly claimants. A for-profit manufacturer can reliably identify and terminate exclusive franchises created by regional or division executives who negotiate away company interests for personal gain, and hence the principal/agent problem does not dominate the gains possible in a private market exclusivity exchange. Since the costs to cable consumers of similarly disciplining their cable franchise agents, i.e., their local politicians, are far higher, the cable television market has given way to uncompensated monopoly creation.

V. Two Case Studies

The existence of duopoly in the cable industry demonstrates the economic and public choice issues surrounding cable competition. A full examination of all overbuilds has not been performed yet, although various treatments offer useful information. In a previous study I found that multiple franchise systems on average offered a package consisting of basic channels and one premium channel at $1.82 per month per subscriber lower than a monopoly franchise system. Webbink finds the difference somewhat less, $1.18, but similarly significant and in the same direction. Recent data on nineteen private overbuilt competitors, reveals that unweighted prices are nearly 23.5 percent below those of monopolistic firms for a typical Basic+HBO package. Although this spread is highly significant statistically, it is unadjusted for other possible characteristic differences between the samples. Moreover, the sample is biased, including some of the most aggressively competitive overbuilt markets.

Rather than reconstruct or extend such monopoly/duopoly studies herein, I shall examine two particular duopolistic markets. Each one is interesting as a cutting edge example of current overbuilds where some entry has been achieved, more is being sought, and political conflict has joined economic rivalry, or vice versa, as an integral element of the competitive struggle, thereby revealing the views of the

97. See Beutel, supra note 50; Cabling America, supra note 76, at 203; Competition v. Franchise Monopoly, supra note 49; Private Monopoly, supra note 13; Zupan, supra note 45; NATIONAL TELECOMMUNICATIONS, supra note 84, at 22-31.


100. Cabling America, supra note 76, at 219.
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parties involved as to the economic impacts of the various policies at issue.

This method of analysis is selective, and owes much to the judgment of the author.\textsuperscript{1} Why should two particular markets be of interest in a systematic analysis intended to be applicable to thousands of cable TV markets? In a similar context, however, Oliver Williamson has argued that:

Considering the primitive state of comparative institutional analysis, more than abstract study is needed. Microanalytic examination of a number of individual cases will also be instructive. Among the cases that might by selected for examination, the "study of extreme instances often provides important leads to the essentials of the situation."\textsuperscript{2}

Williamson also cites the observation of A. A. Walters and P. T. Bauer that "the complexity, instability, and local variation of many economic phenomena imply that the establishment of understanding of relationships requires that analysis . . ." must often extend beyond statistical information to direct observation and use of primary sources.\textsuperscript{3}

Despite the difficulties involved in quantifying and interpreting duopolistic market results, estimations of the possible results of overbuilding have consistently influenced the intuition, and hence conclusions, of cable market analysts. For example, Eli Noam's translog cost function, estimated on a data set consisting of 4,800 cable systems, produced ambiguous empirical evidence, yet Noam nonetheless surmised:

Beyond the theoretical arguments, there is also the reality of competitive entry, or rather the lack thereof. In practice there are no second entrants, apart from minor cream skimming instances. Competitive cable television services . . . exist in less than 50 franchises out of 4,800 and are usually caused by disputes about the scope of the initial franchise award . . . . The

\textsuperscript{1} It also takes a moving target as its subject matter. The market facts discussed in this Article were the result of research conducted in 1987-88. While the dynamics of the marketplace may quickly render the particulars of any snapshot analysis obsolete, the economic forces at work are likely to be operative over broad categories of phenomena.

\textsuperscript{2} Williamson, \textit{ supra} note 70, at 75 (quoting \textit{BEHAVIORAL SCIENCES SUBPANEL, PRESIDENT'S SCIENCE ADVISORY COMMITTEE, STRENGTHENING THE BEHAVIORAL SCIENCES} (1962)).

\textsuperscript{3} \textit{Id.} at 101-02.
rivalry among cable operators is thus primarily for the right of first entry.\textsuperscript{104}

In this methodological spirit I shall present the facts surrounding two instances of ongoing duopolistic competition as case studies.\textsuperscript{105}

A. Duopolistic Competition in Florida

The most aggressive overbuilder in the country is Telesat Cablevision, Inc., a wholly owned subsidiary of the multi-billion dollar firm, Florida Power and Light Group Capital (the FPL Group). Telesat began in 1981 as a private cable firm providing Satellite Master Antenna (SMATV) service to multiple dwelling units (MDUs) located solely on private property. In 1985, Telesat was purchased by the FPL Group and, in 1986, began a campaign to secure local cable franchises with which to compete against established CATV operators.\textsuperscript{106} Telesat currently holds 20 such permits and serves approximately 55,000 subscribers.\textsuperscript{107}

1. Orange County, Florida

In Orange County, Florida, which includes the city of Orlando, Telesat has secured a county-wide franchise permitting competition in all unincorporated areas. In the spring of 1987, Telesat approached overbuilt subscribers in at least eight areas of the County. The areas were served by two spatially separated companies, Cablevision Industries and Cablevision of Central Florida. By September 23, 1987, Telesat, the entrant, had passed 10,000 homes with cable in overbuilt areas, and had signed up 4,000 subscribers in these homes, a penetration of 40 percent. Just as impressive, the pay-to-basic ratio began at 1.07, assuring average monthly revenues per subscriber in the healthy $25-30 range.\textsuperscript{108}

\textsuperscript{104} Noam, supra note 28, at 114.

\textsuperscript{105} A listing of markets where such competitive activity has occurred is contained in Paul Kagan Assocs., \textit{Pending Overbuild Franchising Activity, Cable Television Franchising}, Oct. 31, 1989, at 1-4 (Supp.).

\textsuperscript{106} It is not necessary to obtain a franchise to transmit through a satellite dish or cable located solely on private property. A franchise is required to lay cable across public property, such as city streets. Thus, securing a franchise was necessary to enable Telesat to extend its cable from private property to other private property across city streets.


\textsuperscript{108} Revenues from remote converter rentals, additional outlets, and advertising must be added to basic and premium prices in calculating revenues.
Table 3

Orange Co., Fla. Overbuild Summary: Early 1988

<table>
<thead>
<tr>
<th>Subs</th>
<th>Basic Rate ($/mo.)</th>
<th>1st Pay Rate ($/mo.)</th>
<th>No. of Channels on Basic</th>
<th>No. of Pay Channels</th>
<th>Install Density (HP/mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telesat</td>
<td>5,000</td>
<td>9.95</td>
<td>9.95</td>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>Cablevision Ind.</td>
<td>n.a.</td>
<td>14.45</td>
<td>11.95</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td>Cablevision Ind.*</td>
<td>n.a.</td>
<td>7.25</td>
<td>7.50</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td>Cablevision C.F.</td>
<td>n.a.</td>
<td>12.95</td>
<td>11.95</td>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>Cablevision C.F.*</td>
<td>n.a.</td>
<td>6.50</td>
<td>6.50</td>
<td>33</td>
<td>4</td>
</tr>
</tbody>
</table>

*Free during initial subscriber campaigns and subsequent promotions.
†In overbuilt areas.
**Source: See Broadcasting Cablecasting, Yearbook 1987 at D-55.

One explanation for Telesat's initial overbuilding success is that Telesat charged significantly less while offering significantly more channels than did the incumbents. Interestingly, the post-entry pricing reactions of the two original suppliers have been dramatic. Cablevision of Central Florida has reduced basic prices from $12.95 to $6.50 in duopoly areas, with pay services similarly cut. Cablevision Industries has slashed its basic rates in half, precisely in those regions where it is overbuilt. These strategies have not deterred Telesat from continuing to overbuild in either original supplier's service area, for the strategies have not prevented consumers from switching to Telesat because of its reputation, its quality programming, or for other reasons. The significance of Telesat's success in Orange County is enhanced by the fact that Telesat is overbuilding the modern cable systems of its competitors in an average density market of 91.3

HP/mile, compared to a U.S. average of about 94 HP/mile,\textsuperscript{110} and in a market where off-air broadcast television is amply supplied.\textsuperscript{111} Telesat's success under these conditions sheds doubt on the claims of some analysts that duopoly would only be successful under very favorable market conditions.

2. Riviera Beach, Florida

In Riviera Beach, Florida, Telesat serves 700 customers on Singer Island, a high-density beachfront featuring high-rise condos, apartments, and hotels. With 2.47 miles of cable, Telesat passes some 3,000 housing units. Ongoing franchise litigation has prevented Telesat from actively marketing its product to attract more customers from this number.\textsuperscript{115}

Despite the uncertain status of its municipal franchise, the impact of Telesat's entry in Riviera Beach is clear. The incumbent cable provider, Comcast, served this market before Telesat's entry with an old 12-channel cable system priced at $8.40 per month for basic. Telesat, entering originally as an SMATV supplier, offered to wire the high rises of Riviera Beach on a bulk-rate basis, supplying 26 channels of basic to all units for a price of $5.75, and sending just one bill to the condo association or owner, thereby achieving a penetration of 100 percent. Other services were provided, including a message board channel for each building to program with building and community news via teletype and, in one case, an emergency override message system with which to inform residents of faulty fire alarms, which had plagued the building. The incumbent operator, Comcast, has now upgraded its system capacity and is pricing competitively; it has also joined the City in a lawsuit to impose a universal service stipulation on all cable franchises, requiring that every home be offered service if any home is to be offered service.\textsuperscript{113}

\textsuperscript{110} PAUL KAGAN ASSOC., CABLE TELEVISION FINANCIAL DATA FACTBOOK 55 (June 1987). "HP/mile" signifies "homes passed per mile," or the average number of potential subscribers passed by each mile of the system's cable.

\textsuperscript{111} High density of housing units and a lack of off-air television were explicitly identified as the determinative characteristics of a viable duopoly market structure by Dr. Samuel Book, author of the Malarkey-Taylor overbuild report. Freeman, Study Finds Profits Elusive When Two Systems Overbuild, MULTICHANNEL NEWS, April 13, 1987, at 17.

\textsuperscript{112} Telephone interview with Richard Shore, Vice President and Controller, Telesat Cablevision, Inc. (Feb. 7, 1990).

In Dade County, Florida, which includes the city of Miami, an intense political battle arose in 1987 among four incumbent cable firms, each serving essentially non-overlapping territories, and the competitive entrant, Telesat. The County had adopted an open-entry policy in 1978, and subsequently had issued four county-wide franchises. But, according to the County's top cable official, a year and half of confusion ensued, during which just 2,000 subscribers were connected, as the firms attempted to string cable in a preemptory fashion, staking claims around presumably exclusive turf. At the behest of the four firms, the County then sponsored a gentlemen's agreement, wherein each franchise was given a specific sub-county territory to wire over five years. Upon cabling 80 percent of said region, a franchisee could then request County permission to jump into a rival's area. The presumption was that permission would be granted, given the pro-competitive policy.\(^{115}\)

For the most part, wiring then proceeded smoothly, with each firm operating only within its own area. In 1982 and 1983, the most aggressive of the four firms, Americable, obtained permission to cable unbuilt portions of two neighboring franchises. Both portions were wired, although in the second only MDU's were cabled, leaving out low-density areas of West Dade. The selective entries made by Americable impelled the other franchisees to achieve their 100 percent "build-out" performance in much less than five years. "[E]veryone was afraid of big bad Americable coming in and taking their place."\(^{116}\)

Nonetheless, three other overbuilds have emerged, one in the County's jurisdiction, and two in incorporated cities. In 1978, a franchise was issued to Hart-Hankes to cable South Miami, but no building occurred. The City asked Americable to enter in 1981, at which time Hart-Hankes regained its enthusiasm. Both firms entered, resulting in a simultaneous overbuild.

In 1986, a second overbuild developed when the existing system in Miami Beach, passing 68,000 homes and in place since 1978, was overbuilt by a neighboring operator who had secured a duplicate franchise. In the spring of 1986, a third overbuild began when Telesat, through its purchase of a firm owning a duplicate cable franchise, entered the West Dade County area, and began an ambitious

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114. Interview with Anthony Bellow, Dade County Cable Office Administrator, in Miami, Fla. (June 1987).
115. Id.
116. Id.
overbuilding of the entire market area of about 100,000 homes. But a flurry of lobbying activity convinced the County Commission that a study was needed before Telesat should be allowed to compete head-to-head.\textsuperscript{117}

B. Economic and Political Issues Raised by Duopoly: The Dade County Example

The County Commission’s call for a study represented a reversal of the County’s long-standing pro-competition policy and was justified on two grounds: (1) the entrant could only profitably serve the high-density areas, and such “cherry-picking” in rivalry would be unfair to existing operators; and (2) while duopolistic competition might occasionally occur, it is not likely to be significant in size or endure over time. An independent consulting firm conducted a study for the County. The study recommended that only small franchise areas be opened to competitors, with the stipulation that such areas be fully cabled before additional franchise rights would be granted.\textsuperscript{118}

1. Cream-Skimming and Unsustainable Monopoly Arguments

The fear of cream-skimming or cherry-picking carries interesting implications in the cable television market. Consumer surplus is

\textsuperscript{117} The Miami Herald responded:

This ought to be the Dade County Commission’s motto: "When the going gets tough, we order studies." True to that credo when faced with the politically difficult decision to open the cable-television industry in Dade to competition, commissioners the other day ordered a study to determine if competition is a good thing. Imagine: a taxpayer-funded study to determine if the bedrock of American capitalism is a sound principle.

\textit{Compete for Cable TV}, Miami Herald, May 3, 1987, at 2C, col. 1. The study, completed in October 1987, found that a free entry policy was not in the public interest. See \textit{TOUCHE ROSS, supra} note 19, at 45.

\textsuperscript{118} See \textit{TOUCHE ROSS, supra} note 19. Numerous sources, including Dade County cable regulatory personnel, justify regulation of franchises on the premise that intense price competition in one period will inevitably lead to higher prices in future periods so as to recoup short-term losses. This argument does not make economic sense. As unregulated monopoly prices are currently charged, an entrant engaging in a predatory overbuild could—at best—gain the market position to post prices at levels currently charged by the unregulated monopoly franchise. Moreover, if a local cable market departs from textbook perfect competition due to its above average sunk cost investment requirements, then the predatory entrant is a mythological creature. The existence of two sunk infrastructures, even if only one system operates, serves as a constraint against monopoly pricing, barring merger. Furthermore, the idea that short-term price cuts followed by long-term monopoly pricing are worse than short- and long-term monopoly pricing suffers arithmetically.
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unaffected by such activity. If an incumbent has wired 100 percent of the market, and has been granted free market pricing, competitive entry into any one sub-market does not change the intersection of marginal revenue and marginal cost in any other sub-market.\textsuperscript{119} The existing operator may give cry to the existence of an unsustainable natural monopoly, wherein (given a multi-period model with fixed costs not sunk at the margin) entry barriers are required to obtain optimality.\textsuperscript{120} Yet, sustainability of least-cost production methods should not be confused with sustainability of capitalized monopoly rents.

The evidence suggests that unregulated cable markets suffer from no particular disability in thwarting inefficient entry. To achieve sustainable monopoly, however, the incumbent may have to restrain its monopolistic pricing behavior. This is apparently what incumbents do, because there are scores of unfranchised yet non-overbuilt jurisdictions.\textsuperscript{121} Moreover, the level of sustained rents currently enjoyed by incumbent operators casts doubt on any sustainability rationale for exclusive licensure.

The value (V) of a cable television system is the expected present discounted value of its cash flows (CF), minus any avoidable capital outlays:

\[
\text{ex ante: } V = \sum_{i=1}^{n} CF_i \frac{(1+r)^i}{(1+r)^i} - I_0
\]

119. Ignorance of this point has led to some curious policy pronouncements, such as the statement by an attorney for a cable firm being overbuilt in West Palm Beach: “It sounds like the consumer is getting a break because there’s competition . . . . But those low prices are being subsidized by those consumers who don’t get any service.” The Palm Beach Post, Apr. 29, 1987, at 8B. The fact that an area has already been wired for cable assures, in essence, that they will continue to receive service. The only possibility for changing prices charged for such output in response to partial entry involves the special case of a change in demand elasticity due to a market segmentation. Where differential prices are legal (they are generally illegal in franchise agreements), intense price competition in a sub-market may leave the remaining non-overbuilt market with less elastic demand, thereby raising price, or with more elastic demand, thereby leading to lower prices. The presumption, however, is that competitive entry in the sub-market will, on net, increase demand elasticity in the remaining market by raising the threat of entry. “Competition even at the fringes of each territory could have a powerful demonstration and stimulative effect for the entire area.” A. KAHN & I. STELZER, NATIONAL ECONOMIC RESEARCH Assoc., COMMUNICATIONS REGULATORY REFORM IN NEW YORK STATE, REPORT TO GOVERNOR HUGH L. CAREY (March 25, 1981).


121. See Private Monopoly, supra note 19, at 1372 n.130 (unfranchised markets are not characterized by unsustainable monopoly).
where an n-year project proceeds from investment $I$ undertaken at $t=0$, and $r$ = discount rate appropriate for investments of such riskiness.

\[
\text{ex post: } V = \max[ \sum_{i=1}^{n} CF_i (1+r)^i, sI ]
\]

where $s$ = salvageable proportion of $I$, and $s < 1$.

A zero profit condition would suggest that $V = 1$.\textsuperscript{122} Hence, if cash flows were insufficient to sustain $V \geq I$, entry would not be likely. The fact that $V \geq 3I$ throughout the industry today demonstrates that sustainability is not an issue in cable. Quoted in prices per subscriber, systems now sell for approximately $2,000 (see Table 4). Capital costs per subscriber, however, are in the $400-1,000$ range for a monopoly system,\textsuperscript{123} even when costs are padded by expensive franchising requirements.

Indeed, market analysts today estimate that 60 percent of a typical cable system’s equity value consists of intangibles; only 40 percent consists of “property, plant and equipment” (based on replacement value), yielding a Tobin $q$\textsuperscript{124} of 2.5.\textsuperscript{125} An examination of cable

\textsuperscript{122} Here we abstract from capital depreciation, which would allow $I$ to exceed $V$ at a moment in time if replacement cost were calculated as the price of undepreciated capital. We also abstract from any firm-specific efficiencies or inefficiencies, dealing only with industry averages.

\textsuperscript{123} The capital cost per subscriber, also known as replacement cost, has been estimated at $616 by telecommunications consultants Shooshan & Jackson for an average cable system in a typical cable market. SHOOSHAN & JACKSON, INC., OPENING THE BROADBAND GATEWAY: THE NEED FOR TELEPHONE COMPANY ENTRY INTO THE VIDEO SERVICES MARKETPLACE 13 (October 1987). This is virtually identical to the estimate derived from the data given in Albert Smiley’s analysis for the U.S. Department of Justice. A. SMILEY, supra note 52, at 21-22. Using industry means for penetration (.56), density (90 homes per mile), and costs ($23,000 per mile of cable plant; $1.2 million for head-end and start-up; $120 for converter and subscriber hook-up), the capital expense per basic subscriber for the typical 50,000 home market assumed by Smiley equals $619. Cost/sub = [(1,200,000)/50,000(.56)] + [(23,000)/90(.56)] + 120 = 619.

\textsuperscript{124} Tobin $q$ = market value of assets/capital cost of asset. It is the accepted measure of monopoly rents. A zero-profit condition (i.e., robust competition) implies a $q$ ratio equal to one.

\textsuperscript{125} PAUL KAGAN ASSOCs., supra note 110, at 218 (pro forma analysis by Deloit, Haskins, and Sells). Physical plant typically contributes overwhelmingly to capital cost. Smiley allows for $600,000 in start-up and franchise acquisition costs for a 50,000 home market, i.e., about $12 per home passed, or about $22 per subscriber at the mean national penetration rate. A. SMILEY, supra note 52. Franchise acquisition costs can be significantly higher due to rent seeking, but that is a symptom, not a cause, of market power.
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Table 4126

Cable Television Values: 1985-88

<table>
<thead>
<tr>
<th>Period</th>
<th>No. of System Sales</th>
<th>No. of Basic Subs Involved</th>
<th>Price/Sub ($)</th>
<th>Price/HP ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.-June, 1985</td>
<td>138</td>
<td>2,607,543</td>
<td>1,074</td>
<td>487</td>
</tr>
<tr>
<td>Jan.-June, 1986</td>
<td>211</td>
<td>4,608,724</td>
<td>1,343</td>
<td>681</td>
</tr>
<tr>
<td>Jan.-June, 1987</td>
<td>176</td>
<td>5,856,004</td>
<td>1,506</td>
<td>814</td>
</tr>
<tr>
<td>Jan.-June, 1988</td>
<td>202</td>
<td>7,635,198</td>
<td>1,997</td>
<td>1,153</td>
</tr>
</tbody>
</table>

industry data in December of 1986 cable found a Tobin q of 2.81 using medium replacement cost assumptions.127 This result was far higher than the U.S. nonfinancial firm average of 0.805.128

It appears that incumbent operators sought to protect genuine rents—not quasi-rents—in arguing that Telesat's entry would cause irreparable economic havoc. A comparison of Dade County's firms (see Table 5 on next page) indicates that the damage to the rents of incumbent operators may be considerable.

2. Longevity of Competitive Entry Argument

Just as cream-skimming poses no threat to consumer surplus in this market, questions about the likelihood or longevity of competitive entry in local cable markets are similarly misplaced in the policy discussion. A market may be heavily biased towards the survivorship of a sole supplier, yet still not pose the problem for consumers of being a natural monopoly. Indeed, this is an apt application of the

127. SHOOSHAN & JACKSON, INC., supra note 123.
128. Id. at 14. One recent sale of a 7,400-subscriber cable system brought a per-subscriber price of $2,500 in a city where a request for a competitive franchise had been made by a neighboring firm which had publicly announced its intention to overbuild the market. While the seller alleged that the threat depressed his sales price from what it would have been absent the threat, it is clear that the market value was nowhere near an unsustainable margin. See Grunbaum & Bulkley, Roseville Cable TV System Sold for Record Price, Bus. J. (Sacramento, Cal.), Nov. 23, 1987, at 1, 33.
Table 5\textsuperscript{129}

Dade County: Cable Prices and Services

<table>
<thead>
<tr>
<th></th>
<th>No. of Channels (Total)</th>
<th>No. of Basic Satellite Channels</th>
<th>Basic Channels Off Air</th>
<th>No. of Pay Channels</th>
<th>1st Pay Rate ($/mo.)</th>
<th>Basic Rate ($/mo.)</th>
<th>Install. Fee ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelphia</td>
<td>30</td>
<td>14</td>
<td>12</td>
<td>5</td>
<td>12.95</td>
<td>19.95</td>
<td>39.95</td>
</tr>
<tr>
<td>Storer South</td>
<td>33</td>
<td>17</td>
<td>12</td>
<td>5</td>
<td>11.16</td>
<td>16.50</td>
<td>50.00</td>
</tr>
<tr>
<td>Storer North</td>
<td>31</td>
<td>14</td>
<td>10</td>
<td>4</td>
<td>12.00</td>
<td>14.81</td>
<td>25.00</td>
</tr>
<tr>
<td>Dynamic</td>
<td>40</td>
<td>22</td>
<td>12</td>
<td>5</td>
<td>9.95</td>
<td>14.81</td>
<td>40.00</td>
</tr>
<tr>
<td>Dynamic*</td>
<td>40</td>
<td>22</td>
<td>12</td>
<td>5</td>
<td>9.95</td>
<td>9.95</td>
<td>0.00</td>
</tr>
<tr>
<td>Telesat</td>
<td>42</td>
<td>22</td>
<td>13</td>
<td>8</td>
<td>9.95</td>
<td>9.95</td>
<td>15.00</td>
</tr>
</tbody>
</table>

*Only in overbuilt area.

contestability principle.\textsuperscript{130} Where entry is possible, but unlikely to endure, it can still form an important competitive constraint on incumbent behavior. In such a market, the removal of the threat of potential entry will erase this important source of competition. The prospects for prolonged duopolistic competition are largely irrelevant

\textsuperscript{129} These data were compiled from several sources: information sent from Telesat to author (June 1987) (on file with author); FLORIDA CABLE TELEVISION ASSOC., 1987-88 DIRECTORY & DESK GUIDE 55-59, 88-91 (1987); Soto, Cut-rate Firm May Touch Off Cable TV War, Miami Herald, Mar. 12, 1987, at B1.

\textsuperscript{130} BAUMOL, PANZAR, & WILLIG, CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE 291 (1982). The contestability principle focuses on the monopoly problem as a problem of market process rather than of market structure. A monopoly structure exists where a single firm serves a market. But if the monopoly is maintained only by competitive performance, the process is contestable. A prospective competitor will more likely contest the monopoly and enter the market if she can either easily secure long-term contracts with consumers or easily retrieve her capital investment if her venture fails. Therefore the key to whether a monopolist must perform competitively is, generally, a question as to contracting and exit costs. This line of reasoning is basically an extension of Demsetz, supra note 70. See also T. Hazlett, Franchise Bidding and the Monopoly Problem: The Demsetz Solution on Cable, (June 1989) (paper presented at Western Economics Association annual meetings).
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for purposes of restraining monopolistic pricing, given that where contestability is present, a monopolist will exercise restraint. More fundamentally, as Schumpeter observed, the “leapfrogging” of successive monopoly firms can act as the driving force in dynamic economic progress, as well as the primary efficiency motivation for monopoly survivors struggling to prevent their displacement by the next “gale of creative destruction”.

In short, the sustainability of a duopolistic market structure appears to have little bearing on the economic desirability of opening entry into monopolized markets.

3. Franchise Authority Response to Duopoly in Dade County

To return to the Dade County cable market, the reaction by the overbuilt incumbent, Dynamic, to the entry of Telesat has been pointed: Dynamic has matched the entrant by reducing its basic price by one-third, although just in the overbuilt areas. Dynamic offers this to customers on a six-month contract basis. Apparently, the firm believes that post-entry price matching is an optimal reaction strategy; Dynamic’s prices in non-overbuilt areas remain fixed at high, pre-entry levels.

The aggressiveness of Telesat has precipitated strong political reaction. The Florida Cable Television Association, the operators’ trade group, won passage of a statute, effective October 1, 1987, which requires all new entrants to gain cable franchises (some areas had allowed entry without such permits) and establishes strict standards and extensive procedures for their issuance.

These requirements include a lengthy series of mandated public studies and hearings to

131. Schumpeter, Capitalism, Socialism, and Democracy 84 (1942). In Schumpeter’s view, the ideal of perfect competition was a confusion at best. A market filled with atomistic suppliers was not an appropriate goal for real-world policy makers. This parallels the present discussion of competition in the cable industry, where a numbers approach to competition is in evidence (one firm is a monopoly, two firms is competition). According to Schumpeter, the most important type of rivalry was competition that “strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives.” Id. Competition, then, may have its greatest impact when quite invisible to the unaided eye, to wit:

It is hardly necessary to point out that competition of the kind we now have in mind acts not only when in being but also when it is merely an ever-present threat. It disciplines before it attacks. The businessman feels himself to be in a competitive situation even if he is alone in his field or if, though not alone, he holds a position such that investigating government experts fail to see any effective competition between him and any other firms in the same or a neighboring field . . . .

Id. at 85.

establish whether any public need exists for a second cable entrant and to ensure that, if public need does exist, the second franchisee receives permission to enter on terms not less onerous than those included in the incumbent's franchise award. For instance, if an initial franchisee were required to serve all residents—a universal service requirement—the entrant would also be mandated to wire all homes.\textsuperscript{133} Obviously, this requirement creates barriers to entry that will discourage competition; it is promoted by incumbent operators who insist that they do not mind competition as long as the entrant overbuilds them everywhere. Such regulatory activity, through which incumbent monopolists exploit franchise barriers when plausible welfare arguments for monopoly protection do not exist, smacks strongly of government-assisted predation,\textsuperscript{134} and is a classic demonstration of the strategy of "Raising Rivals' Costs."\textsuperscript{135}

C. Duopolistic Competition in Sacramento

A study of the Sacramento CATV market illustrates a host of interesting theoretical issues. After studying the franchise question for three years, the local Cable Commission (contracting jointly for the City and County of Sacramento) awarded a franchise monopoly in 1982. However, when the Cable Commission, in rounds of post-award renegotiations, refused to waive certain promises that had been made by the awardee, the awardee forfeited the franchise. In late 1983, the Cable Commission issued a new franchise to a firm that similarly attempted a renegotiation in 1984-85, and that ultimately left the market by assigning its franchise to a junior partner. Shortly thereafter, the junior partner obtained significant post-franchise concessions. Thus, the franchise fell to Scripps Howard,\textsuperscript{136} which began construction in August 1985. The Sacramento market, with an

\textsuperscript{133} Advocates of such entry requirements rely on the level playing field rationale, which argues that free entry into incumbent cable markets is inherently unfair to established operators who, it is said, paid a price to enter first. This stands the natural monopoly rationale on its head. Cable operators in other states have been quick to embrace the defensive strategy of state franchising legislation. Five states, including Florida, had passed such measures, called overbuild laws, as of October 1988. Hangsted, \textit{Ops Won Overbuild Protection in Four States}, \textit{Multichannel News}, Dec. 26, 1988, at 8.


\textsuperscript{135} Krattenmaker & Salop, \textit{Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price}, 96 \textit{Yale L.J.} 209 (1986).

\textsuperscript{136} Scripps Howard is the parent company of Sacramento Cable Television.
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estimated 350,000 homes, is one of the larger franchises in the nation.\textsuperscript{137}

In July 1987, the Cable Commission abandoned its monopoly franchise arrangement by opening the entire market to all comers on a license basis.\textsuperscript{1} The Commission greatly reduced entry requirements pertaining to public safety provisions, bonding requirements, and technical standards, and eliminated regulation concerning public access and local origination, universal service, and subsidies to community organizations. This policy shift was a direct response to a successful lawsuit brought by Pacific West Cable Company, which had attempted unsuccessfully to enter the market in 1983 without a franchise. In March, April, and May of 1987, a jury heard arguments on Pacific West's claims that the Cable Commission's exclusion of non-franchised entrants violated the First Amendment.\textsuperscript{138} In June, the jury found that the Sacramento cable market was not a natural monopoly and that the claim of "natural monopoly" was a sham used by defendants as a pretext for granting a single cable television franchise . . . to promote the making of cash payments and provision of 'in-kind' services . . . [and] to obtain increased campaign contributions."\textsuperscript{139} In reaction to these findings, and in an effort to soften the judge's imminent pro-competition decision, which was issued in August 1987, the City adopted an open entry policy in July 1987.\textsuperscript{140} In November, the first outbreak of duopolistic competition occurred when the entrant Cable Americal overbuilt Scripps Howard's cable network in the North Highlands area.\textsuperscript{141}

\textsuperscript{137} Barnes, Why Cable TV Costs Too Much, WASHINGTON MONTHLY, June 1989, at 13-14; Mayer, Complex Path for Cable TV, Sacramento Bee, July 19, 1987, at A30.

\textsuperscript{138} The author testified as an expert witness in these proceedings on behalf of Pacific West.

\textsuperscript{139} Pacific West Cable Co. v. City of Sacramento, 672 F. Supp. 1322, 1349-50 (E.D. Cal. 1987).

\textsuperscript{140} Evans, Cable Saga Now Includes Foes Going Head-to-Head, Bus. J. (Sacramento, Cal.), Dec. 7, 1987, at 21, 32. It is important to note that the Commission did not give up its natural monopoly defense of franchising, however. It issued entry licenses with a five-year life only, and publicly maintained that competition would not develop and endure in the marketplace. Presumably, the short-lived licenses (the incumbent's franchise was originally issued for a 20-year period) will assist the locality in reverting to its exclusive franchising arrangement at some future point, if it can show that a lack of competition, i.e., overbuilds, has proven the government's case ex post. This supposition is buttressed by the December 1987 extension of the incumbent's franchise for an additional twenty years. A forty-year franchise now gives the incumbent a larger window to recoup investments made to eliminate rivals possessing five year licenses. Id. Interestingly, the December 1987 agreement also permits the incumbent to charge lower prices in duopoly neighborhoods, although new entrants' licenses prohibit such discrimination. Mayer, Capital Cable Firms Going Head to Head, Sacramento Bee, Dec. 17, 1987, at B1-2. This policy dichotomy is more interesting from a legal than from an economic standpoint, because entrants will generally face direct competition everywhere.

\textsuperscript{141} Evans, supra note 140, at 33.
Cable Americal was an established franchisee at a nearby military installation, McClellan Air Force Base, and was able to expand its cable network quickly into adjacent Sacramento neighborhoods. The pricing policy adopted in response by the incumbent is informative. The entrant, Cable Americal, hoped to gain market penetration by offering 36-42 channels of basic service for a $10 installation fee and $10 a month, significantly undercutting Scripps Howard’s 40-channel basic service offered for $14.50 per month.\textsuperscript{142}

In responding, Scrippps Howard sought to establish a general policy: it would lower price to match the entrant, while offering free installation and three months of basic service at no charge, in every area where it faced direct competition. Moreover, it pledged never to be undersold by the entrant.\textsuperscript{143} After a rugged six-month competition, the incumbent bought out the entrant for a price several times the incumbent’s capital costs.\textsuperscript{144} A third firm, Pacific West Cable Co., which had initiated the prior key litigation, entered the Sacramento market and was immediately confronted by Scripps Howard’s selective price-cutting strategy. Pacific West decided to make an issue of the discriminatory strategy through radio and newspaper advertisements suggesting that customers in sole-supplier areas demand the same low prices offered by Scripps Howard in overbuilt areas.\textsuperscript{145}

D. Economic and Political Issues Raised by Duopoly: The Sacramento Example

1. Market Predation

The above-described competitive struggle reveals an essential barrier to competitive entry in the CATV industry—capital fixity—that is not an artificial barrier created by franchise regulations.\textsuperscript{146} According to

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{142} Mayer, supra note 140, at B2.
\item \textsuperscript{143} Id. at B1.
\item \textsuperscript{144} Telephone interview with Robert Ling, President of Cable Americal (Feb. 7, 1990).
\item \textsuperscript{145} See, e.g., Sacramento Bee, Sept. 23, 1988, at B4.
\item \textsuperscript{146} While the following discussion focuses on market predation through extra-legal barriers to entry apparently operating in the Sacramento market, such predation is likely to be facilitated by artificial barriers such as franchising requirements. As long-run entry barriers of some form must be available for predatory actions to be viable, the ability to reimpose de facto franchise limitations on new rivals after existing entrants are deterred quite conceivably forms a vital aspect of predation strategy. The alternative, nonlegal entry deterrent that makes predation costs a possibly positive profit stratagem is, of course, the presence of significant sunk capital.
\end{itemize}
\end{footnotesize}
Robert Bork, a leading expert on antitrust law, the largest cost of predatory pricing in a typical oligopolistic market is that associated with price discounts to infra-marginal customers. Rather than simply discounting to those purchasers an entrant might service, a predatory incumbent must lower price across the entire market. This places a large burden upon the monopolist, as predation generally implies pricing below marginal cost; hence, per unit losses are being sustained across an expanded level of output. This creates an asymmetry in the losses sustained by the entrant and the incumbent. The entrant, attempting only to take some market position, is not committed to sustaining losses across the entire demand curve, as is the incumbent. It is this disparity in the distribution of losses during a predatory struggle which, in Bork’s analysis, makes predation such a weak threat and, therefore, an unlikely tool.

The existence of sunk cable plant, however, precisely identifies submarkets of entrants and thus mitigates the problem of infra-marginal customers for the incumbent. Predatory price cuts need not be sustained across all customers, and the losses of incumbent and entrant will diverge in reverse: the entrant will sustain losses across its entire output range, the incumbent across a limited slice of its output. Indeed, focusing on just those segments where entry can physically

However, the presence of sunk capital in the cable industry does not, taken alone, appear to be sufficient to bar entry. When new entrants may enter markets via long-term contracting, as they routinely do in cable in multiple dwelling unit sub-markets, or with superior technology, an incumbent’s sunk capital is no guarantee against competition. The significance of any given level of specific capital is itself uncertain, varying not only between industries, but between firms, markets and over time in the same industry. Franchise barriers may be viewed by incumbent operators as having less variance than sunk capital as a deterrent to entry. In any event, both forms of incumbent protection are reinforcing. Moreover, the fact that legal barriers are diligently pursued by cable firms, sometimes at great cost (it is not uncommon for monopolists to pay the municipality’s legal fees in a court defense of franchising), indicates that the franchise adds substantial entry deterrence at the margin.

147. Infra-marginal customers are those customers who will continue to buy from the incumbent, who are not on the margin of switching to the entrant. Since the reach of fixed cable plant so neatly identifies their geographic position beyond the reach of the entrant, consumers in monopoly areas can still be charged monopoly prices and kept off the margin.


149. When an entrant owning a monopoly cable system attempts to compete in a new market, it exposes itself to retaliation. Indeed, immediately after the federal ruling allowing competition in sacramento, Scripps Howard (parent firm of Sacramento Cable Television) threatened to overbuild the Roseville and Truckee, California systems owned by two Pacific West principals. See Haugsted, Roseville CA System Sold As It Faces Overbuild Threat, MULTICHANNEL NEWS, Nov. 16, 1987, at 68. This may be one very good reason why established cable firms so rarely compete directly with each other and, conversely, why the firms which do compete are industry outsiders, such as Telesat Cablevision. See infra note 176 and accompanying text.
occur, the incumbent is able to employ a panoply of scale advantages, for example, in marketing and brand name identifiability, further biasing competitive losses towards the entrant.

Another effect of capital fixity that eases predation is that the range of predatory pricing can be increased above average variable cost (AVC) to just below the entrant's average total cost (ATC). As extension into sub-markets causes the entrant to undertake nontrivial and nonsalvageable investments, an incumbent who sets prices equal to or above ATC may be able to discourage an equally efficient entrant. This facilitates predation by lowering the cost of predation to the incumbent. In CATV, this price competition is rendered effective, as well, by the high cross-elasticities of demand between cable products. Where products are more greatly differentiated, the predatory possibilities are less, and the likelihood of entry greater. The importance of product differentiation has regularly been observed in the cable industry as old, classic 12-channel capacity systems have been considered the prime targets of successful overbuilds. The availability to an entrant of high-demand local sports programming not carried by an incumbent, for similar reasons, has been considered a key to competitive entry.

It is important, however, to distinguish the capital fixity problem from the wasteful duplication argument commonly advanced in support of the claim that cable markets are incontestable or should be rendered so through regulation. The cost to a second firm of rewiring a market is a factor discouraging entry, but it is a cost entirely internalized by the entrant (disregarding public nuisance problems, which can most directly be dealt with—irrespective of market structure—via appropriate charges, fines, bonds, or regulations). If a second firm can enter and make an economic profit of zero or better, the sinking of additional capital will be in the public interest at the margin. While it may be true that it would have been preferable for the incumbent to provide better services for lower prices and, hence, eliminate the need for this capital outlay, this is an irrelevant consideration for purposes of policy. If the institutional tools were available to realize such an outcome, entry would not be viable. The problem hindering competition in these markets is quite distinct from

150. However, pricing below marginal cost seems to be a possible strategy, as well. In Orange County, Florida, incumbent supplier Cablevision of Central Florida cut prices only to existing customers and did not offer the rates to newcomers. “We're doing this to thwart any losses of our subs to other companies,” claimed an executive of the firm, in assuring the public their price cutting “is not an effort to gain new” customers. If Cablevision had been charging above marginal cost, it should have welcomed new customers. Dukes, supra note 109.

151. A. SMILEY, supra note 52, at 32 n.40.
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wasteful duplication of capital arguments: entry will be optimal at existing, pre-entry, market prices, but may not materialize because of post-entry predation. The easy geographical identification and separation of consumers, coupled with the necessity of bond posting in specific capital, makes predation a relatively cheap defensive strategy.

2. Possible Solutions to Market Predation

A solution to this dilemma is suggested by the contracting literature, pioneered by Harold Demsetz. In CATV markets, an incumbent engages in predatory practices in limited sub-markets where entry has (physically) surfaced, holding its "infra-competitive" consumers hostage, in effect, to its monopoly pricing. A proconsumer solution is for some contracting institution to arise, allowing consumers to purchase cable services from the suppliers—existing or potential—providing the most competitively priced long-term arrangement, as explicitly modeled in Posner and Hazlett. However, the costliness of arranging such private contracting solutions forms the heart of the modern defense of public utility-type regulation.

As franchise entry barriers in cable are declared unconstitutional, a trend now gaining momentum, it will be important to watch for the emergence of private contracting forms. Incumbents hope that customers remain difficult to organize into bargaining units. Entrants, however, will actively seek out efficient contracting agents, such as developers, landlords, and associations of homeowners and condo owners, and will offer enhanced product packages that attach to real property instead of transient residents. More subtle forms of contract will also be of importance. For example, if entry firm reputation is, or

152. Demsetz, supra note 70.
153. Consumers who are not on the competitive (overbuilt) fringe.
156. See Competition v. Franchise Monopoly, supra note 49, at 80; Goldberg, supra note 70; Williamson, supra note 70.
becomes, important to consumers, post-entry price discounting to deter entrants will be more costly for incumbents and competitive entry will thereby be encouraged. At the limit, large entry-firm reputational capital would force pre-entry price cutting to a competitive level, thus gaining the benefits of entry without the expense of actual entry. Such contract forms are certainly not zero-priced, but neither is the alternative of public regulation. As federal constraints on local authorities have neutralized whatever price constraining, pro-consumer options were once available, private contracting to expand the scope of competition appears to present almost no risk to consumers.

3. Franchise Authority Response to Duopoly in Sacramento— The Public Choice Model

A key piece of evidence supporting the public choice model presented in this Article is that public franchising agents, far from facilitating such contracting efficiencies, have generally sought to suppress them. In Sacramento, the instant case study, the local authorities issued a monopoly franchise and for four years vigorously fought lawsuits demanding competitive entry. The prices the incumbent monopolist would charge consumers were not, and could not have been, an issue of contention between the incumbent and the Cable Commission. Only the level of support payments to the Commission and to various interest groups, as mandated in the franchise agreement, were at issue.

The municipal government’s role as the consumer’s bargaining agent is severely compromised by the availability of low-cost rent transfers to well organized pressure groups. That is, in sponsoring a rent-seeking competition for a franchise monopoly, local officials become the arbiters of an auction to assign monopoly rents to a politically-optimal coalition of interests. Supervising such transfers, rather than pressing for policies that produce lower prices to consumers, has a low cost for political decisionmakers. The average voter, acting rationally, is often ignorant of the price differentials involved, knowledge of which would require a detailed study of the CATV industry. Moreover, he does not vote on a cable referendum.

158. Since 1979, California has given permission to cable operators to opt out of local rate regulation. See CAL. GOV’T CODE § 53066.1 (West 1988).

159. This is a general phenomenon. T. Hazlett, supra note 47, at 7-8.
directly but for specific candidates who have other relevant differences. In elections where many issues are involved, and cable policy is viewed as a non-excludable public good, individual voters have little incentive to invest in obtaining information, especially since their vote is not likely to determine the outcome of the election.

In Sacramento, a straightforward exchange encouraged municipal authorities to create an exclusive franchise. To obtain the right of monopoly entry, Scripps Howard paid the federally-established limit in fees to county officials—five percent of gross revenues. Even after payment of the fees, however, excess demand existed for monopoly rights. Hence, the following additional payments were pledged:

1. A commitment to "universal service," wiring even low density portions of the market, at a loss of $5.6 million, as estimated by the firm; (2) grants to "public, educational and access groups" of $1 per subscriber per month; (3) subsidies for production staff, facilities and in-house programming for local origination and access channels, amounting to about $1.43 per subscriber per month; (4) overinvestment in channel capacity and head-end costing approximately $6.7 million, or 38¢ per subscriber per month and; (5) subsidies for government institutional use of cable technologies, on the order of 6.6¢ per subscriber per month.

The total public benefits explicitly bid, not including the five percent franchise fee, amounted to $111 million over the twenty-year franchise, with a $34 million present value, discounted at the high 1986 rate of fourteen percent. (My above calculations for cost of subsidies assumed a twelve percent discount rate and a penetration rate of .50).

This may be a fairly standard division of costs, as one study has found

160. In three instances where voters have decided the cable franchising issue explicitly, they have voted overwhelmingly for free entry. In Waldport, Oregon, the City Council unanimously denied a small local cable operator the right to overbuild a nationally integrated firm providing service to the city, but the small cable operator subsequently won a referendum by the astonishing vote of 266-26. The Register Guard (Eugene, Or.), Nov. 24, 1987, at 1D.

In Cleveland, voters approved two measures on the November 1988 ballot opening the local cable market to new entry by a combined total of 186,640 to 85,834. Cleveland Plain Dealer, Nov. 9, 1988, at C1. In Colorado Springs, Colorado, voters gave a competitive franchise to Citizens Cable by a 4-1 margin in 1985. Moozakis, supra note 17, at 22.


162. TOUCHE ROSS, SACRAMENTO METROPOLITAN CABLE TELEVISION COMMISSION—FINANCIAL ANALYSIS OF POTENTIAL ADDITIONAL CABLE TELEVISION FRANCHISE AWARDS (July 30, 1986).

163. Implicitly, political benefits were bid. Most obviously, five percent of the stock of the firm was distributed to 75 influential local citizens who had made no financial contribution. This group included Michael Deaver and a sitting federal judge. See Hazlett, Wiring the Constitution for Cable, 1988 REGULATION 30.
about twenty-six percent of capital expense attributable to franchise demands.\(^{164}\)

It is commonly known that the worth of such public access/local origination services is far below their opportunity cost. The assertion that these channels are unprofitable forms the basis of the political commitment among franchising agents to use their monopoly bargaining power to force the supplier to provide nonrenumerative programming. The use of market power—protected by legal franchise barriers—is explicitly advanced on just this rationale:

firms may commit to provide certain public benefits in conjunction with their systems, to be paid out of the added profit increment the firms expect to achieve because they believe they can price above the competitive rate. By public benefits we mean services on system features that the operator would not believe to be profitable in themselves, but which were nevertheless committed to in order to obtain the franchise.\(^{165}\)

The legal protection of monopoly rents is central to the pay-out arrangement agreed to by the winning franchisee. This is evidenced in the Sacramento franchise agreement’s escape valve, formally called an “Equality of Regulatory Considerations” clause, and referred to in the industry as a “favored nations” plank. This proviso frees the monopolist from subsidy obligations in the event that competitors are, at some future date, allowed to enter with less costly subsidy obligations. Keeping out competitive entrants was openly justified in Sacramento on the grounds that the benefits of rate competition were likely to be dominated by the loss of public benefits paid for out of the incumbent’s monopoly profits; such public benefits would be eliminated upon occurrence of the new unregulated entry by triggering the Equality of Regulatory Considerations clause.\(^{166}\) Indeed, the incumbent refused to provide such subsidy payments upon initiation of the County’s open entry policy, and was soon required to pay far less.\(^{167}\) The firm’s president noted that “the agreement frees his company . . . to reduce its community obligations that competitors do

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164. Zupan, supra note 45.
165. Touche Ross, supra note 162, at 24.
166. Id.
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years into the franchise, when nearly every Sacramento neighborhood had been wired by the incumbent.

This strategic interplay is helpful in explaining the industrial organization question at hand: Can potential entry serve to constrain incumbent monopolists? The actions taken in the Sacramento case shed doubt on the existence of a natural monopoly. If cost subadditivity prevailed in the Sacramento market or in cable generally, no favored nations clauses would be necessary. A true natural monopoly would retain its rents without franchise barriers; second entrants would be deterred naturally. A true natural monopoly would retain its rents without franchise barriers; second entrants would be deterred naturally. The quid pro quo contract, wherein legal exclusivity is exchanged for public benefits, undermines its very exegesis when premised on the rationale of natural monopoly, as in the case of Sacramento.

E. General Lessons for Overbuilding from Florida and Sacramento: First Entrant Predation Versus Subadditivity of Costs

It is worth noting that the two episodes discussed here do not represent quixotic outliers, brought into the marketplace solely by the efforts of entrepreneurial kamikazes. Nor do they represent simple turf disputes as was the conventional wisdom just a few years ago. Whether such duopolies live and grow in these markets or not, they have been begun as straightforward profit opportunities by presumptively competent maximizers. Such ventures offer evidence similar subsidization of various services, the incumbent instantly filed a lawsuit charging that their franchise agreement had been breached, despite its non-exclusive language. See SACRAMENTO METROPOLITAN CABLE TELEVISION COMMISSION, PUBLIC STATEMENT (Aug. 6, 1987).

An argument could be made that targeted entry, the value of the franchise divided by the amount invested, makes an otherwise efficient sole supplier unsustainable. Falhauber, supra note 120. However, with a q-ratio averaging three, the need for entry barriers to achieve sustainability appears dubious. See supra text accompanying notes 119-28. A more plausible explanation would be that entry barriers are required for rent protection.

See Letter from Bob Smith, Executive Director of the Sacramento Metropolitan Cable Television Commission, to Commission Members 12 (July 31, 1986) (Cable TV in Sacramento is a natural monopoly and will not support two competing cable systems for a sustained period.).

The new conventional wisdom within the industry was recently set forth at a session of the Western Cable Television Show's December 3, 1987, session on "Overbuilds—Real Competition, Greenmail or Hype." Samuel Book, a former economics professor now with the cable consulting firm Malarkey-Taylor, deduced the following: "Overbuilds are here to stay. They are not an ephemeral, one-in-a-thousand fluke as they have been in the cable industry during its history up to now. They are likely to become a permanent and growing feature on the cable landscape." S. Book, Remarks at the Western Cable Television Show's Session on "Overbuilds— Real Competition, Greenmail or Hype" (Dec. 3, 1987) (audio recording).
Whether such duopolies live and grow in these markets or not, they have been begun as straightforward profit opportunities by presumptively competent maximizers. Such ventures offer evidence contradicting the earlier natural monopoly view of cable, and suggest that the CATV market is contestable.

In recent years established monopolists have been economically challenged by overbuilders in cities including Mobile and Huntsville, Alabama; Colorado Springs, Colorado; Baton Rouge, Louisiana; Terre Haute, Indiana; Ridgeland, Mississippi; Easton, Pennsylvania; and Huntington, New York. The rate of entry is plainly increasing. While a 1979 report noted that "there has not been a significant new overlapping franchise award in the last seven years," a 1988 survey listed 48 markets with current overbuilds in whole or in part. The cable industry is keenly aware of the trend and the prospects for further entry that industry profitability invites. In a blunt report, the senior editor of a leading trade journal recently wrote:

By now everyone in the cable business recognizes that it's often cheaper to build a new system than to buy an existing one. But the overbuild threat has been brushed aside with arguments such as: "You'll never be able to get financing," or "No cable operator would ever intrude on another operator's territory."

Cable Television Show's Session on "Overbuilds—Real Competition, Greenmail or Hype" (Dec. 3, 1987) (audio recording).

172. Paul Kagan Assocs., supra note 5, at 1-2 (Supp.); Wolf, Newcomer to Huntsville Puts Pressure on Comcast System, CABLEVISION, Apr. 27, 1987, at 12; The Free Market Triumphant, The Huntsville Times, Dec. 11, 1986, at 1. In these markets, entry appears to have been a welfare-enhancing tool, even where duopoly ended in merger. In Huntington, the entrant routed the incumbent, after a four-year competition, with output, as measured by basic subscribers, increasing significantly from 25,000 to 39,000 basic subscribers. Interview with Randy McCormick, Hempsted Cablevision, in Huntington, N.Y. (Feb. 17, 1988). In Mobile, the incumbent purchased the entrant, yet prices fell and quality, measured in channels of basic, increased, resulting in higher penetration levels. Cable industry interests have labeled the entrant involved in the Mobile market as a green-mailer who profited from taking the monopolist's payoff. Telephone interview with Will Wessel, Community Dev. Office, City of Mobile (Feb. 17, 1988). To the extent the assertion is true—that is, to the extent the entrant profited—entry has been shown to be viable. And, given an elastic supply of potential green-mailers, a non-franchise protected incumbent would be forced to give away the entire sum of incumbent quasi-rents, unless it deterred entry through limit-pricing strategies. Such episodes offer contrary evidence to Noam's assertion that the reality of such markets "violates the criteria for actual or potential contestability." Noam, supra note 28, at 114. While perfect contestability would imply a zero-profit equilibrium that is clearly not achieved, observation now suggests that entry is a credible threat to both incumbents and overbuilders.

173. BOOZ ALLEN, supra note 81, at 1-3.
174. Paul Kagan Assocs., supra note 5, at 1-3 (Supp.).
There's nothing wrong with those arguments. But what happens when you already have the financing, or when you aren't among the top 50 MSO's [multiple system operators]? The appearance of competitors willing to commit investment capital in markets of average density, with abundant broadcast competition, at prices twenty-five percent below established monopoly rates, has not escaped the attention of industry insiders.

All this leads to the conclusion that the constraint on entry is not so much the presence of subadditivity, as the strategic behavior by first movers and franchising agents. Telesat's ambitious thrust throughout Florida's cable market is sensible—and enlightening, in retrospect—in at least three respects. First, it is non-MSO entry. Telesat has no monopoly backyard to protect. Striking down legal barriers to entry does not cost it foregone rents, and retaliatory entry is avoided. Second, because it is a well-financed and sophisticated operation with large designs on multiple market entry across the state, Telesat can absorb the cost of hurdling individual market entry prohibitions. As it pioneers overbuilding in its region, it internalizes a much higher ratio of the gains from competition than would a local cable entrant. This effect is reinforced, thirdly, by Telesat's superior technology; fifty-four channels can be delivered at significantly lower cost today than was possible a few years ago, particularly where expensive franchise obligations are avoided. All three factors aid in upsetting the public choice calculus developed with respect to a single market earlier in this Article, where the incumbent has much more to lose than the entrant can hope to gain. The rare combination of a large state-of-the-art cable competitor with no interest in monopoly maintenance is what makes Telesat a uniquely disagreeable player to incumbents in the CATV marketplace.

Conclusion

The public policy of franchise exclusivity is likely to produce only limited benefits. Because duopoly reliably raises consumer surplus, the only potential downside results from lost profitability by suppliers. As discussed above, the cost of duopoly, as opposed to monopoly, springs from the heightened average costs of the industry's first mover. These

176. See Milgram and Roberts, Predation, Reputation and Entry Deterrence, 27 J. ECON. THEORY 280 (1982). See also supra note 149.
177. See supra text accompanying notes 68-73.
cost changes reflect infra-marginal considerations: the amortization of fixed costs. This loss in profit is not a social loss. Moreover, it can be eliminated at low transaction cost through either of the following mechanisms: limit pricing by an incumbent or aggressive de novo entrant, possibly with long-term service contracts or brand name investment that make pricing commitments credible, or merger. In selecting a profit-maximizing entry strategy, firms will inherently choose to enter an already built market either via purchase or overbuild. A virgin market will be entered solely, simultaneously, or via merger. In any case, alternatives to overbuilding and its attendant loss of profit are available without difficult contracting problems, and need not be supplied by the franchising authority.

To view market entry decisions as rational is not synonymous with a laissez-faire policy rule, however. The rationale for regulation of a natural monopoly is that certain efficient transactions cannot realistically be achieved by market forces alone. Public-utility-type regulation is needed to deal with the transacting problem that exists when efficiency dictates that large numbers of consumers should desire to enter long-term commitments with efficient natural monopolists. Policy should be rationally aligned to confront such large-numbers problems, rather than to conduct profit projections mechanically as a substitute for self-interested market supply judgments unconstrained by transacting difficulties.\(^\text{178}\)

\(^{178}\) Public franchising authorities have attempted to nakedly outguess firm maximization decisions. The New Jersey Board of Public Utilities is charged, by a state statute, with preventing, via franchising policy, "an unreasonable duplication of services likely to be detrimental to the development of adequate cable television service in any area . . . ." J. Cleary, Experimental Dual Franchise in Paramus 2 (August 22, 1980) (New Jersey Board of Public Utilities memorandum).

Similarly, the City of Los Angeles has adopted the policy of forcing potential entrants to prove financial viability as a necessary precondition, among several others, for receipt of a competitive franchise. The City has refused to issue competitive franchises even when an applicant has formally requested one. The Los Angeles cable office director, Susan Herman, recently stated that the applicant for a cable franchise must first satisfy several requirements, including:

Conduct and provide the results of a community ascertainment or marketing study that may demonstrate that more than one franchisee can economically exist in the franchise area proposed to be served . . . . Conduct and provide the results of a study that may demonstrate that an overbuild in the franchise area proposed will not significantly cause any or all of the following:

(a) visual blight;
(b) noise pollution;
(c) disruption to the streets, rights of way and residential backyards;
(d) exhausted capacity on utility poles utility ducts; and
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The importance of this transaction cost asymmetry is elemental to the policy analysis in cable entry decisions. Consumer surplus is positively correlated with multiple entry; only the sunk cost fallacy attempts to argue the other way. Producers' surplus is negatively correlated with multiple entry, ceteris paribus. As producers—that is, multiple entrants—have low costs and clear alternatives in avoiding losses from entry, and as individual consumers are significantly constrained by high transactions costs in imposing efficiency either via economic or political institutions, the benefit of an open entry policy appears not to be offset by the costs in a fuller model of market behavior.\(^1\)

An economic trade-off approach leads Smiley to argue that multiple franchise awards will improve welfare where capital costs are relatively low and firms offer relatively differentiated products.\(^2\) Smiley also


179. In this light, we should be careful to separate self-interested industry statements by cable incumbents from relevant policy considerations. Revealingly, when the 1987 Malarkey-Taylor overbuild study, financed by an Arizona firm fighting competitive entry through the franchising process, was released, a trade publication, MULTICHANNEL NEWS, headlined the results: "Study Finds Profits Elusive When Systems Overbuild." Freeman, supra note 111, at 17. Moreover, the trade journal informed its readers of the study's significance: "An established operator fighting a proposed overbuild could use such an economic analysis to convince a city to ask when deciding whether to grant a second, competing franchise whether in the long run subscribers will benefit or lose in an overbuild . . . ." Id. (statement paraphrasing study's author). It was not explained how the lost profits stemming from increased competition hurt consumers.

180. A. SMILEY, supra note 52.
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argues that such pro-competition opportunities must be discovered “on a case-by-case basis” in so far as “generalizations about the appropriate role of overbuild competition are likely to be misleading.”\(^{181}\) Yet a case-by-case approach fails, in practice, to create entry policy evaluations based upon economic cost-benefit analysis.\(^{182}\) Indeed, given Smiley’s conclusion that open entry most frequently maximizes welfare, the fact that we see so very few local governments pursuing it, even as city councils deal with their cable franchise on a case-by-case basis, suggests a rather deterministic result. The equilibrium in the case-by-case policy rule is very nearly a blanket prohibition on competition.\(^{183}\)

Rational political franchise authorities can craft rent-seeking competitions in which cable licenses are dispensed to high bidders, yet the social value of consumer welfare is not likely to be squarely represented in the auction. The regularity with which incumbent operators succeed in capturing the exclusive allegiance of local authorities testifies to the tendency of a case-by-case methodology to be transformed into a rule-of-thumb. A discretionary policy may, despite its flexibility or, indeed, because of it, prove inferior to a fixed rule that, on average, gets it right.\(^{184}\) This is even more true where

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181. Id. at 35.

182. In studying a parallel phenomenon, John Loomis has found that the Reagan Administration’s policy reform mandating that economic efficiency become “the dominant objective of national forest planning” has not been effective in changing regulatory results: “Despite the greater emphasis on economic efficiency by the Reagan Administration and in revised national forest planning regulations, it continues to be just one input into decision making by regional foresters and forest supervisors.” Loomis, Economic Efficiency Analysis, Bureaucrats, and Budgets: A Test of Hypotheses, 12 W.J. AGRIC. ECON. 27, 32 (1987); see also Sabatier, The Acquisition and Utilization of Technical Information by Administrative Agencies, 23 ADMIN. SCI. Q. 396 (1987).

183. A rather graphic demonstration of this principle involves the translation and influence of the Smiley paper itself. Smiley concluded that the policy decision to open entry was highly sensitive to local cost and demand conditions. A. Smiley, supra note 52, at 34. His article included a sensitivity analysis where density and market price elasticities were allowed to vary between a number of plausible benchmark values. Id. at 29-34. In 20 of the 27 hypothetical duopoly scenarios, welfare under competition was equal to or greater than under monopoly. See id. at 31 (Table 3). These results, however, were quickly reformulated in a more political context. The Malarkey-Taylor study discussed above claimed to be based on the Smiley analysis. Yet its results were quite distinct: The analysis concludes that as a rule, two operators cannot survive economically in an overbuild, “[a]nd from that point one can look at all kinds of unpleasant scenarios for the community, city government and the subscribers.” Freeman, supra note 111 (quoting Malarkey-Taylor, Economic Analysis of Cable System Overbuilds (January, 1987) (unpublished manuscript)).

184. Archibald Cox argues that one of the most important constitutional decisions in U.S. history was rendered in the Steamboat Monopoly Case, Gibbons v. Ogden, 9 Wheat 1 (1824). A. Cox, The Court and the Constitution 88 (1987). In holding that New York’s exclusive steamboat franchise was an unconstitutional violation of the interstate commerce clause, the
private actors with low transactions costs, such as cable company entrants, have strong incentives not to err even when the chosen policy allows them to do so.

The transaction costs associated with identifying the true instances of efficient grants of monopoly franchises may prove crucial in policy analysis. Franchising agencies committed to any economic efficiency rule may demand that potential entrants conduct net benefit estimations. The transaction costs of identifying efficient monopoly grants are especially formidable given the moral hazard expected of, and evidenced by, franchising agents. Hence, the cost of a municipal discretion rule in CATV entry decisions is embodied in F. M. Scherer's apt admonition that: "Few regulatory agency decisions are more difficult than determining how the public interest is best served when new entry threatens what is believed to be a natural monopoly. And few regulatory agency powers lend themselves so readily to abuse."

It is interesting, though economically coincidental, that the legal justification for current challenges to monopoly cable franchises is the constitutional standing of excluded competitors to exercise their rights to free speech as electronic publishers. The First Amendment is the ultimate non-discretionary rule, stating that "Congress shall make no law . . . abridging the freedom of speech, or of the press . . .," a provision that can best be understood as a calculated trade-off sacrificing regulatory flexibility for a higher mean market outcome, given all relevant constraints. That is, while much frivolous, misleading, and antisocial speech, not to mention socially wasteful press duplication, theoretically could be eliminated by pro-consumer regulation, the cost would entail entrusting large blocks of discretionary authority to political agents. In this context, market power (or some other antisocial quality) possessed by a private unregulated supplier of news and entertainment services is judged less harmful than the alternative: monopoly power by regulators acting as buying agents for consumers. The Supreme Court reached just this conclusion in the

Supreme Court ruled against states seeking to promote local advantage by selfish regulation or taxation of interstate trade. Id. at 89. While Cox misunderstands local advantage—it was surely an advantage to organized interests and a disadvantage to local consumers that monopolies were created—his key point is particularly relevant: allowing local authorities to use political discretion in the creation of monopoly rights may well be inimical to the broader public interest.

185. F. SCHEER, supra note 66, at 485. Indeed, the negative impact on consumer welfare discerned from evidence on cable franchising examined in Beutel, supra note 50, Competition v. Franchise Monopoly, supra note 49, and Zupan, supra note 45, and discussed above, see supra text and table accompanying notes 85-88 & 98-100, suggests that the agency dilemma which Scherer describes forms a vital consideration in such markets.

186. U.S. Const. amend. I.
classic First Amendment newspaper precedent, Miami Herald Publishing Co. v. Tornillo.\textsuperscript{187}

In *Tornillo*, the Supreme Court rejected the argument that the existence of market power in the hands of the Miami Herald Publishing Co. in the southern Florida newspaper market gave the Florida legislature the right to compel the Miami Herald to offer a political candidate equal space for a response to an editorial attack. The Supreme Court viewed the First Amendment as designed to eliminate governmental discretion in public policy towards newspapers. The Court made its point with a terse opinion that itself failed to entertain interests competitive with an unregulated press sector. Lucas Powe defines the message embodied therein:

A succinct rejection [of press regulation] was the best way to demonstrate that the old constitutional rights were still valid. Further discussion would just have opened the door to further litigation, and the point of the Court's opinion was that no matter how compelling a right of reply might seem, further litigation was not needed because, as Justice Jackson noted in a different context, the First Amendment "was designed to avoid these ends by avoiding these beginnings."\textsuperscript{188}

What the welfare calculus would look like if it were costlessly discoverable, then, helps us a good deal less than knowing the likely results of a process in which decisionmakers can maximize in dimensions difficult to monitor, largely unconstrained by consumer welfare or freedom of speech criteria. From the markets studied in this Article, competitive cable entry appears to be costly to incumbents and potential monopoly incumbents. Rent seeking, including investments in the political marketplace to erect and protect entry barriers, will predictably result.\textsuperscript{189}

\begin{itemize}
  \item \textsuperscript{187} 418 U.S. 241 (1974).
  \item \textsuperscript{188}  Powe, *Tornillo*, 8 *SUP. CT. REV.* 345, 393 (1987) (quoting West Virginia Bd. of Educ. v. Barnette, 319 U.S. 624, 641 (1943)).
  \item \textsuperscript{189}  It is crucial to remember that entry barriers are virtually never enacted as forthrightly anticompetitive propositions, but rather as seemingly even-handed policies which, in fact, deliver biased, monopolistic results. See, e.g., A. KAHN, supra note 178, at 15. Gerald Falhauber has observed and described this self-preservation tactic:

\begin{quote}
commissions tend to observe several rules, one of the most important being to avoid imposing harms that can be directly traced by the victims to regulation. Another useful gimmick is to describe inefficiencies as "victories," "protecting competition," or "helping poor people."
\end{quote}
\end{itemize}
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If legal monopoly may be justified with evidence proving natural monopoly, such proofs will generally be a steal given the profitability associated with exclusive CATV franchises. In the public policy world, the evidence concerning market structure and the vitality of competitive forces is not impartially derived. The franchising process will calculate such parameters within the context of political self-interest. Because industry profits are maximized under the monopoly scenario, and because firms that seek to enter under competitive conditions cannot effectively take credit for or appropriate the social gains from competition (which accrue as increased consumer surplus), a discretionary public policy will likely be biased not towards maximization of social welfare, but towards maximization of rent. For purposes of policy evaluation, economic analysis should not exclude this fundamental consideration.
