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Switching Channels:
Organization and Change in TV Broadcasting

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PREFACE

This book follows upon previous research on the organization of the arts and entertainment industries-*Creative Industries,* published in 2000. That volume argued that economic analysis can do a surprisingly thorough job explaining why creative activities are organized the way they are: how deals are done, how collaborations are organized between creative personnel (artists) and the humdrum folk who work with them, how competing firms in creative industries prepare, distribute, and promote these goods. While *Creative Industries* drew ad lib. on a number of arts and entertainment industries, it omitted the TV program sector. Keeping that book's length manageable was a key consideration, reinforced by the complexity of TV programs' distribution channels (the proximate selectors of programs). Those channels embrace traditional broadcast networks, their owned and affiliated local stations, cable networks that distribute their signals through local cable systems and direct broadcast satellites, syndicators who distribute individual programs rather than packages, and the public broadcasting system (a complex of nonprofit and governmental organizations). Furthermore, the industry was in the throes of major structural change.

This study addresses how the bedrock properties of creative industries affect the organization and economic performance TV production and distribution. We investigate not only the dealings between program suppliers and distributors, but also the patterns of transactions between the networks (packagers of programs) and their distributors (local broadcast stations, cable systems and multi-system operators (MSOs), and satellite distributors. These "downstream" dealings are strongly shaped by the properties of creative goods and industries, like the distribution of cinema films and trade books, even though the employees and organizations downstream may be free of any *art-for-art's-sake* motives.

Previous economic research on broadcasting is abundant but exhibits two shortcomings. Much of it is somewhat dated, having appeared mostly in the 1980s. More importantly, it focuses on public policy rather than behavioral questions of why the sector works as it does. The broadcasting sector indeed is heavily influenced by public policy, which has shaped the sector's structure through its allocation of the broadcast spectrum resource and the rules it has imposed on the market's various participants. These rules are economic in their substance. However, they are mainly motivated by First Amendment or freedom-of-speech considerations, not conventional economic welfare. Economists have long recognized, however, that broadcasting is subject to market failures, because its public-good character can cause profit-maximizing broadcasters to provide programming of too little diversity. Scholars based in schools of communication have shown more interest in how programs are prepared, acquired and scheduled, but opportunities remain for further inquiry. The behavioral research opportunities that lie open are important for filling out our knowledge of how this market works, which in turn is needed in order to get the policy-oriented research right.

Opportunities for research in the broadcasting sector embrace both formal quantitative and more general descriptive approaches. This study mainly follows the latter course. Its predecessor *Creative Industries* found a large gap to be filled by showing how the distinctive properties of the arts and entertainment industries shape their industrial organization-the evolving nexus of contract arrangements and market structures. This book aims at the same synthesis for broadcasting. It also exploits the same strategy of developing its economic analysis at a relatively simple level, to provide access for readers interested in broadcasting's operation but without more than introductory training in economics. Some attention is paid, however, to quantitative research projects of the student collaborators who are listed as collaborators in this volume.

Data bases unsurprisingly tend to be in short supply in the creative industries. While broadcasting is better served than most, our interest in contract terms and deal structures requires reliance on trade publications-an information source that gets little respect from most economists, presumably on grounds of the inaccuracy and misinterpretation that can trip reporters with little training in economics and working to tight deadlines. However, when several competing trade publications are followed over a run of years, these defects can be considerably reduced by cross-checking-watching for temporal inconsistencies and divergence between the information appearing in different periodicals. Another valuable source of information is studies prepared for proceedings on various policy questions before the Federal Communications Commission (FCC).

TV broadcasting is a moving target for the researcher. As of mid-2004 the digital revolution was under way but moving much slower than policymakers had expected. In 2003 the FCC relaxed several of its rules: one limiting the proportion of U.S. TV households that could be reached by TV stations with any given common owner; others permitting some common ownership between TV stations and newspapers. This brought a storm of protest from First Amendment enthusiasts, who succeeded in forcing some rollback, and in 2004 a court decision threw the local-ownership changes into uncertainty. We hope that the structural patterns shown in this study will aid understanding of this "creative industry" even as unforeseen future market conditions and policy changes assault it.

The following abbreviations for the names of newspapers and periodicals are used throughout the notes to this book:

B&C	*Broadcasting & Cable*
BW	*Business Week*
EM	*Electronic Media*
JBEM	*Journal of Broadcasting and Electronic Media*
JME	*Journal of Media Economics*
MW	*Media Week*
NYT	*New York Times* (New England Edition)
WSJ	*Wall Street Journal*

INTRODUCTION

This book is about the market for TV programs–how it is organized, why it works the way it does, how it has responded to certain major changes in market structure and public policy. It is not an exercise in social or aesthetic criticism. Whether one's preferred entertainment is the Public Broadcasting Service, *Seinfeld* reruns, or professional wrestling, it is important to understand why this sector is organized the way it is and delivers the programming that it does. Unlike most previous research on the broadcasting industry, this book is not about the regime of policies imposed on or advocated for broadcasting. However, understanding why market forces cast up the array of programming that they do is vital for projecting the consequences of any policy change.

Broadcasting's Key Organizational Features

Broadcasting is treated here as one of the arts and entertainment industries, or creative industries. While one might casually suspect these sectors to have escaped the humdrum economic laws that govern the run of industries, the creative industries have been found to show a clear common logic in their organization, apparent in similarities to each other and differences from humdrum industries. Central to this book's agenda is determining how fully TV broadcasting shares the organizational logic of its creative brethren.

By the economic logic of broadcasting (or any creative industry), we mean the following. It puts before viewers some stream of programs that vary in their character and style-what is on view at any given hour, or over the day or week. The shows in this stream also vary in quality. We always speak of quality in the nonjudgmental sense of the resources and talents poured into making a program and/or the size (and perhaps the demographic mix) of

the audience that the broadcaster expects or hopes to attract. This program stream emanates from a group of networks-a few transmitting over the air, many via cable and (increasingly) satellite. They launch their transmissions through deals with many distributors--local broadcast stations and cable systems. The program streams then result from a vat skein of deals. Deals with program suppliers and the talents they recruit proximately determine what the audience can see. Deals with advertisers yield the revenue that covers the cost of producing and distributing programs-all of it, for over-the-air broadcasters, part of it, for cable and satellite channels that can charge viewers for access. The networks and distributors making deals with each other represent groups of firms that vary in important ways-ways that the field of industrial economics finds important for all industries. These include how numerous are the buyers and sellers, how easily can newcomers enter and unsuccessful incumbents extricate themselves, how closely the competing programs that they offer are substitutes for one another, what deal terms the networks deploy as they compete with one another-price, program type and quality, new vs. repeated programs. The bilateral dealings between networks and distributors are particularly complex: the parties at the bargaining table often are few in number, and the bargaining range over which the parties can haggle sometimes is large.

A question commonly asked arises about an industry's structure is why firms are integrated across several markets. The familiar term "media conglomerates" alerts us to the need to understand why TV firms develop multi-market operations as they do. Each broadcast network owns and operates a group of big-city stations known as its O&Os. Ownership links also exist between cable networks and the firms that operate many local cable systems (multi-system operators, or MSOs). The broadcasting networks have been rapidly increasing their ownership of the prime-time programs that they

broadcast, and motion-picture studios (Fox, Paramount, etc.) that have been major suppliers of programs have integrated forward to control broadcast networks. Broadcast networks and studios have made substantial investments in cable networks. Independent broadcast stations have been banding together in chains, as have the individual cable systems. These forms of integration might be propelled by any of several economic mechanisms that can explain why they are profitable, but their significance for economic welfare is problematic. Integration can produce profit by either increasing efficiency or reducing competition.

How all this works out depends in part on public policy, which has largely determined the number of local broadcasting stations and thereby (indirectly) the number of over-the-air networks. It long called the shots on how the supply of prime-time broadcast programs was organized. It imposes decency standards on broadcast but not on cable or satellite programs. It has limited the extent of common ownership of TV stations and has stepped in to referee the terms under which cable systems carry the signals of local broadcast stations. The effects of these many policies run deep, and recent changes in several of them indeed present us with lab experiments.

The imprint of public policy on the industry has been actively researched and is not hard to find. More elusive and less attended is the role of fundamental structure features identified in the other creative industries.

TV Programming among the Creative Industries

This study holds that we can learn much about TV's organization and deal structures by fitting it into the category of creative industries. Many of its organizational features can be well explained by bedrock properties common to other creative industries.[1] It also draws on the analysis of an overlapping category of industries, the “information industries” embracing

“anything that can be digitalized."[2] The creative industries include entertainment industries-cinema films, music recording-that bear an evident close relationship to the production and delivery of TV programs. For an example, in the 1920s and 1930s the Hollywood movie studios kept many of their actors and other creative talent under seven-year option contracts, for reasons clearly associated with the studios' need for an incentive to invest in developing talent. It is equally clear why these contracts largely disappeared as the film industry adopted “flexible specialization,” with a different team of inputs recruited afresh for each project. TV dramatic programs, however, continue to employ long-term option contracts, an evident response to the multi-year life spans in first-run production of successful sitcoms and dramas.

This illumination draws upon relatively simple tools of economic analysis, in particular the theory of contracts and the line of reasoning that economists have developed to explain the scale and scope of the firm (large or small? vertically integrated or dealing at arm's length? using one-shot transactions or long-term contracts?). These concepts and models and the essential structural features of the creative industries are glued together by a series of simple concepts that identify fundamental features of tastes and technology that dictate the deal structures and organizational arrangements most satisfactory for the participants as a group. Here are the key concepts.

Nobody knows. The outputs are invariably “experience goods,” in that the consumer’s valuation is unknown until a good is actually consumed or experienced. Nor is one consumer’s valuation necessarily a good predictor of another’s response. This property implies a high level of uncertainty for producers of creative goods. William Goldman pinned this adage on the movie industry: NOBODY KNOWS ANYTHING.[3] As he explained, industry executives know a

great deal about what has succeeded and failed in the past. They constantly seek to extrapolate that knowledge to nascent creative products at hand, but their forecasts improve little on the roll of the dice.

Sunk costs. Amplifying the problem of uncertain valuations is the requirement that all costs of a creative or information product be incurred and sunk before an informative test of consumers' acceptance becomes possible. If an unsuccessful creative good could be melted down and part of its cost recovered, the hazard of uncertain acceptance would be reduced accordingly. If pre-testing prototypes or first drafts were somewhat informative, likely turkeys could be culled from the flock. Suppliers of movies, music recordings, etc. employ some such concept as a "stiff ratio," the (high) proportion of products that fail to generate enough sales revenue to cover their direct costs. For such uncertain products to be commercially viable, the producer must wring enough revenue from the average winner to cover the losses on six or seven stiffs.

Fixed costs. Information goods and many creative goods share the property that their costs of production are largely or entirely fixed. The marginal cost of serving another consumer accordingly is zero or proportionally tiny. Hence marginal cost (the touchstone for setting prices in standard economic models) provides no guidance at all, and sellers must find some way to quote prices to various buyers that are no greater than the buyers' reservation prices yet cover the producer's fixed costs. That extraction process is eased by the fact that creative goods are commonly not sold or licensed anonymously–their owner (licensor) knows enough of the licensee's economic circumstances to predict the licensee's reservation price with some accuracy. Or the license contract can be written so as to extract more revenue from high-value licensees. Furthermore, information products are durable. That helps the owner/licensor to separate buyers on the basis of

their time urgency–the most eager buyers (and/or the licensees serving them) pay through the nose.

Quality choice (endogenous fixed costs). The costs of producing creative goods are fixed (independent of the quantity produced), but they are discretionary or endogenous with respect to the product's quality. Astutely spending more on a cinema film or TV sitcom series increases its quality (in the non-judgmental sense of raising consumers' willingness to pay). The fixity of cost (zero marginal cost) makes the output a proprietary public good to the producer. The producer therefore decides what quality to provide by comparing the extra revenue elicited by quality improvement to the sum of additions to the willingness to pay of all prospective customers. The market's size then becomes fundamentally important to the producer's choice of quality. If $1,000 spent to improve quality raises each customer's valuation by ten cents, the outlay results in a crushing loss when 1,000 customers are served, a break-even with 10,000, a bonanza with 100,000. A profit-seeking producer spends to raise quality until the last dollar fails to raise net profit (marginal revenue falls equal to marginal cost). Hence the large market will be served better quality than the small one. John Sutton attached the banner of "endogenous fixed cost" to this mechanism.[4] It will prove fundamentally important for investigating the reactions of over-the-air broadcasters and cable networks to the exogenous shifts in the sizes of their respective market segments within the overall market for television programs.

A-list/B-list. A reason why the producer of creative goods enjoys discretion in selecting quality is the perceived variation in quality (proficiency, charisma, whatever) of the inputs of talent themselves. Communities of creative workers commonly share a consensus on the ranking of their various members, based on assessments of their performance in previous

projects. These assessments seem to depend on professional criteria for the prowess of performance—one is not judged to be an A-list player solely because one's last project made a profit. The standard economic term for quality rankings is vertical differentiation. The property has direct implications for how distinctive creative talents are paid: not on their opportunity cost (waiting tables?) but on the basis of the cash flows generated by their participation in a project. A sitcom star can in principle demand a paycheck equal to the gap between the show's earnings when she heads the cast and the same show with an uncredentialed (but competent) actor.[5] In economic terms this surplus is a rent. The principle also applies conspicuously to a popular professional sports team or league.

Real options and production sequences. Many creative goods (TV dramatic program series among them) are produced in steps, with a concept selected and embodied in a script, which is then filmed as a pilot, and (with great good fortune) emerges as a network series program. These steps provide interim opportunities to either scrap or continue a project. These are real options, valuable to a producer because (and qualifying *nobody knows)* some evidence on a project's expected value upon completion likely does accumulate as the fabrication process continues.

Infinite variety. Creative goods exhibit pervasive product differentiation of the "horizontal" variety—consumers discern differences in the attributes of the product's available varieties but diverge in their preference rankings for comparably priced varieties. An important distinction in creative industries is between the potential variants on a basic program style (sitcom, action-adventure drama), which are effectively infinite, and the number of actual varieties that appear on the market. The market picks some equilibrium number, depending on the fixed costs of production interacting with the size of the potential audience and the diversity of

their tastes. The actual number might be small even when the potential varieties are infinite. It also depends on how vigorously the suppliers of rival varieties compete on price. Here *infinite variety* exerts another effect–it softens price competition among rival producers and allows them to sustain prices higher than their (zero) marginal costs, even when their competitors are numerous.

Ars longa. Creative industries' outputs are either durable themselves, or they involve some durable template on call to yield a consumable good. Like cinema films and sound recordings, some TV program series enjoy long economic lifespans during which they can earn rents from exhibition in a succession of venues before different audiences. These uncertain but potentially large flows lend importance to what ownership arrangements were selected when the program first reached the screen. The importance stems from the size of the returns that may ultimately accrue to the owner, but those ultimate rents in turn depend on early decisions about how the program is produced and promoted. Hence, getting decision rights into the hands of a party able to furbish the program for maximum long-run rents can make a large difference in its value.

Art for art's sake. An important structural feature of creative industries is the tastes of creative talents, which affect what terms of employment they will accept. Artists get utility from performing creative work, which implies a low reservation wage. More important for organization, their tastes embrace the way in which their creative work is done and the degree to which they control creative decisions. Organizational arrangements and deals hence are likely to turn on issues of the allocation of decision rights among suppliers of creative inputs.

The Big Picture: Summary

The organization of the broadcasting sector is complicated: programs

are commissioned or prepared by national coordinators (networks) or local distributors (stations, cable systems). The distribution channels include over-the-air, cable, and satellite technologies. This structure provides many nooks and crannies in which to search for the attributes of creative industries. This book is organized in three major parts, each one yielding a lesson (a group of interrelated lessons) about TV program distribution as a creative industry. In the balance of this introduction we summarize these lessons. The book closes with an epilogue sketching their application to the changes currently swirling through the industry.

Acquiring and scheduling programs

Broadcasting's closest contact with other creative industries occurs in the market where networks (program distributors) acquire their shows. It shares several key properties with markets for cinema films and music recordings. Individual TV programs or series are creative goods subject to *infinite variety,* producible in potentially limitless styles and contents. Viewers have heterogeneous tastes for the various styles and types of content that might be provided. Furthermore, the size and composition of the potential TV audience varies temporally, especially with the hours of the day. Broadcasters know what size and type of audience is likely available, but they know little about how popular a new program series will prove: *nobody knows,* yet all the production costs must be incurred before viewers' evaluation is known. Finally, the costs of providing a program are almost entirely fixed (not varying with the number of viewers or showings), yet its magnitude is discretionary (endogenous) for the producer and network. How much quality (better or better-known stars, better writers, opulent production values) is built into the show is a mutual decision of network and producer. Since quality is a fixed cost, the quality worth achieving increases proportionally with the size of the show's potential audience.

Because that audience varies with time of day and week (apart from long-run changes), the shows sought in the program market vary greatly in quality (but because *nobody knows,* a show's quality may be only weakly correlated with the actual audience it attracts).

The market for prime-time (roughly, 8 to 11 p.m.) dramatic programs (sitcoms, dramas) has long functioned as the top tier of vertically differentiated programs. For reasons addressed in Part II of this book, it is now threatened by reality programs, but it continues to show in full measure the features of the program market. Producing a single program (a special program or made-for-TV movie) is a small-scale artisan process undertaken by teams of creative personnel and technicians. Such programs are supplied by small and transient firms. At the opposite pole, scripted prime-time shows need a more complex organization, for two reasons. The higher production values require more infrastructure. And their financing needs are larger and more complex-because they cost more initially, and because their expected cash flows include syndication revenues that may arrive years in the future. Supplying prime-time scripted programs thus requires teamwork between the creative workforce and an organization (such as a Hollywood film studio) to provide overhead facilities and finance. As these needs have grown, the writer-producers who "run" prime-time shows have increasingly made alliances with film studios and (now) the broadcast networks themselves.

Within this organization, the process of preparing programs is governed by contracts structured similarly to those in other creative industries. Because *nobody knows,* programs are prepared in steps that allow periodic reassessment of the project as it develops. An idea gives rise to a sample script; if the script pleases the network buyer, a pilot episode is prepared; the pilot competes with other pilots for a spot on the network's schedule; once the program is scheduled, the network orders a number of episodes that

increases with its faith in the show's success. Contracts also lock in key personnel from the moment when an actor first reads for a part. The duration of this lock-in reflects an important trade-off: too short, and the network has little incentive to develop and promote the show; too long, and the talent (actors, producer) get no cut of the revenues from a successful series. The compromise on five years means that the network has that long to collect rents on a successful show before they can be bargained away by the producer and actors whose talents are necessary to the show's unique value.

A network's stock of programs in hand must be scheduled by season, time of day, etc., in order to maximize the net revenue that results from advertisers and (for cable networks) subscriber fees. This process takes place in several settings. In prime-type broadcasting a stable pattern has long existed of matching oligopolistic moves: all networks launched the fall season the same week, programmed for competitive advantage by hour and day, etc. The entry of new broadcast networks and declining profitability of the incumbents have tended to diffuse this tit-for-tat interplay. Increasingly each network goes its own way with much-reduced attention to rivals' moves.[6]

However, scheduling decisions occur in a broader context than network prime time. Broadcast and cable distribution each involves both national networks and local transmitters. In either channel the selection of program schedules could be made entirely at the national level (as cable networks do). Or they could be made entirely at the local level (stations and cable system operators selecting from program suppliers' libraries), a model approximated by public broadcasting stations. Or the scheduling task could be split between a national core scheduler supplying a block or blocks, to be filled out locally in light of local tastes. The last model describes the arrangement prevailing in over-the-air commercial broadcasting. An economist from outer space might imagine that this mixture of scheduling systems is

efficient overall, with each system giving the best performance (cost-effective, consistent with viewers' tastes). An economist closer to home would recognize that each system is "path dependent," having emerged from public policies and program-distribution technologies that prevailed in its formative years. Chapters on the syndication market and the public broadcasting system (Chapters 2, 3) address the deal-making processes that occur between à la carte commercial and public program suppliers and their station customers.

Shifting audiences and program quality

In the past quarter-century the delivery channels for TV programs have been transformed by the expansion of cable systems and (recently) satellites. While these improved the quality of over-the-air signals received by many viewing households, they also made room for a large number of new networks competing for viewers' attention and advertisers' funds. The cable networks hold a formidable economic advantage over broadcast networks, in that they can charge viewers for access to their programs as well as collecting revenue from advertisers; over-the-air broadcasters supply a public good and can gather revenue only from the advertisers. The second section of this book traces the effects of this transformation, which are driven by the mechanism of *endogenous fixed costs*. Quite simply, the broadcast networks' best response to this exogenous loss of viewers was to reduce the quality (costliness) of their programming, while the cable networks symmetrically upgraded theirs to serve their exogenously expanded audience. The broadcasters' downgrade took, or may have taken, a number of forms-some of which have competing explanations. And certain factors, chiefly the premium that some advertisers pay for the broadcast networks' nationwide coverage, have helped to preserve their position.

The broadcasters' most conspicuous response was to shift their prime-

time programming from its traditional scripted forms to unscripted game and "reality" shows. Although each type can produced with high or low quality and production values, industry observers place the cost of typical unscripted programs around one-third of the traditional sitcoms and dramas. Against this cost advantage stand two partial offsets on the revenue side. Advertisers pay less per thousand viewers of unscripted programs; and reality programs suffer in *ars longa,* for popular reality shows have little syndication value, while the most successful sitcoms earn a fortune (though the majority earn nothing). Another complicating factor, evident from the considerable success of some reality programs, is that many young viewers may actually prefer them to scripted programs. Other forms of economy programming such as news magazine shows have also proliferated.

A program stream's average cost to a network can be greatly decreased by repeating episodes, which reduces the potential audience but not necessarily by a lot. Networks have expanded their traditional repeats of prime-time shows, broadcasting at different times over different outlets (including affiliated cable networks). Programs' revenue has been expanded by increasing the minutes of a program devoted to advertising and public-service messages. During the 1990s this "clutter" during prime-time hours increased by one-quarter or more. Ads and program were intermingled by product-placement strategies and even the writing of commercials into the program's script.

The squeeze on the traditional networks was partly relieved by their position vis-a-vis advertisers, who lack other media that can allow them simultaneously to reach a large proportion of U.S. households. Not only do the broadcast networks enjoy a demand premium, but also their supply of advertising spots is inelastic: prime time cannot be extended, clutter has its limits, and new broadcast networks do not readily enter.

The cable networks symmetrically responded to the exogenous growth of

their audience by upgrading their programs in many dimensions. These upgrades came close on the heels of growth in the cable works' revenues from advertising and subscriber charges. Cable's upgrading also enhanced the variety of programs offered. As the number of channels that cable systems could carry increased, new cable networks emerged to fill (small) empty niches or enter (large) occupied niches with programming differentiated from its incumbents, showing the force of *infinite variety.* Some welfare problems arise because cable systems offer only selected bundles of networks to their subscribers, which indirectly undermines the cable operator's bargaining power against subscriber-fee increases by the networks.

This shift of viewership from broadcast to cable networks naturally shunted profits away from the broadcasters. That loss soured the relationship between the broadcast networks and their affiliated stations, which had long enjoyed their own rents due to the scarcity of channels in the larger city markets. A continual transfer of profit from networks to stations had long resulted from their respective rents and bargaining power. In the 1990s the Big 3 networks (ABC, CBS, NBC) set about stanching this profit flow-a campaign that was upset by the entry of new broadcast networks and an increase in the turnover of station-network affiliations. Much of the (still-continuing) retrieval effort involved the networks exploiting the many forms of incompleteness of the network-affiliate contracts, such as the division of ad spots and sharing the costs of expensive sports programming. The last section of this book deals with other forms of small-numbers bargaining taking place within the setting of creative industries' structural traits.

Bargaining tables and media conglomerates

Economic analysis employs a standard approach to markets with very few parties on each side-bilateral monopoly, at the limit. The traits of creative industries-fixed costs and uncertainty *(nobody knows)*-increase the friction

and transaction costs that can arise and make the parties reach out for various analgesics. In broadcasting this process was exposed by a major change in U.S. government regulation, which in 1995 eliminated a longstanding prohibition on networks producing their own prime-time programs (other than news and sports). The networks that broadcast programs and the producers (often Hollywood movie studios) each make numerous decisions that affect a show's quality (popularity), laying open the question who should own the program's cash flow (in particular syndication rights).

The policy change was followed by markedly increased integration taking several forms-more joint ownership of programs by producer and network, much expanded production of programs by networks, and the occurrence of mergers that brought studios and networks under common ownership. Some statistical evidence suggests that ownership by a network gained favorable treatment for a program and raised its value in off-network syndication. However, in some cases joint ownership stemmed from hold-ups by networks, not from the efficient management of assets.

Vertical integration also occurred in more comprehensive forms, with network and studio coming under common ownership through control changes (e.g., NBC and Universal), or studios integrating forward by starting their own networks (Fox, UPN, The WB). While all these forms of integration swept across the industry, network officials kept declaring the desirability of an open market for programs with many participants, to realize the value of *infinite variety* and make the best defense against uncertainty *(nobody knows).* Nonetheless, the logic of foreclosure put each party in the classic "prisoner's dilemma": if it did not pursue integration, somebody else would tie up the available assets.

Another festering nexus of bargaining is the interface between local broadcasting stations and their program suppliers-networks and syndicators.

Stations are numerous nationally, but each holds a property right (license) to a segment of airwaves in its local market. Associated with relaxation of the Federal Communications Commission's limits on a station group's size, the observed groups are homogeneous with respect to sizes of member-stations' markets. Groups of stations located in small cities simply centralize administration and pare administrative costs. Recent increases in the chain membership of small-market stations, unleashed by a change in public policy, confirm the apparent extent of scale economies. Groups of large-city stations pool members' interests in dealing with networks (usually most of a group's members are affiliated with the same network). Station groups' dealings with their networks, although contentious, show significant internalization of benefits to the network and affiliates as a group. Networks are still constrained by regulation from owning as many of their affiliates as they would like, but the bargaining frictions that support this attitude seem to stem from issues of compensation and clearance than stalemates with station groups. Bargaining power against syndicators may provide a substantial advantage to the group, due to the syndicator's need to achieve substantial national coverage for viability.

Cable systems and networks face each other in a setting that lacks the "small numbers" alarm bells of other interfaces. Each multi-system operator (MSO) transmits many networks, at least some of them close substitutes for one another. A cable network can be viable if it reaches only part of the national market, even though it still faces the ever-present fixed costs. MSOs, however, have become quite concentrated as buyers of networks' program streams, opening the door to bilaterally concentrated dealings between MSOs and the highly differentiated networks.

Basic cable networks have ownership links (typically minority) to MSOs (frequently more than one). Ownership stakes are also held by media companies

and “content producers.” The incidence of these ownership stakes has been increasing over time. The important stakes in networks that succeeded were taken early (first movers). Although investments in novice networks continue, our evidence says that carriage has been decreasingly tied to ownership links. This is consistent with the foreclosure mechanism, because both of them rely on sunkenness and *nobody knows*, the difference being whether uncertainty breeding this behavior entered at start-up phase or (due to regulatory policy) in a mature but constrained market. MSO-network minority stakes and their periodic purchase and sale suggest investment-type motives for the acquirers that do not depend on operating control. So does the finding that carriage of owned networks is not substantially associated with the exclusion of competing networks.

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[1]This analysis of the organization and structure of the arts and entertainment industries was developed by Richard E. Caves, *Creative Industries: Contracts between Art and Commerce* (Cambridge, Mass.: Harvard University Press, 2000). TV broadcasting was omitted from that study solely to keep the book’s length wieldy.

[2]Carl Shapiro and Hal Varian, *Information Rules: A Strategic Guide to the Network Economy* (Boston: Harvard Business School Press, 1999).

[3]William Goldman, Adventures in the Screen Trade: A Personal View of Hollywood and Screenwriting (New York: Warner Books, 1984), p. 39.

[4]John Sutton, *Sunk Cost and Market Structure* (Cambridge, Mass.: M.I.T. Press, 1991). This mechanism had been recognized earlier by several economists who study the broadcasting and cinema film markets, e.g. Steven S. Wildman and Stephen E. Siwek, *International Trade in Films and Television Programs (*Cambridge, Mass.: Ballinger, 1988).

[5]If the cast includes more than one distinctive talent, a single lump of rent must get divided among them. This allocation is not determinate and depends on bargaining power, though the expected rent-depressing effect of one talent dropping out of the cast sets a maximum value on that party's pay.

[6]This pattern of imitative behavior, for reasons embedded in broadcasting's fixed cost, prompted extensive research. Welfare is lost due rival broadcasters' matching of programs appealing to the largest audience group rather than providing programs appealing to minority tastes. For a broad treatment of this issue, see Bruce M. Owen and Steven S. Wildman, *Video Economics* (Cambridge, Mass.: Harvard University Press, 1992).