

Asset Specificity and Network Control of Television  
Programs

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By

Daniel Lin  
Bachelor of Arts  
University of California at Los Angeles, 1994

Director: Donald J. Boudreaux, Professor  
Department of Economics

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George Mason University  
Fairfax, VA

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## DEDICATION

This is dedicated to my loving wife Lee (whose advice and support were essential to the completion of this dissertation) and to my wonderful daughter Sasha (whose unending desire for Curious George stories nearly brought this dissertation to its knees).

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## ABSTRACT

### ASSET SPECIFICITY AND NETWORK CONTROL OF TELEVISION PROGRAMS

Daniel Lin, Ph.D.

George Mason University, 2007

Dissertation Director: Dr. Donald J. Boudreaux

This dissertation uses transaction-cost theories to explain the shift from advertiser control to network control of programs in the 1950s television industry. In the late 1940s, ratings data revealed that the audience for one program tended to flow into neighboring programs. This paper proposes that the threat of ex-post opportunism discouraged advertisers from making the necessary ex-ante investments to exploit audience flow. The networks were better positioned to constrain the opportunism by consolidating the control rights to production and scheduling, increasing the contract duration with key production personnel, and placing more contractual restrictions on producers.



## **1. Introduction**

### **1.1 Dissertation Objective**

Before the 1950s, advertisers controlled the production and scheduling of most network television programs, and contractual relationships were primarily guided by short-term contracts with few restrictions on producers. After the 1950s, networks controlled the production and scheduling of most network television programs, and contractual relationships were increasingly guided by long-term contracts with more restrictions on producers. This dissertation uses transaction-cost theory to explain the economic motivations for the changes in governance structures during in the television industry.

### **1.2 Optimal Governance Structures**

In some transactions, the parties can increase the gains from trade by tailoring the exchanged asset to each others' needs. Such tailoring increases the asset's value for that specific transaction, while decreasing it for all other transactions. If this tailoring requires

relationship-specific investments that can be costlessly recovered, then the parties make the investments without fear of being locked into an idiosyncratic exchange. Either party can respond to the threat of opportunism by recovering its investments and dissolving the relationship. However, if the relationship-specific investments are costly to recover, then the parties are vulnerable to opportunism after the investments are made. Therefore, the parties are reluctant to make the investments, and the additional gains from trade are foregone.

There are two ways to encourage parties to make non-recoverable, relationship-specific investments. One is long-term contracts. Another is consolidation of control rights into a single firm (i.e., vertical integration). Relationship-specific investments encourage the exchange of specific assets rather than generic assets, which increases the gains from trade. This implies that optimal governance structures change as the degree of asset specificity changes. Short-term contracts and dispersed control rights are common with low levels of asset specificity. Long-term contracts and consolidated control rights are common with high levels of asset specificity.

The contribution of this dissertation is to identify the presence of asset specificity in the production of television programs, and to show how an increasing degree of asset specificity in the 1950s changed optimal contract design and organizational form in the production of television programs.

### **1.3 Dissertation Organization**

The dissertation is organized as follows. Chapter 2 is a literature review of theories of the firm. This chapter describes the treatment of the firm in neoclassical theory and reveals why economists sought to develop a more detailed theory of the firm. It begins with Coase (1937) who highlights the role of transaction costs in a firm's organizational structure. Klein et. al. (1978) and Williamson (1975, 1979) provide a fuller understanding of transaction costs. It continues with related developments in the theory of the firm, including the influence of agency costs. This chapter closes with a review of significant case studies on transaction costs.

Chapter 3 describes the organizational changes experienced in the early days of the television industry. It begins with a description of the network television

model. Then, it explains why the network model became the dominant method of broadcasting television programs in the 1940s. It continues by examining the networks' increased control of television production and scheduling in the 1950s. It ends with the federal government's regulatory and antitrust responses to the networks' actions.

Chapter 4 applies these theories to the television industry by identifying the transaction costs that exist in different methods of producing and delivering television programs to the consumer. It describes the reasons for a network to pursue a strategy of exploiting "audience flow," as well as the opportunism problems that arise. It proposes that the changes in contract design and in the allocation of control rights were attempts to constrain opportunism.

Chapter 5 is a conclusion that summarizes the findings and proposes avenues for future research.

## **2. Literature Review**

This chapter will review the theories of the firm in order to provide context for an economic analysis of organization in the television industry. It will begin with the traditional neoclassical theory of the firm and discuss the issues that are properly within its scope. It will then describe Coase's influential work that shifted attention to transaction costs. It will continue with attempts to refine these ideas in transaction-cost theory as well as alternative theories of the firm. It will conclude with a review of the significant empirical studies on transaction costs.

### **2.1 Neoclassical Theory Of The Firm**

In neoclassical theory, the firm performs a technological function. It is a collection of individuals who are organized to transform inputs into output. For a given level of inputs, there are many levels of output that are technologically possible – the production set. However, neoclassical theory assumes that the firm is able

to produce the maximum possible output for a given level of inputs. In other words, the firm always operates at the boundary of the production set – a collection of points that is mathematically expressed as the production function.

By making this assumption, neoclassical theory assumes away difficulties in the relationships between managers and workers, input buyers and sellers, and capital owners and firm managers. What remains is a “black box” that is run by a rational, profit-maximizing manager who has dictatorial control over the entire organization. It is equally valid to view the firm and the manager as the same entity because the entire firm is mobilized to achieve the manager’s objective. While these assumptions produce a tractable model of the firm as a technological entity, it is silent on the decision-making processes and interactions among the people inside the firm. It does not explicitly examine the organizational complexity that can arise within firms.

Lester (1946, 1947) argued that modeling the firm as a production function is unrealistic and therefore not useful. Machlup (1967) replied that the neoclassical theory of the firm was not designed to explain the behavior

of firms. Instead, it was designed to explain the behavior of markets. At the most general level of abstraction, supply and demand curves predict the effects of changing conditions on market prices and quantities. The neoclassical theory of the firm exists to provide more detail about the logic behind these predictions – firm-level changes are aggregated to explain market-level changes. Essentially, the neoclassical theory of the firm is the theory of markets with a special emphasis on the role of firms.

When market conditions change, the theory predicts that a large number of firms will respond by altering output, which alters prices. The resulting changes in price and quantity are the familiar predictions made by shifting supply or demand curves. The theory of the firm serves as a “theoretical link” between cause and effect in output markets. Adding additional variables and organizational details would increase the theory’s realism. However, this additional realism would come at the price of increased complexity and provide no greater ability to understand market behavior.

Demsetz (1982, 1988) provided a related explanation of the issues addressed by the traditional theory of the firm.

He noted that there is almost no role for a manager in the traditional theory of the firm. By assuming that information is widespread and costless, managers are not needed to experiment with new production techniques, try new marketing ideas, or search for optimal resource allocation. By assuming that firms operate at maximum efficiency, managers have no one to supervise. By assuming that most decision variables are outside a manager's control (tastes, technology, wages, prices), managers are left with one function - adjusting output to the profit-maximizing level in response to "given" information. Even this task is reduced to a simple calculation because the behavior of revenue and costs are given.

Demsetz pointed to an inconsistency in the traditional theory of the firm. Because the firm's average cost curve slopes upward at a certain level of output, this fact implies diminishing returns to managerial effort. However, if information is perfect and costless, there should be no reason for diminishing returns - one manager should be able to manage a firm even if it grew to the size of the entire economy. Traditional theory implicitly recognizes there are limits to a manager's efforts to organize production within a firm. Explicitly, there is no such recognition.



Demsetz attributed this lack of treatment of firm organization to the theory's focus on specialization and exchange. The theory begins with the "Robinson Crusoe" economy in which one individual carries out all production and consumption. Then it provides a foil by describing an economy of firms and households, with the former specializing in pure production and the latter in pure consumption.

For the purposes of the theory, the firm is simply any economic unit – whether an individual or a corporation – that produces only for exchange, not for its own consumption. Whereas Adam Smith used the example of a worker who performs one task at a pin factory to illustrate the benefits of specialization, economists have generalized this concept to show that entire economies can consist of specialized economic units. This is sufficient to explain the benefits of specialization and to justify the *existence* of firms. Questions regarding the *organization* of firms, however, are outside the scope of neoclassical theory.

## **2.2 Coase And Transaction Costs**

In the real world, firms come in all sizes and take a wide variety of organizational forms. Because the

traditional theory of the firm was silent on the reasons for this variety, economists searched for a useful framework for understanding why a particular organizational form would be chosen. Coase (1937) provided the framework by focusing the analysis on transaction costs.

Coase illustrated that, in a world of no transaction costs, firms and markets would be perfect substitutes. In one extreme, all production could be carried out within one enormous firm. Raw materials and labor would enter one end of the firm, and finished output would exit the other end. No input markets or intermediate goods markets would exist. Instead, the firm manager would coordinate resource allocation along the entire production process through command-and-control directives.

At the other extreme, all production could be disintegrated into a series of market transactions among highly-specialized, one-person firms. One firm would purchase an intermediate good, partially refine it, then sell it to another firm for a higher price. The movement of the intermediate good through the production process would be guided by market prices.

In the real world, neither extreme exists. Instead, comparisons among firms show a wide variety of

organizations. Even individual firms change shape over time as they internalize or externalize different steps of the production process. This implies two things. One, we live in a world of positive transaction costs. Two, we use different organizational forms to economize on transaction costs. In other words, owners change the firm's organizational structure until the marginal transaction costs of organizing production across markets equals the marginal transaction costs of organizing production in a firm.<sup>1</sup> As changing conditions alter these transaction costs, the optimal organizational form also changes. To understand the design of an organization, we must examine the particular transaction costs that it faces.

Coase (1960) extended the transaction-cost framework to contract design. He illustrated that, in a world of no transaction costs, any contract would result in an efficient allocation of resources. He used the example of a cattle rancher who lived next to a grain farmer. Occasionally, the cattle would stray onto the farmer's land and destroy some of the grain.

If the rancher was contractually liable for the damages caused by his cattle, he would weigh the additional

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<sup>1</sup> Coase (1937), p.395.

profits from a larger herd size against the additional crop-damage costs, then adjust the size of his herd. Alternatively, if the rancher was not contractually liable, the farmer would pay the rancher to reduce the size of his herd. The size of the herd would be the same, regardless of the design of the contract that guided their relationship.

The analysis can be integrated with Coase's "Nature of the Firm" if you imagine that one party buys the other's business. There will now be a single owner in charge of the cattle ranch and the grain farm. Regardless of whether the single owner is the rancher or the farmer, he will want to maximize joint profits, so he adjusts the size of the herd until the additional profits from cattle equal the additional crop losses. Regardless of whether the involved parties alter the contract design or the organizational structure, the allocation of resources will be identical.

This conclusion depends on the assumption of no transaction costs. However, when transaction costs are positive, the particular design of a contract will have an effect on the allocation of resources. Bargaining parties will seek to shape the terms of a contract so that the efficient allocation arises. As changing conditions alter

these transaction costs, the optimal contract design also changes. To understand the design of a contract, we must examine the particular transaction costs that exist between the relevant parties.

### **2.3 Transaction-Cost Theory**

Coase's insight inspired economists to attempt to define transaction costs and flesh out their influence on organizational structure and contract design. Williamson (1975, 1979) provided an influential attempt. His analysis begins with the assumption that contracts are unavoidably incomplete because it is costly for the involved parties to calculate in advance all possible consequences of any action they take.

Even if the number of possible futures is finite, the involved parties may have limits on their cognitive abilities to trace the effects of an action to its possible future (bounded rationality).<sup>2</sup> Eventually, there comes a point when the cost of considering a low-probability event outweighs the benefits of addressing it with a specific clause. Even if they can agree upon required actions to satisfy the contract, they will not be able to require

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<sup>2</sup> For more on bounded rationality, see Simon (1957).

performance in the contract when the actions are observable by the involved parties but unverifiable by third-party mediators.

Once the parties sign a contract, the two parties are locked in a bilateral monopoly and depend on each other for the creation of the contracted gains. In this position of bilateral monopoly, the potential for opportunism arises. Because contracts are unavoidably incomplete, it is possible for one party to exploit this incompleteness – to increase his share of the gains without violating the explicit terms of the contract. Even a credible threat of renegeing on the contract can allow one party to expropriate some of the gains.

Klein, Crawford and Alchian (1978) also pointed to opportunism problems once the contract begins. However, they emphasized asset specificity as the source of the opportunism. Asset specificity is relevant when parties in an on-going relationship can make investments before a binding agreement is reached. These ex-ante investments simultaneously increase the value of the assets inside the relationship and decrease the value of the assets outside the relationship. The difference in asset value inside and outside the relationship is called a “quasi-rent.”

Such relationship-specific investments are desirable to increase the gains from trade. However, relationship-specific investments also create quasi-rents that can be expropriated without causing the asset owner to withdraw from the relationship. Due to this risk, contracting parties become reluctant to make relationship-specific investments, thereby reducing the gains from the contractual relationship.

The risk of opportunism hangs over the contractual relationship when incomplete contracts and asset specificity exist. This risk grows as large ex-ante specific investment is required for large ex-post gains. Due to the potential gains from overcoming this risk, both parties will desire a governance structure that ensures the integrity of the transaction. Vertical integration is one possible governance structure if opportunism is less likely within a single organization compared to contracts between two independent parties.

This raises another question – why will opportunism be reduced in a vertically integrated firm? What prevents two divisions within a firm from acting as opportunistically as the two parties of a contract? Williamson (1975) proposed several reasons for reduced opportunism – a single

organization can use administrative fiat, create monitoring mechanisms, provide conflict resolution procedures, and share information to reduce information asymmetries. However, he does not identify in precise terms how these mechanisms reduce opportunism or why these mechanisms are more likely to exist in a firm. In addition, transaction-cost theory identifies the advantages of consolidating production within a firm, but does not identify the disadvantages. In transaction-cost theory, can production within a firm be less efficient than production across markets? If not, then Coase's original questions remain unanswered.

### **2.3.1 The Property Rights Approach**

Several economists have addressed these issues by specifying what changes when two firms are integrated and identifying the costs and benefits of moving a transaction within a firm. Their writings are called the "property rights approach" because the economists drew inspiration from the literature on the efficiency of private property.<sup>3</sup> The approach accepts the framework created by transaction-cost theory and agrees that managerial control is a

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<sup>3</sup> For more on the efficiency of private property, see Demsetz (1967).



solution to the opportunism created by incomplete contracts. However, it differs by focusing on the role of physical assets (as opposed to human assets) in a contractual relationship.

Hart (1989) begins by asking what "ownership" means. Ownership is the ability to exercise control over an asset. When a person owns an asset, he receives a bundle of control rights. He can exercise these rights by using the asset in whatever way he wishes, or he can sell some of these control rights to others through a contract. Therefore, when Firm A owns Firm B, Firm A holds the control rights over Firm B's assets. Compare this with other possible definitions of ownership. Physical possession does not define ownership – an employee can spend the day working with equipment that he has no ability to modify or sell. Entitlement to the asset's profits does not define ownership – an actor can receive a percentage of a film's profits, even though he has no ability to dictate where and when the film is exhibited.

Having established that control rights are the essence of ownership, the next step is understanding why a firm would want to own another firm rather than contract with the other firm for a service. Hart and Moore (1990) offer

one reason. Suppose Firm A requires a specialized input from Firm B. Firm A can acquire this input by entering into a contract with Firm B or by purchasing Firm B. If the two firms enter into a contract for delivery of the input, then Firm A can use the court system or terminate the contract if it is dissatisfied with Firm B's performance. If Firm A buys Firm B instead, then Firm A can replace Firm B's workers or managers if it is dissatisfied.

Hart and Moore argue that the ability to replace workers and managers while retaining access to their assets is a powerful disciplinary tool that only exists under ownership. In a firm, Firm A does not own Firm B's employees, but it does own Firm B's assets – and ownership allows the owner to exclude others from using an asset. On the other hand, in a contractual relationship, Firm A cannot replace an employee without terminating the contract and losing access to Firm B's assets. If the assets are relationship specific, Firm A would have to bear an additional cost of finding an alternate supplier or foregoing the benefits from using the specific asset.

Grossman and Hart (1986) offer another reason for the desirability of ownership. Recall Williamson's insight

that it is costly to write a complete contract. The presence of gaps, ambiguities, and unforeseen contingencies means some uses of an asset will be unspecified in a contractual relationship. Grossman and Hart do not claim that integration reduces the cost of writing a complete contract. Instead, they claim that integration determines who chooses how the asset is used in an unforeseen contingency. Ownership entitles the owner to the residual control rights that are unallocated by a contract.

Once again, consider our example of Firm A that needs a specialized input from Firm B. Their relationship will create quasi-rents that will be divided between the two parties. Through negotiations, the firms can specify the party entitled to make certain operating decisions. Inevitably, there will be missing provisions in the contract, such as Firm B's maintenance policy or the response when demand for the input rises unexpectedly. The owner of Firm B's assets has the right to choose the response wherever the contract is silent.

Ownership matters because the party that holds these residual control rights can change an asset's use which will alter the size of the quasi-rents. This gives the owner superior bargaining power over the division of the

quasi-rents. The owner now has stronger incentives to make relationship-specific investments because he will gain a larger share of the resulting surplus. At the same time, the non-owner has weaker incentives to make relationship-specific investments because he will gain a smaller share of the resulting surplus. As the shift in ownership leads to increased investment by one party and decreased investment by the other party, the size of the total surplus changes.

In summary, the property rights approach claims that the boundaries of a firm determine who holds the residual control rights over an asset. These boundaries, in turn, determine the size of the surplus in an exchange relationship. When Firm A decides whether to contract with Firm B or buy Firm B outright, it must compare the size of the surplus under each governance structure. This model implies that an asset should be owned by the party whose investments have the larger impact on the surplus. When Firm A's investments are more important, it should buy Firm B. When Firm B's investments are more important, Firm A should contract with Firm B.

This model also explains why integration is optimal in some cases but not in others. While transaction-cost

theory provides the important insight that incomplete contracts reduce the gains in an exchange relationship, it does not explain why contracts are more likely to be incomplete in non-integrated relationships or why integration can make contracts complete. Grossman and Hart argue that a choice between non-integration and integration is not a choice between incomplete and complete contracts. Instead, it is a choice between Firm A or Firm B holding residual control rights. Under either choice, the incomplete contract remains, and the opportunism that exploits incomplete contracts is still present. However, alternative allocations of residual control rights have different effects on the total surplus. This difference drives a firm's decision to integrate or contract.

### **2.3.2 Contractual Solutions to Opportunism**

While contractual relationships have opportunism problems, it may not be necessary to abandon contracts to solve these problems. Rather than advocating vertical integration, some economists have explored contractual solutions to opportunism problems. Telser (1980) shows that, under certain conditions, contract terms can be written so that it is in the self-interest of each party to

adhere to the contract. The general principle is that two parties will adhere to a contract if the gains from adherence exceed the gains from violating the contract.

He uses an example of repeated exchange between two parties over a period of time. If one party violates the contract, he receives an immediate gain, but loses future gains due to the termination of the contract. When the present value of the future gains from adherence exceed the immediate gains from violation, the contract is self-enforcing. When the opposite is true, the contract requires alternative enforcement measures to ensure performance.

Telser's theory provides three predictions. First, self-enforcing contracts are less likely when the contract duration is shorter. Shorter-term contracts reduce the gains from adherence, yet do not change the gains from violation. Second, self-enforcing contracts are less likely when the gains from adherence are uncertain. As external factors create variability in the gains from adherence, the immediate and predictable gains from violation become more desirable. Third, self-enforcing contracts are less likely when the end of the contract is certain. At the final exchange of a multi-period contract,

both parties know that the future gains from adherence are zero, so both parties have an incentive to violate. The same logic applies to the second-to-final exchange and so on. By backwards induction, neither party has an incentive to adhere at any point in the relationship. As long as there is uncertainty about the end of a contract, the self-interest of the parties enforces the contract.

When a contract fails to be self-enforcing, the parties do not necessarily have to turn to third-party enforcement. The parties can also modify the contract terms. Recall that one party chooses to violate the contract when gains from violation exceed the expected future gains from adherence. The contract can reduce the gains from violation by including an amount of money that must be sacrificed in the event of violation. Deferred wages, stock options, money back guarantees, and security deposits are examples of contract terms that reduce the gains from violation. Essentially, the potential violator is posting a bond as a promise of adherence.

Klein and Leffler (1981) also examine the ability for contracts to be self-enforcing without turning to third-party enforcement. In their model, the buyer and seller are in a long-term contract with repeated exchanges. The

seller can produce a product of high-quality (as specified in the contract) or low-quality (in violation of the contract). The buyer is unable to easily measure product quality before purchase or have it verified by a third party after purchase. Perfect communication among buyers does not eliminate contract violations because the one-time gain from violation can exceed the present value of lost business from being known as a low-quality seller.

The authors demonstrated that higher-than-competitive prices can encourage adherence to a contract. Whereas perfect competition is held as an efficiency ideal in textbooks, it increases the incentive to break contracts in Klein and Leffler's model because the absence of economic profits eliminates the penalty from violation. A seller will provide a high-quality product only if the future gains are large enough, and these gains materialize when the price is at or above a certain price - the "quality-assuring price." Therefore, buyers are willing to pay a premium in order to ensure that sellers deliver high-quality products.

These economic profits will attract competition. However, the new rivals will not be able to compete on price because anything below the quality-assuring price



discourages buyers (who assume the seller is likely to promise high quality, but deliver low quality). Therefore, competition to dissipate the economic profits must occur on non-price dimensions.

Non-salvageable investments are one form of non-price competition. A seller can invest in assets (such as advertising or a brand name) that cannot be salvaged for other uses and will depreciate to zero if the seller is caught delivering low-quality products. If a seller intends to deliver high-quality products, it will pour money into non-salvageable investments until the amount equals the present value of the future gains from contract adherence. From the buyer's perspective, the larger a seller's non-salvageable investments, the more likely the seller expects to receive the economic profits that occur by adhering to a contract.

### **2.3.3 The Valuation Approach**

Johnsen (1995) and Habib and Johnsen (1999, 2000) agree that incomplete contracts and asset specificity affect economic organization. However, they argue that the focus on ex-post opportunism is too narrow. While Klein, Crawford, and Alchian (1978) highlight the ways in which

ex-post opportunism can eliminate expected streams of quasi-rents, unexpected changes in the state of the world also disrupt expected streams of quasi-rents. Without opportunism, there will still be uncertainty over future states of the world, and therefore, uncertainty over the returns to providing specific assets. Honest parties must still confront the problem of assuring payment for specific assets in unexpected states of the world.

Suppose the possible states of the world fall into two categories – good states and bad states. In good states, an asset has its highest value in its intended use (the “primary” use). In bad states, the primary use no longer yields the highest value. There are many alternative uses, and the challenge is to identify the highest-value alternative use (the “next-best” use).

Furthermore, suppose there are specialized skills for imparting value to an asset in different states. An entrepreneur has skills specialized for good states – identifying the asset’s primary use, and making ex-ante investments that maximize the asset’s value in its primary use. A redeployer has skills specialized for bad states – identifying the asset’s next-best use, and making ex-ante investments that maximize the asset’s value in its next-

best use. In good states, the asset's value is higher when the entrepreneur owns the asset. In bad states, the asset's value is higher when the redeployer owns the asset.

If it is difficult to identify ex ante the future state of the world, then the asset may have to change owners ex post to maximize its value. What kind of exchange should govern the transfer of asset ownership? One possibility is ex-post bargaining. When a bad state arrives, the entrepreneur can bargain with the redeployer. However, in a bad state, the asset is worth more to the redeployer, so the entrepreneur can extract some bad-state rents in negotiations. This distorts the ex-ante investments of both parties. The entrepreneur has an incentive to shift his investment from good-state skills to bad-state skills so that he can identify the potential bad-state rents. The redeployer knows he will not capture all of the bad-state rents, so he underinvests in bad-state skills. The result is that both parties underinvest in their respective skills, and the expected quasi-rents that flow from applying these skills to the asset diminish.

Another possibility is a contract that, ex ante, specifies which party controls the asset in which state. Such a contract removes the threat of ex-post bargaining,

which also removes the incentives for both parties to underinvest in their respective skills. Entrepreneurs become residual claimants in good states, so they have strong incentives to specialize in identifying an asset's primary use. Redeployers become residual claimants in bad states, so they have strong incentives to specialize in identifying an asset's next-best use. Compared to ex-post bargaining, contractual transfer creates more joint wealth.

How can a contract assign asset ownership based on whether good or bad states prevail? First, imagine the potential states of the world as a continuum. At the good-state extreme, the asset's primary use is more valuable than the next-best use. At the bad-state extreme, the asset's primary use is less valuable than the next-best use. Moving away from either extreme, the differences between the values shrink. At some state, the asset's primary and next-best uses converge. This "critical state" separates the good states from the bad states.

Suppose the redeployer makes a loan to the entrepreneur in an amount equal to the asset's value in this critical state, and the asset is pledged as collateral. If a good state prevails, then the entrepreneur can place the asset in its primary use, which

creates enough value for the entrepreneur to repay the loan and to keep the entire good-state surplus. The redeployer prefers that the entrepreneur keep the asset because loan repayment is worth more than repossessing the asset and placing it in its next-best use. If a bad state prevails, then the entrepreneur prefers to forfeit the asset because the asset's primary use will not create enough value to repay the loan. The redeployer repossess the asset and places it in its next-best use, keeping the entire bad-state surplus. The asset moves to its proper owner without relying on ex-post bargaining.

When ex-ante investments affect an asset's value, the relevant parties should have strong incentives to make the optimal investments. When the state of the world affects an asset's value, the asset should move to the party who has made the investments that maximize the asset's value in the prevailing state. Contractual asset transfer (via secured debt) provides the strong incentives for each party to make optimal ex-ante investments and for the asset to move to the proper party when the state of the world changes. Joint wealth is maximized.

## **2.4 Alternative Theories Of The Firm**

### **2.4.1 Team Production**

While transaction-cost theory was one response to the questions raised by Coase, other economists proposed different approaches for understanding the nature of the firm. Alchian and Demsetz (1972) object to Coase's distinction between allocation by managerial authority within a firm and allocation by prices outside a firm. They argue the authority that a manager has over an employee is no different from the authority that one person has over another person in a market transaction.<sup>4</sup>

If an employee refuses to perform a task requested by a manager, the manager cannot force him to perform. The manager can only terminate the employment contract. This is identical to the options available to a person engaged in a market transaction with another person. Managers do not have any power of authority beyond what ordinary market participants have.

The authors also object to Coase's claim that, due to the transaction cost of using the price mechanism,

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<sup>4</sup> Alchian (1984) characterizes this claim as "incorrect" in light of Williamson's development of transaction-cost theory. Demsetz (1987) reaffirms his support of the claim.

production will occur in a firm "in those cases where a very short-term contract would be unsatisfactory."<sup>5</sup> The intuition is that the high cost of repeated negotiation over the terms of exchange will drive economic activity inside a firm where repeated negotiation is not necessary. However, there are many market transactions between two parties that happen repeatedly over long periods of time. The authors point to their daily exchanges with their grocers, even though the prices of the items exchanged are not known in advance.

If the advantage of firm organization lies not in managerial fiat or lower negotiation costs, where does it lie? The authors propose that firm organization, relative to the price mechanism, offers a superior ability to monitor and reward team production. Team production exists whenever multiple inputs are used to produce output. This is desirable when the value of the output exceeds the sum of the individual production of each input.

The owners of the inputs will prefer team production to maximize the potential gain, but team production also presents a problem. Under team production, the marginal product of each input is non-separable, making it difficult

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<sup>5</sup> Coase (1937), p.392.

to determine each input's contribution to the output's value. If leisure is a good, this "metering problem" encourages each team member to consume leisure because the benefits flow to the shirking team member while the costs are spread across all team members in the form of lower output value. The gains from team production are reduced by losses from shirking.

If the metering problem is overcome, the value of the output will rise, and all team members will gain. One solution is to hire a worker whose sole job is to monitor each team member. The monitor will observe effort and estimate marginal productivity of each team member. To prevent the monitor from having the same incentives to shirk, he is given title to the residual rewards of the team – the better he monitors, the larger his wealth.<sup>6</sup> To give the monitor the ability to punish shirking, he is given the ability to revise the contract terms of a specific team member and to change unilaterally the membership of the team.

This bundle of rights – residual claimant status, input monitoring, involvement in all contracts, hiring and

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<sup>6</sup> Barzel (1987) makes a similar recommendation – the person who has the greatest effect on output value should be the residual claimant because his shirking can potentially reduce output value the most.



firing, and the ability to sell these rights – is what we observe when a person is the owner of a firm. Alchian and Demsetz propose that this is no accident. These rights have coalesced into what is called a “firm” because this organizational form captures the gains from team production while reducing the associated metering problems. The alternative – team production across markets in which each input is owned by a separate firm – does not reduce metering problems as effectively.

This theory predicts that production will occur within a firm when metering problems are relatively large and across markets when metering problems are relatively small. The advantage of firm organization lies in its ability to cope with metering problems, and not in some unspecified managerial “authority.”

#### **2.4.2 Principal-Agent Theory**

Jensen and Meckling (1976) agree with the concept of the firm advanced by Alchian and Demsetz, but feel that the focus on monitoring team production is too narrow. Whereas Alchian and Demsetz emphasize the contract between an employer and employee, there are many other contractual relationships within a firm. Input owners contract with

managers to provide inputs, managers contract with owners to provide monitoring services, bondholders contract with managers to provide credit, and so on. Metering problems exist in all of these contracts, regardless of whether the contracting parties are involved in team production. According to Jensen and Meckling, the theory of the firm should extend to all of these contracts.

Their characterization of the firm differs from Coase's characterization of firms as "islands of conscious power" in a sea of decentralized market transactions.<sup>7</sup> In their model, the contractual activity inside a firm is essentially the same as the contractual activity outside a firm. The firm is a "nexus of contracts" where numerous individuals with conflicting objectives interact.<sup>8</sup> The outcomes of these conflicts are not reached through managerial authority, but through the same impersonal equilibrium processes found outside the firm.<sup>9</sup> To speak of the firm wanting to maximize profits is as nonsensical as speaking of the wheat market wanting to do something.

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<sup>7</sup> D.H. Robertson, quoted in Coase (1937), p.388.

<sup>8</sup> Jensen and Meckling (1976), p.313.

<sup>9</sup> Boudreaux and Holcombe (1989) note that Jensen and Meckling return the theory of the firm to its pre-Coasian state in which there is no scope for entrepreneurial behavior.

Having constructed a contractual model of the firm, Jensen and Meckling draw from the principal-agent literature to identify the potential incentive problems in these contracts. An agency relationship exists when one person (the principal) has a formal or informal contract with another person (the agent) to perform a service. In order for the agent to perform this service, the principal needs to delegate some decision-making authority to him. The principal's wealth is now dependent on the effort of the agent.

In an agency relationship, there is asymmetric information - the agent knows more about his effort level than does the principal. Because it is costly for the agent to exert effort, and the returns to effort do not completely flow to him, the agent takes advantage of the information asymmetry. Contrary to the principal's wishes, the agent will exert less-than-optimal effort. This divergence between the principal's interests and the agent's interests creates a residual loss.

In order to restore the lost residual, the contract terms must be structured to align the agent's interests with the principal's interests. Note that it may be in the interests of both parties to reduce this agency problem

because a larger residual can potentially increase the wealth of both parties. For example, the principal may assign monitors who will observe the effort exerted by the agent.<sup>10</sup> In addition, the agent may incur bonding costs to guarantee he will not harm the principal or to provide compensation if he does harm.

The attempts to reduce agency problems are costly. In the case of monitoring, it may be too costly for the monitor to measure every performance variable of the agent, so he focuses on the variables that are easily measured. There will come a point when the marginal rate of return on resources invested to reduce agency problems becomes negative, so some residual loss will remain in equilibrium. The authors define the sum of these costs – contracting costs, monitoring costs, bonding costs, and residual loss – as “agency costs.” Whenever two or more parties engage in cooperative effort, agency costs influence the structure of contractual relations.

The literature inspired by Jensen and Meckling focuses on incentive problems in team production, managerial compensation, and shareholder and creditor interests.

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<sup>10</sup> Agency problems are similar to the metering problems discussed in Alchian and Demsetz (1972). The issues raised in Alchian and Demsetz’s article can be viewed as a subset of the issues raised in this article.

Despite these important contributions, the literature does not answer Coase's questions of why firms exist and what determines their boundaries. For example, suppose Firm A supplies inputs for Firm B, and the value of Firm B's output depends on the efforts of both firms. Principal-agent theory tells us that Firm A's compensation must be structured to encourage supply of high-quality inputs – most likely, some form of profit-sharing agreement with Firm B.

However, the theory does not tell us whether the optimal compensation structure is achieved through arm's-length contracts between two separate firms or through contracts within a firm. If integration is necessary, the theory is silent on whether Firm A's management should have authority over Firm B's management, or vice versa. In other words, principal-agent theory tells us that compensation schemes matter, but not whether organizational form matters.

Jensen and Meckling acknowledge this point when they describe the firm as a "nexus of contracts." Because they see no difference between the inside and outside of a firm, they do not attempt to explain what changes when a transaction is moved across a firm's boundary. Yet, to

paraphrase Coase, why doesn't all production occur within one giant nexus of optimal contracts? Why doesn't all production occur through numerous independent contractors linked by optimal arm's-length contracts? Firms integrate or disintegrate all the time, often expending considerable resources in the process. This suggests that something economically meaningful happens when a transaction moves across a firm's boundary, yet the principal-agent literature focuses on different issues.

## **2.5 Case Studies**

So far, the literature review has focused on economists who turned Coase's insight about transaction costs and institutional organization into theories that offer testable hypotheses. The literature review will conclude with two notable case studies that arose to test the validity of transaction-cost theories.

### **2.5.1 General Motors and Fisher Body**

Klein, et. al. (1978) provide the most well-known illustration of transaction-cost theory. In 1919, automobile companies began using closed metal bodies as the skeletons of their products. These metal bodies were

produced using dies pressed together in stamping machines. If most automobile companies used a standard body design, the body manufacturer could invest in one die design and sell its output to many automobile companies.

However, if an automobile company desired a specific body design, the stamping machine had to use a specific die. The specific die would be worthless in the production of other metal bodies, so there was a large difference between the specific die's value in the relationship with the automobile company and the value outside the relationship. The difference was an appropriable quasi-rent. Once the body manufacturer made the investment in a specific die, the automobile company could opportunistically renegotiate a lower price and still elicit supply.

Similarly, the automobile company was vulnerable to opportunism. Once the automobile company committed to using the specific body, it became vulnerable to hold-up problems during unexpected demand increases. There was a large difference between the specific body's value and a generic body's value to the automobile manufacturer. The difference was an appropriable quasi-rent. If the specific body could not be purchased elsewhere, the body

manufacturer could opportunistically renegotiate a higher price and still elicit demand.

The body manufacturer and the automobile manufacturer were locked in a bilateral monopoly. Transaction-cost theory argues that contracts are necessarily incomplete, so it is difficult to eliminate opportunism by using contracts. It predicts that vertical integration is the optimal method of organizing this transaction. In 1919, General Motors and Fisher Body faced this situation, but instead choose to use a ten-year contract. To protect Fisher Body, General Motors agreed to buy almost all of its metal bodies from Fisher Body. To protect General Motors, Fisher Body agreed to an explicit price formula. The parties hoped that the contract clauses could govern the transaction during any future changes in the business environment.

Over the next few years, the closed-body design became popular. Demand for General Motors automobiles increased sharply. Because the parties did not anticipate such an increase in demand, they did not foresee the scale economies that Fisher Body would have in the production of the specific bodies. General Motors wanted a lower price to reflect the scale economies. In addition, it wanted



Fisher Body to move their plants next to General Motors' assembly plants to improve production efficiency. Fisher Body was reluctant to make specific investments in new plants and to create more quasi-rents, so it refused. By 1924, General Motors dissolved the contract and integrated with Fisher Body.<sup>11</sup>

This interpretation of General Motors' merger with Fisher Body has been subject to some debate. Coase (1988, 2000) recognizes that relationship-specific investments create appropriable quasi-rents, but argues that long-term contracts are superior to vertical integration in eliminating hold-up problems.<sup>12</sup> For example, if General Motors was worried about having a single supplier for specialized car bodies, it could have purchased the specialized dies from Fisher Body, then leased them back for the duration of their relationship. If Fisher Body was reluctant to relocate next to the General Motors' assembly plants, General Motors could have built a body plant and leased it to Fisher Body. It was not necessary for General

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<sup>11</sup> Klein (2000) points out that the contract, despite being incomplete, functioned well for over five years. The parties had the ability to behave opportunistically but chose not to in order to reap the gains from adhering to the contract. This suggests that the contract was self-enforcing until the unexpected demand increase in 1925 made opportunism more profitable than adherence for both parties.

Motors to incur the costs of vertical integration to eliminate the hold-up problems.

Klein (1988, 2000) replies that long-term contracts require renegotiation because the contract terms are rigid in the face of changing business conditions. For example, the original long-term contract between General Motors and Fisher Body was erroneously thought to contain sufficient protections against business uncertainty. Every time the parties realized that their contract would no longer be self-enforcing, they could engage in costly renegotiation, dissipating part of the surplus. Or, they could vertically integrate, thereby replacing an incomplete, rigid supply contract with a more open-ended, flexible employer-employee contract. Once Fisher Body was brought inside General Motors, the parties gained coordination advantages that did not exist in long-term contracts.

### **2.5.2 The Insurance Industry**

Grossman and Hart (1986) apply the property rights approach to the insurance industry. Insurance companies and sales agents are in an exchange relationship that

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<sup>12</sup> See Freeland (2000) and Casadesus-Masanell and Spulber (2000) for additional criticisms of the hold-up explanation of the merger between General Motors and Fisher Body.

creates ex-post surpluses. The size of the surplus depends on the investments of both parties. The insurance companies can increase the surplus by investing in product innovation, advertising, and policyholder services. The agent can increase the surplus by investing in new client acquisition, tailoring of policies to the needs of each client, and prompt claims processing.

The two parties want to write a contract that rewards investments. However, some investments cannot be specified or verified, so the contract remains unavoidably incomplete which distorts investment incentives. According to the property rights approach, the optimal organizational form is the one that minimizes losses in the surplus due to investment distortions.

Broadly speaking, there are two organizational forms in the industry – insurance companies can employ their own sales agents or sell through independent agents. Typically, in-house agents and independent agents have similar skills, are paid with similar commission formulas, and use similar equipment. One major difference is that in-house agents do not own the client list whereas independent agents do. This means an in-house agent cannot renew a client's policy with another insurance company or

take his clients with him upon termination of his relationship with the company. An independent agent, by owning the client list, can do both of these.

The property rights approach provides a rationale for both organizational forms to co-exist in the insurance industry. The choice between using in-house agents and independent agents is ultimately a choice between a company-owned client list and an agent-owned client list. For some insurance products, company ownership is optimal because company investment in the client list has a larger effect on ex-post surplus. For other insurance products, agent ownership is optimal because agent investment in the client list has a larger effect on ex-post surplus.

For example, a purchaser of whole life insurance will seek a lifetime contract to maximize the benefits of holding such insurance. A series of one-year term life insurance policies gives the purchaser no protection if he is sick but does not die upon the expiration of a policy and becomes uninsurable thereafter. This means purchasers of whole life insurance are likely to stay with one company and not make renewal decisions based on the services offered by an agent. Therefore, the agent's investments are less important in determining the size of the ex-post

surplus than the company's investments are. It is optimal for the insurance company to own the client list, which is equivalent to saying the company should use in-house agents.

Other insurance products are purchased in shorter terms, and there are fewer benefits from staying with one company, so renewal with the same company is not guaranteed. With these products, the agent's investments are more important in determining the size of the ex-post surplus than the insurance company's investments are. It is optimal for the agent to own the client list, which is equivalent to saying the company should use independent agents.

These predictions are consistent with insurance industry practices. Grossman and Hart find that in-house agents sell whole life insurance more often than term life insurance. Furthermore, independent agents derive most of their commissions from selling short-term policies such as property-casualty insurance as opposed to long-term policies such as life insurance. Finally, independent agents are more common when selling substandard or pension insurance because renewal of such products depend heavily

on the agent's efforts to find a good match between insurance company and purchaser.

### **3. History Of Television Industry**

This chapter will divide the production process for television programs into three stages – production, distribution, and exhibition. It will reveal that the industry went through a period of rapid integration in which a few firms gained extensive control of distribution. It will continue by describing the distributors' efforts to gain greater control of production and exhibition. It will conclude by documenting with the government's regulatory and antitrust responses to the dominance of the integrated firms.

#### **3.1 The Production Process**

The entire process of delivering television shows to viewers requires three stages – production, distribution, and exhibition.<sup>13</sup> In the production stage, a producer identifies a promising story idea, secures the financing, and assembles the cast and crew. Most shows have recurring

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<sup>13</sup> The description of the institutional structure of the television industry draws from Sterling and Kitross (1978), Horowitz (1979), and Blumenthal and Goodenough (1998).

characters, themes, situations, and formats that feature 22 to 26 episodes per television season. The producing role has been carried out by film studios, network studios, advertising agencies, and independent producers.

The distributor acts as a broker between producers and exhibitors. It acquires a program by producing it in-house or by purchasing broadcast rights from an outside producer, then sells it to exhibitors. Because no single exhibitor can broadcast nationwide, the distributor must use many exhibitors to ensure that the program is seen by most of the country. In the "network" model, the distributor sends programs to affiliated exhibitors that broadcast the programs in a certain time slot in exchange for a network fee. In the "syndication" model, the distributor stitches together nationwide coverage through negotiations with unaffiliated exhibitors on a market-by-market basis. Each exhibitor determines the syndicated program's time slot. In both models, the distributor receives compensation in the form of direct payments or commercial slots that can be sold to advertisers.

The exhibitor owns the television stations, cable systems, or satellite systems that transmit programs to an area. A television station is either a network affiliate



(carries a distributor's schedule of programs) or an independent (builds its own schedule by purchasing on the spot market). Cable and satellite systems are not limited to a specific broadcast frequency, so they can add programming by adding channels rather than by rearranging the schedule of a single channel. The channels are either retransmitted local stations or transmissions of programs from a cable network. All exhibitors earn revenue by selling commercial slots to advertisers. In addition, network affiliates gain additional revenue from network fees. Cable and satellite systems gain additional revenue from subscriber fees.

Navigating this production process requires a specific sequence of events. A producer usually begins by cultivating a distributor's interest in an idea. In the network model, the distributor takes an interesting idea and pays for the production of a "pilot" episode. If the pilot is promising, the distributor orders several episodes for broadcast during a one-year window (the "first run"), and production begins. In the syndication model, the distributor does not commission a pilot episode. Instead, it sells the series to individual stations on the idea alone. Once enough stations (representing 60-70% of the

country) agree to air the series during the first run, the distributor orders the episodes, and production begins.

The producer receives a licensing fee for each episode delivered to the distributor during the first run. However, the licensing fee typically covers only 70 to 80 percent of the cost of making the episode, which means the producer loses money on every episode produced during a first run. The producer begins making profits only when the series has a large enough catalog of old episodes to be sold on the syndication market (the "second run"). Typically, achieving success in the second-run market requires four years of first run. Because few series last so long in their first runs, the profits from a series sold to second-run syndication are needed to offset the losses from numerous first-run failures.

### **3.2 The Rise Of Television Networks**

Although the method of transmitting a television signal was invented in 1884, television remained a niche product until the end of World War II. Manufacturers were reluctant to build television equipment without national standards for the transmission and display of television signals, which the FCC did not establish until 1941.

Shortly thereafter, the United States entered World War II, which diverted resources from television development. During the war, the first television sets compatible with national standards were very expensive. In addition, each station broadcast about four hours per week.

Once the war ended, television development proceeded dramatically. In 1945, the FCC set aside thirteen very high frequency (VHF) channels for television. One of the channels was later reserved for two-way radio service, leaving channels 2 through 13 for television. If two transmissions occupied the same frequency in the same geographic area at the same time, the signal interference would render the transmissions unusable. The FCC prevented interference by issuing licenses that restricted the frequency, time, and strength of a transmission. By limiting the geographical area in which a license-holder could transmit, the FCC could divide the twelve VHF channels into 529 licenses.

Under a regulatory philosophy called "localism," the FCC sought to place at least one local station in as many communities as possible.<sup>14</sup> Localism was not necessary to create wide television availability because such a goal

could be achieved by increasing the geographical area covered by an individual license. Instead, localism was based on the belief that a local broadcaster was more likely to provide a community with programming tailored to local interests and needs. However, with only 529 licenses available, many communities received programming from only one local station, and most communities did not receive programming at all.

The FCC realized that the situation was unworkable. In 1948, it placed a freeze on all pending license applications until it could find a solution. At the time, 108 VHF licenses had already been approved and were free to begin broadcasting. While the FCC expected the freeze to last six to nine months, it ended four years later, giving the original 108 VHF stations a large advantage in attracting viewers. The FCC's solution to the license problem was to allocate seventy ultra high frequency (UHF) channels for television.<sup>14</sup> These channels, 14 through 83, would be divided into 1,436 licenses.

The VHF portion of the spectrum would continue to be used for television, which meant that many communities had

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<sup>14</sup> The "localism" philosophy can be seen as early as 1928 in the writings of the Federal Radio Commission. See Horowitz (1983).

<sup>15</sup> Federal Communications Commission (1952).

a combination of VHF and UHF stations. For technological reasons, UHF signals are weaker than VHF signals. In addition, television sets could not receive UHF signals without special tuners and antennas. Even with the proper equipment, the viewer was more likely to experience reception problems with UHF than with VHF. These technological limitations, combined with the FCC's pursuit of localism, had the effect of restricting the number of profitable television networks.<sup>16</sup>

The primary appeal of network television was its ability to attract large audiences for its programs. With larger audiences, the network could charge higher rates for airtime, and the programs could be more extravagant. Any network that sought large audiences would have to find affiliates – preferably VHF affiliates – in major metropolitan areas. With a limited number of stations in each area, only three networks could stitch together enough affiliates to get nationwide coverage on primarily VHF channels. Additional networks would have to accept incomplete coverage, and more of their covered areas would be served by weaker UHF affiliates. This meant that the

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<sup>16</sup> Crandall (1974).

television industry would eventually coalesce into three nationwide networks.<sup>17</sup>

It did not take long for this to happen. Large radio networks made the first steps into television, viewing it as a natural extension of their radio programming. They already had radio affiliates in large markets and a deep pool of radio talent. Most of the early television programs showed performers doing their radio programs. By the end of the war, there were four television networks - the American Broadcasting Company (ABC), the Columbia Broadcasting Company (CBS), the National Broadcasting Company (NBC), and DuMont.<sup>18</sup> All the companies also had radio networks, except for DuMont.

Without any experience in broadcasting, DuMont had to assemble affiliates after the other networks had already secured theirs. Because DuMont was unable to find VHF affiliates in many metropolitan areas, it struggled to attract viewers to its programs. A few of its programs managed to find success, including *The Original Amateur Hour* and *Cavalcade of Stars*. However, once a program

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<sup>17</sup> Federal Communications Commission (1980a), p.91.

<sup>18</sup> NBC originally operated two radio networks - Red and Blue. The FCC was so concerned about NBC's dominance in the radio industry that it forced the divestiture of the Blue network in 1941, which became the ABC network.

reached a certain level of popularity, the talent would move to rival networks that offered wider broadcast coverage.<sup>19</sup> After 1950, DuMont did not have a show among the twenty-five most popular.<sup>20</sup> In 1956, it aired its final program and ceased operations, leaving ABC, NBC, and CBS as the only television networks.

The downfall of DuMont occurred during a period of explosive growth for the industry. From 1939 to 1949, there were 3.6 million television sets sold in the United States. In the following ten-year period, there were 63.5 million sets sold.<sup>21</sup> The rapid growth of television set sales coincided with a dramatic broadening of the audience. In 1947, two-thirds of the country's television sets were located in New York City. Three years later, sales had spread to other cities. Households in small and medium-sized cities were more likely to buy television sets than households in large cities, even though small and medium-sized cities had fewer channels available.<sup>22</sup> From 1950 to

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<sup>19</sup> In 1950, *Cavalcade of Stars* hired its third host, a young comic named Jackie Gleason. On this show, he developed the character of a low-wage bus driver with a long-suffering wife that would later appear in *The Honeymooners*. Two years later, Gleason moved to CBS, and *The Jackie Gleason Show* debuted shortly thereafter. By 1954, it was second only to *I Love Lucy* in the ratings.

<sup>20</sup> Heldenfels (1994).

<sup>21</sup> Steinberg (1980a), p.141.

<sup>22</sup> Boddy (1995), p.41-43.

1960, the percentage of American homes with a television grew from 9 percent to 87 percent.<sup>23</sup>

The growing influence of television could be seen in the falling revenues in alternative forms of entertainment. When television was in its infancy from 1939 to 1949, average weekly attendance of movies rose 3 percent, and the number of theaters increased by 741. In the following ten-year period, average weekly attendance *fell* 52 percent, and the number of theaters *decreased* by 2,467 (Table 3.1). Radio also struggled during this period. Average radio use per night dropped from 3 hours and 42 minutes to only 24 minutes.<sup>24</sup> The radio set, which had traditionally been the focal point in the typical American living room, was replaced by the television set.

When the FCC enacted a license freeze from 1948 to 1952, television coverage was still uneven across the country. For example, New York and Los Angeles each had seven stations while Austin, Little Rock, and Portland had none. This four-year freeze created a natural experiment to isolate the effects of television on other forms of entertainment. During the freeze, movie attendance dropped

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<sup>23</sup> By 1979, it had reached 98 percent, which was higher than the percentage of American homes with refrigerators or indoor toilets. See Steinberg (1980a), p.142.



20 to 40 percent in cities with television stations; movie attendance increased in cities without television stations. Cities with television stations experienced decreases in radio use, taxicab fares, jukebox revenues, book sales, and library book circulation. Restaurant owners reported that dinner reservations would drop when popular television shows aired.<sup>25</sup> Some restaurants even closed the night that the enormously popular *Texaco Star Theater* was on.<sup>26</sup>

While this period is called "the golden age of television," it is more accurately the golden age of television *networks*. Public television and large-market independent stations were popular with niche audiences, but network stations attracted an overwhelming share of the total audience. Network programming would appear on every night from 7:00 to 11:00 PM, a highly-watched period known as "prime time." By the 1960s, 95% of prime-time viewers would be watching a network program. After the license freeze, the number of independent television stations dwarfed the number of network stations, and independent programming proliferated outside of prime time. However, the popularity of network programming in prime time was so

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<sup>24</sup> Greenfield (1977), p.44.

<sup>25</sup> Barnouw (1990), p.114.

<sup>26</sup> Desjardins (1997), p.1752.

large that the networks earned in 1953 approximately half of television industry revenues and profits.<sup>27</sup>

In most industries, such profits would attract new entry. While the lifting of the license freeze led to many new stations, there were no new networks. The newly-created stations found that it would be unprofitable to form a new network due to the continuing policy of localism and the technological limitations of UHF. Therefore, many new stations chose to become affiliated with the existing networks. The existing networks welcomed the new stations, which allowed them to fill gaps in their station lineup.

The existing networks' share of industry revenue and profits remained remarkably stable for several decades. The existing networks would continue to dominate the industry until the debut of the Fox Network, thirty years after the demise of DuMont.<sup>28</sup> The stability in the industry structure, however, obscured dramatic changes that occurred in the supply of network programs during this period.

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<sup>27</sup> Boddy (1990), p.57.

<sup>28</sup> When DuMont ceased operations as a network, it spun off its VHF stations into a separate company called the DuMont Broadcasting Company. This company was sold in 1958 to investor John Kluge who renamed it Metromedia. In 1985, Rupert Murdoch purchased Metromedia and used its stations as the foundation for the Fox Network. From this perspective, the Fox Network is the reincarnation of the DuMont Network.

### 3.3 Advertiser-Controlled Programming

In the 1940s, advertisers controlled almost all network programming. Under a system called "time franchise," the networks were common carriers, selling time slots (ranging from fifteen minutes to an hour) to any advertiser who was willing to pay the rates. Occasionally, the networks would produce or license programs for their schedules, but their goal was not to be involved in program production or scheduling. Instead, they aired these programs unsponsored, hoping to attract advertisers that would take control of the programs and pay for the airtime.

Because viewership tended to rise and fall predictably throughout the day, the networks charged for a time slot based on its time of day – similar to a print publisher setting rates based on the position of an ad page within a publication.<sup>29</sup> The rates did not adjust if the programs attracted more or less viewers than anticipated. In addition, the network had no financial interest in the program's network run or in the program's subsequent sales

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<sup>29</sup> The first television commercial aired on July 1, 1941, on WNBT, New York's NBC affiliate. At the time, WNBT's offered only two rates – day and night – for advertisers wishing to buy airtime. See "The Hot Afternoon When TV Went Commercial," *Sponsor* (July 17, 1961), p.34.

to the syndication market. It was the advertiser that bore the risk of failure and reaped the gains from success.<sup>30</sup>

The advertiser typically entered into a one-year contract for a specific time slot. To fill the time slot with programming, the advertiser worked with an advertising agency and an independent producer to develop a program.<sup>31</sup> The advertiser decided on the program format, selected the actors, and monitored the programs for propriety.<sup>32</sup> At the time, most programs were performed in studios and broadcast live, which required renting facilities from the networks. An advertiser-employed director gave orders to the production crew in the studios. Because the network had sold the airtime outright, it had no influence over the content of the programs.

The advertiser invested in an association with a particular program, not a particular network or time slot. As a result, it was not unusual for an advertiser to move its program to different time slots or networks in the

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<sup>30</sup> Greenfield (1977), p.137.

<sup>31</sup> One advertising agency, Young and Rubicam, produced five of the ten most popular television shows in 1949. See Boddy (1990), p.94.

<sup>32</sup> William T. Orr, executive producer of Warner Brothers' television division, recalled a glass company that did not want characters falling through glass or being hit by pieces of flying glass in its sponsored programs. In addition, when a cigarette company became a sponsor of *Maverick*, it asked that new characters smoke cigarettes rather than cigars. See "Who Controls What in TV Films," *Broadcasting* (October 17, 1960), p.31.

pursuit of the largest audience. For example, *The Arthur Murray Dance Party* aired in fourteen different time slots on four different networks during its ten-year run. Sometimes, the programs ran on different networks at the same time. *Admiral Broadway Revue* and *Man Against Crime* aired on NBC in some cities and on DuMont in other cities simultaneously. *Kraft Television Theater* used two one-hour slots to present each week's program – the first hour was on Wednesdays on NBC, the second hour was on Thursdays on ABC.<sup>33</sup> There were even several instances of a program airing on all networks simultaneously.<sup>34</sup>

Advertisers did not limit themselves to a specific program format. In the late 1940s, variety shows were the most popular prime-time programs. They were similar to the vaudeville shows of the 19th century – a stage for short musical performances, comedy sketches, animal tricks, and magic acts. In the early 1950s, anthology dramas were the most popular. The anthology format presented new characters and topics in every episode, and the producers often utilized different writers, directors, actors, and sets for each episode.

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<sup>33</sup> Lackmann (2003).

In 1955, the enormous success of *The \$64,000 Question* spurred a movement away from anthologies and into quiz shows.<sup>35</sup> Some producers began rigging the quiz shows to guarantee the return of popular contestants. When a contestant outlived his usefulness, he was instructed to take a dive – in one instance, he was told which wrong answer to give. This activity remained secret until 1958 when disgruntled former contestants from several popular quiz shows stepped forward. Even though rigging a quiz show was not illegal, the revelation created a large enough scandal to spur hearings by the House Subcommittee on Legislative Oversight.<sup>36</sup>

According to a 1959 Gallup poll, the public was more familiar with the quiz-show scandal than with any other current event.<sup>37</sup> Public awareness peaked in the fall of 1959 when Charles Van Doren, who used his time as a contestant on *Twenty-One* to become a popular public intellectual, appeared before the House subcommittee. Van

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<sup>34</sup> Programs that were simulcast on all four networks included *Light's Diamond Jubilee* (3/28/54) and the *General Foods Anniversary Show* (10/24/54).

<sup>35</sup> At its peak, *The \$64,000 Question* attracted 85% of the television audience, one of the highest ratings in television history. Revlon and its advertising agency Norman, Craig & Kummel produced the show to promote Living Lipstick. The show was so popular that Revlon could not produce enough Living Lipstick to satisfy demand and had to advertise another product on the show. See Barnouw (1990), p.186.

<sup>36</sup> Doherty (1997), p.1331-1332.

Doren testified that the producers had given him the questions in advance to ensure that he would advance to subsequent shows. In the same year, viewership of quiz shows dropped precipitously. The networks cancelled most of their quiz shows, and the ones that remained were moved outside of prime time and eliminated the big-money prizes.

### **3.4 Network-Controlled Programming**

In the early 1950s, advertisers controlled most network programs. The networks had little influence over the content and scheduling of their programs. While the networks produced or licensed some of their programs, their goal was to attract advertisers who would take control of the programs. The networks garnered most of their revenues by leased airtime to any advertiser that would pay the going rates. By the middle of the decade, the networks took a greater interest in acquiring, developing, and scheduling the programs that they aired. Unlike earlier forays into program development, the networks intended to keep control of the programs. By the 1964-65 season, 91 percent of new shows were either produced by or licensed to networks (Table 3.2).

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<sup>37</sup> Anderson (1978), p.154.

The change in program acquisition caused a change in sponsorship trends. An advertiser-controlled program usually had one sponsor at a time. Sometimes, an advertiser would sponsor a program during its entire network run. Other times, two advertisers would alternate sponsorship, with each advertiser taking turns as the program's sponsor.<sup>38</sup> The rise of network-controlled programs led to multiple sponsorship. The networks took the advertising time within each program, divided it into pieces, and sold the pieces to different advertisers. By the 1962-63 season, programs with multiple sponsors outnumbered programs with single or alternating sponsors for the first time (Table 3.3).

Television historians often point to the quiz-show scandals to explain the shift from advertiser-controlled programs to network-controlled programs. In the *Encyclopedia of Television*, the entry on quiz shows includes the following:

Following the scandals, the networks used the involvement of sponsors in the rigging practices as an argument for the complete elimination of

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<sup>38</sup> For example, from 1951-1957, Goodyear and Philco produced an anthology series together. One week, it was called the "Goodyear Playhouse Theater." The following week, it was called the "Philco Playhouse Theater."



sponsor-controlled programming in prime-time television.<sup>39</sup>

Another entry dealing specifically with the scandals includes the following:

The quiz show scandals made the networks forever leery of 'single sponsorship' programming. Henceforth, they parceled out advertising time in fifteen, thirty, and sixty-second increments, wrenching control away from single sponsors and advertising agencies.<sup>40</sup>

However, the movement to network-controlled programming started before the quiz-show scandals. Under time franchise, advertisers could easily move successful programs to rival networks. Network executives wanted a greater ability to keep successful shows and to control what programs it aired. When Sylvester "Pat" Weaver became president of NBC in 1953, he was vocal proponent of network control over programming. He wanted a system similar to the one used in magazines in which advertisers would pay to be inserted into programs without having any control over the content or scheduling of the programs.<sup>41</sup>

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<sup>39</sup> Hoerschelmann (1997), p.1329.

<sup>40</sup> Doherty (1997), p.1332.

<sup>41</sup> Barnouw (1970), p.59-60.

Weaver's initial efforts to replace time franchise with the "magazine concept" yielded the network-produced *Today* and *Tonight* shows. While the shows were successful, they aired in the less-viewed slots outside of prime time. Weaver wanted NBC's prime-time schedule to reflect the magazine concept, but advertisers were reluctant to purchase advertising slots in programs that they did not control. In addition, advertisers who had occupied a time slot for several years were reluctant to vacate the slot. An advertiser felt that as long as it had leased a time slot, it was entitled to renew the lease when the contract term ended.

For example, *The Voice of Firestone* began broadcasting on NBC Radio in 1927 and moved to NBC Television in 1949. It had a relatively small viewership, but Firestone was willing to pay for the airtime to keep the program running. In 1954, NBC worried that the program's small viewership was dragging down viewership for the programs scheduled around it. NBC wanted Firestone to vacate the time slot so that a potentially more popular program could take its place. When Firestone refused, NBC unilaterally moved the program outside of prime time to Sunday at 5:30PM.

Firestone responded by moving the show to ABC where it ran in various time slots for five more years.<sup>42</sup>

NBC's unilateral movement of *The Voice of Firestone* jolted the television industry. It sent a signal to advertisers that the networks were abandoning time franchise and taking greater control of their schedules and placing greater scrutiny on one program's effects on the viewership of adjacent programs. An advertiser that had traditionally held a certain time slot was no longer entitled to that slot. Later that year, an advertising executive complained: "A nasty word has sprung up in this business of ours. It is 'bumping' the advertiser."<sup>43</sup> In addition, an advertising trade magazine published a year-end report that noted the growing efforts by the networks to reduce their dependency on advertiser-controlled programs.<sup>44</sup>

If the networks wished to control their schedules, they needed to obtain programs from sources other than the advertisers. One option was to produce more programs in-house. In the early 1950s, CBS acquired fifteen New York production studios and built in Hollywood a collection of

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<sup>42</sup> "Firestone's Voice Silenced by NBC," *New York Times* (May 15, 1954).

<sup>43</sup> Association of National Advertisers (November 9, 1954).

<sup>44</sup> "Year End Report," *Sponsor* (December 27, 1954), p. 29.

large studios known as "Television City." NBC built a similar facility in Burbank.<sup>45</sup> In 1955, CBS purchased Terrytoons (a major animation studio) and voiced interest in Desilu Productions (the producer of *I Love Lucy*). NBC voiced similar interest in Barry-Enright Productions (the producers of several quiz shows).<sup>46</sup> Another option was to license the programs from independent producers. With this option, the networks received help from an unlikely source – the film industry.

During television's infancy, film executives viewed television programs as direct competition to theatrical films, so they were reluctant to sell older films or to produce new programs for the networks. Jack Warner, the head of Warner Brothers, even forbade the appearance of a television set in any of his films. However, the dramatic restructuring of the film industry in the late 1940s and early 1950s changed their position on television.

In 1948, the Supreme Court ruled that five studios and three distributors had engaged in anticompetitive practices toward independent exhibitors.<sup>47</sup> By 1952, all of the defendants had signed consent decrees (known as the

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<sup>45</sup> Federal Communications Commission (1965), p.173-174.

<sup>46</sup> Ibid. at p.209.

<sup>47</sup> *United States v. Paramount Pictures, Inc.*, 334 U.S. 131 (1948).

"Paramount Decrees") and divested themselves of their theater chains. At the same time, theatrical admissions plunged after several decades of increases. The studios responded by reducing their film output – from 1948 to 1952, the total number of films produced dropped sharply from 488 to 253.<sup>48</sup> Studio executives began looking for new sources of revenue and turned to their one-time rivals.

ABC was the first network to make a deal with a film studio. In the early 1950s, ABC lagged far behind CBS and NBC in affiliate quality, viewership, and advertising revenue.<sup>49</sup> Sponsors were reluctant to bring their most-promising shows to ABC or to stay once a show became popular. ABC wanted to overcome this disadvantage by acquiring more of its own programming. However, ABC did not want live programs because fewer of their affiliates were wired for live broadcast, leaving many ABC viewers to watch low-quality kinescope recordings of live programs. Instead, ABC believed that a greater reliance on filmed programs, which looked better than kinescopes, would eliminate a disadvantage it had to the other networks.

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<sup>48</sup> Boddy (1990), p.134.

<sup>49</sup> ABC had only 84 affiliates and only 58% of them could carry network programming live. In contrast, CBS had 121 affiliates with 87% live clearance, and NBC had 104 affiliates with 90% live clearance. Furthermore, 80% of ABC's affiliates were lower-quality UHF stations established after the license freeze. See Silverman (1959), p.8.

In 1954, ABC and Disney entered into a contract. Disney wanted to build an amusement park in Southern California, so ABC agreed to guarantee a \$4.5 million loan and to purchase a 35% stake in the park for \$500,000. In return, Disney would license shows exclusively to ABC for seven years. The first show *Disneyland* (and later re-titled *The Wonderful World of Disney*) began airing in the 1954-55 season. Its license fee was the highest ABC had ever paid, but the show was an immediate success, becoming the network's first top-ten rated program.<sup>50</sup> In its first season, the show was responsible for half of ABC's advertising revenue.<sup>51</sup> In the 1955-56 season, "The Mickey Mouse Club" debuted, followed by "Zorro" in the 1956-57 season. These shows attracted many viewers, providing an unusual amount of success for the perennially third-place network.

The lucrative terms of the ABC-Disney contract caught Jack Warner's attention. In April 1955, he announced that Warner Brothers had entered into a similar deal to license filmed programs to ABC. In the 1955-56 season, *Warner Brothers Presents* debuted. It was a one-hour program that showed three rotating series – *Casablanca*, *King's Row*, and

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<sup>50</sup> Goldenson (1991), p.59.

*Cheyenne*. Based on the prestige of Warner Brothers, ABC was able to attract large sponsors who had never previously advertised on the network. The program yielded one top-twenty rated hit – the *Cheyenne* series. Because ABC lacked affiliates in certain markets, the national ratings understated the show's popularity wherever it aired. In markets that had affiliates for all three networks, *Cheyenne* was a top-ten rated program in its first season. By 1957, it was number one in these markets.<sup>52</sup>

ABC's success spurred the other networks to seek licensing deals with film studios. Simultaneously, the lucrative deals obtained by Disney and Warner Brothers showed other studios that there were enormous profits to be made in licensing programs to the networks. After years of avoiding network television, the major studios were eager to enter television production at the same time that networks were eager to acquire more of the programs they aired. Columbia Pictures formed Screen Gems, a television production subsidiary. ABC licensed Metro-Goldwyn-Mayer's first television series called *MGM Parade*, which showed serialized versions of popular MGM films. CBS licensed the *Twentieth Century Fox Hour*, which marked the first time

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<sup>51</sup> Orme (1955), p.32.

that veteran film actors from the studio's roster were allowed to appear on a television program.

As the networks acquired more programs from film studios, their prime-time schedules became increasingly populated with filmed programs. Each new program had to displace an older program, which was usually an advertiser-controlled live drama. In the 1955-56 season, ABC cancelled all of its live dramas and replaced them with filmed programs from Hollywood. At the beginning of the 1960-61 season, there were no live dramas on any network's prime-time schedule.<sup>53</sup> Advertiser-controlled programs, once dominant in prime-time, were limited to one-time specials and movies.

### **3.5 Regulation Of Network Television**

Under the model of advertiser-controlled programs, the networks earned revenues from selling one-year leases on large blocks of airtime to advertisers; the networks had no financial participation in a program's development or in its syndication. Once the industry shifted to network-controlled programs, the networks continued selling airtime to advertisers, although in much smaller slices so that a

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<sup>52</sup> Anderson (1997), p.348.



program would have multiple sponsors. More significantly, the networks began to provide investment capital to the producers in exchange for ownership shares and syndication rights in the resulting programs.

Under the model of network-controlled programs, a network paid for some of the costs of developing an idea and producing a pilot episode. In exchange, the network gained two things – an option to exhibit the series for up to seven years, and participation in the program's syndication. Under the seven-year option, the network assessed the viability of a series at the end of each television season and renewed the desirable ones according to the terms of the original contract. If the network cancelled a series, it owed no compensation to the producers. Furthermore, the network received a profit percentage when a series was sold to domestic or foreign syndication. If the network did the selling and promoting itself, it received a syndication fee in addition to the profit participation.

The networks were no longer solely in the business of selling airtime. Instead, their financial health was also affected by developing and supporting programs that would

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<sup>53</sup> Boddy (1990), p.187-188.

be viable in syndication, which gave rise to new contractual relationships with producers and increased vertical integration. These changes aroused the attention of government regulators. In 1956, the House Judiciary Committee and the Senate Commerce Committee simultaneously investigated whether the networks were abusing their dominance in the market for programming.<sup>54</sup> In the same year, the FCC initiated a series of studies on the financial participation that the networks had in their programming.<sup>55</sup>

While the Congressional hearings did not lead to any legislative action, the FCC studies culminated in the *1970 Report and Order*. In the report, the Commission argued that the networks had increased their control over the production process to such an extent that they could extract valuable concessions from the program producers:

The three national television networks for all practical purposes control the entire network television program production process from idea through exhibition.<sup>56</sup>

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<sup>54</sup> See Hearings on Monopoly Problems in Regulated Industries, Antitrust Subcommittee of the Committee on the Judiciary, House of Representatives, 84 Congress, 2d session (1956). See *The Network Monopoly*, Report Prepared for the Use of the Committee on the Interstate and Foreign Commerce, Senate, 84 Congress, 2d session (Washington, DC: U.S. Government Printing Office, 1956).

<sup>55</sup> Federal Communications Commission (1965).

<sup>56</sup> Federal Communications Commission (1970), p.393.

The Commission focused its criticisms in two areas. First, it argued that the network programming market had become less competitive. When the industry shifted from advertiser-controlled programs to network-controlled programs, the number of buyers of network programming dwindled to three. In the Commission's view, the networks had gained monopsony power and used it to negotiate licensing terms that were unfavorable to the producers of the programs.<sup>57</sup> Specifically, the Commission asserted that the network's acquisition of financial interest and syndication rights were terms that would not exist in a competitive network programming market.<sup>58</sup>

Second, the Commission argued that the syndication market had become less competitive. In the time of advertiser-controlled programs, there were numerous suppliers of the syndication market. In the time of network-controlled programs, the supply came primarily from the three networks. In the Commission's view, the networks had gained monopoly power and could grant favorable licensing terms to their own affiliates or refuse to deal with non-affiliated stations. The latter strategy would

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<sup>57</sup> Ibid. at p.387.

leave a network affiliate with a stronger lineup than that of a non-affiliated station.<sup>59</sup>

As a remedy, the Commission proposed several rules, including the Financial Interest and Syndication Rules – or “Fin-Syn.” The Fin-Syn rules barred a network from acquiring ownership shares or syndication rights in the programs that it aired. A network could financially gain from a program’s first run only; it was barred from receiving any subsequent revenue streams. The rules were supposed to reduce the profitability of network involvement in program production, thereby reversing the trend toward vertical integration in the television industry.

The rules did not go into effect immediately. Network appeals resulted in a court order to delay execution of the rules. During the delay, the Antitrust Division of the Justice Department filed separate suits against each network in 1972, charging each with violating Sections 1 and 2 of the Sherman Act.<sup>60</sup> The Division did not allege that the networks colluded. Instead, it alleged that each network had a monopoly in production and distribution of

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<sup>58</sup> Ibid. at p.393.

<sup>59</sup> Ibid. at p.389.

<sup>60</sup> *United States v. American Broadcasting Company*, Civ. Compl. No. 72-819; *United States v. CBS, Inc.*, Civ. Compl. No. 72-820; *United States v. National Broadcasting Company*, Civ. Compl. No. 72-821 (C.D. Cal. filed April 14, 1972)

the programs it aired. In other words, the Division viewed each network's prime-time schedule as a separate market. If only NBC could control NBC's schedule, then NBC was alleged to have a monopoly.

According to the suit, each network had abused its monopoly position by forcing independent producers to surrender financial interest in prime-time programs, by refusing to show programs in which they had no financial interest, and by controlling prices of made-for-television movies by producing movies in-house or contracting with a single supplier. The Division sought remedies that were similar to the ones found in the Fin-Syn rules. Once the FCC received court approval to enact the Fin-Syn rules, the networks saw little purpose in contesting the Division's lawsuit. Each network negotiated a consent decree that included the Fin-Syn rules as well as additional limits on the amount of self-produced programming that could be aired.<sup>61</sup>

The FCC applied these rules only to the three networks that existed at the time. In 1985, Rupert Murdoch bought 20th Century Fox and a chain of six independent television

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<sup>61</sup> *United States v. National Broadcasting Company*, No.74-3601-RJK (C.D. Col. November 17, 1976); *United States v. CBS, Inc.*, No.74-3599-RJK

stations in large markets. The following year, he launched the Fox Broadcasting Company – the first serious attempt at a fourth network since DuMont, and the first network to be integrated with a film studio. Murdoch petitioned for a waiver from the Fin-Syn rules. The FCC granted a waiver on the belief that FOX create a strong competition for the established three networks. In a 1991 rule, the FCC applied the waiver to all “emerging networks” which was any over-the-air network except the established three networks.<sup>62</sup> The following year, the FCC broadened the waiver to include cable networks.

The three established networks objected to the waiver, and their complaints reached the Seventh Circuit of Appeals. In 1992, the court ruled that the FCC had acted arbitrarily and capriciously in enacting the 1970 rules.<sup>63</sup> The FCC officially repealed the Fin-Syn rules on September 15, 1995. After the repeal, the established three networks were free to move into program production, continuing the trend that began in the 1950s. By 2004, each of the

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(C.D. Col. July 31, 1980; *United States v. American Broadcasting Company*, No.74-3600-RJK (C.D. Col. November 14, 1980).

<sup>62</sup> In the early 1990s, two major film studios – and major producers of television programs – each purchased independent television stations to form their own vertically-integrated television networks. In 1995, the United Paramount Network (owned by Paramount Pictures) and the WB Network (owned by Warner Brothers) debuted.

<sup>63</sup> *Schurz Communications, Inc. v. FCC*, 982 F.2d 1043 (7th Cir. 1992)

established three networks had merged with a major film studio, and produced most of its programming in-house.<sup>64</sup>

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<sup>64</sup> In 1996, ABC merged with the Walt Disney Company. In 2000, CBS merged with Viacom, which owned Paramount Pictures. In 2004, NBC merged with Vivendi Universal, which owned Universal Studios.

**Table 3.1**

**Theatrical Admissions and Movie Theaters**

<u>Year</u>	<u>Average Weekly Movie Attendance (millions)</u>	<u>Number of Movie Theaters</u>	<u>Households with Television Sets (thousands)</u>
1939	85	17,829	--
1940	80	19,042	--
1941	85	19,750	--
1942	85	20,380	--
1943	85	20,293	--
1944	85	20,375	--
1945	90	20,457	--
1946	90	19,019	8
1947	90	18,607	14
1948	90	18,395	172
1949	88	18,570	940
1950	60	19,106	3,875
1951	54	18,980	10,320
1952	51	18,623	15,300
1953	46	17,965	20,400
1954	49	19,101	26,000
1955	46	19,200	30,700
1956	47	19,003	34,900
1957	45	19,003	38,900
1958	40	16,000	41,924
1959	42	16,103	43,950

SOURCE: Steinberg (1980b), p.40, 46, and *Historical Statistics of the United States* (2006), p.1027-1028.



**Table 3.2**

**Source of All Network Programs**

<u>Season</u>	<u>Produced by Advertiser</u>	<u>Produced by or Licensed to Network</u>
1955-56	51%	49%
1956-57	--	--
1957-58	37%	63%
1958-59	30%	70%
1959-60	26%	74%
1960-61	20%	80%
1961-62	15%	85%
1962-63	14%	86%
1963-64	13%	87%
1964-65	9%	91%

SOURCE: Federal Communications Commission (1965), p.209, 788.

**Table 3.3**

**Network Shows and Number of Sponsors**

<u>Season</u>	<u>Shows with Single Sponsor</u>	<u>Shows with Alternating Sponsors</u>	<u>Shows with Multiple Sponsors</u>
1955-56	75	30	10
1956-57	57	2	17
1957-58	61	46	1
1958-59	55	43	13
1959-60	30	50	25
1960-61	31	51	24
1961-62	26	27	47
1962-63	24	18	52
1963-64	15	18	54
1964-65	12	22	57

SOURCE: Federal Communications Commission (1965), p.736.

#### **4. Historical Change and Optimal Governance Structures**

This chapter will use transaction cost theory to explain the changes that occurred in the 1950s television industry. It will begin by summarizing the changes in contract design and the allocation of control rights in the 1950s, and link these changes to an increasing degree of asset specificity in the industry. It will continue by explaining how a change in network programming strategy caused a greater reliance on programs that were customized to each network's specific needs, and by describing the quasi-rents that arose with such programs. When these quasi-rents were at risk of being expropriated, governance structures changed to reduce with the risk. Specifically, there were changes in control over production and scheduling, in labor contracts, and in the network program supply agreement.

##### **4.1 Audience Flow And Asset Specificity**

To summarize the governance structures in the early television industry, pre-1950s television was characterized

by advertiser control of program scheduling and production, short-term contracts between producer and network, and short-term contracts between producer and talent. Post-1950s television was characterized by network control of program scheduling and production, long-term contracts between producer and network, and long-term contracts between producer and talent.

The increase in contract duration and the consolidation of control rights can be explained by an increase in the degree of asset specificity. In the 1950s, networks chose to pursue a strategy of exploiting "audience flow" in order to increase the viewership for an entire schedule of programs, rather than letting each producer focus on the viewership of its own program. An audience-flow strategy increases asset specificity because the programs that increase audience flows require investments that cannot be fully recovered if the program is moved to another network. As asset specificity increased, the optimal governance structure moved toward longer contract duration and unified governance.

#### **4.1.1 Audience Flow**

In the late 1920s, the radio industry resembled the early television industry – advertisers controlled production and scheduling of radio programs. Advertisers wanted to know how many listeners tuned into their radio programs, so the Association of National Advertisers created the first ratings service, the non-profit Cooperative Analysis of Broadcasting. Advertisers found ratings data to be so valuable that for-profit competitors appeared. In the 1940s, the ratings companies began calculating television ratings as well.

Unlike the radio industry, the television industry had access to ratings data during its birth as a mass medium. The ratings data showed that, despite the ease of changing channels, a sizable proportion of a television audience remained on the same channel after a program ended. In 1954, an article in *Collier's* described the phenomenon:

[Television] networks have found that they can virtually ensure a good rating for a show by scheduling it next to a show with proven popularity....The reason: most TV viewers, it has been discovered, turn the dial to the channel on which they plan to see their favorite program, and leave it there most of the evening.<sup>65</sup>

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<sup>65</sup> Davidson (1954), p.27.

In addition, Epstein (1973) quotes a network vice-president who was responsible for audience research:

I wish that everyone chose to watch the program that most appealed to them from among the competing programs; it would make my job much easier. Unfortunately, that is not the way it works; the viewing habits of a large portion of the audience - at least the audience that Nielsen measures - is governed more by the laws of inertia than by free choice. Unless they have a very definite reason to switch...they continue to watch the programs on the channel they are tuned to.<sup>66</sup>

This phenomenon - known as "audience flow" - means a program's audience size is determined by more than the program's quality; it is also determined by the programs preceding it.

The ratings history of *Stage 7* illustrates the effects of audience flow. In 1954, *Stage 7* was preceded by *The Fred Waring Show*, which had a 32.8 percent share of the audience. In 1955, *Stage 7* had a new lead-in program, *General Electric Theater*, which garnered a 54.6 percent share. The sponsors of *Stage 7* did not make any significant changes to the show or increase the show's promotion, yet its ratings increased from a 32.1 to a 45.1

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<sup>66</sup> Epstein (1973), p.93.

share.<sup>67</sup> *Stage 7* attracted a larger audience because of its placement in the schedule.

While the *Stage 7* example shows that audience-flow effects can increase a program's viewership, it also shows that the *entire* audience does not flow from one program to another. Some of the audience changes the channel or turns off the television. The size of the retained audience depends on whether the adjacent program appeals to similar audiences. For example, a program that attracts males will retain more of an audience from a lead-in that also attracts males than from a lead-in that attracts females. This has been refined into the strategy of "blocking" in which a cluster of shows have similar appeal. "Format blocks" contain shows of the same genre. "Demographic blocks" appeal to audiences of the same age, income, or marital status.<sup>68</sup>

Another strategy for exploiting audience flow is "counter-programming." Whereas "blocking" recommends that a network's programs be compatible with each other, "counter-programming" recommends that the programs be *incompatible* with programs on rival networks. When a program appeals to one segment of the audience, it also

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<sup>67</sup> Ibid. at p.94.

drives away other audience segments. Rival networks can capture these neglected audience segments with programs customized to appeal to them.<sup>69</sup> When recalling his time as president of CBS Broadcast Group, Richard W. Jencks wrote:

The most difficult questions...involved the precise scheduling of programs with respect to their network competition...This, for example, was the principle underlying the scheduling of the low-key family drama, *The Waltons*, opposite NBC's then number one hit, Flip Wilson's manic variety show, or scheduling a movie night of films chosen for their appeal to women opposite prime-time professional football.<sup>70</sup>

The presence of audience flow means that a program does not rise or fall solely on its own merits. Instead, a program also depends on the scheduling and appeal of other programs, both on the same network and rival networks. To increase viewership for an entire schedule, it is important to attract a large audience early, minimize the discontinuity as one program switches to another, and appeal to an audience that is neglected by rivals. If a program disrupts the audience flow, then it reduces the viewership for the rest of the schedule. According to Jencks, audience-flow effects are not confined to a single

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<sup>68</sup> Walker and Ferguson (1998), p.113.

<sup>69</sup> Ibid. at p.114.



evening. Instead, when a program drives a viewer to a rival network, the viewer may not return on subsequent nights.<sup>71</sup> While viewer inertia helps a network to retain viewers, it also makes it difficult to get the viewer back once he changes channels.

#### **4.1.2 Habitual Viewing**

For exploiting audience flow, a program that can reliably draw the same audience every week is more valuable than a program with unpredictable swings in viewership. Because a single audience-flow disruption sends damaging ripple effects through the rest of a schedule, there is a premium on programs with stable audiences. Certain strategies can increase a program's chances of having viewers who habitually tune in.

Scheduling is one way to encourage habitual viewing. When people can find their favorite programs in the same time and channel every week, they settle into predictable viewing patterns. Programs become part of the daily routine. In 1954, Robert Weitman, ABC's vice president in charge of programming, noted how viewers had formed "established patterns of viewing. People are annoyed when

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<sup>70</sup> Jencks (1980), p.45.

their favorite show is pre-empted, even for a super-spectacular."<sup>72</sup> Television historian Jeff Greenfield described the networks' use of scheduling to encourage habitual viewing: "The networks were looking for predictability - for the security attending the knowledge that every Tuesday night at 8 PM an audience tuned in Milton Berle, or that every Monday night at 9 PM *I Love Lucy* appeared.... Repetition was the key; predictability was the goal."<sup>73</sup>

Program format is another way to encourage habitual viewing. Consider the differences between anthologies and episodic programs. Anthologies have new characters in new situations in every episode. Each week, viewers discover new actors who will perform a story that exhibits a writer's distinctive voice. The format promises variety, surprise, and uniqueness. Episodic programs, however, rely on the same characters in the same basic situations. The early episodes establish the character and story elements; subsequent episodes follow this formula. Episodic programs adhere to their formulas so strictly that it is difficult to sense the creative imprint of an individual writer on

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<sup>71</sup> Ibid. at p.46.

<sup>72</sup> "The Spectaculars: An Interim Report," *Sponsor* (November 15, 1954), p.31.

any particular story. While each week brings a new story, the viewer knows it will take place in the same setting with the same characters.

An anthology is essentially a series of unrelated stories, so the audience for an individual episode depends mostly on the appeal of that week's story. Alternatively, an episodic program follows an established formula, so the audience for an individual episode depends mostly on the appeal of the formula. This means it is easier for episodic programs to be watched habitually, for the same viewers to tune in each week. According to Greenfield, ratings for episodic programs tend to be stable while "anthology dramas might light up the numbers one week and sag the next."<sup>74</sup> Even if the average ratings for both formats are the same, the lower volatility of episodic program ratings is more valuable for exploiting audience flow.<sup>75</sup>

The history of the film industry illustrates the use of format and scheduling to encourage habitual viewing. During the height of the studio system (1920s-1940s),

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<sup>73</sup> Greenfield (1977), p.137-139.

<sup>74</sup> Ibid. at p.138.

<sup>75</sup> The analysis of anthologies applies to other non-episodic programs such as "spectaculars" (one-time specials), variety shows, and game shows.

studios produced two types of films – features and serials. Features, like anthologies, told self-contained stories that presented new situations and characters.<sup>76</sup> Serials, like episodic programs, told continuing stories with formula storylines and recurring characters. Serials often ended one installment in a “cliffhanger” to spur audiences to return for the next one. While features had more prestige, serials attracted audiences more consistently and generated stable revenue streams. At the height of the studio era, serials accounted for up to half of a studio’s annual output.<sup>77</sup> Harry Warner, co-founder of Warner Brothers, noted the importance of serials to studio finances: “You can run a movie business without any A’s [features] sooner than you can run it without any B’s [serials].”<sup>78</sup>

When film studios owned theaters, they could provide a predictable time and place for the exhibition of their serials. For example, audiences for the *Flash Gordon* serials knew that they could see the next installment on the following Saturday at the same time in the same

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<sup>76</sup> Some features had sequels, but the sequels were produced after the successful release of the features. Features were designed to have one installment. Serials were designed to tell stories over multiple installments.

<sup>77</sup> Anderson (1994), p.174.

<sup>78</sup> Behlmer (1985), p.62.

theater. After the Paramount Decrees barred studios from owning theaters, studios had to negotiate with independent theaters and theater chains to get nationwide exhibition of their films. Facing higher uncertainty in exhibition and greater competition from television, studios dramatically reduced their annual output. Specifically, they abandoned serials to focus on features. They could have reduced production of features and serials equally. Or, in the spirit of Harry Warner's comment, they could have abandoned features to focus on serials. However, the loss of exhibition control reduced their ability to encourage habitual viewing of serials. Instead, they shifted resources to features, which were not dependent on habitual viewing.<sup>79</sup>

Episodic programs were a strong competitor to serial films because the marginal cost of watching an episodic program was much lower than the marginal cost of watching a serial film. In addition, once television networks took control of scheduling, they could provide the same scheduling predictability that the film studios provided

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<sup>79</sup> Warner Brothers closed down its serials division after the Paramount Decree in 1948. When Warner Brothers agreed to produce episodic television programs for ABC in 1955, the studio did not transfer resources and personnel from its features division. Instead, it resurrected its serials division. See Anderson (1994), p.172.

before the Paramount Decrees. Television turned out to be superior at encouraging habitual viewing. Leonard Goldenson, who worked in movie distribution before becoming the first president of ABC, understood this dynamic:

The real strength and vitality of television is in your regular week-in and week-out programs. The strength of motion pictures was also the habit of going to motion pictures on a regular basis. And that habit was, in part, taken away from motion pictures and acquired by television.<sup>80</sup>

#### **4.1.3 Specific Programs and Opportunism**

The presence of audience flow means that an entire schedule of programs can attract more viewers if the programs are scheduled to encourage a smooth flow of viewers, are tailored to appeal to specific audiences, and encourage habitual viewing. A larger audience is in the interests of advertisers and networks. In the absence of transaction costs, it does not matter which party holds the control rights over program production and scheduling because the parties can bargain to the optimal outcome. However, in the presence of transaction costs, the allocation of control rights affects audience size. This section will identify the transaction costs in the

television industry and examine how the allocation of control rights affects audience size.

Suppose each network wants to appeal to a particular audience segment to exploit audience flow. In order to fill its schedule, a network purchases programs from a supplier. The supplier has two options. First, it can produce a "generic" program, which has general appeal and can be enjoyed without prior knowledge of earlier episodes. Because its appeal is not limited to a particular audience segment, the program is compatible with the programming on any network. Each episode is designed to be self-contained – no recurring situations, no season-long story lines, no character histories to learn. A viewer can tune in at any point in the season without compromising his ability to follow the narrative. As a result, a generic program can be plugged into any network schedule and survive multiple time-slot changes.

Second, the supplier can produce a "specific" program that exploits audience flow. A specific program is customized to appeal to a certain audience segment, reside in a particular time slot, and have a program format that encourages habitual viewing. Because each network has

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<sup>80</sup> "Twenty-Five Years Wiser About Show Business, Goldenson Finds TV the

different audience-flow needs, a program that is customized for one network schedule will not be as valuable on other network schedules. For example, a program that appeals to young housewives will be more valuable to a network that appeals to young housewives than to a network that appeals to older men. As a result, the value of a specific program depends on the programs surrounding it.

Specific programs exploit audience flow; generic programs do not. As a result, the total gains from exchanging a specific program are larger than the total gains from exchanging a generic program. In order to determine the optimal governance structure for the exchange of specific programs, consider the following two-period model of the transaction.

In period 1, the supplier invests resources to produce a program that is customized for the audience of the network. The investments made to customize the program are non-recoverable. In period 2, the program is broadcast, and the gains from trade are realized. At this point, both parties have incentives to behave opportunistically because the investments in period 1 tie the value of the specific program to one network. Because the program's value is

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Brightest Star," *Broadcasting* (July 14, 1958), p.84.



higher in the exchange relationship than in other exchange relationships, the additional value – the quasi-rent – can be expropriated by one party in period 2 without causing the other to withdraw from the relationship.

In one possibility, the network tries to capture the quasi-rents in period 2 by threatening to cancel the program before it is viable in syndication unless the supplier agrees to a lower price. Because of the customizations made in period 1, the program will decrease in value if sold to another network, so the supplier will continue producing the show at a lower price. If the supplier's gains at the lower price do not cover the investments necessary to develop a specific program, then the transaction has made the supplier worse off. Anticipating this, the supplier will rationally underinvest in period 1. The program becomes more generic, and the total gains from the exchange decrease.

In another possibility, the supplier tries to capture the quasi-rents in period 2 by threatening to hold-up delivery of future episodes of the program unless the network agrees to a higher price. A hold-up will force the network to change its schedule. The network can either move a pre-existing program into the abandoned time slot or

order a replacement program to fill the time slot. In either option, the change disrupts the schedule's predictability and disturbs the flow of viewers. If the replacement program is another specific program, the network is vulnerable to the same hold-up problem. Anticipating this, the network will retreat from a schedule of specific programs in period 1, and the total gains from the exchange decrease.

As a program becomes more customized to a network's audience-flow needs, the benefit from broadcasting the program increases. At the same time, more customization requires more relationship-specific investments. If such investments are non-recoverable, the size of the quasi-rent increases. The larger the quasi-rent, the greater the risk of opportunism. Because there are larger gains from exchanging specific programs than generic programs, both parties will benefit from a governance structure that reduces the scope for opportunism and ensures the integrity of the transaction. Spot-market exchange (finding an alternative buyer or seller) fails to constrain opportunism because it is costly to break the relationship once the relationship-specific investments are made. Instead, the

optimal governance structure moves toward long-term contracts and vertical integration.

Long-term contracts are superior to spot-market exchange at constraining opportunism for two reasons. First, the repeated nature of long-term exchange increases the likelihood that the contract will be self-enforcing. The presence of contractual gains in future periods reduces the incentive for opportunistic gains in the present. Second, long-term contracts can limit the actions of the party who is positioned to appropriate quasi-rents. Before relationship-specific investments are made, contracts can specify performance of both parties after the creation of the specific asset.

Because contracts are unavoidably incomplete, the costs of contractual restraints rise as the size of the appropriable quasi-rent rises. However, the costs of integration are not sensitive to the size of the quasi-rent. Therefore, there will come a point when the costs of specifying performance in all of the relevant contingencies are higher than the costs of integration. At this point, vertical integration is the superior governance structure. Instead of having each program supplier controlling the production and scheduling of its program, the control

rights are consolidated into a single firm – the network. Under vertical integration, decisions about production and scheduling are made internally within a firm, instead of across markets. When the network holds the rights to produce and schedule its programs, it can make relationship-specific investments to exploit audience flow without fear of the resulting gains being expropriated.

To summarize, the post-1950s changes in the television industry governance structures are consistent with the changes predicted by a transaction-cost model in which the products exchanged have become more specialized. A network can increase total viewership if its programs have been produced and scheduled according to the network's particular audience-flow needs. Such actions require relationship-specific investments, which create an opportunism risk. To constrain opportunism, production and scheduling are more likely to be governed by long-term contracts or vertical integration. With long-term contracts, explicit contractual terms restrain the parties from appropriating quasi-rents. With vertical integration, a single party holds all control rights to production and scheduling, allowing it to make the relationship-specific investments without the threat of opportunism.

## 4.2 Illustrative Example

The experience of ABC illustrates the transaction-cost model presented here. ABC, like CBS and NBC, began as a radio network and viewed television as an extension of radio. As a result, ABC applied the radio business model to its early television operations – the network sold airtime and left the advertisers responsible for producing and scheduling most of the programs. An advertiser's primary concern was attracting viewers to its program so that the advertised product could get more exposure. Because an advertiser did not gain from funneling viewers (or a particular kind of viewer) to neighboring programs, it had weak incentives to consider the impact of its decisions on audience flow. In pursuit of a larger audience, an advertiser often moved its program to different time slots or networks, even if these changes disrupted the network's audience flow.

ABC struggled under this business model because it had fewer affiliate stations than did CBS and NBC (Table 4.1). Before the FCC froze applications for new licenses, most cities had only one or two stations. Because ABC was slower than its rivals to enter the television business, it

was unable to secure an affiliate in many cities. In those cities, it had to rely on "drop-ins" – convincing an affiliate of other network to insert an ABC program into its schedule. Many stations were not interested in drop-ins, and those that were interested offered weak time slots. As a result, advertisers did not bring their strongest programs to ABC. Furthermore, if a program became an unexpected success on ABC, the advertiser would move the program to CBS or NBC in search of more viewers.<sup>81</sup>

In 1953, Leonard Goldenson became Chief Executive Officer of ABC. One of his first actions was to commission Dr. Paul Lazarsfeld, a sociologist at Columbia University, to analyze network television audiences. While the networks had data on the *size* of their audiences since the 1940s, this was the first attempt to analyze the *composition* of their audiences. Lazarsfeld found that CBS and NBC tended to attract older audiences. Because CBS and NBC had a long history in radio, most of their television programs were built around radio stars who became popular before World War II. As the stars aged, their audiences aged as well. There were few programs that appealed to younger audiences (those between eighteen and forty-nine

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<sup>81</sup> Federal Communications Commission (1980a), p.84-86.

years old) and to the young families formed since the end of the war.<sup>82</sup>

Because the younger audience segments were growing quickly, Goldenson believed ABC could overcome its lack of strong affiliates if it targeted these segments. CBS and NBC could continue to fight over the same older audiences; ABC would create a new public identity by appealing to audience segments abandoned by the other networks. According to Goldenson, it was a novel idea to customize an entire network schedule to appeal to a specific audience segment:

Lazarsfeld recommended that we go after the young audiences. We should build programs around casts of young, virile people, he said. Beautiful women and handsome men. And create programs with stories that younger people could identify with. This was a lightning bolt to us.<sup>83</sup>

If ABC was going to appeal to a specific audience segment, Goldenson recognized that he would have to change the network's programming policies. ABC needed a unified schedule that exploited audience flow – youth-oriented programs that were arranged to hold on to young viewers

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<sup>82</sup> Federal Communications Commission (1965), p.298.

<sup>83</sup> Goldenson (1991), p.149.

throughout the evening, and that encouraged "steady, routinized viewership."<sup>84</sup>

Goldenson did not believe this would happen as long as advertisers controlled program production and scheduling. Advertisers were reluctant to invest in youth-oriented programs that would be valuable when broadcast on ABC, but less valuable when broadcast on other networks that appealed to older audiences. Instead, they produced broad-appeal programs that could be moved between networks easily. Furthermore, even if advertisers agreed to produce youth-oriented programs, there was no single authority in charge of scheduling. In order to exploit audience flow, each advertiser would have to negotiate over program placement with other advertisers, creating potential hold-up problems as advertisers tried to assemble blocks of programs that worked well together. Because of these disincentives, each advertiser would focus on viewership for its own program rather than viewership for an entire schedule. According to Goldenson, advertiser control of production and scheduling prevented the network from exploiting audience flow:

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<sup>84</sup> Anderson (1994), p.200.



The programming just had no direction. Programs landed next to each other by mere chance, with each [advertising] agency building its own show in a way that was aimed at nothing more than keeping its client happy. There was no planned relationship of one program and another or to the competition, and no particular attempt to create a lasting pattern for the people at home.<sup>85</sup>

In order to effect his new strategy, Goldenson wanted ABC to control program production and scheduling. This was such a break from traditional industry practices that he sought the approval of the board of directors before proceeding:

I went to my board and said, "We've got to know that those programs are licensed to us and can't be taken away. We've got to control audience flow. We can't allow advertisers to yank programs around to suit themselves. We must be able to schedule as we wish, so nobody can force us to move a show into another time slot against our best interests...We've got to commit to a fixed time slot for every program we air."<sup>86</sup>

He received the board's approval, and ABC moved into production and scheduling. As advertiser-controlled programs moved to other networks or ceased production, ABC filled the vacated time slots with network-controlled

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<sup>85</sup> Whiteside (1954), p.67.

<sup>86</sup> Goldenson (1991), p.167.

programs (produced in-house, or licensed from film studios or independent producers).

With control over program production, ABC could dictate that the programs appeal to young audiences. Fred Silverman, who would become head of ABC programming in the 1970s, wrote that "practically all of the programs developed and/or acquired by ABC between 1954 to 1956 were geared to...young post-war families with small children."<sup>87</sup> In addition, ABC could dictate the format - selecting episodic programs (westerns and detective shows) which encouraged habitual viewing more than did the anthologies and variety programs preferred by advertisers.

With control over program scheduling, ABC placed the strongest program early in the evening so that it could funnel a large group of young viewers into the rest of the evening's schedule. On several nights, ABC began its prime-time lineup with a one-hour program, starting a half-hour earlier than the competition's prime-time lineup. ABC even altered the narrative structure of these early programs so that the second-act complications intensified as rival prime-time programs began.<sup>88</sup> The few advertiser-controlled programs that remained on ABC were usually

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<sup>87</sup> Silverman (1959), p.389.

scheduled at the end of the evening where their ability to disrupt audience flow was minimized (Figure 4.2).

By the 1959-60 season, 97% of ABC's schedule consisted of network-controlled programs.<sup>89</sup> In six years, ABC had taken control of program production and scheduling, and remade its entire schedule. The change prompted the following comment in *Variety*:

Seldom if ever in broadcasting annals has a network achieved such absolute control of its programming schedule as applies to ABC-TV....It is no secret to the trade that [President] Ollie Treyz can now sit down with [CEO] Leonard H. Goldenson and program chieftain Tom Moore, and effect any kind of roster he chooses for next season without consulting a single advertiser.<sup>90</sup>

ABC initiated these changes because they spotted a profit opportunity that the other networks neglected. In order to seize this profit opportunity, ABC needed a slate of specific programs that were scheduled to exploit audience flow. The practice of letting advertisers control production and scheduling encouraged the opposite – a slate

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<sup>88</sup> Anderson (1960), p.201.

<sup>89</sup> In the same season, CBS had 52% network-controlled programs, and NBC had 66%. See "The Swing to Network Control," *Broadcasting* (May 16, 1960), p.92.

<sup>90</sup> "ABC-TV's 99% Control of Schedule," *Variety* (March 16, 1960), p.21.

of generic programs, scheduled without consideration of audience flow.

After consolidating the control rights, ABC remade its schedule to attract and hold onto young audiences. By the end of the 1950s, ABC's ratings improved so much that, for the first time, ABC was competitive in the markets where it had affiliates competing with CBS and NBC affiliates.<sup>91</sup> In 1960, ABC had higher ratings than did CBS and NBC in the twenty-four largest markets.<sup>92</sup> Rival networks, which had dismissed ABC's programming strategies, began embracing the idea of an integrated schedule, targeted to specific audience segments. They hired ABC executives to high-ranking positions and accelerated their movement to a network-controlled schedule. By 1960, all three networks were run by people who had played large roles in developing ABC's programming strategies.<sup>93</sup>

#### **4.3 Evolution In Contract Design**

In the pre-1950s television industry, advertisers controlled production and scheduling. While advertisers had final say in the creative direction of the programs,

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<sup>91</sup> Mayer (1961), p.61.

<sup>92</sup> Aderson (1994), p.278.

<sup>93</sup> Barnow (1970), p.149.

they often relied independent producers to assemble the personnel and handle the day-to-day responsibilities of producing the programs. The producer then licensed the finished product to the advertiser. The relationships between producers and personnel were governed predominantly by short-term contracts. The relationships between advertisers and producers were also governed predominantly by short-term contracts.

In the 1950s, the networks began to take control of production and scheduling. The networks produced some programs in-house. Because of their background in radio, the networks had a pool of production crew and owned production facilities that were well-suited for live programs. For filmed programs, they relied on independent producers to assemble the personnel and handle the day-to-day responsibilities of producing the programs. The producer then licensed the finished product to the network. The relationships between producers and production personnel were governed increasingly by long-term contracts. These relationships between network and producer were also governed predominantly by long-term contracts. In addition, the network-producer contracts

included options and restrictions that did not appear in contracts from the era of advertiser-controlled programs.<sup>94</sup>

When control shifted from advertisers to networks, independent producers and production personnel were still hired for day-to-day operations. However, the relationships between relevant parties were governed increasingly by long-term contracts with more restrictions on the actions of both parties. The longer contract duration and tighter restrictions can be explained by an increasing degree of asset specificity in the relationships. The shift to network control led to the adoption of program types and scheduling strategies that required more relationship-specific investment, which required longer-term contracts with explicit restrictions to constrain the resulting opportunism problems.

#### **4.3.1 Contracts Between Producer and Personnel**

Under advertiser-controlled programs, advertisers did not coordinate program type or scheduling with each other due to the high transaction cost of negotiating with multiple parties. As a result, they did not consider audience-flow effects in their decisions, and moved

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<sup>94</sup> Boddy (1990), p.172.

programs to different time slots or networks in pursuit of larger viewership. They chose program types that could retain their appeal after multiple scheduling changes, such as anthologies and variety shows. Such programs did not rely on continuing narratives or recurring characters, so first-time viewers could sample the program at any time during the season without feeling lost.

Once networks took control of production and scheduling, they wanted to exploit audience flow by developing a unified schedule of programs that encouraged habitual viewing among specific audience segments. Unlike advertiser-controlled programs, network-controlled programs had an episodic format – continuing narratives and recurring characters – that placed an emphasis on familiarity rather than surprise. Each program established its formula in the first episode, and stayed largely within the formula during the entire run of the series. The shift from non-episodic to episodic programs meant there was greater reliance on personnel who could ensure a consistent viewing experience from one episode to another. The evolution in personnel contracts reflected this greater reliance.

In television production, the producer is responsible for finding a story idea and hiring the actors and crew to turn the idea into a program. During the era of advertiser-controlled programs, there were few recurring characters or story formulas, so there was no reason to worry about maintaining consistency during a program's run. Most producers did not secure personnel for long periods of time, often signing actors and writers to short-term contracts of up to one year in duration. Anthology producers used even shorter contract durations with actors and writers, often hiring them with spot-market transactions.<sup>95</sup> Once the industry shifted to network-controlled programs, producers began signing actors and writers to long-term contracts. Because all episodes of a series had to be consistent to encourage audience flow, the services provided by actors and writers became increasingly relationship specific.

Actors were often the members of production personnel who were most strongly identified with a program. Episodic programs had recurring characters, so the producer needed the same actors to play the recurring characters during the entire series run. Due to tight production budgets,

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<sup>95</sup> "An Evolution in Star Contracts," *Broadcasting* (July 4, 1960), p.27.



television actors tended to be unknowns. If an unknown actor became strongly associated with a particular television character, the actor would become less marketable playing other roles, and the program's value would become more dependant on that specific actor playing the character. The producer and the actor would be locked in a bilateral monopoly, with its attendant opportunism problems. To solve the opportunism problems, the producer could hire actors with long-term contracts.<sup>96</sup> This was what the industry experienced, as the typical labor contract for actors in recurring roles grew to three to seven years in duration, while actors in single-appearance roles were typically hired with spot-market transactions.<sup>97</sup>

Labor contracts for writers also changed after network control. Because episodic programs adhered to story formulas, it was also important for a program to maintain narrative consistency. Producers created the position of story editor – the highest-ranking writer who oversaw the evolution of a program's storyline and ensured that it adhered to the pre-determined formula. The story editor

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<sup>96</sup> Just as episodic television programs resemble movie serials, the producer-actor contract of the former resemble those of latter. See Chisholm (1994) for a transaction-cost explanation of why labor contract duration increased when film studios produced serials, and decreased when they produced standalone feature films.

<sup>97</sup> Anderson (1994), p.180; Broadcasting (July 4, 1960), p.27.

was responsible for receiving scripts and taking out each writer's distinctive voice so that the story would fit within the formula. Two writers who worked for Warner Brothers Television beginning in 1959 described the experience as follows:

Writers were tailors, cutting bolts of cloth to a rigid set of specifications. They would be provided with an existing group of characters and a format, and any flexibility within these parameters was severely limited.<sup>98</sup>

For episodic programs, writers were generic labor and continued to be hired through spot-market transactions. Story editors, however, were needed to maintain narrative consistency during the entire series run, so producers hired them with long-term contracts.<sup>99</sup>

#### **4.3.2 Contracts Between Network and Producer**

Under advertiser-controlled programs, the producers licensed their programs to advertisers. The programs were not customized for particular audience-flow needs, so they required little relationship-specific investment, which meant few quasi-rents were created. With few quasi-rents,

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<sup>98</sup> Levinson and Link (1981), p.13.

<sup>99</sup> Anderson (1994), p.178-179.

the producers and advertisers faced few opportunism problems in their relationship. Short-term contracts – typically one year in duration – guided most transactions between producers and advertisers. When the contract term ended, the producer was free to shop the program to another advertiser. Due to the program's non-specialized nature, the supplier could often license the program to a new advertiser for similar terms.

Under network-controlled programs, the producers licensed the programs to networks. If the programs licensed to networks were identical to those licensed to advertisers, then the change in licensing parties should not change the design of the contracts. However, the programs licensed to a network were customized for the network's audience-flow needs, so they required relationship-specific investment that could not be fully recovered. This created appropriable quasi-rents, which left both parties vulnerable to opportunism. To strengthen the integrity of the transactions, the network-producer contract changed. There were three significant ways in which network-producer contracts differed from advertiser-producer contracts.

First, the network-producer contracts contained “renewal option” clauses that gave the network the exclusive right to order new episodes of the program for up to seven years at pre-negotiated rates.<sup>100</sup> A typical network-producer contract was essentially a series of one-year contracts, with the network having the sole authority to continue or terminate the relationship at the end of each one-year period. The renewal option clauses allowed the networks to build an integrated schedule to exploit audience flow without worrying that the producer would opportunistically hold up delivery to extract higher license fees. In addition, the longer duration (up to seven years) increased the self-enforcing qualities of the network-producer contract, compared to the one-year contracts predominantly used between advertisers and producers.

Second, the network-producer contracts contained “property exclusivity” clauses that limited the producer’s ability to license an episode of a program to other networks or syndication.<sup>101</sup> The property exclusivity clauses allowed the network to be the sole broadcaster of a particular episode for certain period (usually, three

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<sup>100</sup> Federal Communications Commission (1980b), appendix C, p.2-3.

years). If other networks could show episodes from the same program, then audiences would fragment, disrupting the network's efforts to manage its audience flow. This restriction also applied to "spin-offs," which were new programs built around characters originally developed for the licensed programs. Spin-offs were powerful tools for managing audience flow. Viewers who enjoyed a program would likely enjoy watching its spin-off. In addition, spin-offs typically pulled actors and production personnel away from the parent program, which could reduce the appeal of the parent program. With property exclusivity, the network had the sole authority to approve and broadcast any spin-offs.

Third, the network-producer contracts contained "personnel exclusivity" clauses that prevented actors in recurring roles from appearing in other programs or commercials without the network's consent.<sup>102</sup> The previous section discussed reasons for the producer-actor contractual relationship to be guided by exclusive long-term contract. For similar reasons, the network wanted restrictions on an actor's services. Viewers tend to form associations between a program and its actors, especially

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<sup>101</sup> Ibid. at appendix C, p.6, A9.

if the actors perform in recurring roles. If an actor appeared on a rival network's programs or commercials, it could divert some of the original program's viewers, disrupting the network's ability to manage audience flow. If an actor had become strongly associated with a particular network, the personnel exclusivity extended to periods after the program was cancelled. For example, in the 1950s, CBS cancelled a program, yet paid one of its actors to refrain from appearing on rival networks for thirteen years – without any obligation to perform for CBS.<sup>103</sup>

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<sup>102</sup> Ibid. at appendix C, p.6-7.

<sup>103</sup> "An Evolution in Star Contracts," *Broadcasting* (July 4, 1960), p.27-28.

**Table 4.1**

**Number of Affiliate Stations Per Network**

<u>Year</u>	<u>ABC</u>	<u>CBS</u>	<u>NBC</u>
1949	11	15	25
1950	13	27	56
1951	14	30	63
1952	15	31	64
1953	24	33	71
1954	40	113	164
1955	46	139	189
1956	53	168	200
1957	60	180	205
1958	69	191	209
1959	79	193	213
1960	87	195	214

SOURCE: Sterling and Kitross (1978), p.515.

<u>Sunday</u>		<u>Thursday</u>	
6:30-7:30	Disney	7:30-8:00	Guestward Ho
7:30-8:30	Maverick	8:00-8:30	Donna Reed
8:30-9:00	Lawman	8:30-9:00	Real McCoys
9:00-9:30	Rebel	9:00-9:30	My Three Sons
9:30-10:30	Islanders	9:30-10:30	Untouchables
10:30-11:00	Churchill	10:30-11:00	Yank
<u>Monday</u>		<u>Friday</u>	
7:30-8:30	Cheyenne	7:30-8:00	Room for More One
8:30-9:30	Surfside Six	8:00-8:30	Harrington & Sons
9:30-10:30	Adventures in Paradise	8:30-9:00	Flintstones
10:30-11:00	[Peter Gunn]	9:00-10:00	77 Sunset Strip
		10:00-10:30	Detectives
		10:30-11:00	[Law & Mr. Jones]
<u>Tuesday</u>		<u>Saturday</u>	
7:00-7:30	Expedition	7:00-7:30	Dick Clark
7:30-8:00	Bugs Bunny	7:30-8:30	Roaring 20's
8:00-8:30	[Rifleman]	8:30-9:00	Leave It to Beaver
8:30-9:00	Wyatt Earp	9:00-10:00	Lawrence Welk
9:00-10:00	Stagecoach West	10:00-11:00	[Gillette Fights]
10:00-10:30	One Step Beyond		
<u>Wednesday</u>			
7:30-8:30	Hong Kong		
8:30-9:00	Ozzie & Harriet		
9:00-10:00	Hawaiian Eye		
10:00-11:00	Naked City		

**Figure 4.1**

**ABC Prime-Time Network Schedule, 1960-61 Season**

Note: Advertiser-controlled programs are in brackets [ ]. All other programs are network-controlled.

SOURCE: "The Swing to Network Control," *Broadcasting* (May 16, 1960), p.93.



## 5. Conclusion

### 5.1 Summary of Analysis

This dissertation uses transaction-cost theories of the firm to examine the changes in contract design and allocation of control rights in the 1950s television industry. It provides an efficiency rationale for the movement toward long-term contracts, increased contractual restrictions on producers, and consolidation of control rights.

Before the 1950s, advertisers held the control rights for production and scheduling. An advertiser chose the program format and had final say in creative decisions. It also determined the program scheduling by licensing a time slot from a network. Audience flow was not widely understood. The networks assumed that viewership rose and fell based on the time of day, so they set airtime rates based on the location of the time slot rather than the program being broadcast. The common strategy for increasing audience size was for an advertiser to move its

program to a time slot with more potential viewers, even if the new time slot was on a different network.

In the 1950s, ratings data revealed that viewers exhibited some inertia when watching television – a phenomenon called “audience flow.” A popular program would boost the viewership of subsequent programs; an unpopular one would drag it down. Plus, a program was more likely to retain its inherited viewers if it appealed to the same audience segments as did its lead-in program. After this discovery, program type and scheduling became important determinants of viewership.

To exploit audience flow, programs needed to be customized so that they appealed to particular audience segments, and scheduled into blocks of similar appeal. Such customizations required ex-ante investments that were not fully recoverable if the programs moved to rival networks. Once the customizations were made, each program was vulnerable to ex-post opportunism. To constrain the opportunism, the control rights over production and scheduling were consolidated into the networks, instead of being fragmented across multiple advertisers. Furthermore, the contract duration for key members of production

personnel increased, as the value of their services became increasingly tied to a specific program.

When the industry shifted from advertiser-controlled programs to network-controlled programs, demand for production personnel and facilities remained high. When networks began producing programs, they used the same facilities and contracted with the same independent producers that had been previously used by advertisers. After the change, the primary difference was not in the inputs employed, but in the party holding control over production and scheduling. Once the networks adopted a strategy of exploiting audience flow, the programs on their schedules became more relationship-specific. The increased degree of asset specificity motivated the consolidation of control rights and increase in contract duration.

## **5.2 Avenues for Future Research**

The contract designs and organizational forms that prevailed in the beginning of the 1950s television industry were carried over from the radio industry. The early movers into television were successful radio networks, and they brought many of radio's business practices with them – including the reliance on short-term contracts and on

advertiser-controlled programming. A logical extension of this dissertation is to examine the factors that led to the optimality of short-term contracts and dispersion of control rights in the radio industry. Further study could identify whether the factors that increased asset specificity in television industry were present in the radio industry – and if so, whether they affected optimal contract design and organizational form in the radio industry.

Another extension of this dissertation is to examine the persistence of advertiser-produced programs in network daytime schedules. Despite the elimination of advertiser-produced programs in network prime-time schedules, networks continue to turn to advertiser-produced “soap operas” for large blocks of their daytime schedules.<sup>104</sup> While networks have scheduling control over daytime programs, they yield production control to advertisers. Further study could identify whether daytime programs exhibit less asset specificity than do prime-time programs, and examine whether this could explain differences in the allocation of production control.

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<sup>104</sup> “The Guiding Light,” produced by Procter & Gamble, began on the radio in 1939. In 1952, it aired its first television episode. It is still on the air and still produced by Procter & Gamble.

Another extension of this dissertation is to examine the types of films bundled together before the Paramount Decrees. Film studios often sold bundles of films (features, serials, shorts, documentaries) to theaters with the stipulation that they be shown together. If television networks exploit audience flow by bundling programs with similar appeal, we should also see film studios exhibit this behavior with bundled films. Film audiences should have a stronger tendency toward inertia than television audiences because the marginal cost of switching to alternative entertainment is higher for a person sitting in a movie theater than for a person in front of a television. Further study could identify if film studios attempted to exploit audience flow when their distribution-exhibition network resembled that of the television industry.

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## CURRICULUM VITAE

Daniel Lin received his Bachelor of Arts in Economics at the University of California at Los Angeles in 1995. He received a Masters Degree in Economics from George Mason University in 1999.

Between 1995 and 1997, Daniel was a Center for Innovation in Education Fellow at the Pacific Research Institute in San Francisco, California. Since 1998, he has been an adjunct instructor in the Department of Economics at George Mason University.