

relatively less averse to risk or even prefer a riskier (i.e., more economically diverse) environment. To the extent that such producers are also relatively likely to be creatively diverse, the effect on diversity of programs will be even greater than the effect on diversity of sources of programming. Under the FISR, entry was facilitated for both risk-averse and non-risk-averse individuals.

72. Third, even if, as alleged by the networks, eliminating the FISR were to somehow result in lower costs to "fledgling" producers, these lower costs would not necessarily encourage entry. If eliminating the FISR also resulted in lower returns to successful producers, the net effect could still be to deter entry by producers, just as reducing the price of a lottery ticket by 10% while reducing the value of the prize by 20% could be expected to result in fewer, not more, sales of tickets.

I declare under penalty of perjury that the foregoing is true and correct, this 16th day of February, 1993.


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Assistant Professor, Department of Economics, Washington University in St. Louis; September 1972 - June 1978.

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Fields Taught

Graduate: Industrial Organization, Economic Development and Planning, Microeconomic Theory, International Trade, International Finance, Economic Theories of Behavior, Applied Microeconomics.

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Professional Activities

Referee, *American Economic Review*, *The Bell Journal of Economics/Rand Journal*, *Economic Inquiry*, *Industrial Organization Review*, *Journal of Industrial Economics*, *Journal of Law and Economics*, *Journal of Political Economy*, *Quarterly Journal of Economics*, *Southern Economic Journal*.

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**ECONOMIC ANALYSIS AND POLICY IMPLICATIONS OF THE
FINANCIAL INTEREST AND SYNDICATION RULE**

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III. EFFICIENCIES AND TRANSACTIONS COSTS: RISK SHARING AND MORAL HAZARD

A. Risk Sharing

The principal efficiency argument made by the Network Inquiry,⁷³ the networks⁷⁴ and the DOJ⁷⁵ in support of repeal of the FISR was that the Rule interferes with the efficient allocation of risk between the producer and the network. Specifically, advocates of repeal have argued that for two reasons, the networks may be the most efficient bearers of risk. First, the networks are able to spread the risk of program failure over many programs: The profits from the "gushers" will tend to offset the losses from the dry holes. Second, the networks may have better information regarding the likely success of any particular program than would an independent program producer. As a result of both of these factors, a network should be willing to purchase the syndication rights for a price higher than independent distributors. Let us examine each of these propositions in turn.

The first rationale - that a diversified portfolio allows the networks to spread the risk most efficiently - clearly cannot stand by itself. While it may well be efficient for the producer to shift some of the financial risk of his investment in syndication to other investors,⁷⁶ there is no reason to believe

⁷³ Network Inquiry Special Staff, op.cit. at 347.

⁷⁴ CBS Comments at 122-132; NBC Comments at 111-120.

⁷⁵ DOJ1 at 127-20; DOJ2 at 3-5.

⁷⁶ Note that shifting risk is not costless. In addition to any transactions costs, risk-shifting, like insurance in general, will affect incentives, and may increase the amount of shirking, free-riding or other inefficient behavior.

that networks are uniquely well-positioned to bear the risk of syndication and there is certainly no evidence to suggest that network-specific efficiencies either exist or are significant. The risk-reducing effect that derives from holding a portfolio of programs can be realized completely or in large measure by any non-network entity holding the same programs. While we are unaware of any entity that holds a portfolio of programs that matches the networks' portfolios prior to the Rule, it seems likely that the major studios can achieve most if not all the portfolio-related risk reductions achievable by the networks. Other major investors, such as banks or large corporations, can also combine the risk of investment in a television series with other unrelated risks to build a diversified portfolio which can in turn be held as part of a further diversified portfolio by the individual investor in the stock market. The general point here is that the networks cannot have a comparative advantage over specialized financial institutions in shifting and reducing purely financial risk.

Indeed, as the DOJ noted, because non-network investors can hold shares in programs on all three networks, their ability to diversify away risk may be superior to that of a network (although, again, the individual shareholder can always diversify his own portfolio across those networks).⁷⁷ But an even more telling observation is that the networks suffer from a unique disadvantage that makes them the least efficient bearers of the risks from syndication. Diversification reduces risk only if the returns to assets in the portfolio are not perfectly positively correlated, and the ideal assets to bring together in a portfolio are assets whose returns are highly negatively correlated. Yet, if the networks acquire syndication rights in addition to the network rights, they

⁷⁷ See DOJ1 at 17-20.

will be combining two sets of assets, the returns to which will have a high positive correlation.

The second argument is that the networks have a unique informational advantage which, for any expected return, enables the networks to narrow the expected range of possible returns (i.e., to have a lower estimate of the variance of the returns). For example, the Network Inquiry attributed this advantage to the network as scheduler of the programs appearing on its affiliates: "There is...one piece of information which only the networks possess: how individual programs are likely to be scheduled over the course of the season."⁷⁸

While scheduling is hardly the only factor that will determine whether a program has a sufficiently successful network run to achieve enough episodes for syndication, it can certainly be a factor. For example, whether a program is scheduled to follow "Cosby" on NBC or to compete with "Cosby" on another network could be expected to affect the syndication value of that program, so that investing in the syndication rights to any given program would be less risky if that program's future scheduling were known. Economists would argue that the network, as generator of that scheduling information, presumably at some cost, should receive the benefits from any resulting reduction in the riskiness of

⁷⁸ Network Inquiry Special Staff, op.cit. at 746.

There is a parallel here with the role of local banks and S&Ls in the local mortgage market. Local financial institutions have a comparative advantage over large multinational banks in generating mortgages, not because of their ability to diversify but because they have superior information about local real estate conditions and mortgagors. Indeed, once the mortgage is granted and such local information is no longer useful, the local banks usually resell those mortgages into the secondary market, where they can be held by more efficient bearers of the financial risk.

holding a portfolio of those rights. Barring the networks from the syndication market would thus appear to be inefficient, since it would appear that the owners of the syndication rights could free-ride on the networks' efforts, and the information would be underproduced or even not produced at all.

There is a clear parallel here with the problem examined by Arrow of vertical integration motivated by an upstream firm generating information of value to downstream firms.⁷⁹ As in Arrow's model, however, the flaw in the argument is that the information-generating firm (in our case, the network) can appropriate the benefits of better information by giving the information away.⁸⁰ In the presence of the Rule, we should expect the networks to supply this information at no cost to producers as well as to other potential investors in syndication rights. Alternatively, if scheduling information is proprietary, the networks could provide only their appraisal value of the syndication rights. Providing accurate information to prospective purchasers will result in a fall

⁷⁹ Kenneth Arrow, "Vertical Integration and Communication," Bell Journal of Economics (Spring 1975) at 173-183.

⁸⁰ See Michael Spence, "The Economics of Internal Organization: An Introduction," Bell Journal of Economics (Spring 1975) at 163-172.

Consider, for example, information on how to use an appliance or assemble a kit. Although such information may be very valuable, if it is of value only to those who purchase that manufacturer's product, the manufacturer does not need to charge separately for the information. Since the product and the information are perfect complements, charging for the information separately would simply reduce by that amount the price consumers are willing to pay for the product. If the information is a perfect complement to a proprietary product, the customer is indifferent as to how the cost to him is distributed between an information charge and the price of the product. When a separate information charge would inflict some transactions cost on the manufacturer or on the consumer, it may be more efficient for the manufacturer to charge a nominally zero price for the information even if the information and the product are not perfect complements. Computer manufacturers, for example, may provide "free" software as long as that software is specific to their hardware.

in the market value of some syndication rights (thus increasing the minimum network fee that the producer would accept), and an increase in the market value of the syndication rights to other programs (thus reducing the minimum network fee that the producer would accept). But if this information allowed investors to better predict the return to individual syndication rights in a portfolio of those rights and thus reduced the overall risk of the portfolio, risk-averse investors would require a lower rate of return on their investment. As a result, syndication values will rise on average, and network fees will fall on average. Network acquisition of syndication rights is therefore unnecessary for the networks to realize the benefits from this information.⁸¹ Thus, if the networks

⁸¹ The FTC staff concludes that FISR discourages the networks from engaging in efficient information collection regarding a program's network and syndication prospects because the networks do not share in the syndication revenues. For similar reasons, the FTC staff concludes that the incentive of the networks to schedule programs in a way that maximizes the total value of the program is attenuated. See FTC Staff Comment at 14-16.

It is particularly surprising that the FTC staff should come to this conclusion since it presumes that the a network benefits from the syndication value of its programs only if it is the holder of the syndication rights. But this ignores the fundamental observation, first made by the Network Inquiry and relied upon consistently elsewhere in the FTC analysis, that to the extent that network and syndication rights are complements in production, any general increase in the value of syndication rights will be passed back to the networks by competitive producers in the form of lower network fees. If, as assumed in the FTC and DOJ analysis, we have perfect complementarity in production, total network profits are maximized if each network invests in the syndication value of its programs to the point where the marginal return from that investment (the increase in the total revenue from off-network syndication) is equal to the cost of that investment. This is the case even if the network has no direct interest in the syndication rights to that program and thus receives none of the increased revenue directly.

Thus any network action that reduced the expected syndication value of programs in general (and thus reduced the expected syndication value of the marginal program) would result in the networks having to pay higher license fees. On the other hand, if, as we have argued, the FISR blocks the networks from acting as a perfect price-discriminating monopsonist, then the networks would not be harmed by actions that reduced the expected syndication values of only the infra-marginal programs. We know of no such actions, however, and underproducing scheduling information would certainly seem to be an unlikely candidate in any event. Further, this could hardly be a concern of the FTC, since both the FTC and the DOJ analyses simply assumed away the possibility of

uniquely possess information of value in assessing the market price of the syndication rights.⁸² they should be willing to provide such "proprietary" information gratis⁸³

In sum, there is no reason to attach any substantial weight to the argument that the FISR disturbs efficient risk sharing arrangements in program development and production in the way has been articulated by the networks and others.

B. "Moral Hazard" and Optimal Investment in the Value of Syndication Rights

1. The Problem

Economists use the term "moral hazard" to describe the problem that people generally do not take proper care of things that they do not own, whether they be rented cars, rented houses, or someone else's syndication rights.⁸⁴ A potential problem is created by the Rule in that a network may have control over

differing syndication values (and therefore infra-marginal syndication values) in order to conclude that the networks have no incentive to exercise monopsony power.

⁸² To the extent that the networks already release this information in advance of the season in which the program is to be exhibited and with sufficient lead time for investors to account for the scheduling effect in their lending to producers, then the relevance of the asserted informational advantage of the network becomes remote.

⁸³ Here the parallel with a local bank breaks down because there is no obvious way for the bank to profit from its special knowledge other than by brokering the mortgage.

⁸⁴ The classic discussion of moral hazard is that of Kenneth Arrow, Essays in the Theory of Risk Bearing (North Holland Publishing Company, 1970) and The Limits of Organization (Norton Publishing Company, 1974). A more recent discussion of moral hazard can be found in Oliver Williamson, The Economic Institutions of Capitalism (Free Press, 1984).

syndication rights, but not own those rights. As a result, the network might not have the incentive to take those actions that ensure that the joint profits from the network and off-network runs are maximized.

One network decision that critically affects the probability that a series will be syndicable, and hence the value of the syndication right, is the length of the network run. Since approximately 80-100 episodes is generally the minimum necessary for syndication revenues to exceed distribution costs, at least four full seasons of first-run production are essential. Broadcast stations apparently prefer programs that can be "stripped," that is, exhibited five times a week. The basis for this preference seems to be that off-network programs exhibited less than five times a week or that begin the repeat cycle in less than four or five months do not generate sufficient viewer loyalty and therefore revenues to compensate for even just the distribution costs of such programming.⁸⁵

The network's decision whether to extend the network run to a fourth or subsequent season is thus critical. That decision may have been affected in turn by a number of prior decisions by the network. For example, exhibiting a series in a more attractive time slot (that is, a time when more households are watching television) or immediately following a popular program, raises that series' ratings and thus the probability of renewal for another season. Greater effort

⁸⁵ See, for example, the Network Inquiry Special Staff, op. cit. at 410; Federal Communications Commission, Tentative Decision in the Matter of Amendment of 47 C.F.R. Section 73.658(j)(1)(i) and (ii), the Syndication and Financial Interest Rules, 55 RR 2d (1983) at 462. Current network runs contain about 22 new episodes per season. See Network Inquiry Special Staff, op. cit. at 320.

at program promotion may also raise the probability of a longer network life.

Decisions made by the network will continue to affect the value of the syndication rights even after the minimum necessary number of episodes have been made. Syndication rights will generally be more valuable the longer the network run continues (although perhaps only until some maximum number of episodes is available), especially if the series is released for syndication before the network run is completed.⁸⁶

In making production, scheduling and promotion decisions for a first-run program, a network that did not own the syndication rights to that program might be expected to calculate the benefits and costs of investing in that program differently than if it did own the syndication rights to that program.⁸⁷ For example, we might expect a network to invest less in promoting a first-run series if its return from that investment was limited to just the current advertising revenue from the first-run and did not include the additional future returns from the rise in the syndication value of the series. In other words, the networks would ignore the increase in the syndication value of the series, to the detriment of the owners of those rights (and the viewers of the series), because they do not share in that increased value. Some decisions, such as whether to

⁸⁶ A discussion of some of these decisions can be found in DOJ1 at 20-22; and the Network Inquiry Special Staff op. cit. at 746.

⁸⁷ Of course, even if the network owned the syndication rights to a program, the benefits at the margin to the network of investing in that program will also be lower to the extent that network has any market power in the syndication market. In addition, the "opportunity cost" of assigning scarce internal resources, such as favorable time slots, to any particular program will be higher to the extent that the network owns the rights to other programs which could benefit from those resources. See the discussion below.

release a series for syndication before the network run is completed, may even involve a direct conflict between the value of the network rights and value of the syndication rights.⁸⁸

When ownership and control are separated, the resulting incentive structure could induce inefficient behavior. As a result, the total value of a series may be less than it could have been, and fewer and/or lower quality (i.e., less expensive) programs may be produced. The obvious way to eliminate this inefficiency would be to eliminate the separation of ownership and control by having the networks own the syndication rights. But the potential for moral hazard provides a private as well as a social incentive for the producer to sell the syndication rights to the network. In the absence of market power by the networks, we would expect that, if network ownership of syndication rights were efficient, the most profitable decision by the producer would be to sell the syndication rights to the network, who would take proper "care" of those rights. Because the network would face the correct incentive structure, syndication rights would be worth more to the networks than to any other potential owner -

⁸⁸ Note that our major concern when the network does not own the syndication rights would be with network decisions that affect the value of the syndication rights, regardless of whether they affect the value of the network rights. We need not be concerned about network decisions that affect only the value of the network rights: since the network owns the network rights, they have the full incentive to maintain the value of those rights. In addition, we need not be concerned about investments or other acts that would increase only the value of the syndication rights and which could be taken as efficiently by the producer as by the network, since the producer, as owner of those rights, would have the full incentive to take those actions independently. (Although, as discussed above, if either the network owns even a partial financial interest or if producer investments would raise the values of both the network and the syndication rights, a network that refused to contribute its appropriate share of the producer's cost could severely inhibit such investment.)

including the producers - and the network would simply be willing to pay more for those rights than anyone else would be willing to offer or than they would be worth to the producer.⁸⁹

Assuming that all parties to this proceeding are behaving rationally, we are thus left with only two possibilities. First, it may indeed be more efficient for the networks to own the syndication rights, but, perhaps because any inefficiencies from producer ownership can be reduced significantly through contractual provisions or through reputational effects (discussed below), the benefits to the producers from any remaining efficiency gains are more than outweighed by the market-power effects from allowing network ownership and control of syndication rights. Second, it may actually be more efficient for the producers to own the syndication rights but the benefits to the networks from the market-power effects from allowing network ownership more than outweigh the inefficiencies from network ownership. We thus need to examine how any moral hazard problems induced by producer (or network) ownership of syndication rights can be reduced through contractual provisions and/or reputational effects, and to inquire if there are any other likely potential efficiencies from producer or network ownership.

⁸⁹ This is essentially the "rent vs. buy" tradeoff. Renting involves lower transactions costs but also has higher moral hazard costs (reflected in the rental rate), so the choice depends on how long you need the asset. The moral hazard costs of renting (the costs inflicted on the owner of the asset from your not taking as good care of it as you would if you owned it) depend on how long you need to rent, whereas the transactions cost of ownership (the time, money and risk involved in buying an asset and then selling it again when you no longer need it) are one-time costs. Ownership will be more efficient only if you expect to need the asset for long enough so that the accumulated moral hazard cost would exceed the fixed transactions costs of ownership. Under the FISR, a network essentially "rents" a program during the network run, and then returns the program to whomever owns the syndication rights.

2. Contractual Provisions

As an example of an explicit contractual provision, a producer who retained the syndication rights and was anxious to ensure that the program would go into a fourth season might propose a sharply lower network license fee for the fourth and subsequent seasons. This would lower the network cost of continuing the series and induce the network to renew a marginal series. A producer might also agree to directly share the promotion expenses that a network incurs in trying to build the network audience for a series.

As noted above, we need not be concerned in this context with actions that would affect the value of only the syndication rights and which could be taken as efficiently by the producer as by the network. If the producer would be as efficient as the network at carrying out that action, the producer would simply undertake the expense himself, and there would be no need for any coordination between network and producer.⁹⁰

There may, however, be actions foregone which could raise syndicability but which the network could carry out at lower cost than the producer. Even if the producer would be willing to agree to a contractual provision committing it to pay the network (or to reduce the network fee by) an amount greater than the network's costs, so that the action would be undertaken (at least by a competitive network), producer ownership of the syndication rights would still

⁹⁰ Car rental agencies, for example, do not expect their customers to care about how well that car will perform for the next customer. The rental agencies therefore perform all maintenance themselves, charging their customers only for any immediately apparent damage to the car due to negligence or accident. Thus, the rental agencies do not have to coordinate with their customers on the extent and scheduling of rental car maintenance.

impose a real cost in the form of higher transactions costs. For example, the producer might incur significant costs in monitoring network compliance with the letter and the spirit of the agreement. The contract is also likely not to cover all the possible circumstances that would call for more or less network effort. Disputes between the network and producer are thus likely if the network tries to increase its profitability even if this reduces the joint profits of the network and producer. As a result, the parties may have to engage in costly arbitration or litigation to resolve those disputes. Even worse for the producers, the network may try to take advantage of the incomplete nature of the contract to act in bad faith in a way that is difficult for the producer to prove before an arbitrator or court.

As discussed in the next section, what mitigates this kind of "bad faith" behavior - and therefore renders incomplete contracts far less costly - is its effect on the reputation of the network. As a result, agreements between producers and networks may not need to specify fully the network obligations to take care of the syndication rights. Finally, it should not be overlooked that even if, despite contracts and reputational incentives, producer ownership of syndication rights still involves significant costs, we have no way to compare those costs with the potential costs from producer moral hazard should the networks own the syndication rights (discussed below).

3. Reputational Effects

Even if ex ante contractual provisions or ex post bargaining were ineffective or costly in mitigating moral hazard, a network's desire to minimize the network fees it will have to pay for programs in the future will create a