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ROYALTY RATE SETTING FOR SOUND RECORDINGS BY THE UNITED STATES COPYRIGHT ROYALTY BOARD: THE JUDICIAL NEED FOR INDEPENDENT SCHOLARLY ECONOMIC ANALYSIS

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ABSTRACT. Judges who set copyright royalty rates through litigation, like all trial Judges, are constrained by the evidence and testimony. Thus, we can only determine rates that are supported by the record. For the record to be sufficient, testifying economists must be able to apply a sufficient body of work in the economics of copyrights. In my address to the 2015 SERCI Congress, I emphasized the judicial need for continued and comprehensive research in this field, so that testifying economists can provided a foundation for our determinations. In this article, I explore such issues in more detail.

> "The truism that judicial analysis, economic or otherwise, takes place only in the context of lawsuits between two or more parties imposes a practical constraint on the Judge's ability to use economic analysis.... [A] judge will, for the most part, be limited by what the parties serve up to her." (Patricia Wald, 1987, p. 228)

1. Introduction

In September 2015, I had the privilege of addressing SERCI's Annual Congress. My speech was on the subject of "Royalty Rate Setting for Sound Recordings by the United States Copyright Board: The Judicial Need for Independent Scholarly Analysis." The purpose of this article is to expand briefly on some of the issues addressed in my speech, and to follow-up on several subjects discussed during the Q and A and the discussions that followed my address to the Congress.

The United States Copyright Royalty Board (CRB) establishes rates and terms for statutory licenses of copyrights on sound recordings. The CRB is a three-judge panel, and one of the three (the author of this article) by law shall be an attorney who has significant knowledge in the field of economics. The other two Judges are the Chief Judge, who shall have experience in

The statements contained herein are the personal statements of Judge Strickler, and do not necessarily reflect the opinions of the U.S. Copyright Royalty Board.

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adjudications, arbitrations or trials, and the third Judge, who shall have significant knowledge in the field of copyright law.[1]

One of the regular rate proceedings conducted in five year intervals by the CRB establishes rates and terms for the statutory compulsory blanket licenses for commercial noninteractive webcasting. Although the CRB also has jurisdiction over other rates (such as satellite radio rates) and over the distribution of royalty revenue, this article focuses only on the commercial aspects of the noninteractive proceedings.

In fact, in the interim between my address to the SERCI Congress in September and the publication of this article, the CRB issued its December 16, 2015 determination setting forth rates and terms for, inter alia, commercial noninteractive webcasting ("Web IV Determination").[2] The 200 page Web IV Determination, will be available at http://www.loc.gov/crb/ in the next few weeks, after the parties' attorneys have redacted confidential proprietary information contained in the determination (although the new rates are publicly available now).

The CRB's substantive mandate is set forth in the Copyright Act, 17 U.S.C. 801 et seq., and the CRB's procedures are contained both in the Copyright Act and in the Judges' implementing regulations (37 C.F.R. 351.1 et seq). As these statutory and regulatory provisions provide, rates and terms are set by the Judges, who receive documentary evidence and testimony (oral and written) from fact and expert witnesses. The Web IV proceeding ran from April 2015 through closing arguments in July 2015, and the Judges considered 660 exhibits, consisting of 12,000 pages, and heard oral testimony from 47 witnesses, including 14 economists.

In rate-setting proceedings for noninteractive webcasting, some of the most important expert witnesses are the economists who appear on behalf of licensors and licensees. Broadly stated, these economists offer their opinions as to the structure of the relevant market, the

[1] 17 U.S.C. 802(a)(1).
[2] Determination of Royalty Rates and Terms for Ephemeral Recording and Digital Sound Recordings (Web IV), Docket No. 14-CRB-001-WR (2016-2020) (Dec. 16, 2015)

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competitive state of the industry and the rates that should result, based on an application of economic facts to their opinions and to the statutory parameters for the relevant licenses.

The Judges determine rates and terms pursuant to a proceeding that in essence is a trial, conducted pursuant to the applicable statutory and regulatory procedural rules. Thus, these rate setting proceedings are different than some other rate setting forums, in which parties and non-parties, including the public at large, academics, trade associations and think tanks may provide comment and detailed evidence to a ratemaking body, pursuant to formal notice and comment rulemaking. This distinction is important when considering how the Judges receive economic evidence.

As highlighted by the quote from former Judge Patricia Wald at the outset of this article, in a trial setting, Judges are constrained by the adversarial nature of the process with regard to the economic evidence they receive. In section 114 ratemaking proceedings before the CRB, the principal adverse parties are SoundExchange, which is the administratively-approved licensor collective, appearing on behalf of the record companies and other copyright owners; and the services/licensees that transmit sound recordings, whether pureplay noninteractive webcasters or noninteractive simulcasters on the Internet of terrestrial radio performances of sound recordings.

This distinction between the adversarial process and Notice and Comment rulemaking necessarily constrains the Judges in rendering their determinations. If the parties' experts fail to address specific economic principles or facts that the Judges believe may be applicable to the proceeding, the hearing record will be incomplete at best, and economically inadequate at worst. The Judges can attempt to 'nudge' the economists who appear before them, both by inviting testimony before trial as to certain issues the Judges think may be important, and by questioning the economists closely at trial as to economic issues that arise from their testimony. Nonetheless, the parties, their trial counsel and their economists control the introduction

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of economic evidence in the hearings (although the Judges control the admission of such evidence).

Interestingly, the economists who testify do not necessarily emphasize the economic nuances of copyright issues. Rather, the experts often place their testimony in the context of other microeconomic areas – such as industrial organization, law and economics and price theory. Testimony applying expertise from these fields of course is of value, yet it is surprising that their testimony does not rely more heavily on the body of scholarly research on the economics of copyright issues, such as the work of the Society for Economic Research on Copyright Issues (SERCI).[3]

The foregoing point serves as the impetus for, and theme of, my September address and this article. Perhaps a variant of of Say's Law might be in order: If the supply of scholarly work on royalty-rate setting for copyrights were to increase, that might create a demand for such specific work by expert economic witnesses in the United States (and elsewhere). This dynamic could occur in at least four ways. First, economists/witnesses proposing an economic model for rates could rely on particular research and articles within such scholarly work. Second, economists/witnesses rebutting a proposed economic model could reciprocally attempt to rely on contradictory research and articles from this body of scholarly work. Third, if no sufficient independent work exists, economists can be engaged by the propounding and rebutting parties to research and draft appropriate economic analyses dealing specifically with copyright issues. Fourth, such a burgeoning body of more-pointed research could arm the Judges (in the United States and elsewhere) with additional tools to question the economists/witnesses regarding their expert opinions.

To put a bit of meat on these bones, set forth below is a brief expansion of the economic topics that I touched upon in my September address.

[3]However, in a recent determination regarding the distribution of cable television royalties, the Judges borrowed from an article in the *Review of Economic Research on Copyright Issues* by Professor Richard Watt, to raise the issue of using Shapley values in distribution proceedings. See Distribution of 1998 and 1999 Cable Television Funds, CRB Docket No. 2008-1, 80 Fed. Reg. 13423, 13429-30 (March 13, 2015 (citing Watt (2010)).

2. The standards for statutory royalty rates for non-interactive webcasing of sound recordings

The Copyright Act instructs the Judges to set noninteractive Webcasting royalty rates that *most clearly represent the rates that would be negotiated in the marketplace between a willing buyer and a willing seller.*

Decisional law applying this language has equated the statutory standard with the rates that would have been set in a hypothetical market without a statutory license.[4] The statute also requires the Judges to consider (1) whether noninteractive services substitute for or promote record sales; and (2) whether noninteractive services interfere with or enhance the other streams of record company revenues.

3. Some key economic issues that arise from the statutory standard

3.1. **The Proper Economic Definition of the "Willing Buyer/Willing Seller" Paradigm.** The law utilizes a number of different phrases to describe a price, rate or value established in a market. These phrases include, in addition to the 'willing buyer/willing seller' phrase: 'fair market value,' 'fair value,' and 'reasonable rates.' These descriptive phrases arise in various areas of the law, including rate regulation, tax law, eminent domain proceedings and corporate stock valuation hearings. Judges tend to reason by analogy, and that tendency suggests that these other phrases, in other areas of the law, *might* profitably be borrowed for use in a proceeding to determine webcasting or satellite royalty rates set by regulation. Economic research regarding the usefulness – and the limits – of such analogous reasoning could prove quite useful in such proceedings.

Separate and apart from the foregoing issue is the question of how to envision the 'hypothetical' market that the Judges must construct that is populated by willing buyers and willing sellers. At least two conceptual questions are presented:

[4]See Web II, 72 Fed. Reg. 24084, 24087 (May 1, 2007).

(1) Should (or must) the Judges presuppose that *some* transaction(s) will occur in the hypothetical market, or can evidence of a gulf between licensees' willingness to pay (WTP) and licensors' willingness to accept (WTA) be so wide as to find that no transactions will occur?

(2) Assuming that hypothetical willing buyers and sellers can be identified, *which* market participants and which market measures are appropriate for use in setting the rates? The *average* rate paid and received in actual (benchmark) or modeled transactions? If so, a *weighted average*? If so, weighted by revenue, by play or some other measure? What about the *median* rate paid? How about the *modal* rate paid?

3.2. **"Competitiveness" and the Hypothetical Market.** As noted in the Web IV Determination, an important issue that was addressed was whether under the Copyright Act the hypothetical willing buyer/willing seller market was required by law to be an 'effectively competitive' market. The Judges answered that legal question in the affirmative, establishing for themselves the task of determining whether the proposed rates were effectively competitive – or whether effectively competitive rates could otherwise be derived from the evidence.

Several important issues arose in connection with this issue. The first issue was definitional in nature – what is the meaning of the phrase 'effectively competitive,' and concomitantly, what is an 'effectively competitive' rate?

Several possible meanings could be ascribed to this phrase. An 'effectively competitive' rate could be equated with a 'perfectly competitive' rate. That meaning, though, carries with it several difficulties. Generally, the model of perfect competition (an abstraction to be sure) is a pedagogical tool that demonstrates and develops economic principles – it is not necessarily representative of an actual model. Of course, as Milton Friedman famously explained, perfect competition can serve as a valid model if its adoption proves useful in predicting market outcomes, regardless of whether it's assumptions are realistic (see Friedman, 1953).

Perhaps a more important problem for Judges (and economists) is the difficulty in applying the perfect competition model to a market for intellectual property (IP), such as the Judges' hypothetical market for licenses for sound recordings. Under perfect competition, price equals, or at least tends toward, marginal cost, and, as economic textbooks have long taught, marginal cost pricing is a pre-condition for the maximization of efficiency in purely private perfectly competitive markets (see, e.g., Samuelson, 1973, p. 632). However, as is well understood, in the context of IP goods in general – and sound recording copyright licenses in particular – marginal copying costs are essentially zero, so marginal cost pricing will result in royalty rates that fail to cover recurring fixed costs. This is the classic IP pricing conundrum (see, e.g., Yoo, 2007).[5]

Further, when a Judge (or economist) considers the issue of effective competition, it may be necessary to distinguish between the upstream market (in which licensors grant licenses to noninteractive services) and the downstream market (in which noninteractive services compete to offer music to listeners). The differences between the two markets must be considered (as indicated by any different degrees of pricing power), as well as the interrelationship between the two markets (as indicated by the concept of derived demand and the Hicks-Marshall Principle). Such issues were considered in the Web IV Determination, particularly with regard to the impact of piracy on downstream competition and its impact in the upstream statutory market. Also considered in this vein were the contours of downstream demand, particularly with regard to the segmentation of listener demand based on willingness to pay (WTP). Further considered were the implications of such factors on the development of a two-sided platform market relying on advertising-supported revenue as distinguished from subscription revenue.

The exact measurements of elements such as pricing power, elasticity, and derived demand may be difficult to obtain and, in any event, not introduced into the evidentiary record.

[5]Marginal cost pricing at zero provides no incentives for creators, but prices above marginal cost lead to efficiency losses.

Thus, an alternative approach to the consideration of whether effective competition is present in the statutory market is to apply a more general concept of competition. Prior decisions regarding the section 114 license for noninteractive services have made reference to markets that are effectively competitive. As the Web IV Determination explains, the Judges have found that the concept of 'workable competition' is instructive in determining whether a market is effectively competitive (see generally Clark, 1940).

Accordingly, the Judges consider whether a rate proposed by a party is effectively competitive, or whether it needs to be adjusted to reflect the workings of an effectively competitive market. As the Web IV Determination discusses, the Judges were confronted with just such an issue because of the alleged 'complementary oligopoly' effects of a proposed benchmark analysis based on agreements entered into in the purportedly analogous interactive streaming market (i.e., the market in which listeners can access specific streamed songs on-demand. See generally Parisi and DePoorter, 2003).

Yet another relevant competitiveness issue relates to how the Judges should treat the (non-complementary) oligopoly structure of the sound recording industry. Is the 'Structure-Conduct-Performance' paradigm at all relevant in establishing effectively competitive rates in a section 114 proceeding? Or should the 'Chicago School' of competition analysis guide the Judges, minimizing the importance of market concentration and precluding any presumption that (non-complementary) oligopoly is evidence of anticompetitive conduct or performance, rather than evidence of superior efficiencies and appropriate scale? Compare Scherer and Ross (1990, pp. 53-4) with Posner (1979). This issue as well was discussed in the Web IV Determination, and the Judges declined to make any downward rate adjustment based solely upon the level of market concentration among sellers in the sound recording market. An interesting issue for future proceedings may be a further development of 'Post-Chicago School' concepts – modeling how firms may attempt to enhance or protect their market power or anticipate their rivals' reactions (see generally Baker, 1989).

3.3. **Price Discrimination.** The determination did not address in any particular detail the issue of whether or how price discrimination tools could be utilized to set a different and potentially more efficient commercial rate structure. To respond to the classic IP problem of marginal cost pricing, noted above, economists have long understood the potential of 'second best' approaches, such as Ramsey pricing. In this regard, setting rates principally as a percent of licensee revenue is perhaps somewhat analogous to Ramsey pricing, to the extent that more successful licensees with greater revenue are likely to have less elastic demand for their services. However, higher rates for more successful licensees – like all Ramsey prices – are analogous to higher taxes, and, ceteris paribus, on the margin would penalize and discourage noninteractive webcasters from making innovations that would differentiate their services in a manner that would not only increase revenues, but also profits.

And with regard to the distinction between revenues and profits noted in the preceding paragraph, percent-of-revenue pricing may fail to address the costs incurred to obtain increased revenue, suggesting that a (notoriously difficult to calculate) percent-of-profits structure would be more economically appropriate. And with regard to the economic interests of the licensors under a percentage-rate structure, protection might well be needed – in the form of a substantial minimum fee for the statutory right of a noninteractive webcaster to access the licensors' repertoires – so that the licensors have a minimum guaranteed return from webcasters that play their sound recordings but may eschew profit-seeking for growth in market share. In this latter regard, economic work applying the concept of a two-part tariff to rate-setting for statutory licensing of sound recordings could be fruitful for economic expert witnesses and Judges alike.

3.4. **Benchmarking.** As the Web IV Determination notes, many of the parties utilized actual agreements as benchmarks to support their proposed statutory rates. The Judges have long held that an otherwise appropriate benchmark reflects the actual market behavior of rational actors. Therefore, for example, the Judges consider that the promotional and substitutional

values (if any) of the services in the benchmark market and agreements are implicit in ('baked-in') the parties' benchmark agreements. Further, an otherwise appropriate benchmark is also deemed to provide sufficient revenue for the licensor to recover at least a sufficient proportion of its costs and its normal profit while also requiring payment from the licensee that is not so large as to prevent the licensee from engaging in the webcasting business. It would be interesting – from an economist's perspective – to see how this benchmarking approach might compare to other potential methods for identifying the contours of the hypothetical market and the rates set by willing buyers and willing sellers.

3.5. **The Frontier: Can the Principles of the 'Efficient Component Pricing Rule' Assist in Setting the Statutory Rate?** The Web IV Determination does not address the issue of whether or how the Efficient Component Pricing Rule (ECPR) might be utilized to assist in setting the statutory rate. The ECPR is a principle devised to price access to inputs in the upstream market that are necessary in order to provide a service in the downstream end-user market (see generally Baumol and Sidak, 1994). Because the ECPR applies in the access context, its potential applicability to section 114 proceedings is evident, given that the statutory royalty rate reflects the price paid by noninteractive licensees to licensors for access to their repertoires. Indeed, if there was any consensus among the parties in the most recent section 114 proceeding, it was that the market for sound recordings is being transformed from an ownership market to an access market.

The ECPR typically applies when an upstream monopoly supplier of a necessary input also competes in the downstream market in which end-users purchase access to a service, such as telephony (see, e.g., Spulber and Yoo, 2009, pp. 198-200). The ECPR is invoked to set a price or rate for a necessary input sold by the monopolist, and typically applies in the context of a regulated market, again, such as the market for telephone service, or, in an earlier era, the right to operate trains on railroad tracks owned by a monopolist (Spulber and Yoo, 2009, p. 198).

Under section 114, the necessary input is the sound recording. Although the upstream seller is not a monopolist, the major record companies are complementary oligopolies, which is a structure (as noted in the Web IV Determination) that results in pricing above effectively competitive rates. The upstream sellers do not themselves sell directly into the downstream access and ownership markets (e.g., for downloads, interactive services, noninteractive services and satellite radio). However, record companies have indicated (as noted in the Web IV Determination) an intention to set a return that, across all downstream platforms, represents a relatively uniform percent of downstream revenue (even though the royalty rate may or may not be set explicitly as a percent of revenue).

The ECPR paradigm, in its simplest expression, provides that the access price is equal to: (1) the direct (physical) incremental per-unit cost of the necessary input to the upstream supplier, plus (2) the opportunity cost incurred by that upstream seller by selling the input to an upstream purchaser/downstream seller, rather than using the input itself for sale of the final service in the downstream market (Spulber and Yoo, 2009, p. 199). As explained below, there may be an important analogy between the ECPR and the method of analyzing royalty rate setting under section 114 that could be explored further through academic economic work.

The analogous elements are as follows.

3.5.1. *The ECPR's Monopolist May Be Analogous to a Complementary Oligopolist.* To the extent that the licensors in the section 114 context possess complementary oligopoly power, i.e., each oligopolist's repertoire is a necessary input (a 'must-have' in the parlance of the Web IV witnesses), there may be no important theoretical difference between the monopolist of the ECPR and the complementary oligopolists in the section 114 context. In fact, as noted above and in the Web IV Determination, the pricing behavior of a complementary oligopolist can be even more inefficient than a monopolist's pricing behavior.

3.5.2. *The ECPR's Zero Incremental Cost Equals the Zero Incremental Cost of the Supply of an Additional Electronic Version of a Sound Recording.* The licensors incur essentially no direct incremental (physical) per-unit cost to allow a streaming service to play an additional sound recording on a streaming service, or to allow for the downloading and sale of an additional sound recording to a listener. In this regard, the ECPR appears to be fully consistent with the section 114 market.

3.5.3. *The Opportunity Cost of the ECPR's Monopoly Supplier May Be Analogous to the Opportunity Cost of the Major Record Companies.* If a monopoly supplier sells a necessary input upstream to its downstream competitor, the monopoly supplier will lose the *opportunity* to provide access (or make sales) to the downstream buyers who instead obtain access (or buy product) from the upstream monopolist's downstream competitors. This is the opportunity cost incurred by the upstream monopolist. As a rational seller, the upstream monopolist will make every effort to recoup the cost of this lost opportunity by charging a sufficiently high price to its upstream buyer/downstream competitors that incorporates the cost of that lost opportunity.

By analogy, the complementary oligopolists in the hypothetical section 114 market also sell a necessary input, sound recordings, to noninteractive services who may hypothetically compete – not directly with the upstream sellers – but rather with the other licensees and buyers of the licensors. Those other downstream licensees/buyers negotiate in the upstream market for a rate or price that includes a complementary oligopoly pricing premium.

To the extent, *if any*, that licenses to a noninteractive service may cause a downstream substitution for listeners who otherwise would have accessed the services of other types of licensors (or a substitution for sales to retail customers) those substitutions would constitute an opportunity cost to the complementary oligopolists/licensors. (Of course, to the extent no such substitution occurs, because, for example, downstream listeners to noninteractive

services have a lower (or zero) willingness-to-pay compared with listeners who pay for subscriptions or buy downloads, then the complementary oligopolist need not be concerned with the opportunity cost factor of the ECPR.)

As rational actors, the section 114 licensors would endeavor to recoup any lost opportunity cost, perhaps by equalizing the royalty rate or by equalizing the ratio of downstream revenues to upstream royalties across all sales and license platforms.

If this analogy is reasonable, then so too may be the refinements to the ECPR that have been made over time. First, the opportunity cost of the licensors could be adjusted downward by the rate-setter, by excluding from that lost opportunity the foregone opportunity to receive economic rents, thereby excising the complementary oligopoly power that causes rates to exceed effectively competitive rates. Such an adjustment would be consistent with the concept of the 'Market Determined ECPR' (M-ECPR), which attempts to reduce opportunity cost under the model by replacing the lost opportunity for monopoly rents with the lower lost opportunity for a more competitively priced sale (see Sidak and Spulber, 1997).

Second, to the extent noninteractive webcasting provides for a degree of product differentiation (e.g., through curation), such a service may constitute value added downstream that affects the relative value of the licensed sound recordings. Third, a noninteractive licensee may possess a technological ability to webcast fewer sound recordings owned by higher priced major record companies (in the parlance of the industry, such webcasters can "steer away" from such more expensive sound recordings). In the context of the ECPR literature, this may be an example of a partial by-pass of a necessary input – essentially reducing (but not eliminating) the economic value of the essentiality of that specific input.

Fourth, and relatedly, the noninteractive licensees can substitute sound recordings of licensors who have agreed to accept relatively lower royalty rates. A noninteractive service can engage in such substitution and by-pass to offset non-competitive pricing because of an

important difference between noninteractive services, on the one hand, and interactive services and download sales, on the other. Noninteractive services, by law, cannot play any song that a listener demands at any point in time. Rather, noninteractive services are limited by the statutory 'sound recording performance complement,' which sets limits on the frequency of the performances of sound recordings for listeners.[6] Therefore, noninteractive services can change their curated mix of sound recordings not only based upon the nature of the music they provide, but also based upon the royalty rate associated with the music they elect to provide to their listeners. By contrast, interactive services and download sellers must provide every song demanded by their listeners or purchasers – otherwise the listeners/purchasers will be disappointed. Because the noninteractive listener has no specific expectation as to the songs that would be performed sequentially, a change in the mix cannot lead to disappointment vis-a-vis any specific ex ante expectations.

These mitigating factors – product differentiation, by-pass and substitution – are three forms of amelioration of economic rents otherwise incorporated into the opportunity cost element of the ECPR model (see Armstrong et al., 1996).

The general applicability of the ECPR to copyrights has been noted by one of the principle developers of the ECPR (see Baumol, 2004). Further work on – and and application of – this principle to the particular area of sound recording royalty rate setting could be of marked assistance to jurists, attorneys and economists.

4. CONCLUSION

The foregoing represents some of the economic issues that arise in section 114 proceedings to establish the rates for commercial noninteractive webcasting. I also invite the reader to mine the Web IV Determination, as well as other rulings by the Copyright Royalty Board, for areas of research that will advance economic understanding in this fascinating field.

[6]See 17 U.S.C. 114(j)(13).

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