

The Platformization of Music

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ABSTRACT

The story of the twenty-first century music industry has been one of platformization. While musical records were formerly sold as discrete physical units, or alternatively heard on the radio, listeners' primary mode of engagement with recorded music has become almost completely replaced by online streaming platforms, which offer access to entire catalogs of recorded music for a subscription fee or for free with advertisements.

This Article argues that recorded music is now a platform industry. This transformation has had significant consequences. Long-standing problems in the music industry have been magnified, including determining fair compensation through the copyright system and the consolidation of copyright ownership in both recording and publishing. They have also been supplemented by new problems stemming from the platform model of distribution: discriminatory, opaque, and declining compensation for musicians; user surveillance; the discriminatory treatment of musicians through platform placement; and new implications for the heterogeneity of musical culture.

Addressing the challenges of the music industry's platformization will require adapting and applying tools from the law of networks, platforms, and utilities ("NPU"), including rate regulation, nondiscrimination rules, and structural separations. These policies, some of which already govern parts of the music industry but are limited in scope, could help counter the harmful effects of platform power in music. Public options and cooperative governance also provide promising avenues and may be preferable to the regulation of private streaming platforms alone. Viewing music streaming as a platform industry suggests well-established legal and policy tools that advocates can use to build a healthier and fairer system of commerce to support musical culture.

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INTRODUCTION

The story of the twenty-first century music industry has been one of platformization. In the twentieth century, musical records were sold as discrete physical units or alternatively heard on the radio. The music industry supported by these distribution methods had significant problems, including the fair disbursal of payments to artists and other individuals and firms in the music industry via the copyright system;¹ the concentration of firms and the consolidation of copyright ownership in both recording² and publishing;³ and the problem of “payola,” or pay-to-play, on the radio.⁴

In the last two decades, however, online streaming platforms have almost completely replaced physical media and terrestrial radio as listeners’ primary mode of engagement with recorded music.⁵ These platforms—of which Spotify, Amazon Music, and Apple Music dominate in the U.S. market⁶—offer access to entire catalogs of recorded music for a subscription fee or for free with advertisements.⁷ Combined, the leading three services have nearly 200 million annual users in the United States.⁸ Meanwhile, only 32.9 million CDs were sold

1. See, e.g., 3 Russell Sanjek, *AMERICAN POPULAR MUSIC AND ITS BUSINESS* (1988) (discussing the history of the American music industry in the twentieth century and its frequent battles over copyright and musician compensation).

2. RICK SANJEK, *AMERICAN POPULAR MUSIC AND ITS BUSINESS IN THE DIGITAL AGE* 172 (2024) (listing the “Big Six” oligopoly of record labels that came to dominate the recording industry by the last decades of the twentieth century).

3. 3 SANJEK, *supra* note 1, at 508 (“The rush of amalgamations and mergers in the early 1960s was a mere ripple when contrasted with those being made by big venture capital in the last years of the decade. . . . [M]usic publishers were becoming record manufacturers, and record companies sought to add music publishers to their holdings.”).

4. *Id.* at 439–92; Christopher Buccafusco & Kristelia García, *Pay-to-Playlist: The Commerce of Music Streaming*, 12 U.C. Irvine L. Rev. 805, 811–821 (2022); CHRISTOPHER H. STERLING & JOHN MICHAEL KITROSS, *STAY TUNED: A HISTORY OF AMERICAN BROADCASTING* 368 (Lawrence Erlbaum, 3d ed. 2002); KERRY SEGRAVE, *PAYOLA IN THE MUSIC INDUSTRY: A HISTORY, 1880–1991* (1994).

5. JULIE L. ROSS & MICHAEL J. HUPPE, *MUSIC LAW: CHANGING LANDSCAPES IN THE MUSIC INDUSTRY AND THE LAW THAT GOVERNS IT* 8–11 (2021).

6. *Number of Active Users of Major Music Streaming Services in the United States from 2016 to 2025*, STATISTA, <https://www.statista.com/statistics/293749/spotify-pandora-number-active-users/> [<https://web.archive.org/web/20251228011950/https://www.statista.com/statistics/293749/spotify-pandora-number-active-users/>] (last visited Dec. 28, 2025).

7. Vaishali Varu, *A Guide to Music Streaming Services*, KIPLINGER (Apr. 9, 2025), <https://www.kiplinger.com/personal-finance/a-guide-to-music-streaming-services> [<https://web.archive.org/web/20260126212349/https://www.kiplinger.com/personal-finance/a-guide-to-music-streaming-services>].

8. *Number of Active Users of Major Music Streaming Services*, *supra* note 6.

in the United States in 2024.⁹ Music streaming has, in effect, transformed the recorded music industry into a platform industry, characterized not by discrete commodity units but by “large-scale, centralized places—physical or virtual—that allow people to interact or transact.”¹⁰

This transformation has had significant consequences. The music industry’s long-standing problems—those of fair compensation, concentration, and payola—have been magnified. They have also been supplemented by new problems stemming from the platform model of distribution. Since the early 2010s, when streaming platforms reached scale, musicians have consistently reported low and declining payment for their recorded output,¹¹ and at least one major streaming platform has halted all payments for tracks with under 1,000 streams, which make up over 60 percent of the music it offers.¹² Recent

9. RECORDING INDUS. ASS’N OF AM., RIAA 2024 YEAR-END REVENUE REPORT 3 (Mar. 2025), <https://www.riaa.com/wp-content/uploads/2025/03/RIAA-2024Year-End-Revenue-Report.pdf> [<https://perma.cc/78QV-CVCW>].

10. MORGAN RICKS ET AL., NETWORKS, PLATFORMS, AND UTILITIES: LAW AND POLICY 1 (2022) (defining “platforms”). Platform industries are distinct from trade in ordinary commodities, though they may govern the exchange of commodities, as music streaming platforms do.

11. See, e.g., Damon Krukowski, *Making Cents*, PITCHFORK (Nov. 14, 2012), <https://pitchfork.com/features/article/8993-the-cloud/> [<https://web.archive.org/web/20251228015337/https://pitchfork.com/features/article/8993-the-cloud/>]; Ben Sisario, *As Music Streaming Grows, Royalties Slow to a Trickle*, N.Y. TIMES (Jan. 28, 2013), <https://www.nytimes.com/2013/01/29/business/media/streaming-shakes-up-music-industrys-model-for-royalties.html> [<https://web.archive.org/web/20260119210042/https://www.nytimes.com/2013/01/29/business/media/streaming-shakes-up-music-industrys-model-for-royalties.html>]; Daniel Sanchez, *I’m an Award-Winning Cellist and Composer. Want to See My Royalties?*, DIGIT. MUSIC NEWS (Apr. 18, 2018), <https://www.digitalmusicnews.com/2018/04/18/zoe-keating-royalties/> [<https://web.archive.org/web/20251228020052/https://www.digitalmusicnews.com/2018/04/18/zoe-keating-royalties/>]; Evet Jean, *Streaming Platforms Aren’t Helping Musicians—And Things are Only Getting Worse*, GUARDIAN (Nov. 13, 2020), <https://www.theguardian.com/culture/2020/nov/14/streaming-platforms-arent-helping-musicians-and-things-are-only-getting-worse> [<https://web.archive.org/web/20251228020839/https://www.theguardian.com/culture/2020/nov/14/streaming-platforms-arent-helping-musicians-and-things-are-only-getting-worse>]; David Dayen, *Islands in the Stream*, AM. PROSPECT (Mar. 22, 2021), <https://prospect.org/power/islands-in-the-stream-spotify-youtube-music-monopoly/> [<https://web.archive.org/web/20251228021142/https://prospect.org/2021/03/22/islands-in-the-stream-spotify-youtube-music-monopoly/>]; Ben Sisario, *Musicians Say Streaming Doesn’t Pay: Can the Industry Change?*, N.Y. TIMES (May 10, 2021), <https://www.nytimes.com/2021/05/07/arts/music/streaming-music-payments.html> [<https://web.archive.org/web/20260119211912/https://www.nytimes.com/2021/05/07/arts/music/streaming-music-payments.html>].

12. Elizabeth Aubrey, *Spotify Has Now Officially Demonetised All Songs with Less than 1,000 Streams*, NME (Apr. 5, 2024), <https://www.nme.com/news/music/spotify-has-now-officially-demonetised-all-songs-with-less-than-1000-streams-3614010>

reporting suggests that every rights holder on that same platform—Spotify—receives a different royalty payment,¹³ raising concerns about not only declining pay, but also monopsonistic price discrimination.¹⁴ Streaming platforms also engage in surveillance of the users and artists that depend on them,¹⁵ in turn fueling their power to discriminate between similarly situated artists and users through their hyper-targeted placement of music on the platform.¹⁶ Together, these dynamics pose qualitatively new implications for the heterogeneity of recorded musical culture. As streaming increasingly dominates popular music consumption, downstream effects also occur in other industries, including ticketing and live events,¹⁷ thereby affecting consumers, workers, and firms throughout the culture industries.

This Article argues that addressing the problems of music’s platformization requires treating music streaming—and the music industry more broadly—as a public utility or platform industry.¹⁸ To some extent, the regulation of the music industry is already a public utility regime. This is not often noticed because the public utility regime operates through the copyright system and antitrust consent decrees. But functionally, it is a public utility regime because its central regulatory tools bear the hallmarks of classic public utility regulations: rate-setting,¹⁹ nondiscrimination rules,²⁰ and structural

[<https://web.archive.org/web/20251228021755/https://www.nme.com/news/music/spotify-has-now-officially-demonetised-all-songs-with-less-than-1000-streams-3614010>].

13. LIZ PELLY, MOOD MACHINE: THE RISE OF SPOTIFY AND THE COSTS OF THE PERFECT PLAYLIST 149 (2025) (quoting a Spotify employee as saying in an internal chat that “[e]ach product-market-licensor combo has a unique royalty calculation”).

14. See JOAN ROBINSON, THE ECONOMICS OF IMPERFECT COMPETITION 224–28 (2nd ed. 1969) (analyzing price discrimination in monopsony and oligopsony markets). “Monopsony” refers to a monopoly on the buy side. See *id.*

15. Arnt Maaso & Anja Nylund Hagen, *Metrics and Decision-Making in Music Streaming*, 18 POPULAR COMM’N 18, 18 (2019) (“Music streaming enables the tracking of listening behavior in more detail than any previous music-distribution format.”); PELLY, *supra* note 13, at 137–47 (discussing the surveillance conducted by streaming platforms).

16. PELLY, *supra* note 13, at 92–105.

17. See Rouven Seifert et al., *Conversion in Music Streaming Services*, 59 J. INTERACTIVE MKTG. 201 (2024); Finn Christensen, *Streaming Stimulates the Live Concert Industry: Evidence from YouTube*, 85 INT’L J. INDUS. ORG. 1 (2022).

18. In the sense that they denote enterprises with structural dynamics that invite utility-style regulation, the terms “platform” and “utility” may be used interchangeably.

19. 17 U.S.C. § 115(a)(1)(F) (empowering the Copyright Royalty Judges to set rates for licenses to mechanically reproduce musical works). See RICKS ET AL., *supra* note 10, at 25 (“Perhaps the most distinctive feature of [public utility] law is rate setting, whereby regulators directly determine the prices that certain [utility] enterprises can charge for their services.”).

20. *United States v. Am. Soc’y of Composers, Authors & Publishers*, No. 41-1395, 2001 WL 1589999, at *3 (S.D.N.Y. June 11, 2001); *United States v. Broad. Music, Inc.*, No. 64 Civ. 3787, 1994 WL 901652

separations.²¹ It is, however, an incomplete public utility regime. It governs some elements of the music industry, while leaving other elements up to the dictates of private corporations and individuals alone. This Article argues that the answer to many of the music industry's problems is to accept that music streaming is a platform industry, and to organize it as such.²² This can be done through expanding the public utility regulations governing music streaming, through creating public options, or through establishing models of cooperative governance inside streaming firms. In the era of music's platformization, the case for exploring these options has only gotten stronger.

To understand how music's platformization originated, it is essential to understand the property system governing music, the basic structures of which have existed for much of the last century. As Part I describes, the music industry is governed by an incomplete public utility regime, which functions through the copyright system and antitrust consent decrees. Though the laws governing the music industry are treated in an extensive literature,²³ reinterpreting this familiar territory as a partial utility regime sheds light on the source of problems which plagued the music industry before the rise of streaming services. Important elements of this regime—including compulsory licensing for mechanical rights in musical works, rate-setting by the Copyright Royalty Board, and the nondiscrimination rules to which performance rights organizations ("PROs") are subject under the terms of their Department of Justice-administered consent decrees—function akin to public utility regulations, while others do not, which has implications for the governance of

(S.D.N.Y. Nov. 18, 1994) (requiring that ASCAP and BMI must grant licenses to any songwriter on equal terms to similarly situated licensees, and accept all songwriters who meets certain minimum requirements); see also KEVIN J. HICKEY & DANA A. SCHERER, CONG. RSCH. SERV., IF11463, MUSIC LICENSING: THE ASCAP AND BMI CONSENT DECREES (2020). See RICKS ET AL., *supra* note 10, at 24 ("One of the oldest elements of [public utility] law is nondiscrimination rules, which require providers to serve all prospective users on equal terms.")

21. ASCAP, 2001 WL 1589999, at *3; BMI, 1994 WL 901652, at *1-*2 (prohibiting ASCAP and BMI from offering any license other than that for performance rights). See Lina M. Khan, *The Separation of Platforms and Commerce*, 119 COLUM. L. REV. 973, 980 (2020) ("Structural separations place clear limits on the lines of business in which a firm can engage.")

22. Describing music streaming as a platform or utility industry is, consciously, both a descriptive and a normative move. It not only assists in properly understanding music's industrial organization and the purposes behind many of its governing mechanisms but also points towards avenues for reform. See *infra* Part IV.

23. See, e.g., ROSS & HUPPE, *supra* note 5; DANA SCHERER, CONG. RSCH. SERV., R43984, MONEY FOR SOMETHING: MUSIC LICENSING IN THE 21ST CENTURY (2021); BOB KOHN, KOHN ON MUSIC LICENSING (5th ed. 2018); HICKEY & SCHERER, *supra* note 20; U.S. COPYRIGHT OFF., COPYRIGHT AND THE MUSIC MARKETPLACE (2015).

streaming platforms.

Recorded music transformed into a platform industry with the rise of streaming services in the 2000s and 2010s, a history which Part II recounts. The reason for this transformation was the threat of recorded music's decommmodification, commonly denoted by industry analysts as the threat of piracy.²⁴ As the marginal cost of posting audio files online approached zero, internet-enabled file-sharing promised to make recorded music essentially free for consumers, leaving record labels, publishers, and many musicians unable to derive much revenue. The streaming business model was proposed and adopted in reaction to this threat. The result of its adoption was that the basic structure of the music industry and its problems were preserved, with the addition of a new layer of power over the music industry: that of the streaming platforms. Part II proceeds to discuss how these streaming platforms work today. Streaming platforms are, first, hosts of music. They contract with copyright holders to offer music to listeners, acquiring the necessary licenses for both musical works and sound recordings. Generally, they compensate rights holders through a pro-rata system, paying each rights holder a percentage of the platform's net revenues each month. This baseline process is, however, highly irregular in practice, given the availability of lower royalty payments in exchange for platform promotion, and through the variability of other contractual terms that frequently differ on a case-by-case basis, including the definition of the platform's "net revenue" itself.²⁵ Second, streaming platforms are data collectors and data assigners. They both collect data on user behavior and assign metadata tags to musical tracks that they use to make complex—and often suspect—inferences. Third, they are music recommenders. Both through their proprietary playlists made by in-house curators and through various algorithmic recommendation features, streaming platforms exercise great power over what users see and hear on the platform.

Given these functions, streaming services are best treated as platforms, as Part III argues. Streaming services exhibit network effects, high capital costs, economies of scale, lock-in effects, and resultant power as economic middlemen, each of which also characterize industries the law has historically treated as platforms or utilities. Part III proceeds to detail the consequences of

24. See, e.g., Heidi Purzner, Comment, *Music Streaming Services: The Inequitable Solution to Piracy*, 5 ARIZ. ST. SPORTS & ENT. L.J. 426, 426 (2016).

25. PELLY, *supra* note 13, at 150–51.

music's platformization, which, though they are highly interrelated, can be sorted into at least four distinct groups. The first group consists of problems with musician compensation. These problems both continue and surpass the compensation-related problems of the twentieth-century music industry. For one, compensation on streaming platforms is discriminatory. While streaming platforms publicly depict their compensation systems as consistent and rational,²⁶ reporting indicates that they are not in practice, with several different contractual mechanisms resulting in variable payments to different rights holders based on their relative bargaining power.²⁷ In other words, the platforms engage in price discrimination.²⁸ Internal Spotify communications suggest that every individual unit on the platform requires a different royalty calculation,²⁹ indicating that music streaming may even approach *perfect* price discrimination between rights holders. The compensation system is also opaque, with musicians often a step removed from contractual negotiations between their labels (or other representatives) and streaming platforms, and with enormous imbalances in information between parties undermining the functioning of an effective market system. This system of compensation has resulted in declining pay for many musicians, who are forced to turn to touring and non-artistic labor in increasing amounts to make up the difference.³⁰

26. See, e.g., *Understanding Spotify Royalties*, SPOTIFY FOR ARTISTS, <https://support.spotify.com/us/artists/article/royalties/> [https://perma.cc/86EN-Q55C] (last visited June 13, 2025).

27. These include "promotional rates," or lower royalty payments accepted by rights holders and artists in exchange for promotion on the platform's curatorial or algorithmic recommendation features; and different definitions per contract of what constitutes the platform's "net revenues,"—in other words, what remains after Spotify's overall cut—which render the proportional payment due to artists highly variable. PELLY, *supra* note 13, at 149–51.

28. See RICKS ET AL., *supra* note 10, at 15–16 (defining "price discrimination" as "charging different prices to different users based not on differing costs of service but rather on the users' different willingness to pay"); See also Robinson, *supra* note 14. There is a legitimate debate to be had as to whether the type of monopsonistic discrimination streaming platforms engage in is primarily one of prices or of wages. Under the current framework, the answer to this question ultimately hinges on one's characterization of copyright licenses and musicians' relationship to them. While copyright law has traditionally treated copyright licenses as assets that are owned by creators and sold, making musicians proprietors and the value of licenses *prices*, they may equally be characterized as an income-generation mechanism for musicians functionally the same as *wages*. This is only supported by a strong ethic among musicians of self-identification as creative workers. Ultimately, what is important for the purposes of this analysis is not what type of discrimination occurs, but rather that the discriminatory treatment of counterparties contributes to and reinforces platform power.

29. PELLY, *supra* note 13, at 149.

30. *Id.* at 154; GREATER NASHVILLE MUSIC CENSUS: SUMMARY REPORT 8 (2024), <https://www.greaternashvillemusiccensus.org/results> [https://web.archive.org/web/20260103033643/https://www.greaternashvillemusiccensus.org/results].

A second major consequence of music's platformization is the practice of user surveillance on streaming platforms, which is problematic for several reasons. First, it violates the privacy of users and the artistic integrity of musicians, through the tracking of user behavior and the assignment of suspect metadata tags to music on the platform, which misrepresents and devalues musical creativity. Second, it reinforces the platforms' power. Surveillance contributes to platforms' lock-in effects, as users who build up data on one platform over time are more reluctant to leave.³¹ It also creates valuable troves of data that streaming platforms can exploit in negotiations with advertisers and rights holders, further entrenching the informational imbalance between the platform and contractual counterparties and thus the power of the platforms themselves. Additionally, surveillance fuels a discriminatory system of platform placement, whose problems are covered subsequently.

The third major consequence Part III discusses is that the platforms' function as recommenders of music puts them in a position to discriminate between artists through platform placement. This occurs in two ways: curatorial and algorithmic. Streaming platforms possess power as curators through their proprietary playlists, which highlight new releases or serve as samplers for various genres, moods, or activities. Placement on these human-made playlists are understood to make or break artists, granting streaming platforms power to decide what music is heard by a broad audience on the platform and thus which rights holders make money. Algorithmic features like Spotify's Smart Shuffle and Discovery Mode use the data collected and assigned on the platform to make real-time recommendations to listeners, within which platform engineers can raise or lower the "weights" of particular tracks or establish specific links within algorithmic networks. Even when the algorithm simply works on its own, it may naturally give preferential treatment—even if slight—to tracks that require lower royalty payments of the platforms or otherwise are financially advantageous. This power creates incentives that orient the business of music recommendation to platform profit incentives or suspect musical signifiers, rather than the interests of musicians or the listening public.

Fourth, music platforms pose threats to musical diversity and cultural

31. See Brian J. Hrats & Jack Webster, *From Selling Songs to Engineering Experiences: Exploring the Competitive Strategies of Music Streaming Platforms*, 41 J. CULTURAL ECON. 240, 252 (2021); Gary Sinclair & Julie Tinson, *Psychological Ownership and Music Streaming Consumption*, 71 J. BUS. RSCH. 1 (2017).

heterogeneity. Cultural heterogeneity is desirable for several reasons, including its benefits for free expression, social education, and cultural innovation. Streaming platforms stand opposed to musical heterogeneity in at least three ways. First, by squeezing artist pay, they depress the profitability and respect of music as a profession and thereby discourage investment in musical careers.³² Second, their platform power degrades the quality of the service they offer, resulting in what observers have termed a “flattening” of the cultural production mediated by the platforms.³³ Over time, this effect may make music more homogenous, both as a whole and at the level of specific genres and traditions.³⁴ Third, they may trigger spillover effects in related industries, including ticketing and live events,³⁵ extending their impact not only to the recorded music industry, but to the commerce of musical culture on a larger scale.

Part IV offers policy proposals to address these issues. First, it recommends applying tools from the law and policy of networks, platforms, and utilities (NPU)³⁶ to streaming platforms—in other words, regulating music streaming as a public utility. This would involve an extension of the NPU tools currently in effect to more fully complete the public utility regime of music industry regulation. Policymakers could expand rate regulation to cover not only the license to mechanically reproduce musical works, as is the case today, but all other licenses which streaming platforms must obtain from rights holders. They could apply nondiscrimination rules to streaming platforms, requiring them to offer equal prices and terms to similarly situated artists and users and to publicly post their pricing schedules. They could implement structural separations between music companies like labels and publishers and streaming platforms, eliminating conflicts of interest created by common ownership. They could also apply additional behavioral regulations to minimize the data collected and assigned on platforms and require interoperability between certain platform features to lower switching costs. Second, Part IV

32. PELLY, *supra* note 13, at 154 (reporting that a study in the United Kingdom found that 44 percent of respondents saw low pay from streaming as a barrier to embarking on a musical career).

33. *See, e.g.*, KYLE CHAYKA, *FILTERWORLD: HOW ALGORITHMS FLATTENED CULTURE* 9 (2024).

34. Journalist Liz Pelly describes the homogenized sound that streaming platforms incentivize as “streambait.” PELLY, *supra* note 13, at 82.

35. Intermodal effects occur both for artists and for listeners. *See, e.g.*, Seifert et al., *supra* note 17; Christensen, *supra* note 17; GREATER NASHVILLE MUSIC CENSUS, *supra* note 30.

36. RICKS ET AL., *supra* note 10.

recommends the creation of a public option music streaming service at the Library of Congress (“LOC”). The LOC could use its resources as the parent entity of the U.S. Copyright Office and the designated receiver of copyright-registered works and recordings³⁷ to offer a streaming platform that could compete with private offerings and which, done right, users and musicians might consider a preferable service. This can draw on and supplement the streaming services piloted at local library systems in cities across the country,³⁸ and it can extend a long American tradition of public options in the arts and culture into the twenty-first century.³⁹ Finally, Part IV concludes with a proposal for a model of musician-owned cooperative governance within music streaming platforms. A musician-owned cooperative streaming platform could ensure that musicians directly profit from streaming revenue and could help direct the business of recorded music distribution towards the benefit of musicians and of the listening public, rather than the profit incentives of private corporations. A brief conclusion follows.

A few caveats are worth noting up front regarding the scope of the present project. First, while streaming services are divided into two categories—“interactive” referring to services that host online libraries of music of which users select specific tracks, such as Spotify and Apple Music, and “non-interactive” referring to services which function more like traditional radio broadcasters without specific listener selections, such as Pandora and iHeart⁴⁰—this Article will deal only with the *interactive* category. Non-interactive services have their share of problems that are worthy of analysis.⁴¹ But given the format of such services, these problems are more analogous to

37. See 37 C.F.R. § 202.20 (2022) (requiring deposit copies for copyright registration); U.S. COPYRIGHT OFF., CIRCULAR 56: COPYRIGHT REGISTRATION FOR SOUND RECORDINGS (2021).

38. PELLY, *supra* note 13, at 224–25; MONEY ON THE LEFT: *Making Digital Public Spaces w/ MUSICAT* (Spotify, Jan. 1, 2023).

39. See, e.g., SHARON ANN MUSER, DEMOCRATIC ART: THE NEW DEAL’S INFLUENCE ON AMERICAN CULTURE (2015) (on the New Deal’s public programs in music, art, and other culture industries).

40. See 17 U.S.C. § 114(j)(7) (defining “interactive service”); *Arista Recs., LLC v. Launch Media, Inc.*, 578 F.3d 148, 149 (2d Cir. 2009) (distinguishing a “webcasting” service offering users “stations” of genres or of music with similarity to an artist or song the user selects from “interactive” services, which require that users choose the music they hear). Some industry observers, including the World Intellectual Property Organization (WIPO), view these as subsidiary components of a larger digital music marketplace, which also includes downloads and podcasting. World Intell. Prop. Org. (WIPO), 41st Sess., *Study on the Artists in the Digital Music Marketplace: Legal and Economic Considerations*, at 6, SCCR/41/3 (June 28, 2021).

41. See, e.g., Alexander Reed Speer, Note, *Internet Killed the Radio Star: Preventing Digital Broadcasters from Exploiting the Radio Music License Committee Rate to the Detriment of Songwriters*, 23 J. INTELL. PROP. L. 357 (2016) (on one such policy issue regarding non-interactive streaming services).

those of traditional distribution technologies like radio, and do not include the much broader range of concerns posed by interactive services. In several cases, they are also governed by different rules within the copyright system than those that govern interactive services.⁴² For these reasons, this Article will use “streaming platforms” to refer only to interactive streaming services.

Though the scope of the analysis to which this Article devotes itself is mostly limited to interactive streaming services, its more general conceptual framework—that of treating firms in music’s streaming economy as platforms or utilities—may, in fact, extend much farther. Music streaming services are not the only firms in the music industry that have become platforms: So, too, have major record labels, publishers, and other corporate copyright owners of musical works and recordings.⁴³ The platformization of each of these lines of business has contributed to the broader process of music’s platformization which this Article diagnoses in streaming, and the remedies this Article suggests might well apply in their own way to such firms.

In addition to documenting music streaming platforms and offering tools to govern them, this Article makes two other contributions. First, it contributes to a revival of the field of NPU law and policy, a revival which is connected to the law and political economy (“LPE”) movement in legal scholarship.⁴⁴ Second, it continues scholarly work done on the connections between NPU law and intellectual property.⁴⁵ This work suggests that property systems are often governed as utility-like regimes, as this Article notes in its analysis of musical copyright law as a partial, yet incomplete, utility regime. Viewing intellectual property systems in this way may help us recognize harms posed by the structure of intellectual property markets and suggest avenues for

42. Compare 17 U.S.C. §§ 112 and 114 (governing licenses for non-interactive streaming services), with 17 U.S.C. § 115 (governing licenses for interactive streaming services).

43. For a discussion, see Matt Stoller, *How Record Labels Came Back from the Dead and Turned into Tech Platforms*, BIG (May 26, 2025), <https://www.thebignewsletter.com/p/how-record-labels-came-back-from> [<https://web.archive.org/web/20260110222114/https://www.thebignewsletter.com/p/how-record-labels-came-back-from>].

44. See, e.g., Jedidiah Britton-Purdy et al., *Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis*, 129 YALE L.J. 1784 (2020); Amy Kapczynski, *The Political Economy of NPU Law*, YALE J. REG.: NOTICE & COMMENT (Jan. 26, 2023), <https://www.yalejreg.com/nc/symposium-networks-platforms-utilities-09/> [<https://web.archive.org/web/20260103175157/https://www.yalejreg.com/nc/symposium-networks-platforms-utilities-09/>] (connecting NPU to LPE).

45. See Laura Dolbow, *Public Patent Powers*, 123 MICH. L. REV. 599 (2025); Laura Dolbow, *The Public Franchise Tradition as a Limit on Patent Takings*, 111 CORN. L. REV. (forthcoming 2026) (offering an NPU-inspired analysis of the patent system).

reform to promote their underlying public purpose.

I. COPYRIGHT LAW AND MUSIC'S PROPERTY SYSTEM

Copyright law establishes the property system that governs the music industry.⁴⁶ It defines and regulates the industry's basic units of ownership and exchange: the licenses firms and individuals must obtain from creators or other rights holders to distribute recorded music.⁴⁷ Within the copyright system, these licenses come in two basic forms: those for musical *works*—that is, for musical compositions—and those for sound *recordings*—that is, for audio recordings, not tied to the underlying work. While much of this material is familiar territory for students and practitioners of copyright law, it nonetheless requires some fairly technical explanation, as understanding this legal and practical distinction is foundational for understanding the music industry, its regulation, and the problems of its platformization. Key to its interpretation is understanding that some elements of the copyright system that governs these licenses—which also includes antitrust consent decrees—function akin to public utility regulations, while others do not, making the property system governing music an incomplete public utility regime. This incompleteness has led to problems in music's political economy throughout its modern history, which have been accentuated by the rise of streaming platforms.

A. WORKS AND RECORDINGS

Musical works, in the context of copyright law, refer to musical

46. My denotation of musical copyright as a "property system" is not to suggest that copyright ought to be considered analogous to real or personal property, whose relationship to the category we now call "intellectual property" was initially suggested by scholars affiliated with the law and economics movement in an attempt to reframe copyright, along with patent and trademark law, around a certain normative conception of efficiency and price signaling. See Britton-Purdy et al., *supra* note 44, at 1802; Amy Kapczynski, *The Cost of Price: Why and How to Get Beyond Intellectual Property Internalism*, 59 UCLA L. REV. 970, *passim* (2012). It simply intends to signify copyright's mediation of the relationship between musicians and other people who might possess licenses to use their music in various ways. Cf. Morris R. Cohen, *Property and Sovereignty*, 13 CORN. L. REV. 8, 12 (1927) ("Whatever technical definition of property we may prefer, we must recognize that a property right is a relation not between an owner and a thing, but between the owner and other individuals in reference to things.").

47. For overviews of the copyright system in music, from which this section heavily draws, see U.S. COPYRIGHT OFF., *supra* note 23, and SCHERER, *supra* note 23. The standard treatise is KOHN, *supra* note 23.

compositions or songs—not to any particular recordings of such works.⁴⁸ The owners of these works—which may be songwriters and composers, publishers, or other asset-holders⁴⁹—possess the exclusive rights to use and distribute them in several ways,⁵⁰ including two that are especially relevant to music streaming platforms. One is called the “mechanical right”—the right to reproduce a musical work in some external medium.⁵¹ The other is called the “performance right”—the right to publicly perform a work, including the public playing of a recording of the work.⁵² Streaming services must acquire licenses for both mechanical and performance rights to offer musical works on their platforms.

Mechanical rights are subject to a system of compulsory licensing,⁵³ meaning that any time a work’s creator outsources its reproduction to a third-party licensee, the owner of the right must similarly license the work to any other third party, whether for a fee set by the government or by a privately negotiated fee.⁵⁴ Originally, the Copyright Act of 1909 set the statutory rate for mechanical licenses at 2 cents per copy.⁵⁵ Today, the “statutory rate”⁵⁶ is set by the Copyright Royalty Board (“CRB”), a panel of three administrative law judges appointed by the Librarian of Congress.⁵⁷ Since the passage of the Music

48. U.S. COPYRIGHT OFF., *supra* note 23, at 18.

49. In recent years, some legacy artists have sold all or percentages of their publishing catalogs—including their mechanical rights—to large asset holders, some of which even facilitate direct consumer investment in those catalogs. *See, e.g.*, Simon Read, *Neil Young Sells Song Rights in “\$150m” Deal*, BBC (Jan. 6, 2021), <https://www.bbc.com/news/business-55557633> [<https://web.archive.org/web/20260103185819/https://www.bbc.com/news/business-55557633>].

50. For a fuller list, see U.S. COPYRIGHT OFF., *supra* note 23; KOHN, *supra* note 23.

51. U.S. COPYRIGHT OFF., *supra* note 23, at 26, 28; Digital Performance Right in Sound Recordings Act, Pub. L. No. 104-39, 109 Stat. 336 (1995) (expanding the mechanical right to include “digital phonorecord deliveries”); 17 U.S.C. § 115(e)(10); SCHERER, *supra* note 23, at 13–15.

52. SCHERER, *supra* note 23, at 13–15. Importantly, this includes the public performance of a *recording* of a work—though, critically, it is not a right to the recording *itself* (because it is still a right held by the owner of the underlying *work*).

53. *See* KOHN, *supra* note 23, at 700–47.

54. Copyright law allows for privately negotiated exceptions to set government rates. *See, e.g.*, 17 U.S.C. § 115(2)(a)(i) (“License agreements voluntarily negotiated at any time between one or more copyright owners of nondramatic musical works and one or more persons entitled to obtain a compulsory license . . . shall be given effect in lieu of any determination by the Copyright Royalty Judges.”). But it is unclear whether rights holders may also accept lower royalty rates than government in exchange for preferable terms.

55. KOHN, *supra* note 23, at 704; SCHERER, *supra* note 23, at 29.

56. As of this writing, the rate for physical copies and permanent downloads is set at 13.1 cents per copy or 2.52 cents per minute of playing time, whichever is larger. 37 C.F.R. § 385.11. Rates for interactive streams are calculated via a multi-step process established by the CRB, based on set percentages of service provider revenues and costs. *See* 37 C.F.R. § 385.21.

57. SCHERER, *supra* note 23, at 29. This body is sometimes referred to as, simply, the “Copyright Royalty Judges.” *See, e.g.*, LIBR. OF CONG., FISCAL 2025 BUDGET JUSTIFICATION, at 123 (2024),

Modernization Act of 2018, the CRB must set the compulsory license rates periodically at a price which a “willing buyer” and a “willing seller” would transact for them in a fair, competitive market.⁵⁸

Performance rights, likewise, include streams. Indeed, it is part of the very definition of “stream” in the Code of Federal Regulations that it is subject to licensing as a public performance of a musical work.⁵⁹ Licenses for these rights are administered by organizations known as performance rights organizations (“PROs”), which connect distribution channels (like streaming services) to rights holders by processing huge volumes of royalty payments. The two largest such organizations, of which most publishers and songwriters are members, are the American Society of Composers, Authors, and Publishers (“ASCAP”) and Broadcast Music, Inc. (“BMI”), which are governed by antitrust consent decrees.⁶⁰ Typically, licensees will pay the PROs a negotiated rate to license all the songs in their catalog, called a “blanket license.” Each PRO will then distribute the royalties from those payments to its members, typically songwriters and publishers. If the licensee and the PRO cannot reach agreement on a rate, they enter the docket of the Southern District of New York’s “rate court,” which is directed to resolve disputes by requiring the PRO to prove that its proposed rates are “reasonable.”⁶¹ ASCAP’s consent decree expressly prohibits it from administering any licenses other than those for performance rights.⁶² Both ASCAP and BMI must also offer equal access to all songwriters and publishers who wish to join them and offer licenses to all applicants on nondiscriminatory terms.⁶³ Critically, though, these requirements are not incumbent upon other PROs not covered by the consent decrees. Today, some smaller PROs—including Society of European Stage Authors and Composers (“SESAC”) and Global Music Rights (“GMR”)—invite only the most successful and lucrative songwriters in the industry as their

<https://www.loc.gov/static/portals/about/reports-and-budgets/documents/budgets/fy2025.pdf>
[<https://web.archive.org/web/20251202162229/https://www.loc.gov/static/portals/about/reports-and-budgets/documents/budgets/fy2025.pdf>].

58. SCHERER, *supra* note 23, at 30.

59. 37 C.F.R. § 385.2.

60. *United States v. Am. Soc’y of Composers, Authors & Publishers*, No. 41-1395, 2001 WL 1589999 (S.D.N.Y. June 11, 2001); *United States v. Broad. Music, Inc.*, No. 64 Civ. 3787, 1994 WL 901652 (S.D.N.Y. Nov. 18, 1994). For a history with relevant cases and documents, see ROSS & HUPPE, *supra* note 5, at 109–47.

61. SCHERER, *supra* note 23, at 20.

62. *Id.* at 19.

63. *Id.*

members and thus exercise significant power to set terms for those members, unrestrained by the terms of ASCAP and BMI's consent decrees.⁶⁴

Separate from rights in musical works are rights in sound recordings, not tied to the underlying musical composition. Like for works, the owners of sound recordings possess several constituent rights, including a mechanical right.⁶⁵ Unlike for works, though, mechanical rights in recordings are not subject to compulsory licenses with set rates. Instead, licenses to mechanically reproduce recordings are obtained through negotiations between creators and prospective licensees. How much artists are paid in this arrangement is left to the dictates of their contracts with record labels or other entities performing the functions of record production and distribution, the nature and terms of which depend on the relative bargaining power between the parties. Additionally, while there is a public performance right for musical works—the right administered by the PROs—there is no corresponding performance right for sound recordings,⁶⁶ except in some limited cases.⁶⁷ Therefore, the public performance of a sound recording typically does not result in any royalty payment to the owner of that sound recording.⁶⁸

B. AN INCOMPLETE UTILITY REGIME

The key difference between property rights in musical works and in sound recordings is the degree to which they are subject to utility-style regulation. Musical works are subject to several such regulations. Mechanical license fees are set directly by the government—a form of rate regulation, a classic public utility tool.⁶⁹ Licenses for performance rights, while not rate-regulated, are

64. SCHERER, *supra* note 23, at 20 (“While the rates charged by ASCAP and BMI are subject to oversight by the federal district court judges, pursuant to their respective consent decrees, the rates charged by SESAC and GMR are based on marketplace negotiations.”).

65. For a fuller list, see U.S. COPYRIGHT OFF., *supra* note 23; KOHN, *supra* note 23.

66. U.S. COPYRIGHT OFF., *supra* note 23, at 43–45.

67. While there is a performance right for the licensing of sound recordings by non-interactive streamers, it exempts interactive streaming platforms such as those that are the subject of this Article. *See id.*

68. Though record labels and artists have repeatedly called for the creation of an across-the-board performance right for sound recordings—including the recent introduction of the American Music Fairness Act, H.R. 861, 119th Cong. (2025), which would create such a right—the lack thereof has survived because of the promotional value ascribed to public performances for record sales. *See, e.g., American Music Fairness Act*, AM. FED. OF MUSICIANS, <https://www.afm.org/what-we-are-doing/american-music-fairness-act/> [<https://web.archive.org/web/20260105230153/https://www.afm.org/what-we-are-doing/american-music-fairness-act/>] (last visited July 11, 2025); U.S. COPYRIGHT OFF., *supra* note 23, at 43–46.

69. RICKS ET AL., *supra* note 10, at 25.

subject to the terms of ASCAP and BMI's consent decrees, which require equal access to all prospective licensees and members⁷⁰—a form of nondiscrimination rule, another classic public utility tool.⁷¹ ASCAP's consent decree also prohibits it from offering licenses for any right other than the performance right⁷²—a form of structural separation, yet another tool of utility regulation which “places clear limits on the lines of business in which a firm can engage.”⁷³

In each of these instances, the motivation behind the policy was the need to check the monopoly or oligopoly power of powerful intermediaries, one of several frequent justifications for regulating industries as public utilities.⁷⁴ In 1909, Congress established the first statutory rate for mechanical licenses out of a concern about the growing power of the Aeolian Company.⁷⁵ Aeolian was a manufacturer of piano rolls, a music distribution technology that reproduced popular songs using holes on sheets of paper which would operate mechanical player pianos.⁷⁶ By negotiating exclusive contracts with songwriters and other rights holders, Aeolian was able not only to forestall competition in its own industry—the manufacture of piano rolls—but also to exert power over the songwriting and music publishing industries, by determining what works could and could not be mechanically reproduced and distributed.⁷⁷ By requiring rights holders to license their works to all prospective licensees at a set rate, Congress effectively prohibited these exclusive contracts and thus Aeolian's exercise of intermediary power over the music industry.⁷⁸ Similarly, the nondiscrimination rules in performance rights today are enforced via antitrust consent decrees, which originated from a concern that the PROs were using

70. SCHERER, *supra* note 23, at 19.

71. RICKS ET AL., *supra* note 10, at 24.

72. U.S. COPYRIGHT OFF., *supra* note 23, at 37 (noting also that BMI operates similarly, though without an explicit requirement).

73. Khan, *supra* note 21, at 980; *see also* RICKS ET AL., *supra* note 10, at 28.

74. RICKS ET AL., *supra* note 10, at 13–17.

75. KOHN, *supra* note 23, at 700.

76. U.S. COPYRIGHT OFF., *supra* note 23, at 26; KOHN, *supra* note 23, at 700. For a demonstration of a player piano, see JÜRGEN HOCKER, *Conlon Nanncarrow, Study for Player Piano No. 1* (YouTube, May 19, 2010), <https://www.youtube.com/watch?v=1mKfQYzfdUy>

[<https://web.archive.org/web/20260112064839/https://www.youtube.com/watch?t=6&v=1mKfQYzfdUy&feature=youtu.be>]. Player pianos are also notable as the namesake of Kurt Vonnegut's first novel, which depicts a dystopian future of entirely automated industry. *See* KURT VONNEGUT, *PLAYER PIANO* (1952).

77. U.S. COPYRIGHT OFF., *supra* note 23, at 26, 146; KOHN, *supra* note 23, at 700.

78. U.S. COPYRIGHT OFF., *supra* note 23, at 26, 146; KOHN, *supra* note 23, at 700.

their concentrated power to restrain trade.⁷⁹ These concerns about regulating powerful intermediaries echo those that led to the regulation of many other industries as public utilities: electricity, water, banking, insurance, trash, natural gas, telephones, the telegraph, and railroads among them.⁸⁰

There are important exceptions to the utility-style regulations that govern rights in musical works. First, for mechanical licenses, the law allows for exceptions to the statutory rate, so long as parties agree to them by contract.⁸¹ Second, for performance licenses, the PROs' consent decrees require that the PROs allow alternatives to the blanket licenses, including the ability to acquire licenses by direct negotiations with rights holders.⁸² This means that, though the norm for many licensors is to acquire the blanket license to ASCAP's or BMI's full catalog, they may instead choose to negotiate rates for performance rights individually with each songwriter or publisher.⁸³ There are also the smaller, invitation-only PROs who represent some of the music industry's most successful songwriters, which are not governed by the terms of ASCAP's and BMI's consent decrees.⁸⁴

Sound recordings, however, are not subject to public utility regulations of the sort that govern musical works. Though streaming services and other distributors must acquire licenses to offer sound recordings, there is no system of rate regulation to determine how much the owners of those recordings

79. 15 U.S.C. § 1 (prohibiting combinations and conspiracies in restraint of trade); *U.S. v. Am. Soc'y of Composers, Authors & Publishers*, No. 41-1395, 2001 WL 1589999, at *3, *4 (S.D.N.Y. Jun. 11, 2001); *U.S. v. Broad. Music, Inc.*, No. 64 Civ. 3787, 1994 WL 901652 (S.D.N.Y. Nov. 18, 1994).

80. See RICKS ET AL., *supra* note 10.

81. 17 U.S.C. § 115(2)(a)(i) ("License agreements voluntarily negotiated at any time between one or more copyright owners of nondramatic musical works and one or more persons entitled to obtain a compulsory license [...] shall be given effect in lieu of any determination by the Copyright Royalty Judges.").

82. See, e.g., *ASCAP*, 2001 WL 1589999, at *3 ("ASCAP is hereby enjoined and restrained from . . . [l]imiting, restricting, or interfering with the right of any member to issue, directly or through an agent other than a performance rights organization, non-exclusive licenses to music users for rights of public performance."); see also U.S. Dep't of Just., Statement of the Department of Justice on the Closing of the Antitrust Division's Review of the ASCAP and BMI Consent Decrees (Remarks of Assistant Att'y Gen. Makan Delrahim) (Jan. 15, 2021), <https://www.justice.gov/atr/page/file/1355391/dl?inline> [<https://web.archive.org/web/20250714052546/https://www.justice.gov/atr/page/file/1355391/dl?inline>] ("The crux of the decrees is to encourage competition between ASCAP, BMI, and other PROs for members and music users, and between ASCAP, BMI, and their respective members to license copyrighted works to music users. The decrees prohibit exclusive licensing and protect the ability of ASCAP and BMI members to license works directly if they wish.").

83. See, e.g., *ASCAP*, 2001 WL 1589999, at *6; U.S. Dep't of Just., *supra* note 82.

84. SCHERER, *supra* note 23, at 20.

should be paid.⁸⁵ Nor is there any nondiscrimination rule like that which governs the PROs governing how streaming services and record labels pay out royalties to recording artists. There are also no regulations limiting the licenses that can be administered by firms (i.e., record labels) that manage rights in sound recordings, as evidenced by the high degree of common ownership between major record labels (which deal in sound recordings) and publishers (which deal in musical works).⁸⁶ Therefore, the prices and terms of access to these distribution channels are highly dependent on the bargaining power of the parties to individual contracts.

Given the differences in this respect between sound recordings and musical works—and the regulatory exceptions made even in the case of musical works—the regulation of the music industry through copyright and antitrust law is an incomplete public utility regime. Lawmakers and courts have recognized that elements of the music industry resemble public utilities in their tendency towards monopoly or oligopoly, such as early music manufacturers⁸⁷ and PROs.⁸⁸ But they have not extended that logic to other elements of the industry. This incompleteness has led to problems in music's political economy, including some present well before the rise of streaming platforms.⁸⁹

C. TWENTIETH CENTURY PROBLEMS

In the twentieth century, well before the rise of streaming services, the recorded music industry's structure was the product and source of fierce contestation between industry participants, which arose from its thorny collision of art, technology, and commerce. Many of these debates revolved around three themes, the first of which was the problem of compensation. Determining the compensation due in monetary terms to each of the actors involved in the creation and distribution of a piece of recorded music is an

85. There is, however, a compulsory license for ephemeral copies of sound recordings on *non*-interactive streaming services. SCHERER, *supra* note 23, at 24.

86. U.S. COPYRIGHT OFF., *supra* note 23, at 23 ("One notable feature of the modern music marketplace is the extent of common corporate ownership of major record labels and major music publishers: UMPG is owned by UMG [. . .]; the Sony Corporation owns SME and half of Sony/ATV; and Warner/Chappell Music is a division of WMG." (citations omitted)).

87. KOHN, *supra* note 23, at 700.

88. *Broad. Music, Inc. v. Columbia Broad. Sys., Inc.*, 441 U.S. 1, 1 (1979).

89. Cf. W. Jonathan Cardi, *Über-Middleman: Reshaping the Broken Landscape of Music Copyright*, 92 IOWA L. REV. 835, 869–97 (2007) (discussing the presence of large, powerful intermediaries in the music industry and its implications for music's copyright system).

inherently complicated task. The history of the twentieth-century music industry is filled with high-stakes, zero-sum legal, political, and business battles to answer precisely this question.⁹⁰ Different dynamics emerged from each of these protracted struggles. While payments for songwriters could be somewhat stable and consistent, thanks to the presence of rate regulation, the payment levels for recording artists could be highly variable, left up to privately negotiated contracts between labels and distribution channels, on the one hand, and between labels and artists on the other. Differences in bargaining power were affected by the presence or absence of rate regulation, as well as the integration of record labels and publishers.

Second was the problem of concentration. Over the course of the twentieth century, an oligopoly of six major record labels dominated the American recording industry: Bertelsmann Music Group (“BMG”), Sony Music, EMI (a British firm), Universal Music Group, Warner Music Group, and PolyGram.⁹¹ Through a series of mergers in the late 1990s and 2000s, this oligopoly further consolidated into the so-called “Big Three” major record labels that dominate the music industry as of this writing: Warner Music Group, Universal Music Group, and Sony Music Entertainment.⁹² While the core business of these firms was for many years in recording, they also came to acquire major publishers beginning in the 1960s, as venture capitalists encouraged integration between publishers and record companies, as well as the conglomeration of smaller labels as subsidiaries of the majors.⁹³ Since that time, the common ownership of publishers and record labels—nominally separate industries

90. See generally 3 SANJEK, *supra* note 1; Joey La Neve DeFrancesco, *When Musicians Went on Strike—and Won*, JACOBIN (Mar. 6, 2022), <https://jacobin.com/2022/03/1940s-musicians-strike-american-federations-of-musicians-afm-labels-streaming> [<https://web.archive.org/web/20260112214508/https://jacobin.com/2022/03/1940s-musicians-strike-american-federations-of-musicians-afm-labels-streaming>] (on labor organizing in music). Business difficulties between recording artists and their labels are so commonplace in the music industry as to have become stereotypical. See, e.g., Ann Powers, *Songs Against the Suits*, NPR (Nov. 15, 2019), <https://www.npr.org/2019/11/15/779753813/songs-against-the-suits> [<https://web.archive.org/web/20260112214606/https://www.npr.org/2019/11/15/779753813/songs-against-the-suits>] (on songs by popular artists about business disputes with their record labels).

91. SANJEK, *supra* note 2, at 172. The names of these firms changed often throughout the period of their dominance, from the late 1920s through the late 1990s. The names given here were those in use as of 1998, when Polygram merged with Universal. See Eben Shapiro, *Seagram Plans PolyGram Charge, Designates Noncore Assets for Sale*, WALL ST. J. (Dec. 15, 1998), <https://www.wsj.com/articles/SB913670897536416000> [<https://web.archive.org/web/20260215125549/https://www.wsj.com/articles/SB913670897536416000>].

92. SANJEK, *supra* note 2, at 171–204 (charting this period of consolidation).

93. 3 SANJEK, *supra* note 1, at 508.

within the framework of copyright law—has become a defining characteristic of the music industry’s structure.⁹⁴ The administrators of royalty payments for musical works were also highly concentrated, with ASCAP and BMI enjoying a virtual duopoly over performance rights administration⁹⁵ and the Harry Fox Agency (“HFA”) a virtual monopoly over mechanical rights administration.⁹⁶ The concentrated power of these firms was and is managed to different degrees by antitrust enforcement. As discussed in Part I, ASCAP and BMI are governed by consent decrees administered by the Department of Justice (“DOJ”), which have been upheld by the Supreme Court and repeatedly reaffirmed by DOJ officials.⁹⁷ However, no such decrees exist for governing the activities of conglomerated record labels and publishers; nor do they exist for the more routine yet structurally essential functions of mechanical rights administrators like the HFA.⁹⁸ Over the course of the twentieth century, the overall effect of unregulated concentration in the music industry was to maximize the bargaining power of the conglomerated label-publishers relative to atomized musicians and to entrench their power in the recorded music industry.

A third problem was discrimination between musicians on the radio. Unlike physical media, which could be sold in discrete units with supply theoretically only limited by demand, radio broadcasting was an inherently scarce resource. This was a direct result of its technology: There were only a limited number of radio frequencies that could be transmitted within a geographic area at any given time to prevent congestion and interference; and for each of these frequencies, there were only twenty-four hours in a day.⁹⁹ These physical realities made the question of how to fairly allocate airwaves and broadcast time one of elemental importance for broadcasters, the record

94. U.S. COPYRIGHT OFF., *supra* note 23, at 23.

95. 3 SANJEK, *supra* note 1, at 175–82 (on BMI’s founding). LARRY WAYTE, *PAY FOR PLAY: HOW THE MUSIC INDUSTRY WORKS, WHERE THE MONEY GOES, AND WHY* 256 (2023).

96. U.S. COPYRIGHT OFF., *supra* note 23, at 21; 3 SANJEK, *supra* note 1, at 136.

97. U.S. v. Am. Soc’y of Composers, Authors & Publishers, No. 41-1395, 2001 WL 1589999 (S.D.N.Y. Jun. 11, 2001); U.S. v. Broad. Music, Inc., No. 64 Civ. 3787, 1994 WL 901652 (S.D.N.Y. Nov. 18, 1994); Broad. Music, Inc. v. Columbia Broad. Sys., Inc., 441 U.S. 1 (1979); U.S. Dep’t of Just., *supra* note 82.

98. See Michelle Arnold, *A Matter of (Anti)Trust: The Harry Fox Agency, The Performance Rights Societies, and Antitrust Litigation*, 81 TEMP. L. REV. 1169 (2008).

99. PHILIP T. ROSEN, *THE MODERN STENTORS: RADIO BROADCASTERS AND THE FEDERAL GOVERNMENT, 1920–1934* 3 (1980) (“[I]t was inherent in the technology of the medium that it could not be left unregulated, for the cacophony of competing voices on the airwaves would have made development impossible.”).

industry, lawmakers, and regulators.¹⁰⁰ In the 1950s and 1960s, investigations by Congress and the Federal Communications Commission (“FCC”) uncovered pay-for-play schemes in the radio sector, wherein record labels would compensate influential radio disc jockeys (“DJs”) for preferential treatment and access.¹⁰¹ This practice came to be known as payola.¹⁰² The revelations created public outcry,¹⁰³ and Congress and the FCC reacted by banning undisclosed payola—in other words, requiring DJs to disclose on the air whether a song was to be played as the result of compensation from an interested third party.¹⁰⁴ Despite this policy action, it is universally recognized that record labels continued to devote significant resources towards influencing radio programming through more informal means,¹⁰⁵ much in the same way that while the bribery of public officials is nominally illegal,¹⁰⁶ many industries and the wealthy nonetheless exercise influence over public policy through lobbying, campaign contributions, and social capital.¹⁰⁷

II. THE RISE OF MUSIC STREAMING SERVICES

Understanding how music streaming services created new problems for law and policy requires recalling how they gained traction in the first place. With the rise of the internet in the late 1990s and early 2000s came the rise of online file-sharing, which threatened to de-commodify recorded music and render the traditional structure of the recorded music industry obsolete. The streaming business model was pitched as a technocratic solution to this

100. See Radio Act of 1912, Pub. L. 264, 37 Stat. 302; Communications Act of 1934, Pub. L. 73-416, 48 Stat. 1064, 1085, § 309(a) (requiring broadcast licenses to be granted for the “public interest, convenience, and necessity”).

101. STERLING & KITROSS, *supra* note 4, at 368–69, 394–95; ROSS & HUPPE, *supra* note 5, at 737–39.

102. STERLING & KITROSS, *supra* note 4, at 368–69, 394–95; ROSS & HUPPE, *supra* note 5, at 737–39. For a history of payola in the U.S. and its regulation, see SEGRAVE, *supra* note 4.

103. President Eisenhower remarked in a press conference that payola was an issue of “public morality.” Dwight D. Eisenhower, *The President’s News Conference*, AMER. PRES. PROJ. (Feb. 11, 1960), <https://www.presidency.ucsb.edu/documents/the-presidents-news-conference-215> [<https://web.archive.org/web/20260112221019/https://www.presidency.ucsb.edu/documents/the-presidents-news-conference-215>].

104. 47 U.S.C. § 317; 47 C.F.R. § 73.1212. Radio stations had been subject to this requirement under the Communications Act, but the focus of the new revelations was not on stations in general, but their DJs.

105. STERLING & KITROSS, *supra* note 4, at 396.

106. 18 U.S.C. § 201(b).

107. See ZEPHYR TEACHOUT, *CORRUPTION IN AMERICA: FROM BENJAMIN FRANKLIN’S SNUFF BOX TO CITIZENS UNITED* (2014).

problem.¹⁰⁸ With the assistance of special terms offered to major labels, whose catalogs streaming services needed to operate, streaming services gained buy-in from industry participants and came to enclose and dominate recorded music distribution. This process—music’s platformization—created a new layer of power in the music industry, as streaming services began to funnel music to listeners while preserving the industry’s oligopolistic structure. This section will provide a historical overview of this process and consider the economic, cultural, and political effects of the new layer of power it created.

A. THE REASON: THE THREAT OF MUSIC’S DECOMMODIFICATION

The streaming model of music distribution was initially proposed as a solution to an existential threat faced by the recorded music industry’s traditional structure: that of recorded music’s decommodification.¹⁰⁹ This problem is often denoted as the problem of piracy.¹¹⁰ The piracy of musical works—their unauthorized and uncompensated reproduction—has been a challenge for the music industry for as long as the reproduction of musical works has been possible.¹¹¹ The piracy of recordings in the form of “bootlegs” has also had a long-standing impact on the record industry, with recording artists maintaining varying attitudes towards their existence and distribution.¹¹² But this new piracy was of a different order, as it was on a scale that could not be effectively policed by simply enforcing copyright law.¹¹³ The rise of the

108. PELLY, *supra* note 13, at 11–23.

109. For a definition, see SUSAN MAYHEW, *A DICTIONARY OF GEOGRAPHY* (6th ed., 2023) (“Given that a commodity is an artefact, symbol, or idea that can be exchanged, usually for money, decommodification would indicate that a commodity no longer has a status as such. . . . Decommodification is also any cultural, political, or social, process that reduces the scope and influence of the market in everyday life.”).

110. *See, e.g.*, Purtzer, *supra* note 24, at 426; PELLY, *supra* note 13, at 1–10.

111. 3 SANJEK, *supra* note 1, at 563 (“The piracy or counterfeiting of printed music had been one of the music publishers’ paramount problems from the day that mass duplication of music first became practicable.”).

112. For a discussion of the cultural impact of one particularly notable set of twentieth-century bootleg recordings, see GREIL MARCUS, *INVISIBLE REPUBLIC: BOB DYLAN’S BASEMENT TAPES* (1997).

113. *See* Christophe Geiger, *Challenges for the Enforcement of Copyright in the Online World: Time for a New Approach*, in *RESEARCH HANDBOOK ON CROSS-BORDER ENFORCEMENT OF INTELLECTUAL PROPERTY* 704, 704–05, 707 (2014) (“What is probably different at present is the extent of the phenomenon [of piracy], due to the facility of reproducing copyrighted works in the digital environment—in a quality now equal to the original—and the possibility of disseminating these works at zero cost via the Internet. [. . .] [T]he strategy adopted by legislators, with a strong encouragement from the cultural industries, has been to enhance the set of copyright rules [. . .] and to increase the range of penalties applicable. [. . .] Nevertheless, it must be admitted that these strategies, mainly based on repression and fear of sanctions, did not achieve the expected results.”).

internet made piracy possible on an unprecedented scale: The marginal cost of posting audio files on the internet was essentially zero, which posed an existential threat to record sales. File-sharing services like Napster upended the basic business model of record companies: If listeners could simply find free audio files online uploaded by a single user from physical copies, they would be less likely to purchase additional physical copies.¹¹⁴ The challenge to long-predominant paradigms in recorded music distribution was obvious and enormous—and it was the threat to make recorded music into an essentially free-to-consume public good, whose status as a commodity from which revenue could be derived was in jeopardy.

This situation created an opportunity for entrepreneurs, who looked to market new inventions that would allow the music industry—particularly the major record labels—to continue generating profit from online music distribution and thus retain their market position. One such innovation was digital rights management (“DRM”) software, which when installed on users’ devices—often packaged with commercial audio downloads—prevented the unauthorized copying or distribution of downloaded audio files from online marketplaces like iTunes.¹¹⁵ While holding promise for record labels, DRM technology was roundly criticized by other industry participants who argued that it was invasive for users and burdensome for distributors.¹¹⁶

Entrepreneurs initially proposed music streaming as another technocratic solution to the problem of decommodification—one that would be highly profitable for the music industry to move towards.¹¹⁷ This was inherent in its reliance not on users downloading files but on them listening to “streams,” digital audio data instantaneously communicated via the internet and housed on servers owned or contracted by the platform, rather than a user’s personal device.¹¹⁸ By allowing access to streams via a subscription fee or interspersing

114. The record labels took immediate note of this threat and sued Napster for copyright infringement. *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th. Cir., 2001).

115. SCHERER, *supra* note 23, at 23.

116. In 2007, Apple CEO Steve Jobs offered a characteristically snappy analysis of DRM technology to shift blame for the lack of interoperability on DRM-accompanied iTunes downloads away from Apple and onto record labels: “[If] the music companies are selling over 90 percent of their music DRM-free [on physical media], what benefits do they get from selling the remaining small percentage of their music encumbered with a DRM system? There appear to be none.” Steve Jobs, *Thoughts on Music*, APPLE (Feb. 6, 2007), <http://www.apple.com/hotnews/thoughtsonmusic/> [<https://web.archive.org/web/20070907215836/http://www.apple.com/hotnews/thoughtsonmusic/>].

117. PELLY, *supra* note 13, at 11–23.

118. For an intricate yet workable regulatory definition of “stream,” see 37 C.F.R. § 385.2.

them with revenue-generating ads, centralized music streaming platforms promised to combine the convenience for users of accessing entire catalogs of recorded music for a nominal fee with the benefit to record labels—and purportedly also recording artists, publishers, and composers—of continued revenue streams in the digital age.

The firm that emerged as the principal innovator of this business model was Spotify. Founded in Sweden in 2006 by a group of entrepreneurs well-versed in the technology of search engine optimization and online advertising—importantly, not in music distribution¹¹⁹—Spotify rapidly attracted attention at first from venture capitalists and later from record labels, which recognized the value inherent in an online library of music that would replicate the user experience of file-sharing networks like Napster but ensure that money would continue to flow through the channels maintained by copyright law for musical works and sound recordings.¹²⁰

Major labels bought into this new form of commercial infrastructure, literally. In their initial round of licensing deals with Spotify, the majors received ownership shares in the platform,¹²¹ as well as several other important concessions: guaranteed minimum monthly payments, advances, most-favored-nation (“MFN”) clauses to stipulate that no other label would get better terms, and, critically, a subscription tier, which was understood by labels to be a more consistent source of revenue than advertisements.¹²² According to the designs of its ad-tech founders, Spotify was initially envisioned as a solely ad-funded service.¹²³ But securing major label buy-in required constructing a platform with two tiers of access: one offered to users for free with ads, and a

119. PELLY, *supra* note 13, at 11, 13 (“[Spotify’s founders] knew a lot about search engine optimization, metadata, and selling ads. But they were by no means music guys.” As Spotify’s chief technology officer Andreas Ehn put it, “[i]t wasn’t even clear back then that we were going to do music at all, or that music would be the focus.”).

120. As one Spotify founder put it, “[t]he benchmark we set for ourselves wasn’t existing music services. It was the file-sharing networks.” *Id.* at 14.

121. SVEN CARLSSON & JONAS LEIJONHUFVUD, *THE SPOTIFY PLAY: HOW CEO AND FOUNDER DANIEL EK BEAT APPLE, GOOGLE, AND AMAZON IN THE RACE FOR AUDIO DOMINANCE* 62 (2021).

122. PELLY, *supra* note 13, at 17–18; *see also* Micah Singleton, *This Was Sony Music’s Contract with Spotify*, VERGE (May 19, 2015), <https://www.theverge.com/2015/5/19/8621581/sony-music-spotify-contract> [<https://web.archive.org/web/20251112190550/https://www.theverge.com/2015/5/19/8621581/sony-music-spotify-contract>].

123. PELLY, *supra* note 13, at 17 (“Spotify was committed to its initial business model, which paired a free service with advertising, and paid rights-holders a percentage of ad revenue.”).

premium tier without ads accessed by a recurring subscription fee.¹²⁴ Key to this strategy was steering users away from the free service towards the paid one, a task to which Spotify has since devoted considerable investment.¹²⁵ Soon after deals with the major labels established Spotify as a leading platform for music distribution, independent labels were also convinced to license their catalogs. They did so via the intermediation of the Merlin Network—a London-based nonprofit formed to collectively negotiate digital licensing deals on behalf of independent labels.¹²⁶ Merlin also received ownership shares in Spotify, the returns from which it would pay out to its independent label members.¹²⁷ Thereafter, nearly all recorded music from both major and independent labels became available on Spotify, and later other streaming platforms.

These deals heralded the adoption of the streaming business model as the music industry's preferred strategy to maintain recorded music's status as a profitable commodity. Its promise was such that music streaming was thought to be an innovation that literally saved the music industry as it existed.¹²⁸

B. THE RESULT: A NEW LAYER OF POWER

The net result of streaming's adoption was that the essential structure of the music industry—one dominated by the consolidation of rights holders in publishing and recording,¹²⁹ frequently with common ownership between the two¹³⁰—remained intact following the threat of recorded music's piracy-driven decommmodification. It added to this pre-existing structure a new layer of power in the music industry: that of the streaming platforms. This new layer of oligopolistic power has since demonstrated economic, cultural, and political effects.

In economic terms, the leading music streaming platforms have become behemoths. In the nearly twenty years since Spotify's founding, music streaming has grown into a nearly \$50 billion industry worldwide.¹³¹ Spotify

124. *Id.* at 17–18.

125. *Id.* at 17.

126. *Id.* at 19–20.

127. *Id.*

128. *Id.* at 11–23.

129. SANJEK, *supra* note 2, at 172.

130. U.S. COPYRIGHT OFF., *supra* note 23, at 23.

131. *Music Streaming Market (2025–2030), Report Summary*, GRAND VIEW RSCH., <https://www.grandviewresearch.com/industry-analysis/music-streaming-market>

alone has 100.6 million individual listeners in America;¹³² Amazon Music has upwards of 50 million,¹³³ and Apple Music follows with over 40 million users.¹³⁴ Spotify's most recent round of disclosures to the Securities & Exchange Commission reports over \$12 billion in assets,¹³⁵ and it is valued at \$124 billion in global market capitalization.¹³⁶ While neither Apple Music nor Amazon Music are isolatable from their parent companies' financial disclosures, analysts estimate they earned \$9.2 billion and \$4 billion in revenue in 2023, respectively.¹³⁷ Other streaming platforms operate as well: YouTube, the video streaming app owned by Alphabet (the parent company of Google), is perhaps the largest music streaming service of them all, as many of its videos are functionally audio tracks of musical artists. However, the business of YouTube differs markedly from other streaming platforms: It is primarily an ad-funded service, while other streaming services' revenue mostly comes from subscription fees.¹³⁸ The only way to listen to music without keeping the video on is by purchasing a subscription to YouTube Music or YouTube Premium, of which there were 27.9 million users in the United States as of 2024.¹³⁹ Other

[<https://web.archive.org/web/20260201162154/https://www.grandviewresearch.com/industry-analysis/music-streaming-market>] (last visited July 8, 2025).

132. *Number of Active Users of Major Music Streaming Services*, *supra* note 6.

133. *Id.*

134. *Id.*

135. Spotify Technology S.A., Annual Report, 106 (Form 20-F for FY ending Dec. 31, 2024), https://s29.q4cdn.com/175625835/files/doc_financials/2024/q4/8afe1e0f-192e-43ad-b8d1-aa947b389577.pdf

[https://web.archive.org/web/20250703110017/https://s29.q4cdn.com/175625835/files/doc_financials/2024/q4/8afe1e0f-192e-43ad-b8d1-aa947b389577.pdf].

136. Mandy Dalugdug, *Spotify Market Cap Tops \$124bn—As Stock Price Hits Record High After Posting First Full Year of Profit*, MUSIC BUS. WORLDWIDE (Feb. 5, 2025), <https://www.musicbusinessworldwide.com/spotify-market-cap-value-tops-124bn-as-stock-price-hits-record-high-after-posting-first-full-year-of-profit/>

[<https://web.archive.org/web/20260103020059/https://www.musicbusinessworldwide.com/spotify-market-cap-value-tops-124bn-as-stock-price-hits-record-high-after-posting-first-full-year-of-profit/>].

137. David Curry, *Apple Music Revenue and Usage Statistics (2025)*, BUS. APPS (Jan. 22, 2025), <https://www.businessofapps.com/data/apple-music-statistics/>

[<https://web.archive.org/web/20260103020120/https://www.businessofapps.com/data/apple-music-statistics/>]; David Curry, *Amazon Prime Music Revenue and Usage Statistics (2025)*, BUS. APPS (Jan. 22, 2025), <https://www.businessofapps.com/data/amazon-prime-music-statistics/>

[<https://web.archive.org/web/20260103020135/https://www.businessofapps.com/data/amazon-prime-music-statistics/>].

138. Rohit Shewale, *YouTube Revenue 2024–2025: Complete Report and Alphabet Impact*, RESOURCERA (Apr. 5, 2025), <https://resourcera.com/data/social/youtube-revenue/> [<https://web.archive.org/web/20251228225940/https://resourcera.com/data/social/youtube-revenue/>].

139. Christy Tila, *Number of YouTube Premium Subscribers in the United States from 2020 to 2024*, STATISTA, <https://www.statista.com/statistics/1261865/youtube-premium-subscribers/>

players include Tidal, which has under 1 million U.S.-based users and competes by offering listeners higher audio quality (for a higher price than the other services),¹⁴⁰ and Deezer, a French firm which is popular in Europe but has not achieved significant scale in the United States.¹⁴¹ Despite the activities of these marginal competitors, music streaming is an oligopolistic industry—with Spotify leading the pack as a result of its first-mover advantage.¹⁴²

As for the cultural impact of streaming platforms on musicians and listeners, little evidence is needed: They are ubiquitous. From billboards in Times Square of artists with new releases sponsored by the streaming platforms, to pleas from artists to fans to “pre-save” their upcoming releases on one or more streaming platforms, we see signs of the degree to which the streaming economy has changed not only the music industry, but the very experience of listening to music and engaging in musical culture. Unit sales and revenue figures for different formats reflect this shift: Compared to Spotify’s over 100 million listeners at the beginning of 2025¹⁴³—each of whom may listen to many different songs, albums, and artists—only 32.9 million CDs were sold in the U.S. in 2024.¹⁴⁴ Scholars of media and culture have noted the ways in which the rise of streaming platforms has changed the experience of engaging in music, including through forming new lines of class distinction.¹⁴⁵

[<https://web.archive.org/web/20260114034353/https://www.statista.com/statistics/1261865/youtube-premium-subscribers/>] (last visited July 10, 2025).

140. Tom Triggs, *Is This the End of Tidal?*, SOUNDGUYS (Mar. 10, 2025), <https://www.soundguys.com/the-end-of-tidal-132265/>

[<https://web.archive.org/web/20251104232613/https://www.soundguys.com/the-end-of-tidal-132265/>]. When it was originally launched, Tidal was partly owned by musicians—though it did not resemble models of cooperative governance, as it did not invite other musicians to join as owner-members, while it did carry their music. See Sam Sanders, *Jay Z’s Music Service, Tidal, Arrives with a Splash, and Questions Follow*, NPR (Apr. 1, 2015), <https://www.npr.org/sections/therecord/2015/03/31/396634244/jay-zs-music-service-tidal-arrives-with-a-splash-and-questions-follow>

[<https://web.archive.org/web/20190815170804/http://www.gpb.org/news/2015/04/01/jay-zs-music-service-tidal-arrives-splash-and-questions-follow>].

141. Daniel Thomas, *French Music Streamer Deezer Breaks Even for First Time*, FIN. TIMES (Mar. 18, 2025), <https://www.ft.com/content/0128384e-dabe-4788-89bb-63a33e78c77f> [<https://web.archive.org/web/20260103030505/https://www.ft.com/content/0128384e-dabe-4788-89bb-63a33e78c77f>].

142. See CARLSSON & LEIJONHUFVUD, *supra* note 121.

143. *Number of Active Users of Major Music Streaming Services*, *supra* note 6.

144. RIAA, *supra* note 9.

145. See, e.g., Jack Webster, *Taste in the Platform Age: Music Streaming Services and New Forms of Class Distinction*, 23 INFO, COMM. & SOC’Y 1909, 1909 (2020) (“Music streaming services, such as Spotify, have the potential to transform the social dynamics of music consumption in ways not previously encountered.”).

Streaming platforms' power also has political ramifications. Each platform has prodigious lobbying operations, which they deploy to influence public policy in various jurisdictions on topics including intellectual property and data privacy.¹⁴⁶ Private investments by major streaming executives often involve matters of public policy, including national security, as in the case of Spotify CEO Daniel Ek's investments in European defense technology companies manufacturing weapons for the Russo-Ukrainian War and, potentially, other global conflicts.¹⁴⁷ Jeff Bezos, the CEO of Amazon Music's parent company, owns the *Washington Post*, whose opinion journalists he has personally directed to write "in support and defense of two pillars: personal liberties and free markets."¹⁴⁸ While platform executives do not always exercise their power within the confines of the music industry alone, the power the platforms hold in the music industry adds to and reinforces the power accrued by these figures in general.

C. HOW MUSIC STREAMING SERVICES WORK

Today, music streaming services perform three essential functions—which, while interrelated, are distinct. First, they are hosts of music: They carry recorded music from its creators to its listeners, who can engage with the music

146. Tripp Mickle, *Apple Keeps Losing Patent Cases. Its Solution: Rewrite the Rules*, N.Y. TIMES (Mar. 19, 2024), <https://www.nytimes.com/2024/03/19/technology/apple-patents-lobbying.html> [https://web.archive.org/web/20250623051154/https://www.nytimes.com/2024/03/19/technology/apple-patents-lobbying.html]; Caitlin Oprysko, *Spotify, Music Publishers Lobby Up Amid Royalties Fight*, POLITICO (Aug. 14, 2024), <https://www.politico.com/newsletters/politico-influence/2024/08/14/spotify-music-publishers-lobby-up-amid-royalties-fight-00174062> [https://web.archive.org/web/20240820184357/https://www.politico.com/newsletters/politico-influence/2024/08/14/spotify-music-publishers-lobby-up-amid-royalties-fight-00174062]; Jeffrey Dastin, Chris Kirkham & Aditya Kalra, *Amazon Wages Secret War on Americans' Privacy, Documents Show*, REUTERS (Nov. 19, 2021), <https://www.reuters.com/investigates/special-report/amazon-privacy-lobbying/> [https://web.archive.org/web/2025111201725/https://www.reuters.com/investigates/special-report/amazon-privacy-lobbying/] (on the lobbying efforts of Jay Carney, the former White House Press Secretary and current Amazon executive, to defeat consumer privacy regulations).

147. Tim Bradshaw & Ivan Levingston, *Spotify's Daniel Ek Leads €600mn Investment in German Drone Maker Helsing*, FIN. TIMES (June 16, 2025), <https://www.ft.com/content/cdc02d96-13b5-4ca2-aa0b-1fc7568e9fa0?shareType=nongift> [https://web.archive.org/web/20260103020457/https://www.ft.com/content/cdc02d96-13b5-4ca2-aa0b-1fc7568e9fa0?shareType=nongift].

148. Mandy Taheri, *Bezos Makes Big Change to Washington Post Opinion Focus, Endorsed by Musk*, NEWSWEEK (Feb. 26, 2025), <https://www.newsweek.com/bezos-makes-big-change-washington-post-opinion-focus-endorsed-musk-2036618> [https://web.archive.org/web/20251101213937/https://www.newsweek.com/bezos-makes-big-change-washington-post-opinion-focus-endorsed-musk-2036618].

in a variety of ways. Second, they are data collectors and assigners. Some data collection is inherent in the host function: To carry a track, a service must record its name, its artist, its rights holders, and various other basic information; for listeners to make playlists, the service must retain the contents of that playlist. But streaming platforms collect and assign data far beyond this basic level, creating detailed portraits of listener behavior and assigning an enormous variety of labels to music, creating a valuable resource for the service to exploit. Third, streaming services are music recommenders. Both through curating playlists and through recommending music to users algorithmically based on the data they collect and assign, streaming services steer each user towards certain music they host. Within each of these functions, streaming services work with all the quintessential characteristics of platform enterprises.¹⁴⁹ Each of these dynamics invites consideration to better understand how streaming services work and why the law should treat them as platforms.¹⁵⁰

1. As Hosts

Streaming services are, at their most basic level, hosts of music. To host music, streaming services negotiate licenses to offer music with various rights holders for musical works and recordings. The process for obtaining licenses for musical works is fairly straightforward. For mechanical rights, they must calculate and pay the statutory rate per work to the Mechanical Licensing Collective, which pays it out to individual rights holders such as publishers and songwriters.¹⁵¹ For performance rights, the streaming platforms negotiate deals with the PROs, under which they receive blanket licenses to play the works in the PROs' catalogs in exchange for royalty payments that the PROs subsequently distribute to publishers and songwriters.¹⁵²

149. See RICKS ET AL., *supra* note 10, at 8–10 (listing these characteristics).

150. While this description of how streaming services work will, in part, survey dynamics that this Article goes on to argue are themselves problems of music's platformization, it is intended that this section should be purely descriptive.

151. Before 2021, when the Mechanical Licensing Collective began operation, these licenses were administered by the Harry Fox Agency, as they still are for physical media. See U.S. COPYRIGHT OFF., *supra* note 23, at 21; SCHERER, *supra* note 23, at 16–17.

152. However, these deals may not always follow the prices and terms set by the government or the PROs, as the law allows the option of privately negotiated rates in lieu of publicly set or blanket rates. See 17 U.S.C. § 115(c)(2)(a)(i) ("License agreements voluntarily negotiated at any time between one or more copyright owners of nondramatic musical works and one or more persons entitled to obtain a compulsory

For sound recordings, however, the streaming platforms must negotiate deals in a private marketplace with the relevant rights holders. These rights holders include the major labels, the Merlin Network representing independent labels, and other counterparties—labels, distributors, and independent recording artists—as necessary. Streaming platforms typically pay the rights holders of sound recordings on a pro-rata basis: They calculate the platform’s total pool of net revenues and make monthly payments to rights holders proportional to the percentage of the platform’s total streams—defined as tracks played for over thirty seconds—consisting of that rights holder’s tracks. Several elements of this formula are, importantly, subject to the terms of each individual licensing contract. For example, how the platform calculates its “net revenues” may be stipulated differently in each individual contract.¹⁵³ Rights holders may also be offered lower royalty payments in exchange for promotion on the platform via its function as a music recommender. In some cases, they may also include guaranteed minimum total payments—as they were for the major labels upon initially signing. Importantly, though, these contracts are mostly not public, except for those that have leaked to the press.¹⁵⁴ Following these payouts to rights holders—largely labels—the distribution of royalties to recording artists is then left up to the dictates of their individual contracts with their labels.¹⁵⁵ Each of these layers of contractual alteration to the standard pro-rata formula results in highly variable payments to rights holders.

To be sure, not all music on streaming services is licensed from record labels. Artists without a label may offer music on streaming services through a third-party distributor, such as DistroKid, a company in which Spotify owns a

license [. . .] shall be given effect in lieu of any determination by the Copyright Royalty Judges”); *see also* *United States v. Am. Soc’y of Composers, Authors & Publishers*, No. 41-1395, 2001 WL 1589999, at *3 (S.D.N.Y. June 11, 2001) (“ASCAP is hereby enjoined and restrained from [. . .] [l]imiting, restricting, or interfering with the right of any member to issue, directly or through an agent other than a performance rights organization, non-exclusive licenses to music users for rights of public performance.”).

153. In some circumstances, it may also be affected by whether platform subscription packages bundle access to music and other forms of content, such as audiobooks, thereby diluting the royalty pool for musicians. This has been an issue of bipartisan concern for lawmakers. Audrey Gibbs, *Senators Blackburn, Lujan Request FTC Investigate Spotify Subscription Bundle Practices*, TENNESSEAN (Jun. 23, 2025), <https://www.tennessean.com/story/entertainment/music/2025/06/20/tennessee-marsha-blackburn-ben-ray-lujan-spotify-subscriptions/84290158007/> [<https://web.archive.org/web/20260103020510/https://www.tennessean.com/story/entertainment/music/2025/06/20/tennessee-marsha-blackburn-ben-ray-lujan-spotify-subscriptions/84290158007/>].

154. *See* Xiyin Tang, *Privatizing Copyright*, 121 MICH. L. REV. 753 (2023) (on the confidentiality of major copyright contracts with digital platforms).

155. PELLY, *supra* note 13, at 151 (on the variation among artists’ label contracts, including advances and other remuneration mechanisms).

partial stake.¹⁵⁶ Streaming platforms also directly commission music from producers, often in exchange for lower royalty payments.¹⁵⁷ These discounts have been exploited as a business strategy by Spotify to boost margins, including through a category of recordings known internally as “perfect fit content,” or PFC.¹⁵⁸ Noting that listeners of certain proprietary playlists were often passive rather than active listeners, who would keep playlists on in the background regardless of the specific tracks they included, Spotify made deals with individual record producers to offer low royalty payments in exchange for music that could be comfortably interspersed into such playlists.¹⁵⁹

Once they have obtained these licenses, they offer the licensed music to users on a virtual interface, which functions as a library of recorded music that also incorporates features of social networking, like the ability to create and share playlists. From the perspective of users, music streaming platforms appear as libraries of music, with a search bar that one can use to navigate to artists, albums, and songs. These interfaces may be accessed either on computers or through mobile apps. On them, users can save artists, albums, and tracks to their own individual libraries. They can follow artists and other users to get updates about new releases and see other users’ listening activity across the platform. They can also make playlists, which involves collecting and sequencing musical tracks from across the platform.

The services also host several other features that resemble or are directly

156. Jem Aswald, *Spotify Acquires Stake in Distrokid, Tightening Squeeze on Indie Distributors*, YAHOO! ENT. (Oct. 17, 2018), <https://www.yahoo.com/entertainment/spotify-acquires-stake-distrokid-tightening-135856486.html> [<https://perma.cc/F5U6-AQYD>]. Though Spotify has since sold shares in the enterprise, it is not clear that it has divested from it entirely or that it does not retain a continued interest in independent music distribution. See Paul Resnikoff, *Spotify Quietly Sells Two-Thirds of Its Distrokid Stake for \$167 Million. Is This the End of Spotify’s “Disintermediation” Dream?*, DIGIT. MUSIC NEWS (Oct. 27, 2021), <https://www.digitalmusicnews.com/2021/10/27/spotify-sells-distrokid/> [<https://web.archive.org/web/20251230045109/https://www.digitalmusicnews.com/2021/10/27/spotify-sells-distrokid/>].

157. Liz Pelly, *The Ghosts in the Machine*, HARPER’S (Jan. 2025), <https://harpers.org/archive/2025/01/the-ghosts-in-the-machine-liz-pelly-spotify-musicians/> [<https://web.archive.org/web/20260105192310/https://harpers.org/archive/2025/01/the-ghosts-in-the-machine-liz-pelly-spotify-musicians/>] (documenting this practice).

158. *Id.*

159. Reports of this practice resulted in a scandal that described Spotify as contracting with “fake artists” to maximize its revenue. Whether the artists were actually “fake” or not—the difference being in the contractual mechanism at play, rather than the humanity of the musicians—Spotify was nonetheless incentivized to give PFC tracks preferential treatment on their playlists—which are important revenue- and attention-generating channels for non-PFC artists—because they had directly commissioned those tracks for relatively lower royalty payments. *Id.*; see *infra* Parts III.B, D (on the consequences of this type of commission for music’s political economy).

integrated with those of traditional social networks. On Spotify, users can collaborate on playlists, including some that are generated algorithmically called “blends.” They can follow other users and set up a feed that shows, in real time, what the users they follow are listening to. They can share songs, playlists, and albums with connections on other platforms including social media like Instagram and X. They can also participate in Spotify’s famous annual marketing campaign, “Spotify Wrapped,” which collects information on the user’s listening habits over the course of a year into a package meant to be shared on social media. Despite the preponderance of these social features, data from different streaming platforms are not interoperable with each other: A playlist housed on Apple Music, for example, cannot be heard by a Spotify user unless that user also has an Apple Music account. This restricts the social networking features on the services themselves to the closed ecosystem of each individual streaming platform.

From the musician’s perspective, streaming platforms typically offer an additional interface that is specific to the musician’s role as producers, rather than consumers, of music. On Spotify, this interface is known as Spotify for Artists (“S4A”). Introduced in 2013, S4A offers artists access to a host of metrics related to their performance on the platform: which songs are receiving the most streams, in what contexts and placements listeners are hearing them (i.e., on the artist’s albums or singles or on specific playlists), and even what qualities of the artist’s music most resonate with listeners.¹⁶⁰ Apple Music and Amazon Music each possess analogous interfaces for artists.¹⁶¹

Third, the services earn revenue from user subscription fees and advertisements, some of which they pay to rights holders in the form of royalties after taking a cut. Some services, including Apple Music, are subscriber-only. Others, such as Spotify, operate under the “freemium” model, deriving revenue from both subscribers and ads. The breakdown may vary widely between services: Only around 13 percent of Spotify’s revenue comes from advertisers,¹⁶² while most of YouTube’s revenue comes from advertisers,

160. Pelly, *supra* note 13, at 162.

161. The music streaming platforms that carry advertisements—currently, of the major platforms, only Spotify and YouTube—also offer an interface for advertisers. YouTube, as a subsidiary of Alphabet, uses Google’s advertising technology platform. Spotify aggressively markets itself to advertisers, offering them an interface to create audio ads. *Spotify Advertising*, SPOTIFY, <https://ads.spotify.com/en-US/> [https://perma.cc/4YL5-UNWP] (last visited Apr. 23, 2025).

162. Pelly, *supra* note 13, at 139.

its premium subscriber base being relatively small.¹⁶³ That said, the prices charged for each service are relatively uniform. As of January 2026, Spotify charged \$12.99 per month for its basic individual user subscription, “Spotify Premium,”¹⁶⁴ while Apple Music, Amazon Music, and Tidal each charged \$10.99 (though some variation exists when taking into account bundle deals with related lines of business offered by these competitors).¹⁶⁵ On each, payment of these fees grant users access to over 100 million individual songs, collected in singles, albums, and compilations (as packaged by record labels), as well as in playlists which are generated both by users and the platform itself. These revenues—from subscriptions and ads—form the basis from which the platform’s “net revenues” are calculated, which are in turn used to calculate the payments due to each individual rights holder under the pro-rata system as it is specified per contract.¹⁶⁶

Streaming services also often offer subscription packages that bundle access to music streaming with other types of content, including audiobooks and podcasts (in the case of Spotify)¹⁶⁷ and video or e-commerce discounts (in the case of Amazon Music’s integration with Amazon Prime subscriptions).¹⁶⁸ These bundles may then affect the calculation of the total royalty pools from

163. Shewale, *supra* note 138.

164. As of this writing, Spotify has raised its subscription prices in each of the last three years. See Jordan Valinsky, *Spotify Raises Its Prices Again*, CNN (Jun. 3, 2024), <https://www.cnn.com/2024/06/03/tech/spotify-price-increase/index.html> [<https://web.archive.org/web/20260105193954/https://www.cnn.com/2024/06/03/tech/spotify-price-increase/index.html>]; *Upcoming Changes to Spotify Premium Subscriptions*, SPOTIFY (Jan. 16, 2025), <https://newsroom.spotify.com/2026-01-15/premium-pricing-update/> [<https://web.archive.org/web/20260227191021/https://newsroom.spotify.com/2026-01-15/premium-pricing-update/>].

165. *Subscription Costs of U.S. Music Streaming Offers 2024*, STATISTA (May 20, 2025), <https://www.statista.com/statistics/1551188/music-streaming-monthly-subscription-cost-us/> [<https://web.archive.org/web/20260105194019/https://www.statista.com/statistics/1551188/music-streaming-monthly-subscription-cost-us/>].

166. PELLY, *supra* note 13, at 150–51.

167. Jem Aswad & Todd Spangler, *Spotify’s Music-Audiobook Bundle Means a Lower Royalty Rate for U.S. Songwriters, but Company Promises Record Payouts*, VARIETY (Apr. 18, 2024), <https://variety.com/2024/digital/news/spotify-music-audiobook-bundle-lower-royalty-for-songwriters-1235974942/> [<https://web.archive.org/web/20260105194121/https://variety.com/2024/digital/news/spotify-music-audiobook-bundle-lower-royalty-for-songwriters-1235974942/>].

168. Dave Johnson, *How Much Does Amazon Music Cost?*, ABOUT AMAZON (Feb. 27, 2025), <https://www.aboutamazon.com/news/entertainment/amazon-music-price> [<https://web.archive.org/web/20260105194019/https://www.aboutamazon.com/news/entertainment/amazon-music-price>].

which artists are compensated.¹⁶⁹

2. As Data Collectors and Assigners

Streaming services collect vast amounts of data on user engagement.¹⁷⁰ These interactions line up to those that streaming services facilitate on their host interfaces, and they can be ascertained through individual user downloads of their data. Spotify, for example, retains the contents of user playlists, as well as every query one has ever plugged into the interface's search engine, along with the date and time the query was made.¹⁷¹ They retain a user's entire listening history—a record of every track the user has streamed on the platform—up to the number of milliseconds a track was streamed, where it was heard, whether it was intentionally chosen, and whether it was paused or skipped.¹⁷² This is all in addition to other information collected by the services, including users' names, email addresses, phone numbers, and location information.

Crucially, streaming platforms also *assign* data to the material they host, creating an extensive network of metadata associated with each individual track.¹⁷³ The platforms may tag tracks according to conventional¹⁷⁴ musical identifiers such as key or tempo, but they do not stop there. While the relationship between empiricism and genre classifications has always presented a conceptual challenge—these classifications themselves being socially contingent¹⁷⁵—streaming platforms go far beyond these already subjective classifications to include metadata that are much more suspect, including both

169. The question of whether bundle subscriptions dilute payments for musicians has been a subject of concern from a bipartisan group of Senators. See Letter from Senators Marsha Blackburn and Ben Ray Lujan to FTC Chair Andrew Ferguson (June 20, 2025), <https://www.blackburn.senate.gov/services/files/42F8C53C-F248-45A3-8E37-EC4A6BEEA994> [<https://web.archive.org/web/20260227191732/https://www.blackburn.senate.gov/services/files/42F8C53C-F248-45A3-8E37-EC4A6BEEA994>].

170. As one former Spotify employee put it, "You should be under the assumption that any interaction you have within the Spotify app is going to be recorded." PELLY, *supra* note 13, at 137.

171. *Id.*

172. *Id.* at 137–38. These examples come from Pelly's download of her own user data, but they are replicable by this author's own efforts.

173. *Id.* at 94–95, 122–24; MARIA ERIKSSON ET AL., SPOTIFY TEARDOWN 73–74 (2019).

174. Conventional, at least, in Western systems of musical analysis.

175. See, e.g., Franco Fabbri, *A Theory of Musical Genre: Two Applications*, in D. HORN & P. TAGG, EDS., POPULAR MUSIC PERSPECTIVES 52, 52 (1981) (defining a musical genre as "a set of musical events (real or possible) whose course is governed by a definite set of socially accepted rules").

emotional and cultural descriptors.¹⁷⁶ “Valence,” for example, is an attribute tracked by Spotify on a scale from 0.0 to 1.0, described by the platform as the “musical positiveness conveyed by a track.”¹⁷⁷ To further quote the platform’s public statements, “tracks with high valence sound more positive (e.g. happy, cheerful, euphoric), while tracks with low valence sound more negative (e.g. sad, depressed, angry).”¹⁷⁸ Other descriptors on Spotify include a track’s “energy,”¹⁷⁹ its “danceability,”¹⁸⁰ and its “acousticness,” which seems to be the degree of an acoustic guitar’s presence on a track—a key signifier of music that might fit on certain platform playlists.¹⁸¹ Music may also be classified according to niche cultural trends associated with social media, such as “cottagecore” or “liminal spaces”—which might not make sense to many users, but which nevertheless might appear in the platforms’ recommendation features.¹⁸² Theoretically and practically, the metadata that may be assigned to music on streaming platforms are limitless, and their relation to the actual content of the music potentially infinitesimal.¹⁸³

Despite the conceptually suspect nature of the musical identifiers used by the platforms, combinations of user data and track metadata allow streaming services to make inferences about user behavior.¹⁸⁴ Platforms offer these

176. Streaming platforms claim in public statements that metadata is assigned by labels and distributors before it is delivered to streaming platforms, and any problems with metadata must be communicated to those intermediaries. See, e.g., *Music Metadata Guidelines*, SPOTIFY <https://support.spotify.com/us/artists/article/metadata-formatting-guidelines/> [<https://perma.cc/8Y8B-5QAG>] (last visited July 11, 2025) (“Your metadata is set by your label or distributor before they deliver your music to us. To fix any problems with your music’s metadata, your label or distributor needs to send an update to us with the right info.”). This, however, does not absolve the streaming platforms of responsibility for the function of assigning metadata, given that metadata is required to make its host function and recommendation systems work. Metadata assignment by labels and distributors may thus be thought of as a function that streaming platforms outsource to those intermediaries.

177. PELLY, *supra* note 13, at 95.

178. *Id.*

179. *Id.*

180. Deniz Duman et al., *Music We Move To: Spotify Audio Features and Reasons for Listening*, 17 PLOS ONE 1 (2022).

181. *Id.*; see also PELLY, *supra* note 13, at 95.

182. PELLY, *supra* note 13, at 118–24 (on the incorporation of internet micro-trends into Spotify’s track metadata).

183. There is an entire field of analysis committed to the proposition that one can objectively quantify music’s emotional impact on users of streaming services, called “Music Emotion Recognition.” PELLY, *supra* note 13; NICK SEAVER, *COMPUTING TASTE: ALGORITHMS AND THE MAKERS OF MUSIC RECOMMENDATION* (2022).

184. PELLY, *supra* note 13, at 138 (on the inferences made from the author’s own dataset).

inferences *en masse* to rights holders as a condition of licensing agreements.¹⁸⁵ Platforms also sell them to third-party data brokers, who may also add categories of data to the platforms' metrics.¹⁸⁶ In other words, platforms monetize the data they collect on users and assign to music as a valuable resource. Market participants perceive these data as particularly valuable for their purported insights not only into users' behavior, but into their psychology, in turn helping them sell ads or target music recommendations. Researchers have demonstrated that listeners exhibit qualities of psychological ownership over their music libraries on streaming platforms, which generates high levels of user loyalty.¹⁸⁷ Playlists, too, offer insights into users' psychological profiles from the degree of creativity involved in making them.¹⁸⁸ Inferences about user psychology and behavior are thus sources of value for streaming platforms, including for their functions as ad markets and as music recommenders.

3. As Recommenders

Music streaming services are not only hosts or data collectors and assigners: They are also recommenders of music. When streaming platforms were initially introduced, few imagined that they would also be music recommenders, which was seen as a distinct line of business, with firms such as Echo Nest, Tunigo, and Songza already engaged in it, along with individual platform users.¹⁸⁹ Beginning in the early 2010s, however, industry observers began to assert that the streaming platforms should pursue growth through incorporating recommender functions, rather than through simply converting free users to subscribers.¹⁹⁰ During Spotify's "curatorial turn" in 2012 and 2013,¹⁹¹ they acquired these music recommenders, whose functions were

185. Maaso & Hagen, *supra* note 15, at 22–25, 27–29 (on the value of real-time data on listener engagement for record executives).

186. PELLY, *supra* note 13, at 138.

187. Gary Sinclair & Julie Tinson, *Psychological Ownership and Music Streaming Consumption*, 71 J. BUS. RSCH. 1 (2017).

188. Anja Nylund Hagen, *The Playlist Experience: Personal Playlists in Music Streaming Services*, 38 POPULAR MUSIC & SOC'Y 625 (2015).

189. PELLY, *supra* note 13, at 94 ("Before Tunigo and Echo Nest, user-generated playlists defined Spotify's curation ecosystem."). The function of music recommendation was also, and continues to be, performed offline by journalists, critics, advertisers, and social connections.

190. Antony Bruno, *Growth by Curation: Playlists, Not "Freemium" Business Models, Will Drive the Success of Subscription Music Services*, BILLBOARD MAG., Sep. 17, 2011, at 10.

191. See ERIKSSON ET AL., *supra* note 173, at 59–60 (on Spotify's "curatorial turn").

subsequently incorporated into the platform's design.¹⁹² In the years since, the recommender function has become entrenched within the basic business model of the platforms, such that users are conditioned to the idea that music platforms will provide them with music recommendations that are both useful and engagement-generating. Today, music streaming's recommendation function is evident from the moment users encounter a service's interface. On Spotify, for instance, users are provided with a home screen of playlists filled with personalized recommendations.

In general, the services' recommender function comes in two varieties: curatorial—that is, through platform employees populating the platform's proprietary playlists—and algorithmic—that is, utilizing the inferences made through data networks to recommend music to users through a variety of automated features. Streaming platforms typically offer playlists that are meant to collect and recommend music associated with certain genres, moods, or activities. These proprietary playlists—different from playlists that users make themselves—are populated by curators, employees of the platforms whose job it is to select music to place on them.¹⁹³ These playlists are very popular with platform listeners, in no small part because of the frequency with which they are recommended to users. “RapCaviar,” for example, is the leading hip-hop playlist on Spotify, constructed by in-house curators.¹⁹⁴ “Lorem,” a “genre-fluid” playlist with a curiously generic title, is a leading source of music determined

192. PELLY, *supra* note 13, at 27–29, 93 (on Spotify's acquisitions of Tunigo and Echo Nest, and Google's of Songza). These acquisitions resemble a pattern in which dominant technology platforms acquire small startups and absorb their functionality. See Mark A. Lemley & Matthew T. Wansley, *Coopting Disruption*, 105 B.U. L. REV. 457 (2025) (on the acquisition of nascent firms by large technology platforms and its effects on innovation).

193. See, e.g., Kristin Robinson, *Spotify's Global Head of Editorial Talks AI Music, New Editorial Features and Short-Form Video*, BILLBOARD (Apr. 17, 2025), <https://www.billboard.com/pro/spotify-global-head-editorial-sulinna-ong-interview/> [<https://web.archive.org/web/20260105202516/https://www.billboard.com/pro/spotify-global-head-editorial-sulinna-ong-interview/>] (interviewing the head of Spotify's curatorial team).

194. Craig Marks, *How Hits Happen Now*, VULTURE (Sep. 23, 2017), <https://www.vulture.com/2017/09/spotify-rapcaviar-most-influential-playlist-in-music.html> [<https://web.archive.org/web/20260105202544/https://www.vulture.com/2017/09/spotify-rapcaviar-most-influential-playlist-in-music.html>] (describing RapCaviar as “the most influential playlist in music”); Paul Resnikoff, *What Succeeds on Spotify's RapCaviar—A Statistical Analysis*, DIGIT. MUSIC NEWS (Aug. 18, 2020), <https://www.digitalmusicnews.com/2020/08/18/spotify-rapcaviar-analysis/> [<https://web.archive.org/web/20260105202628/https://www.digitalmusicnews.com/2020/08/18/spotify-rapcaviar-analysis/>] (“With more than 13 million followers to its credit, Spotify's foremost hip-hop playlist, RapCaviar, can change the trajectory of both individual tracks and entire careers.”).

by Spotify curators to be well-suited to the platform in general.¹⁹⁵ The prospect of placement on these playlists is understood by industry participants to have the power to make or break artists' careers.¹⁹⁶

Other features—indeed, the vast majority of those that constitute streaming's recommendation function—are algorithmic. On Spotify, these include a user's "Daily Mixes," which collect music from various genres that the user has listened to in the past; their "daylists," which update regularly throughout the day; and "Discover Weekly," a playlist of personalized recommendations from new releases based on past listening habits.¹⁹⁷ Other personalized algorithmic features include "Smart Shuffle," which intersperses songs on user-made playlists with recommended tracks, and "AutoPlay," which allows an endless selection of tracks to continue streaming from a user's account automatically after an album or playlist has concluded.¹⁹⁸ These features each have their counterparts on Apple Music and Amazon Music. More recently, platforms have piloted "DJ" experiences branded as AI-powered and including an artificial human voice,¹⁹⁹ how they differ in substance from other algorithmically generated playlists, known as "mixes" or "radios," is unclear. Each of these features is powered by the inferences made from the data assigned and collected by the platforms, which allows for recommendation to be hyper-targeted to users.²⁰⁰

Importantly, algorithmic recommendation is not neutral or purely aesthetic in nature. It is highly influenced by the prices and terms set in licensing contracts with individual rights holders. For example, contracts may stipulate that a particular track be given added weight in a streaming service's algorithm or shown more often to subgroups of users. This is the key feature of Spotify's "Discovery Mode," which allows for higher algorithmic weights for

195. Veronika Muchitsch, "Genrefluid" Spotify Playlists and Mediations of Genre and Identity in Music Streaming, 13 IASPM J. 48 (2022); PELLY, *supra* note 13, at 114, 140, 180–82.

196. Anne Steele, *The Playlist Power Broker Who Makes or Breaks New Artists*, WALL ST. J. (Jan. 17, 2025) [https://www.wsj.com/arts-culture/music/spotify-playlist-sulinna-ong-algorithm-7835e0ac?](https://www.wsj.com/arts-culture/music/spotify-playlist-sulinna-ong-algorithm-7835e0ac?https://web.archive.org/web/20260120064120/https://www.wsj.com/arts-culture/music/spotify-playlist-sulinna-ong-algorithm-7835e0ac) [https://web.archive.org/web/20260120064120/https://www.wsj.com/arts-culture/music/spotify-playlist-sulinna-ong-algorithm-7835e0ac].

197. PELLY, *supra* note 13, at 97.

198. *Id.* at 97–99, 186–88.

199. *Spotify Debuts a New AI DJ, Right in Your Pocket*, SPOTIFY (Feb. 22, 2023), <https://newsroom.spotify.com/2023-02-22/spotify-debuts-a-new-ai-dj-right-in-your-pocket/> [https://perma.cc/HZ3J-2RJ9].

200. Robert Prey, *Nothing Personal: Algorithmic Individuation on Music Streaming Platforms*, 40 MEDIA, CULTURE & SOC'Y 1086 (2017); PELLY, *supra* note 13, at 92–105.

certain music in exchange for an additional commission to Spotify (and, sometimes, other distributor intermediaries, like TuneCore)—in other words, accepting lower royalty payments.²⁰¹

III. MUSIC STREAMING PLATFORMS AND THEIR PROBLEMS

From this general overview of how music streaming services function as hosts, data collectors, and assigners, and as recommenders, five essential features stand out that resemble those of traditional platform industries: network effects, high capital costs, economies of scale, lock-in effects, and power as economic intermediaries.²⁰² These features are those that, when present in other industries, have historically led policymakers to regulate them as public utilities.²⁰³ Unregulated platform industries with these features are typically subject to the risks of monopoly or oligopoly market structures: high prices for consumers and low wages for workers; service quality degradation; and the exercise of government-like power over a wide swath of commerce.²⁰⁴ In music streaming, these risks play out in at least four general groups. First are problems with artist pay, which is discriminatory, opaque, and often declining. Second are problems with user surveillance, which raise concerns both on the grounds of user privacy and for how surveillance reinforces the platforms' power. Third, there are problems with the discriminatory treatment of artists through platform placement, related to the platforms' function as music recommenders. Fourth are the platforms' threats to cultural heterogeneity, in their distortions of the music marketplace and, over time, of music itself.

201. *Spotify Discovery Mode*, TUNECORE, <https://support.tunecore.com/hc/en-us/articles/9010994114836-Spotify-Discovery-Mode> [https://web.archive.org/web/20260201171232/https://support.tunecore.com/hc/en-us/articles/9010994114836-Spotify-Discovery-Mode] (last visited Feb. 1, 2026); PELLY, *supra* note 13, at 186–89 (describing Discovery Mode and its lucrativeness for the platform); Letter from Jerrold Nadler, Chair, H. Comm. on the Judiciary, to Daniel Ek, CEO, Spotify (June 2, 2021), <https://nadler.house.gov/news/documentsingle.aspx?DocumentID=394661> [https://web.archive.org/web/20260105203142/https://nadler.house.gov/news/documentsingle.aspx?DocumentID=394661] (raising concerns about the payola-like dynamics of Discovery Mode).

202. See RICKS ET AL., *supra* note 10, at 8–10 (on the characteristics typical of network, platform, and utility industries).

203. *Id.*

204. *Id.* at 13–17.

A. WHY MUSIC STREAMING SERVICES ARE PLATFORMS

The first feature that music streaming services share with other platform enterprises is that they have network effects.²⁰⁵ Streaming services are only useful insofar as they serve many users and carry the music of many artists, both for artists and users to reach each other and for users to employ the social-networking features of the services with other users.²⁰⁶ Users making their own playlists, for example, want the platform to include music from all the artists they could want to put on a playlist, rather than having to switch between different platforms to listen to the music they want. Network effects also exist in the free, advertisement-based tier: As courts and economists evaluating the advertising technology business have found, online advertisers are only interested in a platform with maximum consumer reach.²⁰⁷

The second feature is the enormous cost of building a music streaming platform from scratch, which acts as a high barrier to entry. Put simply, offering a streaming service is very expensive. The necessary expenses include not only the costs of licensing millions of songs, which may add up to hundreds of millions of dollars,²⁰⁸ but also the transaction costs associated with the several different categories of licenses platforms must obtain, as well as the costs of

205. *Id.* at 9 (noting network effects as a defining characteristic of platform or network industries).

206. Other observers, including the European Commission, have noted the network effects of music streaming. *See, e.g.*, Case T-201/04, *Microsoft v. Comm'n*, 2007 E.C.R. II-3620; E. Jordan Teague, *Saving the Spotify Revolution: Recalibrating the Power Imbalance in Digital Copyright*, 4 CASE W. RESERVE J.L. TECH. & INTERNET 207 (2012). Some, however, add the qualifier that they are “indirect” network effects, meaning that one distinct group of users experience network effects because of the presence of other groups, but the others do not. *See, e.g.*, Imanol Ramirez, *Merger Thresholds in the Digital Economy*, 45 DEL. J. CORP. L. 433, 439 (2021). For practical policy-making purposes, the importance of this distinction is not clear: The relative value of the service, for at least some of its users, increases the more others also use it, thus making a larger, more interconnected network preferable. *Contra* Kal Raustiala & Christopher Jon Sprigman, *The Second Digital Disruption: Streaming and the Dawn of Data-Driven Creativity*, 94 N.Y.U. L. REV. 1555, 1608 (2019) (“There are no comparably powerful network effects operating for digital streaming services (though some try to introduce them via social media-style sharing features).”). While Professors Raustiala and Sprigman rightly note streaming platforms’ efforts to generate network effects through social networking features, they neglect the network effects present in the value of carrying as much music as possible to as many users as possible. Their analysis may also predate the more recent entrenchment of several social networking features such as Spotify Wrapped and playlist sharing.

207. *See* *United States v. Google LLC*, 778 F. Supp. 3d 797, 832 (E.D. Va. 2025) (“Scale is a crucial factor for ad tech companies’ ability to compete because of the importance of big data analytics for optimizing ad tech services and the significant network effects that exist in programmatic advertising.”); Catherine E. Tucker, *Online Advertising and Antitrust: Network Effects, Switching Costs, and Data as an Essential Facility*, 1 COMP. POL’Y INT’L 30 (2019). Recall also that Spotify originated as an advertising platform with music distribution as its secondary rationale. PELLY, *supra* note 13, at 11.

208. *See* Singleton, *supra* note 122 (discussing Sony’s original contract with Spotify).

measuring engagement to distribute royalties appropriately. There are also the inherent costs of maintaining a digital platform with which millions of users regularly interact, including the costs of building and updating an interface and the costs of cloud storage, the owners of which may charge monopoly or oligopoly rents.²⁰⁹

Third, the network effects and high capital costs inherent to the streaming model make streaming a business with economies of scale: As new users are added to the platform, the marginal cost of serving each new user decreases.²¹⁰ This is because many users are needed to recoup the high costs of licensing music, as well as the high fixed costs of establishing a music streaming platform. As economies of scale arise, streaming platforms act as middlemen between the users with which they interact, as each relies on the platform to reach the others. Put simply, streaming platforms are most useful when they are large-scale enterprises that connect many users.

The fourth apparent feature is the lock-in effect experienced by the platforms' users. In other words, the costs of switching to a different platform are high.²¹¹ While streaming music over time, users generate enormous amounts of data that is held by the platform: their listening history, their playlists, and music they have saved to their libraries. All of these data, including the copious and substantively suspect metadata associated with each individual unit, hold both psychological and economic value: psychological in the attachment listeners of music feel towards the music they enjoy,²¹² and economic in both the usefulness of the data to the platform²¹³ and in the high switching costs of exiting a platform where a user's data is stored. Playlists made on Apple Music, for example, are not portable to Spotify's platform; similarly, users of one platform cannot hear a song a friend sends to them from another platform. A lack of interoperability between platforms means that once a user builds up a certain amount of data on a particular platform—including playlists, saved songs and albums, and the mostly invisible yet consequential data used

209. For a discussion of the political economy of cloud computing, see Tejas Narechania & Ganesh Sitaraman, *An Antimonopoly Approach to Governing Artificial Intelligence*, 43 *YALE L. & POL'Y REV.* 95, 114–118 (2025).

210. See RICKS ET AL., *supra* note 10, at 8–9 (noting economies of scale as a characteristic of platform industries).

211. See *id.* at 9 (noting lock-in effects as a characteristic of unregulated platform industries).

212. Maaso & Hagen, *supra* note 15.

213. PELLY, *supra* note 13, at 142 (on Spotify's partnerships with data brokers).

by the platform to recommend music—they will be reluctant to exit that platform.²¹⁴ As one platform user told a pair of British researchers (of his use of Spotify as a recommender):

If I was to leave, jump ship and go to another streaming service, it's going to take a while for that streaming service to learn what I like. So for the first six or so months, or for the first year or something, it's going to have a few hits, but also a few misses because they don't know me as well as Spotify knows me.²¹⁵

Artists, too, are incentivized to maintain a presence on each platform, regardless of the specific terms set by each one, as delivering their already-made music to listeners is their primary objective.²¹⁶ As in other platform industries, this offers these counterparties a disincentive to exit, making competition for artists unlikely to be an effective source of discipline on the platforms to remediate the problems posed by their business models.

Recognizing the fifth notable feature is dependent in part upon the realization of the others. Because of the network effects inherent within the streaming model, the high capital costs of building a platform and the resultant economies of scale, and the high switching costs users face when moving from one platform to another (making competition between streaming services unlikely to serve as an effective disciplining mechanism), streaming platforms possess extraordinary bargaining power over the various parties that transact with them. This bargaining power is so great that personal relationships with platform employees might mean the difference between success and failure in

214. Streaming platforms typically offer users the option to download their data in large files that list their listening history, playlists, search queries, and other information. This data, however, is not automatically portable into analogous formats on other platforms; they are simply left as spreadsheets. See, e.g., *Understanding Your Data*, SPOTIFY, <https://support.spotify.com/us/article/understanding-your-data/> [<https://web.archive.org/web/20260115170055/https://support.spotify.com/us/article/understanding-your-data/>] (last visited Jan. 15, 2026).

215. Hracs & Webster, *supra* note 31, at 252.

216. An attempt at a large-scale artist boycott of Spotify over its CEO's investments in military technology companies made headlines in 2025. See, e.g., John Blistein, *Here Are the Artists Who Have Ditched Spotify Over Its CEO's Military Tech Ties*, ROLLING STONE (Sept. 10, 2025), <https://www.rollingstone.com/music/music-features/artists-left-spotify-ceo-daniel-ek-military-tech-1235425098/> [<https://web.archive.org/web/20260115170328/https://www.rollingstone.com/music/music-features/artists-left-spotify-ceo-daniel-ek-military-tech-1235425098/>]. But this episode has reinforced, rather than cast doubt on, the lock-in effects of the platform. As one market researcher noted, the loss of some artists may actually further incentivize other artists to remain, due to the zero-sum nature of Spotify's pro-rata compensation system. Tatiana Cirisano, *Some Artists Are Leaving Spotify (Again). Here's What's Different Now*, MIDIA RSCH. (Aug. 7, 2025), <https://www.midiaresearch.com/blog/some-artists-are-leaving-spotify-again-heres-whats-different-now> [<https://web.archive.org/web/20260115170807/https://www.midiaresearch.com/blog/some-artists-are-leaving-spotify-again-heres-whats-different-now>].

a musical career, as was indicated in a recent profile of the head of Spotify's playlist division.²¹⁷ By occupying the position of middlemen in the music industry with vast reach, music streaming platforms possess power inherent to their business model that they are poised to exploit in the course of a logical, profit-maximizing business strategy.

B. PROBLEMS WITH ARTIST PAY

If there is a single issue that has dominated public conversations about music streaming's political economy, it is the issue of artist pay. Reports that platforms pay artists mere fractions of cents on average per song²¹⁸—and have even discontinued payment for entire swaths of tracks based on their low number of plays²¹⁹—have galvanized widespread condemnation and led to new labor organizing efforts in the music industry.²²⁰ Streaming platforms introduce new dynamics that suppress compensation for many artists. These dynamics are linked to the services' network effects and platform power.

1. Discrimination

The system of compensation on music streaming platforms²²¹ raises at least three distinct problems. First, it is discriminatory. Price discrimination—charging different prices to different counterparties based not on the platform's differing costs to serve them, but on the counterparties' differing willingness to pay²²²—is a typical practice of unregulated platform enterprises.²²³ It is made

217. Anne Steele, *The Playlist Power Broker Who Makes or Breaks New Artists*, WALL ST. J. (Jan. 17, 2025), <https://www.wsj.com/arts-culture/music/spotify-playlist-sulinna-ong-algorithm-7835e0ac> [<https://web.archive.org/web/20260201172743/https://www.wsj.com/arts-culture/music/spotify-playlist-sulinna-ong-algorithm-7835e0ac>].

218. See *supra* note 11 and cited sources.

219. Aubrey, *supra* note 12 (reporting on Spotify's decision to discontinue payments for all tracks on its platform with fewer than 1,000 streams, over 60 percent of the music it offers).

220. See, e.g., *Make Streaming Pay*, UNITED MUSICIANS & ALLIED WORKERS, <https://weareumaw.org/make-streaming-pay> [<https://web.archive.org/web/20260115171956/https://weareumaw.org/make-streaming-pay>] (last visited Jan. 15, 2026) ("Music workers create the enormous wealth that streaming platforms accumulate for their CEOs and investors year after year. But artists continue to be underpaid, misled, and otherwise exploited by streaming platforms. While artists experience declining wages and increasingly precarious employment, the music industry as a whole has reaped unprecedented profits, and CEOs of tech companies have become billionaires.")

221. See *supra* Part II.C.1, 3.

222. RICKS ET AL., *supra* note 10, at 14–16.

223. *Id.*

possible by the platform's power over its counterparties, which in turn derives from its network effects, economies of scale, and its lock-in effects, giving counterparties little bargaining power or incentive to exit the platform.²²⁴ Price discrimination in platform industries is thus akin to the exercise of monopoly power, even in the absence of an actual monopoly over the provision of a particular good or service.²²⁵

In music streaming, price discrimination appears primarily as the payment of different prices to similarly situated artists and rights holders.²²⁶ These payments are both those from streaming platforms to rights holders, and those from rights holders (such as record labels) to artists.²²⁷ Because this discrimination takes place on the buy side, it is more accurately denoted as a form of monopsonistic or oligopsonistic price discrimination.²²⁸ It is made possible—and encouraged—by the private negotiation of licenses allowed under copyright law without affirmative rate regulation. Because the copyright system allows licenses for musical works to be privately negotiated, and because it requires private negotiation for licenses in sound recordings, the royalties paid out and the terms offered to each individual rights holder by streaming platforms are highly variable.²²⁹ A contract with a rights holder may stipulate a “promotional rate,” or lower royalty payments in exchange for promotion on the platform.²³⁰ They may enlarge or narrow the total pool of platform revenues from which payments are calculated.²³¹ They may grant large corporate rights holders, such as major labels and publishers, guaranteed minimum payments or

224. *Id.*

225. Indeed, oligopoly power, as is present in the music industry, functions similarly. *See id.* at 14–16 (on price discrimination and other forms of particularized value extraction as exercises of oligopoly power).

226. PELLY, *supra* note 13, at 148–52 (explaining the variations in Spotify's pro-rata payment system).

227. *Id.* at 151 (on the variability between similarly situated artists' recording contracts, including between independent and major record labels).

228. *See* ROBINSON, *supra* note 14, at 224–28 (on price discrimination and monopsony or oligopsony).

229. When some rates are regulated while others are left unregulated, what results is what copyright scholar Doug Lichtman calls the “seesaw effect,” wherein unregulated rates undermine the regulated ones because they can be adjusted in response to regulation. Douglas Lichtman, *The Seesaw Effect: How Unregulated Negotiations Undermine Regulated Prices in the Market for Music Streaming*, 47 COLUM. J.L. & ARTS 575 (2024). This is also an example of a more general phenomenon economists studying industrial organization have termed the “waterbed effect,” which is present in other industries with some form of rate setting, including telephones. *See* Roman Inderst & Tommaso M. Valletti, *Buyer Power and the “Waterbed Effect,”* 59 J. IND. ECON. 1 (2011); Christos Genakos & Tommaso Valletti, *Testing The “Waterbed” Effect in Mobile Telephony*, 9 J. EURO. ECON. ASSOC. 1114 (2011).

230. This is one way that streaming platforms' payment systems and their recommendation systems, and the problems of each, are highly interrelated. *See supra* Part II.C; *infra* Part III.D.

231. PELLY, *supra* note 13.

large advances from licensing deals, which may or may not be shared with artists.²³² Some music producers have even been directly commissioned by streaming platforms for lower royalty payments.²³³ On the flip side, rights holders with higher relative bargaining power than others may be able to extract higher royalty payments or preferable terms from streaming platforms to the disadvantage of other rights holders, such as the major labels obtaining most favored nation (MFN) clauses in their original contracts with Spotify, which prohibited any other counterparty from getting better terms than the major label in question.²³⁴

Adding up all these contractual quirks, kickbacks,²³⁵ and other modifications within the pro-rata system,²³⁶ the degree of discrimination on streaming platforms may even approach perfect price discrimination—when every counterparty is paid the minimum amount (or charged the maximum amount) they are willing to accept.²³⁷ On Spotify, for example, according to internal employee communications, “Each product-market-licensor combo has a unique royalty calculation.”²³⁸ In other words, Spotify pays a different price for every piece of recorded music on its platform. For 60 percent of the music on Spotify, its creators receive no compensation, since all songs with under 1,000 streams have been demonetized.²³⁹ This discrimination is further compounded in the system of private negotiation governing the terms of artists’ contracts with record labels, thereby adding an additional layer of price

232. U.S. COPYRIGHT OFF., *supra* note 23, at 77–78. In 2018, when Warner sold its stake in Spotify, it credited \$126 million to artists on its roster—only 25 percent of the sale’s revenue. See *Warner Sells Entire Stake in Spotify, Crediting Artists with 126m as a Result*, MUSIC BUS. WORLDWIDE (Aug. 7, 2018), <https://www.musicbusinessworldwide.com/warner-sells-entire-stake-in-spotify-crediting-artists-with-126m-as-a-result/> [<https://web.archive.org/web/20190608222239/https://www.musicbusinessworldwide.com/warner-sells-entire-stake-in-spotify-crediting-artists-with-126m-as-a-result/>].

233. PELLY, *supra* note 13, at 57–67 (on Spotify’s commissioning of musicians to generate low-royalty content for placement on platform playlists). Apple has even acquired a startup that allows it to generate royalty-free music using artificial intelligence. Mark Gurman, *Apple Has Bought a Startup That Uses AI to Make Music to Fit Your Mood*, TIME (Feb. 27, 2022), <https://time.com/6146000/apple-ai-music/> [<https://web.archive.org/web/20260115174827/https://time.com/6146000/apple-ai-music/>].

234. See *supra* Part II.A.

235. PELLY, *supra* note 13, at 152 (describing contractual payment mechanisms as “kickbacks”).

236. *Id.* at 149–52 (for an explanation of these modifications).

237. ROBINSON, *supra* note 14, at 225 (“Perfect discrimination would be achieved if each unit of the commodity were bought at a different price.”).

238. PELLY, *supra* note 13, at 149.

239. Aubrey, *supra* note 12.

discrimination in determining artists' pay.²⁴⁰

Discriminatory pay is not only concerning on its own terms,²⁴¹ but also for several other reasons. First, as stated above, it is akin to the exercise of monopoly or oligopoly power over an area of commerce. The music streaming industry is anything but a site of perfect competition: It is one where the prices and terms offered to musicians are largely dictated by the platforms and major corporate rights holders, in the absence of sufficient bargaining power on the side of individual musicians to influence those offerings. Price discrimination is both enabled by and reinforces this dynamic. Second, it is disrespectful of musicians' status as creators and expressors of ideas in musical language.²⁴² Differences in pay between similarly situated artists on the platform require calculations that are inherently arbitrary and cannot be value-neutral, thus neglecting the value of the labor and craft musicians put into creating music. Third, it is a form of particularized value extraction, or squeezing maximum value out of each user of a platform.²⁴³ This suggests that the platforms are focused primarily on deriving the maximum revenue from each of its individual contracts with rights holders and artists, rather than hosting a service for musicians and listeners to reach each other on fair and equal terms.

For their part, streaming platforms and record labels typically insist that their refusal to pay royalties for music with very few streams is meant to combat streaming fraud—that is, when individuals game the pro-rata system by uploading audio tracks to the platform that, in the platform's judgment, contain no real "music," and are instead noise or silence.²⁴⁴ Several alleged schemes of

240. PELLY, *supra* note 13, at 151 ("Once the rights-holder receives its payout from Spotify, it in turn pays artists according to their own deals, which also varyingly contribute to the ultimate size and fairness of the payments that artists receive.")

241. Economic discrimination by private actors is a practice generally looked down upon in American law, on a variety of grounds. *See, e.g.*, Robinson-Patman Act, Pub. L. No. 74-692, 49 Stat. 1526 (1936) (codified at 15 U.S.C. § 13) (banning price discrimination in commerce unjustified by cost differences); Civil Rights Act, Pub. L. 88-352, 78 Stat. 241 (1964) (banning employment discrimination on the basis of race, color, religion, sex, and national origin, and establishing the Equal Employment Opportunity Commission).

242. *Cf.* BENJAMIN EIDELSON, *DISCRIMINATION AND DISRESPECT* (2015) (theorizing the relationship between various forms of discrimination and disrespect for those subjected to it).

243. *See* RICKS ET AL., *supra* note 10, at 15–16 (on particularized value extraction in platform industries).

244. In the words of Deezer CEO Jeronimo Folgueira, "We have 90 million tracks and many of them are just noise, like literally noise, the sound of a washing machine and rain. It is fundamentally wrong that thirty seconds of the recording of a washing machine gets paid the same as the latest single by Harry Styles." Universal CEO Lucian Grainge likewise criticized the platforms for hosting an "ocean of noise." Anna Nicolaou, *Universal Music Strikes Deal to Reshape Streaming Economics*, FIN. TIMES (Sept. 5, 2023), <https://www.ft.com/content/b28b97ca-a6aa-4e90-8b89-d48ccc940756>

this sort have generated concern throughout the music industry in recent years.²⁴⁵ One of them even led to a DOJ indictment alleging that a North Carolina musician had created hundreds of thousands of AI-generated tracks and subsequently programmed bots to stream them in very small numbers each, adding up to billions of streams which granted him \$10 million in fraudulent royalty payments.²⁴⁶ But while these high-profile instances of fraud are enough to generate concern in the music industry, they are policeable under existing fraud statutes; indeed, guarding against consumer fraud is a responsibility incumbent upon streaming platforms as consumer-facing corporations. But the use of these schemes to justify discriminatory pricing—including the halting of payments for tracks with under a certain number of streams—depresses the income of amateur musicians and other recording artists without large listener bases, while boosting platform and label profit margins.²⁴⁷ They may also, in turn, implicate the platform’s ability to fairly host noise music, and even tracks containing what some observers may perceive as silence, both of which have long histories as serious forms of music.²⁴⁸

[<https://web.archive.org/web/20260201173919/https://www.ft.com/content/b28b97ca-a6aa-4e90-8b89-d48ccc940756>].

245. See, e.g., Aruni Soni, *AI Music Fraud Indictment Brings Scrutiny to Streaming Inflation*, BLOOMBERG LAW (Sep. 12, 2024), <https://news.bloomberglaw.com/ip-law/ai-music-fraud-indictment-brings-scrutiny-to-streaming-inflation> [<https://perma.cc/8KCM-KARA>]; Amanda Hoover, *Spotify Has an AI Music Problem—But Bots Love It*, WIRED (May 11, 2023), <https://www.wired.com/story/spotify-ai-music-robot-listeners/>

[<https://web.archive.org/web/20230605004158/https://www.wired.com/story/spotify-ai-music-robot-listeners/>] (on bots trained to listen to music produced by artificial intelligence, thereby generating rights holders fraudulent streaming royalties).

246. Press Release, U.S. Att’y’s Off., S.D.N.Y., North Carolina Musician Charged with Music Streaming Fraud Aided by Artificial Intelligence (Sep. 4, 2024), <https://www.justice.gov/usao-sdny/pr/north-carolina-musician-charged-music-streaming-fraud-aided-artificial-intelligence> [<https://web.archive.org/web/20260104095245/https://www.justice.gov/usao-sdny/pr/north-carolina-musician-charged-music-streaming-fraud-aided-artificial-intelligence>].

247. Nicolaou, *supra* note 244 (“The goal is to reduce the money flowing towards *amateurs*, bots, and white noise soundtracks. . . . Universal chief digital officer Michael Nash told the *Financial Times* that the changes would be ‘revenue positive’ for the company.”) (emphasis added).

248. See, e.g., John Cage, *433* (composition) (1952) (a work of music with multiple recordings on streaming platforms which directs the performer to remain silent for four minutes and thirty-three seconds, meant to focus the listener towards the content of the ambient sounds around them during the performance); Tim Stegall, *Fifteen Bands Who Are Crucial to the History of Noise Music*, ALT. PRESS (Apr. 6, 2021), <https://www.altpress.com/best-noise-bands/>

[<https://web.archive.org/web/20230629194547/https://www.altpress.com/best-noise-bands/>]; see also PELLY, *supra* note 13, at 156–57 (“It became clear that [the royalty structure] wouldn’t just be impacting AI bots—it seemed like the majors were waging an attack on not only all sorts of DIY and ‘amateur’ musicians, but also artists working with noise, field recordings, and nature sounds. A whole range of musical traditions and practices was set to be affected.”).

2. Opacity

Second, the system of artist compensation is opaque. Because of the multitude of highly variable factors affecting their pay, artists report that they cannot often make sense of how their compensation matches up to the success of their music on the platform.²⁴⁹ Musicians are also often prohibited from reviewing the contracts their labels and publishers sign with streaming platforms, due to the non-disclosure agreements (NDAs) signed by the parties to those contracts.²⁵⁰

On one hand, this “black box”²⁵¹ disempowers artists, thwarts the construction of countervailing power, and shields the platforms from effective accountability.²⁵² But it also undermines one of the core rationalizing justifications for an effective market system: the relative symmetry of decentralized information across market participants. Free markets require—and indeed, are purported by their defenders to promote—relative information symmetry between participants, as manifested in the market price system.²⁵³ With such a high degree of information asymmetry, the music marketplace cannot function effectively as a market, because centralized nodes of distribution—including the streaming platforms—control the flow of capital through their possession of superior information relative to individual producers.²⁵⁴ Existing efforts by streaming platforms to educate artists and the public about their compensation mechanisms, which often read more as public relations campaigns than genuine transparency in the manner of mandated

249. See PELLY, *supra* note 13, at 148–49 (“[A]n outsized percentage of working musicians cannot accurately delineate what percentage of their income comes from streaming, simply due to the absurdly complicated nature of the system.”), 149–50 (“[T]he pro rata system creates a ‘layer of abstraction’ that creates mass confusion among artists.”).

250. See Meredith Filak Rose, *Streaming in the Dark: Competitive Dysfunction Within the Music Streaming Ecosystem*, 13 BERKELEY J. ENT. & SPORTS L. 23, 35–37 (2024) (on NDAs as a source of information asymmetry in music streaming).

251. Cf. FRANK PASQUALE, *THE BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION* (2015) (on the “black box” effects of algorithms and artificial intelligence); ERIKSSON ET AL., *supra* note 173 (describing music streaming as a “black box”).

252. PELLY, *supra* note 13, at 149–50 (“[W]hen industry execs say that it is all just too hard to explain, that’s also how artists are disempowered by the so-called expert class.”).

253. See, e.g., F.A. Hayek, *The Uses of Knowledge in Society*, 35 AM. ECON. REV. 519, *passim* (1945) (on the price mechanism of markets as a signal for participants with disaggregated information); Daniel F. Spulber, *Bargaining and Regulation with Asymmetric Information About Demand and Supply*, 41 J. ECON. THEORY 251 (1988).

254. Rose, *supra* note 250, *passim*.

public disclosures,²⁵⁵ do not change the fundamental fact that this asymmetry is an inherent feature of music streaming's market structure, one in which centralized platforms have access to information about a multitude of decentralized actors with which they contract (including via major rights holders).²⁵⁶

3. Decline

For many artists, music's platformization has resulted in declining pay. This is because of the streaming business model, wherein monopsonistic platforms are incentivized to squeeze artists' incomes to maximize profits, trends towards depressing artist pay. Since streaming platforms first attained scale, artists have repeatedly reported low and declining pay for their recorded output,²⁵⁷ forcing them to take on precarious and non-artistic labor in increasing amounts. This can be judged from empirical research done on the sources of musicians' income. In 2018, one survey found that the median musician in the United States earned between \$20,000 and \$25,000 from the entirety of their musical and non-musical labor.²⁵⁸ Of the quarter of the respondents that reported income from streaming services, it accounted for, on average, only 5 percent of their total income.²⁵⁹ A 2023 study in the United Kingdom—whose music industry is highly integrated with that of the United States—found that over half of that country's musicians are forced to supplement their careers with non-musical work.²⁶⁰ Meanwhile, 44 percent reported that a lack of sustainable income was an active barrier to their musical career.²⁶¹ Even more recently, the Greater Nashville Music Census, a study of

255. See, e.g., *Loud and Clear 2025*, SPOTIFY, <https://loudandclear.byspotify.com/> [<https://web.archive.org/web/20251225031305/https://loudandclear.byspotify.com/>] (last visited Dec. 25, 2025).

256. This is not only true of the subscription-fee model, but of the free-with-advertisements model as well. Analysts have remarked on the opacity of Spotify's advertising business to other users. See ERIKSSON ET AL., *supra* note 173, at 170 ("For consumers and musicians, this is indeed an opaque market.").

257. See, e.g., references cited *supra* note 11.

258. PRINCETON SURVEY RSCH. CTR., INAUGURAL MUSIC INDUSTRY RESEARCH ASSOCIATION (MIRA) SURVEY OF MUSICIANS 1, 3 (2018), https://psrc.princeton.edu/sites/g/files/toruqf1971/files/resource-links/report_on_mira_musician_survey.pdf [https://web.archive.org/web/20250821201442/https://psrc.princeton.edu/sites/g/files/toruqf1971/files/resource-links/report_on_mira_musician_survey.pdf].

259. *Id.*

260. PELLY, *supra* note 13, at 154.

261. *Id.*

musicians geographically concentrated in an important center of America's record industry, found that 62 percent of its participants reported income from recordings as very little or none of their annual income.²⁶²

Of course, this is not to say that there are no musicians who benefit quite considerably from streaming platforms: Spotify reports that nearly 1,500 artists made over \$1 million each from its royalty payments in 2024.²⁶³ But payments to high-earning artists may also be depressed by the platform model of distribution, as monopsonistic labor markets often depress pay across the board.²⁶⁴ Indeed, the compensation of high-streaming artists pales in comparison to the compensation of streaming platform executives: Spotify CEO Daniel Ek and other senior executives earned more than any single artist in the platform's history in 2024 alone.²⁶⁵

Declining pay is especially felt by artists whose music is not necessarily suited to a high volume of individual streams. The pro-rata system, which calculates payouts based in part on the number of individual streams a track has, privileges artists whose music is designed to be played on repeat.²⁶⁶ Under this system, all other music is rendered less valuable, all else being equal. Declining pay for those without high streaming shares is not only bad for those artists: It is highly distortive of art, the value of which is rarely—if ever—guaranteed by the quantity of individual occasions on which an individual

262. GREATER NASHVILLE MUSIC CENSUS, *supra* note 30, at 8.

263. CJ Haddad, *Spotify Says It Paid Nearly 1,500 Artists \$1 Million or More in Royalties for 2024 Streams*, CNBC (Mar. 12, 2025), <https://www.cnbc.com/2025/03/12/spotify-says-it-paid-nearly-1500-artists-1-million-or-more-in-2024.html> [https://web.archive.org/web/20260201175310/https://www.cnbc.com/2025/03/12/spotify-says-it-paid-nearly-1500-artists-1-million-or-more-in-2024.html].

264. See, e.g., Suresh Naidu & Arindrajit Dube, *Monopsony Power in Labor Markets*, NAT'L BUREAU OF ECON. RSCH. (Apr. 24, 2024), <https://www.nber.org/reporter/2024number1/monopsony-power-labor-markets> [https://web.archive.org/web/20260113034334/http://web.archive.org/screenshot/https://www.nber.org/reporter/2024number1/monopsony-power-labor-markets?page=1&perPage=50].

265. Sam Willings, *Daniel Ek Earned More from Spotify in the Past Twelve Months than Any Artist Has Ever Earned on the Platform*, MUSICTECH (Aug. 5, 2024), <https://musictech.com/news/industry/daniel-ek-made-more-money-spotify-in-2024-than-any-artist/> [https://web.archive.org/web/20251211032122/https://musictech.com/news/industry/daniel-ek-made-more-money-spotify-in-2024-than-any-artist/].

266. PELLY, *supra* note 13, at 149 (“[P]ro rata is a system that benefits music that generates massive numbers of plays, whether that be through big marketing budgets, viral hits, or background-friendly streambait. . . . This is a definitive flaw at the heart of streaming remuneration: not all music is meant to be streamed endlessly on loop, but that doesn't mean it should be rendered value-less.”); see also World Intell. Prop. Org., *supra* note 40, at 8 (noting that major-label superstars derive disproportionate revenue from streaming platforms).

engages it.²⁶⁷ The model of corporate governance employed by streaming platforms also introduces an incentive towards declining artist pay: The less they can pay rights holders as a cost of doing business, the more profit they can generate for shareholders—through increased revenue, growth projections, and stock price increases.²⁶⁸

Streaming platforms and some other observers of the music industry object to the idea that they are paying artists insufficiently and often cast blame for any maldistribution of royalties onto the intermediaries, like record labels and publishers, with which they contract.²⁶⁹ Though these corporate intermediaries do have significant power over the payouts to individual artists—a reflection of their platformization—this attempted blame-shifting neglects the real power streaming platforms possess to determine artist pay via these intermediaries. This power is that of platform placement, which can strongly influence what music is successful on each platform. It also manifests in the platforms' power to engage in price discrimination, including via contractual terms such as advance payments, which may limit the funds available to be paid out to artists. And though most labels have sold much of their initial holdings in Spotify and other streaming platforms,²⁷⁰ the labels' historical role in funding and designing the platform business model renders the functional separation between labels and platforms upon which these defenses logically rely less clear as a matter of fact.²⁷¹

267. To use one example from a colleague, one might watch the film *Happy Gilmore* twenty times, and *Schindler's List* only once. This certainly does not mean that the artistic value of *Schindler's List* is any less than that of *Happy Gilmore*.

268. Given the lack of restrictions on common ownership, these shareholders may also be major rights holders. See PELLY, *supra* note 13, at 18 (noting ownership shares as one of the concessions made to major labels to secure their buy-in into the streaming business model).

269. U.S. COPYRIGHT OFF., *supra* note 23, at 77–78 (quoting the Digital Media Association (DiMA), a trade organization representing streaming platforms, as claiming, “a significant portion of the royalties received are retained by [intermediaries] for their own account, or applied toward the recoupment of advances paid to recording artists and songwriters”). This has also been, at various times, the posture of some musicians and advocates. See, e.g., Jess Denham, *Billy Bragg Hits Back at Musicians' Criticism of Spotify*, INDEPENDENT (Nov. 7, 2013), <https://www.the-independent.com/arts-entertainment/music/news/billy-bragg-hits-back-at-musicians-criticism-of-spotify-8927693.html> [<https://web.archive.org/web/20260113035710/https://www.the-independent.com/arts-entertainment/music/news/billy-bragg-hits-back-at-musicians-criticism-of-spotify-8927693.html>].

270. See, e.g., Peter Kafka, *The Big Music Labels Are Selling Big Chunks of Their Spotify Stakes*, Vox (May 7, 2018), <https://www.vox.com/2018/5/7/17326590/spotify-warner-sony-equity-sales> [<https://web.archive.org/web/20260227210148/https://www.vox.com/2018/5/7/17326590/spotify-warner-sony-equity-sales>].

271. This is not to say the power the platforms exert is unidirectional: Indeed, as Rachel Landy has shown, the streaming platforms themselves constitute a major strategy through which major labels seek to

C. PROBLEMS WITH SURVEILLANCE

Streaming platforms conduct surveillance on their users. According to communications scholars, “[m]usic streaming enables the tracking of listening behavior in more detail than any previous music-distribution format.”²⁷² According to a former Spotify employee, “It’s an outrageous amount of data . . . You should be under the assumption that any interaction you have within the Spotify app is going to be recorded.”²⁷³ Surveillance presents problems on at least two grounds. First, it simultaneously infringes on the privacy of platform users and threatens the artistic integrity of musicians. Second, it entrenches platform power, which in turn enables the platforms’ other harmful and distortionary effects on the commerce of music.

1. Violating Privacy and Artistic Integrity

As with other digital platform industries which engage in user surveillance,²⁷⁴ music streaming platforms violate the privacy of their users. The American legal tradition has long held that individuals have a “right to privacy.” Originally grounded in the desire to protect private individuals from unlawful intrusions by the press,²⁷⁵ and updated through the passage of sectoral privacy laws in the second half of the twentieth century,²⁷⁶ the concern of the law for privacy is one which many advocates now argue ought to extend to limit data collection by digital platforms.²⁷⁷ Violations of user privacy may be

retain control over music distribution. See Rachel Landy, *Downstreaming*, 65 B.C. L. Rev. 1251 (2024). But in the matrix of bargaining power that the labels and the platforms each exert over the other, musicians end up on the losing side of the bargain.

272. Maaso & Hagen, *supra* note 15.

273. PELLY, *supra* note 13, at 137.

274. See generally SHOSHANA ZUBOFF, *THE AGE OF SURVEILLANCE CAPITALISM* (2019) (documenting and theorizing the surveillance conducted by digital platforms throughout the economy).

275. See Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193 (1890).

276. See, e.g., Family Educational Rights and Privacy Act of 1974 (FERPA), 20 U.S.C. § 1232g; Privacy Act, Pub. L. 93–579, 88 Stat. 1896 (1974) (regulating the collection of personally identifiable information by federal agencies); Children’s Online Privacy Protection Act, Pub. L. 105–277, 112 Stat. 2681 (1998); Gramm-Leach-Bliley Act, Pub. L. 106–102, 113 Stat. 1338 (1999) (establishing privacy protections in the banking sector). Today, the default privacy regulator in the United States is the Federal Trade Commission, acting under its Section 5 authority. See CHRIS JAY HOOFNAGLE, *FEDERAL TRADE COMMISSION PRIVACY LAW AND POLICY* (2016).

277. See John D. McKinnon, *Data-Privacy Bill Advances in Congress, but States Throw up Objections*, WALL ST. J. (July 20, 2022), <https://www.wsj.com/politics/policy/data-privacy-bill-advances-in-congress-but-states-throw-up-objections-11658347139>

[<https://web.archive.org/web/20260215130402/https://www.wsj.com/politics/policy/data-privacy-bill->

particularly consequential in music, given the vulnerability of the behavioral and psychological user data platforms collect and the potential for their manipulation.²⁷⁸ These profiles of users are sold to third-party data brokers²⁷⁹ or used by the platform and large rights holders to target ads and recommendations to subsets of users.²⁸⁰

The data collection and assignment functions of streaming platforms may also threaten the artistic integrity of musicians in qualitatively new ways. Since the music industry's inception, music distributors have used language to market the music that is exogenous to the music itself.²⁸¹ But assigning unlimited metadata tags to music and offering it to users in never-ending algorithmic networks recontextualizes recorded music based upon technical or financial, rather than artistic or cultural, criteria. It may also nudge musicians to conform to platform incentives, rather than conforming the platform to the needs of musicians and listeners, as when a promotional video on Spotify for Artists showed a musician viewing his streaming data and deciding to change musical directions in reaction to them.²⁸² Though artistic process has always conformed in some way to technological²⁸³ and legal²⁸⁴ constraints, the recontextualization and consequent devaluation of music facilitated by metadata tags operates on a scale unprecedented by earlier generations of marketing and distribution technology.

2. Reinforcing Platform Power

Surveillance reinforces the power of music streaming platforms in at least

advances-in-congress-but-states-throw-up-objections-11658347139] (on the proposed American Data Privacy and Protection Act); Lina Khan, Samuel A.A. Levine & Stephanie T. Nguyen, *After Notice and Choice: Reinvigorating "Unfairness" to Rein in Data Abuses*, 77 STAN. L. REV. 1375 (2025).

278. See *supra* Part II.C.2.

279. Adi Robertson, *Lawsuit Claims Apple Violated Privacy Laws by Revealing iTunes Listening Data*, THE VERGE (May 28, 2019), <https://www.theverge.com/2019/5/28/18643146/apple-itunes-privacy-listening-data-disclosure-lawsuit-rhode-island-michigan> [<https://web.archive.org/web/20250314144037/https://www.theverge.com/2019/5/28/18643146/apple-itunes-privacy-listening-data-disclosure-lawsuit-rhode-island-michigan>]; PELLY, *supra* note 13, at 142 (on Spotify's sale of user data to third-party brokers).

280. PELLY, *supra* note 13, at 92–105 (on Spotify's recommendation system).

281. See James R. Ogden, Denise T. Ogden & Karl Long, *Music Marketing: A History and Landscape*, 18 J. RETAILING & CONSUMER SERVS. 120 (2011); see also PELLY, *supra* note 13, at 40–42 (on the historical use of marketing language linking music to particular moods).

282. PELLY, *supra* note 13, at 79–80.

283. See HOWIE SINGER & BILL ROSENBLATT, *KEY CHANGES*, *passim* (2023).

284. See Joseph Fishman, *Creating Around Copyright*, 128 HARV. L. REV. 1333 (2015).

three ways. First, it contributes to the platforms' lock-in effects. Over time, the users of streaming playlists generate data to which they become psychologically attached.²⁸⁵ This includes the records of their listening history (such as that which is collected and re-packaged in end-of-year marketing campaigns such as Spotify Wrapped and Apple Music Replay), in addition to playlists they have made and libraries of saved music.²⁸⁶ These data are not accessible via other platforms, and they are portable only with the assistance of third-party processors which still require accounts with multiple services.²⁸⁷ Thus, the switching costs of music streaming platforms may be substantial, as with the costs of exiting streaming platforms entirely.

Second, surveillance creates a valuable resource—data—that can be utilized by third parties, including advertisers and record labels, thus enhancing the value of the platforms to those parties. This is value generated by users for which users are not compensated. Platforms share data with advertisers and rights holders with whom they contract on their platform.²⁸⁸ They may also sell them to data brokers, as in the case of Spotify's partnership with Acxiom, a large data broker, and the use of music streaming data by firms that evaluate

285. Gary Sinclair & Julie Tinson, *Psychological Ownership and Music Streaming Consumption*, 71 J. BUS. RSCH. 1 (2017).

286. *Id.*; Hagen, *supra* note 188.

287. See, e.g., Maxwell Zeff, *These Two Friends Built a Simple Tool to Transfer Playlists Between Apple Music and Spotify, and It Works Great*, TECHCRUNCH (Sep. 14, 2024), <https://techcrunch.com/2024/09/14/these-two-friends-built-a-simple-tool-to-transfer-playlists-between-apple-music-and-spotify-and-it-works-great/> [<https://web.archive.org/web/20260115191502/https://techcrunch.com/2024/09/14/these-two-friends-built-a-simple-tool-to-transfer-playlists-between-apple-music-and-spotify-and-it-works-great/>]. Apple Music has introduced a feature whereby users can more easily transfer their music libraries from other services to Apple. Jazz Monroe, *Apple Music Now Lets You Import Playlists from Spotify and Other Streaming Services*, PITCHFORK (Aug. 6, 2025), <https://pitchfork.com/news/apple-music-now-lets-you-import-playlists-from-spotify-and-other-streaming-services/> [<https://web.archive.org/web/20260107195652/https://pitchfork.com/news/apple-music-now-lets-you-import-playlists-from-spotify-and-other-streaming-services/>]. Importantly, though, the switching it facilitates does not appear to be reciprocal, and interoperability remains voluntary as a matter of company policy at streaming platforms.

288. See, e.g., *Apple Music & Privacy*, APPLE (updated Dec. 12, 2025), <https://www.apple.com/legal/privacy/data/en/apple-music/> [<https://web.archive.org/web/20260107195917/https://www.apple.com/legal/privacy/data/en/apple-music/>] (“We are obligated to provide some aggregated non-personal data about the use of Apple Music and Apple Music Classical, as well as aggregated user demographics such as age group and gender (which may be inferred from information such as your name and salutation in your Apple Account), to record labels, publishers, and artists so that they can measure the performance of their creative work and meet royalty and accounting requirements.”).

consumer creditworthiness for loan approvals.²⁸⁹ They also incorporate data from third parties, such as when Spotify engaged in a collaboration with the now-bankrupt genetic analysis firm 23andMe to offer users playlists from world regions based on their ascribed ancestry.²⁹⁰ Spotify has even invested in features called Marquees and Campaign Kit, which utilize user data and sell advertisements to musicians looking for added promotion on the platform.²⁹¹ The sheer scale of the data platforms gather additionally contributes to the informational imbalance that makes their business decisions opaque to many users.²⁹²

Third, surveillance fuels the platforms' business as music recommenders, facilitating the *en masse* discrimination between like artists and users discussed elsewhere in this section.²⁹³ From data on listeners, streaming platforms can construct detailed profiles that they can then use to match users to music they are under contract to promote.²⁹⁴ Ignoring that because of this process, listener habits are deeply influenced by platform design and promotion, platforms can also use the resultant performance data to nudge artists with varying degrees of subtlety towards producing music that better matches the metrics tracked by the platform.²⁹⁵ Music, thus, comes to be categorized and perceived according to descriptors set not by musicians or participants in musical culture, but by profit-motivated platform enterprises. Surveillance, in this way, not only affects the user experience on the platforms, but also the very nature of the cultural production the platforms mediate.

289. Pelly, *supra* note 13, at 142.

290. John Herrman, *Content for Humans About the Content of Humans*, N.Y. TIMES (Oct. 5, 2018), <https://www.nytimes.com/2018/10/05/style/spotify-ancestry-dna-playlists.html> [<https://web.archive.org/web/20260107201422/https://www.nytimes.com/2018/10/05/style/spotify-ancestry-dna-playlists.html>].

291. Pelly, *supra* note 13, at 190–91.

292. See *supra* Part II.C.2; Rose, *supra* note 250, *passim*.

293. See *supra* Part III.B; see *infra* Part III.D.

294. Prey, *supra* note 200.

295. At least one promotional material from Spotify has explicitly encouraged artists to adjust the content of their artistic output to conform to the areas in which the platform deems them successful. See Pelly, *supra* note 13, at 79–80 (“The video’s tenor is light and goofy, but its message is serious: follow the data if you want to make more streaming-friendly music. The video narrator proclaims that ‘data can help you learn things that maybe you hadn’t even thought about before!’ But the undertone is: study the data, see what is generating mass enthusiasm, and let the stats influence your sound.”). Spotify CEO Daniel Ek has also said that “some artists that used to do well in the past may not do well in this future landscape, where you can’t record music once every three to four years and think that’s going to be enough.” *Id.* at 167–68.

D. PROBLEMS WITH PLATFORM PLACEMENT

Music platforms use the reams of data they collect from listeners and artists in part to fuel their business as music recommenders. This function endows streaming platforms with an extraordinary form of gatekeeper power in the music industry: the power to place music in particular places on the platform²⁹⁶ and steer users towards certain music.²⁹⁷ On the scale at which streaming platforms operate, these recommendations have a powerful influence on mass listening habits and thus the commercial system of recorded music. Coupled with the financial incentives towards steering users towards music for which the platforms pay less, this recommender function lends itself to discrimination via platform placement. These problems resemble classic payola in some respects,²⁹⁸ but they exist on a far greater scale than payola did on the radio in the twentieth century: They have been automated, turbocharged, and hyper-targeted to nearly all musical consumers.²⁹⁹

1. Conflicts of Interest

Discrimination between like artists in recommending music to listeners is concerning for at least three reasons. First are the conflicts of interest it creates with the platform's function as a host of music.³⁰⁰ While they host a wide variety of music to which users might be exposed, streaming platforms offer preferential placement to rights holders and artists who accept lower royalty rates for curatorial or algorithmic promotion on the platform.³⁰¹ This in turn incentivizes musicians who need to use the platforms to reach listeners to

296. See *supra* Part II.C.1.

297. See *supra* Part II.C.3.

298. "Payola" refers to a practice in which record labels or other interested parties would grant payments, gifts, or special treatment to radio disc jockeys in exchange for playing certain music on the air. For a history of this practice in the twentieth century, see STERLING & KITTROSS, *supra* note 3, at 368; SEGRAVE, *supra* note 4. Indeed, one lawyer has made a compelling case for the FTC's oversight over streaming services' playlists under the FTC Act and existing anti-payola statutes. Kasi Wautlet, *Playlists as Endorsements: An Argument for Continued Payola Regulation in the Internet Age*, 76 N.Y.U. ANN. SURV. AM. L. 821 (2021). It is unclear whether the proposal would extend the same rules to algorithmic recommendation features.

299. For a discussion, see PELLY, *supra* note 13, at 185–96 (comparing and contrasting problems with platform placement on Spotify to classic payola).

300. See *supra* Part II.C.1.

301. See, e.g., PELLY, *supra* note 13, at 186 ("Rather than charge an up-front fee, labels or rights-holders agree to be paid a promotional recording royalty rate for streams in personalized listening sessions where we provided this service.").

accept such lower rates to influence each platform's placement of their music. This dynamic functions similarly to favoritism or self-preferencing, when a platform on which multiple sellers compete for customers grants its own offerings or its preferred sellers preferential treatment.³⁰² This practice points to a conflict between a platform's role as a provider of infrastructure and its role as a user itself of the infrastructure.³⁰³ To use one example from music streaming, Spotify has directly commissioned artists to record music that they grant preferential placement in playlists, known internally as "perfect fit content," or PFC.³⁰⁴ But a similar dynamic exists even when the platform does not directly commission the music: Artists' acceptance of lower royalty payments for preferential placement—which is akin to paying a tax to the platform on every stream—makes it more likely that users will stream their music.³⁰⁵ A platform's power to advantage its preferred sellers—those who pay the tax—over others has, in other digital platform industries, not only harmed competition and the diversity of options available to consumers, but also driven down revenues for many sellers, thus discouraging investment and harming innovation.³⁰⁶ In music streaming, this threat to innovation manifests as a threat to the heterogeneity of the music available to listeners.³⁰⁷

Another conflict of interest related to platform placement has been present in the common ownership of streaming platforms and major record labels and publishers. This common ownership, particularly dating from the early years of streaming's development, may have bearing upon platform decisions regarding musical placement. On the one hand, this is a simple conflict of financial interests: The less a transaction between the two compensates the label or publisher (and thereby the artists on their rosters) in the form of royalties, the more it can compensate the label or publisher as an owner in the form of dividends and capital gains.³⁰⁸ But partial ownership also puts major

302. RICKS ET AL., *supra* note 10, at 16 (on favoritism); Khan, *supra* note 21, at 988, 999–1000 (on Amazon and Google's self-preferencing to capture value and reinforce monopoly power).

303. See Khan, *supra* note 21, at 1052–55 (on conflicts of interest in platform industries).

304. PELLY, *supra* note 13, at 57–67.

305. See PELLY, *supra* note 13, at 149 (on the "promotional rates" offered by the platform to artists).

306. Lemley & Wansley, *supra* note 192 (on the harms to innovation caused by platform self-preferencing).

307. See *infra* Part III.E.

308. See TVO TODAY, *Cory Doctorow: How Spotify Rigged the Music Market: The Agenda*, YOUTUBE (May 26, 2023), https://www.youtube.com/watch?v=FZ5z_KKeFqE [<https://perma.cc/JS64-CTN9>] (noting that each dollar a major label receives from royalties as a rights holder is one less it can receive from dividends as a shareholder).

labels and publishers in a position to exert power over the platforms' corporate decisions, according to simple logic: If Sony, for example, is engaged in a contractual negotiation with Spotify on behalf of its artist roster, Sony can use its power as a partial owner of Spotify to influence its deliberations and actions—even if not through the dictation of specific terms, through the mere implication of withdrawing its investments. This could result in terms that give Sony preferential terms compared to other counterparties, such as independent labels and artists.³⁰⁹ Conflicts of interest may not only be limited to particular deal negotiations, but to broader policy decisions, such as those that would limit compensation to other rights holders or adjust the weights of particular artists in algorithmic recommendation tools.³¹⁰ This may hurt other rights holders and musicians vis-à-vis platform placement, while driving additional value both to major labels and publishers as well as to the platforms themselves.³¹¹

Streaming platforms are not only partially owned by major rights holders vying for preferential placement on the platform: They also, in turn, do business as distributors and even as labels themselves. Spotify, for example, is a partial owner of DistroKid, a distribution platform which contracts with independent artists who lack label deals and generates revenue through charging fees paid by the artist.³¹² Spotify has also licensed music directly from artists—in other words, acting as a record label itself.³¹³ Though doing so unilaterally and at scale might trigger collective revolt on the part of the major labels, vertically integrating recording and distribution creates the risk of self-preferencing. One classic example of self-preferencing from American history

309. The contracts between platforms and labels that have been made public through leaks and investigative reporting included most-favored-nation (MFN) clauses. See Singleton, *supra* note 122.

310. See *supra* Part II.C.

311. In the years since their initial investments, the major labels have divested much of their ownership stakes in streaming platforms like Spotify. See, e.g., Ben Sisario, *As Spotify Goes Public, Sony Cashes In*, N.Y. TIMES (Apr. 4, 2018), <https://www.nytimes.com/2018/04/04/business/media/as-spotify-goes-public-sony-cashes-in.html> [<https://web.archive.org/web/20201109035324/https://www.nytimes.com/2018/04/04/business/media/as-spotify-goes-public-sony-cashes-in.html>]. This does not indicate, however, that these conflicts of interest would no longer be possible, and it therefore remains important to address them.

312. PELLY, *supra* note 13, at 167; DISTROKID, <https://distrokid.com/> (last visited July 11, 2025).

313. Ben Sisario, *A New Spotify Initiative Makes the Big Record Labels Nervous*, N.Y. TIMES (Sep. 6, 2018), <https://www.nytimes.com/2018/09/06/business/media/spotify-music-industry-record-labels.html> [<https://web.archive.org/web/20230409012418/https://www.nytimes.com/2018/09/06/business/media/spotify-music-industry-record-labels.html>]; Tim Ingham, *Spotify Is Making Its Own Records... And Putting Them on Playlists*, MUSIC BUS. WORLDWIDE (Aug. 31, 2016), <https://www.musicbusinessworldwide.com/spotify-is-creating-its-own-recordings-and-putting-them-on-playlists/> [<https://perma.cc/YJP8-84TP>].

is the vertical integration of railroads and energy companies, which in turn granted those companies preferential treatment.³¹⁴ Another case of more recent vintage are the reports of Amazon's online marketplace giving its own products preferential treatment over third-party sellers.³¹⁵ Similar dynamics are at play on music streaming platforms: Even though they do not facilitate the purchases of individual units of music, they still have the power to influence which music is heard most often, including through the power of their proprietary playlists and algorithmic features such as Spotify's Discovery Mode, Smart Shuffle, and Autoplay, each of which automatically play certain music chosen by the platform's algorithm on users' accounts.³¹⁶ Should the platforms own record labels themselves, it would be logical and revenue-maximizing for them to tilt these features in favor of their own music, rather than those of other artists and rights holders.

2. Degraded Quality

Second are the quality degradations platform placement presents for listeners. Quality degradations are common in industries with monopolistic or oligopolistic market structures,³¹⁷ including music streaming. In a platform's role as a curatorial recommender, it may populate its playlists with lower quality, "filler" content which fits comfortably into the background for passive listeners but may also distort the genres or musical functions those playlists are meant to represent.³¹⁸ This may cause the quality of the musical experience to suffer for listeners. Algorithmic recommendation features may also harm quality. A streaming service's algorithm might give users what it "thinks" they will want to hear; in some cases, it will succeed. But the service may simultaneously create musical echo chambers, channeling music to users linked by the metadata tags platforms assign, rather than the real-world relationships of different types of music to each other. This dynamic is akin to that which

314. See generally Matthew Jinoos Buck, *Railroad Regulation Reinterpreted*, 134 YALE L.J. 2912 (2025) (on the history of railroad regulation to solve self-preferencing, price discrimination, and other structural problems).

315. Khan, *supra* note 21, at 985–97.

316. This dynamic has caught the attention of Congress, with members of the House Judiciary Committee requesting information from Spotify about it in a public letter which raises concerns about potential payola-like practices. See Letter from Jerrold Nadler, *supra* note 201.

317. See RICKS ET AL., *supra* note 10, at 16–17.

318. PELLY, *supra* note 13, at 57–67 (on Spotify's commissioning of low-quality, lower-royalty content for placement on its playlists).

exists in social networking: By constantly providing users with content recommendations, many of which are low-quality but nonetheless stimulating because of their reinforcement of past preferences, their engagement is retained for longer durations and thus more of their activity surveilled and their data recorded.³¹⁹

3. Contributions to Declining Artist Pay

Third is the impact which discriminatory placement has on artists' livelihoods. As was reported of artists when their tracks were added to, and then subsequently removed from, a popular platform playlist, "[S]ome . . . were able to pay their rents from music for the first time ever thanks to a single playlist placement. But it also illuminated Spotify's immense platform power: when the playlist was refreshed, artists could see their rent checks disappear."³²⁰ Similarly, as one independent label manager reported, "Our streaming revenue heavily depends on editorial playlist placements . . . We used to be in someone's good graces there, but we pretty much just went through a two-year dry spell of barely getting any placements at all, and our revenue now has been cut in half"³²¹—limiting the money that the label can then pay out to artists on its roster. In this way, the discretionary power of streaming platforms may limit and disincentivize the productive capacity of musicians, the fundamental element that fuels the music industry and which constitutes musical culture.

4. Entrenchment of Platform Power

Fourth, unregulated placement discretion entrenches platform power in music streaming. The function of music recommendation, particularly in algorithmic features, creates lock-in effects for users, as demonstrated by consumers feeling that the algorithm knows their taste after having built up data on their preferences.³²² Curated playlists also function as a filter within the network effects that streaming platforms create between musicians and

319. See, e.g., Matteo Cinelli et al., *The Echo Chamber Effect in Social Media*, 118 PNAS 1 (2021).

320. PELLY, *supra* note 13, at 50, 113 ("One producer told me that getting prime playlist placements could mean the difference between earning six figures or earning nothing.")

321. *Id.* at 83.

322. Hracs & Webster, *supra* note 31.

listeners, thereby reinforcing the importance of satisfying the platform so musicians can reach audiences and vice versa.³²³

E. THREATS TO CULTURAL HETEROGENEITY

Cultural heterogeneity refers to a state in which a society accepts and encourages a wide variety of different cultural practices to be expressed and developed, and for these practices to be commonplace and broadly accessible by the public. Cultural heterogeneity is desirable for several reasons. First, it encourages free expression. Cultural homogeneity or sameness may create a chilling effect on expression understood to be outside a given norm, thereby limiting free expression, while heterogeneity instead encourages expression that may fall outside the norms of predominant traditions or practices. Second, it is democratic and egalitarian. By holding different forms of expression in equal regard, it encourages democratic participation in culture, rather than reserving it to only those who abide by a particular set of norms. Third, it is educational. Encountering different cultural practices enables us to learn more about those practices, in turn expanding our perception and knowledge of the society in which we live. Fourth, it results in cultural innovation. Free expression in culture lends itself to experimentation with new forms of that expression, whether by distinction with or synthesis of past practices, thereby helping to push culture forward. Finally, it strengthens bonds between people as participants in culture, promoting solidarity. Acknowledging the value of many different forms of cultural expression lends itself to a similar acknowledgment of the value of its different creators, creating strong social bonds both among creators and between creators and other members of society.

Streaming platforms threaten cultural heterogeneity through technological dynamics and business practices which, in the long run, promote musical homogeneity. They do so in at least three ways: by disincentivizing investment in musical careers; by incentivizing greater homogeneity in musical sound through platform design; and through spillover effects in other areas of musical commerce, including ticketing and live events, where concentrated economic power via platformization presents similar problems.

323. See *infra* Part III.D.

1. Disincentivizing Investment

By suppressing artist pay through an opaque system of price discrimination, streaming platforms—and, in general, the music industry they shape—disincentivize investment in musical careers, which in turn threatens the heterogeneity of music available to listeners. Partly, this can be judged through data indicating a lack of expected income as a frequent barrier to entry into the music business.³²⁴ But it is also evident in the popular perceptions and material reality of the musical profession that it has shifted in fundamental ways in the era of music's platformization. Musical composition, for example, once a stable profession in the era of Tin Pan Alley and Brill Building songwriting in the mid-twentieth century,³²⁵ has continued its trajectory of downward mobility through precarious employment and squeezed earnings.³²⁶ Meanwhile, recording artists—typically, these days, also composers themselves—face increasing barriers to breaking through in the commercial system of music, wherein recording contracts are difficult to come by and distribution via streaming platforms offers so little remuneration. On the one hand, this pushing of music-making to the margins of commercial society results in regional independent music scenes filled with talented and innovative musicians, often committed to do-it-yourself (“D.I.Y.”) aesthetics and values.³²⁷ But it also makes the pursuit of music, at most, a part-time occupation for many of these participants, who engage in it in spite of, rather than for, its economic potential.³²⁸ This road is indeed precarious: Creative labor, without the

324. See *supra* Part III.B; Ying Zhen, *Career Challenges Facing Musicians in the United States*, 47 J. CULTURAL ECON. 519 (2022).

325. See Simon Barber, *The Brill Building and the Creative Labour of the Professional Songwriter*, in THE CAMBRIDGE COMPANION TO THE SINGER-SONGWRITER 67 (Katherine Williams & Justin A. Williams eds., 2016). “Tin Pan Alley” and the “Brill Building” were two New York landmarks that became synonymous with the American songwriting industry in the first two thirds of the twentieth century.

326. See, e.g., Lauren Boisvert, *New Study Shows Songwriters Can Barely Make a Living from Digital Streaming Profits*, AM. SONGWRITER (Aug. 3, 2024), <https://americansongwriter.com/new-study-shows-songwriters-can-barely-make-a-living-from-digital-streaming-profits/> [<https://web.archive.org/web/20260107222154/https://americansongwriter.com/new-study-shows-songwriters-can-barely-make-a-living-from-digital-streaming-profits/>].

327. See, e.g., David Verbuč, “A Whole Society, with Its Own Economic System”: *The Reciprocal and Capitalist Configurations of American DIY Music Scenes*, 32 ETHNOMUSICOLOGY FORUM 5 (2023).

328. As Rachel Brown, the lead singer and co-songwriter of critically acclaimed band Water from Your Eyes, put it, “[A]s you get older, it’s like, I’m spending all my time doing this thing that I love, but I’m running out of time to do it, because I need to make money. It’s why people age out of knowing what’s going on in the underground.” Music Person Podcast (@musicpersonpodcast), INSTAGRAM (July 9, 2025), https://www.instagram.com/p/DL5F9kKxX0w?img_index=3 [<https://perma.cc/K42P-ZZ7P>].

guarantee of recoupment, can lead to exhaustion, burnout, and the cessation of that labor.³²⁹ Often, this pursuit requires great commitment, or else inter-generational capital uncommon to many people.³³⁰ These bottlenecks further narrow access to musical culture across society, both for its producers and for its consumers, resulting in a less heterogeneous cultural ecosystem.

2. Cultural “Flattening” and “Streambait”

Music’s platformization has material effects not only on the profession and practice of music-making, but on the content of music itself. Streaming platforms, as gatekeepers of recorded music distribution, steer huge numbers of listeners to particular music and musicians towards particular sounds.³³¹ These dynamics trend towards music being less diverse and innovative. This effect results in what scholars of algorithm-based platforms refer to as cultural “flattening,” or greater homogenization. In an algorithm-driven cultural economy, as Kyle Chayka writes:

Attention becomes the only metric by which culture is judged, and what gets attention is dictated by equations developed by Silicon Valley engineers. The outcome of . . . algorithmic gatekeeping is the pervasive flattening that has been happening across culture. By flatness I mean homogenization but also a reduction into simplicity: the least ambiguous, least disruptive, and perhaps least meaningful pieces of culture are promoted the most. Flatness is the lowest common denominator, an averageness that has never been the marker of humanity’s proudest cultural creations.³³²

In the music streaming context, this flatness manifests in part as what Liz Pelly calls “streambait”—the style of music most conducive to audio streams offered on streaming platforms.³³³ Its qualities are ubiquitous: “muted, mid-tempo, and melancholy.”³³⁴ The homogenizing effect of streaming platforms

329. Online resources for working musicians regularly address this problem, indicating its commonality. See, e.g., *Burnout*, MUSICIAN’S UNION (Mar. 28, 2024), <https://musiciansunion.org.uk/health-safety-wellbeing/mental-health-and-wellbeing/musicians-wellbeing-guidance-pack/burnout> [<https://web.archive.org/web/20260115203901/https://musiciansunion.org.uk/health-safety-wellbeing/mental-health-and-wellbeing/musicians-wellbeing-guidance-pack/burnout/>].

330. See Aimee Ferrier, *The Middle-Class Takeover: Music Is Less of a Meritocracy than Ever Before*, FAR OUT MAG. (May 17, 2023), <https://faroutmagazine.co.uk/the-middle-class-takeover-music-is-less-of-a-meritocracy-than-ever-before/> [<https://web.archive.org/web/20260115204204/https://faroutmagazine.co.uk/the-middle-class-takeover-music-is-less-of-a-meritocracy-than-ever-before/>].

331. See *supra* Part II.B, C.

332. CHAYKA, *supra* note 33, at 9.

333. PELLY, *supra* note 13, at 40, 80–81, 87, 90–91.

334. *Id.* at 82.

exists not only at the general level, but also at the level of specific musical cultures and genres, as metadata tags and playlist placements determine, in the minds of the public, what constitutes their representative works.³³⁵

To be sure, properly conceiving of the effects of economic structure on the content of musical expression itself is a precarious task, given the acknowledged subjectivity of musical experience. But when one considers the tendency of unregulated platform industries to degrade service quality,³³⁶ they find a potentially powerful framework within which to level such critiques in the context of music. Just as by viewing streaming services as platforms, differential royalty payments reappear as monopsonistic or oligopsonistic price discrimination,³³⁷ the “flattening” effect on musical expression reappears in this view as the natural effect of unregulated platform power on the quality of the service the platform provides, for which the threat of competition offers little recourse. In this situation, the overall musical ecosystem is weakened, given that the creators of music that streaming platforms promote are placed in an oppositional relationship with the creators of other types of music in a competition for a shared pool of streaming revenues.³³⁸ The platform, in turn, not only sets the rules for this contest but also, in many cases, picks the winners.³³⁹ This results in an incentive on the part of musicians of all types to better conform with platform designs, an incentive which, in the long run, trends towards greater artistic homogenization.³⁴⁰

335. Two good examples of this phenomenon are ambient music—a robust musical tradition whose representative works were substituted for low-royalty music on Spotify’s playlists—and hyperpop, a once-underground genre of electronic music whose success on Spotify granted the platform power to aesthetically shape it through the curation of its flagship playlist. *Id.* at 44–48 (on the devaluation of ambient music through platform placement alongside “chill” music), 111 (“The official Spotify playlist did to hyperpop what streaming giants do to culture at large: it worked as a flattening, making a scene that was previously sprawling and complicated into something commodified and palatable, cutting out many of its original voices along the way.”).

336. RICKS ET AL., *supra* note 10, at 16–17 (on this tendency); *cf.* Lina Khan, *Amazon’s Antitrust Paradox*, 126 *YALE L.J.* 710, 766–67 (2017) (noting a similar dynamic in Amazon’s online marketplace as it pertains to bookselling).

337. *See supra* Part III.B.1.

338. *See supra* Part III.B.1 (on the baseline pro-rata system of artist compensation); *cf.* PELLY, *supra* note 13, at 73–74 (describing how streaming has “flattened difference across musical purpose” through consolidation: “different music-adjacent industries and ecosystems that previously operated more in isolation, all suddenly now generating royalties from the same pots on the same platforms”).

339. *See supra* Part II.C; Part III.D.1.

340. Perhaps no individual case better demonstrates this effect than the recent success of the Velvet Sundown, an artist whose music racked up millions of listens in 2025 on Spotify despite being entirely generated by artificial intelligence, which relies on enormous data inputs from similar-sounding music. *See* Brian Hiatt, *AI “Band” the Velvet Sundown Officially Confirm They’re AI—And a “Provocation,”* ROLLING

Despite the links between the streaming business model and the promotion of greater cultural homogeneity, platform executives often suggest that their services democratize culture and expand the variety of music able to be heard by audiences around the world. In other words, they argue their services make musical culture more heterogeneous, not less. For example, in Spotify's filing with the Securities and Exchange Commission at the time of its initial public offering in 2018, CEO Daniel Ek wrote:

"With access to unprecedented amounts of data and insights, we're building audiences for every kind of artist at every level of fame and exposing fans to a universe of songs. In this new world, music has no borders. . . . We're working to democratize the industry and connect all of us, across the world, in a shared culture that expands our horizons."³⁴¹

There are significant reasons to discount these claims as public relations with little backing.³⁴² As described above, streaming platforms exercise their power to decide what music is successful on its platform—through their marketing of promotional rates, their curatorial discretion, their algorithmic weight adjustments, and through algorithmic steering with the assistance of suspect metadata. These practices, when combined with the market power inherent to the platform business model, suggest that their role is not one of democratization but rather of centralizing control over the recorded music industry, resulting in a less robust and diverse commercial ecosystem for music.

3. Intermodal Effects

Another dimension of streaming platforms' threats to cultural heterogeneity relates to their effects on related cultural industries, including ticketing and live events. Streaming—i.e., recorded music distribution—and live events—i.e., live music distribution—can be thought of as two distinct industries that together make up a larger system of commercial music distribution, with changes in one affecting the other. This is true in at least two ways. One concerns music consumers: Economists and market researchers have

STONE (July 5, 2025), <https://www.rollingstone.com/music/music-features/ai-band-the-velvet-sundown-confirm-ai-1235379354/> [<https://web.archive.org/web/20260115205021/https://www.rollingstone.com/music/music-features/ai-band-the-velvet-sundown-confirm-ai-1235379354/>]; cf. Narechania & Sitaraman, *supra* note 209, at 118–26 (on the data inputs required for artificial intelligence models to function).

341. Spotify Technology S.A., Registration Statement (Form F-1) 92 ("Letter from Daniel Ek") (Feb. 28, 2018).

342. For a thorough deconstruction of these claims, see Thomas Hodgson, *Spotify and the Democratization of Music*, 40 *POPULAR MUSIC* 1 (2021).

demonstrated a strong relationship between artists' streams and ticket sales, which supports the intuition that listeners are more likely to be concertgoers of artists whose music they have previously streamed.³⁴³ Research indicates the converse effect is also true.³⁴⁴ This results in streaming's *en masse* distortions of listening habits in recorded music being reflected in live music as well. A second concern artists: As demonstrated in surveys of musicians, declining pay from streaming results in having to tour more regularly to make up the difference, given that many musicians' incomes come from a mix of recording and performing. It is worth noting here just how precarious and grueling touring is as a form of labor and income for musicians³⁴⁵—a situation made worse by the harms of concentration in live events and ticketing, with the preponderance of extractive business practices such as venue merchandise cuts³⁴⁶ and junk fees³⁴⁷ reflecting the industry's monopolistic structure.³⁴⁸ While an analysis of the political economy of ticketing and live events is outside the scope of the present project, having been capably articulated elsewhere,³⁴⁹ it is

343. See Seifert et al., *supra* note 17; Christensen, *supra* note 17.

344. Eric Hogue, *The Complementary Relationship Between Live Performances and Post-Concert Streaming for Top-Performing Artists*, 56 APPLIED ECON. 8437 (2024).

345. See, e.g., James Reich, *Road to Madness: The Dangers of Touring and How Musicians Cope*, SPIN (Jan. 31, 2023), <https://www.spin.com/2023/01/how-musicians-cope-on-tour/> [<https://web.archive.org/web/20260115205716/https://www.spin.com/2023/01/how-musicians-cope-on-tour/>].

346. Nina Corcoran, *The Fight Between Musicians and Venues over Merch Profits Is a Big Deal with a Simple Solution*, PITCHFORK (Nov. 1, 2023), <https://pitchfork.com/features/article/artist-merch-cuts-venues/> [<https://web.archive.org/web/20260115210142/https://pitchfork.com/features/article/artist-merch-cuts-venues/>].

347. *Federal Trade Commission Announces Bipartisan Rule Banning Junk Ticket and Hotel Fees*, FED. TRADE COMM'N. (Dec. 17, 2024), <https://www.ftc.gov/news-events/news/press-releases/2024/12/federal-trade-commission-announces-bipartisan-rule-banning-junk-ticket-hotel-fees> [<https://web.archive.org/web/20260115210531/https://www.ftc.gov/news-events/news/press-releases/2024/12/federal-trade-commission-announces-bipartisan-rule-banning-junk-ticket-hotel-fees>].

348. Press Release, Justice Department Sues Live Nation-Ticketmaster for Monopolizing Markets Across the Live Concert Industry, U.S. DEP'T. OF JUST. (May 23, 2024), <https://www.justice.gov/archives/opa/pr/justice-department-sues-live-nation-ticketmaster-monopolizing-markets-across-live-concert> [<https://web.archive.org/web/20260201185345/https://www.justice.gov/archives/opa/pr/justice-department-sues-live-nation-ticketmaster-monopolizing-markets-across-live-concert>]. The DOJ has filed suit under the antitrust laws to unwind the merger between Ticketmaster and Live Nation that it had previously approved in 2010.

349. See Katherine Van Dyck & Lee Hepner, *The Case Against Live Nation-Ticketmaster*, AM. ECON. LIBERTIES PROJ. (Jan. 4, 2024), <https://www.economicliberties.us/wp-content/uploads/2024/01/20240104-AELP-Livenation-Brief-FINAL.pdf> [<https://web.archive.org/web/20251221125057/https://www.economicliberties.us/wp-content/uploads/2024/01/20240104-AELP-Livenation-Brief-FINAL.pdf>].

nonetheless important to note that the problems with streaming worsen the impact of the problems with that related industry.

IV. HOW TO GOVERN MUSIC STREAMING PLATFORMS

The dynamics that music streaming platforms have introduced into the political economy of music are ones that public policy can address. Throughout history, policymakers have used a coherent set of tools to address industries with similar dynamics: regulating them as public utilities; creating public options; and encouraging the development of cooperative governance within firms. Though many of these tools came under attack from the 1970s onwards,³⁵⁰ in an age characterized by the advocacy of deregulation, privatization, and fiscal austerity across sectors,³⁵¹ they have been reinvigorated by a new generation of legal scholars and advocates as proposals to govern digital technologies and other industries with power over our economy, culture, and politics.³⁵² Exploring each of these legal and policy tools may help build a fairer and healthier system of commerce to support musical culture.

A. REGULATING MUSIC STREAMING AS A PUBLIC UTILITY

Music streaming services are platforms, and one way to address their problems would be to regulate them as policymakers have historically regulated platform industries: as public utilities. For musicians, listeners, and other participants in the music industry, streaming platforms are possessors of enormous economic power.³⁵³ To deal with this reality, four tools from the law and policy of networks, platforms, and utilities (NPU) would apply well to music streaming platforms: rate regulation, nondiscrimination rules, structural separations, and interoperability mandates. Some of these tools are, in fact,

350. See, e.g., DAVID HARVEY, *A BRIEF HISTORY OF NEOLIBERALISM* (2005); GARY GERSTLE, *THE RISE AND FALL OF THE NEOLIBERAL ORDER* (2022).

351. See GANESH SITARAMAN, *THE GREAT DEMOCRACY: HOW TO FIX OUR POLITICS, UNRIG THE ECONOMY, AND UNITE AMERICA* (2019).

352. See, e.g., RICKS ET AL., *supra* note 10; K. Sabeel Rahman, *The New Utilities: Private Power, Social Infrastructure, and the Revival of the Public Utility Concept*, 39 *CARDOZO L. REV.* 1621 (2018); Khan, *supra* note 21; Lev Menand & Morgan Ricks, *Rebuilding Banking Law: Banks as Public Utilities*, 41 *YALE J. ON REG.* 591 (2024); Narechania & Sitaraman, *supra* note 209; Ganesh Sitaraman & Morgan Ricks, *Tech Platforms and the Common Law of Carriers*, 73 *DUKE L. REV.* 1037 (2024).

353. See *supra* Part II.B (on the economic, cultural, and political dimensions of streaming platforms' power).

already present in the music industry, but are limited in scope.³⁵⁴ Governing streaming platforms will, thus, require completing the incomplete public utility regime that currently governs the music industry.³⁵⁵

1. Rate Regulation

Problems related to artist pay and placement on streaming platforms stem, in large part, from the platforms' ability to engage in price discrimination.³⁵⁶ The most effective way to tackle price discrimination in the near term would be to regulate the rates for every license that streaming services must obtain at a level that fairly compensates musicians. Rate regulation is a classic tool in the governance of public utilities and infrastructural industries.³⁵⁷ By mandating consistency in the rates platforms charge for a service (or in this case, pay for a good), rate regulation prevents harmful exercises of platform power, including particularized value extraction via price discrimination.³⁵⁸ And by setting the rates at specific levels—contra nondiscrimination rules, which do not specify particular rates³⁵⁹—rate regulation can serve as an effective tool to ensure that the platforms compensate their counterparties fairly and sufficiently, and that those counterparties do so for musicians.

Rate regulation in music streaming is, conceptually, a relatively simple proposition: Every comparable license acquired by a platform would earn every comparable rights holder the same amount of money. This amount of money could be calibrated to ensure that artists can earn a living wage.³⁶⁰ Regulating every rate would effectively prohibit platforms from offering lower rates for promotion on the platform. They would also eliminate the financial incentive the platforms possess to steer listeners towards music that costs less for the platforms to offer. A comprehensive system of rate regulation could ensure that

354. See *supra* Part I.C.

355. *Id.*

356. See *supra* Part III.B.1, D.3.

357. RICKS ET AL., *supra* note 10, at 25.

358. *Id.* at 14–16.

359. See *infra* Part IV.A.2.

360. Cf. Press Release, Tlaib Introduces Living Wage for Musicians Act, CONGRESSWOMAN RASHIDA TLAIB (Mar. 6, 2024), <https://tlaib.house.gov/posts/tlaib-introduces-living-wage-for-musicians-act> [https://web.archive.org/web/20260106024120/https://tlaib.house.gov/posts/tlaib-introduces-living-wage-for-musicians-act] (on a piece of legislation that aims to guarantee a living wage for musicians by creating an additional royalty fund, instead of regulating the other categories of royalties meant to compensate musicians).

every similarly situated artist is paid fairly and equitably for their work.

Obviously, there is a great deal of nuance and complication that would arise in designing such a system of rate regulation, and there may be reason to be concerned about its capacity to recognize a diversity of artistic practices. Consider these questions: Should the rate-regulated licenses be based on units of tracks, streams, or some other metric? How should rates account for different, hardly comparable types of music, or for music that is designed to be listened to on repeat, versus music that, while equally valuable, might only be suitable for listening to a few times? What constitutes “similarly situated” or “comparable” artists in the first place? How should rates account for the number of individual musicians involved in a record’s creation, which could vary quite broadly? These are complicated questions, and they are the subject of fierce contestation within the current system of private, individual negotiation.³⁶¹ Though they may be complex, these questions may be answered at least in part through the establishment of different tiers within each regulated rate: Symphony orchestras, for example, might be compensated comparably to each other for their recordings, while individual singer-songwriters, to take a different example, would be considered separately.³⁶² The advantage of empowering a public authority to set these rates, despite the complexity of the task at hand, is that the remuneration system can be built with some modicum of public input, transparency, and democratic legitimacy, rather than being left to the behind-the-scenes dictates of streaming platforms and their corporate counterparts in recording and publishing. It may also allow for the design and implementation of new, fairer, and more capacious models of artist payment than ones based on the quantity of individual streams alone.

Importantly, rate regulation need not supplant the rate-setting function of existing copyright law. Rather, it would extend the logic of rate regulation already applied to the “mechanical right” in musical works, which sought to prevent the harmful exercise of monopoly power in music distribution.³⁶³ Regulating every rate could thus address what Professor Douglas Lichtman calls

361. Recall that determining the monetary value due music’s creators is an inherently complicated task. *See supra* Part I.C.

362. It is important to distinguish this scheme from the “artist tiers” that streaming platforms have internally constructed, which assign differential treatment to artists based on how much money artists generate in royalties. *See PELLY, supra* note 13, at 159. Tiers set here would flip the script, determining compensation levels and thereby platform revenues based on the different costs incurred to produce music, and affording equal treatment to all as far as possible.

363. *See KOHN, supra* note 23; *supra* Part I.A, B.

a “seesaw effect,” wherein the policy goals in regulating one type of rate are undermined when other rates are left unregulated.³⁶⁴ If a license for a musical work is regulated while a license for its sound recording is left unregulated, for example, streaming platforms can simply pay more or less accordingly for the unregulated license, thereby enabling them to discriminate between artists in the same way the regulated rate was intended to prevent. If instead we regulated the rates of all the licenses streaming services must obtain, it would prohibit the platforms from engaging in price discrimination across the board, and it would empower a public authority to make sure the platforms pay musicians fairly.

Here’s how it could work: Congress could empower the Copyright Royalty Board (CRB), which currently sets rates for mechanical licenses in musical works, to set rates for every license the streaming platforms are required to obtain to offer music, including licenses for sound recordings. The CRB could establish different tiers of rates within each category of license to account for the circumstances of differently situated rights holders and musicians. It could be required to review and update the rates at regular intervals, as it currently does for the rates already under its purview. Alternatively, Congress could empower the FCC to set rates for these licenses. Though the FCC has not traditionally exercised authority over copyright law and policy, it has had experience as a regulator of communications networks,³⁶⁵ of which streaming platforms are close analogues. Indeed, the FCC served as one of the most important regulators of the music industry when it assisted the FTC in enforcing anti-payola regulations against radio broadcasters³⁶⁶—a function that continues to the present day.³⁶⁷ A price-setting authority at the FCC could absorb and fulfill the functions of the CRB, while establishing the regulation of the music industry as a comprehensive public utility system, rather than as an amalgamation of individual licensing contracts.

There are a few problems with the existing copyright rate-setting process

364. See Lichtman, *supra* note 229. Economists have noted a similar dynamic in other networked industries, which they refer to as the “waterbed effect.” See *supra* note 229.

365. RICKS ET AL., *supra* note 10, at 332–369 (on the FCC and telecommunications regulation).

366. 3 SANJEK, *supra* note 1, at 447.

367. Dylan Smith, *Payola Crackdown? FCC Issues Enforcement Advisory Targeting Free Artist Shows and Appearances*, DIGIT. MUSIC NEWS (Feb. 17, 2025), <https://www.digitalmusicnews.com/2025/02/17/payola-enforcement-advisory-fcc/> [https://web.archive.org/web/20260106032311/https://www.digitalmusicnews.com/2025/02/17/payola-enforcement-advisory-fcc/].

which policymakers could improve as they expand it. First, there are the standards by which rates are set. Currently, the CRB judges are required to set the rates of mechanical licenses according to a “willing buyer-willing seller” standard³⁶⁸—that is, by conducting market research and holding hearings to determine what a typical buyer and a typical seller in an open market would think is a fair price for the license. The S.D.N.Y. judges (“rate court”) assigned to handle licensing disputes in performance rights are required to evaluate, simply, whether rates are “reasonable.”³⁶⁹ These standards contradict and undermine the logic of rate-setting. For mechanical licenses, the mere presence of rate regulation significantly curtails the existence of an open, competitive market with willing buyers and willing sellers transacting at freely negotiated rates, making the task of rate regulation reliant on an imaginary hypothetical.³⁷⁰ “Reasonability,” in turn, may vary significantly on a case-by-case basis, making the rates for performance licenses potentially inconsistent. But more importantly, by basing the value of a particular license solely on the terms of its exchange, these standards do not account for the full range of costs musicians incur in making different types of music. They treat music like a simple commodity that derives its value from exchange between artists and businesspeople, instead of the rich and complex public good that it is. A better standard would be more akin to a “cost-plus” pricing standard common in public utility industries, wherein regulators consider not only existing market transactions, but the actual input costs of providing a service.³⁷¹ This standard would guarantee an overhead above these costs to ensure that copyright owners—in this case, musicians—sufficiently profit to continue creating

368. See SCHERER, *supra* note 23, at 30.

369. See U.S. COPYRIGHT OFF., *supra* note 23, at 41.

370. As the longest-serving judge currently on the Copyright Royalty Board has noted, “Because the statutes supplant the actual market, the CRB Judges must establish a ‘hypothetical market’ that satisfies the statutory standard. A critical element in that regard is the testimony of the parties’ economists, which consists of various forms of economic modeling.” Hon. David R. Strickler, *Identifying an “Effectively Competitive” Market: The Work of the Copyright Royalty Board*, 48 COLUM. J.L. & ARTS 546, 547 (2025). See also Natilie Linn, *Mechanical Licenses and the Willing Buyer/Willing Seller Standard: Establishing Royalty Rates in a Vacuum of Knowledge*, 40 CARDOZO ARTS & ENT. L.J. 313 (2022). Cf. Joseph Stiglitz, *How Models Get the Economy Wrong*, AM. PROSPECT (Apr. 3, 2023), <https://prospect.org/2023/04/03/2023-04-03-how-models-get-economy-wrong/> [<https://web.archive.org/web/20260227211501/https://prospect.org/2023/04/03/2023-04-03-how-models-get-economy-wrong/>] (on the problems posed by certain forms of economic modeling more generally).

371. RICKS ET AL., *supra* note 10, at 25, 34 (on setting rates according to input costs plus a fair rate of return).

work.³⁷² Typically, regulators set these rates with robust public input, which an expanded authority might attract from musicians and their allies in greater numbers.

Second, there is the problem of exceptions. Under current law, the CRB allows rates that deviate from its set rates, as long as the parties—i.e., the songwriter or publisher and licensor—mutually agree on them by contract.³⁷³ This also undermines the logic of rate-setting, because in effect, it allows platforms to alter their payments to songwriters and publishers in exchange for kickbacks, promotional placement, or other adjustments. To prevent price discrimination more effectively, Congress should significantly curtail the exceptions that may be made to the CRB's set rates and instead establish a capacious rate-setting methodology that factors in many potential circumstances.

Third, there is the problem of capacity. A panel of only three judges, in an office that only includes four additional staff members, faces a tall order setting even one type of rate, let alone those for the up to six different licenses that might be needed in different (sometimes extraordinary) circumstances, each with their own potential tiers.³⁷⁴ This is one reason it might be preferable to empower an entirely different and better-resourced authority to set these rates, such as the FCC. Whatever route it takes, Congress should appropriate funds sufficient to ensure that the authority they empower is fully resourced and equipped to consider a large volume of testimony on input costs and set fair rates accordingly. While the CRB may not have sufficient capacity as of this writing to regulate every necessary rate, it is important to note that a regime of rate regulation would be eminently administrable. Indeed, setting prices is a function that is already performed by private streaming platforms, with all the data, personnel, and resources they need to determine how much each rights holder should be paid according to their calculations. It is also done by record labels, where teams of employees determine how much artists on their rosters should be paid. The capacity required for a government body to set rates would certainly be no greater than that which is already possessed by these firms,

372. *Id.*

373. 17 U.S.C. § 115(2)(a)(i) ("License agreements voluntarily negotiated at any time between one or more copyright owners of nondramatic musical works and one or more persons entitled to obtain a compulsory license . . . shall be given effect in lieu of any determination by the Copyright Royalty Judges.")

374. See Lichtman, *supra* note 229, at 580 n.14; Libr. of Cong., *supra* note 57, at 122 (on staffing numbers).

which exercise price-setting power over the music industry as it currently exists. In fact, in the absence of resource-intensive price discrimination, it might even require *less* capacity, all else being equal.

2. Nondiscrimination Rules

In lieu of or in addition to across-the-board rate regulation for music licensing, policymakers could implement a nondiscrimination rule for streaming platforms, mandating that they serve similarly situated rights holders, artists, and other users with reasonably equal prices and terms. Like rate regulation, nondiscrimination rules—variously known also as “neutrality mandates” or “equal access” rules—are another classic tool of public utility regulation, which have appeared in the regulatory systems governing many industries including railroads,³⁷⁵ electricity,³⁷⁶ insurance,³⁷⁷ banking,³⁷⁸ and, indeed, music licensing.³⁷⁹ Rather than prohibiting price discrimination by setting *specific* rates, though, a nondiscrimination rule would prevent it *in general*.

Functionally, a nondiscrimination rule would require platforms to publicly post their pricing schedule for licenses. This would empower regulators, musicians, and the public to determine whether the rates are fair and nondiscriminatory. This was the model of regulation adopted by the Interstate Commerce Commission to govern railroads, infrastructure which facilitated America’s economic growth in the nineteenth century.³⁸⁰ By requiring publicly posted pricing schedules of rates to carry goods, regulators were better equipped to prevent rail companies from engaging in particularized value extraction and thus reducing service quality.

Similar logic would apply by implementing similar rules in music streaming. Indeed, nondiscrimination rules already apply in some parts of the music industry relevant to streaming platforms, including the equal access rules to which ASCAP and BMI are subject under the terms of their consent

375. RICKS ET AL., *supra* note 10, at 475–572.

376. *Id.* at 647–728.

377. See Daniel Schwarz, *Ending Public Utility Style Rate Regulation of Insurance*, 35 YALE J. ON REG. 941 (2018) (arguing against the utility regulation of insurance).

378. Menand & Ricks, *supra* note 352.

379. See *supra* Part I.A, B (on the nondiscrimination rules to which performance licenses are subject under the ASCAP and BMI consent decrees).

380. RICKS ET AL., *supra* note 10, at 497–532.

decrees.³⁸¹ They are also present in the scheme of compulsory licensing for mechanical rights in musical works, in the requirement that a right holder in a musical work must offer mechanical licenses to any third party on equal terms.³⁸² Applying these rules not only to the monopoly on a work's mechanical reproduction—in other words, the property right—created by copyright law, but to the oligopsony of streaming platforms that license works and recordings, would extend the logic policymakers applied in that instance to the music industry as it works today.

Like rate regulation, nondiscrimination rules could help solve several problems with music streaming platforms at once. They could eliminate incentives to discriminate between artists through platform placement, thus rendering the recommendation function less susceptible to a platform's profit motive. They could promote fair payment for recorded music, and thereby stimulate its production, by ensuring transparency and consistency in the rates artists can expect to receive. In doing so, they can make the property system governing music distribution more conducive to the public interest.

3. Structural Separations

To remedy the conflicts of interest associated with the common ownership of labels, publishers, and streaming platforms, Congress should consider applying structural separations between these distinct and interdependent lines of business. One way to address the problem of discriminatory treatment of musicians and rights holders in music streaming is to enact a nondiscrimination rule or neutrality mandate. But structural separations, by comparison, have the advantage of eliminating the ability to discriminate because of common ownership, instead of simply prohibiting the practice. This reduces the costs of enforcing a rule, because the activity the rule is designed to prevent has been structurally preempted.³⁸³

To remedy the conflicts of interest created by common ownership,³⁸⁴ structural separations in the music streaming industry could take several forms. First, rights holders that do business with music streaming platforms could be

381. See *supra* Part I.B.

382. *Id.*

383. See Khan, *supra* note 21, *passim* (on the administrative preferability of structural separations as compared to narrow behavioral rules).

384. See *supra* Part III.D.1.

prohibited from owning shares in streaming platforms. This would require major labels and publishers to divest any remaining ownership shares in streaming platforms.³⁸⁵ Second, streaming platforms could be prohibited from doing business as record labels or music publishers. This would prohibit Spotify from directly commissioning music from producers, in which case it acted as a record label. To be sure, musical artists without label contracts or publishing deals would still be able to license their music to Spotify—but Spotify would be prohibited from contracting with those artists to receive cuts of royalties. For this reason, the structural separation would be highly integrated within the scheme of rate regulation proposed above.

A third type of structural separation could be implemented between the host and recommender functions of streaming platforms. This policy would be particularly useful in the absence of rate regulation or nondiscrimination rules to limit financial incentives in music recommendation, and it might even be desirable alongside those policies. Unbundling hosting and recommending would eliminate the conflict of interest between these roles and recognize these as fundamentally distinct lines of business. This is not to say that music recommendation could not exist as a functionality on a streaming interface. Rather, it would render the business of music recommendation as a standardized *protocol* that could work across many applications, rather than as a proprietary platform enterprise. This reflects one proposal made in reference to the content moderation functions of social networks.³⁸⁶ Before the rise of online platforms, basic functions made possible by the internet such as email, instant messaging, and search consisted not of proprietary platforms (as they do today), but as sets of protocols established and maintained by voluntary associations of computer engineers and members of the public.³⁸⁷ These

385. It may be necessary to make an exception to this rule for cooperative streaming platforms. See *infra* Part IV.C. Under a musician-owned cooperative model, musicians as counterparties of the platform would necessarily be permitted to own shares in the platform; indeed, they would be the *only* owners. Cooperative exemptions have precedent in the law, including notably the Capper-Volstead Act, which exempted agricultural cooperatives from antitrust enforcement under certain strict conditions to act in the collective interest of their member-owners. Pub. L. 67–146, 42 Stat. 388–389 (1922); see also Sandeep Vaheesan & Nathan Schneider, *Cooperative Enterprise as an Antimonopoly Strategy*, 124 PENN. ST. L. REV. 1, 28–31 (2019).

386. See Mike Masnick, *Protocols, Not Platforms: A Technological Approach to Free Speech*, KNIGHT FIRST AMENDMENT INST. (Aug. 21, 2019), <https://knightcolumbia.org/content/protocols-not-platforms-a-technological-approach-to-free-speech> [https://web.archive.org/web/20260106041447/https://knightcolumbia.org/content/protocols-not-platforms-a-technological-approach-to-free-speech].

387. *Id.*

protocols—which became industry standards—could then be applied to a variety of different applications.³⁸⁸ Making music recommendation a protocol would mean that users could access recommendation of music available on various music streaming platforms, and the recommender function could exist on the same interface as that music. But by being built on metadata and algorithms constructed by associations of expert participants—including artists and music enthusiasts—a standardized algorithmic recommendation protocol could ensure that such recommendations are made, as far as possible, on aesthetic rather than commercial grounds.³⁸⁹

4. Data Minimization and Interoperability Rules

Two other sorts of rules could be applied to music streaming platforms. First, policymakers should consider a rule to limit the amount and types of data that streaming platforms can collect on their users. Rules of this type are often called “data minimization” rules—that is, the firms subject to them would be required to minimize the data they collect on user behavior to only that which is necessary to offer the essential service they provide.³⁹⁰ In the case of music streaming, a data minimization rule could include restrictions on the information about users they collect—including the various inferences made about them from their listening history. Crucially, the minimization principle could apply not only to users, but to material carried by the platform. In other words, the rule could require platforms to minimize the metadata tags assigned to music to only those needed to offer its essential service. Second, policymakers could mandate interoperability between platforms. Interoperability rules are common in platform industries wherein the interconnection of all users is important to the success of the service, such as in

388. *Id.*

389. There may be reason to doubt the efficacy or desirability of *any* algorithmic recommendation mechanism based on linguistic metadata, because of the difficult relationship between music and language. For a discussion of this relationship through the analysis of musical phrases based on the work of linguist Noam Chomsky, who insists that languages share deep “syntactic structures” in common, see LEONARD BERNSTEIN, *THE UNANSWERED QUESTION: SIX TALKS AT HARVARD* (1976). Nonetheless, a well-built recommendation protocol might closely approximate this relationship and thus generate music recommendations that listeners find useful.

390. For examples, see Council Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data, and repealing Directive 95/46/EC (General Data Protection Regulation), 2016 O.J. (L 119) 1; Cal. Civ. Code §§ 1798.100–1798.199 (West 2018) (effective Jan. 1, 2020) (codifying the California Consumer Protection Act of 2018).

telephone networks.³⁹¹ In music streaming, playlists, for example, could be exchanged between users of different platforms, which is currently not possible except with the use of third parties and multiple subscriptions.³⁹² User data could be portable between platforms, reducing switching costs and thereby limiting the lock-in effects to which listeners are subject. This could facilitate greater competition between platforms for users between platforms by facilitating their easier exit and transfer to competing services. There are limitations worth noting here: It is not guaranteed—and in fact it may be unlikely—that additional competition between platforms alone would serve the overarching interests of artists and of the listening public. Platforms may compete for users, for example, by limiting the payouts they make to artists, or they could further accelerate their competitive strategies of creating “experiences” based on user data.³⁹³ But such a rule would improve the listener experience by allowing for a greater degree of interconnection between platforms, thus making an interoperability rule worthwhile on consumer protection grounds, when supplemented with rate regulation to ensure fair artist payment and rules to limit data collection.

5. Regulation Through Antitrust Enforcement

Ideally, regulating music streaming as a public utility would be done by passing legislation through Congress. But antitrust enforcement also provides a promising avenue for setting up a public utility regime to govern music streaming.³⁹⁴ Antitrust enforcers at the federal or state level or private individuals or firms could investigate and sue streaming platforms under the antitrust laws for their discriminatory payment and recommendation systems, as well as their common ownership with rights holders, which may harm competition in the music marketplace.³⁹⁵ Should such lawsuits be successful,

391. RICKSET AL., *supra* note 10, at 13 (on developing integrated systems as a goal of the laws governing platforms).

392. See, e.g., Chase Bernath, *How to Transfer Apple Music to Spotify*, SOUND GUYS (Apr. 8, 2025), <https://www.soundguys.com/how-to-transfer-apple-music-to-spotify-67647/> [<https://web.archive.org/web/20260105150811/https://www.soundguys.com/how-to-transfer-apple-music-to-spotify-67647/>].

393. See Hracs & Webster, *supra* note 31, at 253 (arguing that streaming platforms’ exploit user data to engineer “experiences” as a competitive strategy).

394. Cf. Ganesh Sitaraman, *The Public Utility Tradition in Antitrust Remedies*, EMORY L. REV. (forthcoming 2026) (on antitrust remedies as substitutes for NPU regulatory legislation).

395. See *supra* Part III.B, D.

streaming platforms could be governed by the remedies issued by courts in those cases, which could ban harmful business practices including price discrimination and the integration of streaming with recording and publishing. Indeed, antitrust enforcement has served as the vehicle for utility-style regulation in the music industry before—through the PROs’ consent decrees.³⁹⁶ This is a model that could be replicated to govern music streaming platforms.³⁹⁷ The Federal Trade Commission and various state attorneys general also possess the authority to define and prohibit unfair methods of competition (UMC) and unfair and deceptive acts and practices (UDAP), which could be useful avenues for regulating music streaming platforms.³⁹⁸ Additionally, innovative litigators might bring suits against streaming platforms under the law of common carriers, which legal scholars and at least one Supreme Court justice have argued applies to digital platforms.³⁹⁹

B. A VIRTUAL PUBLIC LIBRARY FOR RECORDED MUSIC

Historically, platform enterprises in the United States—along with enterprises of many kinds—were not only subject to public utility regulations, but also, frequently, to public ownership.⁴⁰⁰ Public enterprises, including public options which coexist with private offerings, offer several benefits: They can guarantee the universal provision of essential services; they can offer goods and services affordably and pay workers fairly, unconstrained by the profit motive of private firms; and they can have a disciplining effect on private firms through

396. See Jacob Noti-Victor and Xiyin Tang, *Antitrust Regulation of Copyright Markets*, 101 Wash. U. L. Rev. 1 (2023).

397. Importantly, an antitrust consent decree regime for music streaming might suffer from the same problem as the one for PROs: that they apply to specific firms, rather than to an entire class of firms defined by a particular economic activity. See *supra* Part I.A, B.

398. See, e.g., 15 U.S.C. § 45; N.Y. Gen. Bus. Law art. 22-A § 349 (banning deceptive acts and practices).

399. See Sitaraman and Ricks, *supra* note 352; Biden v. Knight First Amend. Inst. at Colum. Univ., 141 S. Ct. 1220, 1224 (2021) (mem.) (Thomas, J., concurring). For one example of such a lawsuit, filed by the Attorney General of Ohio, see Complaint for Declaratory Judgment and Injunctive Relief at 3, 5, 11, State *ex rel.* Yost v. Google LLC, No. 21-CV-H-06-0274, 2021 WL 2333652 (Ohio C.P. Del. Cnty. June 8, 2021). The Ohio case is currently pending on appeal. See Press Release, Ohio Att’y Gen., AG Yost Appeals Ruling in Google Common Carrier Case (Aug. 29, 2025) <https://www.ohioattorneygeneral.gov/Media/News-Releases/August-2025/AG-Yost-Appeals-Ruling-in-Google-Common-Carrier-Ca>. [https://web.archive.org/web/20260227212318/https://www.ohioattorneygeneral.gov/Media/News-Releases/August-2025/AG-Yost-Appeals-Ruling-in-Google-Common-Carrier-Ca]

400. Such industries include healthcare (in the form of Medicare and Medicaid), education (in the form of public schools and universities), consumer credit (in the form of public options for housing and education finance), electricity (in the form of municipally or federally owned power facilities), and mail (in the form of the postal service). See, e.g., GANESH SITARAMAN & ANNE ALSTOTT, *THE PUBLIC OPTION 1* (2019).

competition on price and quality.⁴⁰¹ They are also capable of addressing the problems posed by unregulated platform industries, including price discrimination and harms to innovation and dynamism.

Indeed, though many modern observers think of cultural production as a private sector enterprise,⁴⁰² the American music industry has a long tradition of public options. In the 1930s, the Federal Music Project of the Works Progress Administration directly employed over 13,000 musicians, who gave concerts, organized orchestras and jazz groups, served as music teachers for the young, and produced field recordings of traditional American music.⁴⁰³ In the 1960s, the Johnson Administration founded the National Endowments for the Arts and Humanities, which offer public grants to musicians as well as to writers and visual artists.⁴⁰⁴ The government even owns a record label: In 1987, the Smithsonian Institution acquired Folkways, the label founded in 1948 that contributed to the popularization of American folk music in the mid-twentieth century.⁴⁰⁵ And in a tradition dating back to the Founding Era, when music was distributed primarily through the medium of printed sheet music, the United States Postal Service continues to emphasize the importance of distributing this media through the mail by offering discounted rates, which also apply to records, CDs, and other forms of musical media.⁴⁰⁶

Over the long term, the most effective way to address the problems of music's platformization may be to reinvigorate this tradition and build a public option music streaming service. Such a service—in other words, a virtual

401. *Id.*

402. See Tyler Cowen, *The Arts in a Free Market Economy*, FOUND. FOR ECON. FREEDOM (Dec. 1, 1995), <https://fee.org/articles/the-arts-in-a-free-market-economy/> [<https://web.archive.org/web/20260105192209/https://fee.org/articles/the-arts-in-a-free-market-economy/>] for one normative defense of art as a private, capitalistic enterprise.

403. Sharon Musher, *The New Deal and the Arts*, OXFORD RSCH. ENCYCLOPEDIA OF AM. HISTORY 4 (2022), <https://doi.org/10.1093/acrefore/9780199329175.013.81> [<https://web.archive.org/web/20240711092112/https://oxfordre.com/americanhistory/display/10.1093/acrefore/9780199329175.001.0001/acrefore-9780199329175-e-81>].

404. See, e.g., MARK BAUERLEIN & ELLEN GRANTHAM, EDS., *THE NATIONAL ENDOWMENT FOR THE ARTS: A HISTORY, 1965–2008*, at 1, 21 (2009).

405. *About Us: Mission and History*, SMITHSONIAN FOLKWAYS RECORDINGS, <https://folkways.si.edu/mission-and-history> [<https://web.archive.org/web/20260105195716/https://folkways.si.edu/mission-and-history>] (last visited Jan. 5, 2026).

406. *What Is Media Mail?*, U.S. POSTAL SERV., <https://faq.usps.com/s/article/What-is-Media-Mail-Book-Rate> [<https://perma.cc/N4XG-P28E>] (last visited Jan. 12, 2026). See generally RICHARD R. JOHN, *SPREADING THE NEWS: THE AMERICAN POSTAL SYSTEM FROM FRANKLIN TO MORSE* (1998) for more on the early history and democratic function of the postal service, though without specific mention of music.

public library of recorded music—could compete with private offerings, including Spotify, Apple Music, and Amazon Music, offering recorded music to the public and compensating artists on fair terms. Done right, this service might come to be considered a preferable offering by musicians and the listening public, allowing for the public governance of music’s streaming economy.

Indeed, public option streaming has already been piloted at local libraries in cities ranging from Austin, Pittsburgh, and Chapel Hill to Salt Lake City.⁴⁰⁷ These are mostly small-scale initiatives, often with fifty or so albums chosen by curators from the local music scene.⁴⁰⁸ But they offer a microcosmic view of what a fully-fledged public option streaming service might look like. They take in music via applications with metadata provided by the artists themselves, which typically only includes basic identifiers like names and song lengths.⁴⁰⁹ Some services contract with outside technologists to build their interface, including those like MusiCAT that have developed platform interfaces specifically for streaming services at local libraries.⁴¹⁰ Others feel strongly about keeping their operations in-house, even down to the data servers on which files are stored.⁴¹¹ Regardless of the particulars, each of them is committed to maintaining a library of recorded music for the public to access and that benefits musicians.

The ideal agency to host such a service at the federal level would be the Library of Congress (“LOC”). Indeed, the raw materials for building a public option streaming service at the LOC are already in place. As the parent entity of the U.S. Copyright Office, it is the designated receiver of copyrighted musical works and recordings.⁴¹² This means that any individual or entity registering a copyright in a musical work or recording must furnish the LOC with a copy of that work or recording,⁴¹³ which are in turn made available to the Library’s

407. PELLY, *supra* note 13, at 224.

408. *Id.*

409. *See* MONEY ON THE LEFT, *supra* note 38.

410. *Id.*

411. PELLY, *supra* note 13, at 225 (“According to Eli Neiburger, the [Ann Arbor] library’s deputy director, building the library’s own streaming and mp3 downloads infrastructure directly into its website has been an important decision. A lot of the musical material . . . is stored in the library’s own data center, in its basement.”).

412. 37 C.F.R. § 202.20 (2025) (requiring deposit copies for copyright registration); U.S. COPYRIGHT OFF., CIRCULAR 56, *supra* note 37.

413. 37 C.F.R. § 202.20 (2025); U.S. COPYRIGHT OFF., CIRCULAR 56, *supra* note 37.

users: members of Congress and registered researchers. Should the Library expand access to those materials through a user interface accessible to the public, it could create a competitive streaming platform without the need to engage in negotiations with each individual rights holder.

Compensation for rights holders could, by default, operate on similar terms as they would on private streaming platforms following the model of rate regulation outlined above. But one advantage of the public option as opposed to reforms within the copyright system alone would be its ability to pioneer new models of artist payment beyond copyright royalties, including those that do not rely on the number of individual streams a track receives. Copyright treats music like widgets: It bases compensation for musicians on the quantity of individual units they produce which listeners consume, rather than the value of artists' labor in creating music as a public good.⁴¹⁴ A public streaming service could explore alternatives to this system. These alternative payment models could resemble programs of guaranteed basic income for musicians, as is currently offered by the government of Ireland.⁴¹⁵ Indeed, this is not dissimilar from the program of direct employment hosted by the New Deal's jobs programs for musicians, which compensated musicians for a wide variety of musical jobs, including as teachers and performers, in addition to recording artists and composers.⁴¹⁶ This could enable America's music industry to be more heterogeneous than is possible under the existing pro-rata royalty system of private platforms, given that a variety of artistic practices not grounded solely in the number of individual units produced could be funded and thereby encouraged.

Whatever the compensation structure, three considerations are especially important for the success of a public library for recorded music. First is offering a highly effective and engaging user interface. Part of the attraction of private

414. The author thanks Professor Rohan Grey for this formulation.

415. Ashley King, *Irish Government Pays Artists & Musicians \$330 "Basic Income" Allowance*, DIGIT. MUSIC NEWS (Sep. 12, 2022), <https://www.digitalmusicnews.com/2022/09/12/irish-government-basic-income-artists-musicians/> [<https://web.archive.org/web/20260105210224/https://www.digitalmusicnews.com/2022/09/12/irish-government-basic-income-artists-musicians/>]; cf. Dean Baker, *The Artistic Freedom Voucher: An Internet Age Alternative to Copyrights*, CTR. FOR ECON. POL'Y & RSCH. (Nov. 15, 2003) https://cepr.net/documents/publications/ip_2003_11.pdf [https://web.archive.org/web/20260105210514/https://cepr.net/documents/publications/ip_2003_11.pdf] (proposing a guaranteed income for artists through the tax system as an alternative to remuneration via the copyright system).

416. See MUSER, *supra* note 39, at 1–2.

streaming platforms for users are their excellent graphic design, user-friendly navigation, and ease of use, despite their harmful business practices. To compete with private platforms and offer users good service, the online public library for music should offer an interface that at least meets, and ideally exceeds, the standard set by private offerings.

Second is the importance of staffing the streaming service with sufficient personnel, both at the stage of its creation and for its maintenance and improvement over time. These personnel would include engineers, lawyers, and people with expertise in many different musical traditions and practices. One way to do this, at least for technical staff, would be to hire personnel from the private sector, including the streaming platforms with which the public option would compete. This can be done through a process known as “Schedule A” hiring authority, as was utilized by the U.S. Digital Service in the Obama Administration to hire technologists to improve the federal government’s digital capacity.⁴¹⁷ There are important caveats worth noting here, including that recent actions by the Trump Administration have reduced state capacity and have significantly eroded the security and prestige of government jobs.⁴¹⁸ These problems can only be repaired with concerted effort and determination in future administrations, including through the mass re-hiring of personnel and the strengthening of public sector unions.

A third, and perhaps most important, consideration for making public option streaming work is securing the buy-in of the musicians whom the platform is intended to serve. Primarily, this will require ensuring that the platform compensates musicians on terms that are better and fairer than those currently offered by private streaming firms, including, potentially, by piloting the new models of remuneration outlined above. It will require that the platform runs as a neutral host to the extent possible, with any recommendation functions fulfilled by an independent protocol, to avoid the appearance of political influence on musical curation. It will also require a

417. See *Hiring FAQ*, U.S. DIGIT. SERV., <https://www.usds.gov/faq> [<https://web.archive.org/web/20260105214334/https://www.usds.gov/faq>] (last visited Jan. 5, 2026).

418. See, e.g., Makena Kelly, *DOGE Has Started Gutting a Key U.S. Technology Agency*, WIRED (Feb. 12, 2025), <https://www.wired.com/story/doge-tts-fired/> [<https://web.archive.org/web/20260201193543/https://www.wired.com/story/doge-tts-fired/>]; Benjamin Wallace-Wells, *What Did Elon Musk Accomplish at DOGE?*, NEW YORKER (June 16, 2025), <https://www.newyorker.com/magazine/2025/06/23/what-did-elon-musk-accomplish-at-doge> [<https://web.archive.org/web/20251113051241/https://www.newyorker.com/magazine/2025/06/23/what-did-elon-musk-accomplish-at-doge>].

prodigious public engagement operation, which can interface with musicians and increase the salience of the service among the public. Above all, it must offer a genuine alternative for musicians to existing offerings, one that is thereby useful to the development of American musical culture.

C. ESTABLISHING COOPERATIVE GOVERNANCE

The problems of music's platformization may also be addressed by establishing cooperative streaming platforms. As defined by the International Cooperative Alliance, cooperatives refer to "autonomous association[s] of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise."⁴¹⁹ Tracing their roots to the founding of the Rochdale Society of Equitable Pioneers in Rochdale, England in 1844,⁴²⁰ self-identified modern cooperatives are governed according to seven principles: open and voluntary membership; democratic member control; members' economic participation; autonomy and independence; education, training, and information; cooperation among cooperatives; and concern for community.⁴²¹ Functionally, they indicate models of governance wherein a firm's owners—typically called owner-members—are that firm's consumers or workers, rather than independent shareholders. Models of cooperative governance have been adopted in a variety of industries throughout history, including electricity,⁴²²

419. *Cooperative Identity, Values, & Principles*, INT'L COOP. ALL., <https://ica.coop/en/whats-co-op/co-operative-identity-values-principles> [<https://web.archive.org/web/20260105221258/https://ica.coop/en/whats-co-op/co-operative-identity-values-principles>] (last visited Jan. 5, 2026).

420. *Understanding the Seven Cooperative Principles*, NAT'L RURAL ELEC. COOP. ASS'N (Dec. 1, 2016), <https://www.electric.coop/seven-cooperative-principles%E2%80%8B> [<https://web.archive.org/web/20260105221529/https://www.electric.coop/seven-cooperative-principles%E2%80%8B>].

421. INT'L COOP. ALL., *supra* note 419.

422. SANDEEP VAHEESAN, *DEMOCRACY IN POWER: A HISTORY OF ELECTRIFICATION IN THE UNITED STATES* 5 (2025).

agriculture,⁴²³ insurance,⁴²⁴ law,⁴²⁵ groceries,⁴²⁶ and consumer retail.⁴²⁷ Cooperative governance serves similar ends as utility regulation and public options because it can allow platforms to operate at scale while simultaneously preventing the structural exploitation of their consumers and/or workers by making them the platform's owners.⁴²⁸ In other words, cooperative governance can check platforms' monopoly power.⁴²⁹

Indeed, collectives of musicians have already established cooperative streaming platforms, albeit at small scale. One such enterprise, Catalytic Soundstream, offers a subscription service that commits to a fifty-fifty split of profits between the musicians and the platform, with the musicians' share being split equally between their member-owners.⁴³⁰ Another, Resonate, offers a "pay-as-you-play" model, wherein payment is collected from users per stream until the user owns a copy of the recording, which they can thereafter stream for free.⁴³¹ While these organizations offer the music of at most a couple thousand owner-members and are not known by many music listeners,⁴³² they offer a vision of what a healthy and fair system of commerce to support music-making could look like. They also invite consideration of how streaming co-ops could grow as a broader response to music's platformization.

A music streaming co-op would ideally take the form of a worker-owned, rather than consumer-owned, co-op. By making the musicians whose music it carries the primary governors of the enterprise, the co-op could ensure that it

423. Vaheesan & Schneider, *supra* note 385 (on antitrust exemptions for agricultural cooperatives).

424. Peter Molk, *The Puzzling Absence of Co-operatives*, 88 TUL. L. REV. 899, 956–957 (2014) (on the application of cooperative governance in health insurance).

425. MODEL RULES OF PRO. CONDUCT r. 5.4(d) (A.B.A. 1983) (prohibiting the non-lawyer ownership of law firms, functionally making law firms lawyer-owned cooperatives); *cf.* Stephen P. Younger, *The Pitfalls and False Promises of Nonlawyer Ownership of Law Firms*, 2022 YALE. L.J. FORUM 259 (arguing against proposals to allow nonlawyer ownership of law firms).

426. *See, e.g., Mission Statement*, PARK SLOPE FOOD COOP, <https://www.foodcoop.com/mission/> [<https://web.archive.org/web/20260105225812/https://www.foodcoop.com/mission/>] (last visited Jan. 5, 2026).

427. *See, e.g., Who We Are*, REI CO-OP, <https://www.rei.com/about-rei?msockid=3e8b7a20b5a369613cc06917b4cc68ec> [<https://web.archive.org/web/20260105230217/https://www.rei.com/about-rei?msockid=3e8b7a20b5a369613cc06917b4cc68ec>] (last visited Jan. 5, 2026).

428. *See* Narechania & Sitaraman, *supra* note 209, at 167–69.

429. Vaheesan & Schneider, *supra* note 385, at 1.

430. PELLY, *supra* note 13, at 217–223.

431. *Pricing*, RESONATE, <https://resonate.coop/pricing/> [<https://web.archive.org/web/20251203000655/https://resonate.coop/pricing/>] (last visited Jan. 5, 2026).

432. Catalytic has thirty musician-owners, while Resonate had 1,700 as of 2021. PELLY, *supra* note 13, at 219, 222. As of this writing, Resonate is on hiatus, and is not accepting new members. *Id.*, at 222.

works on behalf of musicians and the community they create. Listeners, in turn, could pay subscription fees or other forms of payment as decided by the musician member-owners, which would fairly compensate those musicians for their labor.

Establishing a successful cooperative streaming platform at scale would require the same elements as establishing a successful public option, including offering a useful interface, staffing technical personnel, and attracting the buy-in of musician-owners and listeners. Key to the cooperative model would be attracting music listeners away from existing corporate streaming platforms, whether through appeals to the benefit of the co-op for musicians and thereby for musical culture, or through competitive subscription prices, which might be possible given the absence of platform pricing power. Crucially, cooperative streaming platforms would have to contend with the network effects of the streaming model, which incentivizes carrying the music of as many artists as possible.⁴³³ If network effects are unattainable, a successful co-op may require either interoperability with other platforms, or else a program of social education to encourage listening to music in the contexts presented by artists—such as album tracklists—rather than playlists of many different artists whose music is only available on separate platforms. Record labels may also be unlikely to license the music of their artist rosters to a co-op service, or they may prohibit their artists from becoming co-op member-owners. For this reason, a system of compulsory licensing for sound recordings, in addition to the system of rate regulation outlined above, could ensure that cooperative streaming platforms would be able to license their members' music, by prohibiting these restrictive terms.

CONCLUSION

Though they have become the dominant distribution avenue for today's recorded music industry, music streaming services are not the only firms that act as platforms in the era of music's platformization. Record labels and the publishers with whom they are integrated also operate as platforms, connecting musicians to distribution outlets and vice versa. Ticketing and live events companies do as well, connecting musicians to live audience members and vice versa. Each of these firms, which possess power inherent to their business

433. See *supra* Part III.A.

models as economic middlemen, should be subject to the rules that have governed other enterprises of their type.

Problems in the commerce of music extend far beyond the dynamics that streaming has introduced, as would be expected of any commercial or property system governing something so intangible and yet culturally vital as art. But recognizing the ways that music platforms act similarly to other platform enterprises reveals powerful tools that policymakers have used to address those issues in other contexts. Going forward, these tools should be part of the conversation about how to govern the commerce of music for the benefit of musicians and the democratic public.