Copyright and Innovation in the Market for Recorded Music[1]

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Abstract

Copyright protection is often justified with the argument that, by securing exclusive rights to writers and artists, it provides incentives for the creation of new products. The implication is that a decline in copyright-related revenue should lead to less creativity. Yet recent history suggests otherwise. Since 1999, although recorded music revenues fell sharply, music output increased and access to music has expanded as the industry restructured around new business models. This challenges the assumption that copyright is a necessary condition for musical innovation.

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1. Introduction

The advent of digital technology has dramatically transformed the recorded music industry, raising questions about the role of copyright in fostering or hindering innovation. A common assumption among policymakers and industry leaders is that the decline in recorded music revenues—mostly due to digital piracy—negatively impacted musical creativity and output. The fact, however, is that the industry's adaptation to new business models not only preserved but, in many ways, enhanced innovation in the music sector. By examining revenue trends, shifts in consumer behavior, and the evolving role of artists, we challenge the notion that strict copyright enforcement is necessary to sustain musical creativity.[2]

2. The Decline of Revenues from Recorded Music Sales

The International Federation of the Phonographic Industry (IFPI) reports that global recorded music revenues peaked in 1999 before entering a long decline, documented in Figure 1, which shows that global sales (in constant 2010 dollars) fell steadily from $28.7 billion in 1999 to $11.9 billion in 2014 (a 58.5% decline in real terms), with a recovery since then to $20.5 billion in 2024 (which is still 28.6% below the 1999 high mark).

********** INSERT FIGURE 1 ABOUT HERE **********

The main culprit was file-sharing, which allowed users to copy and distribute music at zero marginal cost, bypassing copyright restrictions. Industry efforts to halt this trend— including lawsuits against file-sharing services and legislative efforts such as the Digital Millennium Copyright Act (DMCA)—proved ineffective. The file-sharing website Napster was shut down, but decentralized alternatives soon replaced it. Copyright enforcement became a game of whack-a-mole, with each shutdown followed by the appearance of new file-sharing websites.

By the mid-2000s, the industry pivoted to digital distribution. The iTunes Store (2003) allowed users to purchase individual songs, breaking the traditional album-based sales model. Streaming services like Spotify (2008) went further, shifting revenue sources from transfer of ownership to simple access. These innovations, however, were not the product of copyright enforcement but rather adaptations to technological realities. File-sharing had already forced the unbundling of music, and music providers now had to compete on convenience rather than legal threats.

3. From Bundles to Individual Songs

[2] This analysis aligns with broader critiques of intellectual property rights, such as the arguments presented in Cole (2001a, 2001b), which question whether the societal benefits of patents and copyrights outweigh their economic costs.

One of the most significant transformations in the music industry was the shift from selling music in fixed bundles—such as CDs and full albums—to models that allow consumers to purchase or stream individual songs. Before file-sharing, consumers had little choice but to buy entire albums, even if they were only interested in a few songs, and copyright enforcement allowed record labels to maintain this bundling strategy. However, the rise of piracy revealed a strong consumer preference for *à la carte* music consumption, prompting legal digital services and later streaming platforms to adapt by offering more flexible access to music, allowing consumers to obtain greater satisfaction from the money they spend on music.

********** INSERT FIGURE 2 ABOUT HERE **********

Figure 2 shows the effect of these innovations, which explain the upturn in sales of recorded music since 2015: while the decline in physical sales (CDs) continued unabated (they now represent a little over 16% of all recorded music sales), revenues from streaming services now account for over two-thirds of global music sales. This shift in the industry's business model illustrates a broader point: copyright enforcement, rather than encouraging innovation, often preserves outdated practices. If stronger enforcement had succeeded in blocking file-sharing, the industry would have had no incentive to abandon its bundling strategy, and consumer choice would have remained constrained.

4. Has Innovation Suffered?

If the conventional incentive theory of copyright is correct, then the decline in recorded music revenues would have caused a drop in the quantity or quality of new music. However, the empirical evidence suggests otherwise.

Waldfogel (2015), for instance, examines the impact of digitization on the quantity and quality of new media products, with a particular focus on recorded music. To assess whether declining revenues from recorded music led to a reduction in creative output, the author analyzed trends in the quantity of new music releases over time, drawing on comprehensive datasets that track the number of new albums and songs introduced to the market annually. The findings indicate a substantial increase in the volume of new releases in the digital era, suggesting that technological changes have lowered barriers to entry, enabling more artists to produce and distribute music independently.

Waldfogel further examined whether this expansion in output is concentrated among independent artists or established industry players. The analysis of *Billboard* chart data reveals a growing presence of independent releases, highlighting the democratizing effect of digitization. While traditional record labels historically served as "gatekeepers", filtering which artists could access mainstream distribution, digital platforms have facilitated a more decentralized environment. Importantly, despite concerns that an increased volume of music might dilute overall quality, this study found no systematic decline in critical or commercial success among top-ranked releases.

In an earlier study, Waldfogel (2012) employed a multi-faceted empirical approach to assess whether the post-Napster decline in recorded music revenue had negatively impacted the quality of new music. Rather than relying on a single metric, he aggregated multiple quality indicators, ensuring a more robust evaluation. One of his measures included retrospective rankings such as *Rolling Stone*'s "All-Time Greatest" albums lists, which provide a long-term perspective on artistic merit. However, recognizing the potential biases in such rankings—particularly their tendency to favor older, well-established works—he complemented this with contemporaneous critic scores from sources such as *Metacritic* and *AllMusic*, which capture how albums were received at the time of release. Additionally, he incorporated consumer ratings from platforms like *Amazon* and *RateYourMusic*, offering insight into broader audience perceptions of quality.

Beyond subjective assessments, Waldfogel also examined industry data, including *Billboard* chart performance, to determine whether critically acclaimed albums continue to achieve commercial success despite declining revenues from recorded music. Finally, he tracked the number of highly rated albums produced each year to assess trends in output quality over time. Across these diverse measures, he found no consistent evidence of a decline in quality in the post-Napster era, despite reduced copyright-related revenue. The continued presence of highly rated albums suggests that financial incentives beyond copyright continue to drive high-quality music production.[3]

5. Why Not?

If musical innovation has continued despite weaker copyright protections and lower revenues from sales of recorded music, what explains this resilience? Most musicians never really made much money from copyright-related sources of income and—even in the case of Grammy-winning and platinum-record superstars—very few musicians have relied solely on recorded music sales for income. Performing artists, particularly, have always earned much more money from concerts and live performances than from album sales. DiCola (2013) provides survey-based evidence that supports this claim.

Based on a survey of over 5,000 musicians from the Future of Music Coalition's Artist Revenue Streams (ARS) project, DiCola demonstrates that musicians generate revenue from a diverse set of sources, with substantial variation depending on their role in the industry, career stage, and genre. His data show that recorded music sales accounted for just 6–12% of total income, even among full-time musicians, while live performance generated 28% on average (and exceeding 50% for independent artists). Secondary sources such as teaching, licensing, and grants supplemented musicians' income, buffering them against declining record sales.

[3] These findings are reinforced by Waldfogel (2017), who argues that digitization has broadly contributed to a "golden age" of creative output across not only music but also movies, books, and television, as lower distribution costs and expanded access have facilitated both greater quantity and diversity of new products.

By demonstrating that musicians have historically relied on multiple income streams, DiCola's research suggests that the decline in recorded music revenue has had a limited impact on musicians' financial well-being, as they have been able to adapt by shifting their income mix toward live performance, teaching, licensing, and other revenue-generating activities. Concerns over declining revenues from record sales should be considered in the broader context of how musicians sustain their careers.

6. Conclusion

The decline in recorded music revenues did not bring about the collapse of musical innovation. Instead, it forced the industry to adapt, leading to more flexible consumption models and alternative revenue sources. These changes were not driven by copyright enforcement but by market dynamics. Meanwhile, musical output has remained strong, undermining the argument that copyright is essential for creativity.[4]

Policymakers should focus on fostering competition and access in the digital music market rather than attempting to prop up an outdated copyright model.

[4] This is consistent with the broader empirical literature questioning the link between copyright incentives and creative output. Sprigman (2017), for instance, reviews a wide range of studies and concludes that there is little solid evidence supporting the claim that stronger copyright protections generally lead to increased creativity. Recent meta-analytic research also casts doubt on the universal economic benefits of intellectual property protection: Awaworyi Churchill, Luong and Ugur (2022) reviewed a large body of empirical studies examining this issue, concluding that the effect of IP protection on innovation, technology diffusion, productivity, and economic growth is statistically or practically insignificant, and that "the sanguine claims about the economic benefits of IP protection voiced in the advocacy literature or some legal research are not supported by the existing evidence" (p. 1502). See also Boldrin and Levine (2008, 2013), Scherer (2010) and De Beer (2016) for additional perspectives in this vein.

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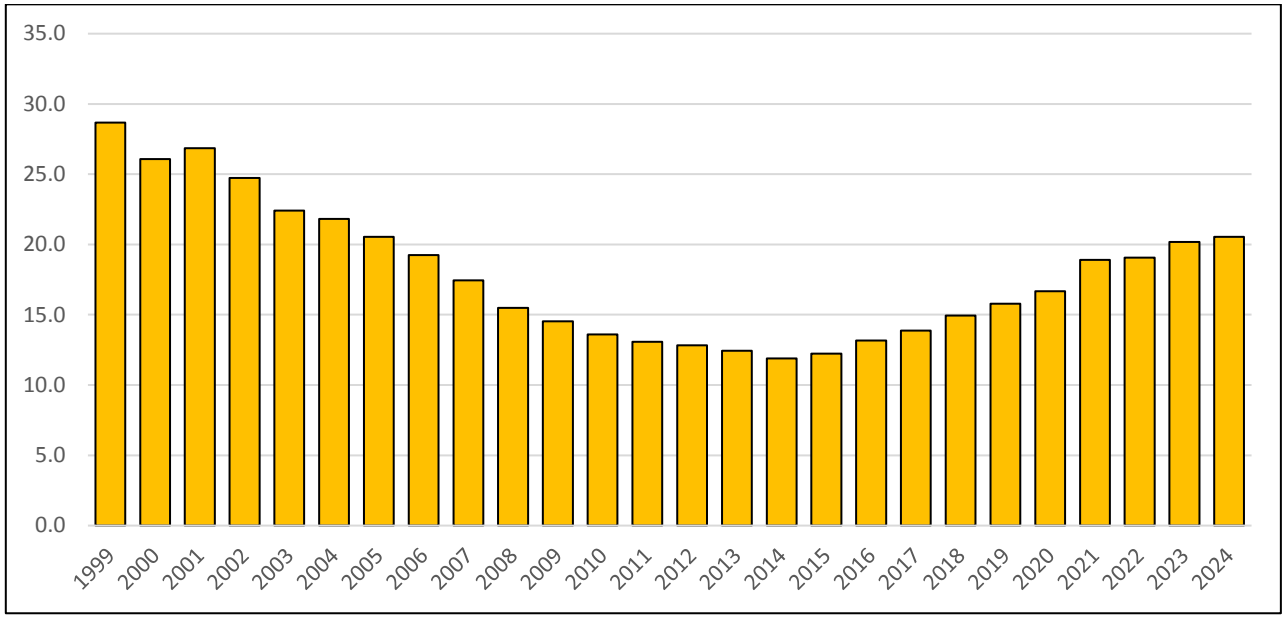
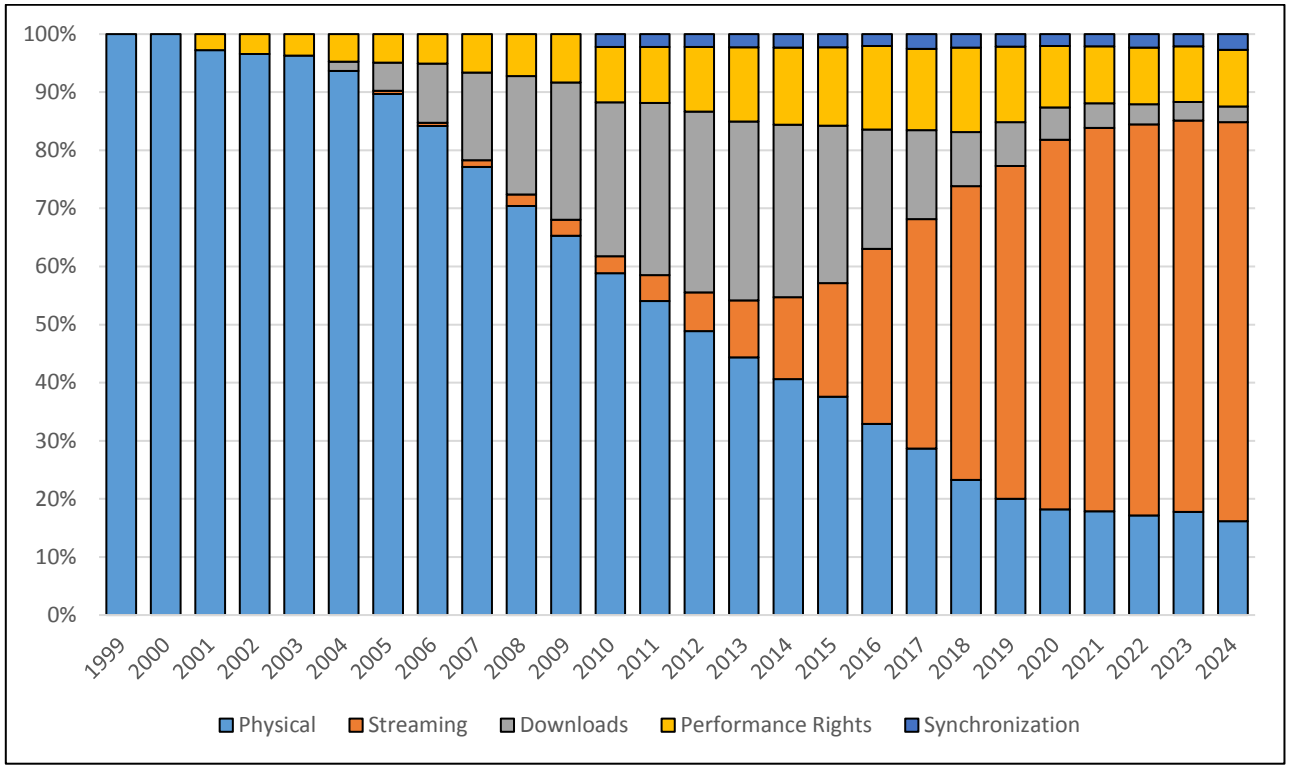
Figure 1. Global Recorded Music Industry Revenues, 1999-2024 (constant 2010 us dollars, billions).



Source: Adapted from data reported in IPFI (2025), p. 7. Data in nominal dollars were deflated using the US Consumer Price Index.

Figure 2. Global Recorded Music Industry Revenues, 1999-2024 (breakdown by source, %).



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