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TESI DI LAUREA

THE TWO SIDES OF THE MUSIC STREAMING COIN: AN INNOVATION THAT BLESSED THE INDUSTRY BUT IS NOW TEARING IT APART.

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Firma dello studente

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I thank my Father for introducing me to the world of music, my Mother for supporting me tenderly and sympathetically, and of course my Sister, who, as always, was there for me and whose astute judgment always kept me on the correct path. I want to applaud countless rock idols I adored as a child, which only served to fuel my passion in the subject of my work.

ABSTRACT

This thesis revolves entirely around the topic of music streaming and its ambiguous impact on the music industry. The focus of the paper is the research question: How exactly has such an innovative phenomenon as music streaming shaped the blessed but problematic landscape of the music business industry that we can observe now? The research attempts to specify economic and common problems that this innovation brought to the complex network of the music business industry. Additionally, it explores how and which of the main agents and participants music streaming phenomena affected the most.

The evolution of digital music consumption throughout history, as well as the factors that led to this, are analyzed in depth. The current situation of the music business industry in Europe and in the world, as well as the broad dominance of digital music, are presented to emphasize the relevance of music streaming in modern reality. Attention is also drawn to an analysis of the relations within music streaming, its main participants, together with their perception and attitude to innovation, and economic and legal aspects of the system. The main problem points identified are the issues of the music rights market, the remuneration of recording rightsholders and song rightsholders, and general problems of the music streaming platforms market. The main reason for the problems of the rights market is shown to be the sharp concentration and cross-ownership of rights which led to the dominance of the rights market by majors. Streaming technology legal classification issues, metadata peculiarities, and royalty chain length are identified among the main reasons for the problems with remuneration. The main troubles faced by the music streaming platforms market are safe harbor provisions in the law, monogamy of platform services, intense competition, and privacy concerns. The conclusion presents possible future trends for music streaming within the music industry business.

Keywords: Music Streaming, Remuneration, Music Business, Digital Music Consumption, Innovation, Copyright, Rightsholders.

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INTRODUCTION

Since I can remember, I have been a big fan of music. My father had a large library of music from the 1960s to the 1980s when I was a child, and my favorite was an old tape with a collection of classic rock ballads by artists like Gary Moore, Deep Purple, Eric Clapton, Scorpions, and others. This tape, along with many others, vanished when I moved, but I remembered the songs' orders and recreated this mixtape masterpiece as a Spotify playlist, which I still frequently listen to when I feel nostalgic. When I was younger, I had a curious mind. One question always occupied me more than the others. Taking the tape in my hand, I often asked my father how all these rock idols become who they are. Early on, I saw that they weren't naturally born rock stars. My father answered me in a simple way: he explained that the whole world listens to them and loves their music. And I was baffled by how those musicians knew that. How does Chris Rea know that we are in a tiny village in the southern part of Russia, almost in the middle of nowhere, listening to his songs? My father laughed at it, he could not explain to a 6-year-old child all the subtleties of music distribution, he just proudly enjoyed the fact that his growing daughter had his taste in music. Following my curiosity, I have now answered my tape question for a considerable amount of time, but my curiosity about the intricate, complex musical environment has not subsided.

Over the course of its history, the music industry has seen numerous transformations. It hasn't been still for a year, one could say. Some of the modifications were more gradual and cautious, enhancing current technologies and patterns. Some changes were just demolishing all paradigms. Such modifications ruined everything that people knew about music and how to listen to it. The advent of music streaming was one of these brilliant and cutting-edge breakthroughs.

It can be stated that iTunes has paved a good path for expanding and improving the possibilities of digital music consumption, but the fact that streaming has shaken up the industry like nothing else is undeniable. And now, almost 15 years after the launch of one of the largest streaming platforms, we still use this innovation almost daily. It has become so firmly embedded in our everyday life that we no longer think about all the complexities and intricacies behind a simple click on "play". However, from an economic and legal standpoint, the ecosystem of music streaming is highly muddled and complex, and it is important to note that an unequivocal balance in this system has not been attained during the entire lifetime of streaming services.

Main backdrop at the beginning of this work was disagreement with the fact that in the modern world, the phenomenon of music streaming is being made a scapegoat for the entire industry, blaming streaming for all possible sins. I conducted a detailed analysis to identify current state of issues and trends and causes behind them.

The recorded music industry has seen its share of ups and downs, blunders and successes. For a long time, the industry's music consumption methods remained steady, presented mainly with physical media like a vinyl records, CDs and tapes. That time music industry was truly prospering. The future appeared bright for the biggest industry players, who were excited with the CD sector's tremendous earnings. One of the biggest shocks for the music business was the beginning of the 2000s and the heyday of piracy. Piracy has become a massive problem that has thrown into question all previous technology advancements, such as MP3, because they have now served as the foundation for illicit activity. The issues of the recorded music industry have spurred debate among practitioners, policymakers, and academics over the impact of illegal file sharing. This conduct not only decreased the industry's revenues significantly, but it also violated many rights, harmed copyright protection, and presented a significant risk to main sector players' reputation.

A lot of academic research has been written on piracy, including behavioral experimental research of d'Astous, Colbert and Montpetit (2005) which tested young consumer's attitude towards early anti-piracy arguments and studied music piracy behavior, paper by Chiou, Huang and Lee (2005) that examined the antecedents of consumer attitude and behavioral intention toward music piracy behavior. It is also worth mentioning contribution to the research of the piracy issue made by Sinha and Mandel (2008), that ascertained the factors that govern consumers' willingness to pirate a digital product, and comprehensive study on the behavioral dynamics that impact the piracy of digital audio written by Gopal et al. (2004). It is necessary to note an article by Sinha, Machado and Sellman (2010) with an interesting approach to questioning digital rights management (DRM) as an effective strategy for reducing digital piracy, that conducted large empirical studies and concluded that the music business can gain from DRM removal since this removal has the ability to convert some pirates into paying customers. In streaming context, the works by Dörr et al. (2013) and Borja, Dieringer and Daw (2015) bring sizable contribution, presenting an empirical investigation of the intention to use music streaming services as an alternative to music piracy, and analysis of the impact of music streaming services on music piracy among young generation of listeners respectively.

After overcoming the peak of piracy, the record industry was saved by iTunes from its own inefficiency, which also provided Apple the priority of the pioneer with all the privileges that follow from this. While iTunes didn't put an end to internet piracy, it did provide great solution to those who thought it was preferable to pay for things. Spotify was launched in 2008 with the ambition to create a legal ad-supported music service that was free for the music listener but generated licensing revenues to copyright holders. The company managed to sign agreements with the leaders of the music industry, which was already a great victory in place of the usual failures. Music streaming are undeniably significant innovations that have resulted in considerable mindset shifts among both consumers and producers. The digital era has presented the industry with a number of unexpected challenges, some of which it has addressed and others which it must yet face.

Indeed, one of the acute problems is the problem with the financial compensation of creators for music streaming. It turned out to be difficult for modern industry players to cope with the radical changes that streaming brought to the economic architecture of the system. The expansion of music streaming utilization has been accompanied by ongoing debates over how much streaming services should pay rights holders. But the present industry dispute is focused primally on how the revenue raised by streaming services via fat rates from consumers is allocated to the appropriate holders of the rights. The problem of renumeration is raised by Meyn et al. (2022) in their research of the implications of platform remuneration models for digital content. It is impossible to downplay the contribution to this topic made by Hesmondhalgh in his works on issues of argument and evidence surrounding music streaming criticisms, including remuneration question (2020) and his extensive study on music creators' earnings in the digital era (Hesmondhalgh et al., 2021). Another common theme that the industry has encountered is the problem of the imperfection of related legal and copyright systems for the streaming era, friction and discrepancies within which prevent effective interaction of the parties. This topic was touched upon by Meisel and Sullivan (2002) in their work that examined the effect of the Internet's disruption of the distribution stage on the state of existing copyright law, the recent work by Calboli (2022) which analyzed current legal perspectives on music streaming within US legal practice. Also, in the modern context, the research by Frosio, (2017) on European Digital Single Market strategy and the work by Quintais (2019) containing his critical look on the new EU Copyright in the Digital Single Market Directive are very important for comprehensive understanding of the matter. Finally, other noteworthy papers touching on the various frictions and tensions surrounding music streaming are the following: the work by Marshall (2015) which gives a detailed summary of the dispute, focusing on Spotify's accusations from indie labels and performers; the study by Aly-Tovar et al. (2019) that presents one of the first empirical attempts to investigate the causes of artists' attitudes towards free streaming; the research by Naveed, Watanabe and Neittaanmäki (2017) on co-evolution between streaming and live music and its impact on music industry; the work by Augusto, Santos and Santo (2019) that is exploring the role of trust in service in assessing willingness to pay for it; the article by Bender, Gal-Or and Geylani (2020) that looks into the parameters that make it beneficial for musicians to release their music via a streaming platform; paper by Danaher et al. (2010) that dived into the topic of converting music pirates into music streaming users without cannibalizing sales; Datta et al. (2017) research on how consumers' adoption of online streaming affects music consumption and discovery; analysis of Lee et al. (2016) on the impact of online streaming services on music record sales; recent article by Lyons et al. (2019) on music data dilemma and the problems that industry faces within it; and many others.

Undoubtedly a giant impact was brought by primary field reports mainly conducted by IFPI, MidIA and RIAA agencies, that explored whole industry inside and out and present key statistics. It is also impossible to detract from the importance of the primary sources of all information about the music industry, which are published on such news media as the Times, Billboard, Rolling Stone, Music Business Worldwide, Digital Music News. Irreplaceable contribution was made by the members of the Digital, Culture, Media and Sport Committee of the House of Commons of the United Kingdom Parliament in their published reports on the practice of streaming and DSPs in the UK (House of Commons, 2021)

Many scholarly publications shift their attention to a single area of the issue, eventually moving away from the general picture. My notion was that one aspect cannot be explored in depth and comprehended without first comprehending and studying the entire scenery, much as music streaming cannot be analyzed, demonized, or celebrated without first understanding the environment in which it resides. In this thesis, an attempt was made to integrate existing themes relevant to streaming in the context of the industry's changing reality, to examine them from the perspectives of many participants, and to reference and assess some of the companions in recent solutions.

Aim of research

My main goal was to look at music streaming as an innovation and from the side of various industry agents, to identify and describe the pressing problems causing imbalance and try to understand the reasons leading to them. My main point is that, regrettably, the issue of music streaming is often reduced to blaming all problems on a single aspect of it, such as the payment model. However, there are many pitfalls that are crucial to understanding the actual situation in which the entire music industry ecosystem found itself in the early 2000s and subsequent years.

The beginning to my thesis will give a quick outline of the development of music streaming as innovation and the context in which it occurred. Then, after reviewing the current state of digital music's domination and supporting my points with statistics, I will turn my focus to the data for Europe and Italy in particular. Then, thesis will focus primarily on music streaming, including its traits, subtypes, and unique features.

The thesis will then discuss in detail common rights and economic compensation from music streaming using the illustrative example of monetary flow breakdown. The topic of my work will then be discussed within the context of an examination of innovation and the experiences of those involved in the music streaming relationships. First, I will examine the experience and all the potential benefits and disadvantages of music streaming for consumers - music listeners - from an economic point of view as well as from behavioral and other angles. Next, I will move on to a critical analysis of the experiences of the original participants in the streaming chain: recording and song rightsholders.

At the same time, the problem statements with their interactions and the use of streaming systems, such as incentive and reward issues, as well as the root causes of these issues for certain agents, will be discovered. In the last stage, I will take a broad look at the state of the market for music rights as well as certain challenges and developing trends in the market for music streaming services, which are directly connected to the problems experienced by the agents in this ecosystem.

Methodology of research

Due to the nature of the research issue, I will be combining qualitative research, document analysis, secondary data analysis and some quantitative research to answer it.

Qualitative research considers non-numerical facts and data. Because it defines subjective matters, descriptive qualitative research has various advantages. It is often used in order to comprehend economic, political, social issue, as well as to reach understanding of the ideas, views, or experiences related to the studied subject. Qualitative research might provide in-depth insights into an issue or inspire new ideas. This form of research involves the collection and evaluation of data such as text, video, or audio. Quantitative research, which uses numerical data for statistical analysis, contrasts with qualitative research.

Document analysis is the methodical process of evaluating all types of documents, including printed, electronic, and internet-transmitted ones. Analysis of documents is effective since it calls for data selection rather than gathering. Because of the nature of my research subject, which necessitates close attention to the specifics of the rapidly evolving realities of industry and technology, it is required to examine a significant amount of primary data obtained from various practical, non-academic sources. It is worth saying, in view of the specifics of the topic, the primary data prevails in my research, since it explores practical things and real-case scenarios within the industry. Another benefit is that since such data are mostly in the public domain, it may be easily obtained through the internet or other means without the author's consent. The following types of materials were used during the research: Public records, books, brochures, newspapers articles, press releases, survey results, radio and television show scripts, public posts on social platforms and video content. These materials were used to extract meaning and obtain insight through document analysis.

The term "secondary data analysis" refers to the gathering and re-analysis of the data already gathered by other researchers. Secondary data is useful for studying several facets of the academic point of view on innovation of music streaming, particularly specific problems related to a given subtopic. Another benefit of doing secondary data analysis is that sometimes it is far more cost-effective than gathering primary data. Analyzing secondary data is the best option because gathering primary data that is not publicly available is frequently costly and unreasonable. The extensive accessibility of secondary data is another significant benefit of this approach.

CHAPTER 1: MUSIC STREAMING EVOLUTION

The first chapter begins with a discussion of the development and evolution of the phenomenon of music streaming as a breakthrough innovation for the industry. In addition, it explores the rise and fall of physical media for music consumption and p-2-p piracy, which preceded the arrival of the digital era. After that, the chapter explains the dynamics of the music industry which is in fact is several related sectors: record business, music licensing and the live music industry.

The worldwide music market and the evident dominance of digital music in it, as well as the informational, economic and legal context in which this emergence took place, are further highlighted in my work. Additionally, the characteristics and statistics of the European region, which includes its component, the Italian region, are discussed as significant elements of the enormous worldwide music market. Further, when discussing the establishment of music streaming, the feuds accompanying the innovation emergence were also investigated. The chapter concludes with a consideration of the risks of cannibalization of other music distribution channels through streaming.

1.1 Music streaming as innovation and its short history

Like any other commercial sector, the music industry has seen blunders and successes over the course of its existence, changing both our leisure time and our way of life in general. The music business has advanced significantly from the 18th and 19th centuries, when it was either supported solely by amateurs playing in their homes or by the government, the church, and wealthy private patrons. Now it is a multibillion-dollar entertainment monster machine, which has an incommensurable impact on everything that we are now used to call the digital world. One of the biggest shocks for the music business was the beginning of the 2000s and the heyday of piracy: in the early years of the internet, the recorded music industry failed because piracy spread like wildfire among consumers.

Previously, for some time ways of consumption were stable in the industry, meaning that buying your favorite artist's album on a physical medium like a vinyl record, CD, cassette was the only way in which individual could listen to them. The music business was truly thriving. The future seemed bright for the suits at the top, who were bloated by the enormous revenues of the CD sector, which peaked in 1999 at €30.6 billion. But suddenly for them, everything changed when every US and later worldwide student learned a new word: Napster. The value of recorded music market, increased significantly between 1975 and 1999, but due to the growth of piracy and associated issues physical recorded music decreased drastically after 1999 (RIAA, 2018). The realization that music no longer required to be purchased in the age of the digital and online immediately displaced this long-standing way of way music fans behaved. But who in their right mind could resist such a temptation to have any music of this world and absolutely for free?

While music piracy preceded the digital era, new technologies such as the MP3 format, for example, which emerged and were applauded from the mid-1990s onwards, presented a serious challenge to the music business. The problems of the recorded music industry have sparked discussion on the impact of illicit file sharing among practitioners, policy makers, and academics. This practice not only severely reduced the industry's earnings but also violated several rights, damaged copyright protection, and posed a major danger to its credibility. Later, though, few changes occurred in an unforeseen way: iTunes came to industry’s rescue and a new era of digital music consumption began. By offering fans a safe, convenient, and economical way to buy music, iTunes has resurrected the music business.

After Napster's downfall, it became clear that while internet music sharing was undoubtedly a route worth exploring, free peer-to-peer music sharing remained an exceedingly controversial practice within the music business. While iTunes didn't magically put an end to internet piracy, it did provide great solution to those music lovers who believed in idea of paying for content. One may thus argue that iTunes lent a helping hand to the record business and helped it to cope with its own inefficiency. However, it also gave Apple a more advantageous position as a pioneer in a huge market. Further, the earliest precursors of modern streaming services emerged as a result of technological progress and a more thorough study of consumer needs and behavior. Initially, they were presented with the idea of personalized Internet radio stations with a blend of recommendation algorithms and new economic approaches that usually stood for a "freemium model" where individuals can listen to music without paying anything with encrypted advertisements or pay around 10 euro per month to have uninterrupted streaming.

The digital era has presented many unexpected problems to the record business, some of which it subsequently solved itself, and some still only it has to solve. Digital music consumption and music streaming is undoubtedly a major disruptive innovation that has resulted in significant attitude changes among both consumers and producers: artists, songwriters, producers, publishers, labels, everyone else involved in the massive record music industry ecosystem. Before proceeding to a detailed consideration of the matter it is worth defining some basic concepts and assumptions that are crucial for better understanding.

Understanding the dynamics of the music industry requires first realizing that it is actually a number of distinct industries, all of which are intimately tied to one another, but which also have separate underlying logics and structures. In this work the part of the music industry that is called the record business is mostly discussed: this sector has creation, recording and distribution of music to consumers as its focus. The record business is very closely connected with the music licensing (or publishing) business which is primarily aimed at licensing music content and providing various licensing arrangements to businesses. In the basic structure of the music industry, there is also a third last but not the least part – live music that deals with producing and promoting formats of live music: concerts, festivals, shows.

Recorded music is the biggest of the three sectors and it brought in the most money in the music industry that existed before the Internet. In the traditional music business, musicians and bands were eager to sign with a record label. The agreement allowed the artist to access the record labels' global distribution network, which was otherwise unreachable to the majority of unsigned bands, and moreover the record label paid for high quality studio recordings. Simply put, the music label assisted in the distribution of the artist's music on physical media as well as other platforms, including radio, television, and so on. From an economic point of view, all this was accompanied by a relatively intricate network of transactions in the form of royalties, advances, and other payments however, those formulas used earlier for calculations instantly lost their relevance with the emergence of the Internet and the development of new music distribution channels such as music streaming itself.

Music licensing sector was always smaller and less intriguing. In this industry, music publishers mostly worked on a B2B basis with no direct contact with audience or consumers. Their main goal was to make sure that licensing payments were collected when a song was utilized in any situation and that the money was then equitably and rightfully divided among the participants of the songwriting process. However, even these processes have become much more complicated when music streaming emerged.

It is crucial to note this because understanding and exploring all the economic financial flows would be challenging without a knowledge of the industry's constituent parts. The record industry and music licensing both provide a sizable portion of the industry's overall revenue. One might even argue that music streaming combines two opposite ends: the music industry which is creative by its nature and the innovative flourishing technology industry, which is precisely represented by the emergence and improvement of streaming services.

1.2 General overview of the current state of digital music

Music streaming has a lot of peculiar aspects such as legal framework, agreements and deals within industry practice, payment, and compensation models, all of which rests under the big idea of digital music consumption via music streaming. To comprehend the idiosyncrasies of music streaming economics the environment in which it evolved must be first examined. Politicians and the music industry experts were unprepared for the legal conflict that emerged with the introduction of new music consumption habits. It sparked the development of national copyright laws for the use of digital music, establishing, among other things, the well-known "making available right" that states who and with which condition can make musical content public. The EU member states adopted the making available right as well. In this legal document, technology-neutral language was purposely employed, where the technical means of communication were unimportant, to ensure that any future technical developments would be covered by the clause.

Yet, it took the music business a while to create a workable digital music business plan and provide customers genuine digital music goods. While users simply downloaded more and more recordings illegally, the music business was in chaos and trying to address the issue of piracy from several angles. The business sought to turn to the legal system for a solution, flooding pirated sites with many ineffective lawsuits against people for unlawful file sharing. Firms were frantically attempting to join the market for digital downloads, specifically through the disastrous PressPlay and MusicNet programs, which also turned out to be a fiasco (Witt, 2015). However, in the midst of the furious battle, there were also wins. For instance, record companies were able to shut down peer-to-peer illegal file-sharing networks like Napster, Kazaa and LimeWire, ultimately making them enter the legal side, and collect millions of dollars in damages (McIntyre, 2018). However, despite all efforts, the industry's revenue continued to fall as it can be seen on Pic 1 (IFPI, 2022).

It is worth noting that despite the general negative effect for the entire music industry, piracy still affected different industry players in different ways. One of the good confirmations of this was the study on the effects of the implementation of France's anti-piracy law, HADOPI in 2009, which was examined in the recent paper by Savelkoul (2020). The author was able to find that piracy has a negative impact on music sales when looking at the entire market as a whole. However, he also suggested that the effect is greater for top selling songs compared to lower ranked songs, meaning that superstars suffer from piracy much more than a so-called long tail. Additionally, he discovered that when there is no piracy, customers prefer to focus more on genre and aesthetic. People appear to prefer variety because they eat more of it when it is simpler to find high-quality options, which is the case when free samples are offered through piracy. Despite these disparities in outcomes, the overall market environment was spiraling downward into an economic abyss.

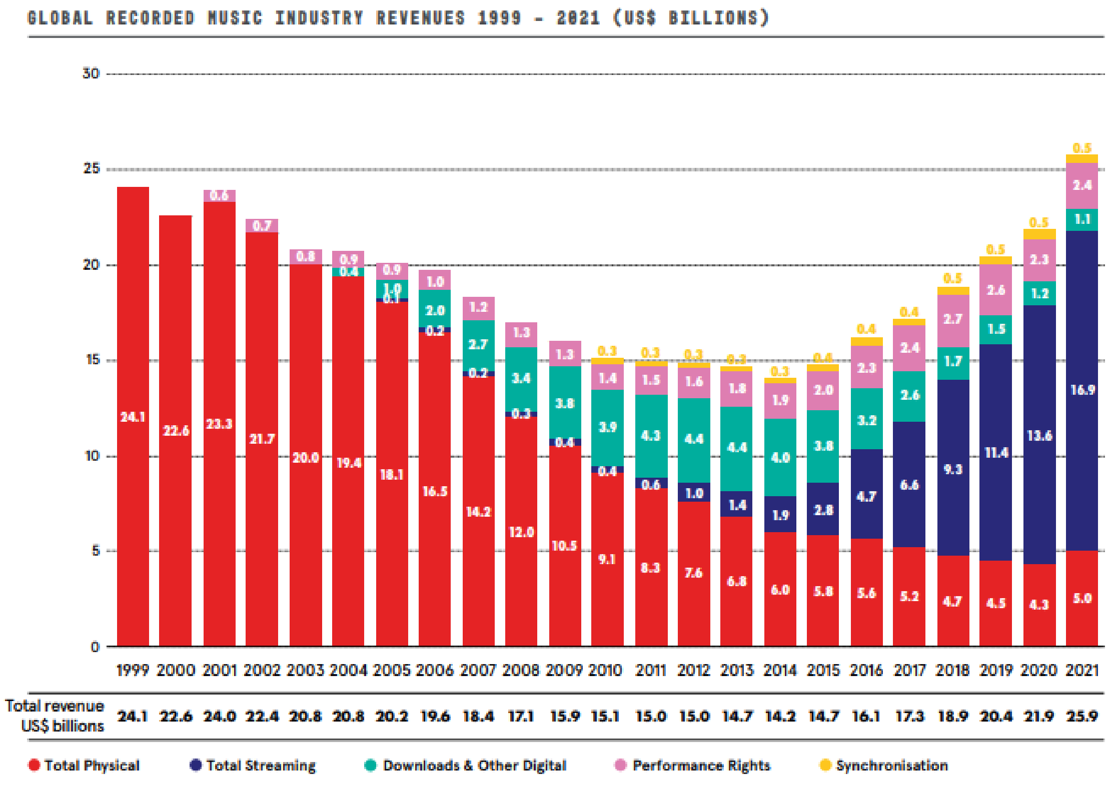


Figure 1. Global recorded music industry revenues: 1999–2021 (IFPI, 2022)

The market for recorded music peaked in 2001 at $23 billion globally, or $33 billion at today's exchange rates. Later, there was a decline of 40% between 2002 and 2015 in the global recorded music revenues because a sizable amount of music listeners moved on to digitally pirated music or unlicensed content on UGC hosting websites. Many industry stakeholders of that time aggressively stated that around 90% of music consumption was illegal.

If we talk about attempts to technically regulate the situation, preceding the victorious launching of iTunes, there were a few botched initiatives by the major record labels at the time, but the most important component in the development of these services appeared to be that idea of increasing the businesses' revenue rather than posing any kind of danger to their current revenue sources. If ideas succeeded in not competing with physical sales, they could not compete with piracy anyway.

In 2003, Apple was able to convince major record companies that music lovers would lawfully buy music if they were given a very innovative option that permitted them to obtain it for less than a $1 per track. The music business underwent a sea change thanks to iTunes. It was the pioneer digital shop that could sell the music from all the major record labels. Service had a completely original price structure, and it let customers just purchase the songs they genuinely liked rather than the full album. Despite departing from the typical for music industry bundle sales vision and having its short-term detrimental economic repercussions (Elberse, 2010) iTunes platform still allowed the biggest players in the industry to sympathize with the technology. The positions of big labels and power structures, on the other hand, have largely been unaffected, making iTunes all-in-one drastic but careful innovation. This was sufficient to accommodate the great majority for the time being. Thanks to the amount and structuring of data, provided by Apple, the copyright holders still had control over their property, and the systems for allocating the royalties collected from each track sale were predictable and transparent. The iTunes music shop can only be viewed as a resounding success because Apple correctly predicted customer behavior.

After iTunes gained the top spot by introducing the industry to the realm of digital music consumption, some companies went even farther and started to explore even bolder solutions in new dimension. These businesses provided services that were entirely legal but also far more revolutionary and therefore more controversial.

These were streaming services that gave customers access to a sizable music collection so they could listen to it whenever they wanted, as opposed to offering single tracks for sale at a defined fee. Some services functioned similarly to Internet radio, taking the listener's tastes into consideration based on the built-in recommender algorithms. Users of these services created a new economic paradigm for the consumption of music when they paid a monthly subscription fee that entitled them to uninterruptedly stream endless amount of songs from any artist, any collection and as frequently as they wanted.

Economic and legitimate copyright issues and absolute novelty in mindset were the reason that these access-based music services have had trouble on one hand persuading record labels to provide them access to their catalogs in form of licensing and on another hand persuading customers that they may listen to music without buying a copy of the composition or music album. Furthermore, it would be impossible to ignore the industry's growing concern at the time regarding the impact that streaming services would have on music sales. In his work, Aguiar and Waldfogel (2018, p.280) argue that although it is difficult to accurately measure the collective contribution of a sharp increase in streaming reliably in isolation from other factors affecting digital sales, however, it is stated that this effect is not zero. It is asserted that “even if streaming displaces sales, it does not necessarily depress music revenue; that depends on whether the streaming payment is high enough to offset and potentially overcome the reduction in revenue from forgone permanent sales. Revenue is the sum of revenue from music sales and streams".

Spotify is the most popular and the most discussed music service so far. It gave a crazy twist to a music consumption situation in mid 2010s, quickly becoming the first of its kind mainstream music subscription service. It was launched in the end of 2008 with the main duty to create a legal music service that was absolutely free of charge for the music lover but that would also be able to generate revenues to content rightsholders.

It was difficult for the company to negotiate with labels and publicists, since the latter were not very positive about getting involved in another technical adventure, which is very likely to burn out, like its predecessors. Additionally, there were certain musicians who did not wish to contribute full catalogues to Spotify, including such superstar artists like Radiohead's front man Thom Yorke and Taylor Swift (Knopper, 2018). Bender et al. (2020) explore the circumstances in their study that might make it lucrative for musicians to release their music through a streaming service. They demonstrate that more popular musicians run a greater risk of jeopardizing their sales when they decide to stream their music than do lesser-known musicians. The degree of imbalance between the two categories of artists in terms of the size of their fan bases and the consumption benefits they provide to fans determines the level of this heightened cannibalization. These results also make it evident why celebrities who have removed their art from streaming took this decision. According to the research, if the platform wants to draw in more popular artists, it could have to raise the royalty payment in order to counteract the effects of cannibalization. But this option questions main principles of equal chances of revenue from streaming, that were originally promoted by the platform. However, despite the skepticism surrounding the startup, the company managed to sign agreements with the leaders of the music industry, which was already a great victory in place of the usual failures. Looking ahead, it is important to note that the value of new technology in the industry has been realized by the artists who first pulled their works from Spotify, and they eventually returned them. In written evidence submitted by Eddie Sears, creative director of Ultra Records (Annex 1), it was stated that streaming cardinally changed the industry, becoming more than more just a distribution channel: streaming became the key to every successful campaign. According to Sears, music streaming allows to analyze audiences in detail and tailor creative campaigns in the best possible way, as well as allowing independent artists to release music with very limited cost. It allows a lot of trial and error and endless opportunity for discovery on different platforms.

According to a Swedish survey, between 2009 and 2011, as streaming services became more widely accessible all across the globe, the number of persons who pirated music decreased by 25% (Dörr et al., 2013). In 2018, there was only 10 % of music consumers who still pirated it, which was a sizable decrease of 8% within half of the decade. It was also stated that 63 % of those who had quitted pirating music, had actually switched to streaming services. (Feldman, 2018). The recorded music sector has shown annual growth since 2014 on average. For the first time, music streaming format tipped the most share of consumption of music in 2019, when worldwide streaming income increased by 23% and made up 56% of all global recorded music revenue (IFPI, 2020).

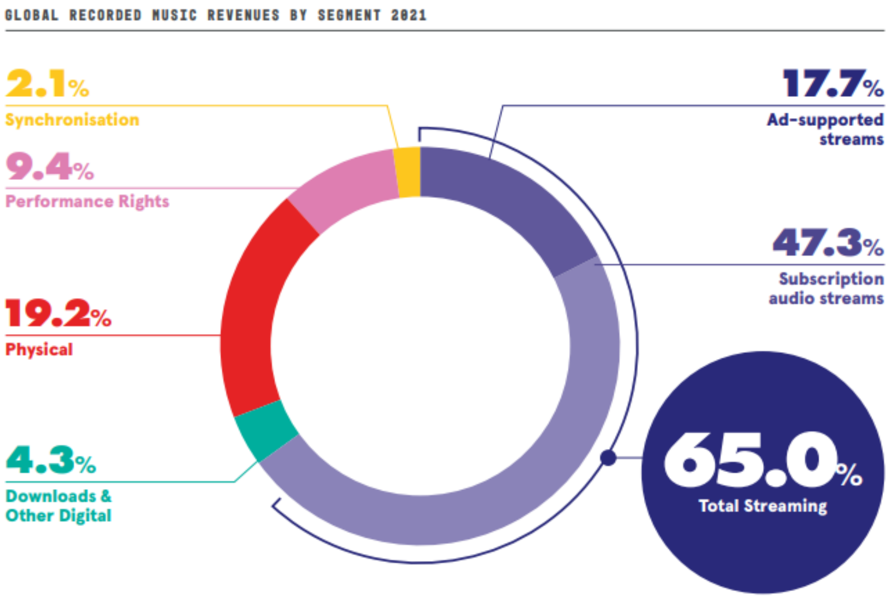


Figure 2. Global recorded music industry revenues in 2021 by segment (IFPI, 2022)

2021 is the seventh consecutive year of growth for the industry. That year global streaming revenues reached 65% up from a 61.9% share in 2020, of which net revenues from audio streaming subscriptions amounted to 47.3%, while the rest was made up of ad-supported streams and video stream revenues. In the figure below, it can be seen what percentage of the total music income other components were: synchronization, performance rights, physical media, downloads and other digital. We can plainly see that streaming accounts for more over half of income, and its share is rising.

IFPI research stated that in 2021 the worldwide recorded music market grew by 18.5%, a notable difference over the rate of the previous year, that was estimated to be around 11.3%. Recorded music revenues reached US$25.9 billion, which happens to be the highest revenue levels this millennium. Except for digital downloads and other (non-streaming) digital, which is experiencing a sharp decline of 10.7%, all other media experienced rise in revenues, including physical formats, performance rights, streaming and synchronization. The top 10 markets in the globe that are US, Japan, United Kingdom, Germany, France, China, South Korea, Canada, Australia, and Italy, all saw increases. Once more, streaming, especially paid subscription streaming, was a major factor in the expansion of the whole industry. Datta and others (2017) demonstrate in their work on the adoption of online streaming that streaming shapes listener behavior which explains some shifts in revenues. They also discovered that streaming enhances overall consumption, promotes greater diversity, and makes it easier to find more highly regarded musical genres.

Online music piracy also continued to decline steadily, being seriously shaken by legal streaming. Some researchers believe that streaming displaces piracy in general (Aguiar & Waldfogel, 2018). Technologically, one of the tools for combating streaming piracy is the so-called DRM systems (digitals rights management). These systems were a huge success in the early stages of the introduction of music streaming, and clearly influenced the reduction of piracy in general, but now that streaming has firmly entered our everyday life, some researchers do not agree that in our time DRM bring as much benefit as before. According to Sinha et al. (2010), abolishing DRM might help the music business since it might persuade some lingering pirates to become paying customers. It is obvious that many listeners appreciate songs that are free from paranoid control over piracy also based on a psychological phenomenon called reactance (Brecht, 1966). Therefore, it is reasonable to say that DRM restrictions have the dual effect of decreasing consumers' utility for legally purchased music and increasing reaction among consumers who value the social networking benefits of sharing music, which causes many of them to develop negative attitudes toward the industry and possibly also engage in exactly the kind of behavior that DRM tries to prevent. Additionally, by raising customer demand for and willingness to pay for legal items, a DRM-free environment improves both consumer and producer welfare. In other words, the DRMs helped the community out earlier, but now it can serve as a kind of problem for streaming platforms.

Data from MUSO's Discover analytics platform reveals that from January 2017 through the second half of 2020, music piracy continuously decreased year over year; however, starting in 2021, it progressively began to grow (Stassen, 2022a). According to the data, as seen in the graph below, there was a 65% drop in music-related pirate visits globally in 2021 as compared to 2017. It is stated that the decision to not support exclusive material on streaming platforms made by the music business over the previous five years has had a favorable effect on music piracy. The slight growth was 2.18% in 2021 compared to 2020.

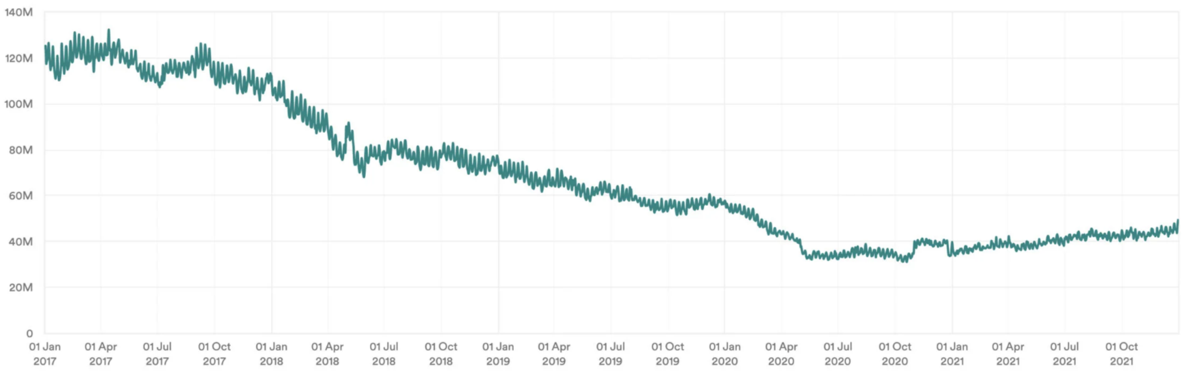


Figure 3. Music piracy decline 2017-2021 (Stassen, 2022a).

Looking at MUSO's statistics internationally reveals that unauthorized streaming and online downloads are the two most common types of music piracy on the market, with India being the most popular nation for it. Iran takes second place for music piracy, with the United States coming in third and India holding the crown. According to MUSO data, stream ripping was the most common form of piracy, accounting for 63% of all activity.

The report from the European Union Intellectual Property Office (EUIPO) exploring online copyright infringement serves as a pleasant reminder that in 2022 we will be in a far better position to address that problem than we were in 2002 (Garcia-Valero et al., 2021).

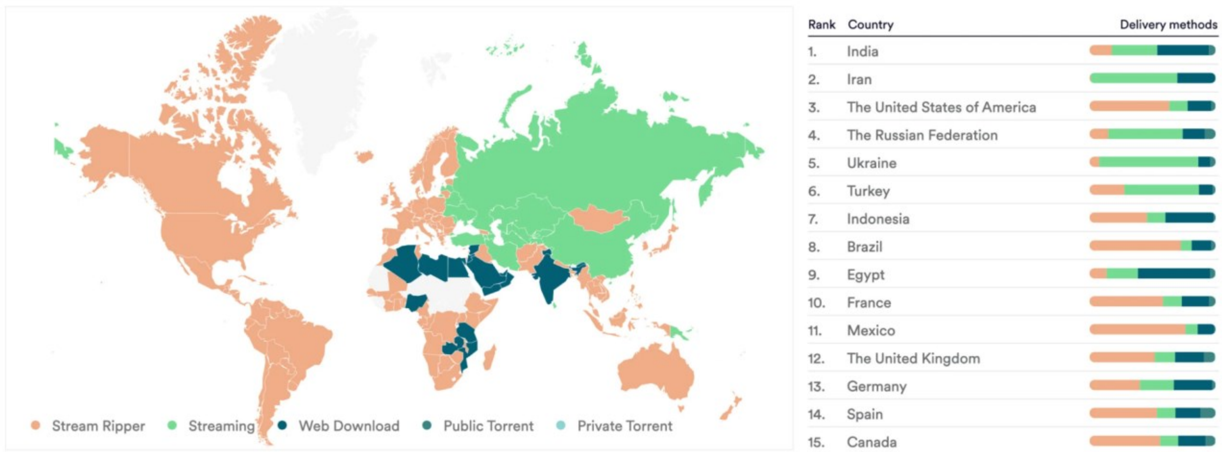


Figure 4. International statistic for methods of piracy 2021 (Stassen, 2022a).

Despite the fact that many are still arguing about whether online music consumption is equivalent to offline consumption, whether these two types are complementary or interchangeable, a study by Dang Nguyen et al. (2013) showed that on-demand music streaming, where the consumer does not own the music but only has access to it, has no discernible impact on CD sales (Nguyen et al., 2013). And furthermore, live music attendance, which is considered offline music consumption as well, is positively impacted by on-demand music streaming, but only for national or international artists who are more likely to be accessible on streaming services.

The recorded music industry's experience with the rise and fall of music formats such as vinyl records, 8-track cassettes, cassette tapes, CDs, digital downloads, and now streaming music is an excellent illustration of the economic principle known as "creative destruction." The gales of creative destruction, in the words of economist Joseph Schumpeter, are "processes of industrial mutation that ceaselessly change the economic structure from within, endlessly destroying the old ones, endlessly constructing new ones" (Reinert, 2006) Physical music formats (LPs, cassettes, and CDs) have all but been "destroyed" in favor of streaming music.

This fact facilitated it to see the risks of cannibalizing other music distribution channels through streaming. The findings of the Wlömert and Papies (2016) study demonstrate that both the use of free streaming services and the use of paid streaming services decrease consumer spending on music overall, meaning other channels of music consumption apart from streaming are mainly affected. However, they show that subscription streaming services have a net beneficial impact on revenue. The results imply that the positive effect of paid streaming on industry income balances out the negative impact of free streaming on that level. However, some other studies have also addressed the issue of cannibalization but ended up with more unanimous conclusions. In order to ascertain the influence of digital products on physical items, Lee et al. (2016) examined the effects of implementing online music streaming services on the sales of music recordings. They were able to determine that internet streaming services have a favorable influence on music record sales using monthly data on music record sales and streaming from the official Korean Gaon Music Chart. Additionally, male musicians sell more recordings than female musicians because female fans, who like male musicians, are more prepared to shell out cash for particular services. Record sales are positively impacted by the quantity of tracks on an album and the number of artists in a band. According to the data, online streaming has a favorable effect on music record sales.

Despite different opinions about the impact of streaming on other channels of music consumption it is safe to say that with each new destruction and mutation, music formats improved, became more affordable, accessible, and practical. Indeed, the most popular music streaming services have initiated a giant movement away from a paradigm of consumption of music built on the idea of ownership toward one that is based on unlimited access. It is yet another illustration of why current period in history is so incredible, especially for music lovers.

1.3. Music streaming and music market in Europe and Italy

The position of the European recorded music market in the global landscape has only been briefly discussed so far, it can be analyzed more thoroughly now to see where it stands in the industry as a whole, and what indicators it has for music consumption by formats, as well as where Italy is located in this system.

To begin with, it needs to be stated that the share of the United States in the music industry has historically significantly outweighed the share of Europe and other regions. The U.S. was always the big player but it is not only matter of the music market size. The influence of the United states spreads far beyond the country's borders, making the country industry trendsetter. For example, as of October 2022, over 62% of the songs on Spotify's Global Top-50 playlist were recorded by US-based artists. Figure 5 illustrates the situation and Annex 2 provides the extensive data, proving the point.

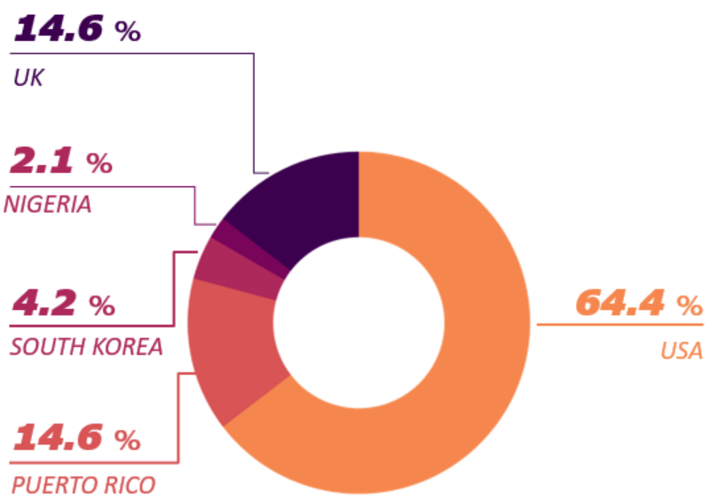


Figure 5. Percentage share by country of songs in the Spotify's Global Top-50 playlist

However, recently, namely in the last 7 years during which the industry has not stopped growing, the European region has shown good results and in an impressive number of years it was considered the second on the worldwide market: for example, in 2021 the European region has a share of 30.1% of the global revenues of recorded music business. Since 2016, Europe has seen significant growth in music revenues. It is heavily attributed to the rise in music streaming in the region. In their most recent state of the industry report, IFPI notices that there was 15.4% revenue growth for the European region (IFPI 2022). Compared to the 3.2% rise in the previous year, it is a notable improvement. In contrast to the previous year, revenues in Europe have sharply tripled in 2021.The three biggest markets in the European region are the UK, Germany, and France. With double digit percentage sales growth of 13.2%, 12.6%, and 11.8%, respectively, each country kept its place in the top 10 globally. After expanding by 27.8%, Italy entered the top 10 markets once more. Gains in streaming revenues were the main driver of growth in each of the four European countries. Italian recorded music revenues grew 27.8% in 2021 to reach €332 million, up €72 million versus 2020, when the market generated €259.89 million in recorded music revenues. It is a well-recognized tendency that revenue from streaming platforms, the majority of which is earnings from subscriptions, is the primary driver of such revenue rise.

According to a recent presentation by David Price at Milano Music Week (Price, 2022), subscription-based audio streaming takes an average of 14.7% or 3 hours a week for Italians, while advertising-based streaming takes 2.4 hours a week. Radio surprisingly plays an important role in Italian media realities: it is listened to 4.1 hours a week (20.1%), which is about equivalent to the amount of time Italians spend on video streaming platforms – a little bit over 4 hours or 19.8%.

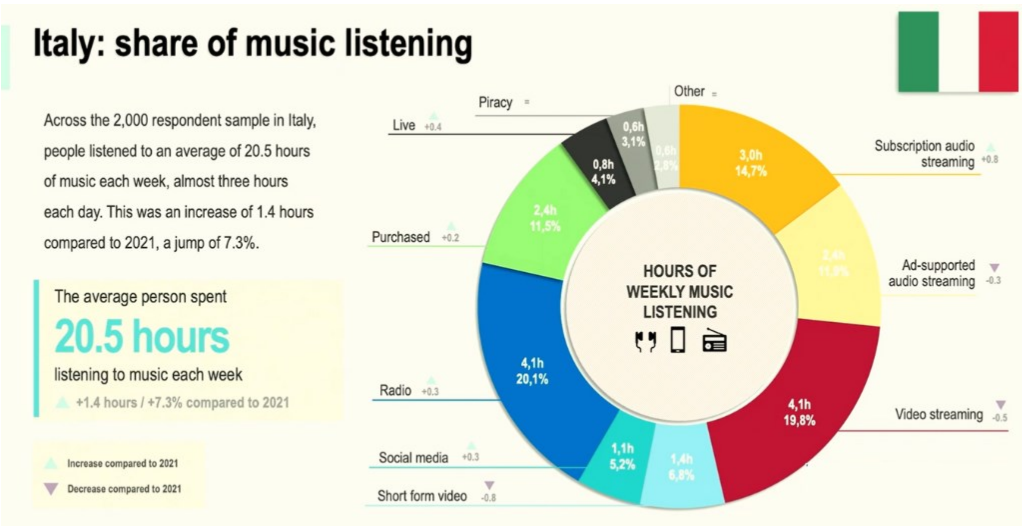


Figure 6. Share of music listening in Italy by formats (Price, 2022)

As for age differences, 84% of 16-19 years old consumes music through streaming services. Despite the rise of music streaming, radio remains a significant channel for music consumption for a considerable percentage of Italians over the age of 55 (34% of older listeners comparing to only 4% of radio listeners among youngsters of 16-19 age). Listeners from Italy appreciate uninterrupted, on-demand access to a rich music library of licensed content available. According to the survey (FIMI 2022), young people are more likely to appreciate the option to switch and skip songs, as well as the capacity to save content to the phone for offline listening, which is given by many subscription-based streaming models. Older Italian listeners, for instance, enjoy the convenience and ability to listen on demand.

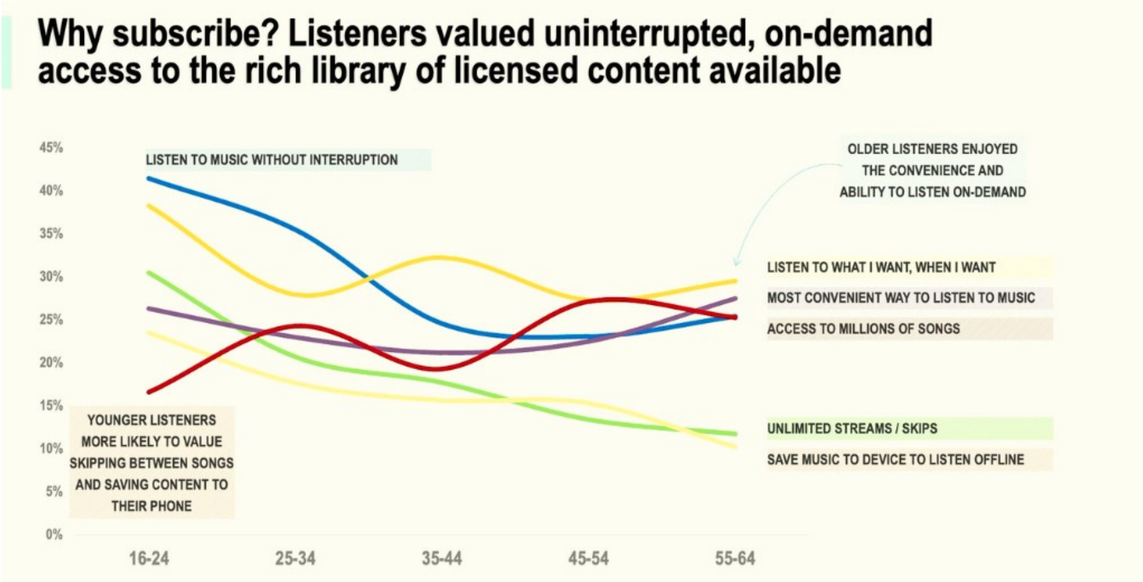


Figure 7. Reasons to subscribe for streaming service in Italy (Price, 2022)

When we look at the specific preferred ways to stream in Italy by different ages, we get a fascinating image of the Italian listener (Figure 8).

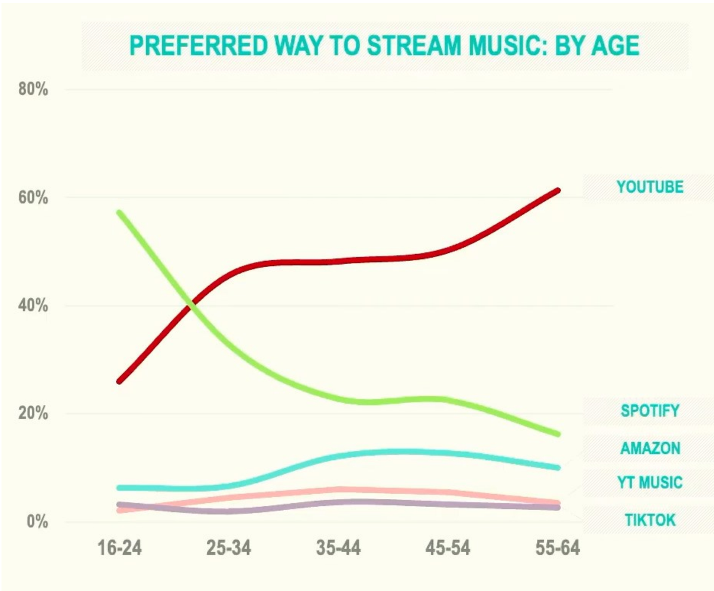
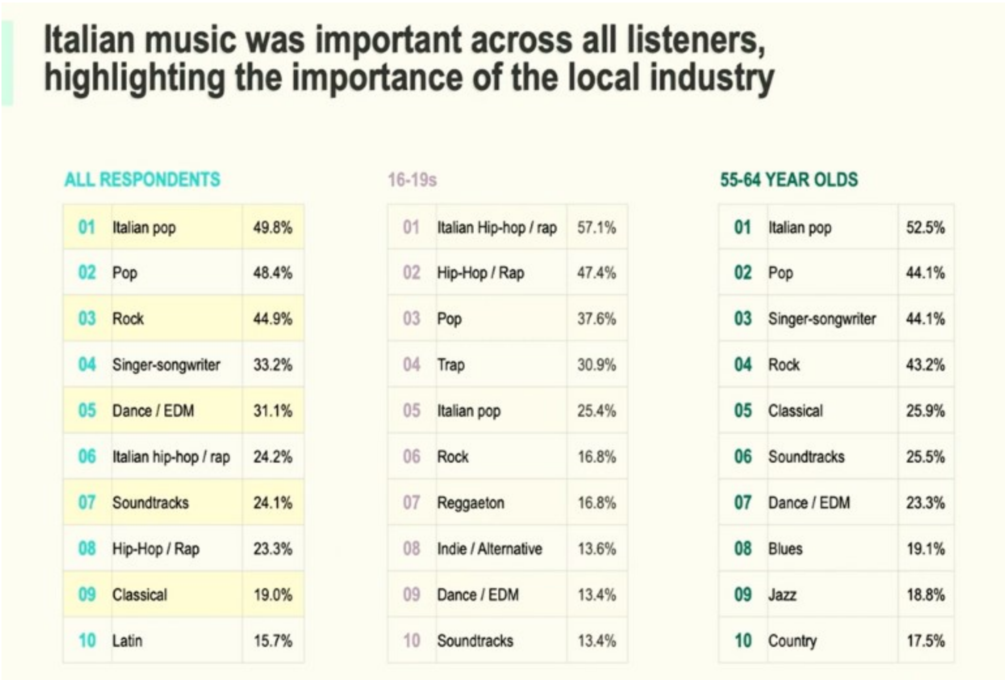


Figure 8. Preferred platform to stream music by age (Price, 2022)

There are two competing channels, YouTube and Spotify; the first is popular with older listeners, while the second is the go-to channel for young people. As for the information on the discovery of new music, in Italy the pedestal is divided the following way: Tik Tok for the young population (38% of young people under 19 years old), Radio for the older population (also 38% for the population over 55 years old) and YouTube, which is a popular way for all ages (35-27%). Piracy in Italy is most popular among the youngest listeners. Stream ripping remains a key threat from music piracy: it is used by about one in four Italian listeners in cohort of an age 16-24. As in the rest of the world, the main reasons for stream ripping in Italy were focused on obtaining for free the kind of benefits offered by subscription based streaming – listening offline, having no advertisements, have a copy of a content to access to it on-demand.

One of the most intriguing ideas raised during the report was that Italian listeners are fundamentally different from the majority of listeners in other countries in that they prefer to listen to locally produced music in their native language - for example, more than 50% of all ages listened to Italian pop music in Italian. A higher percentage can only be found in K-pop in Korea and J-Pop music in Japan. Given the enormous popularity of K-pop both inside and outside of their native nation, throughout the world, it would be fascinating to see if a similar trend is conceivable in the future in Italy and whether it is applicable to the world music market.



Italian music was important across all listeners, highlighting the importance of the local industry

	ALL RESPONDENTS			16-19s			55-64 YEAR OLDS	
01	Italian pop	49.8%	01	Italian Hip-hop / rap	57.1%	01	Italian pop	52.5%
02	Pop	48.4%	02	Hip-Hop / Rap	47.4%	02	Pop	44.1%
03	Rock	44.9%	03	Pop	37.6%	03	Singer-songwriter	44.1%
04	Singer-songwriter	33.2%	04	Trap	30.9%	04	Rock	43.2%
05	Dance / EDM	31.1%	05	Italian pop	25.4%	05	Classical	25.9%
06	Italian hip-hop / rap	24.2%	06	Rock	16.8%	06	Soundtracks	25.5%
07	Soundtracks	24.1%	07	Reggaeton	16.8%	07	Dance / EDM	23.3%
08	Hip-Hop / Rap	23.3%	08	Indie / Alternative	13.6%	08	Blues	19.1%
09	Classical	19.0%	09	Dance / EDM	13.4%	09	Jazz	18.8%
10	Latin	15.7%	10	Soundtracks	13.4%	10	Country	17.5%

Figure 9. Preferred genres of music by two age cohorts: 16-19 years old, 55-64 years old (Price, 2022)

But the impact of the United States on other local music markets, particularly the European one, goes beyond simple commerce. While there are undoubtedly distinctions across other areas, the basis, which was mostly set by American precedents, remains as solid as ever. The United States is a leader and an inspiration for other countries in the fields of law and legislation, and generally the architecture of the music market models related to streaming. It is advisable to consider how the music business system functions in the USA for further comparison with the European area and then with Italy.

CHAPTER 2: INSIDE OF MUSIC STREAMING

This chapter will showcase numerous music streaming models that are distinguished by unique traits. Following that, 2021 user usage data for the most popular services will be presented. Next, the basic set of rights related to the relations of agents within the music streaming process will be considered: the rights to the song and the rights to record, since the aforementioned rights serve as the basis for financial compensation of those involved in the creative process. Further the controversial making available right and right to equitable compensation will be briefly addressed, due to the fact that they have a great impact on the dynamics of streaming. Having mentioned all these rights, the thesis proceeds to the description of the types of royalties and to whom and in what proportions they are supposed to be assigned. Next, a monetary breakdown of the economic flow of music streaming will be presented with a detailed description of all the cash movements and the participants of the system. The different kinds of license agreements between artists and labels will next be briefly addressed in order to provide a more comprehensive understanding of the flow of funds and its peculiarities.

2.1. Music streaming models

The first thing to note is that music streaming services are at the junction of the creative sector and the technical one, and for the most part streaming is technological innovation in a first place. Technology company platforms offer music streaming services either as their primary role or, less frequently, as a supplemental service. Streaming services are frequently called digital service providers in the music industry practice (DSPs), although this name may also be used to informally speak about variety of other things, because term does not clarify which service platform provides.

One of the simplest categorizations that speaks for itself is interactive music streaming services, non-interactive, and hybrid versions that prevail on the market. However, there are still many attempts to bring order to the classification of streaming platforms. consider Some approaches of different categorizations will be examined below.

2.1.1. Pricing Strategy

Most of the streaming services for music can be accessed in the following ways:

1) through premium option, which require individual to pay subscription fee every month or every year.

2) through free option, that is financed by third-party promotional ads. Such ads are targeted to a particular streaming client with the help of personal data shared by the platform.
3) through freemium option that combines premium and free.

A logical explanation for the creation of several pricing business models in the streaming sector has been discussed by number of researchers. A larger audience, in the opinion of Carroni and Paolini (2020), encourages the platform to boost the advertising intensity and the standard of the Premium. As a result, some customers switch to the Premium service. As the audience grows to a certain point, the platform ultimately has large incentive to switch to a solely subscription-based pricing strategy. Despite this, platforms with free access still exist and will continue to exist, since according to the authors' model, a smaller the platform would instead provide a selection of subscriptions, including free advertising-funded access.

The normal cost of such services like Apple Music, Spotify, YouTube Music, SoundCloud Go+, Tidal Premium, Deezer Premium is around 9.99 –10.99 €. They also provide student for 4.99-5.99 € and family plan for 14.99-15.99 €. It needs to be mentioned that there may be pricing expansion tendency, since Spotify has recently added duo plan those costs 12.99 € and serves 2 accounts. Some premium services also have free versions, which however have some restrictions on the use of the service, such as built-in audio ads or track skipping restrictions and online-only playback. On the other hand, to enhance the standard premium offering, some providers offer more detailed premium tier structures with specific service features like better fidelity sound for more costly plan. The majority of music streaming services, except Apple Music use a "freemium" model, meaning that they provide a mixed service that combines a premium paid one and free bare-minimum service (with the aforementioned difficulties for a listener). All this is done in order to convert as many free subscribers as possible into customers paying for a premium subscription.

Although the mentioned three schemes of pricing are the most common in the streaming services market, few services provide price-forming innovative solutions either to leverage other bundled services or to set themselves apart from their rivals. Despite the general trend of the industry towards unbundling, some players prefer to use the old schemes in a new reading regarding the world of digital and music streaming (Papies & van Heerde, 2017). For example, Amazon includes its premium streaming service Amazon Music as part of the overall Prime package with their expanded Amazon Prime membership. Users of Amazon Prime receive features including shopping discounts and movie streaming in addition to uninterrupted music streaming from a giant Amazon library. Such services are offering music as a bundled offering and the idea works according to the "two for the price of one" principle favored by marketers.

There is another set of strategies with completely alternative pricing strategies, different from the three most popular ones listed above. An example of such price models is an alternative model called "Stream2Own", it has much more complex logic than previous models. A listener using this model pays a certain fee, which doubles when he streams a track every tenth time, reaching the expected threshold, which corresponds to the approximate payment for downloading a track, after which the listener can stream this track without additional charge for their streams. Thus, this model gradually increases the price, in accordance with how a fan increases his love for a certain track and the desire to listen to it more and more. Such model starts with very cheap prices, ending with the usual cost for the digital download for the market. Another music startup that can serve as an example is Soundstream. It operates in a similar way. It does not charge a subscription price per month, but micro payments every time a user listens (streams) a song. This provides a more flexible payment model, because in fact individual pays the service only for what they listen to and can be a good solution for rare listeners. The reason for such a variety of pricing of streaming services is that pricing indeed is a contentious issue and a major roadblock in all disputes related to the renumeration of artists and creators, as well as, in general, the entire economy on which streaming is based.

2.1.2. Content hosting

All music streaming services can be divided into two groups depending on the type of content they provide to users:

1) Created for a commercial purpose and legally licensed music content. No matter how popular or niche a song is, it usually needs to be licensed in order to be streamed through these services, which can done through different intermediaries, that will be discussed further in this work.
2) User-submitted content and/or user generated content (UGC). This content is not initially created for a commercial purpose and may be completely original, as well as sometimes carry commercial excerpts in their original or modified form.

This category of difference between types of streaming services is extremely important in legal terms. The first category must only contain content that has a legal permission, a license, as it was previously noted, and the websites that post user content are often immune from legal consequences of copyright violation until they come into "actual knowledge" of illegal behavior. At that point, they must take prompt action to delete or block access to the data. This fact also creates a lot of discussions and disputes in the legal field and is one of the problem areas of the music streaming world.

All the friction is also directly and indirectly related to the problem of compensation of artists, creators, and rights holders, which will be dealt with later on in the work.

2.1.3. Consumer access

This category divides all services according to the principle of how the listener gets access to them. There are 3 ways in total:

1) through music streaming platform itself. Sometimes this type of access is accompanied with digital downloads store. Vast majority of the popular music streaming services specialize in this type of access.
2) through community-focused platforms that let users access the artistic creations and music. In simple terms, these new platforms allow individual to access music and other creative content bypassing the accepted methods, exclusively for a certain community of fans associated with these services. BandCamp and Patreon and even Only Fans (when purposefully used) are great examples of this type of access platforms. They entitle artists to engage with their fans and have a direct interaction with them, as well as monetize this base independently of corporate partners. An Illustration can be made out of Cardi B campaign on OnlyFans, where she presented her uncensored version and the footage of making process for the music video for her provocative single “WAP”.
3) through social media. Technology firms that provide social media services have allegedly begun to consider how they can provide digital music services or have already designed and implemented into practice music content strategies.

2.1.4. Types of content

This attempt to categorize music streaming services echoes content hosting classification, however, it focuses on content formats and not on the purposes and methods of its creation. The majority of online music services are typically audio-only or audio plus video. Contrarily, businesses that specialize in social media services are more likely to permit video because music streaming is a tangential aspect of their overall service portfolio. Users may now enjoy official music videos and audio tracks on the two most prominent streaming services, Spotify and Apple Music, wherever they are accessible, while SoundCloud is still on the previous page - providing its users with audio content only.

However, users may "live stream" music performances on social media platforms like Twitch, YouTube, Instagram, Tiktok and Facebook, where during the process, media material is simultaneously captured and displayed in real time. Due to the shortage of live music caused by social isolation and quarantine procedures during the epidemic, live streaming has grown in popularity. During the Covid years, many musicians conducted virtual performances that were financed by ticket sales off the platform, which once more fueled the ongoing argument about the creators' inadequate financial compensation. Interestingly, a live broadcast may bring about another unforeseen shift in how people consume the music as it becomes more widely available and popular.

2.1.5. Payment model

This is probably the most noteworthy section of the categorization, when disputes and confrontations are constantly observed. To put it simple, a payment model is a system through which the money paid by a service's customer—in this example, a music streaming service user—is distributed to the content provider for that service. Recent research (Meyn et al., 2022) indicate that the choice of a music streaming platform's content remuneration model is influenced by transaction costs, risk effects, and competition. The most intriguing part of the issue is this one, which is also the most puzzling. The focus of all recent music business scandals, legal battles, and prominent headlines has been on payment models. There are 2 main payment models: pro-rata and user-centric.

The pro-rata method is the payment distribution model that is currently preeminent in the music streaming world (Muikku, 2017). The logic of this concept lays in allocating funds in accordance with all listening hours from a total that is generated by the consumers' monthly subscription. As a result, it is quite easy to see that the model favors the rightful owners of the most popular songs. In this approach, all of the platform listeners' consumption and expenditure is aggregated into one pot, and the revenue from this is given in the form of royalties to copyright holders in proportion to their streams. Despite controversies, this method is the most efficient and well organized payout system in usage up to date, according to Will Page, a former head economist at Spotify. (Page, Safir, 2018). One of the main advantages that he considers is the minimal administrative expenses to maintain the system.

Although the model is properly seen as reasonably inexpensive, efficient, and easy for all parties to comprehend, it is also contentiously problematic in various ways. In the pro-rat paradigm, for example, each stream has the same economic worth, which neither creators nor listeners always agree on. As a result of this, people who listen to more music on a daily basis financially support pro-rata platform customers who stream far less. Additionally, this approach has aided in the development of an exceptionally top-oriented system. The top 1% of musicians receive 90% of streaming money, according to a recent Rolling Stone article (Blake, 20209) 9.4 % of the streams went to the top 160,000 artists who put out their music during that time period. Almost half of the musicians studied received fewer than 100 streams on their songs. Finally, it is stated that typically only the larger labels really gain from this type of payment model.

In the main alternative model, which is opposed from the previous one and would this time be user-centric one, where the copyright holder is compensated depending on how many different tracks an individual user has listened to and how many times they have done so. It potentially means that a subscriber's whole monthly pay will be given to the one track's copyright holders if they only listen to this particular one track. Thus, the difference between it and the pro-rata approach is that, in theory, it would raise pay to copyright holders of less-heard recordings while decreasing remuneration for the music that is most often heard. Meyn et al. (2022) came to the conclusion that user-centric remuneration causes income to be reallocated, moving it from mainstream to niche genres. A user-centric compensation model therefore supports a more diversified and dynamic music environment because it will eventually assist local artists as well as labels with a high share of niche genres. They also emphasize that transparency is one of the key characteristics of this model: All types of click fraud are possible if the total number of streams is assessed as in the pro rata paradigm. Contrarily, click fraud has less impact in a user-centric approach as only the particular respective listener’s money is involved. While Pedersen (2020) agrees that a switch to user-centric distribution might benefit local creators, they suggest that the effects of switching to a user-centric model vary significantly between individual creators: within each segment, there will be some who win from a switch and some who lose out (Pedersen, 2020). Finally, according to Maaso (2014), it has been demonstrated that a user-centric compensation system also enables artists with limited marketing resources to monetize their local fan bases more effectively by focusing their marketing budgets on more niche local target audiences, ensuring that attracting new listeners would directly generate revenue returns. All the above mentioned prioritizes user-centric model over pro-rata, due to the fact that the user-centric method provides a sophisticated choice for economically targeting local clients through local marketing activities. Users-centric payments have received support from artists, composers, and industry experts, or at the very least, they have sparked curiosity in more investigation (Dredge, 2021).

For instance, Universal asserts that the business is open to any proposal that promotes market expansion while maximizing justice and transparency. However, during recent UK parliament hearing for digital economics and streaming inquiry, other record labels did not always agree with the above mentioned view on user-centric model. The viewpoint of Warner Music Group was initially more unfavorable. WMG predicted that the user-oriented model won't change the total amount of royalties, and that their internal analysis revealed that any modifications to the distribution of payments to artists won't be sizable enough to fight for. They also described the alternative system as being substantially more complicated and bureaucratically stressful for the emergence of digital services providers, since it would involve working with a vast quantity of data. Music streaming services are quite likely to wish to shift the additionally obtained costs to the creators since it would be more efficient for the services. Another big player, Sony Music stated that they are skeptical about the usage of a user-centric approach because it is not intended to alter the amount of funding that is made available to labels and artists. They also agreed with the opinion that the decision to use a user-centric model ultimately rests with the music streaming service providers, that will need to spend a sizable amount of money to alter all inner systems related to royalty. They also suggested an ambiguous outcome for the community of artists, as some artists may benefit from the new approach while others may suffer.

At the moment of writing this thesis, SoundCloud has already introduced the new payout model, which provoked even more disputes. The Fan-Powered Royalties method, however, has undoubtedly proven successful for SoundCloud. SoundCloud observed a 30% increase in subscriptions to its premium creator services within a year of launching them last spring. These services have annual starting prices of $30 and may go as high as $144. According to Hesmondhalgh et al. (2019) The ambitions for democratizing cultural creation and consumption that were so extensively expressed in the first ten years of the twenty-first century are indeed evident in SoundCloud. Similar to how independent, alternative record labels and record stores previously functioned, user-centric platforms that value producers of content have increasingly taken the lead when it comes to "alternative" music (Kruse, 2003). Unlike traditional streaming services, SoundCloud gives professional musicians a sense of a real bond with their audience, and for up-and-coming musicians aiming for better results, it offers a huge worldwide network for contacting followers directly. (Mulligan, 2017).

After SoundCloud attempts within the user-centric field, Warner Music started to express some modest interest in mentioned experience and now plan to borrow something from SoundCloud's user-focused business model (Shapiro, 2022). It is an odd time since one of the major record labels, who are typically responsible for promoting the most economically advantageous models for them, is suddenly changing their mind, and encouraging the concept of experimenting with the user-centric approach. To embrace SoundCloud's new approach, which is way more artist-friendly since it allocates funds depending on individual subscriber engagement with music, Warner Music Group has finally reached a license agreement with the streaming service. The industry may undergo a wider change as a result of WMG becoming the first major label to implement the method. Although it is still far from the standard in the world of music, the mentioned agreement can be considered as an indication of industry trend shifting towards the user-centric approach: for example, the transition to a user-centric strategy was also revealed by Tidal in the October of 2021. However, while acknowledging the new royalty's policy, Spotify plays careful and is still eager to see what the rest of the market decides before making a step into adopting new model. WMG, the smallest of the three major studios (Sony is the second largest, followed by Universal), may be able to make a difference.

At a recent discussion panel organized by the Independent Music Association, Paul Pacifico, AIM CEO, presented a model called "artist growth and development" for streaming payments (AIM, 2021). This model, according to his assumption, has a slightly communist flavor, distributing profits from the most streamed musicians in a more equitable way to assist niche and smaller creators to gain from service. This concept uses the idea of rating on a scale where the first streams are considered the most valuable, and the cost of subsequent ones gradually decreases. Thus, the more a fan listens to a track, the less the stream costs. It is believed that this will help to divert the focus of stakeholders from mainstream music to a more niche direction.

Finally, it is also worth to note that the public who are involved in the music industry are starting to talk more and more about the possibility of artist-oriented music streaming models appearing, in which artists could offer the listener something more individual, exclusive, with the opportunity for the artist and creator to set their prices on the platform. It would be helpful for the industry to determine if the market will be able to develop and sustain a successful artist-oriented service in the future given the rise of the fan-based communities indicated above. Direct-to-fan distribution via websites like Bandcamp is a great example of this strategy. Bandcamp is a platform that allows labels and artists to directly upload songs and sell them under their own terms and conditions. On the Bandcamp app and website, listeners may purchase music, download them, and enjoy them as many as they'd like. Fans can opt to pay more or purchase products as an additional way to support the artists they adore, even if artists establish their own rates. Bandcamp does not charge for music uploads, but it does take a 15% cut of any purchases that are made through its platform.

Each of the types of payment models has a thousand pitfalls and difficulties. That is why neither the labels nor the artists themselves, nor the stakeholders seem to have come to a consensus. In general, remuneration is a complex and problematic topic, economically and legally.

2.1.6. Overview of types of services presented in the market

All the above-mentioned categories and their characteristics can be combined in completely different ways in different streaming platforms, creating an infinite number of different digital products. However, the following description combines all the above features and puts them in the order that we can observe on the market.

1) Premium-only subscription services: Apple Music, Tidal, Qobuz.
2) Premium and Ad-funded services: Spotify, Deezer, Amazon Prime Music, Yandex.
3) Hybrid services that include premium and freemium tiers and user content: YouTube and Soundcloud, Tencent Music, NetEase.
4) Other social media and messaging platforms: TikTok Twitter, Twitch and Telegram

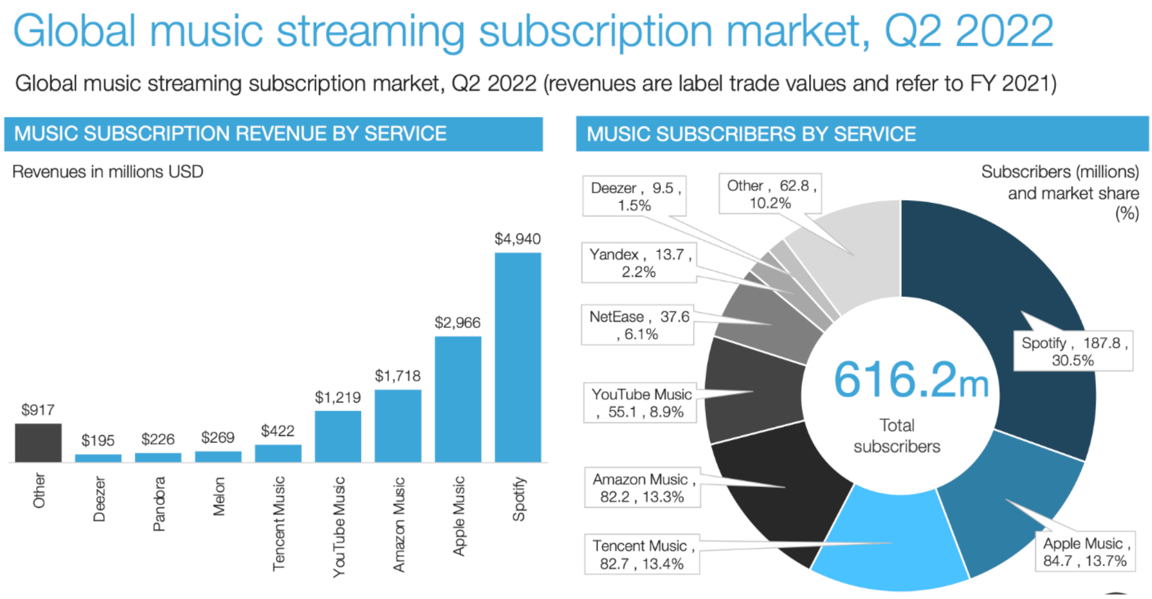


Figure 10. Global streaming music subscription market, Q2 2021 (Mulligan, 2022).

MIDIA's yearly streaming services subscriber research shows the proportion of users to popular services in second quarter of 2022 (Mulligan, 2021). The largest music streaming service provider by market share is still Spotify (30.5%), however it is down from 31% in 2021, 33% in 2020 and 34% in 2019. It can be seen how Spotify consistently occupies the first place, but the study notes that at the moment there is a gradual decrease in its share.

Apple Music consistently ranks second with a share of 13.7%, which is 1.3% less than last year. The research particularly notes how in 2022 the Chinese super platform Tencent Music came in third place, overtaking Amazon Music. In general, there may be some stagnation in the European music streaming market, which contrasts with the growth in the Asian direction. Even while the industry is expected to remain steady overall, the report finds that the music subscriber market is on the verge of a major turning phase and forecasts an even bigger decline in growth rates in 2023. This situation may lead to the emergence of new tools for differentiating the streaming product, which in turn initiates another round of growth.

2.2. Overview of common rights and economical compensation from music streaming

2.2.1. Rights and Royalties

In the preceding historical overview, we observed how music consumption has changed over time. We observed that when the industry underwent new phases of development, it encountered new issues that required prompt solutions. If the industry was unable to provide these solutions, agile users sought them on their own, as they did in the case of piracy. As was previously mentioned, the majority of the issues were based on the disputes of rights and remuneration.

When music is streamed, several sets of rights are involved into discussion, two important ones are:

1) RECORDING RIGHTS**:** the copyright in the performance (named as master rights in industry practice language): the ownership of a composition's unique expression when it is transformed into a recording by the artists sometimes with the help of the record companies. Recording rights usually but not always belong to a performers and artists fully or partly.
2) SONG RIGHTS: the copyright in the song's music and lyrics (also known as a composition rights): the lyrics, melody, and harmony are protected by the rights of the songwriters and their music publishers. Every time an unique and authentic musical work is transferred to a physical medium, such as a notepad, sheet music, or even a single tweet, composition copyright is acquired. Song rights usually but not always belong to a songwriters and composers fully or partly.

What follows the so-called “making available” right needs to be mentioned as well. This right stands apart from the two main ones listed above, because it differs in its nature, but it is also important for understanding the strife around streaming. Making available right is the general controversial legal right from copyright set of the performer (artist) to exclusively make own work available to the public and the right to prevent other unauthorized parties from doing this. The right to make available is one of the first grounds that are used in the distribution of profits in the streaming system.

Music rights provide music royalties. They refer to the compensation that music creators (songwriters, composers, recording artists, and their respective agents) receive in exchange for granting permission to use their music. So there are many distinct kinds of royalties, but even the same kind of royalty might be paid in many ways depending on the usage context, which makes the whole subject exceedingly complex. The rates and payout procedures are also quite country-specific, which further compounds the problem. For instance, master rights holders in the US do not receive royalties for radio airplay, although they do in a large portion of the rest of the globe. There are even some royalty kinds that are present in one nation but not the other.

In the industrial practice there are 4 main types of royalties, which might be briefly considered before focusing on those that relate directly to music streaming. These types are:

1) performance royalties;
2) mechanical royalties;
3) synchronization royalties;
4) print music royalties.

Synchronization royalties (Sync) result from the pairing or "syncing" of copyrighted music with visual material. They make use of rights for music in television shows, series, movies, commercial video advertising, video games, and other forms of visual media. Print royalties are a frequent type of revenue source for classical composers and cinema composers but are less prevalent for recording artists. This type of royalty is provided when musical work takes a printed form, for example, printed sequence of chords, and is made available to the public purchase.

Most important when considering streaming are mechanical and performance royalties as they are connected to all monetary payments made to record artists, composers, publishers, and all other players in the music streaming ecosystem. Mechanical royalties are obtained when your copyrighted songs are physically or digitally reproduced.

Absolutely all musical forms are subject to this type of royalty: vinyl's, cassettes, tapes, CDs MP3s, downloads. Music streaming also falls under this form of royalty. In the traditional music industry, the label created copies of the artists' vinyl and sold it around the world, while the artists themselves earned mechanical royalties on this basis. Copying was a mechanical process, hence the name for this type of royalty. To gain control and accounting over the physical copying and distribution of music, Mechanical-Copyright Protection Societies (MCPS) emerged. They collect these types of royalties and are responsible for the proper allocation of these funds.

Performance royalties are generated when a musical work is publicly performed or played. Music streaming also falls under this category. In general, this category applies to a much more extensive number of situations: such royalties are accrued every time music, for example, is played at concerts and festivals, public recreation areas and cafes, restaurants, parks, also when a DJ plays music in a nightclub, when music is played in a supermarket, when music is broadcast via radio, television and internet radio. This list can be continued indefinitely. Such a huge scope of application for performance royalties raises the question of how all these processes of public reproduction can be controlled and taken into account while paying out the revenues. Instead of attempting to pay a fee for each musical piece a station or venue plays independently of each other, these parties pay Performance Rights Organizations (P.R.O.) an annual blanket licensing price in order to use their whole collection of registered music. P.R.O.s grant licenses to use their music repertoire, ensure that they are paid by the companies or venues who use it, and then distribute royalties. Performance royalties consist of two equal parts: 50% are payments to the author (composer or songwriter) and 50% are paid to the publisher, and it is because publisher and songwriter is often not the same person. The publisher is a party represented as a separate individual or organization that controls the song part of the copyright of the song author, including both mechanicals and performance monies. Successful creators usually delegate their rights to publishers in accordance with temporary contracts. There are also quite a large number of independent songwriters in the music industry who do not have any agreements with publishers. In this case, they themselves are responsible for controlling the rights and remuneration. While performers collaborate only with record labels to make use of recording rights, songwriters deal with publishers who in turn deal with Performance Rights Organizations to make use of song rights.

To better understand how the abovementioned framework functions, it is suggested to look at the music ownership model and its main agents in the table below. A complete track can be seen as a whole piece having two sides, Side A and Side B.

1) Side A - Referring to the actual SONG RIGHTS
2) Side B - Referring to the actual RECORDING RIGHTS

Main players on the sides are presented below on the Figure 11. It is worth mentioning that in several cases the recording artist and the songwriter may be the same individual.

Figure 11. Agents in context of recording and song rights

On side B the situation is relatively easy: Record labels can individually directly provide music streaming services with licenses for their catalogs of recording that they have rights for, especially in the scenario where they have sizable catalogs, as a large part of the labels do. Music distributor can be utilized by labels of smaller size or self-releasing artists. Music distributors are intermediate party for rightsholders and DSPs in this situation. Distributors varies in size from tiny, specialized businesses to large powerful collectives, a third-party licensing companies established by independent or even big record companies to capitalize on their combined market share.

On the other side, with song rights it works completely differently: songwriters and publishers get their money through in-between organizations such as PRO or MCPS as it was mentioned above. Performance rights organization (PRO) is a collecting society that negotiates and licenses music rights collectively on behalf of songwriters, composers, and publishers. And as it can be seen from the name, they collect performance royalties. In other words, they are responsible for collecting income when a song is publicly broadcast or performed. Every country usually has a PRO for its own territory and in most countries except the US there is generally only one PRO for the country which are government sanctioned. In the US on the other hand there are four major PROs: GMR (Global Music Rights), BMI (Broadcast Music Incorporated), SESAC (which originally stood for Society of European Stage Authors and Composers), and ASCAP (American Society of Composers, Authors and Publishers). Among all the four, only ASCAP and BMI are non-profit, like in other countries, other organizations are commercial. Mechanical-Copyright Protection Society (MCPS) in US is mainly presented by Harry Fox Agency that is now bought by SESAC. However, even though many music labels have both publishing and recording divisions, they are typically structured as independent businesses bodies, so any service—including music streaming services—that wants to use recorded music will need to obtain separate licenses for both the song and the recording rights.

2.2.2. The breakdown of monetary flow

How parties are compensated from music streaming is significantly impacted by the intricate underpinnings of rights, license discussions, and corporate/creator agreements. Every year, the music streaming service distributes its profits. But before that, they need to pay a percentage to the state. First deduction from streaming revenues is made by government of the country in the form of collecting value-added tax (VAT). The EU's average VAT is 21 percent of the gross profit, which is around 6% more than a minimum VAT regulation adopted by EU laws. For comparison, standard UK VAT is 20 percent of the gross margin. And in US there is no VAT at all and it makes US the only major economy without VAT. The reason for this lays within the fact that every state in America has own regime for sales and taxes.

For simplicity of calculations the 20% the UK VAT norm can be used. This equals 1.67 euro per subscription from a typical 9.99 € monthly membership. All remaining (namely 8.32 euros) known as e gross revenue pot, is a subject to further distribution by music streaming services. And the first thing they do is get their share of income. Although the precise percentage of their income is unknown to the general public, it is assumed to be about 30%, however some industry experts suggest it to be around 35%. The residual amount of money goes straightly to the music sector, and in music practice language it is named royalty pot. The royalty pot is the funds from where all the royalty computations come from.

The recordings (master) rights holders get the majority of the royalties pot's gross earnings, accounting for around 55% of the total. Thus, the balance, or around 15% of the total gross revenue, goes to the owners of the song rights, who often is not the artist. Recalculating percentages from the perspective through the eyes of the rights holder, the following scenario can be observed: considering the royalty pot as a 100%, the recordings (master) rights holders earn around 78.5 percent of the money, while rightsholders of the song right get about 21.5 percent of it. The Figure 12 bellow shows a breakdown of music streaming monetization flow, considering, that all percentages are approximate or illustrative.

Next, we can consider in detail how the rights holders are rewarded, and which way money goes from the existence as music streaming platform revenue to the pocket of artists and not only them. There are 2 groups of final rightsholders: 1) artist (or performer) and record labels and 2) songwriters, composers, and music publishers.

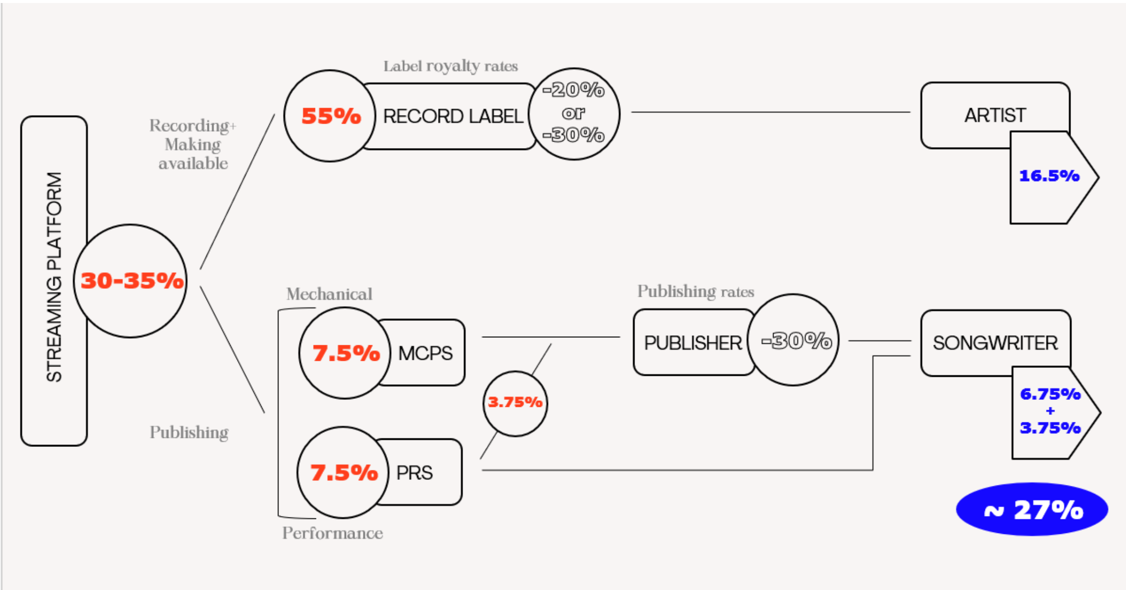


Figure 12. Illustrative breakdown of music streaming monetization flow

2.2.3. Recording Rightsholders

Let's first consider the first group and look on what the recordings (master) rights offer as a revenue. We see this 55% of total or 78.5% of royalty pot that goes to a record label. The procedure of compensating artists (performers) is rather simple. When the distributor or record label receives the funds, they pay the artist in accordance with the terms of their contract. There are a few general forms of agreements an artist might have. Recording agreements are concluded on an individual basis between the respective business and artistic partners. Four main types of deals are listed below:

A) Traditional deals based on royalties and advance payments and/or profit share:

With this type of agreement, the artist agrees to delegate his recording rights to the label, while receiving payment in the form of non-refundable advances. Also, the artist receives royalties from recordings by right of "making available". In exchange for these conditions, the artist must release a certain amount of content per year, counted as albums, singles or EP. In this agreement, the label has a lot of power and it has many ways to adjust or extend the contract and manipulate the artist, since the artist essentially transfers his ownership of the recordings to the label, usually for the entire period of copyright validity (the life of the author plus an additional 70 years). In addition, traditional agreements indicate that it is the label that covers the costs associated with touring, full production, packaging, distribution, marketing, advertising and promotion. The amount of advances received by the artist is deducted from the amount of royalties awarded, since the advances are in the nature of a loan from the label. Usually, the share of royalties for an artist collaborating with a major label is about 15 or 20%. However, if an artist has a large degree of influence on the label, this figure may be higher, which, however, happens only in exceptional cases.

B) Exclusive license deals

In the case of this type of agreement, the company buys license for ready-made recordings from other producing intermediate organizations who previously purchased rights for this recording from the artist. In such agreements, the validity period of rights is usually limited from 5 to 10 years, and the payout rates may be slightly higher than usual - about half of the income.

C) Deals on distribution

Such a contract provides for the main purpose of distributing the artist's works in exchange for payments in the range of 15-20%. With this type of transaction, no advances are paid to the artist. Distribution deals are usually limited to a period of 3-5 years.

D) Deals on services of the label

This contract functions in the similar way to the previous one with the exceptions of offering other additional services such as promotional by the label. The fee for this type of deal is slightly bigger then previous one.

It is also important to note that an artist (performer) always has the option to join a label or not, even if this decision is not always clear-cut and unrestricted by many life obstacles. Nevertheless, musicians have the option of self-releasing rather than signing a label agreement at all. In this case, the artist could pay a set charge per track to a special platform like TuneCore or CDBaby to release their music pieces on streaming platform. Some of these intermediate platforms are owned by majors, for example Universal owns Spinnup. The artist will receive all future streaming service earnings in full, but will not get any assistance with regard to creative services, marketing, PR, collaborations, data insight, or other forms of support.

The record label takes its percentage, royalties, under one of the most common types of transactions, for example. The corresponding scenario is shown in the picture above. In this case, the artist or in other words, the performer receives about 16% due to the rights of the recording (master). Such cases are the reason artists question if it is worth signing a record deal at all. Cconsidering that technologies do not stand still, but are developing, making it easier for creators to access their audience. There is no definite answer to this question, and it raises a whole ethical controversy about the expediency of deals with labels, as will be explained later.

2.2.4. Song Rightsholders

Now the songwriters, composers, and music publisher's situation can be examined. It is a considerably more difficult procedure when it comes to song rights. First, the income that equals now 15% of the overall income, or if recalculated it equals around 20–21% of the royalty part, is divided equally between mechanical and public performance money.

Mechanical and performance money are sometimes confused in the common perception since they pass via the same financial tunnel. Sometimes even the streaming services treat them as the elements of the same pool. However, in practice, they are extremely unlike. In the practice of the music industry, both of these concepts originated quite a long time ago, but with the appearance of digital distribution and music consumption, these two types of royalties began to cause a lot of controversy and problems. In fact, this is not unreasonable.

In the 1909 US Copyright Act, the phrase "mechanical royalties" (or "mechanicals" to its supporters) was developed to refer to payments for instruments "used to mechanically reproduce sound." The term mechanical royalties—which are funds paid to copyright owners for the creation and distribution of records—has persisted even though machines haven't reproduced sound "mechanically" since the 1940s. Mechanical rights are the permission to duplicate tunes from recordings. The Congress was worried that the music industry might grow into a massive monopoly, which led to the idea of requiring a license for certain mechanical rights. The obligatory license for recordings was created in response to this desire to prevent copyright owners from having total control over the world, and it successfully completes its purpose. As one can guess mechanical rights serve to get mechanical royalties. What comes to public performance, it has been said before is that it underlies the legal assumption that the author, songwriter, composer has the exclusive right to present his work to the public. This right grant the authorization and receiving remuneration for the performance.

So, what are proportions if music streaming services combine these two cash flows into one? The question is provoked by the complexity of the concept of what music streaming should be attributed to in terms of publishing: performances or mechanical distribution. Or both? This controversy, coupled with the question of the applicability of the right of making available, creates incredible contradictions in the world of music streaming. The issue and related discrepancies will be dealt with later on in the section «Origins and background of problems with renumeration: streaming technology classification issues» section. For simplicity of calculations the proportions are imagined to be even.

Regardless of who collects these monies in the future, they are distributed as follows. Due to the right to equitable compensation, which also will be covered in section «Origins and background of problems with renumeration» in detail, both the publishing party and song author divide the revenues evenly for the public performance rights. This monies are then sent to their PRO, who then gives it to the rightsholders. Note that PRO monies also are split 50/50 in case if publisher and songwriter is not the same individual. Later, MCPS collects mechanical revenue and passes it to songwriters through a publisher if they are presented. Songwriters are compensated for the mechanicals in accordance with the terms of their contracts with publishers, and it should be highlighted that publishing agreements are frequently more generous than record deals. In other words, the organizations (MCPSs and PROs) that collect mechanical royalties and royalties from public performances originally split the money that is justified by the existence of the song's rights equally. The proportion of the PROs is then divided in half and given to the publisher and the songwriter receives the remaining funds. Next step is that the publisher deducts his portion, which is often around 11-30% (more frequently less than more), from the money that has already been paid to him (mechanical royalties and part of the performance royalties), and then pays the songwriter the remaining money.

This whole situation clearly demonstrates that everyone involved in the network of the music business wants their portion of initial pot of funds from streaming, and it is crucial to understand that it is slightly more profitable to be a performer than a songwriter, and it is better to be both of them.

CHAPTER 3: THE CONSUMER EXPERIENCE FROM MUSIC STREAMING

The situation of another party participating in the streaming relationship—the end user, or the music listener—will be described in the following chapter. The thesis will continue with describing primary benefits of this style of digital music consumption. One of the main economic aspects of streaming will be discussed - the consumer's willingness to pay, as well as some academic views on this topic. The consumer viewpoint gathered from industry studies—representing the two biggest music markets, the US and the UK—will also be used to analyze the economic aspects of the issue in detail. Additionally, the ethical and moral implications of streaming music will be examined, as well as how this format and its prominent features, such as playlists and curation, have changed us as listeners and our regular interactions and engagement with music. The chapter concludes with a review of current trends regarding streaming music consumers, noting a decrease in the key statistic indicator for this issue, namely average rate per user along with simultaneous growth of premium subscribers for the main platforms. Finally, the chapter lists the main consequences arising from trends for both consumers and music creators.

3.1. Consumer benefits from streaming

While observing the financial flows within the industry throughout this process, it is extremely important not to forget that consumers themselves occupy a significant portion of this economic scheme because they basically sponsor all of these revenues that were thoroughly examined beforehand. It is crucial to learn more about music streaming digital phenomena and what influences its usage in particular. Given the general spread of piracy which started about 15 years ago, it is sometimes hard now to believe that people have moved from absolutely free consumption of music content to namely conscious consumption and are willing to pay for what they listen to. This happened majorly because music services determine some benefit for the consumers, thereby influencing their willingness to pay for the service.

Different opinions surrounded the problem of piracy in the entertainment industry, Steve Jobs, for example, believed that piracy cannot be defeated, but one can compete with it (Goodell, 2003). Danaher et al. (2010) prove that it is possible to convert so-called pirates to paying consumers, without cannibalizing prior purchasers. The findings also indicated that early users of iTunes may refrain from engaging in piracy because doing so involves a set cost, such as learning how to use pirate software, or because engaging in illicit conduct has a fixed moral or social penalty. However, when the digital sales channel is unavailable, these people may shift to piracy, pay the fixed cost, and start consuming more content through pirate channel than they had previously purchased because of the allegedly low marginal costs of new downloads.

Therefore, initially the prices of using the digital music channels were set in such a way that the consumer's desire to listen to free music did not outweigh his unwillingness to face associated problems in piracy - the risk of downloading a low-quality or incomplete file, searching for a file sharing service, searching for disparate catalogs, and so on. But besides the price, there are other features that affect the desire to pay for a premium subscription. In their recent study Augusto et al. (2020) discovered that trust is a key factor in determining people's willingness to pay more, as without it, the convenience and intricacy of the streaming service have no longer any effect. In order to increase trust, the streaming providers should be exploiting recommendations engines to show content according to each customer's profile, as well as establish the work of the support system of the service to a very efficient level, according to the research. Other studies (Weijters et al., 2013) have also shown that consumers of all ages consistently and obviously favor legal and ethical alternatives, if available, but prefer various means to make it economically possible. While middle-aged adults are more willing to pay for ad-free platforms, young people and young adults are more receptive to advertising. Young individuals may appear less moral and law-abiding while making decisions in the real world, although this is primarily due to economic factors. YouGov analysis found out that most global consumers agree that it is fair to watch ads in exchange for free content and agree to pay subscription fee to avoid frictions. The chart below shows the clear percentage predominance of those ones who believe that the trade-off between consumers and marketers, in which people watch advertisements in return for free content, is generally fair (Figure 12).

So according to widespread opinion, the customer gains considerably from the present music streaming paradigm, and therefore their values have also developed. Cost and service selection are two important and related factors that are involved here. Customers typically receive an "all-you-can-eat" service for relatively low monthly prices, allowing them to stream any song from their service's catalog as frequently as they like. Industry insiders stated that there hasn't yet been a pricing war amongst music streaming services and that the membership price is set according to other platforms rather than the market for recorded music (Wang, 2019). It is also critical to note that since the common pricing of subscriptions to streaming services have been fixed at the stated plans for more than ten years, when the nominal price is compared to inflation, the customer has seen a decrease in price throughout that time. Additionally, prices are fixed at the same nominal amount in the majority of currencies (for example, customers pay , €9.99 in the Europe, $9.99 in the US and £9.99 in the UK), showing that there is no price parity for streaming services across customers in various nations.

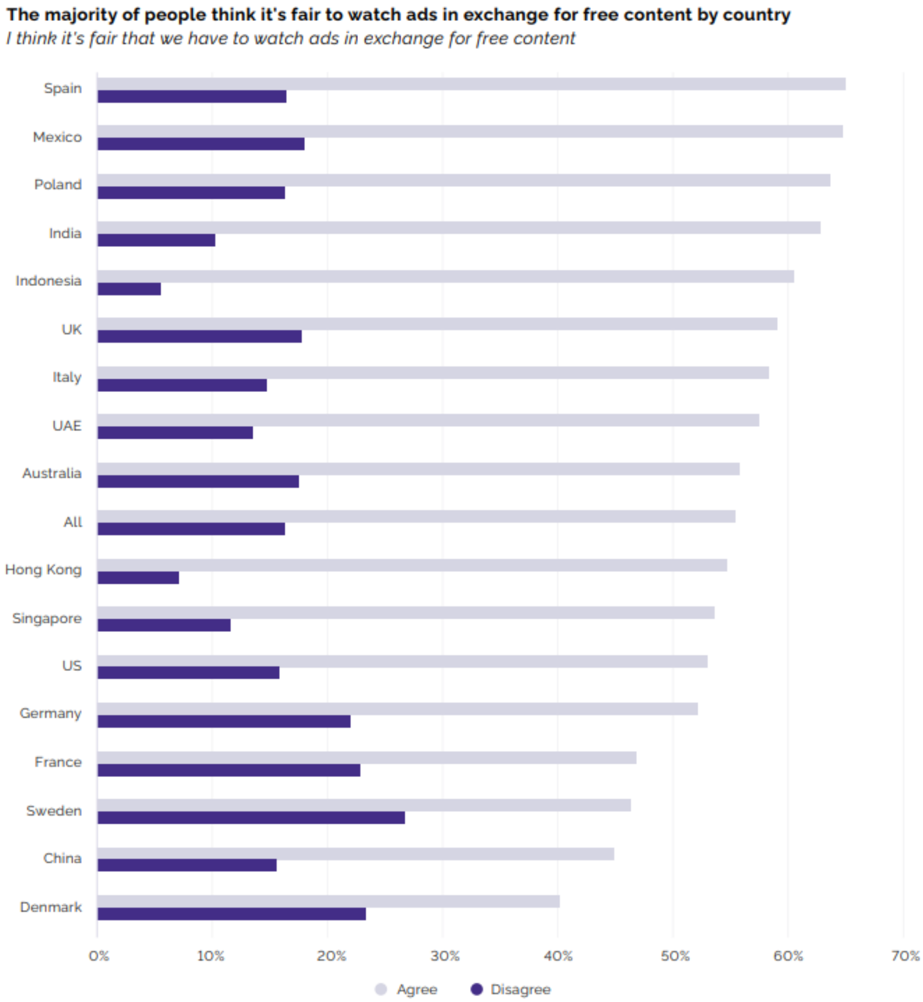


Figure 13. Share of people's opinion on fairness of advertisement in subscription free platforms by countries (YouGov, 2021)

Speaking about the peculiarities of the economic side of the issue through the eyes of consumers, it must be noted that if a consumer finds content that is rightfully priced and expensive, he can always turn to those streaming services that offer the freemium model or, moreover, just choose listening to the music via services like YouTube, that is stated to be most popular platform to stream music among all-types platforms. It must be noted that Youtube place certain restrictions on the customer, such as disability to listen only offline, advertising, no possibility to play music on a background while using other apps for mobile users. The 2017 IFPI Music Consumer Insight Report states that 55% of all on-demand streaming time is devoted to video platforms. It is hard to believe sometimes, but 46% of all on-demand streaming time is attributed to YouTube (BPI, 2017). In 2022, the trend continues, a huge percentage of listeners prefer to get engaged with music through video streaming (YouTube in particular), 82% globally consider the video streaming platform to be the top 1 for listening to music (IFPI 2022). According to IFPI, up to 35% of music streaming users mentioned sites like YouTube as the main deterrent to purchasing a paid membership. In the United States, surprisingly, the most widely used music streaming site is YouTube, its free version to be more precise, according to YouGov's International Media Consumption Report (2021). They surveyed people in 17 countries about their media consumption habits. And their evidence shows that in the US, over two out of every five people (44%) claim they use YouTube to listen to music. Spotify (27%) is closely followed by Pandora (25%) and Amazon Prime Music (24%) in terms of popularity. Younger Americans are substantially more likely to stream music using both YouTube and Spotify than older Americans, who are more likely to use YouTube and Pandora. There are also considerable variances by age. The variations in platform use by age are probably related to the wide range of musical tastes. Platforms like YouTube and Spotify are a logical match since they let users search for the precise song or album they want to listen to. Because Americans aged 18 to 34 prefer music streaming over CDs and downloaded music, they are more popular than both of these options (a feature Pandora now offers albeit later than its competitors). A natural extension of their linear radio listening on their smart TV or smartphone and Amazon Music on their Alexa devices, adults aged 50 and over, on the other hand, primarily listen to their CD collection on the radio when in their cars. This makes Pandora's radio-based format appealing to this demographic segment.

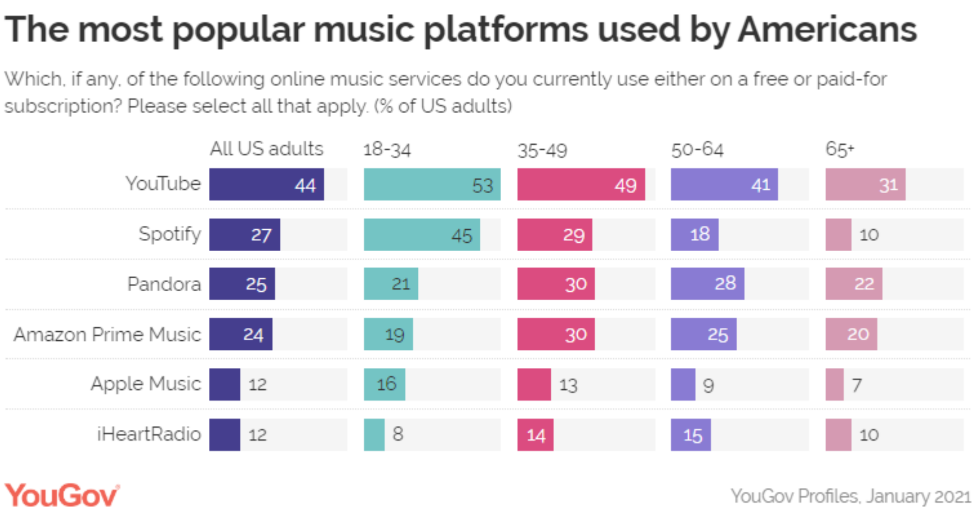


Figure 14. Share of popular music platforms used by US representatives by age (YouGov, 2021)

In Great Britain, instead, Spotify is the most popular music streaming service in Great Britain among people under the age of 55. This is especially true for Britons between the ages of 18 and 34, who are more than twice as likely to use Spotify than any other music streaming platform, including YouTube.

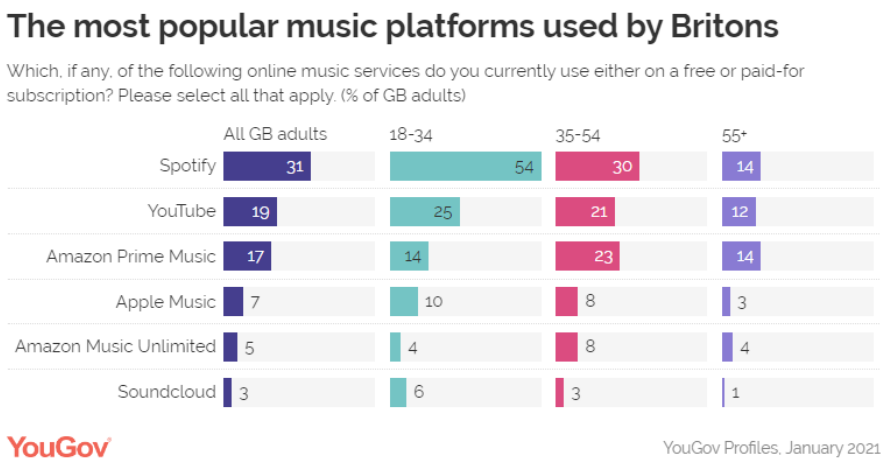


Figure 15. Share of popular music platforms used by UK representatives by age (YouGov, 2021)

The popularity of Spotify gradually declines among those 35 and older, allowing services like Amazon Prime Music to enter the aural mix. This is particularly noteworthy for British citizens over the age of 55, who are as likely to be listening to music on Amazon Prime Music as they are on Spotify.

It is also worth noting another not-quite-economic advantage for the consumer of music content through streaming services. Consumers may now access tunes that record labels previously considered to be no longer commercially efficient to continue producing and distributing thanks to streaming. Earlier, before the era of streaming and even in the era of piracy, it was sometimes very difficult and sometimes even impossible to find a piece of product that labels supposedly marked as cutouts or delets (product that is not selling mid-price and budget price and cut out of company's catalog of available recordings), scarps (product that is sold to be broken for components parts) and schlock (physical product that is sold from a 99 cent bin). In the period of streaming, this no longer occurs; all the creative pieces are preserved and are waiting inside the service, not completely destroyed and forgotten. As a result, consumers may now purchase more legally licensed music for less money, if they want to pay at all.

As a result of the introduction of music streaming, consumer behaviors drastically shifted, and professional music industry entities have responded. The popularity of streaming is increasing at the same time as sales of physical music like vinyl and CD are on the general decline tendency. While it is true that physical music sales have climbed in 2021 (Van Veen, 2021), their revenues have decreased by more than 5% between 2018 and 2019 for example. The market for physical music has drastically decreased during the past 20 years. However, things took a complete 180-degree swing in 2021. According to IFPI Global Music Report revenues increased by 16.1% to US$5.0 billion. A resurgence in physical retail, which had been severely hit by the COVID-19 epidemic in 2020, contributed to some of this. For the first time this millennium, CD sales increased, and Asia showed particularly great interest in the medium. At the same time, vinyl continues to enjoy a recent rebound in popularity, with extremely significant revenue growth of 51.3% in 2021 (up from 25.9% increase in 2020). One can definitely see a decline in 2021, revenue generated by downloads and other digital formats fell by 10.7% as the trajectory of digital music consumption continued to move from an ownership to an access model via streaming services. Revenues from permanent downloads fell by 15.3% to US$839.3 million and represented just 3.2% of the global market in 2021.

And in the meantime, streaming is decreasing radio listening, particularly among younger audience members: a 2016 survey revealed that millennials utilized on-demand streaming services yet listened to radio just 12 % of their listening time, compared to 35 % of the listening time for the overall population. Typically, 51% of the time as opposed to 24% for the entire population (McIntyre, 2016). The MidiA research (2021) demonstrated that the preferences of users of streaming services generally differ from those of the broader public. For instance, rock music is typically underrepresented among the top 50 songs on streaming services. But hip-hop is typically overrepresented.

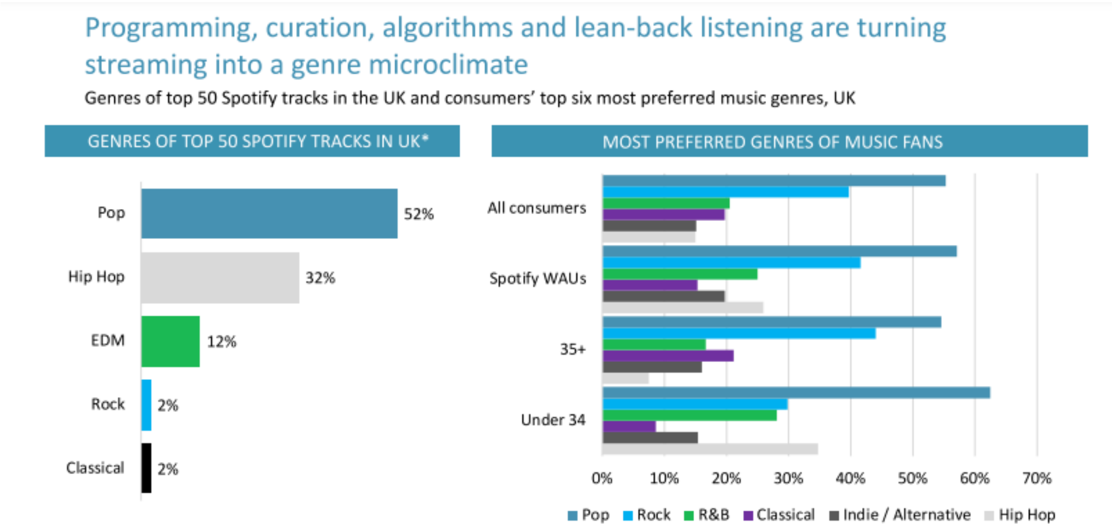


Figure 16. Genre microclimate created by specificity of streaming (MidiA research, 2021)

Meyn et al. (2022) highlight how streaming has changed consumer behavior, emphasizing the implications of various remuneration methods, starting with the fact that users of streaming platforms with a pro-rata system focus on the number of streams when listening, often supporting their favorite artists in this way. If listeners do not consider such a method honest and meaningful, they usually choose a user-centric model and another streaming platform. Moreover, study has shown that music consumption has shifted to the frame of playing on the background becoming more oriented for tasks and mood. It is used as a signal for marketing specialists as well. The impact of this scenario can be observed throughout almost every streaming platform interface: platforms offer various types of mixes for various moods, situations, time of the day, artists, genres, even aesthetics. This also causes a shift towards how people listen to music: increasingly, we are not just choosing an album or a specific artist, but playlists created using various advertising systems.

Additionally, listening to music has evolved to be more task- and mood-focused, which provides marketers with new indications on which to build personalized advertising. Many streaming service applications, which also provide human-curated "music mixes" on themes linked to certain artists, events, or moods, might be considered as a result of this strategy. This also affects the way people listen to music, since we are increasingly picking playlists made using different recommendation systems rather than just albums or certain artists. Recommendations system technology which is widely used by streaming platforms for playlist creations poses some unanticipated consequences for human behavior and ethical concerns. Now users must make their consumer choices in a very crowded marketplace. Streaming services may provide nearly endless content options online, free of the physical limits of the brick-and-mortar model, providing consumers access to not just popular but also obscure, specialized pieces, which obviously dramatically affected the behavior of users and their habits. It would seem logical for consumers to evaluate potential products for purchase or consumption with greater caution now that they have a much wider range of options. But music is particularly challenging product to market since buyers must first experience them before deciding whether they enjoy them. Because of this following scenario is observed: the time that customers must spend evaluating each of the musical content piece is worth more than the money that are spent for the subscription fee. It is necessary to keep in mind that the value of lost evaluation time cannot be replaced: customers can't return, unread, unlisten to items that turned out to be unsuitable. In such a context, some benefits from the assessment are lost, and algorithms capable of making complex predictions of interests and recommendations really represent certain sizable benefits for users. But it is crucial to highlight that this leads to neglect the exclusive personal selection of music that the consumer would like to hear, and even if the recommenders give out the song that is not quite the desired product for the streaming service user, many of them agree to put up with this in exchange for the benefits of a service that "thinks and chooses for them".

As stated before, nowadays, playlists have progressively supplanted themed broadcasts for customers. Every minute of the day has its own playlist of a different length: waking up, eating breakfast, exercising, unwinding, meditating, running, socializing, etc. Without your involvement, the songs that suiting your taste or mood will be chosen and played on your device.

Commonly, three different sorts of playlists can be distinguished:

1) User-made playlists are distinct collections of songs that may be listened to in any order, shuffled, or skipped over. Users design these playlists based on their personal tastes.
2) Editorial playlists are those made by the in-house staff of music streaming services or by prominent connected curators.
3) Algorithmic playlists, empowered by recommendation system, used by streaming services. These systems employ large data gathered from signals like habits related to engaging with music, browser searches, and other aspects to estimate user preferences. In other words, by continuously learning about a listener's tastes from their usage history, captured and later utilized by the platform continuously, streaming services employ machine learning to produce customized playlists.

Of all three types of playlists, the last playlist has the most impact on changing consumer behavior. Since playlists created by the user and editorial ones existed before, just in a slightly different form and on other media. They existed for example in the form of mixtapes, which in the days before streaming were a popular means of transmitting music. Many people collected their own mixtapes, placing their favorite songs in any desired order, which can be considered analogous to creating a modern playlist.

3.2. Current market trends and potential consequences for consumers

This section will touch on important concepts that will be useful in future consideration of the trend and problems associated with streaming services and their economic component. As has been noted more than once before, despite the fact that streaming services brought tangible benefits to both sides, economic and not only, they also brought with them some difficulties and consequences for the industry, which now had to quickly adapt its entire clumsy system to a new digital solution. Many of the difficulties that appeared then persist to this day.

One of the important technical concepts used in the world of music streaming is the concept of ARPU or Average Rate per User. In other words, what's the average amount of money that the streaming service gets from each user. Let us see the example of Apple Music. Every user pays a subscription: students, individuals and families pay 3.49 €, 5.99 €, and 8.99 € per month respectively, then Apple Music's ARPU is around 6 euros.

$$ARPU = \frac{3.49 + 5.99 + 8.99}{3} = 6.15$$

However, Spotify's ARP is much lower.

Spotify offers a free service that is financed by adverts in the hopes that individual would purchase a subscription to remove the commercials. As of this writing, there are approximately more than 2.5 times as many free users of Spotify as there are premium customers. Additionally, the ad-supported free users generate far less revenue than premium subscribers. Why do advertisements provide much less revenue than subscribers? In comparison to Spotify, over-the-air radio contains around 14 to 16 minutes of advertising every hour. As a result, Spotify commercials can't make as much money (since there isn't as much time offered for advertising), their prices are lower than those for over-the-air ads, and there aren't enough ads to drive users to pay a membership fee because there aren't enough advertisements. Therefore, the gratis users significantly reduce ARPU. In other words, for "every 6 euros that a Spotify subscriber pays" each month, there are 2.5 ad-supported users who pay far less. As a result, the average revenue per stream is substantially lower than it would be on a service that only accepts subscription payments (like Apple Music).

Mark Mulligan, the media and technology analyst, while analyzing MIDiA research on Spotify price growth of 2020, demonstrated that between 2016 and 2020, Spotify experienced subscriber ARPU falling from €6.38 to €4.19, that corresponds to a 34% decline (Mulligan, 2021). It needs to be once again mentioned that the lower the index the lower rates per stream eventually. According to him this trend may have the following aspects as the reasons: incising amount of various discounted trials, such as duo plans, student plans and so on; increasing amount of multi-user plans; promotional trials; lowering of the ARPU index in emerging markets. Recently Spotify stated that the are working on improvements of audio for free tier of subscriptions, that could also worsen the situation.

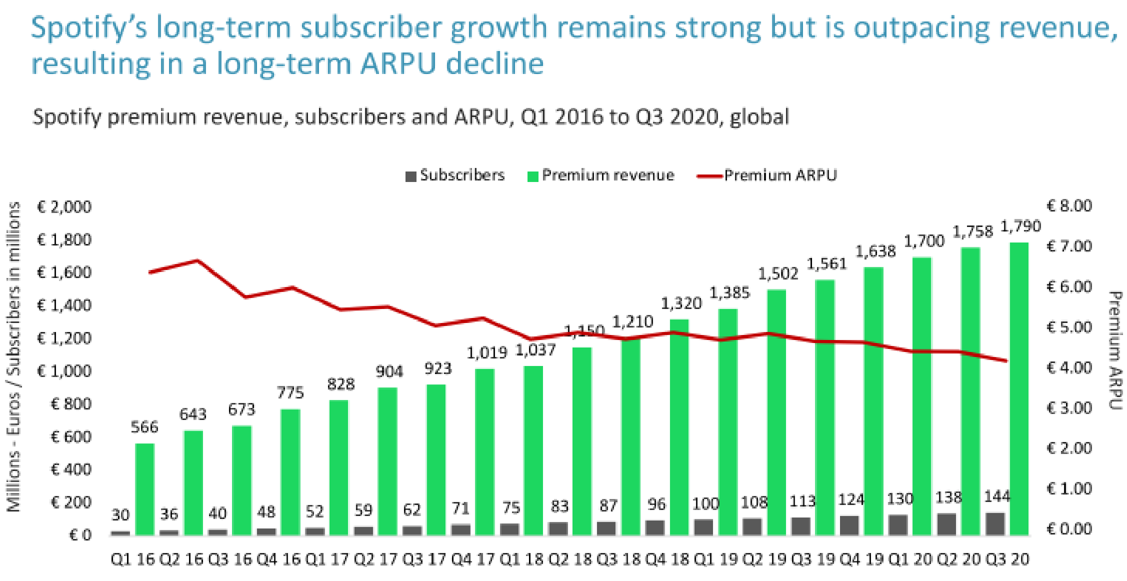


Figure 17. Spotify statistics on subscriber growth and ARPU decline (MidiA research, 2021)

As was mentioned before inflation is also not helping to the situation, especially since headline subscription prices have remained mostly the same for many streaming services. It is evident that there are reasons for consumer prices to rise, and experts in this field point out that customers are generally tolerant of price rises. It is crucial to remember that even a 2 euro increase would not be enough to offset the far more extensive consequences of the streaming economy on producers.

Nevertheless, it is not just Spotify that is afflicted by this inclination: According to some industry insiders, the music business is seeing a constant decline in ARPU for streaming services, partly as a result of the income distribution model mentioned above. However, there may be some reasons to be upbeat in the business. For instance, it was made obvious that since 2014, customers became more stable financially and were able to spend more on consuming music. However, when compared to the lowest of the legitimate business when piracy was at its peak, this is a quite short-term perspective. Recorded music sales have increased since 2014 but are still much lower than they were 20 or 30 years ago in actual terms.

The economic clashes described above can affect the creation of music in the long run. In the academic article by Ormosi and Mariuzzo (2020) the argument was made that the long-term damage may be more serious than we assume. Since users of streaming platforms have access to huge libraries of music and for a relatively small and understandable cost, they unconsciously encourage the modern structure of the distribution of funds. In turn, this can lead to a loss of versatility among musicians, encouraging mainstream and enriching top artists, humiliating the position of independent artists who are fighting an unequal battle for royalties.

Unfortunately, it appears that most customers are unaware of the controversy going on right now in the music business. Rarely, for instance, do exceptionally well-known cases grab the public's attention, as the Taylor Swift case at the time (Swift, 2014). There are certain consequences on both the industry and customer behavior following high-profile incidents like this. According to studies of Sinclair and Green (2015), the majority of customers are unaware of how musicians get paid when their music is streamed. The bulk of listeners, with the exception of devoted followers, do not prioritize or even consider the ethical pay of artists when making decisions. This was thought to be a result of the media's failure to adequately cover artists' at the time of the research, comparatively low pay. The majority of music streaming service customers polled recently by the YouGov and #BrokenRecord movement said that record companies and streaming service providers are overpaid, artists and composers are underpaid, and session musicians should be compensated in some way for streaming (Dredge, 2020). Most respondents claimed they wouldn't be prepared to pay more for streaming music under the present arrangements for payment, but, around half of the research participants also said they agree to spend more if the extra money went directly to the authors and artists they also enjoy. These claims bolster the user-centric model's generally favorable reputation.

This is also supported by the idea of Patreon platform existance, where consumers may pay their subscribed producers on a monthly or annual basis. Patreon stays a popular tool for many musicians and musical content creators, who manage to earn significant income with use of the platform. This implies that the customer is interested not only in the platform's exclusive content but also in the concept of supporting artists and creators directly. However, it should be emphasized that neither the survey results nor Patreon’s own findings account for variables impacting customer price tolerance, such as the cost of rival platforms, users’ earnings, and etc. (Dean, 2021). This begs the question of whether Patron users may be categorized as anomalous "superfans" who are more eager to shell out cash for particular musicians than other music fans.

CHAPTER 4: MUSIC STREAMING REMUNERATION FOR RECORDING RIGHTSHOLDERS

Chapter IV will examine the main stumbling block of all discussions about music streaming: financial remuneration from streaming your music on platforms. To begin with, the effects of the conditions according to which artists and recording rightsholders are compensated that were set out previously will be examined. It will be analyzed in detail how the rights to the recording are divided up in terms of streaming revenue, and similarly how the creative and corporate partners are split up in terms of these revenues. Additionally, a quantitative analysis of the amount of streaming success required for an artist from each of the three example countries (USA, UK, and Italy) to sustain themselves at least according to the minimum poverty criterion will be conducted. Regarding the prospects of artists, the issue of debts formed from unrecouped money will be particularly highlighted. Next, the chapter will present examples of initiatives raised by concerns regarding the economics of streaming music through platforms, which has been reformulated in light of the sudden and involuntary loss of income from live music for performers during the pandemic. At the same time, the influence of the music streaming economy on non-featured artists and business agents of recording rightsholders will be addressed. The chapter will conclude with the disclosure of the causes of all these impacts and tensions, among which are fundamental problems with the legal classification of streaming and controversial situation with equitable remuneration right.

4.1. Impact on artists and performers

After highlighting the history, structure, interrelationships of some individual elements and trends in the world of music streaming, we can talk in more detail about the problems that are present and try to understand what they are caused by and whether anything can be done about them. As mentioned, one of the most painful topics for the industry as a whole is the remuneration of the creator. Their basic rights and the royalties that these rights bring were hinted at in previous sections. But this is just the tip of the iceberg in a complex scheme of interrelations between cash flows and flows of rights, which, by the way, do not move in one direction only.

4.1.1. Power abuse coming from major labels: advances and royalty

Given all mentioned above about the industry, it would appear that at least one of the creators—professional musicians—should be content with the current situation, even if just that small fraction of superstars who earn enormous sums of money. They should undoubtedly make a lot of money from streaming because they are so well-known, their songs are becoming famous worldwide, they go viral and they are now included in all playlists, no matter the genre. But unfortunately, the real state of things even for viral artists is not that favorable. The premise that there is intense rivalry for the development of commercial music is valid, yet even professional musicians occasionally do not make enough money to support themselves. The revenue from live performances, which, as a result of certain business and legal considerations, greatly surpasses the revenue from recorded music, frequently fills this gap. The fact is that streaming doesn't really pay even superstars much. According to a survey conducted by The Ivors Academy and Musicians' Union, eight out of 10 musicians make less than €200 annually from streaming. This scenario has grown intolerable in the aftermath of a Covid-19 epidemic, when alternative revenue sources have been unavoidably dried up for some period.

In his recent work, Marshall (2015) draws attention to how artists with a huge amount of influence, clout and fanbase also complain to streaming platforms about insufficient remuneration. He asserts that there are primarily two categories of complaints. First, musicians contend that on-demand streaming services reduce the demand for digital files and physical media, making them an unsustainable business model for their careers. Secondly, this idea is supported by a larger aesthetic and moral debate regarding the value of music, with the micropayments produced by each stream being perceived as diminishing music itself. Marshall also notes that perhaps the rational response of streaming services to such criticism is quite reasonable, and perhaps the services are not cheating at all by paying lower rates compared to other types of digital music supplies. The researcher points out that most of this problem may be major labels that promote pro-rata-based streaming services. And this is mostly to blame because of the platforms' "consumption-based" rationale and its handy alignment with the logic of the pre-digital record business.

To understand this statement, the economic flow from the artist's perspective should be examined, which is better to do from the very end of diagram from Figure 12. Except for the very few independent musicians who autonomously create, distribute and release their music, an artist signs a contract in a large number of cases - whether with a major label or an independent one. As said above the most common label deal is called: traditional royalty, advance and/or profit share agreement. The number of recordings per stated period of time, the number of adjustment or recording options and the duration of time for which an artist delegates the rights to the musical works they create - are just a few of the conditions that are typically included in a record contract. The agreement also crucially specifies the performer's royalty percentage. And these royalties are quite meager in the amount of only 20% or best case scenario 30%. Independent labels often include a profit share condition in the contract, thereby raising these payments to 50 percent. Common royalties might increase to 25 to 30 percent for more seasoned performers who are engaging in out-of-contractor renegotiating, depending on their professional achievement. A record deal will also specify system of recoupable monies that indicates which production expenses—such as those associated with production, packaging, distribution, marketing, and touring—are to be paid for by the record label and which expenses are recoverable from future sales. If the contract implies a profit-sharing clause, the recoupable expenses are deducted from the total revenue. This means that this applies to both the artist's share of income and the label's share of income until the recording brings a positive financial result. However, if the deal states only advance and royalty arrangement, only the performer's royalties are used to pay for the performer's advance and any agreed-upon recoupable expenditures. These kinds of contractual arrangements also present an obvious and highly dubious problem. They imply that the total revenue from the recording may possibly surpass the total cost of producing the recording and the artist's advance much earlier than the label may recoup these costs under the conditions of the contract and begin paying royalties to the recording artist. In other words, an artist can wait a very long time for his payments. This happens because all costs are paid from an initially small part of the income. This is because the costs are reimbursed at the expense of a small part of the income. Sometimes artists call these conditions suffocating and compare them with the fact that after paying off a loan for a car, he does not have it, correctly noting that there is no such practice in other businesses.

Problems related to the terms of contracts between labels and artists at first glance indirectly relate to the renumeration of streaming, however, these transactions are an important part of the chain through which finances move on the way to the artist and friction with these transactions only aggravate discontent around payment systems from streaming.

4.1.2. Unrecouped money issue

The problem of debts formed from unrecouped money is really acute in the industry. A small percentage of independent labels erase them after a specific amount of time, but it is most certainly not an industry practice. For instance, one of the major independent record firms in the UK, Beggars Banquet, pays off debt after 15 years. But unfortunately, many labels don't seem to hurry in adopting this policy, which means that many agreements from decades ago are still making back their initial investment in manufacturing and distribution. Sony did, however, signal a positive change in 2021 when it declared that it would "pay for the current non-refundable balances in order to boost the chances of individuals who are entitled to get more money for utilizing their music" under the agreements reached earlier in 2000 (Ingham, 2021). This decision was followed by similar rules adopted by the two remaining big players in the industry: first Warner, and then Universal. On February 1, 2022, WMG announced a legacy unrecouped advances program under which, for our artists and songwriters who signed with us before 2000 and did not receive advances during or after 2000, we will not use their unpaid advances in royalty reports for any period beginning July 1, 2022 or after (Ingham, 2022). Universal Music Group was the slowest of all, and was 2 months late with the decision, but still accepted it officially - on March 31, 2022 (Stassen, 2022b). In other words, starting this summer, if one is a qualifying artist or songwriter whose monthly streaming royalties are being held by major labels because they have not yet recouped past advances, they will begin receiving those funds finally. This is a big step for the music industry.

4.1.3. Quantitative example on sustaining household with revenues from streaming

The problem of unfair details in record deals is made worse when compared to the relatively low income from streaming, even if considering the fact that listening to music via streaming platforms is replacing other means and has become the dominant format. Payouts from streaming services are a relatively new source of income for musicians. It is true that one is advocating that artists rely only on streaming revenues. Even so every other week someone goes viral online and builds an entire career of the profits made from streaming royalties. The bulk of these sudden superstars are young people who don't have families to support, yet they nevertheless have daily costs to cover. The following quantitative example demonstrates that sustaining even a household of 1 person is not an easy task if one relies only on streaming revenues. This example uses information of two countries that dominate the music industry and county that occupies last place in top-10 within world market –United States, Great Britain, and Italy. It is important to note that the data in the examples are illustrative and rounded.

We assume that 82% of streams in the UK originate from Spotify and 18% from Apple Music, while 70% of streams in the US come from Spotify and 30% from Apple Music based on the statistics given earlier. We also assume that the musician is self-releasing their music, saving them from having to provide a significant amount of the profits to a label.

1) US: The Assistant Secretary for Planning and Evaluation (ASPE, 2022) estimates that the poverty level for households with only one member is $13,590. We may utilize streaming revenue calculators to determine how many Spotify streams someone would need to be able to support oneself, ignoring the fact that it would be difficult for anybody

to live on that amount in a big city (and most mid-size cities). And as of 2022, Spotify pays artists between $0.003 – $0.005 per stream on average (Ditto Music, 2022). We can also simplify for our example and say that Spotify pays $0.004. At an average payout of $0.004 per song stream, a musician living in the United States needs approximately 3,397,500 Spotify streams alone annually to have a income of $13,590. In 2022, Apple Music pays artists $0.01 per stream on average. So essentially 1 stream is equal to 1 penny earned (Ditto Music, 2022). So to make living on a Apple Music streaming alone, artist needs their song to play 1,359,900. It looks a little better than Spotify situation, but the number is still terrifying, especially for a niche artist. Given that streams in the US come from Spotify and 30% from Apple Music, accordingly we get $9,513 from Spotify and $4,077 from Apple, we can count number of streams needed for each platform, for simplicity assuming that our artist uses just 2 of them. *With the use of some basic computations, it can be seen that to make your living on streams from these platforms we need our content to be played 2,378,250 times a year on Spotify or 6515 times per day and 1,019,250 times per year or 2792 times per day on Apple Music in the United States.*

2) We can repeat a similar analysis for the UK, given that the poverty line for single-person households in UK is rounded to €13500 (Trust for London, 2020), 82% of streams in the UK originate from Spotify and 18% from Apple Music. Turns out to leave just on a border of a poverty threshold *artist needs 2,767,500 streams per year on Spotify or approximately 7580 streams per day and 243,000 streams per year or 660 streams per day on Apple Music in the UK.*

3) For Italy the situation will be looking noticeably different, because the in 2020, an individual living in Italy with less than only 601 euros per month was considered poor (Statista Research Department, 2021), which is much lower comparing to UK and majority of EU countries. Despite the fact that precise information has not been revealed yet, but as of 2022 In Italy around 58.3% of subscription-based streams comes from Spotify and around 19.5% from Amazon Music, 8.8% from paid YouTube Music and only 2.2 % from Apple music and the rest is divided between various different platforms. (David Price, 2022). For illustrative purposes let us round these numbers to the following situation: Italian artist gets 75% of his total amount of streams through Spotify and 25% from Amazon. On average, Amazon Music pays out roughly 0.004 € per stream on the platform to the owners of the recording (Fitzjohn, 2022). *So in Italy for example, absolutely independent artist needs 112 687 streams per year on Spotify* *or approximately 309 streams per day and 37562 streams per year or 102 streams per day on Amazon Music.*

The cumulative number of streams on the 2 most popular platforms in each country is presented on the graph below (Figure 16).

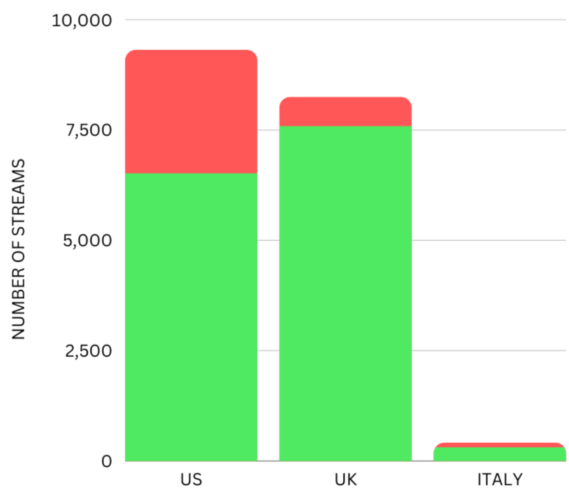


Figure 18. The number of streams needed for artist to sustain themselves in US, UK, Italy

The artist may require millions of additional streaming views to get the same amount of revenue for themselves, depending on the amount owing to the label because the record company would receive payment before to the artist if the artist. These numbers get much bigger when the musician is part of a larger group or if solo artist doesn't live in a single household but has a family to support financially. In practice, the situation also is not so easy. For example, Peter Frampton received a royalty check for $1700.00 for 55 million streams of his song "Baby I Love you way". Rock singer, guitarist, singer-songwriter and Grammy Award winner posted in his twitter the following statement: "For 55 million streams of, 'Baby I Love Your Way', I got $1,700. I went to Washington with ASCAP (American Society of Composers, Authors and Publishers) last year to talk to law makers about this. Their jaws dropped and they asked me to repeat that for them." (Frampton, 2018).

The example above is strictly illustrative, nobody nowadays is proposing for a musician to live solely off of streaming earnings. Some artists will be able to make it work, particularly if they have a sizable fan base and little costs, but the majority will need to develop as many revenue streams as they can in order to survive. Today, building a fanbase that encourages the purchase of merchandise, tangible media, and concert tickets is the key to a successful music career. That has always been the case and probably always will be.

4.1.4. Problems with touring and live music in the streaming era

Another aspect that bared dissatisfaction with streaming payments as a system was the fact that musicians became overly dependent on income from touring activity and income from live performances. Indeed, live music and record business have a dynamic and rapidly changing interdependent relationship that is strongly influenced by piracy, unbundling, artist fame, musical quality, according to a study by Papies and Heerde (2017) But the main problem on the artist side, is that these relationships are spiral. And even though it has been demonstrated that record sales and live music revenues are connected, the impact of records on concerts is far greater. In other words, if an artist gets well-known through their records, it will naturally lead to concert success, but the study shows that the reverse situation is usually not the case in the music industry. As a result, many artists now use streaming services more and more, sometimes perceiving it as a marketing tool than as a reliable source of money. Many musicians commented that having a sizable number of followers on streaming services is vital for being heard and seen, therefore removing content from these platforms is impractical and can hinder future success. Many performers also notice that the presence on streaming services is evaluated by some agents in the decision-making process whether to book a certain artist for a show or not. Despite the fact that at the beginning of this work live music was shown to be a part of the music industry least related to recorded music and licensing, the times still seem to be changing, and this connection can be less and less downplayed. The two activities of making music and playing it live became inextricably intertwined because while touring is frequently done to support the release of new recordings, producing music would be impossible without it. A detailed study of economic flows is not in the plans for this work, however, it must be noted that the comparing percentage that arises from streaming and from touring in the bottom line is not even practical, since the percentage of touring is 4 times bigger. The streaming era has led to the fact that musicians cannot neglect live performances if they intend to earn money from their creative career. The balance has shifted towards the fact that touring/live performance ticket sales serve are the primary source of income for most musicians today. For example, in a recent interview with the New York Times, singer and songwriter from the UK Nadine Shah shared her observations on the issue. According to her, she faced a sudden decline in her earnings when the pandemic began in 2020. Because of this, she had to return to live with her parents, which was not easy for a 34-year-old adult. In an interview, Shah said she was "financially deficient." (Sisario, 2021).

Concerns regarding the economics of music streaming were then reframed in light of the sudden and involuntary loss of live music income for performers during the pandemic. Examples of how the issue is becoming more pressing include:

1) In Britain, more than 150 artists, including stars like Paul McCartney, Kate Bush and Sting, signed a letter asking Prime Minister Boris Johnson for reforms in the streaming economy (Blistein, 2021).
2) The 2020 «Keep Music Alive» campaign to actively fix streaming was also started by the Ivor's Academy. They did this by circulating a petition asking the Government to look into regulating and reforming the music streaming industry.
3) A brand-new advocacy group, the Union of Musicians and Allied Workers, launched a guerilla campaign against Spotify in the US and called for larger payments. More attention than ever was being paid to the details of record corporations' contracts with artists, including royalty payments and ownership of recordings (Nast, 2021).
4) The #BrokenRecord Campaign, started by Tom Gray who is popular songwriter, received significant reaction on social media in March 2020. It brought together musicians, business people, fans, and other parties who were dissatisfied with compensation from music streaming and called for action towards changing the current model.

While some industry stakeholders applauded the public debate, the CEO of the UK record labels' trade group, the British Phonographic Industry Ltd. (BPI), Geoff Taylor, disagreed, adding that instead of arguing about where the streaming pie should go, the business should focus on expanding the streaming pie. Creative director of Ultra Records Eddie Sears, who happens to be an independent artist as well, expressed a similar indifferent opinion in his written evidence (Annex 1). According to him, the artists compensation issue could always be better, but it could also be worse. It is now stated that the value of a single stream is not much, but the value of a community is extremely high: an artist can monetize in various ways and not only through selling records. Streaming platforms allow artists communicate directly with the audience and sell merch, custom songs, limited pieces of art, livestreams, etc.

Despite the fact that the burdensome era of the pandemic for live music is almost over by the time of writing this work, the continued problem with EU travel policies for creatives means that musicians will remain confronted with financial challenges. Any restriction, whether it be visas or something else, will be detrimental to live touring in Europe. Considering that the market of United Kingdom is the second largest in the west, after the USA, as well as the fact that many musicians from the UK historically arrange extensive tours of European countries, it becomes obvious how much it may affect the situation.

Following the Brexit events, UK nationals no longer have freedom of travel, and artists and crews will now require a visa for stays longer than 90 days during a 180-day period. Touring bands will also need to pay for carnets (permissions) for their equipment and products in several EU nations, which will also require supplementary work permits upon arrival. A further obstacle, according to the Association of British Orchestras, is the restriction of road haulage, with new regulations mandating that drivers return to the UK after traveling through two EU member states. This makes it hard to use the traditional touring strategy, which involves shipping musical equipment by truck from the UK to venues across many nations. Musicians from the UK may have to consider paying additional fees to hire European road haulage providers. And now, more than a year later, the industry is still clueless on how to properly address the problem (Trendell, 2022). One by one, performers from other nations decide to cancel or postpone their tours, speaking openly about the emotional, physical, and most importantly financial difficulties they have had while attempting to succeed in the oversaturated "return to normal" market. The petition to support visa-free travel throughout Europe was written by Tim Brennan of the Carry On Touring Campaign and garnered hundreds of thousands of signatures before being rejected by the government. He concurred with the notion that the music business had been made into a "sacrificial lamb" in order to eliminate freedom of movement.

The Trade and Cooperation Agreement (TCA), which came into effect on January 1, 2021, was the outcome of negotiations between the UK and the EU, although there were still no guidelines for short-term travel for artists or related employees. Due to obstacles like work permits and visas, both musicians and the ecology that supports them can no longer move freely, as well as products like equipment and merchandise. This might significantly increase the financial and administrative burden on performers, have an adverse effect on their main source of revenue, and exacerbate current problems with streaming remuneration.

4.1.5. Industry gatekeeping and other issues

There are also valid worries that the streaming industry is stifling fresh talent and forever tying previously successful musicians. Despite the emergence and success of many niche artists, the influence of the mainstream superstars is still very strong. In the meantime, it has become standard practice in the business for creators to bear the expense of the process of music producing, such as paying for facilities and appliances. The external costs of production that are indeed advantageous to corporate earnings, increase entry barriers for musicians who lack the financial resources to pay these charges. This whole situation resembles a vicious circle from which a professional, and even more so a beginner or niche artist, cannot escape, and leads to the fact that many artists are looking for new sources of income outside the music industry, considering the revenues from music streaming insufficient, and efforts to obtain it - inappropriate. Professional musicians said to YouGov that 43 percent of them had looked for employment outside the music industry due to a lack of income from streaming (The Ivors Academy, 2020). Several artists have claimed in writing that they or their colleagues have been obliged to work multiple jobs in order to support their musical endeavors, which further depletes their time and resources (Hesmondhalgh et al., 2021). Other musicians have seen that it has been more profitable to carve out a niche in producing music for television, movies, and advertising or background music that is tailored for playlists of different moods.

4.2. Impact on non-featured artists

All of the aforementioned issues are common for musicians who have signed a contract with the label, and things become much worse for musicians who aren't featured. Non-featured artists are usually those musicians who are called “session” once in industry language. They normally give their performers' rights to the recording's producer in exchange for a one-time payment. These musicians may be instrumental musicians, backup singers, or special musical instrument players, or even sound producers who are hired to perform on a recording or tour of flat rate basis. And despite the fact that researchers have proven the great role of featuring artists in increasing the demand for the track and the growth of the promotion, and in general the fact of a better economic performance (McKenzie et al., 2020), it is not hard to guess that such artists are much less legally protected than they would like to be.

Various professional unions and associations negotiate the flat fee on this payment. These indicators differ depending on the country, because different organizations are responsible for setting prices and proceed from the socio-economic indicators of each individual country. More recently, a new periodic agreement on this issue has also been concluded in France. Organizations that represent performers and phonographic producers had 12 months to come to an agreement on the minimum remuneration guarantee (MRG) for artists, both featured and non-featured, when France issued an order on May 12, 2021, transposing Directive (EU) 2019/790. This clause states that non-featured artists must receive a minimum lump sum payment equal to 1.5% of the base charge for each musician and for each minute of recording. The agreement offers for an extra lump sum payment based on the attainment of specific stream criteria in France: 20% of the basic charge for 7.5 million streams, 30% of the base cost for 15 million streams, and 35% of the base fee for 30 million streams (Lauvaux, 2022). Other aspects of such agreements may include an extra few minutes break between sessions; restrictions on how many minutes of a recorded performance may be used by a record label each session; plus extra compensation for working overtime, weekends, and holidays. The French agreement has made great progress in this matter. Thus, payments by a session musician in France are still considered royalties, unlike the situation other countries, where in reality, non-featured artists purchase out of their options to future earnings, like those from streaming, in return for a one-time service fee instead of a royalties when musicians surrender their rights. This implies that non-featured artists are not compensated when a recording with their contributions is streamed, downloaded, or physically purchased. Instead, after 50 years from the release of the album, session musicians are only eligible for an equal share of 20% of gross profits from physical and online sales (also known as the non-featured performers fund or session fund). Session musicians play a variety of vital roles starting from the composition finishing live performance both via own originality, ability, and experience as well as through introducing new talented musicians to the scene. In the History of music, it has also happened that session musicians have gained incredible popularity and have themselves become real featured artists with contracts from major labels. Though the Covid-19 pandemic and other non-pandemic bureaucratic constraints on unrestricted travel, however, had a notably negative impact on their reliance on session fees for a living and considerably less financial encouragement. Despite all of this, according to specialists representing the record business viewpoint, session musicians are paid fairly since they are paid in advance regardless of the recording's economic success and are thus not exposed to the danger of a release's failure. There are concerns that the desire to address inequality or to reconsider the situation with non-featured artists in favor of assigning them royalties can only lead to a deterioration of the situation in the form of lower prices for the studio session time with musicians, a decrease in the total number of musicians, as labels will try to transfer losses associated with new royalties to third parties.

However, it is not entirely clear why the fee for sessions, which is the subject of collective bargaining, can automatically decrease or why there will necessarily be fewer session musicians if higher remuneration of performers will stimulate the creation of new music. There is a feeling that the representatives of the recording industry simply serve their own interests in this matter as well.

4.3. Impact on business agents: Managers, Lawyers, Promoters etc.

There are many other participants in the business that are also significantly impacted by the economic concerns of streaming, in addition to musicians who perform the role that is most significant from the perspective of the customer, namely that they create music. Sometimes artists can create completely individually, but most often artists have a whole "office" of alliances around them to ensure that daily tasks are completed. All these ecosystem agents are an indispensable part of the industry, the cogs without which it will not function. For instance, managers may oversee day-to-day business operations; attorneys and accountants offer crucial support and guidance in these areas; workers to plan the live performances and tours which is one of the main sources of income for most musicians. This ecosystem as a whole has suffered from the decrease of creator rewards due to abovementioned issues of streaming. Since, as an industry rule, all of the above agents are the artist's team, which means that their remuneration usually depends on the percentages set in the contract, with the exception of more rare specific scenarios, where compensation is defined in advance by the parties. However, even the latter situation was influenced by streaming problems. The Association of Independent Music acknowledges that, in contrast to record labels, managers who usually operate under the premise of a 20% fee on the performer final revenue are compelled to make larger prospective investments when working with up-and-coming musicians. Similar to other agents, who used to earn money through commissions that have since vanished. Road crews, now also suffer challenging working circumstances and steadily deteriorating job conditions. Road crews are great part of live music industry workers with highly specialized labor, it includes sound and light engineers, agents, technicians and so on. Particularly Ed O'Brien of the English music band Radiohead stated that his crew members cannot be considered "roadies"; rather, they became qualified technical workers, and the majority of them have transitioned into delivery driver jobs as a result of industry issues (Peplow, 2020).

Different industry actors are impacted by issues with the financial benefits of streaming, and these issues have unique consequences on how people see streaming. The initiatives mentioned above, which set themselves the goal, if not to deal with the problem, then at least to make it public, were partly not in vain. The issue is seen as significant by listeners, and average customers support the idea of developing a universal solution. These thoughts may be what drives the achievements of digital firms like Patreon, which enable musicians to and monetize their fan bases autonomously of any corporate partners, providing early or exclusive access to creative content, products, and other perks. In a similar vein, Spotify at the start of the epidemic introduced a feature for musicians to solicit money from fans, which began to be known as the Spotify "tip jar." However, the "tip jar," according to several artists, was just an acknowledgment that the economics of streaming did not help creators and that the industry is aware of the issue but unable to address it effectively. It has also been noted that up-and-coming musicians who had not yet developed a devoted audience would not be in same fruitful position.

4.4. Origins and background of recording rightsholders problems.

4.4.1. Poor legal categorization of music streaming

To focus on the roots of the problems, one of the reasons lies in the so-called right to equitable remuneration (ER). Initially, the right of equitable restitution was applied to radio, and according to experts, this was vital. It basically implied that the artist had a source of revenue that the record labels were unable to access. This means when specific copyright rules are violated, there is a non-waivable, non-transferrable legal claim to compensation known as equitable remuneration. This is paid at the current industry standard rate of 50:50 between the label and performers, which unfortunately has in fact no legal foundation. Many of the aforementioned problems that artists face has an equitable pay plan suggested as a remedy. Firstly, due to the fact that ER has a different nature and does not carry the basis for compensation to the label, which means that the artist will receive money at the moments when their songs will be broadcasted\streamed on the streaming platform. Unlike the current situation with deals between artists and labels, money from streams with EP rights can be obtained regardless of whether the label has recouped its investment in the artist or not yet. Secondly, ER can help reduce the discrepancies faced by older performers who are paid in accordance with contracts that were concluded before the advent of streaming in general, significantly lower than modern reality requires, even though these creators often bring significant amounts of money to the sector. And last but not least, ER is not subject to cancellation and transfer, which means that performers in no case can give or delegate their right to remuneration of this type to anyone. This is especially important in a scenario where aspiring artists sign contracts with majors and agree on the deals with parties who have much more clout and leverage of influence. While appeals for more equitable creative payment from streaming have been spurred by the unfair distribution of its advantages, arguments for applying a particular equitable remuneration right have evolved as a result of the conflicting legal categorization of music streaming. There is no agreement on how streaming should be categorized or characterized. Indeed, many artists argue that streaming can be regarded as a subject for the application of this right, after all, bearing in mind the nature of streaming. Most stakeholders in the face of various creative and legal and trade entities within the sector support this position. In contrast, as was to be expected, record labels and their trade groups typically disagreed with this viewpoint or sought to maintain a neutral position. The position of labels, both major and independent, is that they consider music streaming from the point of view of the application of "making available" right. In support of this categorization, the major labels emphasized technological requirements, including the on-demand capabilities of streaming services. Additionally, they contended that streams are analogous to sales in that listener may choose what and when to listen. Individuals have the option of making your own playlist, selecting a song directly, etc. They may also select the duration of the listening session. And the majority of subscription services presently provide the choice to transfer or preserve recordings for offline usage. Warner Music also has recognized that commercially, downloads and physical goods may be replaced by streaming, and that it has mostly done so. Therefore, music streaming resembles a sale in all of these ways, according to the labels, and extends the "making available" right based on this, as was already mentioned. This, they say, is due to the fact that the digital era has established access that is closer to the understanding and nature of the sale, rather than broadcasting, which assumes other characteristics and is analogous to rent. That is why the big labels emphasize that legally they see streaming as a sale, which explains the fact that compensation is accrued to the artist in the form of royalties.

However, the question is not as straightforward as it is considered by labels and many other industry agents do not agree with the above position. First, music streaming does have some major similarities to a process of rent. In fact, with music streaming users may access limitless music through services, but only while they are paying for time-limited access, which is a subscription to the service fee. This is incomparable with the process in the old days when listeners were simply buying CDs, because then they really owned what they bought. The streaming process is really more like how people rented videos, for example. The most crucial point to keep in mind is that, in comparison to other forms of consumption, streaming services themselves disputed the notion that they were simply analogous to physical sales or downloads. Apple and Spotify many times positioned their services in a dimension that streaming was distinct from an ownership model and more comparable to a rental, despite the fact that they usually did not address the legal repercussions.

While big record companies have maintained that sales and downloads are being replaced by streaming, it is as relevant that radio is being replaced by streaming. This enables us to claim that streaming and other forms of passive listening, including broadcasting, are comparable. It also becomes obvious if one thinks about how autoplay works in streaming platforms. Recommendation systems themselves select tracks and even the order of tracks in the event that the listener does not take initiatives to switch the playlist that has already ended or any other set of tracks, such as an album or mix. This situation is passive listening in the broad sense of the term. To illustrate this aspect practically, Spotify said that it plans to use its more individualized listening experience to attract radio listeners and that company anticipates a gradual decline in radio listens. The $30 billion in radio advertising income, according to Dawn Ostroff, Chief Content Officer and Advertising Commercial Officer at Spotify, presents a new market specifically for streaming services that use advertisements in their free tier options. (Pepitone, 2019).

4.4.2. Difference between the rights to the songs and the rights to the recording's appliance.

Additionally, there is a discrepancy in the way streaming is defined within the publishing (song rights side) and recording (recording/master rights) sides of the industry**.** Contrary to the recording, which is only classified as "making available," the song part is not only about "mechanical" element but also "performance." This is not a groundless dispute. Which element is more presented in the song when it is streamed: mechanical or performance? And what happens if I later on download music on my phone? Is that only mechanical or does it also constitute a performance? Some claim that listening to a song via the internet is the same as hearing it on the radio, meaning similarities with broadcasting, which is obviously a performance. Additionally, they claim that in order to be delivered, a download must be streamed to a phone or PC, making it itself a performance. Others assert that one cannot stream song without the process of first downloading it to the music streaming service provider computer server. And since those are reproductions of the song, meaning that a mechanical license is required. Additionally, many premium streaming platforms offer downloading a song to listen it offline which is equivalent to purchasing a CD, proving that it is a mechanical right.

It is true that the issue is especially challenging when it relates the rights that are abused when a piece is listened to through a streaming service. Even though a track's song and recording rights are used concurrently while streaming, the fact that each of them is classified legally differently, resulting in a quite a confusion. Streaming a recording is regarded as a "making available", while the song rights, are handled with appliance of equitable remuneration because they are viewed as both a "mechanical" copy of the work and a "public performance" of it. So the artists began to wonder why they weren't receiving reasonable compensation (royalty for their performance), especially while the same track's songwriters and composers receive royalties for performances powered by ER right. Due to the artist's lack of compensation rights, the majority of creators have argued that adequate compensation should be given for both recording side and publication side.

But behind all of this bluster, there was actually a simple dispute over who received compensation for collecting it: the PROs who collect performance monies, or the Mechanical-Copyright Protection Society (MCPS), the organization that collects royalties, or both?

It interesting to note that Europe solved this issue before the US. Downloads are regarded as 25% performance and 75% mechanical in the majority of European nations, while streams are regarded as 75% performance and 25% mechanical. However, the Switzerland and a few other nations do not recognize any performance right for a download, whereas the United Kingdom shares the revenue equally between performance and download.

However, the whole controversial situation can generally be seen from an alternative standpoint: not from the point of view of technical arguments, but economic ones. Currently, the right ER only applies to consumption ways where record companies' production, storage, distribution, and physical breakdown expenses are insignificant to those of other channels, such as physical sales. It also applies when expenses are sizable but connected to the retail or media/broadcasting entities. Let's look at our controversial rental/sale situation considering the above. For example, in renting, the expenditures of producing and delivering each unit only occur once, and the future act of renting has little to no extra financial impact on the business. Similar to this, there are no further charges to the record label after music has been licensed for broadcast or public performance. When compared to the costs involved in the traditional sales of physical music media, the costs of distribution, transmission, storing, and product maintenance in the context of streaming are insignificant or nonexistent. This applies to both streaming and the music download store. Even though it is obvious that the marginal costs of digital consumption have decreased significantly, performers have not benefited from these cost savings: this saved money is not settling in their pockets.

In other words, the issues underlying the problems with the remuneration of artists and any other owners of the rights to the recording concern some of the main pillars - such as the debate about the applicability of the right to equal remuneration, the right of "making available" and the categorization of music streaming in a legal framework, both globally and locally. "Making available" straightforward right frequently ignores the nuances of streaming that set it apart from other methods of consumption. For instance, streaming resembles renting and broadcasting in that it uses copyright rules to ensure that performers have a legal claim to equitable remuneration. The way streaming is poorly categorized in the legal system results in discrepancies between the rights to the songs and the rights to the recordings appliance. The diverse interpretations used by the legal systems of various countries and regions within the music industry supplementary complicate situation.

CHAPTER 5: MUSIC STREAMING REMUNERATION FOR SONG RIGHTSHOLDERS

This chapter will point out that the way that industry earnings are initially split leads to challenges and financial issues on the side of song rights, which in turn has negative consequences that may be severe for songwriters, composers, and the commercial partners they work with. The chapter will examine the diverse effect of compensation practice on the creators and their dependent alliances, such as inequitable position comparing to the recording rightsholders, additional challenges of advances provision and "one-time payments" nature of income, track optimization trends, the trend of reconciliation with the mainstream and the devaluation of the genre. The implications of streaming's specifics, such as the algorithmic and playlisting dilemmas, will be next briefly discussed. Then the chapter will address the idea that the streaming economy in general is a poor fit for the song rights holders and its parties and the reasons for this opinion. Finally, it will investigate technical obstacles for adequate song creator compensation: specifically, tensions with the metadata and length of royalty pipeline for authors of songs.

5.1. Impact on songwriters and composers.

While previous chapter focused on rewarding the owners of the masters, the present chapter offers a more detailed look at the end belonging to the song rightsholders to see valuation of the song process and its impact on songwriters, composers and music publishers. To recapitulate a few important points, streaming services retain 30 to 35 % income and provide the remaining 65 to 70 % to the music business. While recording rights holders receive the majority of the industry's revenues—roughly 78.5 to 80%—song rights holders earn just about 20 to 21.5 percent of those funds. As a result, we perceive a definite advantage in favor of the owners of the recordings' rightsholders. Regardless of the notion that those sets of rights are logically interconnected since a license is required to use the recorded music, representatives of the copyright holders of the songs contrasted the low compensation rate for songwriters and composers compared to other parties.

Similar to performers, songwriters and composers sometimes face additional challenges due to a lack of financial compensation. But unlike singers, who could get advances or the pay for the musical session, songwriters frequently don't get compensated for their work until it is made available for purchase. It also does not improve the situation that with the spread of streaming, the music business began to move towards the development of the so-called song economy.

Most streaming platforms count a stream as listened to if the client listens to it for more than 30 seconds. This practice significantly changes the way music is now created by songwriters and the way we listen to it. On the consumer side, we can talk about a radical change in the patterns of music consumption. This, in turn, leads to changes on the side of songwriters who have less desire and incentives to release full-size albums, since today there is a clear trend towards a decrease in interest in such formats. Songwriters are eager to take advantage of the new reality of streaming. First off, platforms are now encouraging artists to consistently produce music in order to maximize streaming income. Nowadays authors are encouraged to employ a particular songwriting style that emphasizes concise snippets and attention-grabbing starts, and this creates comparable trends and makes content more homogenous. In an effort to optimize the track for streaming and playlist inclusion and draw listeners to the album, many composers are increasingly condensing the song introduction. Meyn et al. (2022) have proven that streaming leads to a tendency to reduce the length of the song in all major genres. The authors argue that there is a definite tendency for tracks to get shorter in music, which is also partly owing to the characteristics of the pro-rata system that is prevalent in streaming.

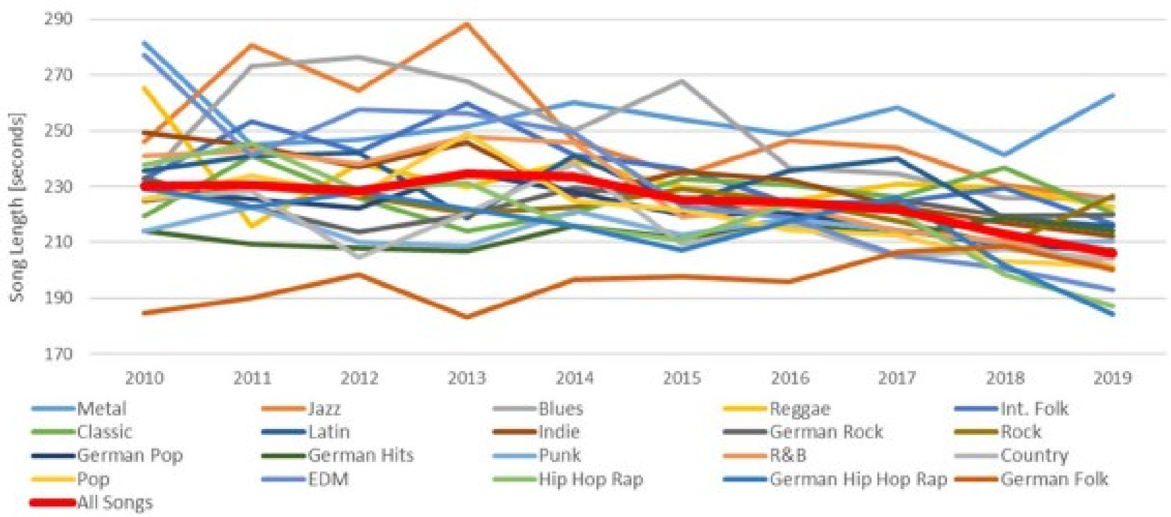


Figure 19. Development of song length by genre over the last 10 years (Meyn et al., 2022)

Problems with compensation and value of the song are also exacerbated by factors like the variety of genres and their distinctness, which prevents the comparison of all songs to a single fictitious average. For instance, various musical genres are characterized by varied track durations. And how much a listener is ready to listen to those crucial thirty seconds in order for the streaming platform to recognize the song being listened to directly depends on the length of the music and its characteristics, including, for example, lengthy intros. Genres other than mainstream and less popular, such as folk traditional music, jazz, experimental music, are going through particularly difficult times and are suffering greatly from the new reality of the industry created by streaming. For instance, it seems a bit odd when paying rights holders after 30 seconds of streaming a recording result in the same price for a 31-second interlude of a pop album “Surrender” by Hurts as it does for a twenty-four-minute rock track “Octavarium” by Dream Theater.

This effectively implies that lengthy form of music fans who regularly listen to music it funds listeners with mainstream musical preferences, specifically when pop music has been optimized for streaming, particularly for services that use "pro-rata" pricing methods. For instance, Sam Smith’s viral track “Unholy” (2:36) could be played seven times for every one play of The Velvet Underground’s track “Sister Ray”. It must be clarified that the efforts put forth by pop song writers are not deliberately minimized, rather, it is just emphasized that paying for a three-minute track logically shouldn't be treated the same as paying for a 24-minute track that is completely listened to from beginning to end.

Also continuing the topic of critically large differences between genres, the great influence of algorithmically curated playlists on the streaming of music of certain genres must be taken into account. The playlisting dilemma is complex. Firstly, traditional great length music genres like traditional, jazz, classical and experimental music may be completely ignored by recommendation systems, yet on sometimes, good music gets playedlisted with poor contextualization. A talented and experienced composer is unlikely to be happy that his composition is constantly in the playlists for sleep, and certainly unlikely to consider it a big booster for his career.

Another issue that owners of song rights must deal with is the frequent occurrence of many songwriters working on a single song simultaneously. A song can frequently have several contributors due to the various components of songwriting. That is why it is perfectly common for songwriters to split royalties from songwriting credits. And very often one track has more than one songwriter, usually it is three or even four. Within the industry practice it is believed that successful single today requires the work of 4.84 songwriters on average. The prevalence of sampling practices is a major contributor to this issue's aggravation. As a result, by adding a few extra seconds of a sample to the song, artists may find themselves with ten additional composers claiming your slice of the revenue pie. As a result of the regrettable frequency with which prominent artists claim the right to be recorded on song credit, even when they did not compose the song at all but only performed it, the situation can occasionally border on the absurd. The biggest songwriters of our time are critically dissatisfied with this situation, alleging that an increasing number of musicians are requesting a part of publishing income, even though they did not compose the song. The letter states that while musicians will continue to make money from touring, selling goods, and working with brands, songwriters will only be able to make money from their publishing deals. Although no individual artists were mentioned in the letter, the signees acknowledged that composers frequently dealt with "bully tactics and threats" from those who want to siphon off a portion of the composition earnings. The most successful composers in the world can't pay their rent, according to Fiona Bevan, a songwriter for One Direction, Lewis Capaldi, and other artists. She revealed that she only made €100 from streaming for a song she co-wrote on Kylie Minogue's new album, “Disco”. These amounts are pejorative, given the actual popularity of superstars who have other sources of income, whereas songwriters have to fight for these miserable pennies.

5.2. Impact on music publishers

Regarding music publishers, they contend that way economic framework of music streaming functions, do not entirely fit them and have experienced financial challenges similar to those experienced by songwriters and composers. As mentioned above, to make use of the song rights that they hold, music creators collaborate with publishers. Sometimes publishers can act as investors, supporting the songwriting process and authors from the very beginning. But their most important function is that they monitor the observance and protection of rights, supply songwriting products to the market and make them available to the general public. Many artists or even labels buy songs and musical arrangements, and do not write them themselves, this is a common practice in the industry. With the advent of the ability to consume music digitally, there was a need for publishers to cooperate with societies collecting money for performances and mechanical reproduction in order to monitor how their data is used and ensure that the rights holders are compensated on time and correctly. The majority of publishers today, from small independent businesses to BMG, the fourth-largest publisher in the world, support raising the compensation of songwriters and composers and support the creators' point of view. Publishers insist that they have the right to have a larger share of revenue and highlight a scandalous disparity in relation to the part of income that the owners of the recording rights receive. Despite the fact that the industry is shifting to a streaming trend of consumption that based on tracks rather than albums, thereby increasing the value of the song, most publishers, and correspondingly songwriters, do not benefit from this, which feels very unfair. For example, The National Music Publishers' Association estimates that the US music publishing sector produced $4.70 billion in revenue in 2021. According to previously released NMPA data

(Israelite, 2022), the numbers appear to be quite large at first glance, and they were more than double the size of music publishers' annual revenues in the US as recently as 2014 ($2.15bn). However, music publishing's growth in the US in 2021 was nothing compared to how the recorded music industry exploded in the same year. In the US, the RIAA provides an equal wholesale yearly statistic for the recorded music sector of the music industry (Recording Industry Association of America). The RIAA stated back in March that this amount was $9.8 billion in 2021. In comparison to the $8.0 billion in income that record labels and distributors in the US got in 2020, that $9.8 billion wholesale number for 2021 represented an increase of $1.8 billion year over year. To restate the issue: According to industry (NMPA) figures, music publishers' wholesale US sales increased by $700 million in 2021; whereas record corporations' (and distributors') wholesale US revenues increased by $1.8 billion, more than double this amount.

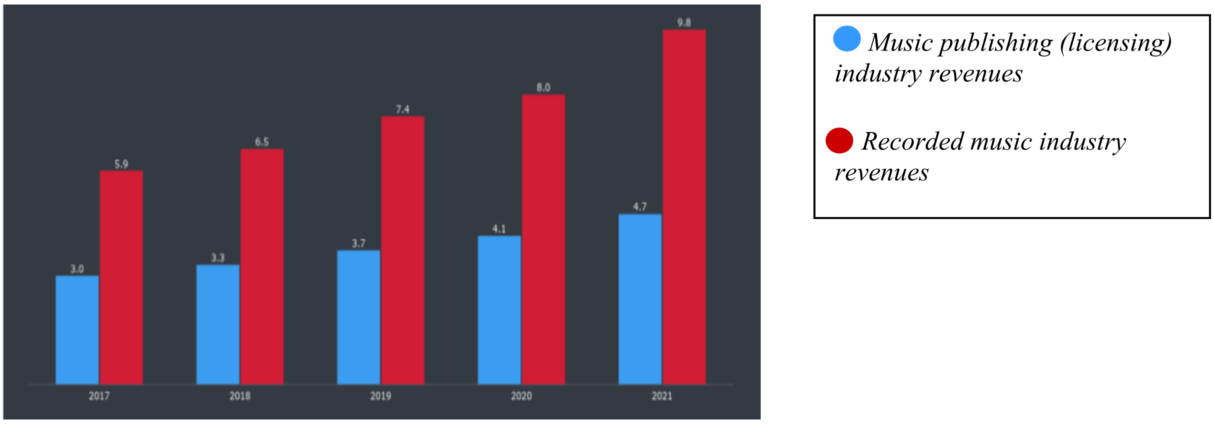


Figure 20. Comparison of Annual Wholesale US revenues for music publishing vs. recorded music industries

To add to that, the nature, and specifics of the income from the song rights differ from the specifics of the income flows from the master rights, as the former are more based on transactions involving royalty payments than the former. In the first case, the main transactions are based on the provision of advances and one-time payments.

5.3. Origins and background of Song rightsholders problems: metadata and longer royalty chain

5.3.1. Length and peculiarity of song rightsholder royalty chain

It is important to highlight, that a significant number of the problems with the remuneration of the rightsholders of songs often have their origin in the fact that the royalty chains for the representatives of the owners of the rights to the songs and the representatives of the recording rights are significantly different. The complexity of song rights licensing and the following processing of royalties is where the difference mostly manifests itself. Recording rights are usually licensed much easier than the rights to songs, since the first ones go through a more straightforward process. The track is streamed, and the streaming service understands how and in what proportions funds should be distributed, and then simply transfers the money to either labels or distributors of artists. What happens then is also obvious - after deducting their share, labels pay artists the royalties due.

However, the song rights procedure functions much more strangely, as is seen in the Figure 12. The first thing to note is that there may be more entities in between. This might involve a collecting society as well as one or more publishers, other company which serves as a middleman between collecting society and publishers. Second, as was noted in previous parts of my work stream makes use of both the song's mechanical and performing rights and a single songwriter or composer is compensated separately for each, with the publisher receiving the full 50% of the mechanical portion first, and crucial to note, that this portion also partly consists of the songwriters' and composers' royalties. Because of these difficulties, songwriters and composers deal with a number of problems that affect when and how much they can get paid. First, when money moves through these channels, deductions will be made. These might be charges and administrative expenses charged by collecting societies or revenue sharing demanded by business partners in accordance with contractual requirements. Secondly, various time lags may occur, and since the creators are at the very end of these pipelines, they most often suffer from their position. Songwriters and composers usually have to wait longer than performers to earn their royalties. The more participants there are in the chain, the more you have to wait for your part of the money, this really applies to the situation with songwriters. Furthermore, ownership, data, and/or audit conflicts may apply to these types of the royalties.

It is worth mentioning that in such situations there is usually a lack of transparency of the actions of all participants in the chain. This makes songwriters dependent on higher-level organizations, as processes often occur without their knowledge, but on their behalf. In the industry, the established practice of agreements also creates additional levels of complexity, uncertainty and opportunities for data disputes and improper distribution of royalties, including differences in the licensing of rights to songs between different geographical locations, differences in the legal framework regarding copyright, and how the rights to the song are paid. All minor differences lead to big consequences when the songwriter enters the world market. Last but not least, these tensions exacerbate existing metadata problems.

5.3.2. Usage of metadata within streaming

Concerning the root causes of the issues that song rights holders encounter, it is not only the intricacy of the royalty chain but also issues with metadata that are frequently to blame. It is crucial to understand that three essential components are transferred by the record label when recorded music is licensed for streaming services: the track itself, the art for its track (album or single cover, canvas and other visual elements) and the information about the trac in form of metadata.

There are three kinds of metadata that are pertinent to streaming music. The descriptive metadata, which includes information on a music's title, album, track number, genre, and other elements, comes first. Metadata about the owners, which includes information about the authors, their business partners, agreements reached by them and other elements and details related to the fact of ownership of the rights, The third category is the recommendation metadata, which are tags that the service applies and continuously improves using indicators like observed and quantified user behavior. The music business produces both the descriptive and ownership data at the time a piece of music is composed and recorded. The track, specifically its song component and part of the recording, are given distinctive digital identities in order to recognize a large number of tracks and information about them. These identifiers go by the following names: International Standard Musical Works Code (ISWC) or an International Standard Recording Code (ISRC). Since they take into account who is paid, by whom, how, and under what conditions, these statistics are critically significant to the economics of music streaming. And as with any important element in this system, there are constant problems with metadata in music streaming. Sometimes the agents themselves, such as labels, are the cause of these problems, and sometimes streaming services create obstacles and friction. One thing is certain: problems with the metadata are a major obstacle to effective and appropriate rightsholder payment, therefore fixing metadata is crucial.

Sometimes it happens that labels, when transmitting data about a track to streaming, do not transmit its identifier for the song part of the rights. In this case, the songwriters lose what they could earn from streaming. Sometimes the remuneration is lost because the rights to songs and recordings can belong to many different entities and be the subject of complex intricacies in the relationship under record contracts. When a song has several recordings or covers, this is even worse, since in this case a single identifier will be assigned to the song and for each of the recordings for the same song – different.

Also digitalization of old label catalogs adds to all these problems. When receiving metadata that is unclear or hard to analyze, MCPS and PRS agencies frequently must figure out the way to pay related songwriters and their publishers simply using the identifier for the recording rather than the appropriate song identifier. And as it was highlighted before, streaming services frequently erect obstacles in the way of submitting right information or objecting to poor metadata, for example they need that related demands come directly from the sole rightsholder or their representative. Despite the positive fact that this makes it impossible for third parties to take action and act like concerned citizen, it also implies impracticability for situations where there are several artists, authors, and/or composers, as is the scenarios with classical music.

Technically speaking there are few common problems with metadata in music streaming:

1) Database standardization is lacking: There isn't a single database structure in place yet. A non-standard intertwining of databases exists throughout the business that uses metadata. The databases of those parties don't always have the same columns and sections, even though they are all transferring information. After the advent of digital music, when nobody truly understood how the market would change, the present metadata management system was developed. Data output then increased dramatically. Today, 20,000 songs are released every day, pushing thousands of faults across the complex network of incompatible databases.
2) The diversity of the musical data: songs can be various iterations of the same musical composition, as I've already mentioned. The picture is greatly complicated by the fact that a single composition might generate hundreds, if not thousands, of distinct information elements. The many levels of abstraction that music labels must meet to provide correct data.
3) Defects in the Music ID Standard: Sound recordings are given ISRC codes, which is only one of the layers of musical data. One won't be able to determine what the original musical work is behind that specific recording based just on the ISRC. It is not possible to combine all the variations of a single track or composition by aggregating the entries to a higher level of abstraction. For music firms, fixing damaged information is extremely difficult due to the limitations of the ISRC standard. Music firms must go through hoops each time they encounter a metadata issue because of the ID system's flaws. The everyday routine of music data management involves trying to make sense of datasets that are themselves replete with contradictions by cross-referencing them.
4) Human Mistakes: we also have what some people refer to as the weakest link in every system. Most of the ownership and descriptive metadata are developed and filled up by

hand. Given the scope, such obviously results in a variety of mistakes, incorrect spellings of names, titles, and release dates, as well as outright missing data.

At best, incorrect, insufficient, or absent information can cause months or even years of delays in the payment of creative royalties. At worst, this may lead to payments being incorrectly assigned or otherwise relegated to "black boxes" as unclaimed or non-attributable royalties. There's around € 2.5 billion in unclaimed royalties in 2021(Ullah, 2021). Similarly, research from Ivors Academy exposes a € 570 million worth streaming data gap (Paine, 2021). Unmatched streaming royalties are frequently combined and then given to songs that have already been compensated through streaming on a market share basis. Standard publishing agreements stipulate that black boxes would be eventually allocated using pro-rata scheme to streams that they managed to accurately recognize. This means that the most popular authors and corporations are essentially paid twice – for real streams that they gained and for those who cannot be properly recognized. The digital value chain of music streaming is also being adversely impacted by several factors, such as the production of unprecedented amounts of data, differing data flow speeds, rapid expansion in the variety of data sources, a lack of trust in the accuracy of the data and access challenges, as well as multi-layered metadata fragmentation, and a desire for private walled data enclaves (Lyons et al., 2019).

The main eternal problem of music streaming is the problem with the economical compensation of creators, who in this situation are usually represented by the owners of the rights to the song and recording, namely performers and songwriters. The general media has been riveted on this core issue for more than ten years, framed by high-profile court cases, protests, manifestations, open letters, petitions, and other methods that industry players express their unhappiness. The common reasons for the inadequate compensation of industry creators and performers are the legal challenges brought on by the emergence of a new form of music consumption, the conflicting legal classification of music streaming, technological issues with metadata, and the complications of royalty chains. In the realm of music streaming, there are additional issues that are not directly economic in nature, but which nevertheless ultimately affect the economic situation faced by the closing chain of royalty creators and performers. These issues could be due to the ethical consequences of streaming, which fundamentally alters consumer behavior and forces musicians and artists to adjust to the new context, often at the expense of their own interests and the creative process. Although the music industry sector is expanding steadily, there is still a substantial imbalance of power between agents at the beginning and end of the royalties chain as well as between owners of various kinds of rights such as song rights and recording rights. The industry is actively attempting to begin an open dialogue aimed at finding solutions, but it should be kept in mind that for the dialogue to properly address issues that the sector finds important, all private and public parties concerned must actively engage.

CHAPTER 6: MARKET ISSUES

Chapter 6 will examine the current problematic situation regarding song and recording rights holders from a general market of rights perspective. Among the main aspects influencing the situation, the growing dominance of the majors will be noted, expressed in the gatekeeping in the industry, little opportunity for self-releasing artists, unbalanced nature of label contracts, bargaining power in contractual relationships. It will also be highlighted that the ubiquitous control of the majors, especially in the era of streaming, leads to competition concerns that are presented by oligopsony in asset acquisition for recording market and oligopoly in music licensing or song rights market, and various transparency concerns. Vertical integration, the purchase of rival services, and the cross-ownership system - these are the main currently observed methods that the majors are now using to gain control over digital music distribution. Next, some academic opinions will be presented on the reasons for such an unequal situation with abuse of power in the context of streaming.

After that, the Chapter will move on to the analysis of the streaming platform market, along with key aspects and characteristics. The main characteristics of such a market are intense competition and extensive usage of streaming platforms for music listening, despite which the vast majority of streaming firms continue to operate at a loss. It will be discussed that a highly competitive market environment revolves around the inability to differentiate by price, which, however, bears fruit in the form of creating new methods of differentiating a streaming product in the form of a variety of internal features. Several directions will also be described on which there are heated discussions of the streaming platform market: privacy and the surrounding unrest, annoyance with the unequal treatment for services with USG content, and possible solutions for it. In conclusion, the main trends for music streaming in the context of the music industry will be listed including: music business economic and industry standards restructuring to fit streaming, viral mainstream focus and growing significance of short-form videos, decline of some musical formats, growth of niche artists presence, and industry experiments.

6.1. Market of song and recording rights problems

Major labels hold the lion's share of the market for song and recordings rights in all their diversity, and during the past 20 years, both this concentration and their importance have grown significantly. While there is no doubt that it is artists, performers, songwriters and composers are the significant base to the music industry, though as has been analyzed and shown before, the importance of their accompanying business partners cannot be diminished. These partners provide specialized financial and legitimate assistance in the framework of interactions with streaming, resources, investments, while opening access to the market, and in other words, in every possible way supporting the career development of this creator. These partners include publishers who invest in song rights and support their use as well as record companies who assist authors make use of the recording rights they purchase. The 'Big Three', music labels (Sony, Warner, Universal) are the biggest of these corporations, who often own also a publishing intermediates or subsidiaries: Warner Chappell Music, Sony Music Publishing and Universal Music Publishing Group. Major record labels and/or music publishers are classified by the industry's principles as multinational corporations if they hold more than 5% of the global market of its industry, otherwise a firm is classified as independent. It is crucial to highlight once again that despite the fact that a label and a publisher can be two completely different enterprises, it is important to understand that most of the big player organizations combine these functions and are engaged in both recording and publishing activities, somehow linking themselves with corporate relations with various subsidiaries. Furthermore, this pattern goes beyond for the majors. Often, the interests of labels go beyond recording and publishing, and they want to have their share in the ownership of streaming platforms. According to a recent study of AIM members, 81% of independent record companies reported having commercial interests in publishing, with 89% claiming to have activities beyond only recording. But more interestingly, majors continue to have economic interests in the streaming services as well as in the services for recording, publishing, and distribution. The four major music labels at the time of emergence of music streaming—Sony, Universal, Warner, and EMI were offered shares worth a combined 18 percent equity stake in exchange for an investment of €8,804.40 in the summer of 2009 (Ingham, 2018). It is also worth paying attention to the fact that the numerous instances of cross-ownership between the big music groups and their parent firms currently complicate the shareholdings of these organizations.

The sharp concentration and cross-ownership of rights obviously led to the dominance of the market by majors. The current debates surrounding Spotify's Discovery mode (King, 2022b) and the controversial promotional agreements that led to the argument highlight the severity of the dilemma of cross ownership and majors' dominant influence on streaming. It can be seen on the MIDiA research chart (Figure 20) how the majors dominate the Spotify streams, occupying 68.9% of the total number of streams in 2020 (Mulligan, 2020). Despite the fact that the percentage of independent labels and artists who are directly involved in distribution has increased, it still remains a smaller part of the total number. Undoubtedly, the tendency continues to slowly persist in 2021.

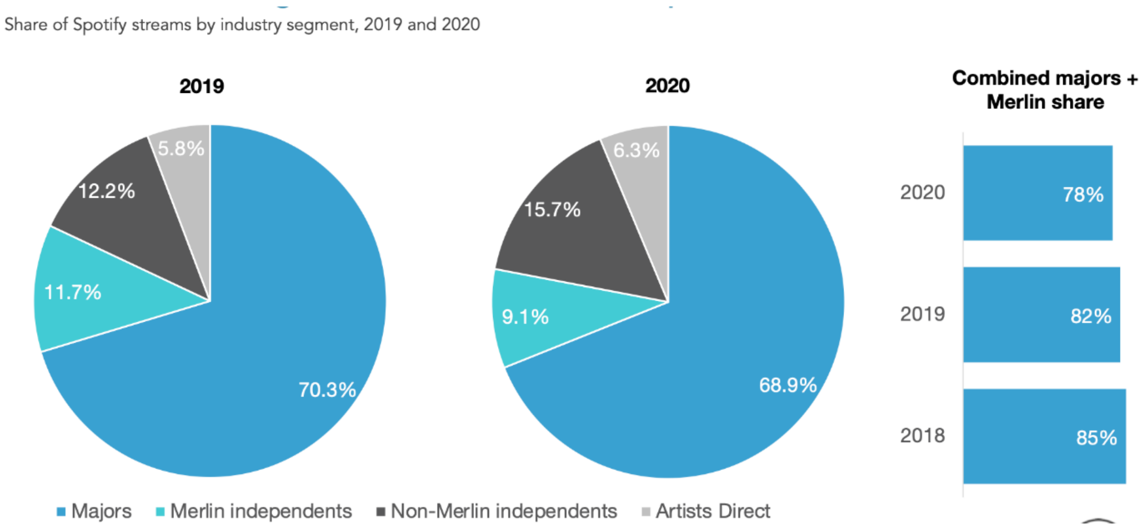


Figure 21. Share of Spotify by Industry segment in 2019 and 2020 (Mulligan, 2020).

Nevertheless, there is no denying that the big music labels today control the majority of the both industry sectors (recording and licensing or publishing) through vertical integration, purchasing rival services, and the cross-ownership system. This situation inevitably leads to competition concerns that are presented by oligopsony in asset acquisition in music recording market and oligopoly in music licensing, and various transparency concerns. As mentioned, major music labels benefit disproportionately from music streaming compared to artists and performers. This situation in the context of the music industry can be considered as an oligopsony, when a small group of powerful buyers control the majority of a market. Due to this, big labels have had historically high levels of income and profit growth, while artists' salaries typically fall below the median salary. The probable causes of this phenomenon, including the gatekeeping in the industry, little opportunity for self-releasing artists, unbalanced nature of label contracts, bargaining power in contractual relationships, cause fierce controversy. The majors' success in acquiring assets is what has led to the emergence of this oligopsony. Recent academic arguments contend that the dominant position of the majors is the result of the fact that they own a huge number of highly valued rights in the industry. For example, Hesmondhalgh (2021) argues that, because the risks that the label takes by signing young and only developing artists without an established fan base and influence are not so significant to them, because one success with the signing of a superstar, the label can neutralize all other unsuccessful steps. Majors can distribute these risks and costs as it is convenient for them, juggling them, and they also have more versatile opportunities and resources for actual costs, for example, for maintaining their catalogs, which leads to long-term conditions of oligopoly.

Unlike oligopsony, the oligopoly applied to the music industry and music streaming in particular indicates that major music labels have managed to achieve the favorable conditions they want from the DSPs, and this fact has consequences for competitive environment between record companies, as well as for the streaming services market. Although the way licensing works directly between the music business and streaming services is largely viewed favorably, there are continuing worries regarding the major labels' bargaining power, which benefits at the cost of minor labels and independent artists. This is especially true when it comes to playlisting. The way majors and smaller labels distribute their music varies, as Mariuzzo and Ormos (2021) found out during a quantitative study. They showed that songs whose rights belong to the majors appear in popular Spotify playlists with a disproportionately higher frequency than songs whose rights belong to small or independent labels. They argue that this may be a result of the power of major record labels over Spotify and their control over the platforms' playlists, both directly and indirectly. This whole system increasingly resembles one big vertical element, which is led by big players.

Additionally, due to the overall power disparity in the industry, knowledge asymmetry and subsequent worsening of creators' unequal pay, and the prevalence of non-disclosure agreements both music labels and streaming services that license artists' work provide a systemic lack of transparency to artists and their agents. Unfortunately, in practice, simple rights that belong to both artists and songwriters are often abused. Any of abovementioned side should be presented with transparency in order to easily understand under what conditions, where and how their art works are used.

6.2. Issues of the music streaming services market.

It is difficult to deny the overall impressive change in the streaming platform market, which can be briefly characterized by the transition from selling songs to selling experiences. And one of the main topics that needs to be raised in this regard is competition in the music streaming services platforms market. In one sense, the market for the majority of DSPs is cutthroat competitive. It needs to be highlighted that the services themselves are quite similar in a primary idea of functioning. Due to the widespread distribution of music by various labels, the music found on mainstream platforms may effectively be replaced by the same music on other platforms. The amount of music available on each platform is astounding; now, 100,000 new tracks are added to music streaming services every day, and switching from one service to another is not a problem at all (Ingham, 2022a). Some services are trying to move away from the idea of similarity and wide availability and position themselves exclusively, for example, the Tidal platform tried to pull this off with the release of Kanye West's album "The Life of Pablo», but the idea failed after the album became available everywhere after less than 2 months of exclusivity on this platform. The situation was remarkable since Kanye West had previously assured fans that the album would never, ever be available on Apple. This earlier guarantee ultimately increased mobile Tidal app downloads and propelled it to the top of the U.S. App Store (Perez, 2016). It is worth noting that in this particular situation, the reason was not only the fact of the impossibility of exclusivity among mainstream music, but also, as usual, Kanye's inconsistent and eccentric behavior itself. But normally if we look at the streaming platforms – they all are the same. The majority of features and functions, including offline and high-fidelity playback, have been standardized across many platforms. Most services provide algorithmically generated, editorially selected, and user-generated playlists. Even price categories are often the same across various platforms, which is quite reasonable for a competitive market environment. Additionally, customers have rather comprehensive knowledge of the service's goods and rates due to price and service standardization, as well as its growing ubiquity.

It is important to note that most streaming firms continue to operate at a loss because of the intense competition and despite extensive usage of streaming platforms for music listening. Up until now, the majority of services like Spotify and SoundCloud have reported operational losses. In reality, Spotify lost €2.62 billion in yearly losses throughout the ten years leading up to 2020 (Ingham, 2020). Despite adding more Premium subscribers, Spotify reported operating loss over around € 228 million during the last quarter, as well as total of 433 million users across both its free and premium (Spotify, 2022). Following the release of third quarter earnings, Spotify shares dropped, and they continue to drop as of the moment of writing this (Schafer, 2022). The same problem is present for several other streaming giants. However, undoubtedly, one cannot make a one-sided judgment, since failure does not necessarily result from the absence of evident financial efficiency, while other positive indicators continue to rise. Additionally, it cannot imply that the customers who purchase the service do not significantly contribute to revenue.

The Covid-19 epidemic, on the other hand, has produced new positive conditions for streaming services (Gontovnikas, 2020). The room for the development, upgrading of streaming platforms appeared thanks to all the necessary measures taken in the epidemic. Everything from the social distance, ending with the closure and cancellation of all entertainment events, affected the way streaming changed during this period. Partly surprisingly, and partly naturally, streaming was able to adapt, and many indicators increased. Even small organizations, such as SoundCloud, have lately broken even in many quarters, showing considerable improvement from the company's loss of 16% in 2019. When questioned, however, company representatives were reticent to credit success to the lack of live music (Dredge, 2022). SoundCloud's financials for 2020 indicated that the company's sales increased by 31% to €193.5m, but operating losses decreased significantly compared to prior years, indicating a longer-term shift toward operational profitability for SoundCloud. Positive consequences of lockdowns are even more obvious with bigger players. Spotify's share price has climbed faster than Apple and Amazon firms since January 2020. During this period, Spotify's share costed double (up more than 103%), outpacing Apple (+85%) and Amazon (+78%), all of which provide services other than streaming. Furthermore, all three firms outperformed Netflix (+70%), Google (+52%), and Facebook (+28%) (Ghosh, 2021).

Pricing is not the only one possible leverage of pressure and distinction in the streaming service market. Currently it is their internal elements, like as algorithms and playlists, largely contribute to differentiate the services from one another in all of their diversity. Similarly, YouTube is propelled by mechanisms that prioritize inside elements such as engagement of viewers, view and subscription rates as well as interactions with the content in the form of comments and likes. Human curation is recognized as the biggest defining feature of both Apple and Amazon's service offerings. It goes without saying that Spotify's playlists are one of the most diverse and highly valued by music lovers. Moreover, Spotify offer other interesting seasonal features, such as extremely popular annual Spotify Wrapped, that shows listener’s personal music statistics for the year. Amazon, for example, focuses on investments in human curation, employing music professionals in every nation. All of that provides a unique selling point and differentiating factor for the services.

Playlists generated by recommendation systems are crucial for DSP. However, many questions remain about how they affect the way consumers now listen to music and to what extent they are regulated. There is a debate about whether any recommender AI system can have subjectivity, accidental or imposed, which can hinder interaction with new music and contribute to the homogenization of taste. Given the vulnerability of automated playlists in many streaming platforms to global influence, they can also disfavor local artists and undermine self-releasing musicians. Curated playlists are significant in the discovery and consumption of streaming formats as well. It is not surprising that artists and their labels really try their best to attract the attention of supervisors of supervised playlists. Earlier, in the era before streaming, a similar situation was with radio broadcasts. However, payment and activity are not controlled in any manner under advertising regulations, despite the fact that they are of this kind.

Additionally, among the main problems of the music streaming platforms market, there are concerns about privacy, which are exacerbated by the growing trend of vertical integration of technological firms. Attempts by streaming giants to misuse the huge amounts of data available to them can have significant effects both for specific users and for the competitiveness of the market as a whole. Misuse can be expressed in licensing deals, which also imply the provision of unprecedented unlimited access to user data by streaming platforms, which in the official version is done to help labels create new tools for promoting and strengthening ties with fans (Perez, 2020). However, in reality, this of course violates digital ethics and privacy of listeners. Such cases are aggravated by the fact that many companies have increasingly begun to integrate their services vertically, utilizing their initial assumptions in order to achieve a competitive advantage. Nevertheless, many stakeholders are hopeful for the possibility that the current losses from music streaming may encourage businesses to increase anti-competitive behavior in approach to boost profits. Large tech organizations that are engaged in streaming may employ vertical integrations or other business facets to their advantage. This might result in a market "tipping," when a market quickly trends toward monopolistic equilibrium. This may happen due to the fact that the service reaches the maximum number of consumers, which, with further increase, will cause a negative accelerating growth of magnitude, avalanche-like impact. A similar situation may arise, for example, if some company in addition to streaming has other activities in its portfolio, for example, the development of technical devices. This can guarantee such a company the position of a monopolist, since, for example, it can restrict access to the service on all devices except its own.

There is also a legitimate problem in the music streaming market that surrounds services that host user-generated content (UGC). According to the latest FIPI report, short-form videos are one of the leading ways to discover music today: 68% of respondents engage with music through short-form videos and the number keeps growing. Additionally, while user-generated content (UGC) improves fan engagement and creativity while serving as a marketing tool, it also poses a number of challenges for the platforms that host it. Many industry players are fundamentally unhappy that such platforms fall under the safe harbor provisions in copyright infringement laws. In the recent report of Digital, Culture, Media and Sport Committee of UK’s House of Commons, it was stated that The European Union's E-Commerce Directive gave rise to the safe harbor provisions, which have as the goal to make clear the financial and pecuniary obligations of DSPs in cases of transmittance, caching, and—most importantly—hosting of illegally obtained information when the DSP does not have control and knowledge about it. (House of Commons, 2021). Thus, safe harbor shields the free-to-use, ad-funded business model of social media businesses from prescriptive legislative requirements, that in reality has entitles users to go on with posting, listen to the content for free. In other words, YouTube, the market leader in music streaming services today, also serves as a home for a large number of unlicensed products. With the use of these legal clauses, YouTube has been able to resolve copyright issues in a number of situations, which has economic implications for the industry and offers YouTube a sustained better position in whatever related to licensing compared to rivals who do not post UGC on their platforms. Safe harbor clauses have several effects on the economy. The music business is first directly impacted by it via its own pricing. For example, compared to other websites, YouTube often offers lower average payouts per stream. In response to the issue of compensation, YouTube claims that as of January 2020, it had paid out more than $12 billion to the music business. However, YouTube's $15 billion in total advertising income sharply contrasts with its $3 billion contribution to the music business. It's important to note that services typically use tools to combat piracy on websites, such as identification systems. They check the uploaded content for compliance in the reference database and remove any violations found. They use publicly available web forms that help users assert copyrights, and other tools that allow copyright holders to request the removal of content, and so on. All these techniques might sometimes be inaccurate, and they all need the individual who owns the right to the content to supply information and supporting documents. The industry is arguing about whether it is worth putting such services at a common table with the main streaming platforms and finally equalize all rights and obligations, and whether this will have the desired positive effect that everyone is waiting for.

The recent European Union Directive on Copyright in the Digital Single Market is a positive beginning toward resolving some of the real issues with the market for music streaming platforms. Article 2 of Directive ((EU) 2019/790) establishes a new type of DSPs known as "online content-sharing service providers", and their primary functions is preservation and making accessible to the usage of the public a sizable amount of legally protected content in different forms, including those that is user-uploaded or user-generated. Such content those DSPs promote for financial gain. Additionally, and most importantly, it states that a DSP is legally held accountable for violation of copyright on their platform unless it shows that the best attempts were conducted to secure permission and delete such content. Despite the fact that the Copyright Directive does not offer a panacea for the problems brought on by safe harbor, the music business continues to support the Directive in great extent: The music industry supports the Directive's attempts to curb piracy through the notice and stay-down provisions, as well as its goal of standardizing how music is licensed for UGC-hosting sites.

6.3. Future trends for music streaming withing music business industry

With or without the existing problems, the music streaming market continues to exist, evolve and develop, changing the landscape of the entire music business industry. The long-term structural transformations that will eventually shape the future of the music industry are just beginning, as seen by the developments and trends we are already seeing. The following sets of trends are easily discernible in current music world:

6.3.1. Music business economic and industry standards restructuring to fit streaming

a) Labels and Publishers changing strategies: Getting a cut for a single requires about the same amount of work as getting a cut for an album. Therefore, it makes sense that label economics continue to favor the album. However, streaming is quickly disproving the ROI premise for many genres, with the tracks rather than the albums generating the returns in these genres.

b) Composition processes changing: The numbers are also becoming a main goal for songwriters. Songs are saturated with hooks and well-known references out of concern that listeners won't make it past the 30-second skip. Songs that resemble a loosely sewn succession of various hooks are produced through the industrialization of songwriting among writing teams and camps. Trying to "sound like Spotify" and chasing specific playlists produces results, but at the expense of the art.

c) A&R Strategy changes: In an effort to increase sales, record labels are developing A+R and marketing plans focused on streaming. Despite the oral materials, A +R experts point out that the initial factor in making a decision remains the uniqueness of the artist, it is difficult to deny the fact that labels are trying to adapt to the era of digital streaming with its peculiarities regarding music consumption

d) Tension in the value chain is growing between content providers, which are represented by labels and artists, publishers and songwriters, etc., and distribution, which is represented by streaming platforms and technical companies that own them. The balance of power and influence is unfolding before our eyes and the scales are constantly leaning one way or the other.

e) The continued growth of the streaming market: The worldwide music streaming industry is anticipated to triple in size by 2030, reaching $103 billion, according to data from ResearchAndMarkets.com (Research and Markets ltd, 2022). Over the course of the forecast period, the market is expected to be influenced by the rising popularity of on-demand music services on platforms like Spotify, SoundCloud, Tidal, Apple Music, and Bandcamp. From 2022 to 2030, the Middle East and Africa market is anticipated to develop at the strongest compound annual growth rate of 17.8%.

f) Strengthening the fight against piracy. With an understanding of what methods piracy takes place in 2022, labels and streaming companies can wage a productive struggle in attempts to finally overthrow the topical problem. For example, record companies in the US are currently focusing on online artificial intelligence-based music extractors and mixers in an effort to ferret out copyright infringement in the music industry (King, 2022).

g) Gradual increase in the subscription cost of all major streaming platforms. It's hard to believe, because the cost has not changed for almost a decade, but Apple and Amazon have already announced price changes for some of their streaming plans, and Spotify is preparing the ground for such a statement. This decision is part of the attempts to lower expenses by companies. These attempts also include the dismissal of a large percentage of employees by the main platforms, the termination of charitable donations, and so on. One of the additional reasons that platforms highlight is the licensing of music and the associated costs.

e) Last but not least, of course, is the ongoing and developing debate creators' remuneration. Given the complexity of the ecosystem's present interactions, it is clear from the creation of new solutions in an effort to control the situation that the disagreement will not end and that a compromise or a state of equilibrium is not yet anticipated in the nearest future. However due to the industry's penchant for experimenting, it is probable that it will also explore compensation in this context, potentially in the form of new financial technology tilted up to music streaming.

6.3.2. New mainstream, interest to catalogues and the decline of album format.

a) Albums are no longer sold as wholesome bundles since customers can now cherry-pick the best songs and ignore the filler thanks to the digital technology. The transition has been emphasized by the rise of the playlist. Carefully crafted album narratives are not appreciated by the playlist juggernaut or, increasingly, by music fans.

b) It may first seem that the excess of material geared toward Gen Z and the fetishization of the new in streaming have deprioritized the urge to look back and listen the catalogued tracks.

However, the rise of interest in buying old catalogs by big industry players suggests the opposite. This foreshadows a future trend of increasing streaming of old catalogs, which may also be associated with an increase in revenue from synchronization, especially demonstrated by the example of songs from old catalogues. For instance, more songs from the collection have been streamed on Spotify than ever before during the previous year. It was claimed that 155% more of Spotify's top songs from around the world were located in older catalogues, making the old relevant again, and taking the spotlight from recently released tracks (Resnikoff, 2023). It is crucial to bear in mind that the streaming platform defines the catalog as any track released more than 18 months ago.

c) Hyper targeting is transforming marketing, and music world is no exception due to its growing audience fragmentation. Independent, DIY artists, and others are chasing niches as the mainstream of A&R seeks the middle, which is getting more and more fractured. However, most frequently, this is an accidental result of hyper-focused targeting and positioning rather than a genuine fragmentation of scenes.

6.3.3. Niche champions, going viral online, and industry experiments.

a) Fewer and fewer musicians are achieving crazy success internationally. On the one hand, streaming has facilitated access to music distribution for any artist, on the other hand, it has placed a novice artist in a crazy whirlpool of competition, from which it is a very difficult task to break out. Often, there is a clear preponderance due to already established and successful artists, before streaming has reached such a large distribution. In written evidence submitted by Eddie Sears, creative director of Ultra Records (Annex 1), it is stated one of the possible trend for future in music streaming realm is hearing less and less overarching and iconic pop stars such as Madonna or Michael Jackson in the past and having more champions of niches, which can be massive, like Fred Again or Rufus Du Sol. Mentioned niche artists that extremely popular within own subculture, successfully exploit music streaming as a tool, building strong relationships with their fanbases. For example, Fred Again, who is on peak of his popularity now, often does YouTube live-streams where he simply plays his albums. The most popular recorded versions of his Boiler Room Live and Studio Live streams reached 14.1 million of views cumulatively at time of writing this work.

b) Increasing the impact of short-form videos on discovery and engaging with music: this has a positive marketing effect, but many experts warn that going viral in TikTok or Reels is not equal to the money that can be earned from selling records or the number of tickets sold for a concert (Milano Music Week, 2022). On the contrary, the viral effect can significantly complicate the artist's life by nailing the role or these hackneyed 15 seconds of the hook of the song to him making the success of subsequent releases much more difficult to achieve.

c) Chronically online artists: for a long time, artists understood the importance of connecting with their audiences. The metrics of social media are the measure of success, and it is where most people discover and consume media. It seems sense that some artists seem more focused on maintaining positive social media interactions than increasing revenue. Great recent examples of such artists creating a strong bond between fans and the band through constant online engagement are the 1975 band, Lizzo, Meghan Trainor and so on. The latter are an excellent example of an online digital strategy, which is in the nature of promoting new releases, and also serves as a good tool for maintaining communication and interest in the period between major releases.

d) The rise of the metaverse, Web3, AI-music making and other concepts with enormous promise for music streaming services: the music industry will be observing live streaming to see how it functions, which music streaming services will merge with the experience, and how it will change the shape of music as more and more metaverses become more and more prominent. There is a notion that could develop into something far more substantial than we can now imagine.

e) Vertical integration of music companies and their growing interest in alternative methods of transfer of music and music related purchases: Some labels are already exploring the possibility of using blockchain technologies and the notorious NFTs regarding the distribution of their artists' music to to shift their focus away from streaming service providers and give their handpicked audience exclusive access to music and other digital valuables. For example, Warner Music Group (WMG) has increased its position in the Web3 sector through a new partnership with e-commerce and interactive platform builder LGND.io and Polygon Companies, a blockchain network developer (Dalugdug, 2022). To provide fans the chance to experience unique material and experiences, a select group of WMG artists will release their digital assets on LGND Music, powered by Polygon. Customers of LGND Music will be able to purchase and possess music tokens and create a digital collection of "Virtual Vinyls" via the company's app or desktop platforms. The businesses said that LGND Music offers a simple entry point for fans who are not familiar with cryptocurrency or digital collectibles. Another example is Apple's move, which is now actively promoting their new HomePod, a device associated by default with Apple music. This is a perfect example of how a streaming platform participates in the process of vertical integration with its general technical corporation.

f) The growing significance of sync licensing: sync licensing is paying musicians more and giving them more attention than ever before. U.S. synchronization recorded music sales hit $178 million in the first six months of the year, according to the RIAA's midyear report, which was published last week (Peoples, 2022). This is a 29.9% increase year over year. Some business leaders attribute the current advances to the industry's recovery from the COVID-19 epidemic in 2020, which interrupted film and television productions and decreased brand advertising spending.

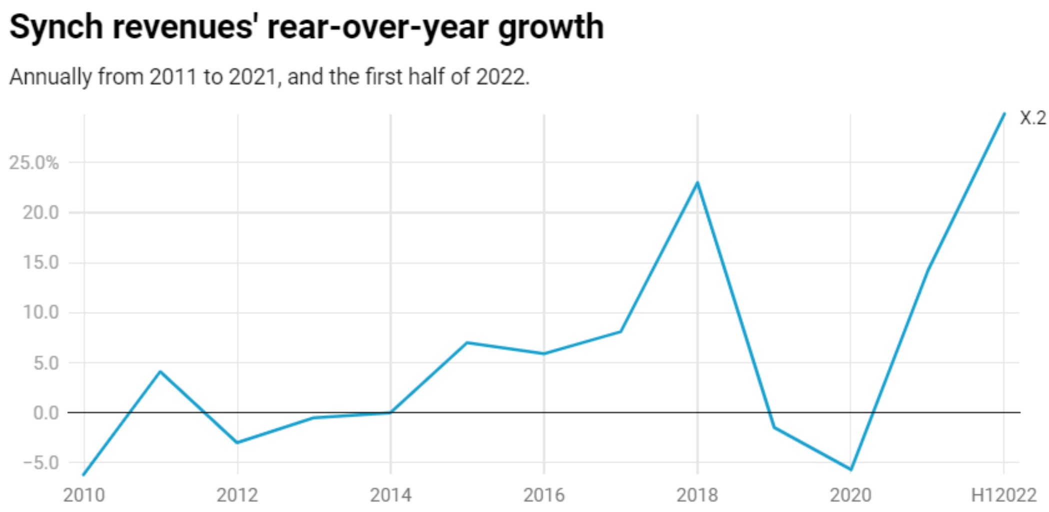


Figure 22. Sync revenues growth (Peoples, 2022).

Obviously, the majority of the credit for synch's recent surge should go to film and television. Additionally, a surge in original programming was brought on by the streaming conflicts between Netflix, HBO Max, Disney+, Peacock, Paramount+, and Hulu. It gave rise to several shows, including Stranger Things, Euphoria, The Bear, Pam and Tommy, Wednesday, Atlanta, Severance, and countless more, where music plays a significant part in promotion and occasionally serves as the program's unique and distinctive feature. What happens next is already well known: a scene from the movie along with a synchronized track becomes viral on social networks, thereby boosting streams of the mentioned content. The most notable 2022 example of sync licensing's power to introduce classic songs to brand-new listeners occurred during the summer, when "Running Up That Hill", 40 year old hit from Kate Bush was thrust back into the commercial limelight thanks to a placement in Stranger Things (Resnikoff, 2022).

g) Interpolation boom: interpolation is the process of incorporating a section or sections of an already-written song into a brand-new piece. Contrary to sampling, which actually incorporates a portion of an existing recording, interpolation is a step in the songwriting process and may involve using a melody but modifying the lyrics or creating something new while maintaining a recognizable element of the original source. The interpolation boom may have started as a result of the music industry's heightened caution, and it still creates conflict between the owners of the song's rights, particularly when there may be issues with the metadata in some circumstances.

CONCLUSION

Summary

The music industry has come a long way and changed via several waves of new technical advancements and innovations. These changes have been sustainable over time, and the sector is now a complicated one with various stakeholders. In this thesis, one of such innovations that changed the reality of the industry was considered, namely, music streaming. The aim of the work was to understand exactly how the above-mentioned innovation affected various participants of the ecosystem and how it affected the landscape of the industry. In the course of the research, the main issues and tensions presented in the relationship of many participants within music streaming, as well as their causes and some possible solutions were identified. Due to the nature of the issue, the problems and their origins go far deeper than what society is accustomed to perceiving, blaming only particular aspects of streaming, like the payment models. The thesis made evident that the evolution of the recorded music, music licensing, and live music industries rests on the sophisticated and complex system of economic and legal interactions that underpins music streaming.

The first part of this work started out by going through the history and development of the phenomena of music streaming as a game-changing invention for the sector. It also looked at peer-to-peer piracy and the rise and collapse of physical media for music consumption prior to the advent of the digital era. This work analyzed the global music industry, the obvious dominance of digital music within it, as well as the informational, economic, and legal framework in which this rise took place. It presented global music business and streaming statistics as well as the European region and the Italian region data. In addition, the disputes that accompanied the creation of the invention were also examined while talking about the establishment of music streaming and its entering into everyday life of music lovers. The first chapter ended with a discussion of the dangers of streaming cannibalizing other music distribution methods as well as the perspectives of several academic experts on the subject.

The second part of thesis presented a variety of music streaming models, each of which stands out for certain characteristics. The rights to the song and the rights to the recording were thus deemed to be the fundamental set of rights relating to the relationships of agents within the music streaming process, since they form the basis for the monetary recompense of individuals participating in the creative process. Additionally, the making available right and right to equitable compensation were briefly discussed because they have a significant influence on the dynamics of streaming. Mentioning all these rights allowed the thesis to move on to an explanation of the several forms of royalties. The financial breakdown of the music streaming industry's economic flow was then provided, along with a thorough explanation of all the cash transactions and system participants. For a deeper understanding of the flow of finances and its quirks, the many types of licensing agreements between artists and labels were briefly emphasized.

The situation of another party involved in the streaming relationship—the end user, or the music listener—was covered in the third part of the research, when it went on to list the main advantages of this type of digital music consumption. Average rate per user (ARPU) which is one of the key economic components of streaming was addressed, along with various scholarly opinions on the customers' willingness to pay subject. The consumer perspective acquired from industry research spanning the US and UK's largest music marketplaces was utilized to thoroughly assess the economic components of the problem. Thesis then described the moral and ethical ramifications of streaming music, as well as how this format and its key features, including playlists and curation, altered how we listeners connect and engage with music. This chapter ended with an analysis of current trends among users of streaming music, noting a decline in the ARPU, while concurrently increasing the number of premium members for the major platforms. The primary effects of trends on both music consumers and music makers were outlined.

The primary barrier to all debates concerning music streaming, financial compensation for music streaming on platforms, was discussed in Chapter 4. It started by examining the implications of the previously mentioned conditions for artist and recording rightsholder compensation. Additionally, the distribution of streaming money from the recording's rights as well as the distribution of these earnings between the corporate and creative partners were thoroughly examined. The chapter then went on to give instances of projects that addressed issues with the economics of music streaming, which have been recast in light of the unexpected and unavoidable loss of income from live music for artists during the epidemic. The thesis also brought up the impact of the music streaming industry on non-featured musicians and business representatives of owners of the recording rights. This part of the work came to a close with an explanation of the factors that led to difficulties, among which the following ones were specifically emphasized: basic issues with how streaming is legally classified, a contentious scenario involving the equitable payment entitlement and the difference between the rights to the songs and the rights to the recording's appliance.

Chapter 5 made clear that problems with income on the song rights side are brought on by the original distribution of industry earnings, which has negative effects for songwriters, composers, and their business partners, music publishers. This section looked at the various effects of compensation practices on creators and the creative ecosystems that depend on them, including their unequal position in relation to holders of recording rights, the additional difficulties of advances and the nature of their income as one-time payments, trends in track optimization, trends toward mainstream acceptance, and the devaluation of the genres. The consequences of streaming-specific nature of music consumption, including the algorithmic and playlisting impasses, were briefly covered after that. Later the thesis looked into the notion that the streaming economy is not a good fit for the parties involved in the ownership of song part of musical works. Finally, problems with the metadata and songwriting royalty chains as obstacles to sufficient song author compensation were particularly mentioned.

From the standpoint of the whole market of rights, the last chapter described the challenging scenario that song and recording rights holders currently face. The growing power of the major labels was identified as one of the key factors affecting the situation, as evidenced by the gatekeeping in the industry, the limited opportunities for self-releasing artists, the unbalanced nature of label contracts, and the bargaining power in contractual relationships. It was also noted that the majors' omnipresent dominance, particularly in the era of streaming, creates various transparency concerns and competition issues within the music service platforms market, including oligopsony environment in asset acquisition for recording market and oligopoly situations in music licensing or song rights market. It was discussed how the difficulty to differentiate on the basis of pricing permeates a highly competitive platform market environment, but also gives rise to new ways of differentiating. There were also other areas mentioned where there are contentious arguments about the streaming platform industry, including privacy, dissatisfaction with the unfair and unequal treatment of platforms that offer USG material. However, it was highlighted that with the recent publication of the European Union Directive on Copyright in the Digital Single Market, the streaming platforms market cases saw a potential for resolution. The primary trends for music streaming within the framework of the music industry were outlined in the last part of final chapter, including music business economic and industry standards restructuring to fit streaming, music streaming chain tensions, the continued growth of the streaming market. It was also added that music industry under the streaming dominance was moving towards the importance of niche and new understanding of mainstream, short-form video takeover, industry experiments with metaverse, AI and so on.

Final thoughts

In the title of the thesis, an attempt was made to split any of that what occurs in the industry and all of the streaming's influence on it into two sides of a single coin: the one that blesses the sector by liberating it from its own inefficiency and the one that curses it by its dramatic nature of innovation. In reality, it is challenging to describe the streaming situation categorically and dichotomously in the music industry. The music streaming market is a dynamic ocean of thousands of elements and features that are sensitive to any changes. In this ocean, one drop can occasionally trigger a tsunami that even industry experts and professionals are unable to predict.

Having described in detail and examined all the frictions that public opinion often assigns to music streaming, it can be seen that often - music streaming serves only as an indirect cause for them. It happens quite often that the innovation of music streaming is simply the backdrop that shows the previously accumulated complexities in the industry. So, for instance, many artists blame streaming for all the financial difficulties they experience, when in fact it turns out that the main problem lies in the fact that contractual norms within the industry sometimes do not meet the modern realities of the digital era. Contracts and agreements, although they have among their elements the conditions for remuneration from streaming, often represent averaged old traditional norms and conditions with only minor refinements towards digitalization. The present research also shows how the owners of recording rights sometimes blame the legal framework for excluding them from the rights to equitable remuneration, and this framework, in turn, is shaped by the prerequisites that appeared and corresponded to the traditional industrial reality in the time before streaming. Thus, we see that the innovation of music streaming itself simply serves as a kind of indicator to spot weaknesses and sore points of the entire music industry, in all its sectors: the record business, music licensing/publishing, and even live music. Moreover, it needs to be highlighted that in the modern realm of the music scene, the holders of the rights to record and to a song can be both different people and also can carry both of these rights while being the same individual, which is really happening more and more often, as artists are more eager to take part in writing songs or at least designate themselves as contributors in the songwriting process from covetous or righteous motives.

It's definitely worth emphasizing that while the above-mentioned applies to song rightsholders as well, their situation is slightly different. Undoubtedly, streaming helped to expose their part's weaknesses, but it also proved to be more of a change of routine processes for them than for those who only have rights to the recording. It can be seen that song rightsholders are in a more vulnerable position than artists and recording rights holders: they have a longer and more complex chain of relationships leading from them to the streaming platform, and they are also more dependent not only on the members of their own chain but also on members of a parallel chain of recording rights. they suffer from technical obstacles more often than others. The positive part is that they are entitled to equitable compensation, but even this does not always equalize their weak position. It's not unequivocal to say that streaming hit all of these issues, but it did push some of them directly into emergence more than what we can see on the side of record rights holders.

It can be said that even though the described issues and tensions for two main sets of rightsholders are of a different nature and belong to different levels in the sector, they were all acutely identified and experienced by the industry due to the emergence of music streaming, which served as a petri dish for the entire economy of the industry.

This extensive research on streaming innovation and its peculiarities creates the needed discourse and brings a lot of insight into the industry, exposing some of the disputes around streaming and fueling others, revealing possible areas for further work. Special attention in the areas of future works should be paid to the problems with the localization of legal industry frameworks in certain regions and the friction caused by this fact. Despite some agreements achieved regarding streaming as an object of dispute, it is still often differently legally classified in leading countries, causing a lot of misunderstandings within the system. Also, attempts to simplify the architecture of the streaming system, remove obsolete elements, and facilitate agreements between rights holders and their business partners may become a possible area for further work. It goes without a doubt that research to continue on the conclusion of the ideal formula of remuneration for streaming, which would take into account the comprehensive complexities and nuances described in this work.

Having passed the difficult and thorny path of its emergence, music streaming remains one of the most impressive innovations of all time. What modern music lovers cannot imagine life without now was once only an inherently audacious idea that aimed to solve the problems that were accumulated inside the music industry. It is realistic to conclude that streaming has solved the initial issues while also introducing thousands of new elements into the sector's whirlwind of economic and legal interactions. It simultaneously made life easier for many industry participants while tearing down all the outdated paradigms of the common architecture of a complete established system. This can be considered a positive outcome, because in an unstable system there is always a desire for development, a search for utopian equilibrium, which all participants would be satisfied with. That is why music streaming continues to be actively used by the industry, occupying the dominant digital music channel position, and continues to develop, pioneering technologies and radically influencing the industry around, affecting even its most remote parts. Without a doubt, there has never been a more exciting time to be part of the music industry.

ANNEX 1

Written evidence submitted by Eddie Sears, 10 Jan 2023. The evidence is presented unchanged.

1. What role do music streaming and its various features play in your professional life? Has the rise of music streaming affected your approach to the job?

When I started there were still physical CDs, so streaming changed everything. Streaming is pretty much the key to every successful campaign. It allows to analyze audiences in detail and tailor creative campaigns in the best possible way, as well as allowing artists to get their music out there with very limited cost. It allows for lots of trial and error. It's ok now to release music nonstop as the "algorithm(s)" will bury what fans don't like and highlight what they do like. It also gives endless opportunity for discovery on different platforms: are you a music centric artist? Are you a visual driven artist? There's room for everyone. So yes, long story short: it has affected my approach to the job.

2. During the evolution of music streaming, several problems were brought up and resolved. What currently concerns you the most about how music streaming is impacting the music industry?

No concerns really, it's just the nature of the industry. It's constantly evolving, and I'm focusing on trying to identify what's next to create the best opportunities. If I were concerned, I would have chosen a different path! Streaming is here to stay in whatever shape or form it'll evolve in, and the time for people to pay attention is getting more and more valuable. That's the currency: time. I think that the impact will manifest by having less and less overarching and iconic pop stars such as Madonna or Michael Jackson and having more champions of "niches" (which can be massive) like Fred Again or Rufus Du Sol just to name a few. There's room to be financially sustainable even if you're not Taylor Swift.

3. Do you believe that alternative music streaming payment models (different from the prevailing pro-rata system) will be able to permanently resolve the general issue of remuneration?

I don't feel there's a general issue of remuneration, meaning that it could always be better, but it could also be worse. There was a point when paying for music wasn't even a thing. As of now, the value of a single stream is not much, but the value of a community is extremely high: an artist can monetize in various ways and not only through "selling records". You can communicate directly with your audience and sell merch, custom songs, limited pieces of art, livestreams, etc. The list is endless, and it's direct with your audience. Music is a part of the equation of an artist today, that's just the landscape. For those who are exclusively focused on music: DSPs allow for unlimited uploads, so there you go – make more music! Lots of streams make a good revenue.

4. Which music industry trends do you believe are prevailing and will develop further in the nearest future?

Music being integrated with every other aspect of the entertainment industry such as experimental audio-visual shows. Social media platforms opening new opportunities for new music to be discovered. New DSPs, new forms of revenue for artists such as NFTs, metaverse shows, new forms of live events. We're at the beginning of an era that will have way more artists than ever and way more fans than ever, and to me that is extremely exciting.

ANNEX 2

Global Top 50 Songs, Spotify, October 2022

	ARTIST & SONG	DAYS	STREAMS	COUNTRY BASED (1ST LABEL)
1	Sam Smith - Unholy	11	6,679,879	US
2	Bizarrap - Quevedo: Bzrp Music Sessions, Vol. 52	88	4,349,143	US
3	Harry Styles - As It Was	186	4,346,983	US
4	David Guetta - I'm Good (Blue)	38	4,143,176	US
5	Manuel Turizo - La Bachata	93	3,936,536	US
6	Bad Bunny - Tití Me Preguntó	150	3,793,169	PUERTO RICO
7	Bad Bunny - Me Porto Bonito	150	3,721,847	PUERTO RICO
8	Chris Brown - Under The Influence	72	3,330,152	US
9	OneRepublic - I Ain't Worried	120	3,241,612	US
10	BLACKPINK - Shut Down	17	3,092,552	SOUTH KOREA
11	ROSALÍA - DESPECHÁ	67	3,039,168	US
12	Steve Lacy - Bad Habit	88	2,917,898	UK
13	Bad Bunny - Efecto	150	2,909,499	PUERTO RICO
14	Bad Bunny - Ojitos Lindos	150	2,604,188	PUERTO RICO
15	BLACKPINK - Pink Venom	45	2,549,819	SOUTH KOREA
16	Nicki Minaj - Super Freaky Girl	52	2,440,065	US
17	Tom Odell - Another Love	536	2,329,330	UK
18	Joji - Glimpse of Us	115	2,306,050	US
19	Rosa Linn - SNAP	83	2,253,697	US
20	Bad Bunny - Neverita	150	2,224,497	PUERTO RICO
21	Bad Bunny - Moscow Mule	150	2,204,546	PUERTO RICO
22	The Neighbourhood - Sweater Weather	854	2,177,200	US
23	Glass Animals - Heat Waves	652	2,155,400	UK
24	d4vd - Romantic Homicide	29	2,137,735	US

25	Stephen Sanchez - Until I Found You	147	2,027,929	US
26	Lil Nas X - STAR WALKIN' (League of Legends Worlds Anthem)	10	1,969,765	US
27	KAROL G - PROVENZA	164	1,965,517	US
28	The Kid LAROI - Stay	451	1,963,836	US
29	Beyoncé - CUFF IT	43	1,955,987	US
30	The Weeknd - Die For You	276	1,947,005	US
31	Charlie Puth - Left and Right (Feat. Jung Kook of BTS)	101	1,834,357	US
32	Arctic Monkeys - I Wanna Be Yours	88	1,795,309	UK
33	Kate Bush - Running Up That Hill (A Deal With God)	128	1,770,467	UK
34	Central Cee - Doja	73	1,740,965	US
35	Imagine Dragons - Bones	206	1,710,266	US
36	Rema - Calm Down	38	1,669,557	NIGERIA
37	Nicky Youre - Sunroof	151	1,667,745	US
38	Harry Styles - Late Night Talking	136	1,631,904	US
39	Post Malone - I Like You (A Happier Song)	122	1,591,280	US
40	Coolio - Gangsta's Paradise	332	1,584,398	US
41	Rauw Alejandro - LOKERA	54	1,555,996	US
42	Grupo Frontera - No Se Va	9	1,554,279	SPAIN
43	Arctic Monkeys - 505	284	1,539,111	UK
44	Elton John - Cold Heart - PNAU Remix	416	1,518,934	UK
45	Bad Bunny - Tarot	150	1,512,221	PUERTO RICO
46	Ghost - Mary On A Cross	50	1,509,036	US
47	Feid - Feliz Cumpleaños Ferxxo	44	1,482,041	US
48	Lizzo - About Damn Time	159	1,478,039	US
49	The Weeknd - Blinding Lights	1039	1,465,559	US
50	Pablo Pesadilla - BABY OTAKU	11	1,461,230	INDEPENDENT

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