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**"ON THE MARKET OF MUSIC RIGHTS:
THE IMPACT OF DIGITAL TECHNOLOGIES ON LICENSING AND
REVENUE STREAMS"**

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Abstract

The market for music rights is examined in this thesis along with the effects of new technologies on licensing and revenue sources. The music industry has changed significantly in recent years as a result of the growth of digital platforms and streaming services, creating new licensing structures and revenue streams. The study addresses the potential and challenges presented by the new environment and analyzes the effects of these changes on artists, labels, publishers, and other stakeholders.

This work attempts to provide a deeper understanding of the music market rights and the impact of technology on its future using a combination of quantitative and qualitative methodologies.

Abstract

In questa tesi viene esaminato il mercato dei diritti musicali e gli effetti delle nuove tecnologie sulle licenze e sulle fonti di guadagno. L'industria musicale è cambiata significativamente negli ultimi anni a seguito della crescita delle piattaforme digitali e dei servizi di streaming, creando nuove strutture di licenze e flussi di ricavi. Lo studio affronta le potenzialità e le sfide presentate dal nuovo ambiente e analizza gli effetti di questi cambiamenti su artisti, etichette, editori e altre parti interessate.

Questo lavoro cerca di fornire una comprensione più approfondita dei diritti del mercato musicale e dell'impatto della tecnologia sul suo futuro, utilizzando una combinazione di metodologie quantitative e qualitative.

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Introduction:

This thesis aims to present and analyse the music market and, in particular, the effects of new technologies and the digitisation of tracks on licensing and revenue streams.

Due to the expansion of digital platforms and streaming services, the music industry has undergone a major transformation in recent years, resulting in new licencing models and sources of income. This study examines the opportunities and difficulties brought about by the new environment and examines how these changes affect artists, labels, publishers and other stakeholders.

The work is divided into three main paragraphs, in each of which I want to focus on certain aspects of the music business.

The purpose of the first chapter is to provide the reader with an analysis of the digital music market and, more importantly, how digitisation in the industry has occurred over several years. To do so, I want to introduce and provide an overview of the music market, going from its origins through the earliest forms of music recording, such as vinyl records, cassette tapes, and CDs, to the present days, when music is primarily consumed digitally. In this same section, I'll also discuss the significant figures and events that helped shape the industry into what it is now. It will also be presented the economic and social aspects brought about by this change, for example, the case of Covid-19, and how they have impacted those involved in the industry.

Then, in the second chapter, I will go into detail on one of the key topics of my paper: the advent of music streaming and its digitisation. I'm going to talk about the streaming platform landscape, examining the many types, the variety of services each one provides, and their usability. I will also analyse the competition and rivalry between the various them. This chapter will deal, inter alia, with the changing public attitudes toward music consumption and enjoyment; to that end, I am going to look at past historic differences between so-called physical music and today's digital music; for instance, I will discuss how customers interact with the new type of music listening offered by streaming services and the reasons why some services are more widely used and favoured than others.

The third and final chapter aims to present and analyse how royalties and earnings from shares are managed within the market. I'll pay particular attention to the issue of how songs are treated and when they are deemed to have been reproduced. I'll connect this to a discussion of how and when rights holders and artists are compensated and song rights are exploited.

CHAPTER 1 Music market evolution

It's critical to first concentrate on the historical context from which music streaming's economy emerged to comprehend the key characteristics of its economy such as the specific legal frameworks, compensation and licensing arrangements, and industry norms that support the music streaming economic model.

1.1 History of the music industry

The music market owes its birth to Thomas Edison who patented and invented the phonograph in 1877. This invention enabled, for the first time in history, to record and subsequently play back actual sounds and then full songs without requiring a live performance. From then on, the path to music production, distribution and enjoyment has continuously and persistently evolved. Before the widespread use of the Internet, music was usually delivered in only two ways: by radio in a passive nondurable environment, where the consumer had no direct control over the content, and by purchasing physical media for the permanent ownership of a song or album. The effects of the various innovations in the music industry were enormous, continuous and unanticipated; in the last years, for example, technological and digital advancement had become relentless and did not appear to be planned to slow down.

As remarked by Peron, E. (2016), a revolutionary breakthrough was certainly the invention of the CD; it was in 1978 that the first music album on Compact Disc was launched on the market, *52nd Street* by Billy Joel. From that point, CDs have been the preferred method of releasing recordings since they were convenient and practical enough to reach an enormous audience in a relatively short time. The rules of the game changed radically around 1980 when music was first played in a computer format. The transition from CD players to the new format has been consolidated in a decade, thanks to falling prices for them and their conversion into music archives. An unfortunate consequence of the popularity and convenience of CDs was pirated music and its progressive growth; even though music piracy naturally predates the digital age, the technologies that appeared and spread rapidly starting in the mid-1990s posed a special threat to the music business. The transition of the music industry from cassette tapes and vinyl to CDs allowed for the sale of music in an easily digitized format, and the availability of CD drives on personal computers made it possible to pirate recorded music more than was possible with tapes.

In the years that followed, the Motion Picture Experts Group (MPEG), a technical committee established to define models for the digital representation of multimedia content, used advancements in technology in the encoding of an international standard for the reproduction of audio files. The invention of portable CD replacements and cassette players, such as the iPod in 2001, was made possible thanks to the introduction of new audio compression formats, such as the MP3 format introduced in 1993, which allowed audio files to be compressed with little or no loss of sound quality. Finally, as internet technologies advanced and the World Wide Web became more widely used, peer-to-peer (P2P) file-sharing platforms gained widespread popularity. Users could freely share MP3s of their music recordings through these platforms, free of charge. As a result, the physical restrictions on earlier types of piracy, such as the duplication and distribution of pirated music, were effectively eliminated. The ease with which tracks were illegally shared caused quite a few problems; in addition, the music industry and policymakers did not anticipate the legal conflict brought on by the emergence of these new music consumption practices.

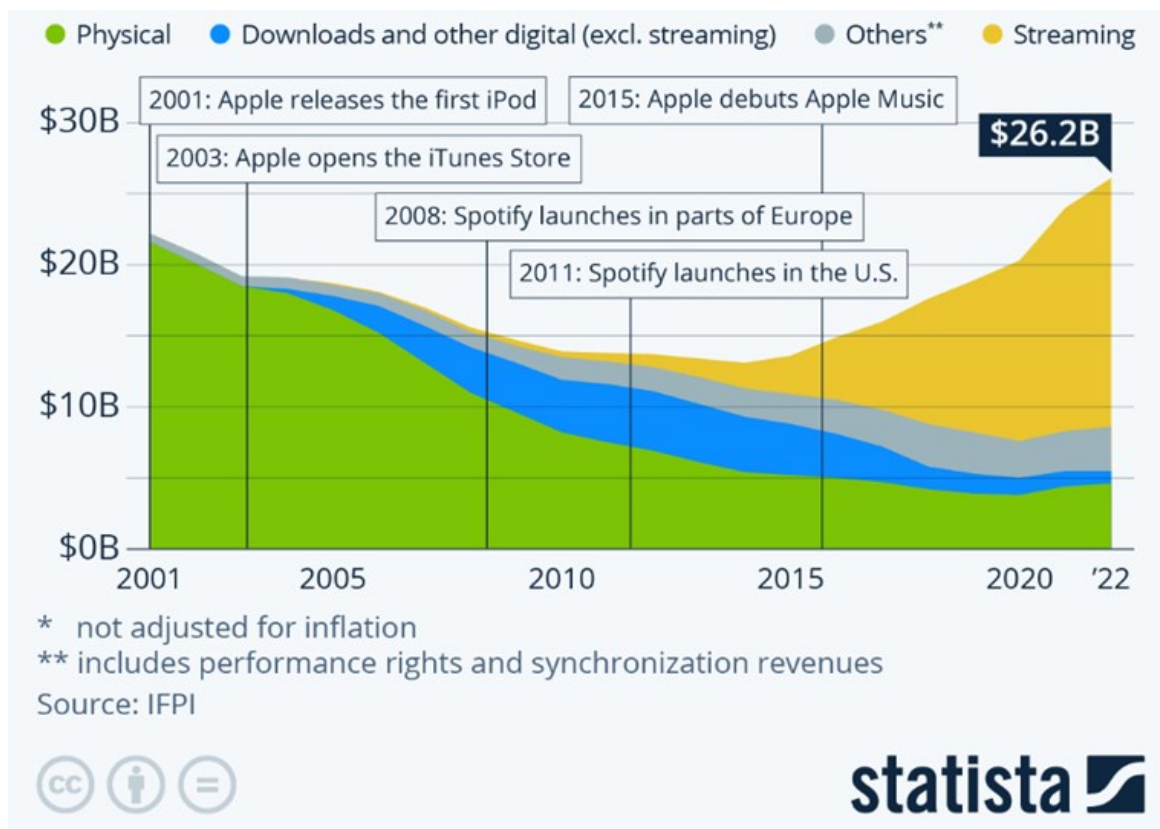
Consequently, in response to the calls for addressing unauthorised access to copyright works using Internet and digital network technologies, WIPO (World Intellectual Property Organization) was forced to establish international provisions on intellectual property through Internet treaties which it signed with member states in December 1996 (see WIPO Internet Treaties). National copyright laws for the use of digital music were adopted and one of them stipulates that record companies for performers must have the sole authority to approve the distribution of their phonograms to the public via wire or wireless, meaning that people can access them at any time and from any location. The right to make available was adopted by the EU member states in 2002 through Article 3 of the Information Society Directive.

Despite this, however, global sales of recorded music fell by 40% between 2002 and 2015 as consumers turned to UGC (User Generated Content) hosting sites or digitally pirated music. News announced in 2006 that 20 billion tracks had been downloaded illegally in the previous year (BBC News, 2009). While the IFPI (International Federation of the Phonographic Industry) claimed that music piracy accounted for 95% of music consumption, the BBC also reported in 2008 that 20% of Europeans used file-sharing networks, compared to only 10% who used legitimate digital services such as iTunes. To stem the spread of digital piracy via its Trade Association, the music industry began taking civil actions against individuals for unlawful sharing of files which was eventually found to cost both financial and damaging publicity.

Nevertheless, there have been some successes. Record labels won legal battles to shut down peer-to-peer file-sharing services such as Limewire and Napster, and to force the legalisation of Kazaa and other streaming services (McIntyre, 2018).

Despite these achievements, the music industry's income was on the decline; in 2015, record label revenues fell to less than £800 million. Only in the middle of the 2010s did things start to change. Online piracy dramatically decreased as a result of the introduction of music streaming services, particularly Spotify. According to YouGov's 2018 report on music, the number of illegal downloaders decreased from 18 % in 2013 to 10 % in 2018, and 63 % of those who stopped using sites that were not legal switched to streaming services. Since 2014, the recorded music industry has grown annually, and in 2015, the downward trend that had been affecting the music market finally began to turn around. Revenues from the digital format were equal to those from the physical format, and the overall industry value began to increase once more. This shows, almost plainly, how the introduction of streaming services assisted in resolving the music industry's crisis (House of Commons, 2021)

Different types of revenues in the music industry (in billion U.S. dollars)



Source: Statista

1.2 The impact of Covid-19

A key event that is still very relevant today is the emergence of Covid-19 and the subsequent pandemic, which has had a major impact on the economics of the music industry. Authorities from all over the world had to think about how to combat the virus starting in March 2020. As highlighted by Kinnunen, M. and Honkanen, A. (2021), national and local governments enforce laws governing safe distances and hygiene, as well as stringent limitations on the number of attendees at large gatherings, all to stop the spread of disease. The live music industry, in particular, stopped performing all over the world, and the effect was dramatic. The shock to the music sector of Covid-19, which we divide into two different groups: live events and recordings, resulted from needed restrictive policies imposed by political leaders throughout the world.

For those who were involved in the live music industry, the effects were disastrous. Live music event employees, including musicians, lighting and sound engineers, event planners, promoters, agents, road crews, and others, were unexpectedly unable to work. They lacked the safety net that would protect traditional employees because many of them were business owners, self-employed, or on short-term contracts. It took time for governments to provide any financial support, if any (see Banks, M., and O'Connor, J. 2021). Unfortunately, there always seemed to be musicians working in music events who weren't eligible for assistance; in addition, many employees in the music industry had to find alternative means of supporting their families due to the length restrictions. Due to limitations, live music venues and music event organizations found themselves in a situation where they had fixed costs but no income. For example, according to the UK's House of Commons (2021), in 2020, 90% of UK festivals were postponed, and 93% of independent music venues faced closure. Various limitations, or even the complete absence of live performances and concerts, have compelled artists to rely solely on music streaming income. Even the most lucrative musicians, though, quickly realized that their earnings were insufficient. As a result of this, some successful songwriters have come to realize that, because they are unable to make ends meet by streams of revenue, they're forced to live on universal credit and subsidies from the government.

Although the impact on live music events appears to be visible, it is not yet clear what effect this pandemic has had on the recorded music market. The current trend of digitalisation in music has accelerated as a result of the COVID-19 virus, with premium streaming being one of the biggest beneficiaries. Analyses of consumer spending (in euros) and music consumption (in hours) in live music events, as well as in the digital and physical recorded music submarkets, before and after the pandemic, based on a bi-annual online panel captured five waves between

winter 2018/19 and winter 2020/21. Yet overall consumer spending on music declined by over 45% each month compared to the level prior to the crisis, with major events such as musical performances and retail sales taking the biggest hit. Surprisingly, even when spending more time at home during the lockdown, there was also a decline in music consumption per hour (Denk et al., 2022).

1.3 Majors and record labels

To understand deeper the music business means to speak of record labels, which have controlled the market for more than a century. The first record company in history was the Victor Talking-Machine Company (then RCA Victor) which also produced turntables. Not much later, three new record labels made themselves leaders in the industry at the end of the 19th century: the Thomas A. Edison Company, the Victor Talking Machine Company, and the Columbia Phonograph Company. But, it was in the 1960s that the peak of record companies occurred; they started dominating the market with a sophisticated business strategy that included every aspect of music production, along with finding new artists, producing studio tracks, selling them in record stores, managing image and communication, negotiating with radio stations to have their catalogue of songs played, and planning television broadcasts and tours.

As explained by Cesaretti, A. and Moro-Visconti, R. (2022); this was a long-term commitment which, consequently, also involved substantial use of financial resources. Subsequently, independent labels called "Indie" emerged in the 1980s, founded by the artists themselves. These independent structures allowed artists to create their music with no pressure from the major groups. However, because they did not have their commercial structure in place, they were forced to subcontract the distribution of records to major labels.

The market share of the major players has been growing more and more consolidated during the last 20 years. All three of today's major music companies merged with or acquired the other 'big six' firms including PolyGram, Bertelsmann BMG and EMI Group Ltd, that were in existence in the 1990s, due to the destruction that digital piracy caused to the music industry. Consequently, there are now three of the world's biggest music labels, SONY Music Entertainment, Universal Music Group and Warner Music Group, which have a combined market share of over 71% (Cesaretti, A. and Moro-Visconti, R., 2022).

The strength of these labels was their hegemonic position vis-à-vis the whole process of music creation, production and distribution. The music industry consists of a series of interconnections between cultural material and market players, resulting in the creation of a physical product. At

the centre of this complex system of interconnections are the record companies, which coordinate and finance the creative industries and talent, while controlling the reproduction and distribution arrangements.

Even from a strictly economic point of view, the music market has undergone a multitude of variations, especially regarding the evolution of the players' business model. As record companies have become less and less committed, artists and industry players have had to explore new forms of financing by introducing new financial-economic models. An early example and innovation has been the securitisation of David Bowie's musical rights by issuing ten-year bonds in 1997 with a total value of 55 million USD at an interest rate of 7.9%. This form of financing was also replicated in favour of other artists (Cesaretti, A. and Moro-Visconti, R., 2022).

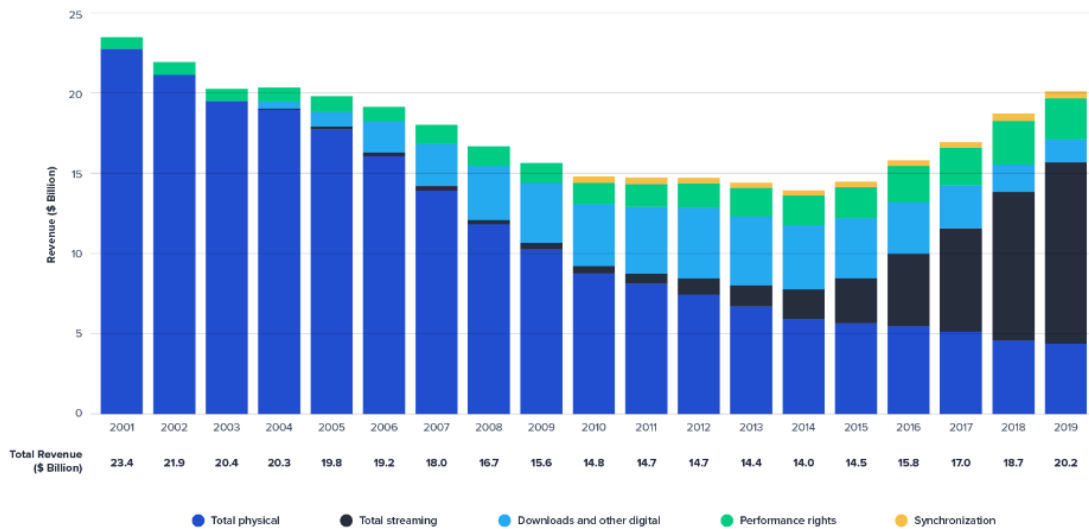
With the advent of the new century, as anticipated, the music industry has had to come to terms with the gradual reduction in sales of physical media and the simultaneous increase in digital distribution (as well as piracy). But, in the medium to long term, record labels were then able to replace the loss of sales revenues with increased royalty revenues generated by streaming. Over time, new music streaming systems have therefore changed the structure of record labels' revenues from record sales to royalties. For instance, Universal Music's streaming revenues in 2020 increased by 15.3% year-on-year to EUR 3.83 billion against a decline in sales of physical media sales of 6.4% and this new financial landscape has generated renewed interest in structured finance in the music sector.

The phenomena of illegal CD burning and online piracy greatly influenced the decline of traditional record companies. The disruptive innovation that fundamentally changed the music industry market was, however, the emergence of online platforms such as iTunes and, subsequently, streaming. The music industry hit its bottom in 2014 when sales reached a 20-year low of \$13.1 billion, \$9 billion less than they had been 15 years earlier when physical music sales alone had reached a peak of \$22.3 billion during the CD era (Richter, 2023).

New ways of enjoying musical works via the Internet have favoured the emergence of online labels (netlabels) which distribute music exclusively over the Internet. However, many encourage artistic collaboration by distributing works under Creative Commons licences while allowing the producer to retain copyright. As a result of the post-digital music crisis, even the traditional majors have shifted their business model towards digital distribution, especially streaming. Record labels and artists followed consumers' lead and accepted that digital distribution is the way of the future for music after the music industry initially resisted adopting

streaming services. This decision proved to be successful since the downward trend that had been affecting the music industry was first reversed in 2015. Revenues from the digital format were equal to those from the physical format, and the overall industry value began to increase once more.

Global Music Recording Industry Revenues: 2001-2019 (in U.S. Billion Dollars)



Source: IFPI

As highlighted by Cesaretti, A. and Moro-Visconti, R.(2022)., consumers are also benefitting from the digitisation of musical works. Increased competition between producers, better quality of products and lower user costs have resulted from an increase in the spread of music on the Internet. An example is the difference in prices and costs between the price of a physical record and the price of a subscription to a streaming service or a single track in digital format. The availability of both durable and non-durable solutions on the internet has also had a tremendous effect on the customer’s experience since it has enhanced consumer choice.

CHAPTER 2 The Advent of music streaming

Technological advances resulting from the creation and popularity of the Internet have brought a great deal of disruption to the music market as was noted in the previous chapter. With the growing popularity of music files in MP3 format and subsequently Peer-to-Peer (P2P), the music industry underwent a huge change.

2.1 PEER-to-PEER

The proliferation of the Peer2peer service, also known as a file-sharing service, made it possible for each user to have access to millions of multimedia files with ease and speed just by having an Internet connection. Consumers have benefited enormously from this free and unregulated sharing, although it has undermined all other operators who provide the same service at a fee. The rapid and boundless proliferation of P2P services was, moreover, due to the ease of access and affordability. This success can be surely attributed to the fact that downloading tracks from file-sharing sites was free, while legal music purchases, whether physical or digital, are often more expensive than consumers' willingness to pay.

An economic analysis of this phenomenon is necessary to fully understand why sharing software offer this service free of charge. A high fixed production cost and low variable reproduction costs are characteristic of digital products. As noted by Shapiro et al. (1999), in the particular case of P2Ps, new technologies have ensured that the reproduction costs are practically zero and that the product in digital form (the MP3 file) can be reproduced an unlimited number of times. Precisely because of these low reproduction costs, users of P2P software did not have to pay any additional costs. In addition, the use of music has not affected another user's ability to fully enjoy it since music is a non-exclusive product. Another reason that encouraged the use of these illegal sharing platforms was that many of the users who use them were teenagers; in the younger generations, the perceived illegality of using P2P platforms was not ingrained enough to push them to purchase the product legally. In addition, structural barriers existed, as the vast majority of music that can be purchased on the Internet is connected with a credit card, something which many young people don't have.

The change in how listeners discover music was also a factor that led to the popularity of this type of file-sharing. Music had been broadcasted by the radio until the invention of the Internet; and, because the fact that radio did not have competition in the market, it was offering a service which could be accessed anywhere and anytime. This platform, being a passive and non-interactive form of entertainment, was over time replaced by P2P (Kusek and Leonhard, 2005). The Internet had become the new instrument of discovery for consumers to discover new music

since the new millennium, and multiple file-sharing services were also becoming increasingly popular; it was this new use of sharing platforms which encouraged their expansion.

A further consequence of this revolution concerned the major labels. They rightly started worrying about the growing popularity of P2P; since they used to control the distribution of tracks and their revenues since the beginning of the music business, which had been destroyed by the digital revolution. To cope with the growth in file sharing, record labels used several strategies. One of the first measures taken was technological and was devised soon after the invention of the Compact Disc. The so-called DRM (Digital Rights Management) was created to protect rights at the digital level and block any attempt to copy. This technology allowed access to the file solely under established rules, as well as using keys for the encryption of media files. However, as pointed out by Kusek and Leonhard (2005), soon it was created a software that was able to extract music files by circumventing DRM, which were then traded on the Internet. The result was an increasing difficulty for consumers to reproduce media files without a decrease in piracy but a growing malcontent.

Other measures to protect copyright have also been put in place since the 1990s, with most of them legislative. A first example is “The Audio Home Recording Act”, authorizing the consumer to make copies of a CD for personal use only and not for commercialization. Other treaties have been the “Sonny Bono Term Extension Law” and the “Digital Millennium Copyright Act” (DMCA). These two measures aimed to bring copyright law up to 20 years and ensure that an author can retain the right to have his or her work for a time up to 70 years after death (McCourt, T., & Burkart, P., 2003). Other efforts have been made to prevent the continued proliferation of piracy by establishing an innovative, profitable and legally preferable alternative to unlawful platforms as a result of the ever-increasing trend towards digital music. The first were MP3.com in 1997 and eMusic in 1998, which were unsuccessful. As time went by, record companies started to develop services for the digital distribution of music. In 2001, Bertelsmann, Warner and Emi's partnership with MusicNet was the first attempt at this; in 2001 Sony and Universal also launched PressPlay as a joint venture. However, according to Waldfogel (2010), it is mainly because both services didn't provide free access to music downloads that they have been unable to attract consumers' interest.

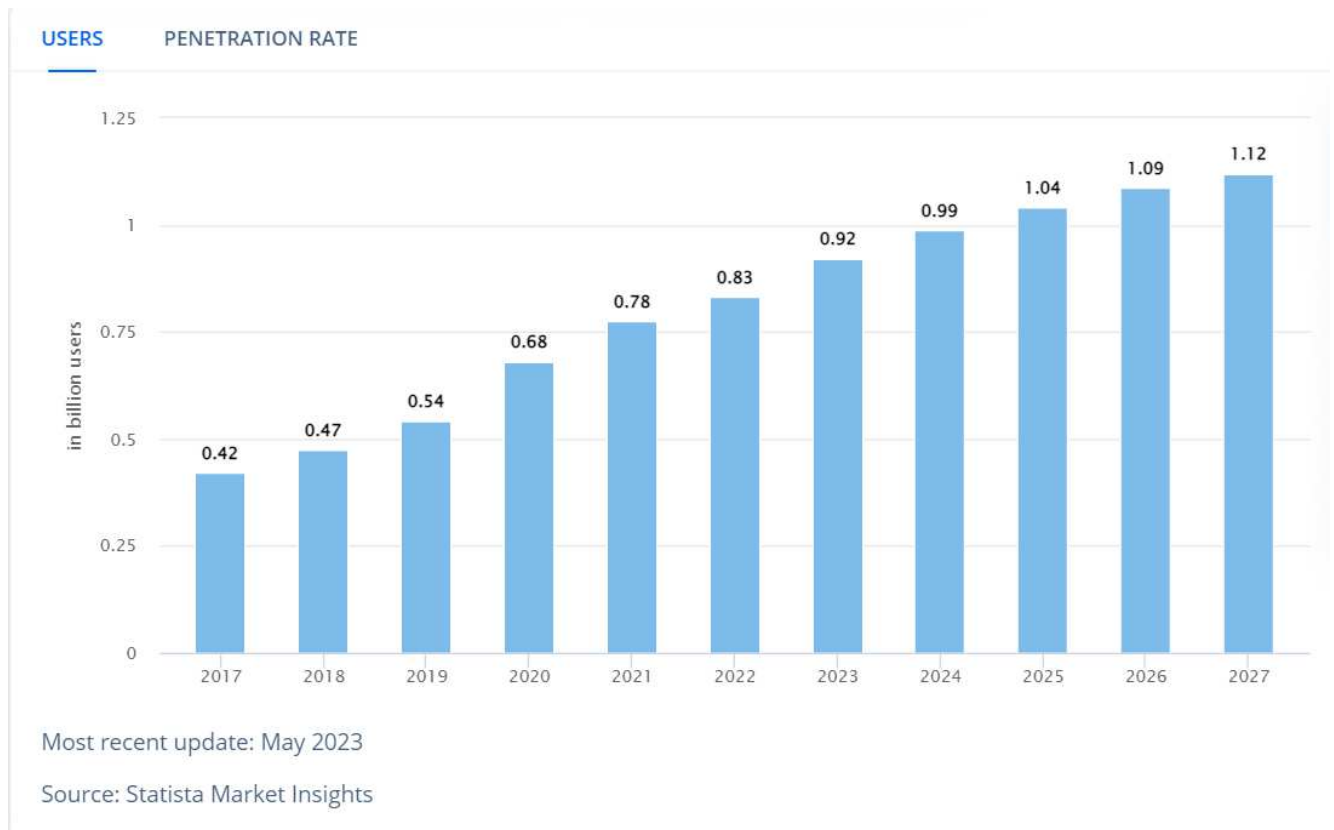
The phenomenon of file sharing, in some aspects, accelerated the crisis faced by record firms in their markets, but it also provided several benefits to the music market as a whole. Additionally, streaming was growing rapidly as a result of the decline in tangible revenues which decreased from over 5 % in 2018 to 2019. At the same time streaming, particularly among younger viewers, was decimating radio listening. The average time spent by young people on-

demand streaming services is 51 per cent, according to a Forbes study in 2016, as opposed to 24% for the rest of the population and only 12 per cent when they listen to the radio (see McIntyre, 2016).

New forms of music curation, such as playlists, are instrumental to this convenience and change in habits and tastes. According to the International Federation of Musicians (FIM), curated playlists have replaced thematic programming on a gradual basis for consumers. Another very important consequence of streaming music was the increase in musical content and the fact that creators were able to access the consumer more easily thanks to reduced costs of production and distribution over the first ten years of the 21st century; these factors are also contributing to an increase in product availability. For instance, while in the 80s, in the U.S. published just a few thousand new singles every year, it is reported by Ingham (2021) that now Spotify adds more than 60,000 new tracks to its platform every single day. It is during this time that the first successful digital service was launched in 2003 by Apple: iTunes. There were two advantages to this new digital music purchasing platform: it had a large music library, and it sold songs "à la carte" or individually for \$0.99. Furthermore, downloaded music may be listened to by the consumer via a computer or portable devices. According to Van Buskirk (2008), in February 2006, over a billion songs had been sold, rising to more than five billion in June 2008 resulting in generating 70% of worldwide digital music sales in 2008.

Consumers probably have had the most benefits from the streaming phenomenon. Music can be enjoyed by all Internet users thanks to the digitalization of songs and albums. The public is now able to search and find everything related to a specific author or artist. The exponential growth of music lovers is a further great consequence of the spread of tracks. Moreover, as mentioned by Rogers (2013), the increased frequency and closeness of interaction between artists and their followers have been facilitated by technological developments. Savings of time are another positive aspect for consumers.

Music streaming users (from 2017 to 2027) in billion of users



Source: Statista

2.2 Streaming Platforms

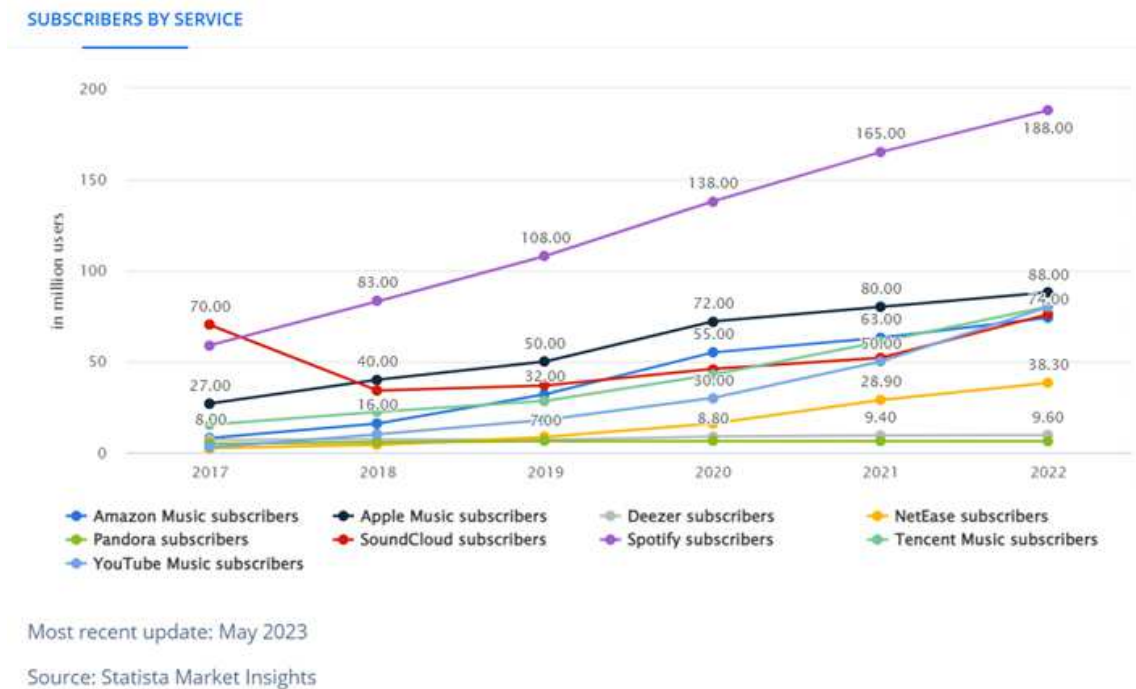
Streamed music has also tested the established business model of the music industry. This simplified consumer music consumption, but it also complicated the musical supply chain and distorts how much is paid to those who created this in all of its forms, such as composition and performance or a digital services provider (DSP) or platform where consumers receive their music. Due to the increasing use of streaming services for accessing music, which is now accounting for more than half its revenue in major markets, established royalties based on sales are being broken down by the digital distribution of recorded sound recordings through platforms. In addition, digital service providers use different business models for pricing platforms and have different motivations from the music industry, which has a significant impact on the streaming fees paid to songwriters and performers.

Music consumption has undergone a significant transformation as a result of music streaming becoming the predominant method of music delivery. In response to the advent of music streaming, consumer habits are changing, and successful music industry players are responding.

The Internet Association reports that UK consumers streamed audio-only subscription services 114 billion times in 2019 alone, surpassing 100 billion plays for the first time. Consumers no longer purchase a perpetual, irrevocable licence to pick tracks from a library of recorded music. Instead, they pay a monthly access fee to view the entire catalogue. A key aspect of streaming is that it introduces an "all-you-can-eat" business model that is fresh and fundamentally different (Haampland et al., 2022). The main difference is that now once you pay the monthly subscription, the user has unlimited access to all the songs in the platform's catalogue. Once again, consumers enjoy a significant advantage from the existing streaming business model, for two main reasons: price and service offering. Consumers are generally given a service, which enables them to stream all tracks in their catalogue as often as possible for relatively low monthly price plans. For more than a decade, the nominal price of streaming subscriptions has been fixed at the same price, which means that over the same period when the nominal fee is taken into account against inflation, the consumer has experienced a fall in prices in real terms of 26%. Moreover, streaming also allowed consumers to access tracks that the labels did not consider necessary for continued pressing and release until now.

On the other hand, users can stream content in the same "all-you-can-eat" style via YouTube's free, ad-supported, user-uploaded video-sharing service if they still find these services to be prohibitively expensive. Although YouTube imposes certain barriers on the consumer, through advertising and online solely playback it continues to be a dominant music download service compared with other free services or no background player in the case of mobile users. According to an IFPI analysis report, YouTube accounted for 46% of all on-demand music streaming time in 2017, which was more than Spotify, Apple, Tidal, Deezer, and Napster put together (see McIntyre, 2017). YouTube has a global market share of at least 51 % as regards streams, according to data from the Recording Industry Association of America.

Number of active paying customers by service for music streaming in millions for each year.



Source: Statista

2.3 What is a streaming platform?

A streaming platform is “a service that sends video, music, etc., over the Internet so that people can watch or listen to it immediately rather than having to download it, or rather than having to watch or listen at a particular time when something is broadcast” (Cambridge Dictionary)

In this context, the term "platform" refers to a range of business models, in particular online, which serve as intermediaries for the distribution of goods, services and products created by others. Platforms allow different groups of participants to be coordinated on two or more markets via an online marketplace, where they can trade. The net outcome is a key and vital feature of the new generation of Internet businesses. Users who gain from the number of users on their side of the market are said to have direct effects on the group of users (producers or consumers). Indirect cross-group effects occur when users benefit from the number of users on the other side of the market (for example, advertisers benefit from the number of viewers). Another possible way of creating network effects is through the provision of complementary services like rating and recommending systems that enable customers to buy additional products or host third-party applications. Platforms generally seek to set prices that maximize profits in all their activities, resulting in a price on one side that is dependent on the price on the other side or the other side. When referring to the music industry we have to talk about a

specific example of platforms; streaming services. This specific type of platform is engaged in purchasing the rights of record labels to distribute their recorded music over the Internet or through cellular devices and making them available to consumers either by selling a subscription, which is the price for an unlimited time rental or providing listeners with a free ad-based service financed by the sale of time slots to advertisers on the other side of the market. Many ways to classify music streaming services can be found, for example by pricing strategy, offering and payment models. As reported by the UK's House of Commons (2021), today, the main services are operated on either a subscription model or an open access model of both called 'freemium.' While free services are sponsored by advertising revenue or, in the case of Amazon, packaged with a video and goods-delivery subscription, premium services are paid for by monthly subscriptions (with a current benchmark of £9.99 per month). Those revenues shall then be split based on established, negotiated agreements with the music sector between the service and recording industry. As regards content hosting, this is another important way of classifying streaming services. The majority of music streaming services, like Spotify, Amazon Music and Apple Music, are licensed by the music industry. Some services, which are primarily or in addition to hosting UGC (User Generated Content) on their homepages, include YouTube and SoundCloud. As stated by SCRIPT (2020), platforms that host UGC are not subject to legal liability for infringement of copyright unless and until they have obtained informed factual information about an unlawful activity, during which time they must suspend or delete access to such information without undue delay.

We can also divide the digital streaming platforms into two major groups based on their activities. A platform for which streaming music is its sole activity, for example, Spotify, is a two-sided market with prices on one side for listeners and on the other side for advertisers. Other digital services providers, like Apple and Amazon, are multiproduct platforms that offer a variety of services, including music as well as other products like phones and iPads (for the former) and Prime (for the latter). This type of practice is called vertical integration; to gain an advantage in the competition, companies have become more and more inclined to join up with other services or otherwise make use of complementary products. This competition has encouraged innovativeness and positive differentiation of services to a large extent. For example, in the U.S. in 2021 Spotify launched its first hardware device, an in-car music player called "Car Thing". Other services have also started to appear, and they are advertising their services using more responsible payment systems for rights holders.

2.4 The Role of Playlists

One of the key tools and characteristics by which streaming services distinguish themselves from their competitors on the market is playlists, in combination with user experience.

Nowadays, streaming platforms such as Spotify have playlists for any occasion, event or genre; there are even playlists for every minute of the day: wake up, breakfast, exercise, relaxation, meditation, running, partying etc.

As noted by Aguiar and Waldfogel (2021), the main functions and purposes of playlists are to be a large, informative list of tracks but also to be an efficient tool for playing those songs. As far as streaming is concerned, there are many types of playlists. Taking Spotify as an example, the platform itself offers user-created playlists that contain a series of tracks played sequentially, shuffled or skipped over and curated by all users according to their preferences; both curated and algorithmic-based general playlists as well as playlists to be custom-made by each user. There are various ways in which each of these playlists works. For instance, curated ones are edited by Spotify staff, who decide which songs will be included in the list. These lists contain songs that have been streamed on Spotify for a certain time, along with artists and musicians who are well-known to the general public.

For this reason, the impact and effects of inclusion on songs and artists in platform-operated playlists are a subject that is frequently discussed. Concerns about the exercise of market power by music platforms have increased, which has led to a debate on whether existing antitrust enforcement practices are appropriate in today's digital age.

Analyzing the data collected by Aguiar and Waldfogel (2021), it was noted that playlists have an important effect on which songs are heavily streamed and also how successful artists and new tracks are. This paper examines whether platforms, one of the major channels to promote music on the internet, can influence users' listening choices through their playlists. With particular reference to data from Spotify, it highlights the fact that all 25 most popular playlists are maintained by Spotify and the fact that more than 75 % of the top 1,000 most popular playlists belong to the Spotify curated lists, leading to clear evidence of the power of Spotify to influence consumer decisions. This means that platforms can affect artists and music creators, but also consumers. Platforms can affect which songs people listen to, to the extent that the songs included in the playlists generate more or less satisfaction than the songs consumers would otherwise have listened to, the effects on consumption may also affect the consumer's tendency to use or not use the service (Aguiar & Waldfogel, 2021).

2.5 Competitiveness of the streaming market

The market for streaming services is highly competitive for a series of motives. Firstly, there is a relative homogeneousness of services themselves. With major music publishers, independent labels and self-released artists making mainstream music as widely accessible to services as possible, the content of these services is effectively substitutable. In addition, most of the features and functions, such as offline or high-fidelity playback, have become standardized.

All the platforms are virtually the same from an economic point of view. As Jimmy Iovine (music producer) stated: "The streaming services are all charging \$9.99 and everyone has the same music"; this is because the premium service prices are generally charged by all companies offering such services at an equal, stable level of price. Most services, as stated above, offer one monthly subscription at a fixed rate of £/\$9.99 which has existed for over 10 years and it is still not certain that any service will be able or possible to deviate from this (Savage, 2018).

Another reason is that users have relatively full information about the various products, services and prices of the different platforms thanks to their standardization in the market. But, because the pricing of the premium service is so competitive, historically streaming services have not been profitable. So far, the operating losses have largely been reported by services such as Spotify and SoundCloud. As reported by Music Business Worldwide (May 2020), in the last decade Spotify's total annual losses amounted to EUR 2.62 billion. The platforms can afford to incur losses because, by attracting consumers to the loss-leading side through very low and competitive prices, they make their service value for the other (profit-making) sides and ensure their participation.

This can be seen as a competitive advantage for multimodal platforms compared to two-modal platforms because they will support more losses on the loss-making side. In the case of a two-modal platform, for example, Spotify, the products and services offered are based on venture capital, thus allowing them to set themselves up for competitive pricing to maintain market growth. Otherwise, in services where streaming is not the main focus, but a part of a broader business, like Apple (with Apple Music) and Amazon (with Amazon Music), those segments are considered to be a great loss. Nevertheless, there is a risk that companies may use abuses of competition practices to improve their profitability if streaming music revenues continue to be low. This could result in a market "tipping," whereby network effects cause a snowball effect that pushes a market toward monopoly equilibrium once a good or service reaches a certain number of users. Specifically, if one piece of hardware were to dominate the market, vertically integrated tech companies, for instance, with more developed hardware and smart technology divisions, could theoretically gain an advantage by creating incentives like free trials or frictions

for competitors like denying access to third-party services or shipping with defaults that are difficult for customers to change (BBC, n.d.).

CHAPTER 3 Music Rights and creator remuneration

Given that streaming services, as described above, represent the major source of music being listened to and consumed, there is more and more interest and concern over the fairness of those platforms than ever before. In particular, the main discussions regard royalties, income from tracks and artists' representation on streaming services.

Platforms and companies, especially emerging ones, are increasingly focusing on making, or creating, the fairest environment for artists but also consumers. There are many definitions of fairness. The two most commonly cited definitions are group and individual fairness. Individual fairness is a reflection of the fact that similar people should receive equal treatment; while the objective of group fairness is to treat individuals belonging to a protected category as equal to the rest of the population. Both definitions may conflict, but evidence shows that in the streaming market, individual and group fairness can be achieved at the same time. That's what streaming platforms are trying to do, and that's what they're advertising.

3.1 Licensing

The word "music licence" refers to the permission for the use of music with copyright. Music licensing aims at ensuring that the copyright holders of musical works receive compensation for their use in a particular way.

In 2020, 80% of music sales in the US have been generated by digital streaming, which, as we know, has become the predominant method of music consumption. Naturally, this quick ascent to dominance has significant implications for music licensing. The scale of the licensing requirements for streaming service providers is unprecedented because streaming providers upload an enormous quantity of new recordings every single day. Most of this music contains a copyrighted sound recording and an underlying musical composition which must be licensed separately. The fact that streaming services require numerous licences is an indication of the importance of collectives which facilitate their communication with manageable numbers of licence holders (Priest, 2021).

The streaming market has a high concentration: Spotify, Apple Music, and Amazon Music control two-thirds of the global streaming market. This has led to an easier time for copyright holders to find and grant licences to the largest and most profitable platforms in the market. In addition, the cost of tracking usage and distributing royalties has decreased significantly thanks to technology. All streams are now automatically logged, and royalties are allocated based on usage data. The collective management of copyright ensures a single place where licensors and

licensees can do business, significantly reducing transaction costs. Collective copyright management will also benefit copyright holders as a result of sharing and thereby reducing costs associated with administration and enforcement.

Because of this market concentration, oligopolies in the licensing sector have become a very serious problem in the music market. An oligopoly can occur when the market is dominated by a limited number of large players. As a result, by concentrating demand and thus power, sellers can effectively keep prices high, at the expense of buyers, in the absence of alternative sources of supply. As explained by Competition Policy International (2021), this means that major music groups have been able to negotiate advantageous terms with stream services, which has implications for competition in the market for streams as well as among record labels themselves. In other words, the high quantity of licences held by very few actors has long been a major concern for collective licensing; if a single entity holds the rights to license the most popular songs, it can exact a monopoly price from anyone who wishes to use music. There would have been no possibility of searching for alternatives if the rights to license music they need were held in a single entity, radio stations, streaming services and other enterprises whose business is dominated by music.

The situation that arose resulted in the majors posting record profits but, at the same time a lack of sustainable profitability of the streaming services themselves. A reason for the non-profitability of those platforms is linked with the ease with which assets can now be transferred from the label to the platforms thanks to the development of the Internet; thus leading to greater economic spending by the latter. Streaming has also extended the commercial life of music because it removes these expenditures on labels, says Horace Trubridge, General Secretary of the Musicians' Union. Despite the elimination, externalization, and replacement of physical costs resulting from the digitization of music distribution, the revenue share of music retailers has remained constant in both physical and digital retail, with record labels benefiting disproportionately from the savings generated by digital distribution (see Economics of music streaming, 2021).

3.1.1 Types of Licences

The record label's success in the negotiation of direct recording licensing contracts with streaming services is likely to be based on the reasons explained above. This contractual dominance of the majors led to direct licences being widely preferred by both large and independent record labels.

Direct licensing occurs when the rights of users with no licences are directly licensed by the copyright holders to each other via a collective intermediary. In this specific type of licensing, music creators are paid upfront for their work, so that they can concentrate on new music rather than complex agreements. They'll transfer those rights to a company that buys music, and they can still receive royalties in the future. Direct licensing covers all rights relating to a music track; it shall include synchronization rights, physical or electronic performance rights, and an additional fee or royalty. It is the result of companies that hold all rights to songs in their catalogues. A single upfront fee is enough to get access to a vast selection of music that will be made available on platforms (Midby, F., 2023).

Regarding this type of licence, there are conflicting opinions; as noted by Paul Pacifico, representative of the independent community, since independents could license their products in a collective but separate manner from major labels, direct licensing has not had an impact on small labels. That view, however, is in contrast to the opinions of many industry experts. Several contributors raised concerns regarding the indirect effects of direct licensing on independent labels and musicians who release their music independently. Given the secrecy of such licensing negotiations, these conditions have been applied to small labels and self-publishing artists as well without any leverage in which they can negotiate similar terms. These theories are supported by academic evidence. According to Mariuzzo, Ormosi (2020), the distributional characteristics of major and independent record labels' streaming data are different, with major songs appearing on popular Spotify playlists at a disproportionately high rate than independent songs. Also in another paper published by Antal, Fletcher and Ormosi (2021), it is discussed how streaming services end up favouring more mainstream, and established services and internationally recorded music, particularly those which appear on major labels at the expense and disadvantages of the more niche, the more independent, the more local-focused tracks.

To conclude this passage about licensing in the digital environment, it is important to remark that, although there is widespread agreement that direct licensing between the music industry and streaming services constitutes good business for both firms, concerns remain regarding the position of major labels during negotiations which allow them to profit at the expense of independently owned record labels and self-releasing artists, in particular when it comes to playlists.

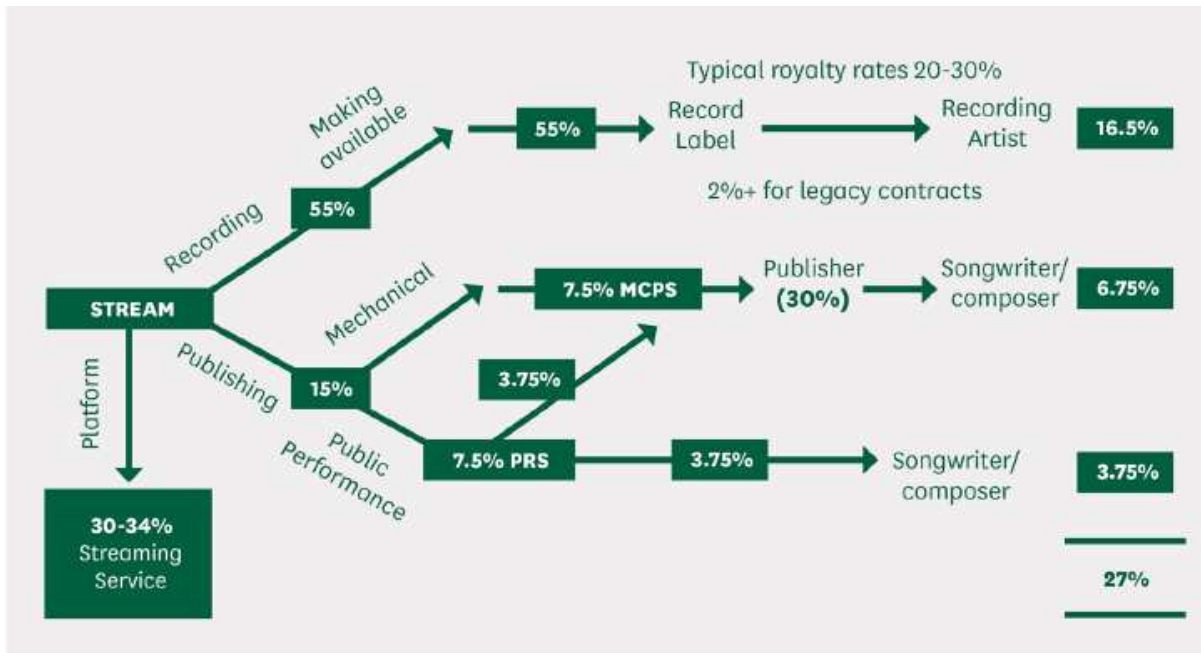
3.2 Copyright and Royalties

Music is composed and recorded by artists. It is possible to play, stream, perform or interpret these recordings. There are a lot of different rights within the music business that can make money for those who are involved.

There are two main types of music rights: recording rights and publishing rights. The master sound is the initial sound of a song being recorded. When a song has been recorded, either in the recording studio or on stage, it shall automatically be entitled to record rights. The artist, record label, producer or the person who funded the recording shall own the recording of a composition. For a specific period defined by the contract, these rights may be awarded to any record label or third party. The rights to the composition of music and its lyrics are publication rights. They are the property of writers, composers and lyricists. In Europe, they cannot be sold. When music and lyrics are created, authors automatically own the publishing rights until 70 years after their death unless they have been taken over by a publisher. However, those rights may be licensed to publishers (Ag, 2022).

When considering music stream, two distinct bundles of rights can be exploited: copyright in song lyrics and music, and copyright in the performance. Recording rights are granted directly to streaming services by record labels or aggregators and distributors, while song rights are granted collectively by collecting societies, which are bodies that licence copyright works on behalf of copyright holders and ensure that copyright holders are compensated for the use of copyright works in return for administrative fees. How parties are compensated for streaming music is influenced by the complex underlying details of their rights, licensing negotiations and corporate creators' agreements. To give an example, the UK government receives income from streaming music subscriptions by way of VAT under British legislation. VAT is an indirect tax levied on most goods and services, at a standard rate of 20 % of the gross margin before streaming revenue is divided between the licensee and the rights holder; then, streaming platforms will receive part of the revenues from what they're left. Such a share ratio is usually considered to be 30 %. A share referred to as a royalty pot will continue to be allocated to the industry. The main source of revenue is royalty payments to master rights holders who receive, on average, approximately 55 % of the gross revenues. Thus, about 15 % of the gross revenue is allocated to music rights holders (see Economics of music streaming, 2021).

Allocation of revenues from music streaming (after VAT)



Source: CC Young e Co Limited

As said by the UK's House of Commons (2021), the streaming of music is an exceptional case in its own right. Although the rights to the song and the rights to the recording of a single song are used at the same time, each is characterized by its legal character. On one hand, the streaming of the recording is considered to be a means of making it available. By contrast, song rights are also regarded as a public performance, resulting in communication to the general audience through artistic work and mechanically reproducing it. All parties responsible for the song are compensated in an equal way when there is communication with the public. However, the creators are paid by the companies to which their rights have been assigned, licensed or distributed under the terms of their publishing or recording contracts when music is consumed in a "mechanical" or "making available" manner.

3.3 Remuneration

The new subscription model introduced by the advent of streaming is also a major revolution that platforms have brought about. The rules governing remuneration in general for all the industry have been altered by this system, which does not yet depend on purchasing each song to make it available but is more focused on paying per stream. Through that model, platforms pay royalties to record labels, solo artists, publishers and distributor companies every time a song plays on the platform creating transactions which are smaller in total but extend for an

extended time. In addition to being more cost-efficient, this innovative system also enables labels to have immediate feedback on the popularity of songs or albums and gives managers a key strategic tool for planning their record campaigns. Most platforms' economic success in terms of profits depends, for example, on their incoming revenue from subscriptions and advertising as well as the cost of procuring content or services.

Discussions on how much streaming services pay the rights holders of products have continued to accompany the increase in music streaming usage. The current debate on the industry is less and less about how much money rights holders are to receive from streaming services via flat rates or advertising by users, but rather its method of allocating funds collected as a result of this. One of the more common ways to pay for music streamed on these services is via a pro-rata system, which has now been established in all large service providers. According to this model, the service collects all net distributable income from a population and divides the money among the rights holders in proportion to the aggregate streams each has generated. Therefore, each stream's monthly payment is determined by its market share in respect of all users can be expressed in formulas as:

$$\begin{aligned} & (\textit{net distributable revenue} \div \textit{total number of streams}) \\ & \times \textit{pro rata share of total streams} \end{aligned}$$

Despite Will Page's, former Chief Economist at Spotify, statements saying that the system has intrinsic fairness because of its validity, transparency and cost-effectiveness to operate; there are many debates regarding the consideration of using other payment models. Many have been calling for a user-centric remuneration system, including academics, performers, lyricists and composers of different subgenres in their respective trade bodies. In the user-centric system, the net amount of revenue received by each user shall be based on the overall number of streams produced by that user. Therefore, the monthly payment rate for a given stream depends on the market shares of each user, which may differ between them. As Will Page explains, user-centred distribution splits every consumer's subscription fee into a unique allocation to the tracks played by that consumer. (see House of Commons Digital, Culture, Media and Sport Committee, 2021)

Currently, there are already some concrete examples of platforms pushing and publishing the usage of a user-centric model instead of the pro rata industry standard. For example, Deezer has been improving its technology and services intending to achieve greater remuneration for artists since 2009. According to the company's website, Deezer has now been able to allocate revenue from artists using a user-centric payment scheme that will benefit not only those at the highest level of performance but also all genres, sizes and geographic locations. To this end, Deezer is

committed to pursuing the User Centric Payment System (UCPS), to increase fairness and transparency in the music streaming sector, both of which are core values of the company.

Another step of the Platform's longstanding commitment towards achieving a model that is fairer to artists was also announced in March 2023. As part of an initiative with Universal Music Group, the world's leader in music-based entertainment, it will explore new streaming models to better align the interests of artists, fans and streaming services. This initiative will not only be focused on the largest streamed artists on the platform but also ensures equal access to all stages of an artist's career, and it intends to benefit the broader music community as a whole (Deezer, 2023).

On the other hand, even if recently it has expressed an open-mindedness in exploring new payment models, the pro rata system is still defended by Spotify, and its director of economics, as the most efficient payout system due to the low administration costs. It is argued that user-centric payments could only benefit artists whose listeners were more likely than average to be listening to their tracks rather than those who have larger than average pro-rata market shares for streams. In addition, the growing complexity of the scheme will make distributions more costly in terms of administration and operating costs, these would likely be well within the current processing limits of modern computer systems. The bargaining of individual contracts per song is not efficient for platforms such as Spotify, due to the vast quantity of songs present in its catalogue. It would therefore be simpler and more effective for an online platform to provide all songs with equal conditions, giving right holders 70 % of their income in royalties on the content which is proportionate to its consumption.

The debate about whether the dominant preferential payment model should be followed by alternatives, like user-centric methods, certainly brings a positive and innovative air to the music market. New services are a concrete step forward in addressing creators' and consumers' concerns about fairness and transparency when it comes to the remuneration paid by stream providers. The existing contractual arrangements between the biggest music companies and streaming service providers, which could hinder innovation if exploited, is one aspect that deserves to be given additional attention and more transparency.

3.3.1 Performer vs song rights remuneration

As explained in “Economics of music streaming” (2021), there is also a substantial difference in the way the various rightsholders are remunerated. The process of remuneration for performers is relatively simple. The revenue of the recording shall first be received by the record

label or distributor; then, according to their agreement with the artist, they will pay him for his performance. Record deals are numerous and of various types, they are negotiated individually between the record label and the artist. A classic recording agreement is certainly the most frequent of them. Such an arrangement enables artists to assign their rights solely to the record label in exchange for an advance and royalties or a share of profits on recordings made by them within the scope of this agreement.

The distribution contract is another rather common type of agreement. In such cases, the record label shall enter into a contract with music streaming services under which it agrees to share recordings for an artist at a fee between 15 and 20 % of total revenue.

A different scenario occurs when an artist decides not to rely on a label but, rather, self-realise his or her music. In this case, they would have to make their music available via a distributor or an aggregator for streaming services in exchange for a predetermined fee per track but without the service provided by the record label such as promotion, marketing and data intelligence. Concerning song rights, this process is much more complicated. In the first place, the revenue from the songs is divided equally between the mechanical and public performances, while, for public performances, revenue is divided evenly between publishers and songwriters and composers due to the right to fair remuneration. For mechanical, the publisher and the songwriters and the composers shall be paid according to the terms of their contracts (UK's House of Commons, 2021)

Individual song agreements, whereby songwriters assign rights in certain works to a publisher and share part of their revenue with him, have been one of the more commonly used types of arrangements. Another contract widely used is the exclusive songwriters' agreement, in which a composer assigns all works he creates during one specific period to share the revenue and monthly or termly payments are treated as reimbursement advances

Conclusion

To conclude, I want to dwell on the path and evolution of the entire music industry; as we have seen, it has undergone a multitude of radical transformations until the advent of music streaming. This revolution had implications both for the sector as a whole but also for consumers and artists. Through how music is found, enjoyed and made available for listening, streaming has fundamentally altered the game's rules.

Moreover, the enforcement and regulation of intellectual property rights are becoming more difficult as technology develops. Piracy and illegal distribution have been a major problem since the inception of digital formats. Several solutions have been tried by streaming platforms, record labels, and artists themselves to cope with this situation, some of them more successful than others. Streaming has enabled artists to make themselves known not only in their home market but also globally, functioning as a launch pad for many emerging artists; moreover, contact with the audience has become much more direct and genuine thanks to the platforms. As a result, barriers to entry have been significantly reduced, allowing independent artists to release their music independently without having to go through a record label.

But the remuneration of performers remains an issue to which attention should be paid. The artist's income continues to be regarded as too poor despite improvement and increased emphasis on fairness and better compensation for artists by subscription services, especially if this is compared to the big revenues of the majors. The disparity has led to an increased awareness of the situation and a need for greater transparency from consumers.

Finally, the music business has experienced both opportunities and challenges as streaming technologies have become more widespread. The issues of equitable compensation and the enforcement of copyright are not resolved while streaming services make music available to listeners at unprecedented levels, which can be used by artists in new ways to reach their audiences. In the future, it will be important for the industry to continue exploring innovative solutions that strike a balance between streaming convenience and fair compensation of artists while protecting intellectual property rights.

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Note

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