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How Does Music Consumption Impact the Music Industry and Benefit Artists?

By

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An Honors Thesis in partial fulfillment of the requirements for the degree of Bachelor of Science
in Business Administration in Accounting

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Project Abstract

With the introduction of digital music in the 1990s, internet-based music consumption has become significantly simpler and increasingly more popular as more and more consumers are streaming, sharing, and discovering new music all across the globe. With this new development of digital music, the dynamics of the music industry have been affected dramatically both in terms of record sales and the way music listeners are consuming music. Unfortunately, with the rise of music in its digital format came the rise of illegal file sharing sites, causing many to believe that the music industry was headed for its impending destruction. However, legal online purchasing services and the more recent surge of streaming services like Spotify and Pandora have added an additional element to the structure of music consumption. Despite some of these negative effects that the digital format of music has had on the industry, perhaps it is just this increased discoverability and accessibility that has encouraged the rising popularity of live music. The purpose of this project is to understand the methods and relevant trends of music consumption, determine those benefits received by the artists, and provide guidance to artists about the rapidly changing dynamic of the industry.

Introduction

“No artist will be able to survive to be professionals except those who have a significant live business, and that’s very few,” Hartwig Masuch, chief executive of BMG Rights Management (as cited in Sisario, 2013).

With new music formats has come the ability to consume and discover music more easily and at higher velocities. The changing tastes and preferences of consumers have an incredible impact on the industry as a whole. In addition to the way music consumption has changed, so has the way in which artists receive compensation. In many cases, the prominence of the royalty is changing dramatically in response to the new era of streaming as a relevant method of music consumption. Instead of only receiving a percentage of record sales or radio revenues, artists are now entitled to collect their earnings based on the number of plays they receive from each streaming service. But, royalties and streaming revenue are not the only ways that an artist is able to make money. In order to more greatly understand how artists are able to indirectly benefit from this increase in accessibility, this project will study some of the revenue streams, such as live music sales, that come with an artist’s rising popularity.

Through an analytical approach, this project will address three major topics. First, how has each relevant media format impacted the music industry in terms of record sales? With this background information, this project will more comprehensively be able to explain what the industry can expect when a new format is introduced. Second, how have these new formats impacted music accessibility, and can that information provide insight as to how live music sales are growing? By understanding the indirect effects of increasing knowledge and artist discovery, is there a connection that has generated larger ticket revenue? Third, how have these innovations impacted artists in terms of revenue generated from record sales and live music sales? In other words, have these new formats and music sharing capabilities been a positive change in the

music industry, or are artists suffering the consequences of the industry's changing preferences? With an analysis of the relevant data and literature, this project will answer these questions and provide guidance on successfully marketing and selling music.

Project Outline

This paper will proceed with in the following format. Section one begins by analyzing the impact each media format has had on the music industry as it applies to generated revenue and music consumption. Section two consists of a data review of the relevant information regarding recorded music revenues varying by each format of music. This analysis is broken up into multiple time periods in order to see which formats had the most significant influences on the industry. Section three discusses artist compensation in order to understand how artists generate their income, specifically identifying the most significant sources of income. Section four discusses the impact of the diversity of formats in the recorded music industry on the live music sector. Lastly, the project concludes by providing a brief overview of the information presented and delivers guidance based on the findings over the course of this project.

Methodology

The majority of the recorded music industry data was obtained by examining the Recording Industry Association of America's North American Shipment Database, identifying specific time periods and selected formats. The data was collected from the perspective of total revenue levels and total units purchased from year to year and percentages of sales and percentages of units sold relative to the overall level of respective annual revenues and unit sales. Additional literary sources including online journal articles, online interviews, and additional web sources were used in order to obtain critical primary and secondary quality sources when reviewing the relevant literature. The financial data used to compare Spotify, Pandora, and Live

Nation was obtained from Statista, a statistics portal with data from more than 18,000 sources. The data pertaining to North American concert sales since 1990 was obtained from Pollstar, a music-oriented, collaborative database specializing in entertainment information.

Section I: Overview of the Recorded Music Industry

The Pre-Digital Era

In the post-World War II era, the most popular medium in record production was polyvinyl chloride, also known as “vinyl” (Taintor, 2004). Simply put, vinyl became the most prevalent choice for consumers with regards to affordable means of owning and playing music. It was in 1948 that Columbia and RCA, rivals in the industry, began to make vinyl ownership mainstream (Taintor, 2004). With the introduction of Columbia’s 33 1/3 rpm record and RCA’s 7-inch disc, the methods of producing and distributing affordable music became more possible (Taintor, 2004).

The late sixties brought about the significant popularity of the cassette as a means of record production. In fact, towards the end of the 1960s, while holding roughly the same amount of information as the \$6 vinyl, a blank cassette was sold for around \$3 (Taintor, 2004). It was with this innovation that record companies began to worry about the cassette as a potential disruption in the level of vinyl sales. This is because a blank cassette would allow consumers to create many bootleg recordings of their previously purchased vinyl record without actually having to purchase more music. But, it was during this period of growing popularity for the cassette that vinyl was facing a more threatening competitor.

With the introduction of the 8-track in the mid-1960s, consumers now had the ability to theoretically record twice as much music as was possible with the blank cassette. In addition, with its portability and more accessible use, it quickly became an accepted format for music consumption. Claiming 25 percent of all music industry revenue in 1974, it seemed as though the 8-track was the fastest growing format in the industry (Recording Industry Association of America [RIAA], 2016). However, the 8-track soon faced some challenges. For example,

manufacturers would often rearrange tracks of the vinyl in order to make the programs of the 8-track equal length (Taintor, 2004). Additionally, in the case where a song would not fit on one side of the program, the 8-track would abruptly stop in the middle of a track, and pick up again once the listener had switched the track (Taintor, 2004). But perhaps the most significant disadvantage of the 8-tracks' capabilities was the difficulty of recording other music. Being confined to the eight tracks after which the format was so famously named, the 8-track failed to provide the same ease of duplication that quickly became the norm with blank cassettes. With this being said, while the 8-track was capable of producing a higher quality sound than its counterpart cassette, and provided more versatility than vinyl, it essentially disappeared from the market in 1982 (RIAA, 2016). This is important to note because it is one of the first indicators of the music industry being a subject of the market's tastes and preferences. Clearly, convenience and versatility were significant factors when determining value to consumers of music.

In the early 1970s, the music industry became frustrated with 'bootlegging,' or illegally recording vinyl audio or radio broadcasts onto programmable cassettes. The largest argument was from record companies claiming that teenagers were hurting record sales by taping audio and swapping albums instead of purchasing physical copies of the albums (Taintor, 2004). Record companies pushed for an additional tax to be placed on blank cassettes in order to regenerate some of the lost record sales from bootleggers. After voicing this frustration, the U.S. Congress passed the 1971 Sound Recording Amendment to the 1909 Copyright Statute (Taintor, 2004). It was not until the late 1970s that music sales actually began to slide, falling 11 percent between 1978 and 1979, and failing to reach the previous high of \$4.1 Billion until 1984 (RIAA, 2016). Though, the decline in the industry at that time may have been a result of the economic recession of the late 1970s. In addition, with the introduction of the Sony Walkman in 1979, and

the increasing sound quality of the cassette, the cassette quickly became the most widely used music listening format in 1983 with nearly half of all recorded music industry revenue (RIAA, 2016). It was this change in the music industry that caused the Record Industry Association of America to lobby and convince legislators to grant a percentage of blank cassette sales back to music labels.

Just as the cassette had revolutionized the vinyl-dominated music industry of the 1950s and 1960s, a new format was introduced in the late 1980s. According to Callie Taintor, “With the introduction of the Compact Disc (CD), the ‘80s become the most explosive boom in recorded audio history, as consumers replace their vinyl collections. Within three years of the CD’s arrival in the marketplace, the electronics industry sells one million CD players” (2004). In fact, in 1987, record sales from the CD finally surpassed those from the declining vinyl format. This is an important innovation in the music industry as it again proves the consumer’s power in influencing the way music is recorded and sold.

This same power was displayed when the market refused to accept the Digital Audio Tape (DAT) in 1987. A largely unmemorable format, the DAT offered excellent sound quality, even when compared to the CD. However, one reason the music industry was hesitant to accept this format was because of its capability of near perfect duplication (Taintor, 2004). Again, in order to make up for these lost sales, record labels felt that it was necessary to receive a royalty from every DAT player sold (Taintor, 2004). This claim was met with much debate, and as time passed, the music industry began to believe that the DAT was not the format of the future. With that in mind, record labels simply did not record music on the DAT. Because this format lacked the accessibility as demanded by consumers and the profitability record labels desired, the DAT never became a significant factor in the music industry.

The Digital Era

From the beginning of the 1990s, and into the early 2000s, the CD consistently contributed the largest percentage of sales to overall revenue levels of the recorded music industry (RIAA, 2016). Being superior in nearly every way for the average consumer, there simply was no reason to prefer another form of music consumption. But the late 1990s were a revolutionary period of innovation for the music industry, as it brought about the relevance of music in its digital form. It was from a combination of the internet and digital audio recording that the MP3 was born. With the development of the internet and the growing pressures from consumers to be better, faster, and smaller, it only seemed logical that the music industry would see this new option of consumption. Because of its ease of use, duplicative abilities, range of selection, and accessibility, the MP3 was attractive in the eyes of consumers. Being that MP3s are cut into individual songs, consumers could now select which songs they most desired, without having to purchase a full-length album. In addition, because of their availability, consumers were able to download music immediately from their computers. With the recorded music industry peaking at its highest overall revenue level in 1999, it was exciting to have such a fresh and new format in the market.

However, with this new capability, music sharing and piracy became a larger concern of the record labels, and in response, the Audio Home Recording Act of 1992 was created. This act essentially imposed a two percent royalty on digital audio recorder manufacturers to be paid to copyright holders to make up for the lost sales from the increasing ease of piracy (Taintor, 2004). On that note, the late 1990s brought about one of the largest piracy battles facing the music industry. It was apparent that piracy and illegal music sharing was having a negative effect on the music industry, and the MP3 was only making it worse. After a number of RIAA member

labels successfully won a lawsuit with Napster in 2001, a new void was created in the market for internet music consumption. Where so many consumers had become familiar with internet downloads, there was a desire for a legal purchasing service. This is important, because it is in response to this fact that iTunes was created in 2003. In her web page from 2004, Callie Taintor claims, “In its first year, Apple (sold) 70 million songs at \$0.99 per song, creating nearly \$70 million in legal Internet music sales.” At this time, the industry was not sure how this new market would affect the revenues generated by physical media. What was clear, however, was that legal purchasing services allowed the MP3 to quickly grow into one of the mainstream formats of music consumption. In fact, according to the RIAA data, MP3 unit sales surpassed all other formats in the music industry in 2007, just 6 years after its legal relevance (RIAA, 2016). Yet despite the wild success of the MP3, a number of consumers did change their spending habits, and physical media formats did begin to suffer. The recorded music industry has been in decline since its peak in 1999 (RIAA, 2016).

The Streaming Era

The digital era, like all periods before it, sparked a redesign of recorded music industry’s revenue structure. CDs and other physical media continued to decline as the new, popular MP3 became the favorite. While it seemed that the MP3 was as attractive to the average consumer as music could legally be, the mid-2000s introduced an interesting concept of music consumption. With internet speeds and technological familiarity increasing rapidly, developers saw the opportunity to deliver music in yet another form. Similar to its digital counterpart, streaming allowed consumers to listen to music without having to download the songs to a computer or device. The music was simply delivered to consumers as a continuous stream of data. Through ad-supported or paid subscriptions, consumers had the opportunity to listen to more music for a

fraction of the cost of any other format. The only real disadvantage of streaming to the average consumer was that there was no transfer of ownership of the music being consumed. It was with this fact that many questioned the success of streaming as a relevant format in the recorded music industry. But because of its attractive qualities including accessibility to large libraries of music, inexpensiveness, ease of use, and portability, streaming too became mainstream. More recently, by the early 2010s, streaming became the fastest growing music format in the recorded music industry (“Streaming Music Revenue,” 2015). While the recorded music industry has plateaued since 2009, it is clear that streaming is having an effect on all preceding formats. Considering the current freeze in revenue levels and the three major contributors to the music industry, streaming is the only growing format today. Coupled with the recent resurgence of vinyl as a relevant media format, the music industry is currently facing its most diverse time in history with regard to the number of formats surpassing \$100 million in annual revenue. It is with this being said that the question remains for those involved in the production of music. How do these recent changes in the music industry actually affect the greater music industry, including live music sales, and how do these changes affect those artists responsible for making this industry possible?

Section II: Data Analysis

With this brief overview of the history of the recorded music industry in mind, it is clear that the music industry and its consumers have a definite impact on the innovation of new formats. Unfortunately, it is a commonly held belief that the music industry has recently been negatively affected by the rise of music in its digital format. Looking at the overall revenue levels of the recorded music industry, that accepted belief rings true. Since the introduction of music sharing in the late 1990s, there has been a significant decline in the overall revenue levels of recorded music (RIAA, 2016). According to the RIAA music database, after peaking at \$14.6 billion in 1999, the recorded music industry has generally declined to \$6.9 billion in revenue in 2014 (RIAA, 2016). That is a 53 percent decline in fifteen years, without considering the effects of inflation. Additionally, when the revenue of recorded music is converted into the equivalent of the value of dollars from 2014, the data still shows a peak in the music industry in 1999 (RIAA, 2016). However, with the adjustment, the music industry theoretically peaks at \$20.7 billion in revenue (RIAA, 2016). With the consideration of inflation, going only fifteen years back the data shows that overall revenue level of recorded music has decreased even more significantly-- approximately 66 percent. Because of this, it is clear that the recorded music industry is losing revenue. But there are a number of other factors to consider when evaluating the overall state of the music industry. Figure 1 below is an illustration of the overall recorded music industry adjusted for inflation between 1973 and 2014.

Music Industry Overview 1972-2014 Adjusted for Inflation (In Millions)

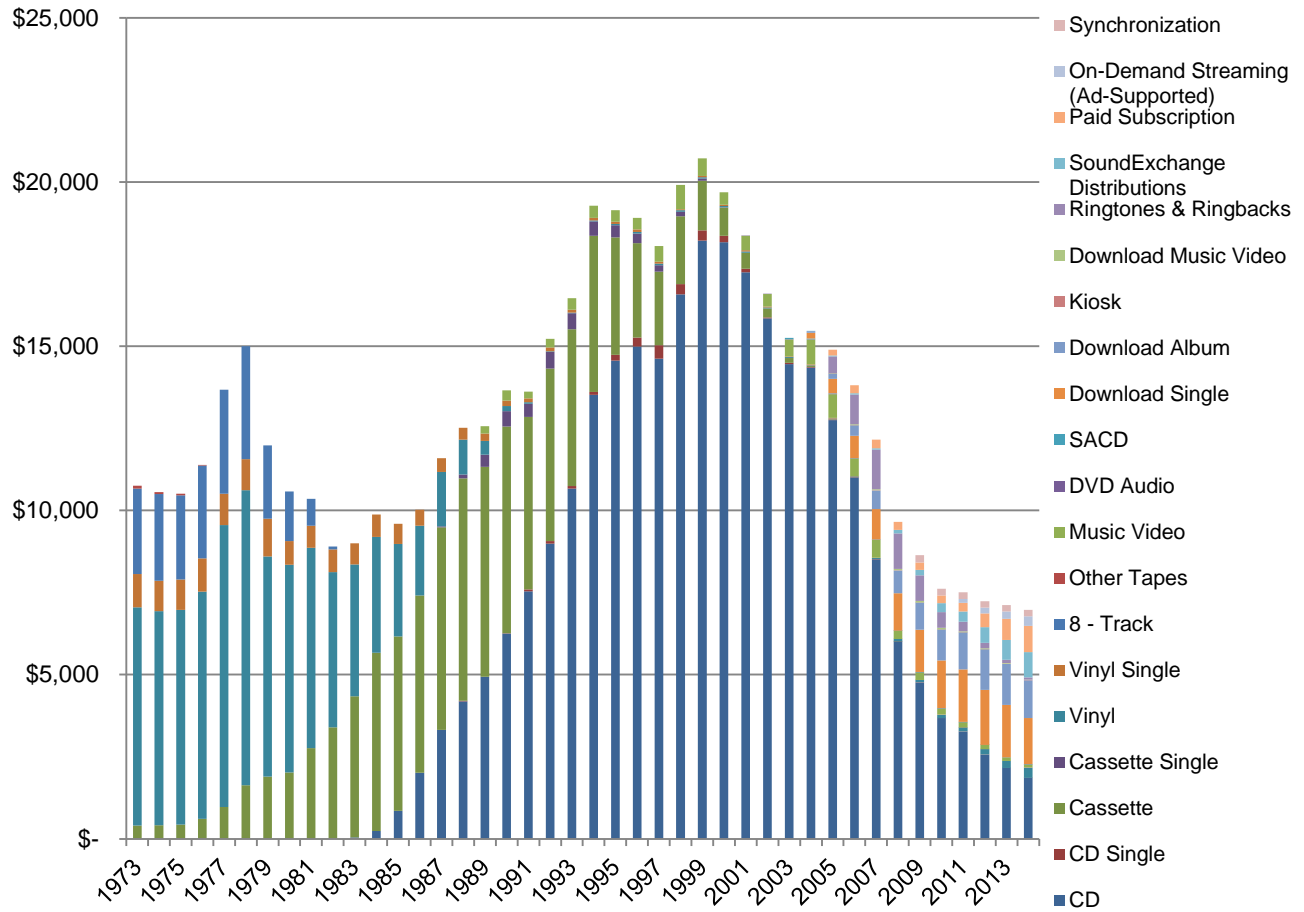


Figure 1: Overview of music industry sales. Generated from RIAA, Copyright 2016 by RIAA.

The Pre-Digital Era

Beginning in 1973, the popular format in music consumption was vinyl. In terms of overall revenue generated, vinyl remained the most successful format of music until 1984, when it was surpassed by the cassette (RIAA, 2016). However, despite losing its grip on the top position, vinyl sales did not lose relevance until the early 1990s (RIAA, 2016). It was during this time of vinyl relevance that the music industry grew with each year. Furthermore, the only time the industry dipped during the pre-digital era was in the late 1970s and the early 1980s. While

many of the music industry giants attributed these decreases in revenue in 1980 and 1982 to the ease of duplication and bootlegging offered by the growing cassette, it should also be noted that during this time, the globe was experiencing a severe economic recession. By analyzing the growth of vinyl and the cassette between 1979 and 1981, the data shows that the two formats grew together in terms of revenue created (RIAA, 2016). However, 1981 marked the beginning of the end of relevance for vinyl. Every year after 1981 showed a decrease in revenue generated until finally falling below \$100 million in sales in 1991 (RIAA, 2016). Regardless of the recession that struck in the late 1970s and early 1980s, there is substantive evidence to suggest that the cassette was responsible for the death of vinyl.

Just as vinyl continued to lose revenue during the 1980s, cassette sales rose to compensate for the difference. After examining Figure 2 below, showing just vinyl and cassette revenue in the period from 1981 to 1989, it is worth noting that the revenue levels from just these two formats stayed between \$3.7 billion and \$4.2 billion (RIAA, 2016). To establish the context of this fact, during the same period, the recorded music industry, including all available formats, experienced revenue levels ranging between \$4.0 and \$6.6 billion (RIAA, 2016). In essence, it was during this time that the cassette replaced vinyl as the most popular format of music consumption. About eight years after its relevance, in 1984, cassette claimed nearly 55 percent of the revenue in the recorded music industry, officially claiming dominance over vinyl (RIAA, 2016). But 1984 also proved to be an important year for what would soon be a serious competitor in the music industry. Figure 2 and Figure 3 below illustrate the competition between vinyl and cassette during the 1980s and a comparative overview of recorded music industry sales in 1984, respectively. Figure 3 also highlights the relevant beginning of a new format in 1984.

Vinyl vs. Cassette 1981-1989 (In Millions)

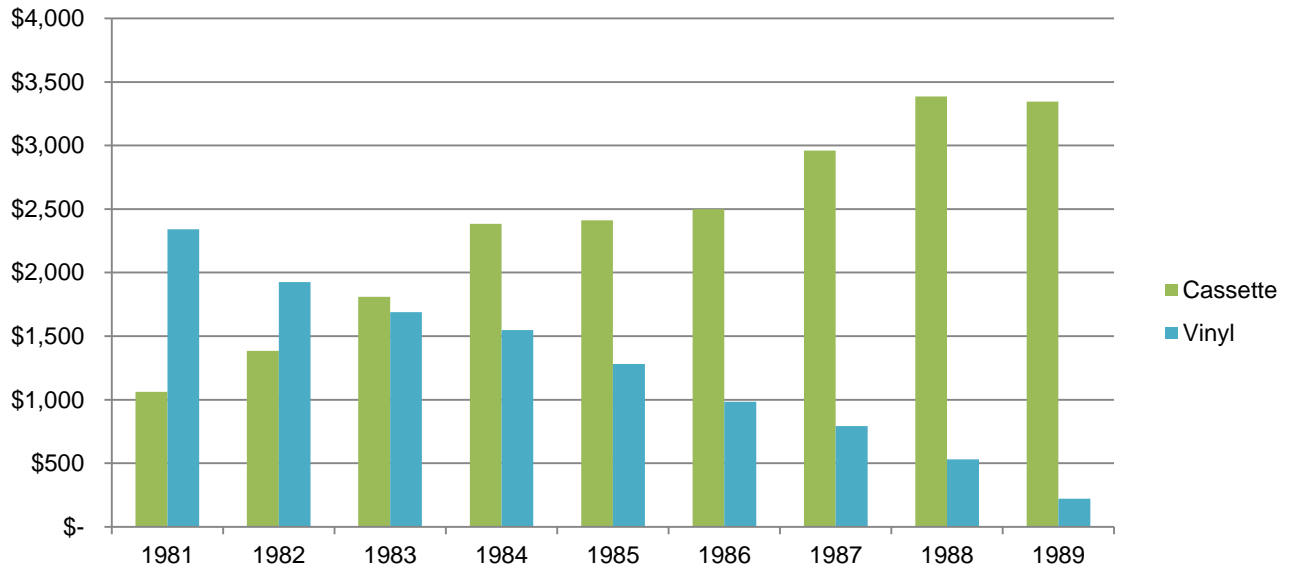


Figure 2: Vinyl and cassette comparison between 1981-1989. Generated from RIAA, Copyright 2016 by RIAA.

Comparative Overview of Music Industry Sales 1984 (In Millions)

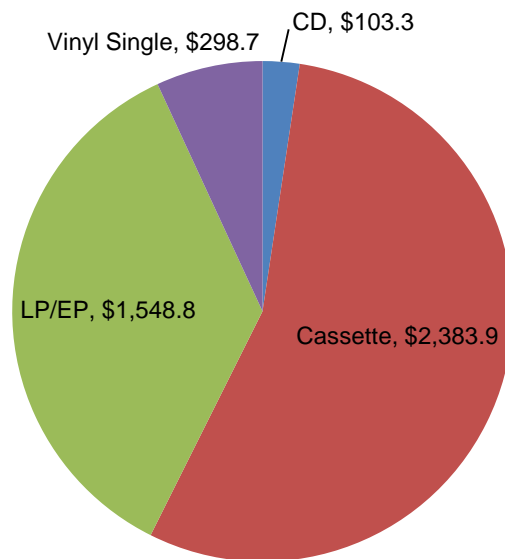


Figure 3: Overview of industry sales in 1984. Generated from RIAA, Copyright 2016 by RIAA.

Just one year after being introduced to the music industry as a purchasable music format, the CD generated \$103 million in sales in 1984 (RIAA, 2016). Between 1984 and 1989, CD sales rose from \$103 million to nearly \$2.6 billion (RIAA, 2016). However, perhaps a more significant piece of information is that by 1990, the CD was the only growing format in the recorded music industry. By 1991, the CD claimed a title it would hold for many following years—the largest revenue generating format in the recorded music industry. Reacting just as vinyl had when confronted by the cassette, the cassette itself soon began its gradual decline in 1992. Unlike the death of vinyl however, the rise of the CD was so large that between 1989 and 1999, the overall level of revenue attributable to just cassette and CD more than doubled from 6.1 billion to 13.9 billion (RIAA, 2016). Below, Figure 4 illustrates the rapid growth of the industry that came with the popularity of the CD.

CD and Cassette 1989-1999 (In Millions)

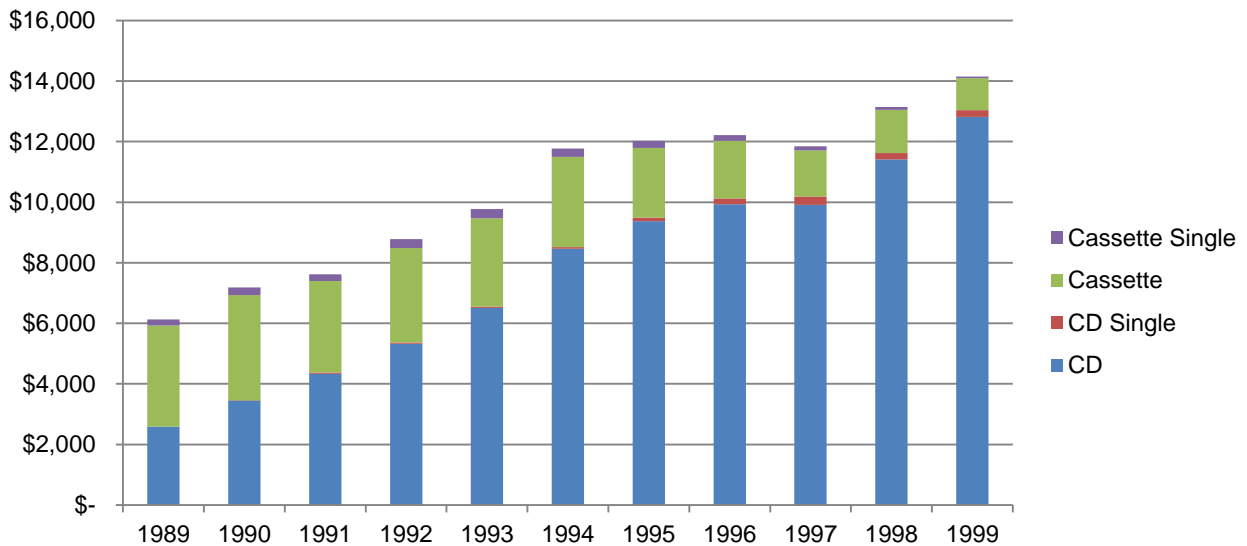


Figure 4: CD and cassette growth between 1989 and 1999. Generated from RIAA, Copyright 2016 by RIAA.

Not only did the CD continue to grow from the mid-1980s until the early 2000s, it dominated the industry. In fact, after the CD first claimed the largest share in 1991, over 55

percent of total revenue, it went on to generate nearly 96 percent of the recorded music industry’s sales in 2002—by far the largest percentage of any formats in the history of the recent industry (RIAA, 2016). The CD also made history in 2000 when it generated \$13.2 billion in revenue, alone (RIAA, 2016). This was, and still is, the largest amount of revenue generated by any format in any year. It is important to understand the magnitude of this fact in order to begin analyzing the driving forces behind the popularity of this format. Figure 5 below illustrates the dominance of the CD on music industry sales in 2002.

Comparitive Overview of Music Industry Sales 2002

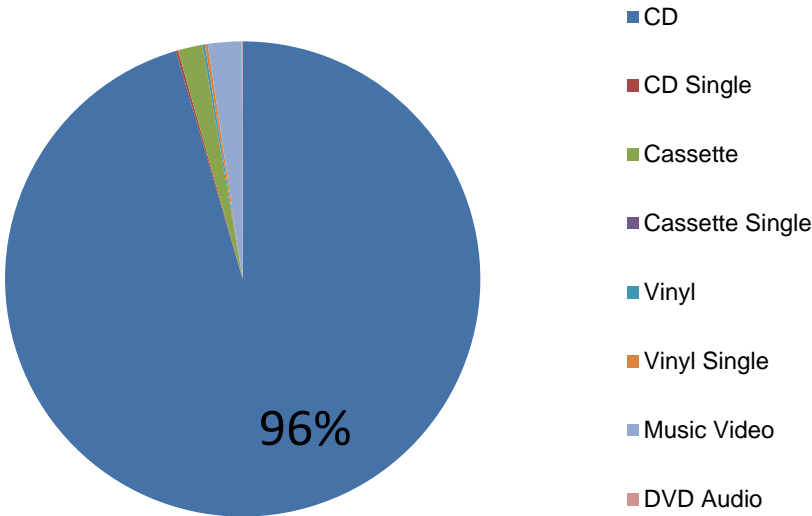


Figure 5: Comparitive overview of music industry sales in 2002. Generated from RIAA, Copyright 2016 by RIAA.

The CD’s Dominance

Entering into a market with two already established formats accounting for nearly 100 percent of the industry’s revenue, the CD was faced with the difficult task of competition. In order to be successful, the CD had to prove that it was better than both cassette and vinyl. With this in mind, the CD started with a distinct advantage — duplication. One of the most attractive

characteristics of the cassette was its ease of duplication. Although cassette could not record music with as high of quality levels as vinyl, the ease of duplication, portability, affordability, and accessibility made it inherently better for the general music consumer. As expected, when the CD arrived on the scene, it brought a number of qualities that were unique to this new format. In terms of duplication, the CD was capable of near perfect duplication. This is significant because it took one of the cassettes most attractive assets and did it better. Along those lines, with the ability to skip and start specific songs exactly when they appear in the album, users no longer had to fast-forward or rewind their cassettes, constantly checking to see if they had reached the correct destination. In addition, the CD initially provided a more durable form of consumption. Where fast-forwarding and rewinding was damaging to cassettes, causing some records to become unlistenable, the CD offered more damage-resistance. In addition, as CD players were developed for home stereos, cars, and other methods of portable consumption, the CD became easier to use than the cassette. Simply put, the CD was better than the cassette in nearly every way. With this in mind, tied with the RIAA database supporting the CD's dominance, it is clear that consumers preferred this new format. Again, this is significant because it indicates the consumer's power to accept a format into the industry. While the CD dominated the recent industry much longer than any other format, this consumer power was once again revealed in the early 2000s. Additionally, by using a similar analysis, it is clear that the music industry took a turn in 2004.

The Beginning of the Digital Era

It is commonly accepted that piracy has had an inverse effect on all revenue generating formats of the music industry. Record companies and artists have battled illegal music sharing sites and other means of prohibited duplication as long as piracy has been possible. In 1999, sites

like Napster became a serious threat to the health of the industry. Between 1973 and 1999, the overall revenue levels of the industry increased nearly every year (RIAA, 2016). However, seemingly in response to this new, “free” alternative, the music industry declined nearly 20 percent between 1999 and 2003 (RIAA, 2016). While the music industry was able to recuperate some of those lost sales in 2004 with the introduction of legal music purchasing sites, the industry’s revenue has declined with each year thereafter. Figure 6 below shows the impact of piracy beginning after 1999 and the introduction of internet-based consumption with downloaded digital music beginning in 2004 and streaming relevance beginning in 2010. Considering the effects of inflation, the music industry has declined 66 percent since 1999 (RIAA, 2016).

Digital Era Overview Adjusted for Inflation (In Millions)

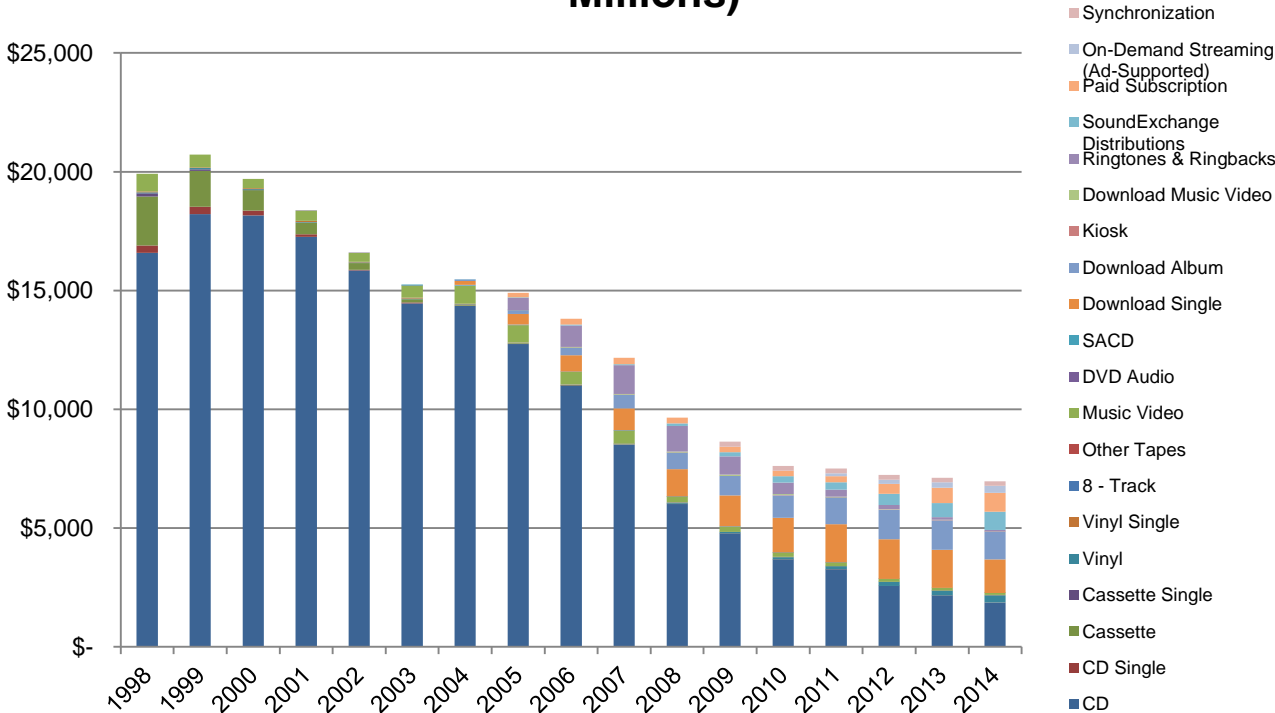


Figure 6: Digital era industry overview adjusted for inflation. Generated from RIAA, Copyright 2016 by RIAA.

Since the beginning of internet sales in the digital era, specifically since 2004 with the introduction of legal music purchasing sites, the number of units purchased has told a different

story of the consumption dynamic in the music industry. Since the introduction of the MP3, ringtones, and ringbacks as relevant music formats, there has only been one year that the number of units purchased has been lower than the 1999 peak of nearly 1.2 million units purchased in the pre-digital era (RIAA, 2016). That is to say, with the introduction of the digital music format, consumers have been purchasing more units of music with each passing year. In fact, between 2004 and 2012, the digital album and digital single formats grew from only \$184 million to \$2.8 billion in total revenue (RIAA, 2016). More impressively, only three years after its legal introduction, digital albums and digital singles accounted for nearly 47 percent of the total units sold among all formats of music (RIAA, 2016). In 2012, digital music was the largest contributor to the total revenue of the recorded music industry (RIAA, 2016). This is significant because, for the first time since 1990, the CD was not the leading contributor to the overall revenue of the recorded music industry. While it seemed inevitable that the CD would eventually lose its shine, consumers made it clear that digital was the best format to fit their needs. To date, the digital format claims the lion's share of the music industry with 37 percent of the total revenue generated (RIAA, 2016). Despite its defeat over the CD, it is important to note that in the past couple of years, the recorded music industry has seen a plateau in overall revenue level. This is important because there is a new format replacing the revenues of the declining CD and digital downloads. This current trend shows that the format responsible for this plateau in industry revenue is streaming.

The Streaming Era

Today, the only growing relevant format of music consumption is streaming. With the CD's decline beginning in the early 2000s and the digital format's decline beginning in 2012, the ability to convince consumers to spend more of their discretionary income on purchasing music

is becoming increasingly difficult. To the average consumer, while digital and streaming can offer the same quality of product, the fact is that streaming offers a much larger selection at a much more affordable cost. With the nearly infinite libraries of songs that streaming can provide at any place and time, it is no surprise that streaming has so quickly been accepted as a relevant format in the eyes of consumers. Just as the recorded music industry has adapted to each new format depending on the preferences of consumers, streaming is finally beginning to prove itself as one of the leading formats.

Despite the recent lull in the growth or decline of the overall revenue levels of the recorded music industry, there has been a change in the dynamic of the number of users involved in each format of the industry. To identify the formats considered to be streaming, RIAA includes SoundExchange distributions (estimated payments in dollars to performers and copyright holders for digital radio services under statutory licenses), paid subscriptions, and on-demand streaming (ad-Supported) as streaming (RIAA, 2016). However, there is no data in the RIAA database indicating the number of units sold regarding SoundExchange distributions or on-demand streaming. This is because streaming without a paid subscription does not transfer a unit of music to the consumer. The consumer does not own anything related to the music industry when using ad-supported streaming. Yet, the data behind paid subscriptions gives some useful insight about the behavior of the larger streaming format. For example, Figure 7 below indicates that in 2014, paid streaming subscriptions only accounted for 0.5 percent of the total number of units sold (RIAA, 2016). However, that same category, paid subscriptions, accounted for nearly 12 percent of the total revenue generated in the industry (RIAA, 2016). This is important because it signifies the decision of many consumers to switch from digital to streaming as a primary source of consumption. This is a trend that has been rising significantly since 2004.

More specifically, the streaming recorded music industry has grown from \$6.9 million in 2004 to nearly \$1.9 billion in 2014 (RIAA, 2016). More recently, streaming has nearly doubled its revenue earned since 2012, when streaming revenue levels were just over \$1.0 billion (RIAA, 2016). Figure 8 below shows the growth of the recorded streaming sector since 2005.

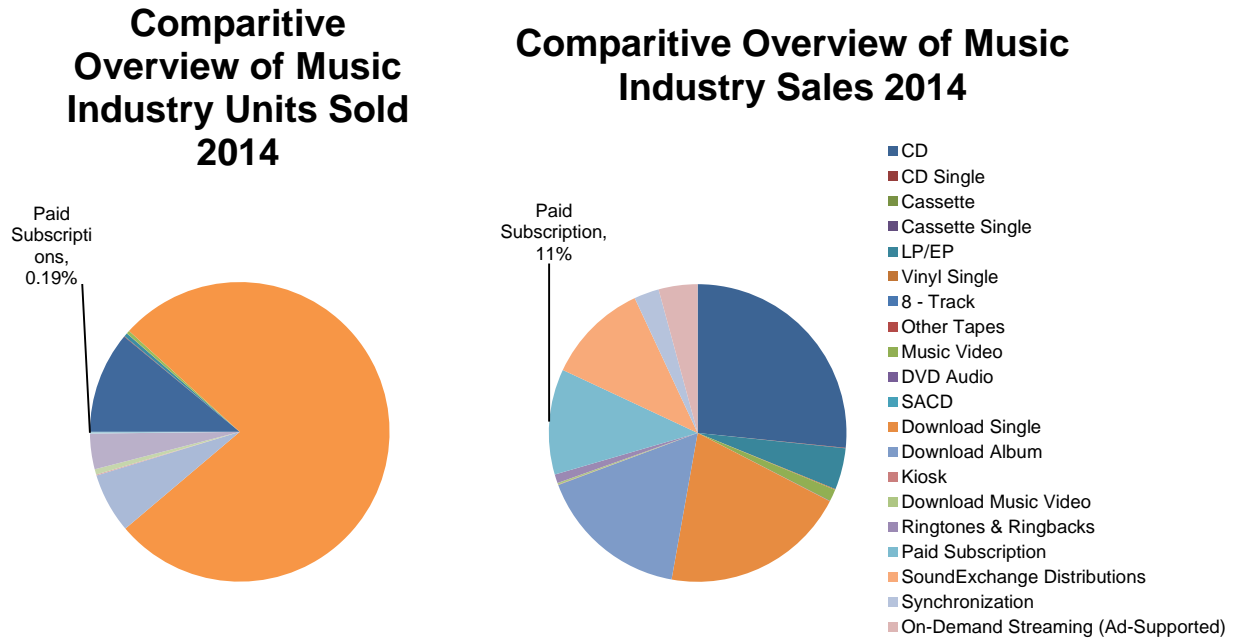


Figure 7: Streaming units sold and percentages of revenue in 2014. Generated from RIAA, Copyright 2016 by RIAA.

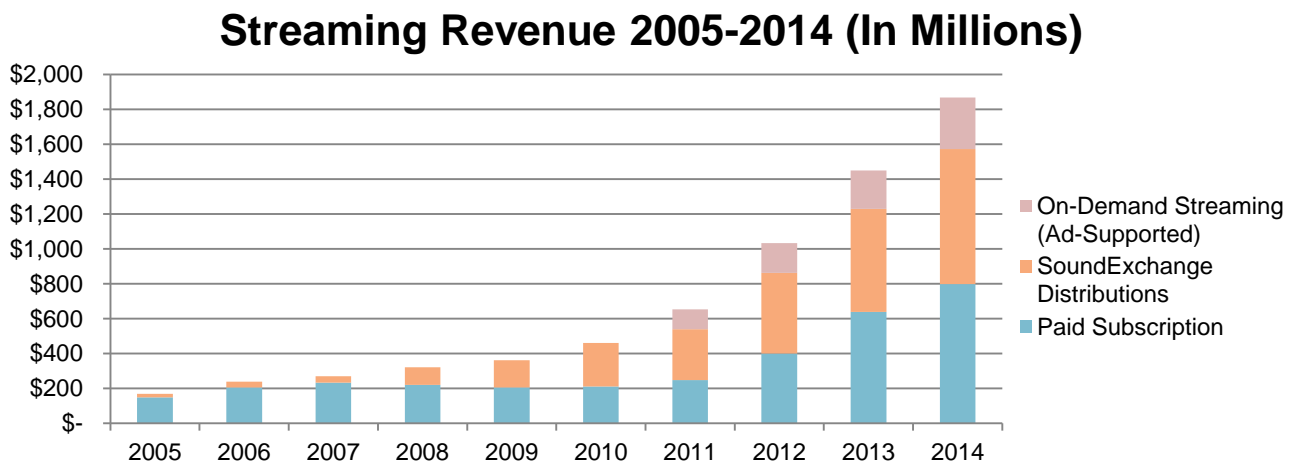


Figure 8: Streaming revenue since 2005. Generated from RIAA, Copyright 2016 by RIAA.

Another factor influencing the performance of the music industry during this era was the economic recession that took place most significantly between 2007 and 2009. In times of economic hardship, consumers will generally spend less on unnecessary goods. While music is certainly an important part of any culture, it is one category of goods that can be forgotten by some consumers in times of recession. Unfortunately for the recorded music industry, that meant that the recession would cause sales to fall even faster than the unwelcome downturn that began in 2000. In 2007, for the first time in recorded music history, the industry declined by over 10 percent in one year (RIAA, 2016). The following three years, the industry declined even more severely by 21 percent in 2008 and 12 percent in both 2009 and 2010 (RIAA, 2016). The effects of the recession only heightened the declining popularity of recorded music in the eyes of consumers. However, since the recession, revenue recorded music industry, unadjusted for inflation, has been relatively stagnant, as streaming seems to fill the void created by the physical and digital decline. Considering its timing of introduction and its relative less expensiveness, it is no surprise that streaming has become one of the relevant sectors of the recorded music industry.

Clearly, the streaming sector is a significant format among consumers as a basis for music consumption as it currently serves the fastest growing format in the recorded music industry. Although this new possibility seems to have halted the growth or decline of the recorded music industry, artists are concerned about the effects that rise from this recent change. While many believe that streaming, along with many other factors coming from the digital era are what are killing the industry, streaming may actually be the format that saves it. In order to examine the probability for artists in relation to the new dynamic established by the industry, it is important to consider the significant revenue streams available to artists.

Section III: Recorded Music Compensation

Pre-Digital Overview

Just as the music industry has changed dramatically over the years, so have the methods of compensation for the artists that record the music. Regarding the profitability of recorded music, prior to the streaming era, artists had most often been compensated by a portion of physical media sales and royalties from licensed airplay. Physical sales, from the sale of vinyl, cassette, cd, and other tangible forms of music, have all followed the same general structure of compensation. Though moving through time, more characters involved in the production of music has often meant smaller portions to be divided among the artists. According to an article in Rolling Stone magazine titled “The New Economics of the Music Industry,” Steve Knopper, the author, provides the details of how the revenue is divided amongst those involved. In his article, Knopper talks to Josh Grier, a music-business attorney for artists such as Wilco and Ryan Adams to see what happens to all of the money on an album listed for sale at \$17.98 (Knopper, 2011). When an album is sold, retailers, in order to make a healthy profit, will take about \$5.40, or 30 percent of the suggested retail price (Knopper, 2011). About 91 cents of the price is allocated to publishers and songwriters (Knopper 2011). Assuming the producer does not take a cut of the revenue, artists and record labels are left with \$11.67 to divide (Knopper. 2011). However, due to the agreement between labels and artists, labels see about \$9.74 in proceeds compared to the \$1.93 in royalties for the artists (Knopper, 2011). That means that for every record sale, the artist takes home roughly 16 percent of sales. However, after packaging and other hidden costs, that percentage can actually be closer to 11 percent for an established artist (Knopper, 2011). Looking at another example of physical media sales, according to a BBC article by Natalie Donovan, only 13 percent of the CD sales are actually received by the artists (Donovan, 2013).

The other 87 percent of a CD sale is shared with labels, government, retailers, manufacturers, distributors, and the cost of obtaining a copyright (Donovan, 2013). According to her article, the percentage of revenues paid to artists has been recently decreasing. For many new artists, that percentage is closer to five or ten percent because of the simple desire for exposure (Donovan, 2013). With recorded music purchases having been in decline since 1999, that means decreasing compensation from two elements of the process. This is significant because artists have already been receiving smaller portions of CD revenue, despite there being less and less of that revenue to share each year.

Another form of compensation for artists before the age of streaming was airplay royalties. The most common association with royalties is payment for radio airplay. According to Broadcast Music Inc. (BMI), when commercial radio stations play a song on air, depending on the licensing fees collected from stations that performed work in combination with the number of times each work aired on those stations, there is a certain rate of royalties that are due to the original composer of the work (BMI, 2016). Though this is a seemingly fair method of compensation, there is more inclination for the less-popular artists to be pushed aside. The more stations on which a song is played, the larger the royalties associated with that song will be. Furthermore, there is an additional piece of compensation that further promotes the established artist. According to BMI, there is something called “The Hit Song Bonus.” Essentially “The Hit Song Bonus” is the portion of the royalties available for distribution that are allocated specifically to be received by the owners of the highest performing songs during a quarter (BMI, 2016). BMI also compensates another pool of songs with something called “The Standard Bonus.” These tracks are eligible for additional compensation if they have received airplay over 2.5 million times, and are continuing to be played at a certain rate each quarter (BMI, 2016).

Unsurprisingly, this further benefits the already well-established artist, leaving many of the aspiring artists to struggle to find significant earnings from this revenue pool. While there are many other forms of compensation related to these royalty payments, the internet and legal music purchasing sites added another layer of depth to the compensation structure of recorded music.

Digital Compensation

According to the same article in Rolling Stone titled “The New Economics of the Music Industry,” the compensation process related to legal purchasing sites mirrors that of a physical purchase. Services, such as iTunes, will first act as the retailer, claiming approximately 30 percent (Knopper, 2011). After the first cut is taken, the rest of the proceeds are sent to the record labels to appropriate the funds amongst the correct parties (Knopper, 2011). Though each label establishes its own agreements, artists generally receive between 12 and 20 percent of each sale (Knopper, 2011). One significant difference however that benefits artists in this format is the reduction of packaging costs. Although the costs of creating an album certainly still exist, the production of physical materials no longer exists. Once a file is available for transactional duplication, the artist is no longer has a financial obligation to create more of that file.

Services such as YouTube and Vevo also add another level of complexity to the compensation of the music industry. Becoming more popular with each year, consumers are watching videos and listening to music on these sites because they offer an easy and inexpensive route to music consumption. Because of this trend, many advertisers will approach services like YouTube and pay for an advertisement to be played before or during the selected video. Because artists are ultimately responsible for the attraction of these advertisers, YouTube will then share a

portion of the profits with the record label supplying the video. For larger artists, the agreement can be around \$1 per 1,000 plays (Knopper, 2011). With the number of artists who have shared their music on YouTube, many record labels believe that this is a valuable source of income. Knopper goes on to share a quote from Eric Garland, the CEO of a company that measures online metrics such as file-sharing numbers and sells the data back to label. Garland says, “I know individual artists who make tens of thousands of dollars a month on YouTube, and I know of individual artists who make more money on an individual basis from YouTube than they do from iTunes” (as cited in Knopper, 2011). This is important because as technology continues to evolve and consumers modify their preferences, labels will be capable of creating lucrative opportunities. The now popular streaming option is once again proving that idea.

Streaming Compensation

With the introduction of streaming as an alternative for recorded music consumption, artists have found another way to generate revenue from recorded music in addition to the previously mentioned means of compensation. Similar to the traditional royalty formula used in the previous section, on streaming sites like Spotify or Pandora, an artist generates earnings as a percentage of all available royalty payments depending on the number of plays an artist’s music receives relative to the overall number of plays on the service. Streaming sites equitably distribute a significant percentage of their own revenues to a cataloged artist based on that artist’s ability to help generate the revenue in the first place. Currently, Spotify and Pandora two of the most popular streaming services in the music industry, can provide some useful information about the new element of artist compensation.

According to a page on Spotify’s website titled “Spotify Explained for Artists”, Spotify returns roughly 70 percent of their earned revenue to the rights holders (Spotify, 2013). The other 30 percent is kept by Spotify. The way Spotify decides an artist’s payout is determined the formula below.

$$\text{Spotify Monthly Revenue} \times \frac{\text{Artist's Spotify Streams}}{\text{Total Spotify Streams}} \times \sim 70\% \text{ to Master \& Publishing Owners} \times \text{Artist's Royalty Rate} = \text{Artist Payout}$$

It is clear from this formula that an artist is not necessarily paid by the play, but rather as a percentage of the revenues generated during the period, based on the level of usage that the artist contributes to the total usage of the site. For example, an artist with one hundred plays during a month where Spotify experienced lower levels of usage could receive a larger payout than an artist with one hundred plays in a month where Spotify experienced higher levels of usage, depending on the level of revenue generated during the period. The second multiplier is a significant factor in determining an artist’s payout. Additionally, Spotify and Pandora discriminate their payouts depending on the status of the user that plays an artist’s songs. According to an article in Investopedia titled “How Pandora and Spotify Pay Artists”, these payout formulas, considering the discrimination of premium and ad-supported listeners, generally pay artists \$.0084 and \$.006 for Spotify users, and \$.0025 and \$.0014 for Pandora users (Nath, 2015). Furthermore, according to “Spotify Explained for Artists”, this system works out to produce the following estimated payout figure below for just one month. Because Spotify is a Swedish-based company, the numbers below are presented in euros. While this graph should be viewed with some skepticism due to the ambiguity of some of the terms used, there does seem to be some plausible information behind the data.

Actual Monthly Royalties for July 2013 in Euros (per Spotify)

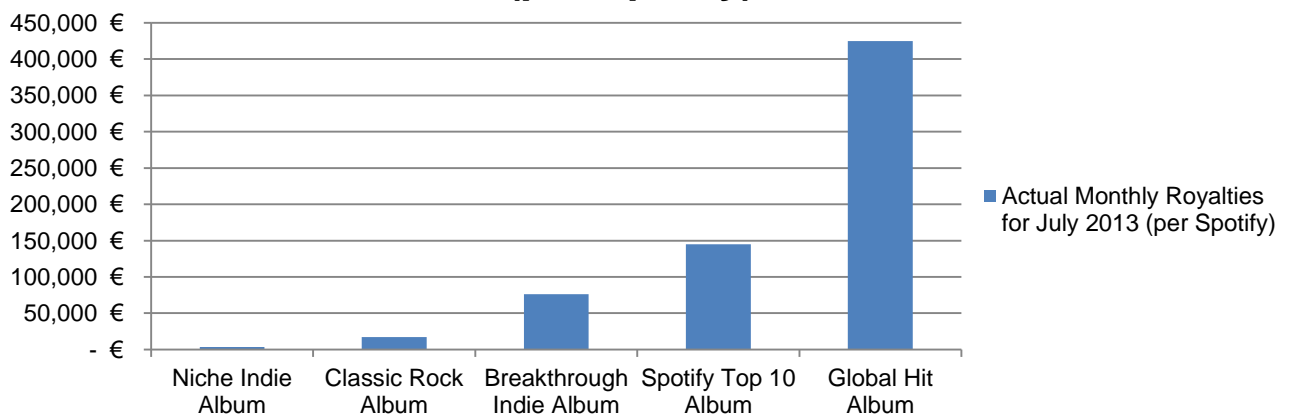


Figure 9: Estimated distribution from Spotify in July 2013. Recreated from Spotify, Copyright 2013 by Spotify.

In an article titled “Maybe Spotify Isn’t Killing the Music Industry After All,” Andrew Flowers provides the details of a conversation he had with a streaming-skeptic artist, David Lowery, specifically noting the artist’s feeling about the streaming giants. In the article, Flowers reveals the results of a study that investigated the impact of streaming on the digitally and illegally acquired platforms of music consumption. The test revealed that on average, there was one fewer sale for every 137 streams (Flowers, 2015). The study also showed that for every 47 streams, there was one less pirated download (Flowers, 2015). This is significant because it more closely indicates a structural shift in the revenue distribution of the industry. Flowers goes on to share the work of Joel Waldfogel and Luis Aguiar, suggesting that, “Spotify has had a revenue-neutral impact on the music industry” (as cited in Flowers, 2015). Given the fact that the music industry was in decline before streaming capabilities became relevant, there is little evidence to suggest that consumers would have suddenly changed their spending habits in the music industry (Flowers, 2015). This is an important consideration when understanding that the streaming component of the industry now accounts for roughly 30 percent of the overall generated revenue in the recorded music industry. Though there has been some displacement in the sale of physical

and digital music because of streaming capabilities, the overall impact of streaming on the recorded music industry could actually be neutral at worst. But perhaps the most significant value of this new dynamic produced by streaming is the increase in the level of awareness that has come with the digital era. Perhaps it is this new ease of music discovery offered by streaming services that has led to the drastic growth in the live music industry in recent history. It is with this perspective that the real value of streaming comes to light.

Section IV: The Live Music Sector

Despite the recorded music industry reaching its peak and finally beginning its drastic decline in terms of overall revenue levels in 2000, the live music sector of the music industry has experienced a radically different trend, especially since this mark. By examining Pollstar's 2014 year-end business analysis of the North American concert industry, it is clear that between 1990 and 1999, the North American concert industry ticket sales varied on a small scale with a low of \$.830 billion in 1991 and a high of \$1.5 billion in 1999 (Pollstar, 2015). However, between the years of 2000 and 2014, the years signifying the digital capability of music as a consumable product, the revenue level of North American concert industry ticket sales has increased from \$1.7 billion to \$6.2 billion (Pollstar, 2015). This is important because it signifies the impact that the digital capability has generally had on the live music industry. It is with this in mind that it becomes clear that the revenues generated in the all-encompassing music industry are actually shifting toward the artists themselves, instead of the massive chain of recipients that has been more commonly associated with the recorded music industry. Because it is widely accepted that live music revenue is the most direct form of compensation of the performing artists, it is essential to gather an understanding of how the live music industry is responding to the changing dynamic of the industry. Figure 10 below recreates the data presented in Pollstar's 2014 year-end business analysis of the North American concert industry.

North American Concert Industry Ticket Sales (In Millions)

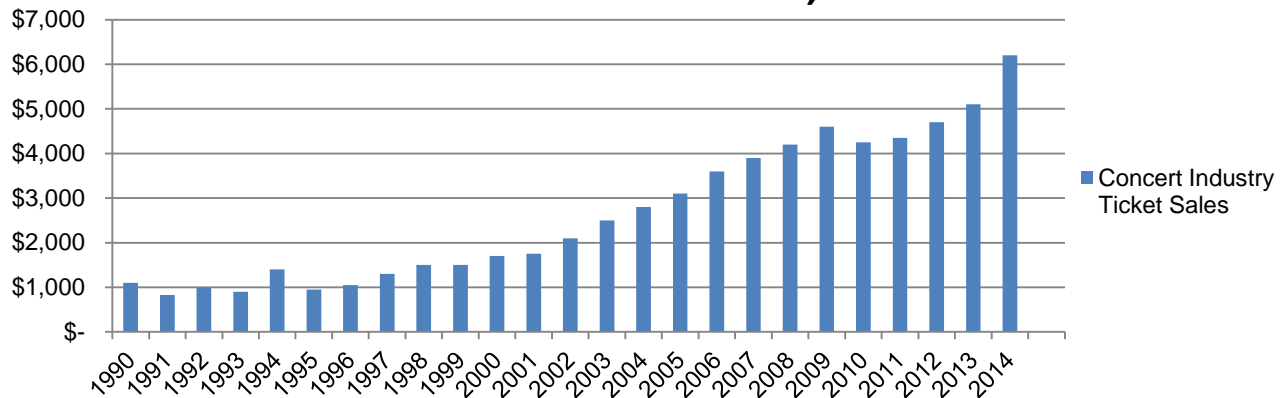


Figure 10: North American concert industry ticket sales since 1990. Recreated from Pollstar, Copyright 2015 by Pollstar.

Since 2004, coinciding with the introduction of the legal option of purchasing music digitally, the streaming music industry has grown exponentially. SoundExchange distributions, paid subscriptions, and ad-supported streaming have grown the streaming industry from only \$6.9 million to over \$1.8 billion in just ten years (RIAA, 2016). The fact is, in an industry where consumers are spending less on all formats except streaming, there has been a shift in the number of users that select streaming as a primary source of music consumption. Again, streaming is currently the only relevant format in the industry that is growing both in terms of revenue and users. For Spotify and Pandora, the revenue levels behind these two companies share an important correlation with that of the growing live music businesses. By comparing the revenue levels of the past six years of these large streaming companies with that of a large live music business, Live Nation, it seems as though streaming has encouraged the live music industry to grow. The data for Figures 11-13 below show the financial success of the mentioned companies in this section. The information was obtained from Statista.

Spotify Revenue 2009-2014 (In Millions of Euros)

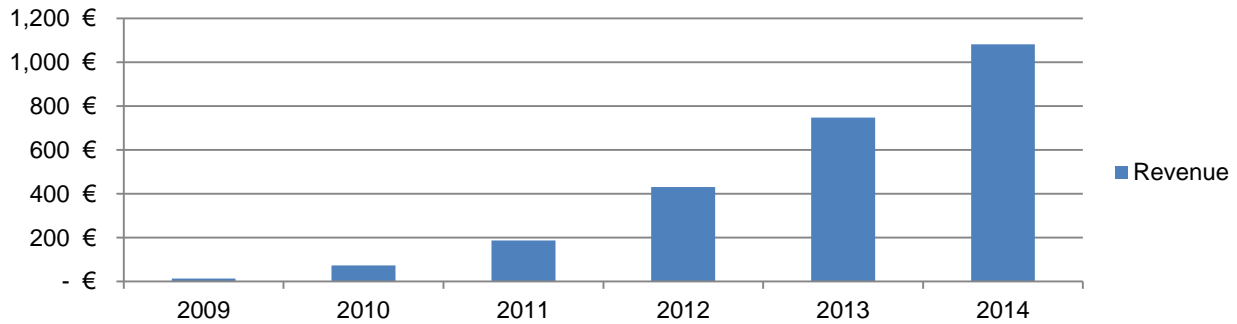


Figure 11: Spotify revenue since 2009. Recreated from Statista, Copyright 2015 by Statista.

Pandora Revenue 2008-2014 (In Millions)

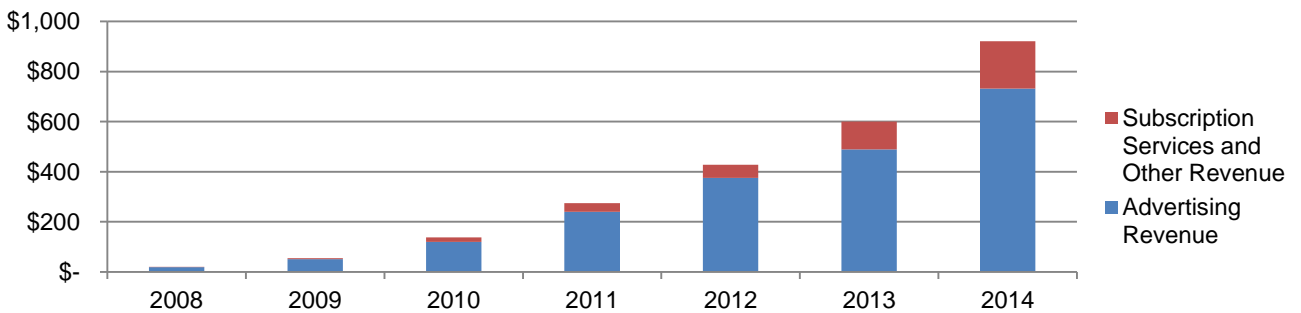


Figure 12: Pandora revenue since 2008. Recreated from Statista, Copyright 2015 by Statista.

Live Nation's Concert Revenue 2008-2014 (In Millions)

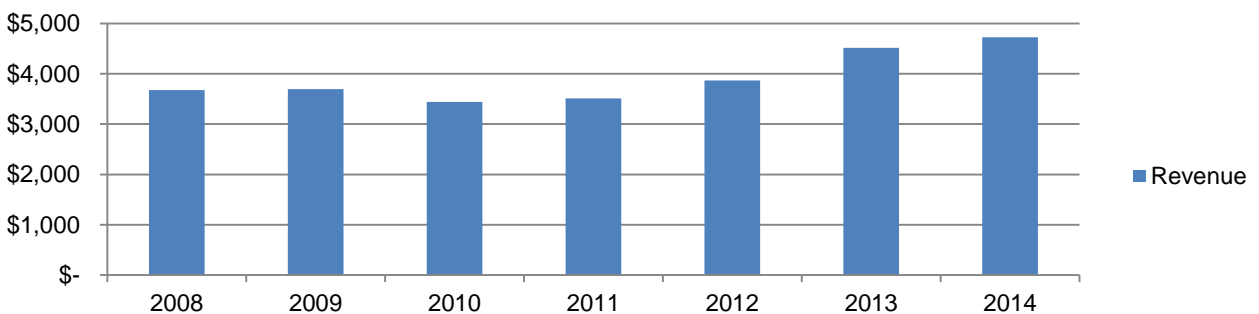


Figure 13: Live Nation revenue since 2008. Recreated from Statista, Copyright 2015 by Statista.

When comparing the overall ticket sales from the Pollstar data with the revenue levels of Live Nation between 2008 and 2011, there is a clear plateau of growth. While it is evident that the more recent financial crisis that began 2008 affected both of these entities, both the industry and Live Nation saw slight growth between 2008 and 2009, decline from 2009 to 2010, and a

return to growth thereafter. This is to say that Live Nation is a representative product of the recent live music industry. Also from the graphs of Spotify's and Pandora's revenue, it is clear that there has only been exponential growth since 2010. During this time, and while it is on a much smaller scale in terms of percentage of growth, Live Nation has also only seen growth since 2010. With every other format of the recorded music industry declining, it seems as though streaming could be a driving force behind the growth of the live music industry. This point can be seen more clearly when comparing the growth of the overall live music revenue levels from Pollstar's North American ticket revenues and the financial data of Spotify and Pandora.

Between 2010 and 2014, Spotify's sales rose 14.5 times from a mere 74 € million to over 1 € billion (Statista, 2015c). And for Pandora, revenue levels have grown 6 times in the same time period with \$119 million in 2010 and \$732 million in 2014 (Statista, 2015b). Though these are two of the fastest growing streaming companies in the music industry, there is evidence that streaming is encouraging the growth of live music. For example, with the exponential growth of streaming in mind, ticket sales grew from \$4.25 billion in 2010 to \$6.2 billion in 2014 (Pollstar, 2015). That is nearly a 50 percent increase in the same period of time in which streaming has become a significant contributor to the industry. With this in mind, if consumers are choosing to consume music with streaming services relatively more than with a physical or digital download, it seems as though streaming can only be a positive influence on live music sales.

Reintroducing the effects of the recent economic recession it should be considered that these two perspectives of the music industry, the live sector and the recorded sector, could have been impacted in different ways. Again in times of recession, consumers generally spend less than in years prior. This notion can be most notably seen in Figure 10, between the years of 2009 and 2010 when North American concert sales actually decreased by over seven percent (Pollstar,

2015). But what is interesting about the performance of the live music sector compared to the recorded music sector is that aside from this small disturbance in the late 2000s, North American concert industry had only seen growth until 2009 (Pollstar, 2015). Where the recorded music industry was suffering losses between 2007 and 2009, the live industry saw growth rates between eight and ten percent with each year (Pollstar, 2015). What this could indicate is that many consumers may have been purchasing more concert tickets rather than traditionally more expensive luxury goods, thereby causing ticket sales to unexpectedly grow. In this unique circumstance, concert tickets may have actually been a more attractive good during the recession than items such as automobiles or home improvements. Since its only decline in 2010, the concert industry has grown 46 percent, and in 2014 the industry peaked at \$6.2 billion (Pollstar, 2015). While the effects of the recession are not completely clear, the concert industry was able to maintain fairly healthy growth, and it continues to grow together with the streaming format today. With this growth in mind, it seems that when the revenues of both sides of the industry are considered as one, the all-encompassing industry may not be performing as poorly as what is commonly accepted.

When combining the live music revenue data with the recorded music revenue data, another interesting trend can be found. By placing the adjusted for inflation data of North American concert revenue on top of the recorded revenues in Figure 1, there is growth between 2011 and 2014. Aligning with the new growth of streaming, it is the only multi-year growth that the combined music industry has seen since the late 1990s. Looking at 1999, the peak of recorded industry revenue, the combined industry accounted for \$22.9 billion when adjusted for inflation (RIAA, 2016). In 2011, the combined industry accounted for \$12.1 billion when adjusted for inflation (RIAA, 2016). However, in the past four years, the combined industry has

grown 9 percent, and in 2014, the combined industry produced \$13.2 billion in revenue (RIAA, 2016). That is 58 percent of the total amount of revenue that the industry was able to generate during the most successful year of the recorded music industry. However, with the quick growth of live music and increasing popularity of streaming services in the recorded sector, it is likely that the combined industry will continue to grow in the near future. Clearly, by halting the decline and encouraging growth more recently in the combined revenue levels in the industry, live music and streaming have had a significant, positive impact on the music business. Figure 14 below illustrates the combined music industry adjusted for inflation beginning in 1990.

Combined Music Industry Revenue Adjusted for Inflation 1990-2014 (In Millions)

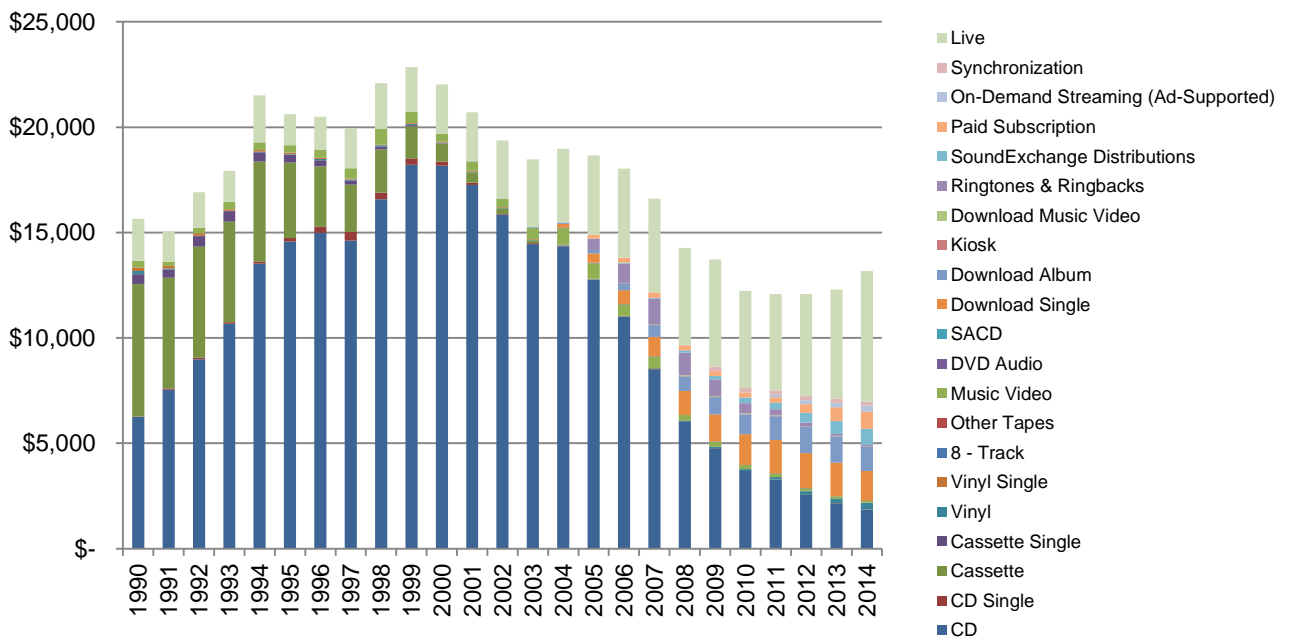


Figure 14: Combined industry revenue since 1990. Generated from RIAA 2016 and Pollstar 2015.

This piece of information is critical in reviewing the current state of the music industry. What this means for artists is that the sector that provides the highest portion of take-home revenue, live music, has been quickly growing for a few years. Despite the recorded music

industry that has struggled to perform as well as it had in the early 2000s, live music is a segment of the market that is allowing artists to find an alternative source of revenue. This change in the dynamic of the music industry must ultimately be beneficial to artists. Even if streaming is not the most influential factor driving live music sales, both streaming and live music are growing rapidly together. In order to take advantage of this trend, artists would likely find the most success promoting their music on streaming services and touring. With the rise in popularity of streaming and live music, it seems as though these two fields will be responsible for defining success to many aspiring artists. In the short-term, these sources will continue to be the only relevant growing sectors of the music industry.

Section V: Conclusions

It is clear that the music industry is no exception to the notion that the business environment is dynamic and constantly changing in response to a countless number of factors in the world today. From vinyl to digital and streaming, the industry has been dominated by a number of different formats, all possessing unique qualities that have proven desirable in the eyes of consumers and producers of recorded music. Yet ultimately, it seems as though consumers have the deciding factors on the growth, the duration, and the dominance of each format as a means of music consumption. As the music industry has evolved, consumers have changed their tastes and preferences, as illustrated by the overall progression of the industry. For example, the DAT never became a relevant contender in the industry, especially compared to the widely accepted cassette. All of these changes came as a result of both consumer preferences and producer capabilities. Through an analysis of the RIAA music shipment database, it is clear that the data behind the progression represents these changes.

One of the most significant conclusions to be drawn from the data is how any of the formats came to be the most popular format consumed in the industry. With the example of the CD, it was clear that it possessed nearly every valuable quality of its predecessors on top of the added features of ownership. For many years, there simply was not a competitor that was able to offer an improvement in the qualities of consumption. As such, the CD held the largest share of the industry for the longest period of time. In fact, it was not until the early 2000s that the CD was challenged with the introduction of music in its digital format. Although the effects of piracy that came with the digital era certainly attributed to the decline of the recorded music industry, the introduction of legal music purchasing sites were able to recuperate some of the unfortunately lost sales. But the industry has not stopped innovating. Today, the industry boasts

the most diverse collection of music formats available, with digital downloads, streaming, and CDs holding the most significant portions of the market. But with this fact comes another that shows that streaming is the only of these three formats that is growing. In fact, according to the PwC Data Outlook Insights, 2014 was the first year that streaming surpassed the revenue levels of CDs (PricewaterhouseCoopers, 2015). It only seems logical that in the short-term, currently frozen music industry, streaming will continue to grow quickly, and it will soon become the most popular format of music consumption. Streaming is clearly the immediate future of the recorded portion of the music industry.

Expectedly, as revenue levels have changed and consumers have elected to spend their income in different sectors of the music industry, so has the distribution of industry generated revenue. The days of receiving a significant portion of income from record sales are disappearing quickly for the majority of smaller artists. The introduction of streaming has added another element of compensation to the mix, suggesting that artists may need to find alternative revenue sourcing in order to find success. Fortunately however, despite income from recorded music becoming less and less, there does to be some correlation between the growth of the streaming sector of the industry and the live music industry. Its influence has been beneficial to artists as streaming and live music continue to grow together. Consumers are spending more money on live music, an industry that allows the artists to keep a greater portion of the revenue earned with each performance. This is worth noting because as the music industry is experiencing dramatic change in the complexity of which formats are available, the effective modes of artist compensation are shifting to methods that seem to essentially put more income in an artist's pocket. With this in mind, it seems as though this trend will ultimately benefit artists—that is, provided that an artist is able to quality music, as deemed by consumers.

To reiterate the advantage of this new knowledge, there is evidence to suggest that the most effective methods of finding success would be to pursue these growing sectors of the music industry. It should be noted that there is still a significant amount of consumers that are still spending on physical and digital media. Currently, digital music sales hold just under 40 percent of the recorded music industry's revenue, but it seems likely that streaming will soon become the leading contributor to the recorded music industry (PricewaterhouseCoopers, 2015). According to the PwC Media Outlook, there is evidence to suggest that streaming will overtake digital as the largest revenue generating sector of the recorded music industry by 2019 (PricewaterhouseCoopers, 2015). Because successfully profiting from the music industry is such a product of consumer preferences, in terms of music format and preference of sound, this will not be a simple task. However, for those artists that are able to produce a preferable sound and focus their efforts on the clear growing favorites of the industry, success will be more easily found. Though many of the conversations regarding the music industry end with the agreed idea that the industry is slowly crawling toward its inevitable doom, there is hope. While this reallocation of compensation will definitely be easier for some, the dynamic of the industry will eventually adjust in order to most satisfy the parties involved. Contrary to popular belief, streaming, accompanied by live music sales, may actually be the driving forces behind the new survival and growth of the music industry.

Works Cited

BMI. (2016). How we pay royalties. Retrieved from

http://www.bmi.com/creators/royalty_print#id-533115

Donovan, N. (2013, 26 August 2013). If CDs cost £8 where does the money go? Magazine -

BBC News. Retrieved from <http://www.bbc.com/news/magazine-23840744>

Flowers, A. (2015). Maybe spotify isn't killing the music industry after all. Retrieved from

<http://fivethirtyeight.com/features/maybe-spotify-isnt-killing-the-music-industry-after-all/>

Knopper, S. (2011, 25 October 2011). The new economics of the music industry. *Rolling Stone*.

Retrieved from <http://www.rollingstone.com/music/news/the-new-economics-of-the-music-industry-20111025?page=5>

Nath, T. (2015). How pandora and spotify pay artists. Retrieved from

<http://www.investopedia.com/articles/personal-finance/121614/how-pandora-and-spotify-pay-artists.asp>

Pollstar. (2015). 2014 year end business analysis. Retrieved from

<http://www.pollstarpro.com/files/charts2015/2015YearEndBusinessAnalysis.pdf>

PricewaterhouseCoopers. (2015). *The future of the music industry*. Retrieved from

<http://www.pwc.com/gx/en/industries/entertainment-media/outlook/segment-insights/music.html>

Recording Industry Association of America. (2016). *U.S. sales database*. Undefined: RIAA.

Sisario, B. (2013, 28 Jan 2013). As music streaming grows, royalties slow to a trickle. *The New York Times*. Retrieved from http://www.nytimes.com/2013/01/29/business/media/streaming-shakes-up-music-industrys-model-for-royalties.html?_r=1;

Spotify. (2013). Spotify explained for artists. Retrieved from <http://www.spotifyartists.com/spotify-explained/>

Statista. (2015a). *Live Nation Entertainment's concert revenue from 2008 to 2015 (in billion U.S. dollars)* Retrieved from <http://www.statista.com/statistics/193710/concert-revenue-of-live-nation-entertainment-since-2008/>

Statista. (2015b). *Pandora's revenue from 2006 to 2015, by source (in million U.S. dollars)* Retrieved from <http://www.statista.com/statistics/190918/revenue-sources-of-pandora-since-2007/>

Statista. (2015c). *Spotify's revenue and net income/loss from 2009 to 2014 (in million euros)* Retrieved from <http://www.statista.com/statistics/244990/spotify-s-revenue-and-net-income/>

Taintor, C. (2004). Chronology: Technology and the music industry. Retrieved from <http://www.pbs.org/wgbh/pages/frontline/shows/music/inside/cron.html>

YahooTech. (2015). Streaming music revenue beat CDs in the U.S. last year for the first time. Retrieved from <https://www.yahoo.com/tech/streaming-music-revenue-beat-cds-in-the-u-s-last-114048448124.html>