

Market Share in the Music Industry; Have Major Labels Regained their Oligopoly?

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Abstract

In 1999 Napster was first created, it was the first popular online space where users could share and listen to music. Major labels took big losses in revenue and indie labels saw an increase in market share. As the internet grew and with the birth of social media and music blogs, many say that major labels could be irrelevant since users could market and distribute themselves online. However, the data shows the world's biggest and most popular artists are still signed and distributed by their label. The data is from the three different year-end Billboard charts from 2006-2019. The data shows major labels maintain their oligopoly by taking up a large majority on the charts as the label, and an even larger majority as the distributors.

I : Introduction

Since music went digital in 1999 with Napster, the music industry saw a huge decrease in revenue. Sales were cheaper online and illegal file-sharing was prevalent. Just before the start of Napster music sales were at their peak, since then sales have declined significantly. In 2005 sales were twenty-five percent below their peak and then in 2012 sales were fifty percent below their peak.

Major labels lost a lot of money, many lay-offs were made in the music industry and significantly less money went into the artists. Illegal file-sharing did not start with Napster, in the 1970s some the first MP3 files were being made by some Ph.D. students, the reason this was not the start of the end for the music business was that it took them a long time to create it and few people knew about them (Knopper, 2010). Then in the late 1990s, a 19-year-old named Shawn Fanning started Napster in his college dorm. Since illegal file sharing is a copyright issue, Napster was sued and taken to the supreme court, but Napster won the case because the courts claimed that Sony's "Betamax" was legal, which allowed people to tape tv shows (Knopper 2010).

Aside from the loss in revenue, artists and the media were starting to take Napster's side when "Fanning became a sort of folk hero" (Knopper p.132, 2010), along with the fact that record labels have never had the best image in the public eye. One thing that brought the public to Napster's side was artists being outspoken about their record contracts and artists were switching to Napster to promote their music. (Knopper, 2010)

This paper starts with a literature review about copyright infringement effects, market roles in the music industry, digitizations effect on the label practices, and interactions between different kinds of record labels. It also contains an empirical study that uses year-end Billboard chart data determining how much do different types of labels appear on the charts, average chart position for different labels and distributors, amount of entries by artists and how their label affects that, the switching patterns of artists, label distributor relationships, average chart position again but this time using a t-test, and finally how often each label comes up on the different charts in the study.

The empirical study comes to the conclusion that having a major label distribute an artist is more important than having a major label. It also finds that major labels may be getting more powerful in the last five years.

II: Literature Review

This literature review examines Napster's effect on the revenue streams for labels and how Napster affected practices for different types of labels. In short, major labels lost a lot of market power and indie labels gained more influence in the market.

These issues drive the motivation of this paper, to determine whether major labels are still irrelevant. The timeframe of this literature review starts with the immediate effects of copyright in 1999 to the current models of the popular music industry. An examination of these models and business practices provides useful information to better understand the data and reasoning for the empirical study.

II A: How Copyright Infringement Impacted Different Labels

With the advent of Napster, illegal file-sharing became prevalent as MP3 files had no copyright protection. This had different effects on major labels and the artists that signed with them than indie labels and their artists. Steve Knopper's work explains that both types of labels lost revenue since people were less inclined to buy CDs, but the situation was worse for the major labels because their artists are bigger, so more people would share their music giving them more potential losses. As for major labels, the copyright infringement hurt them significantly; they were losing revenue from sales, but were also spending money on fake files to be spread on sites to try to stop people from using them. The illegal file-sharing did not give major labels and artists any extra exposure because they were already well known to the public (Knopper, 2010).

However, for indie labels and artists this was a good opportunity, as most of these artists were unknown so people sharing their music was good exposure for them. A band called "Ugly Mugs" posted their music online via files and then received emails from people in Russia and Turkey asking them to put more music online (Knopper, 2010).

This idea aligns with the work of Mortimer, Nosko, and Sorenson, who argue that the number of music releases and live performances was observed after music file sharing (both legal and illegal) became popular. The data for concerts came from Pollstar from the years 1993-2004, which provided information about the differences between before and after file sharing because as mentioned earlier music first became digital in 1999. The data for album sales was taken from Nielsen Soundscan. The

years for this set of data are 1993-2002. Additional data for album sales was taken from "MusicBrainz" (Mortimer, Nosko, Sorensen, 2012).

This paper suggests that file-sharing even if it was essentially stealing from record labels, actually benefited independent labels. Even though labels were losing revenue from people not paying for music, the amount of time people spent listening to music increased significantly, and this benefited indie labels (Mortimer, Nosko, Sorensen, 2012). We see from other works (Waldfoegel 2018) file-sharing was a great way for unknown artists who were not signed to a big label to gain exposure. This gain in exposure increased demand for live concerts, because music listening and concert attending are complementary products, "artists had an incentive to reallocate [their] effort away from recording new albums, instead of performing more frequent and/or more extensive concert tours" (Mortimer, Nosko, Sorensen, p.6, 2012). This means that artists and labels had to make up for lost revenue from music sales by performing more live concerts.

In general, there is a large increase in the number of live performances after the year 2000. From the years 1995-1999, the amount of artists on tour remains approximately the same (Mortimer, Nosko, Sorensen, 2012). The 2001, saw a significant increase in the number of artists on tour. Before 2001 the number of artists on tour was consistently between 2,100 and 2,300. In 2001 there was a jump to just under 2,900 (Mortimer, Nosko, Sorensen, 2012).

After 2001 the number of artists on tour kept increasing and in 2004 it reached just over 4,200. In the number of concerts performed in general, we see a similar trend.

From 1995-1999 the number of performances stayed consistent from approximately 15,000 to 17,000 (Mortimer, Nosko, Sorensen, 2012). Then, in the year 2001, it increased to about 19,400 and in 2004 it increased to just over 24,000. The average ticket price also increased from \$26.32 in 1995 to \$36.02 in 2002 (Mortimer, Nosko, Sorensen, 2012). This is because of the increase in demand for concerts. One interesting result was that the number of tickets sold per concert rises from 1995-2000 and then falls (Mortimer, Nosko, Sorensen, 2012). This means that there was a larger amount of smaller concerts, which would suggest that more people were seeing indie artists which is how the rise in file-sharing helped indie artists and labels.

Furthermore, there was a significant change in the number of artists that waited longer to release another album. In 1995, 59.6 percent of artists waited one year before releasing another album, and 20.31% of artists waited three or more years before releasing another album. In 2004, 50 percent of artists waited a year before releasing another album and 28.9 percent of artists waited three or more years before releasing another album (Mortimer, Nosko, Sorensen, 2012). As expected, with the exposure of a bunch of new artists with file-sharing the number of new artists per year increased significantly. In 1995 the number of new artists for that year was 3,822, and then it rose steadily until it hit 7,931 in 2004 (Mortimer, Nosko, Sorensen, 2012). Album sales rose slightly from the year 1995, but this result was biased because of the increase of new artists in the market. Furthermore, from the years 1995-2000, there was a significant increase in album sales (722 million to 938 million) as expected after the year 2000 sales decreased significantly. (Mortimer, Nosko, Sorensen, 2012)

Finally, Mortimer, Nosko, and Sorensen (2012) analyze concert revenue from different kinds of artists. Since the “implementation of Napster, the demand increased for concerts from smaller, more obscure artists than for larger, better-known artists” (Mortimer, Nosko, Sorensen, 2012, p.6). Conversely, Napster had a negative impact on large well-known artists. “Concert revenue growth rates fell by 5 percentage points for the largest artists post-Napster, they increased 18 percentage points for the smallest artists” (Mortimer, Nosko, Sorensen, 2012, p.11). In general, Napster had more of a positive impact on smaller artists.

Waldfoegel (2018) also runs empirical research on the effect of sharing on music sales. First, he documents the amount of revenue the music industry obtained from music sales over the years. This amount is pretty consistent with the other works and the amount of revenue lost over the years. Then there is an empirical study that is based on surveys about how they obtained certain albums and songs. It is found that those who steal more purchase less and those who purchase more steal less. The best estimate for “sales displacement is about 5 to 1. That is, for every five songs people steal, they purchase one fewer song” (Waldfoegel, 2018, p.43). This shows that there is a substitution effect for online music to CDs even if it is illegal.

Similarly, in 2006, Montoro-Pons and Cuadrado-Garcia studied the effects of piracy on legal demand for music. According to Montoro-Pons and Cuadrado-Garcia copyrights give artists protection by giving them a monopoly on their work. However, after music became digital, it became much easier to replicate a copy of an artist’s work

because it is easier and cheaper to copy a file as opposed to a CD or vinyl (Montoro-Pons, Cuadrado-Garcia, 2006).

This paper is an empirical analysis testing how the following factors affected legal and illegal demand for music; price of the original recording, opportunity cost of the copy, and income. Opportunity cost is not only the monetary cost of the alternative form of consuming music. The other factors of opportunity cost are technological barriers; an example of this would be a country that does not have access to certain technologies like the internet. The other factor of opportunity cost is how strictly enforced copyright laws are (Montoro-Pons, Cuadrado-Garcia, 2006).

There are multiple sources of data from this paper the data for music sales came from The Music Industry in Numbers, (IFPI, 2004), which is made by the International Federation of the Phonographic Industry (IFPI) This was taken from sixty different countries and was used to find the average price of music in each country. This also was used to find an estimate for overall music piracy. Data for piracy rates were also taken “from the special 301 report on global copyright protection and enforcement by International Intellectual Property Alliance...Additionally, when needed, we use data published in the Global Software Piracy Study by the Business Software Alliance on piracy levels in the software industry.” (Montoro-Pons, Cuadrado-Garcia, p.6, 2006)

Another significant measure of the impact of digitization and copyright infringement is how strict the law was in protecting artists. This is because they were trying to see the correlation between how strict the law was and its effect on demand for legal and illegal music. The data for this aspect of the study was from the “Doing

Business Project website (<http://www.doingbusiness.org>), supported by the World Bank Group.” This was measured in three different ways, “time until resolution, cost as a percentage of the debt, and number of procedures involved from the moment the plaintiff files the lawsuit until actual payment” (Montoro-Pons, Cuadrado-Garcia, p.7, 2006). To find more data on the piracy rate of music the 2004 survey of enterprises by the World Economic Forum was used (Montoro-Pons, Cuadrado-Garcia, 2006). To find data on the technological availability the IFPI published a report every year that included digital recorders and players, compact discs, and broadband connections. To find the percentage of people in an area who were using these technologies data from the Digital Broadband Content was used. Income for each region was measured by using each country's GDP (Montoro-Pons, Cuadrado-Garcia, 2006).

This study used a mathematical model to calculate legal and illegal demand. The results saw a direct correlation between the availability of technology and the number of users of technology and the amount of piracy. International albums were also more likely to have a higher illegal demand. The estimation showed that higher prices caused less demand for legal music. The stricter a country enforces copyright laws the lower the demand for illegal music. A one-unit standard deviation increase in copyright enforcement leads to a sales increase by 27% (Montoro-Pons, Cuadrado-Garcia, p.11, 2006). More households per capita with internet connections have a positive increase for illegal demand; a one standard deviation increase in households with broadband connections decreases per capita legal demand by 19% (Montoro-Pons, Cuadrado-Garcia, p.11, 2006).

The number of music-playing devices in a given household was analyzed as well. The effect of the number of CD players and P2P networks owned surprisingly did not affect the demand for legal and illegal copies of music. However, the number of DVD players owned had a positive impact on the legal demand for music. This means that, the more DVD players owned, the more legal demand for music. The likely reason for this is because record labels released more material on DVDs. Having a portable music device at first increased the demand for illegal sales, then, with the birth of the iTunes store, it increased legal demand. A one-unit increase in the number of DVD players owned increased legal demand by seven-teen percent. Furthermore, access to portable music from things like the *iTunes store* leads to an increase in demand for legal music, it increases legal demand by 5.77 percent (Montoro-Pons, Cuadrado-Garcia, 2006).

The claim about how an increase in technology (i.e. computers) leads to an increase in the demand for illegal music is backed up by Norbert J. Michel (2005). He backs it up with an empirical study that “uses individual level data from the consumer expenditure survey to test whether consumers simultaneously spent less on music and more on movie tickets and/or prerecorded movies with the rise of digital technology. (Michel, 2005) Results from spending on music will only be discussed, the data and conclusions about how digitization affected movie sales will not be discussed.

The data for the Empirical Study came from the “Consumer Expenditure Survey public-use micro files (CEX) [that] are used to create six separate calendar year samples for 1998 through 2003.” (Michel, 2005, p.42) This provided prices for movie

tickets, CDs, and movie rentals. The study was split into three categories; all consumers, consumers that do not own a computer, and consumers that own a computer. The data in the table below was taken from “table 1” in Michel’s paper.

Table 1

Mean CD Expenditures from 1998-2003

	1998	1999	2000	2001	2002	2003
All consumer mean CD expenditures	\$51.09	\$47.92	\$46.35	\$42.19	\$38.76	\$34.95
Computer owning mean CD expenditures	\$82.36	\$71.19	\$64.35	\$58.81	\$51.47	\$44.26
Non-computer owning mean CD expenditures	\$29.84	\$29.50	\$28.12	\$21.10	\$19.68	\$18.43

Michel J Nobert, Digital File Sharing and the Music Industry: was there a Substitution Effect?, (2005), P. 43

As you can see in the table above both groups had a decrease spent on legal music, but the group that owned computers had a greater decrease in spending on CDs. The group that owns computers spent nearly fifty percent less on CDs while the group that did not own computers spent approximately forty percent less. The paper also tries to see the relationship between income and spending on legal music. The

results from this paper did not show any significant correlation between income change and how much people spent on legal music.

The paper then ran a regression model where the dependent variable was expenditures on legal music and movies, in the independent variables were the year (which was a dummy variable), the variable "CMP" (which was set to one for individuals owning a computer which was also a dummy variable), and the variable "CMPINT is the difference-in-differences estimator. To compute CMPINT, the year dummy (Y03) is multiplied by each consumer's CMP dummy." (Michel, 2005, p.45) The model also contains a variable called "X" which includes income and family size. The results of the regression support a substitution effect with file sharing decreasing demand for CD sales. The model showed a fifteen percent decrease in CD purchases from 1998 to 2003.

From the years 1998 to 2003 more people were purchasing computers, according to CEX data, the number of people that did not own a computer was nearly cut in half, which means that more people had access to file-sharing as the time period passed by. So the paper then does a two-stage least squares analysis, and it showed the same results.

Another work by Nobert in 2006 aligns with the last mentioned work in some ways, while being a different study. The paper is an empirical study that looks to see the effect of digital file-sharing and its effect on music sales. The paper also looks at the individual consumer level to see how computer ownership affects individual music purchases in the form of CDs.

Michel (2006) uses micro-level data from the Consumer Expenditure Survey. The interviews are about individual consumer spending and the data is taken from the years 1995 to 2003. Consumers report their spending for every quarter in this survey. The nominal dollar amounts in the study were converted to 2003 dollars using the CPI-U. The results show that people that owned computers spent less on music. In 1999 “computer owners’ mean CD expenditures increased \$0.68 (1 percent), a small, statistically insignificant change. On the other hand, non-computer owners’ mean CD expenditure increased \$3.30 (20 percent) in 1999.” (Nobert, 2006, p.4) The reason that there is an increase in this year is that Napster was released in June halfway through the year 1999. Also before Napster’s release, there was an increasing trend of music sales.

According to the paper, there was an increase in music sales from 1997-1998. In the year 2000 “computer owners’ mean CD expenditure decreased \$4.77, a statistically significant 10 percent decrease. In the same year, non-computer owners’ mean CD expenditure decreased by 8 percent, and the change is statistically insignificant.” (Nobert, 2006, pp. 4-5) In 2001 when Napster was shut down and computer owners’ mean CD expenditure increased by only \$0.05 which is less than one percent and in the same year, non-computer owners’ mean CD expenditure was decreased by 19 percent (Michel, 2006). In the following years 2002 and 2003, computer owners’ mean spending on CDs decreased by \$4.79 in 2002 and \$5.55 in 2003. In 2002 non-computer owning individuals on average spent \$0.80 less on CDs in 2002 and \$0.20 in 2003 (Michel, 2006).

To further analyze the relationship between owning a computer and CDs sales data was only compared between the years of 1998 and 2003. The subjects in this part of the study had their CD expenditures compared in those two years. The results from this part of the study showed that owning a computer meant fewer CD purchases. This part of the study regressed the relationship between owning a computer and CD purchases and the results showed that owning a computer on average meant consumers spent thirteen percent less on CDs. The number of computer owners in the years 1998-2003 also increased.

II B: Digitizations Impact on Market Roles and Power in the Music Industry

As a result of digitization indie labels gained more influence in the market. Waldfogel uses a comparative study to show how the different types of labels behave in the market. He states that in “recent years the ‘big three’ have accounted for 90 percent of music sales in recent years” (Waldfogel 2018, pp. 32-33). While this makes it seem like the big three labels have almost all control over the music market, many factors show that the independent labels are on the rise. For example from the years 2001-2010 “the independents’ share among the Billboard 200 rose from 14 percent to 35 percent... [There is a] similar proportional in the independents’ share among albums appearing to increase in the weekly top 100, top 50, and top 25.” (Waldfogel, 2018, p.57) This is due to the development of the internet as a marketing tool. In the past, the best source of exposure for artists was through radio.

Waldfoegel also discusses the changes in market behavior after music became digitized. The data came from over 63,000 thousand albums that were released between the years 1990 and 2010. Discog was used to track music releases over time and data from the weekly billboard charts were used to estimate revenue, both indie and major labels were used in this study.

The main results were that major labels release more music from already established artists, and the number of overall releases from majors decreased in general. However, since the selectivity from major labels has increased, the number of major releases that have made it into the billboard top 200 has increased from less than 20% in the late 1990s to 50% in 2010, (Waldfoegel, 2016). This selectivity has occurred because traditionally only ten percent of albums break even, which still applies today. An already proven artist is more likely to succeed as opposed to a new artist. This result was found through “examining how the share of a label’s releases—that are albums by artists with prior chart success (previously released either internally or externally), a label’s numbers of releases, and the share of a label’s releases that achieve Billboard chart success—vary over time with the technological change.” (Waldfoegel, 2016, p.137)

The number of releases from indie labels increased because the internet lowered the cost of music and indie labels have used more low-cost methods to create more music. The amount of releases from relatively large independent labels has increased from 239 in 1990 to 1,141 by 2007, while releases from smaller unknown labels rise from 551 to 2,611 (Waldfoegel, 2016, p.140).

In a study done before EMI records was shut down in 2012 Rayna and Stiukova released a case study on how the “big four” controlled more than eighty-five percent of the market. The main argument in Rayna and Stiukova’s paper was the control of intellectual property. Previous music written by artists is owned by the major labels and it “generates a free flow of revenues...This enables them to take more risk since potential losses can be covered by a back catalogue” (Rayna, Stiukova, 2009, p.5). This back catalog also gives these labels bargaining power when it comes to music merchants. An example of this in modern music is how older inactive music artists such as “Led Zeppelin” and “Simon and Garfunkel” get millions of streams on Spotify every month making Spotify a lot of money. Labels owning the intellectual property of these songs and artists gives them enough bargaining to control the platform.

Another reason intellectual property gives labels so much power is that all the intellectual property creates a strong barrier to entry for independent artists because the labels can sue all competitors that are releasing music where the ‘influences’ are too evident (Rayna, Stiukova, 2009).

The other main reason for these four companies controlling as much of the market as they do is the fact that they are the only employer for artists. The paper argues that the big four are an oligopsony meaning that there are only a few buyers of something in a market. In this case, they are the only buyers for artists' labor. Since they are the only buyers they can make deals that give them a lot more benefit than if the artists had other options.

II C: How Digitization Changed Record Labels Practices

The modern-day 360 deal contract is when an artist gets signed to a label with an initial signing bonus and then splits their income with the label including things like sales, tours, sponsorships, media, etc. In other words, the artist shares all their aspects of their income. Each 360 deal also is set up to benefit the label. For example, in the contract that a rock or metal band signs the label will take more from the artists' touring revenue, since rock and metal bands make most of their touring and concerts. Vasquez (2014) explains, the new style of record deal contract is compared to the record contract before music was put online. A more traditional style of record contract initially puts the artist into debt because the record company pays for studio time and distribution fees. The artist would then pay the label back in touring revenues and CD sales, which were split with the label. In a more traditional style of the contract, the music belongs to the artist. In some modern 360 deals, music and image are created by the label (Vasquez, 2014).

There are currently two types of modern 360 deal contracts: active and passive. In a passive deal, the label has little ownership of the artist and the artist shares their income. In an active deal, the label micro-manages the artist by telling them what to wear, how to promote themselves, what music to write, etc. An example of this is the band, Paramore. When they signed their first record deal they were given \$300,000 upfront and thirty percent of their profits from sales (Vasquez, 2014).

The rise of the internet has also caused change for independent record labels. Choi (2009, p.4) wants “To evaluate the status of the independent labels and their approaches, in terms of the ways the labels are managed in this swiftly changing period, and in terms of how their current state relates to their past experiences. To identify whether changes in the conduct of independent record companies have produced, or are taking advantage of, changes in conceptions of intellectual property. To establish the growth points of new business models in the independent record company sector.” The data was taken from interviews from six different independent firms to analyze the similarities between the firms.

Before the internet, independent labels had to rely on the majors to distribute for them to get their records or CDs into the shops (Choi, 2009). This is partially why the major labels had more monopoly power before the internet. This still applies today, but indie music labels always had the market role of playing niche music, and then what normally happens is that major labels will then use the new genres for themselves and then buy out the indie label where they got the idea from. Now the internet has significantly lowered the cost of distribution so there is no need to rely on a major to distribute. Furthermore, the cost to enter the market has decreased significantly, in fact, the study uses labels that are entirely online for the data. The indies would rely on majors to distribute for them not only because of the financial resources but also because of the marketing resources. The rise of the internet has also given cheaper ways to market, such as social media. One of the business tactics of independent labels is to set up a direct community between artists and fans. One case is John Brine,

who started Oh Boy Records (Choi, 2009). He started a chat room to make a sort of a community for the fans and artists. In one of the Waldfogel works mentioned earlier, he concluded that the internet has allowed indie labels to switch to low-cost production strategies. Which in turn has led them to release more music with the internet lowering costs of releasing music.

The main results from the studies were that independent music labels have the same DIY aesthetic, and the same motives as before which are more about music than money. The real difference in indie labels' behavior is that the internet has given them more opportunities to market their music, and they therefore do not need resources from the major labels (Choi, 2009).

Record labels business practices with creating artists have also changed with the invention of the internet. Bourreau, Moreau, Gensollen (2008) did a comparative study between different models and business practices. One of the practices is the push model also known as the "American Idol model, [this is] characterized by a general fall in quality, uniformity of products, the formatting of tastes, etc" (Gensollon, Boureau, Moreau, 2008, p.9). This is when a label creates an artist. This has always been a business practice of the music industry, but the rise of the internet has made this practice significantly easier. For example, the artist "Bhad Bhaby" became popular on the show Dr. Phil and then was created into an artist.

Another model used in the music industry is the "Free Pull Model [which is] based on the possibility for artists to enter into direct contact with their public, without either professional selection or centralized promotion" (Gensollon, Boureau, Moreau,

p.9). This aligns with the other literature as a strategy implemented by indie labels. The rise of the internet has given indie labels a direct marketing strategy, which works for them because they target smaller niche audiences.

Specifically for indie labels, using indie blog websites to market themselves has increased. Paul Bridgewater, who is an editor for “Line at best fit” claims that “the role of independent music blogs is equivalent to the testbed of new talent, which was the traditional role of A&R” (Son, 2019, p.116). The article further explains that the use of streaming playlists is now a new way for music to be marketed and that streaming platforms such as Spotify are replacing the role of traditional radio to a degree.

II D: The Interactions between Major and Independent Labels

Although major labels and independent labels are two different entities the two types of labels do interact and work with each other. These interactions are a part of what gives them their market roles. Remy Guichardaz, Laurent Bach, and Julien Penin (2019) conducted a case study between Sony and multiple indie record labels and how Sony distributes Sony’s and other labels’ music. The paper is trying to find out how the major labels are still able to obtain their oligopoly status even though the rise of the internet allows indie labels and independent artists to market themselves. The major labels have occupied 68.7% of the worldwide recorded revenue market in 2016, 69.32% of the market in 2016, and then increasing to 70.12% in 2017, (Guichardaz, Bach, Penin, 2019) which is also not too far behind 77.4% in 1998. After the initial difficulty with music being pushed online, the majors were able to get back with their 360 deal

business model. The paper claims that the majors have also been able to bounce back because of their transactional capabilities, the case study mentioned earlier is about Sony Music Entertainment France to show that the major labels have a large active role in the current music market (Guichardaz et. al, 2019). This was to prove that majors' transactional capability explains how the majors maintain an oligarchy. In all economic markets, the intermediary has always played a role, examples include wholesaler, broker, or retailer (Guichardaz et. al, 2019 p.846).

The data for the case study in the paper is from archives, interviews, internal documents, and reports from phonographic and public institutions. The archives were collected from Sony's website and archive.org. They also used the International Federation of the Phonographic Industry (IFPI) website, the Syndicat National de l'Edition Phonographique (SNEP) and the Société Civile des Producteurs de Phonograph en France (SPPF) (Guichardaz, Bach, Penin, 2019). Interviews were also used in gathering data.

The results from the case study are that Sony music's strengths are in their "recording and production of music content; promotion via traditional media; and physical distribution. In the last decade, the firm has enlarged its value proposal requiring a much more diverse and complex range of actors" (Guichardaz, Bach, Penin, 2019, p.851). Labels like Sony (i.e. major) have many resources that indie labels rarely possess, such as really big names and a musical catalog. Labels use these as bargaining tools with suppliers. For example, big-name artists gave the major's leverage with radio stations and streaming platforms. This gives their smaller artists an

advantage when they are first starting (Guichardaz, Bach, Penin, 2019). This also applies to online retailers such as Spotify. Sony acquired EMI in 2018 according to the paper which gave them more copyrights which increased their bargaining power. From the years 2011-2013, Spotify gave Sony \$42.5 million in exchange for their back catalog (Guichardaz, Bach, Penin, 2019).

Furthermore, Sony has access to marketing data that indie labels do not have. This allows them to optimize sales with their releases. Indies are also at a disadvantage because the distributor has control over their releases. Since Major labels extend their music intermediation to other markets which is allowed through its strengths mentioned they can discover new trends and practices from other related industries (Guidchardaz, Bach, Penin, 2019). This is how the major labels use indie labels for marketing information.

In the Son paper mentioned earlier the biggest “Indie labels, INgrooves, The Orchard, and the Alternative Distribution Association have partnered with major labels, and all three of the major labels, Universal, Sony, and Warner, distribute their own indie labels’ catalogues through their own indie label distribution partners” (Son, 2019, p.119). Majors distribute for indies because the major labels own playlist companies such as; Topsify, Filtre, and Digster (Son 2019). What these companies do is make playlists for people based on their music tastes with music they have never heard before. The reasons for majors distributing indie labels is for monetary reasons and to also gather marketing data on different audiences (Choi 2019).

Benardo and Gustavo Martins (2013) give reasoning for indie labels going against their own do it yourself nature and collaborating with major record labels. One reason, as mentioned earlier, is financial. With the invention of the internet, the barriers of entry have been lowered significantly, thus increasing competition between independent labels. The independent labels then rely on bigger labels to promote their songs. This aligns with how there is competition for attention mentioned earlier. Also with the growing market share of independent labels responsibilities increase and they do not have the resources on their own. As independent music labels get better at low-cost marketing strategies it “demands more effort from a variety of required activities including musicianship, performance, technical, through to business aspects” (Benardo, Gustavo, 2013, p.10). With the increase in workload for the smaller companies they have turned to major labels. Another reason that labels work together is because of the high bankruptcy rate of businesses in general. Major labels still influence the independent music market; there was a significant increase in indie music labels in the years 1994-2004, but most releases were done through the major labels (Bernardo, Gustavo, 2013).

With file sharing changing the structure of the music industry one thing that changed in the music market was the number of partnerships between major and indie labels with releases. Paola Dubini and Bernardino Provera describe market power and the number of interactions between major and indie record labels from the years 1991-2005. Their data was taken from the US Weekly Top 200 albums chart from the billboard website. The databases Hoover and Factive were used to see how the

albums were released and if they were a first-time release from an artist or a repeat artist. Music press magazines, music encyclopedias, books, and company websites were also used to find out how an album was released (Dubini, Bernardino, 2015).

Dubini and Bernardino wanted to see if different types of record labels had become more innovative with their music and artists after music became digital. They also wanted to see if the number of partnerships between different record labels, specifically major and indie, would increase after music became digital. The success of an artist was shown by peak ranking and the total amount of weeks spent on the charts. They also studied the number of new artists being released by the labels every year as opposed to albums such as “greatest hits.” The types of genres were also measured, using the label that iTunes. The six genres were R&B, pop, country, dance, alternative, and rock (Dubini, Bernardino, 2015). The results of the study were that more artists reached the top of the charts, but spent less time there. This is because the digitization of music allowed many more people to enter the market creating more competition. Artists that would stay at the top would do so by releasing more in a year. The number of artists in the top position in the year 1991 was 14 and then it increased almost every year and in 2005 that number was 32 (Dubini, Bernardino, 2015). The same applied to the total number of artists in the top three, hundred, etc. The overall innovation for major, indie, and partnership releases was mostly “medium innovation,” or new albums released by an already established artist. The lowest category for major and indie labels was “high innovation” which meant a new album by a new artist. For

partnerships, this was the second-lowest by one percent. “Low innovation” was an album that was some kind of reissue (Dubini, Bernardino, 2015).

Furthermore, the study looked at albums sold from each different type of record label and the change in the market share for each type of release. In 1991 majors had 82 percent of the market indie labels had 16 percent and only two percent were partnerships (Dubini, Bernardino, 2015). Over the years there is a steady increase in market share for indie labels and partnerships. In 2005 major labels had 49 percent of the market, indie labels had 38 percent, and the number of partnerships was twelve percent (Dubini, Bernardino, 2015). From the literature we can conclude that at first with music going online major labels lost a lot of influence and revenue and indie labels were starting to grow, but then the majors retained their market power.

III: Empirical Study Data

The purpose of this empirical study is to see how many different types of labels appear on the billboard charts as the label and distributor. This will give us an idea of the market power in the music industry, because the top artists in the world control most of the market. After looking at how much the labels appear on the charts we will see how different labels rank on the charts. How different distributors affect ranking will also be looked at.

The data came from the billboard rankings, the artists' names and rankings came from the billboard's website. Data was taken from the year-end charts in the following

categories, top 100 artists, top 200 albums, and billboard hot 100 artists. Only the top one hundred out of two hundred albums were used in this analysis to keep an even playing field. Some years only had the top fifty artists, this occurred a total of six times. Another limitation for the data set is that some categories were missing an entry or two. This only occurred a few times and will not cause any significant changes in the results. In total there were 590 artists and 3,767 entries. Out of all the entries, there were ten collaborations. 127 Entries were not used in this study, these included; soundtracks, compilations, various artists' releases, and original Broadway releases.

Each category has data from the years 2006-2019, the reason for this is because the billboard website had data for two of the three categories until the year 2006 and the third until 2002. The goal was to find out how often major labels were on the billboard and how many times indie labels were on the billboard. Another goal was to find how often artists switch labels and how they switched, meaning did they switch from a major to an indie label, an indie to a major label, etc. This was done by seeing which artist was signed to which label at the time of their appearance on the billboard charts.

To find what label each artist was signed to we used two different sources, one was officialcharts.com, this was only to see what album and/or single was released from which label. Rankings from this website were not used because the website only posts the UK chart rankings and this study only focused on the US music market. To find information on the labels Wikipedia articles were used, Wikipedia typically has a reputation for not being a reputable source, but in this case, it worked because it lined up with the information from the billboard charts and the officialcharts website. For

artists that switched labels the type of label along with their most successful single and album were recorded. Most successful was judged by the best ranking on the US charts. The rankings for the previous successes were peak chart positions as opposed to year-end positions.

The data was divided into different categories; major label (one of the big three or four depending on the year), the label whose parent company is one of the big three or four, independent, no label, Disney records, BMG, a large Eastern entertainment company that is typically involved with K-Pop, for example, YG entertainment, E1 music were grouped into one category, and Roc Nation. The goal was to see how much of each label came up on the charts and to see the patterns of artists when switching labels.

IV: Results

The results will be shown in two different ways depending on the part of the study; one where "Roc Nation," BMG, Disney, and Eastern Multimedia Companies are categorized as an independent label and one way where they are grouped into one category. The different categories are as follows, Big three or four, which are either Sony, UMG, Warner Bros, or EMI. Despite EMI going out of business in 2012 to present for a significant portion of this part of the study, they were in business. Any label whose parent company is one of the big three or four, for example, Republic Records is owned by Universal Music Group putting them in the second category. Artists with no label are one category in this part, everything else is considered as an

indie label for this part of the study. Also, big companies for this part of the study such as Disney and Roc Nation were considered as Indie labels because they did not come up very often which shows their lack of power in the industry. The results for the descriptive statistics are shown below in figures 1 and 2.

Figure 1

Artist labels from 2006 - 2019

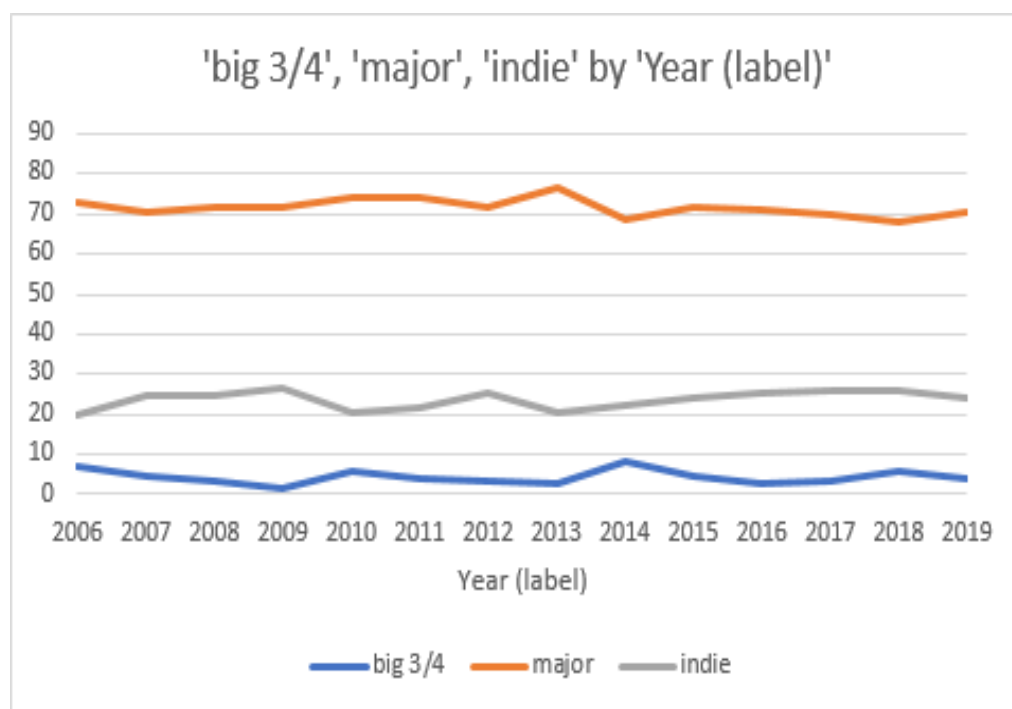


Figure 2

Artist distributors from 2006 - 2019

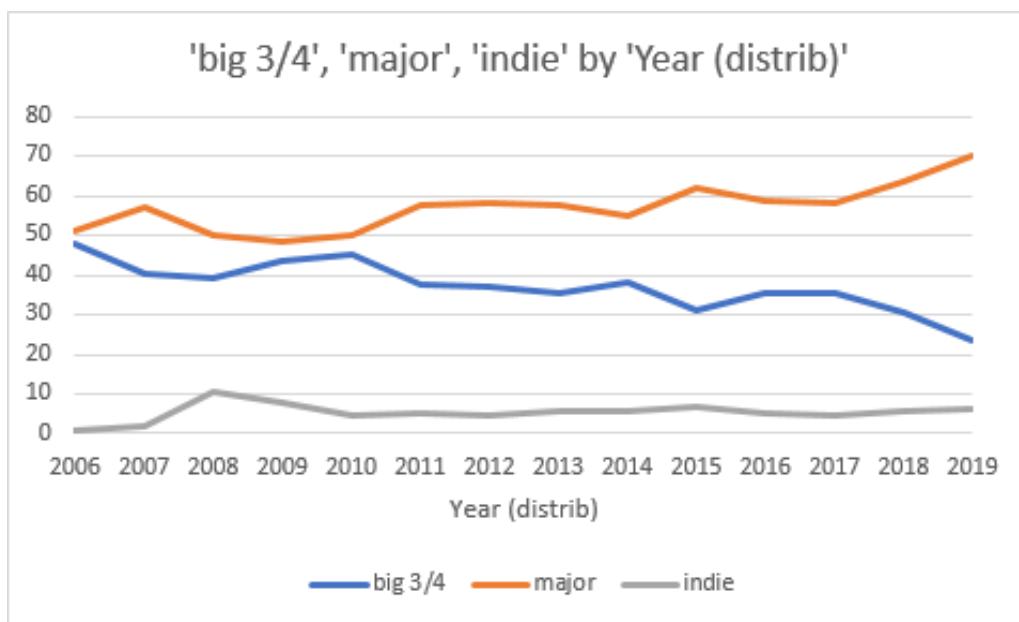


Table 2

Artist Labels 2006 - 2019 Presence in the Charts (%)

	Big 3/4	Major	Indie
Average	4.36	71.65	23.62
Max	7.96	76.39	26.78
Min	1.67	68.24	19.79
Median	4.12	71.52	24.42

Table 3**Artist Distributor 2006-2019 Presence on the Charts (%)**

	Big 3/4	Major	Indie
Average	37.24	57.10	5.37
Max	47.92	70.20	10.50
Min	23.39	48.54	1.04
Median	37.31	57.81	5.29

Table “1” shows the percentage of times a different kind of label came up and table “2” shows the percentage of each type of distributor came up in each category from the three billboard charts mentioned earlier. The reason artists with no label were not included in these graphs is because out of the fourteen years included nine of them had zero artists in both categories and the most in one year was in 2019 with approximately 1.36% of artists without a label and the highest percentage of artists with no label distributing them was in 2013 at approximately 1.04%. One thing to notice is that after EMI records shut down in 2012 percentage of the big 3 did not decrease in artist labels and it also did not decrease in the number of artists distributed by the big three right away. The reason for the decrease in the big three’s distribution is the increase in other major labels distributing for artists.

The number of artists coming from an indie label each year is consistently between nine-teen and thirty percent. The reason for the spike in 2008 is because multiple artists signed by Disney Records came upon all three charts multiple times. The amount of artists being distributed by an indie label is between one and eleven percent. We can also see a big difference in the number of times the “big three” were the label and how often they were the distributor. Each year the number of times the big three or four came up on the charts as the label was between one and eight percent and the number of times they have come up as the distributor is between twenty-three and forty-nine percent, with an average and median of approximately 37%. These results align with the literature because adding majors (which are owned by the big three) and the big three you get 84 percent for distributors and approximately 75 percent for the label.

The different kinds of labels led to differences in average rankings for the artists on the charts. The results of the average of the ranking for each type of label is shown below. The averages for the rankings were rounded to the nearest whole number.

Table 4**Average ranking by label type**

Label	Average ranking in charts	Standard Dev
Big Three	61	26
Major	47	29
Indie	51	29
Roc Nation	40	29
Other large Media Company	48	28

As shown above signing to Roc Nation as the label yields the highest ranking on average, however, the reason the big three is so powerful is the number of times they were on the charts as opposed to Roc Nation.

Table 5**Average ranking by distributor type**

Distributor	Average Ranking on the Charts	Standard Dev
Big Three	50	28
Major	46	29
Indie	63	26
Roc Nation	90	29
Other media Company	47	7

These results show that being distributed by a major label yields the best ranking on the charts. The category “other media company” has the second-best ranking on the charts, however, as was the case before they only came as the distributor 1% of the time. The fact that being with a major label gives you the best ranking and most likely to be on the charts aligns with the literature and supports that the majors own the streaming platforms such as Spotify.

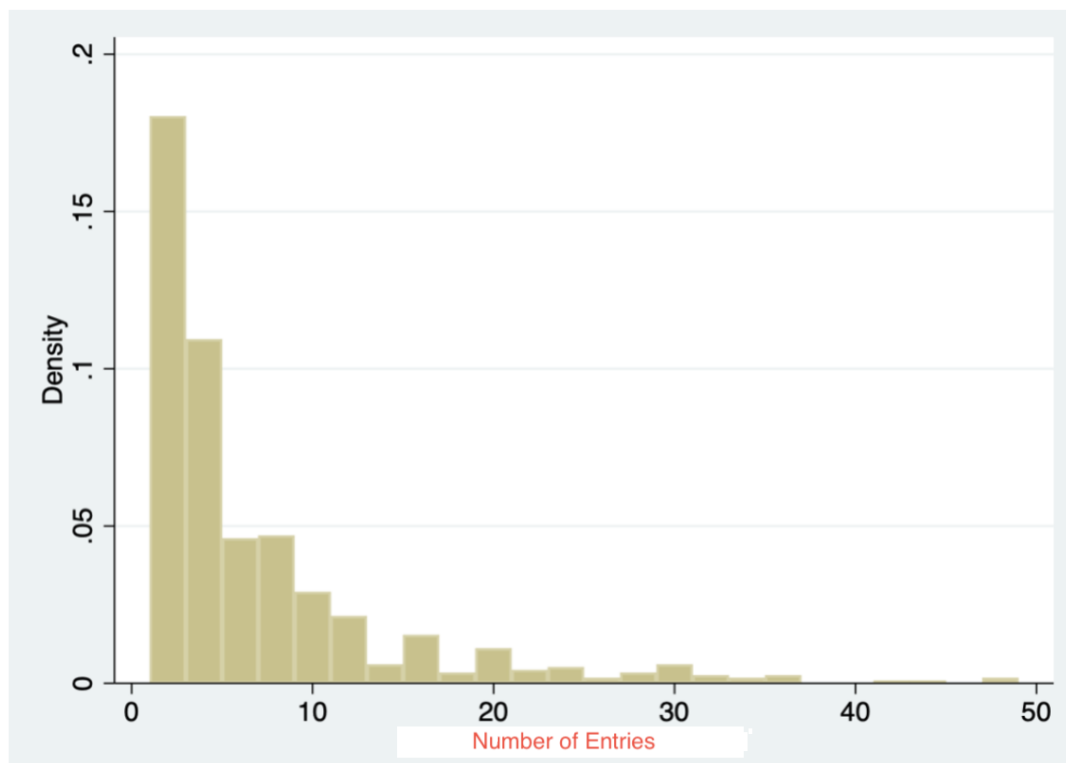
One of the questions being researched is how much power do indie labels have? So artists who were completely indie meaning label and distributed were counted year by year. The average percentage for completely independent artists each year is 6%. The highest percentage was in the year 2008 at 12%, after 2010 there is a decline, Most recently in 2019 5% of the artists are completely independent. This can be attributed to the rise of streaming platforms and how the major companies own them.

Artists appeared on the study multiple times the median amount of times an artist’s name appeared was four times. The least amount of times an artist’s name would appear as one. The max amount of times an artist’s name would appear was forty-eight times. At the 99% level (top one percent) the least amount of times an artist’s name would appear was 35 times and the most were 48.

Table 6**Number of Entries by Artists**

Percentiles	Mean	Smallest		
1%	1	1	Obs	590
5%	1	1	Sum of Wgt.	590
10%	1	1	Mean	6.38
25%	2	1	Standard Dev.	7.33
50%	4		Variance	53.67
	Mean	Largest	Skewness	2.3
75%	8	35	Kurtosis	9.03
90%	16	41		
95%	23	44		
99%	35	48		

Figure 3: Number of Entries By Artists



The table above shows the mean amount of times an artist's name would appear on the charts used in the study. Below the mean, the most amount of times an artist's name would appear on the charts at each level, above the mean the least amount of times an artist's name would appear in the charts at each level. The graph above also shows the frequency of how many times an artist appeared on the charts.

The top 1% consists of Taylor Swift, Eminem, and Drake. They are all currently signed and distributed by a major label. The artist that appears the most is Taylor Swift and she appears forty-eight times she was signed to an indie label until 2019.

At the ninety-five percent level, there are twenty-seven artists. All artists were distributed by a major label, there is one incidence where an artist switched to eOne Music in the year 2019. Out of the twenty-seven artists, twenty-four stayed with the same label and three switched. Out of the 24 that stayed 75% were signed to a major label and 25% were signed to an indie label. One of the three, Taylor Swift switched from an indie label to a major label in 2019. Kanye West switched from Roc Nation to a major in 2017. The Zac Brown Band switched from a major to eOne in 2019. Out of the 3,767 entries, the artists at the ninety-five percent level were 22.22 percent of all the entries.

Out of all the artist entries, 127 only came up once on the charts. Their labels and distributors were also counted. Out of the 127 entries, 95 were signed to a major label and 32 were signed to an indie label. This means that approximately 25% of the artists are signed to an indie label. This is the same as the top 5%. Out of the 127 entries, 111 were distributed by a major label and 16 were distributed by an indie label. So approximately 12.6% were distributed by an indie label at the bottom compared to the 0% at the top 5%. No one was signed to or distributed by any other big company.

How often artists switch labels were also tracked. This was through the same articles mentioned earlier. Every artist's discography was tracked and artists switching labels was taken into account and noted in the data set. The table below shows the switching patterns for artists. Table "D" will show the label switches.

Table 7**Artists current label and previous label**

Prev Label Label	Big 3/4	Other Major	Indie	No label	Media Company	Roc Nation	Total
Big 3/4	0	4	3	0	0	0	7
Major	5	25	24	7	4	1	66
Indie	3	27	13	1	1	0	45
No label	0	1	0	0	0	0	1
Media Company	0	3	0	0	0	0	3
Roc Nation	0	1	0	0	0	0	1
Total	8	61	40	8	5	1	123

Table 8**Artists current distributor and previous distributor**

Prev Label Label	Big 3/4	Major	Indie	No label	Media Company	Roc Nation	Toal
Big 3/4	10	20	14	5	3	0	52
Major	12	19	12	2	1	0	46
Indie	6	11	2	1	0	0	20
No label	0	1	0	0	0	0	1
Media Company	1	2	0	0	0	0	3
Roc Nation	1	0	0	0	0	0	1
Total	29	54	28	8	4	0	123

As shown in Table 7 123 of the entries switched labels at some point, this means approximately 20.8% of the artists have switched labels. Thirty artists in total went from a major to an indie label and twenty-seven artists went from an indie label to a major label. It shows that it is more common for an artist to switch to another major label as opposed to an indie label or other big entertainment company. “Big $\frac{3}{4}$ ” and “other major” are being grouped for this part because as mentioned earlier the majors are owned by the big three.

Table 8 shows that it is more common to have one of the big three distribute an artist's music than to be signed to that label. As you can see out of the twenty artists that switched to an indie distributor 85% were from a major label. Out of the 28 artists that switched from an indie distributor 92.8% switched to a major distributor. Although it is only three entries we see that all the artists that switched to a different media company started at a major. This type of switch aligns with the literature when it says that indie labels produce the next sound and major labels buy it out. The switches were in recent years. Which could mean that more artists will continue to make the switch in the future.

Label and distributor partnerships were also noted from the data. Out of the artists signed to an indie label, 65% are distributed by a major or one of the big three. The rest were distributed by the label they were signed to. Out of artists that were signed to a major label that was not the big three 40% were distributed by one of the big three or four depending on the year. The rest were distributed by either the same label or another label that is owned by the big three. Three artists with no label made onto the

billboard charts used in this study, one of the three were distributed by a major label. All of the artists signed to Disney were distributed by a major label. Sixty percent of the artists signed to Roc Nation were distributed by a major label. All artists that were signed by one of the big three were distributed by the same label.

To further test the theory that the distributor is more important for a higher ranking than a label “T-tests” were performed to see the difference in means in the rankings between having an indie label versus a major label, and having a major distributor versus an indie distributor. We can see that there are only 230 indie label observations below and 2,783 major observations. This shows that artists are more likely to make it on the charts if they are signed by a major label. However; this is still enough observations to get a good average ranking for artists signed to an indie label. The results were that having a major label versus an indie led to no difference in chart ranking, but on average having a major label distribute an artist led to an average ranking of 47 and having an independent distributor led to an average ranking of 60. (See tables below.) We can see that for the difference in ranking with the distributor chart we can reject the null hypothesis, and for the difference in rank because of the label we cannot reject the null hypothesis because of the “p-value” being greater than 5%.

Table 9**T-Test For chart ranking Indie versus Major Distributor**

Group	Obs	Mean	Sd. Er.	St. Dv.	95%	Con Int
Indie	230	60	1.79	27.155	56.92	63.98
Major	2,783	48	0.545	28.761	46.811	48.949
Combined	3,013	48.84	0.525	28.831	47.81	49.85

diff= mean(indie)- mean(major)

t= 6.3954 degrees of freedom =3011

Ho:diff=0 Ha:diff<1 Ha: diff !=0 Ha: diff > 0

Pr(T < t) =1.00 Pr(T > t) =0 Pr(T > t) =0

Table 10**T-Test for chart ranking Indie Versus Major Label**

Group	Obs	Mean	Sd. Er.	St. Dv.	95%	Con Int
Indie	230	47.04	1.05	28.704	44.99	49.094
Major	2,783	47.88	.545	28.761	46.811	48.949
Combined	3,013	47.7	.483	28.787	46.754	48.649

diff= mean(indie)- mean(major)

t= -0.7099 degrees of freedom =3535

Ho: diff=0 Ha: diff < 0 Ha: diff !=0 Ha: diff >0

Pr(T < t) = 0.2389 Pr(T > t) = 0.4778 Pr(T > t) = 0.7611

Table 11**Percentage of labels on each chart**

Label	Top Artist Chart (%)	Top Album Chart (%)	Billboard top 20 chart (%)
Major	75.75	75.26	72.64
Indie	19.48	22.45	23.37
No Label	0.33	0.57	0.62
Media Company	2.17	1.72	1.61
Roc Nation	2.26	2.15	0.92

Table 12**Percentage of distributor on different charts**

Distributor	Top Artist Chart (%)	Top Album Chart (%)	Billboard Top 200 Chart (%)
Major	94.48	93.64	93.70
Indie	3.93	4.58	4.53
No Label	0.25	0.47	0.54
Media Company	1.59	1.12	1.08
Roc Nation	0	0.19	0.15

Correlations and coefficients were compared for the different rankings in the charts. The results showed that the correlation compared on three different charts was low. Different labels were counted to see if being on a different label led to a difference

in which charts. To see if there was a correlation between the type of label or distributor and which charts the artist ended up on percentages were counted on combinations of charts, meaning is there a correlation between the label and distributor and what charts they appear on.

Major labels had a consistent percentage on each chart as the distributor. As for being the label, major labels were on the “billboard top” chart 3% less than the other two charts. Indie labels were on the “billboard top” and “top albums,” chart 23% of the time, but they were on the “top artist” chart 19% of the time as the label. For the distributor, indie labels were on the billboard top and top albums chart 5% of the time and on the top artist chart 4% of the time. Large media companies not including Roc Nation were on the top artist charts about .5% more than the other charts. This number is small but is about a thirty percent increase from the other charts, as the label. As the distributor, we see that it has the same .5% percent increase from the other charts. Roc Nation highest on the lowest on the billboard top charts approximately 1% compared to 2% on the other charts as the label. As the distributor, Roc Nation was the distributor for 0% of the artists for the top artist’s list and was the distributor .15% for the billboard top list and .19% for the top albums list.

V: Conclusion

The literature concludes that major labels did lose a lot of revenue with the invention of Napster and the increase in illegal file-sharing. However, once consumers could buy music online with things like the *iTunes* store, the data shows that the majors

gained more of their market power back. Then, with streaming platforms, such as Spotify, Soundcloud, and Apple Music, they gained their oligopoly back by having some control over these platforms.

We found that on average major 75% of the artists that make it onto the year-end charts were signed to a major label. We also found that on average more than 90% of artists that make it onto the same charts are distributed by a major label. A large majority of the artists being distributed by a major aligns with the literature. The literature suggests that the majors have control over the streaming platforms. The paper also concludes that once an artist makes it onto the charts the type of label they are signed to does not matter, however, the type of label distributing that artist makes a significant difference on their ranking in the charts.

To further back the claim that having a major distributor is more impactful than having a major label we looked at the top five percent of the artists on the charts based on how many times they came up throughout the data set and the artists that came up only once throughout the dataset. We saw the same percentage of artists at the top and the bottom was signed to a major and indie label, but significantly more artists at the bottom were distributed by an indie label.

This paper also saw that an artist is almost just as likely to switch from a major to an indie label as an indie label to a major label. We see that it is much more likely for an artist to switch from a major to another major or an indie label to another indie label.

To further research this topic past label and distributor relationships can be looked at before 1999 and compare the relationships to see if those relationships were

different pre-Napster. The average ranking of artists comparing their distributors can also be calculated during this time period. This can see if indie labels had less influence as the distributor before Napster was created compared to the current music industry. Furthermore, market power can be calculated at the individual label level for both major and indie labels.

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