THE ROLE OF ANTITRUST IN PROTECTING COMPETITION, INNOVATION AND CONSUMERS AS THE DIGITAL REVOLUTION MATURES:

THE CASE AGAINST THE UNIVERSAL-EMI MERGER AND E-BOOK PRICE FIXING

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ABSTRACT

This paper presents a detailed analysis of the proposed merger between Universal Music Group (UMG) and EMI by applying the standards and methods outlined in the recently revised Department of Justice/Federal Trade Commission Merger Guidelines. It shows that the UMG-EMI merger is "an unfair method of competition" that constitutes "an unreasonable restraint of trade" because it will "substantially lessen competition" and is "likely to enhance market power." Simply put, the post-merger firm will have a strong incentive and increased ability to exercise market power, particularly in undermining, delaying, or distorting new digital distribution business models, in a market that has been a tight oligopoly for over a decade.

The merger creates a highly concentrated market by eliminating one of only four major record labels and results in an increase in concentration that is five times the level that the DOJ/FTC identify as a cause of concern. The recent history of anticompetitive, anti-consumer conduct by this tight oligopoly and the role of EMI as a maverick in the digital era compound the anticompetitive effects of the merger and significantly increase the likelihood that the merger will not only result in higher prices but also undermine incipient competition.

Claims that piracy will prevent the abuse of market power are directly refuted by evidence on consumer purchasing behavior, estimates of elasticities of demand by academics, and marketing research conducted by the music industry. The analysis demonstrates that the industry has chronically and grossly overestimated the role of copyright infringement in the development of digital distribution. Correcting this misrepresentation of the extent of infringement is necessary to ensure that policymakers have a proper understanding of the full benefits of digital technologies.

The strong parallels between the impact of the merger on the development of digital disintermediation in the music sector and the recent case brought by the Department of Justice against e-book publishers highlight the economic efficiency and consumer benefit from the digital distribution of goods and services. The anticompetitive tactics of the dominant, incumbent, physical space firms remind us that these firms will stop at nothing to delay change and preserve their dominance. Antitrust authorities and others must use the full range of tools available to protect competition, innovation, and consumers and ensure that consumers and the economy enjoy the full benefits of the development of digital technologies.

TABLE OF CONTENTS

LIST OF EXHIBITS

I. INTRODUCTION

A. Purpose

In a recent letter to the Federal Trade Commission (FTC) and the Congressional Committees with oversight over the antitrust laws, the Consumer Federation of America (CFA) and Public Knowledge (PK) called for close scrutiny of the proposed merger between Universal Music Group (UMG) and EMI. The letter pointed out that "the Department of Justice's (DOJ) recent e-book antitrust complaint immediately casts a spotlight on another action under review by the antitrust authorities that raises similar and parallel issues." (Cooper and Griffin, 2012)

Universal immediately objected to the parallel we drew between the DOJ case against e-book price collusion as well as our call for antitrust scrutiny of the proposed Universal-EMI merger.

> CFA's effort to compare this case to the government's e-book case completely misunderstands the law. The e-book case is about an alleged illegal price-fixing conspiracy. Market shares don't matter in a case like that, it's just as illegal for two tiny bookstores to fix prices, as it is for giant publishing companies… The law governing mergers is totally different, and most mergers, like this one, are ultimately found to be beneficial to competition and consumers. (Sisario, 2012)

This paper shows that the Universal response could not be more wrong on both of the issues raised in its response.

- The law governing merger review is exactly the same as the law governing collusion.
- Under the antitrust laws the UMG-EMI merger represents a business agreement that constitutes "an unreasonable restraint of trade" that will "substantially lessen competition" and constitutes an unfair method of competition, which is unlawful because it is "likely to enhance market power." (DOJ/FTC, 2006)

As we pointed out in our letter, this is a particularly important moment to reject gross misrepresentations of the antitrust laws, like the one offered by Universal and the book publishers. The Department of Justice action against price fixing by five major publishers underscores the ongoing effort of antitrust authorities to define the proper role for antitrust in the development of the digital economy. The economic efficiency and consumer benefit from the digital distribution of goods and services are transforming the way the market meets consumer demand. Incumbent physical space firms confronted with a more efficient business model will stop at nothing to preserve their dominance. The actions of antitrust authorities and others to ensure that incipient competition is not squelched by anticompetitive tactics should include the full range of antitrust powers that have traditionally been used to ensure that consumers and the economy enjoy the benefits of the greatest amount of competition possible (Cooper, 2001) – denial or conditioning of mergers and acquisitions that substantially lessen competition, reversing actions that defend or expand monopoly power by undermining competition, prevention of unilateral monopoly abuse, and blocking of collusion.

1. Traditional Horizontal Merger Concerns

In seeking to block and unravel the price fixing scheme hatched by five publishers, the DOJ alleged that a cabal of companies with a total market share of less than 50% could undermine or distort the growth of nascent competition from new digital distribution models by refusing to make their products available to alternative distribution models or by manipulating the terms, conditions, or price of access to their products. (DOJ, 2012)

- If five companies with a market share of less than 50% pose a threat to nascent competition from digital distribution models, does one company with a market share above 40% (Nielsen/Soundscan, 2012) pose a similar threat? We believe the answer is an emphatic yes.
- Viewed through the lens of traditional antitrust practice and the lens of nascent development of digital distribution models, the UMG-EMI merger poses a significant threat to competition and demands close scrutiny and vigorous remedy by the Federal Trade Commission (FTC), the sister antitrust agency to the DOJ that is reviewing the transaction.

The recently revised joint DOJ/FTC *Merger Guidelines* show that this merger raises serious concentration concerns, even when viewed as a traditional horizontal merger. Placed under the microscope of antitrust merger review, as the following analysis demonstrates, the facts in this case make it clear that the merger is very likely to enhance the market power of the post-merger firm and make the abuse of that market power much more likely. The post-merger market share of EMI-Universal is sufficient to give it the power to distort or even determine the fate of digital distribution models.

Even if the FTC does not believe that a 40+% market share alone gives a single company the power to determine life or death for emerging digital business models, it certainly makes it very easy for that company to lead the effort to do so. With a post-merger three-firm market share of 90%, one or two of the other major labels following the lead of the dominant firm could easily decide the fate of alternative distribution models. The market would be vulnerable to anticompetitive harm resulting from conscious parallelism.

2. A Key Moment in the Development of Digital Distribution

While traditional antitrust analysis builds an overwhelming case against the merger, concern about nascent competition in the digital space significantly magnifies the threat already posed by it. The most compelling reason to give the merger extremely close scrutiny is the potential for development of alternative business models in the transition to digital music distribution coupled with incumbent record labels' strong interest in diminishing the impact of digital disintermediation on their control of the marketplace. Incumbent major record labels have incentive to stifle new digital distribution platforms because those platforms begin to level the playing field among major labels, independent labels, and unsigned artists. The merger will dramatically increase the concentration of control over sound recordings of popular music – current albums, catalogue albums and deep catalogue albums, as well as digital albums and tracks – to which competing distribution models must have access to succeed.

Digital platforms are more likely to license unknown or niche music because, unlike their physical space predecessors, they are not constrained by time limits (like radio) or space limits (like physical stores). As a result, the major record labels lose one of their main selling points to musicians—namely, that they have the connections and influence that a musician absolutely needs to get his or her music out in the marketplace. Thus, the dominant incumbent labels are particularly incentivized to stifle digital platforms that will decrease their influence as compared to smaller labels or unsigned acts. By reducing the alternatives available to artists, they preserve their market power over creators.

Digital disintermediation is a powerful, consumer-friendly, competition-friendly force in the music industry, just as it is in the book publishing market, but it is not immune to the abuse of market power by entrenched physical space incumbents. Merger review is intended to be prophylactic, to prevent the acquisition of market power that raises the likelihood that anticompetitive, anti-consumer behaviors will occur and be effective.

Giving a firm with a strong interest in retarding digital distribution substantially more ability to do so is a mistake that can be avoided by denying the merger outright, or crafting conditions that prevent the abuse of this newly acquired market power. That is exactly the situation in the proposed merger between Universal and EMI in the music space. The FTC must take steps to prevent this severe harm to competition by either rejecting the merger outright, requiring divestitures to reduce the structural damage to competition in the market for recorded music, or imposing behavioral conditions that prevent the abuse of market power.

B. OUTLINE

The report is organized as follows:

Section II briefly describes the role of merger review in the arsenal of antitrust tools to promote competition and protect consumers from the abuse of market power.

Section III shows that the proposed merger violates the market structure thresholds of the *Guidelines* by a wide margin. The persistent tight oligopoly structure, in the face of several major technological changes, reinforces the concern about the merger. It also examines conduct in the music sector over the past two decades. It shows that the evidence to which the antitrust authorities look for insight into the likely impact of the merger after it has failed the market concentration test heightens, rather than lessens, concerns about this merger.

Section IV takes up the question of piracy. It shows that piracy will not prevent the abuse of market power in the future. It also explains how the industry vastly overestimated the impact of piracy in the past.

Section V reviews the current situation in the music sector from the point of view of incipient or nascent competition. It shows that competition is incipient and still vulnerable to anticompetitive attacks by incumbents, while the merger eliminates an important player with a record as a maverick in the digital era.

Section VI expands on the e-book analysis, showing that the impact of digital disintermediation on that market is similar, which highlights the need for antitrust authorities to remain vigilant in their defense of competition. It concludes with some observations on the important role for antitrust in the maturing digital revolution.

Appendix A presents a brief, graphical explication of the welfare economics of digital disintermediation.

II. THE ROLE OF MERGER REVIEW IN THE ENFORCEMENT OF THE ANTITRUST LAWS

A. GOVERNING PRINCIPLES

Mergers must be evaluated under the antitrust laws as acts that raise the most fundamental concern of antitrust, as the following 2006 Commentary on the joint DOJ/FTC *Merger Guidelines* makes clear.

> **Governing Legal Principles:** The principal federal antitrust laws applicable to mergers are section 7 of the Clayton Act, section 1 of the Sherman Act, and section 5 of the Federal Trade Commission Act. Section 7 proscribes a merger the effects of which "may be substantially to lessen competition." Section 1 prohibits an agreement that constitutes an unreasonable "restraint of trade." Section 5, which the Federal Trade Commission enforces, proscribes "unfair methods of competition." Over many decades, the federal courts have provided an expansive body of case law interpreting these statutes within the factual and economic context of individual cases.
>
> The core concern of the antitrust laws, including as they pertain to mergers between rivals, is the creation or enhancement of market power. In the context of sellers of goods or services, "market power" may be defined as the ability to profitably maintain prices above competitive levels for a significant period of time. Market power may be exercised, however, not only by raising prices, but also, for example, by reducing quality or slowing innovation. In addition, mergers also can create market power on the buying side of a market. Most mergers between rivals do not create or enhance market power. Many mergers, moreover, enable the merged firm to reduce its costs and become more efficient, which, in turn, may lead to lower prices, higher quality products, or investments in innovation. However, under the law, the Agencies challenge mergers that are likely to create or enhance the merged firm's ability—either unilaterally or through coordination with rivals—to exercise market power.
>
> Following their mandate under the antitrust statutory and case law, the Agencies focus their horizontal merger analysis on whether the transactions under review are likely to create or enhance market power. The Guidelines set forth the analytical framework and standards, consistent with the law and with economic learning, that the Agencies use to assess whether an anticompetitive outcome is likely. The unifying theme of that assessment is "that mergers should not be permitted to create or enhance market power or to facilitate its exercise." Guidelines § 0.1. The Guidelines are flexible, allowing the Agencies' analysis to adapt as business practices and economic learning evolve.
>
> In applying the Guidelines to the transactions that each separately reviews, the Agencies strive to allow transactions unlikely substantially to lessen competition to proceed as expeditiously as possible. The Agencies focus their attention on quickly identifying those transactions that could violate the antitrust laws, subjecting those mergers to greater scrutiny. Most mergers that pose significant risk to competition come to the Agencies' attention before they are consummated under the premerger notification and reporting requirements of the Hart-Scott-Rodino Antitrust Improvements Act of 1976, 15 U.S.C. § 18a ("HSR"). HSR requires that the parties to a transaction above a certain size notify the Agencies before consummation and prohibits consummation of the transaction until expiration of one or more waiting periods during which one of the Agencies reviews the transaction. The waiting periods provide the Agencies time to review a transaction before consummation (DOJ/FTC, 2006).

In fact, merger review is one of the few areas of antitrust practice where the authorities traditionally take prophylactic measures to prevent the abuse of market power.

> Most merger analysis is necessarily predictive, requiring an assessment of what will likely happen if a merger proceeds as compared to what will likely happen if it does not. Given this inherent need for prediction, these Guidelines reflect the congressional intent that merger enforcement should interdict

> competitive problems in their incipiency and that certainty about anticompetitive effect is seldom possible and not required for a merger to be illegal. (DOJ/FTC, 2010:1)

Whether or not most mergers are allowed to proceed, as claimed by Universal, is irrelevant; each merger must be reviewed on the basis of the facts in the case and the extent to which the specific merger will make the abuse of market power more likely.

> These Guidelines should be read with the awareness that merger analysis does not consist of uniform application of a single methodology. Rather, it is a fact-specific process through which the Agencies, guided by their extensive experience, apply a range of analytical tools to the reasonably available and reliable evidence to evaluate competitive concerns in a limited period of time (DOJ/FTC, 2010:2).

For this reason and to give guidance to firms contemplating mergers, the antitrust agencies adopted *Merger Guidelines* almost half a century ago. Those *Guidelines* have been updated several times, most recently in 2010. Thus, the agencies have a very fresh set of tools to use to evaluate the proposed Universal-EMI merger.

B. THE MERGER GUIDELINES

1. Key Thresholds

Under the joint Department of Justice/Federal Trade Commission *Merger Guidelines,* the consideration of proposed mergers begins with a straightforward analysis of market concentration. If a merger increases the concentration in the market by an amount that could result in a significant increase in the market power of the post-merger firm, then the merger demands scrutiny. Concentration is measured by the Hirschman-Herfindahl Index (HHI) because that index has a direct relationship to existence of market power. (Viscusi, Vernon and Harrington, 2001: 147-149, 212-213) The thresholds at which concern is felt about mergers were raised substantially in the recent revision of the *Guidelines*.

A market that is considered moderately concentrated used to be defined as one that exhibited an HHI between 1,000 and 1,800. An HHI above 1,800 was considered a highly concentrated market. Translated into everyday terms, a market with ten equal-sized competitors would have an HHI of 1,000. A market with 6 equal-sized competitors would have an HHI of 1,667. In effect, a market with 10 or more equal-sized competitors was considered unconcentrated, and a market with fewer than roughly 5.5 was considered highly concentrated. In between, the market was considered to be moderately concentrated. Under the recently revised guidelines, the unconcentrated threshold was raised to 1,800, while the highly concentrated threshold was raised to 2,500, or the equivalent of 4-equal sized firms.

The revised guidelines are consistent with long-standing conceptualizations in the economic literature, as described in Exhibit II-1. A moderately concentrated market would correspond to a tight oligopoly, which was defined as a market where the top four firms (the four firm concentration ratio, or CR4) had more than 60 percent of the market.[1] Monopolistic competition involves products whose differentiation affords the firms that produce them market power which is assumed to be short lived as entry will erode that market power. The differentiation of content in the music sector makes this market structure relevant, but some argue

[1] In the case of 5.5 equal-sized firms, the four firm concentration ratios would be 72%.

that the existence of barriers to entry – copyright and economies of scale in physical production and distribution – open the way to long-term market power.[2] (Tschmuck, 2009: 261)

EXHIBIT II-1: DESCRIBING MARKET STRUCTURES

Department of Justice Merger Guidelines	Type of Market	HHI	Equivalents in Terms of Equal Sized Firms	4-Firm Share CR4
Highly Concentrated	Monopoly[a/]	10,000	1	100
	Duopoly[b/]	5,000	2	100
		2,500	4	100
Moderately Concentrated			5.5	72
	Tight Oligopoly			60
	Loose Oligopoly	1,000	10	40
	Monopolistic Competition			
Unconcentrated	Atomistic Competition	200	50	8

Sources and Notes a = Antitrust practice finds monopoly firms with market share in the 65% to 75% range. Thus, HHIs in "monopoly markets can be as low as 4200; b = Duopolies need not be a perfect 50/50 split. Duopolies with a 60/40 split would have a higher HHI. Sources: U.S. Department of Justice, *Horizontal Merger Guidelines*, revised August 2010, for a discussion of the HHI thresholds; William G. Shepherd, *The Economics of Industrial Organization* (Englewood Cliffs, NJ: Prentice Hall, 1985), for a discussion of four firm concentration ratios.

2. The Impact of the Merger on Concentration

During merger review, a merger is evaluated by examining the level of concentration of the post-merger market and the impact of the merger on the level of concentration in the market. The higher the level of post-merger concentration and the larger the increase in concentration, the greater the threat to competition and the more likely the antitrust authorities are to block a merger or demand remedies to mitigate the potential harms of increased market power.

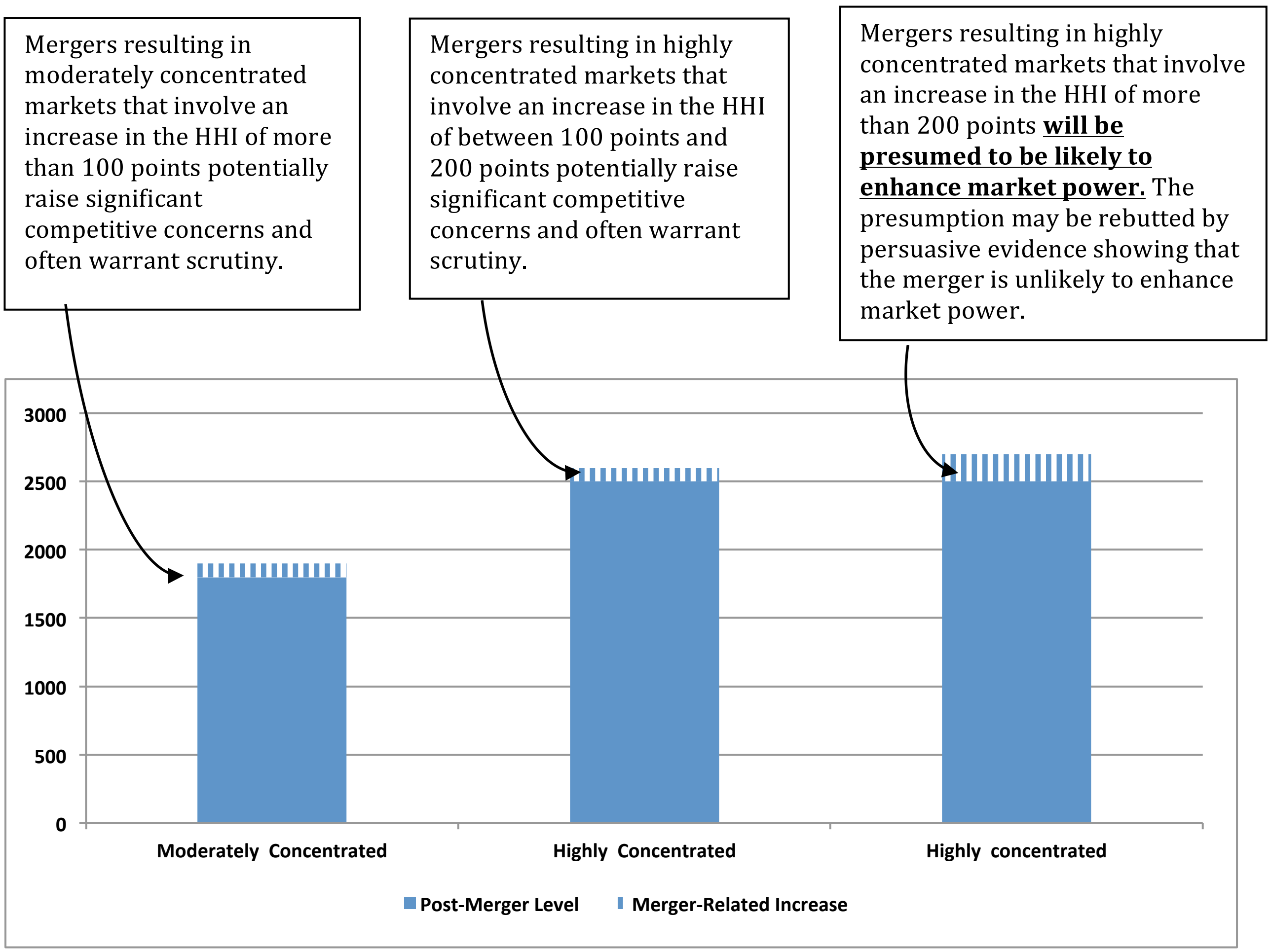
> *Moderately Concentrated Markets:* Mergers resulting in moderately concentrated markets that involve an increase in the HHI of more than 100 points potentially raise significant competitive concerns and often warrant scrutiny.
>
> *Highly Concentrated Markets:* Mergers resulting in highly concentrated markets that involve an increase in the HHI of between 100 points and 200 points potentially raise significant competitive concerns and often warrant scrutiny. Mergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power.

[2] Thus, one way to view digital disintermediation is the reduction of physical barriers to entry, which moves the sector back toward the model of true monopolistic competition, with its short-term exercise of market power. At the same time, the second major barrier to entry, licensing of content, becomes a focal point of the effort to preserve or reduce long-term market power.

The presumption may be rebutted by persuasive evidence showing that the merger is unlikely to enhance market power. (DOJ/FTC, 2010: 19)

Exhibit II-2 shows the concentration thresholds and the merger-related increases in concentration that trigger concerns and lead to scrutiny. In the Comments filed in response to the revision of the *Guidelines,* the Consumer Federation of America observed that, while the revisions accepted more concentrated markets as thresholds for concern, they would improve antitrust enforcement only if they were deemed to be more binding and led to more consistent action to block harmful mergers. The UMG-EMI merger is exactly the circumstance we had in mind.[3]

EXHIBIT II-2: CONCENTRATION THRESHOLDS AND IMPLICATIONS OF MERGER-RELATED INCREASES IN HHI



Source: U.S. Department of Justice, *Horizontal Merger Guidelines*, revised August 2010.

It turns out that Universal is not only wrong on the broad principles of antitrust law, it is dead wrong when this specific merger is viewed through the lens of the *Merger Guidelines* applied to the facts of this case. As discussed in the next section, the UMG-EMI merger falls in the highest level of concern, highlighted in Exhibit II-2.

[3] If the revision enables the antitrust authorities to make the thresholds more binding – to challenge mergers more consistently when they violate the thresholds – this will be an important step forward. Antitrust authorities had failed to challenge and the courts have failed to block too many mergers. (CFA, 2010: 3-4)

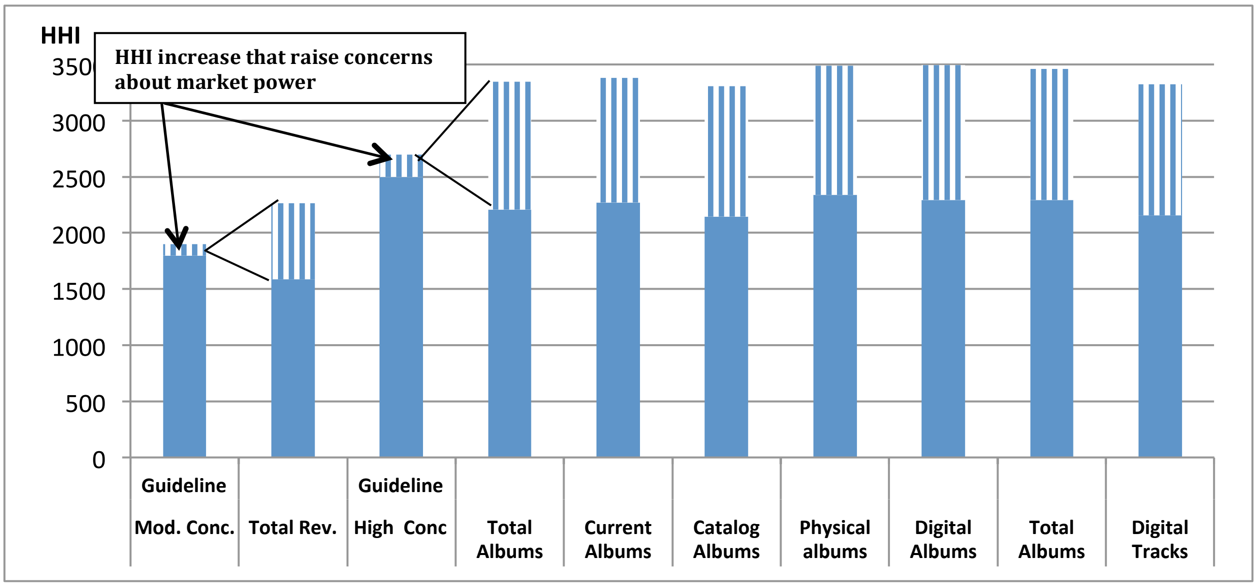
III. THE UMG-EMI MERGER RAISES SIGNIFICANT COMPETITIVE CONCERNS

A. MARKET STRUCTURE

1. Horizontal Concentration

By a wide margin, the UMG-EMI merger is a merger that exceeds the levels where a merger is deemed to "potentially raise significant competitive concerns" and "warrant scrutiny." As shown in Exhibit III-1, measured by revenues, the merger would move the market for recorded music sales from the unconcentrated range to the moderately concentrated range by increasing the HHI by over 500 points, five times the level that triggers concerns. Looking at the market for albums, which is a distinct product[4] and the largest single source of record label revenue, the impact of the merger is much greater. For each of the major categories of albums the merger moves the market from the moderately concentrated level to the highly concentrated level adding over 1,000 points to the HHI. This is five times the level at which a merger is "presumed to be likely to enhance market power."

EXHIBIT III-1: IMPACT OF THE UMG-EMI MERGER ON MARKET CONCENTRATION



Source: Music and Copyright, 2011, Universal Music Group Reasserts it Recorded Music Dominance in 2010; Nielsen Company & Billboard's 2011 Music Industry Report, Department of Justice, Federal Trade Commission *Merger Guidelines,* June 2010.

The issue of market definition will be hotly debated, as always happens in merger review, but we are convinced that album sales, which remain the dominant source of revenue for the labels, is a well-defined market that is extremely important.[5] The fact that all five of the major products

[4] Enders, 2011: 14, *notes* that "On the demand side, CDs involve albums and digital downloads involve predominantly singles which makes them imperfect substitutes."

[5] *Merger Guidelines* "Market definition focuses solely on demand substitution factors, i.e., on customers' ability and willingness to substitute away from one product to another in response to a price increase or a corresponding non-price change such as a reduction in product quality or service.... Market shares of different products in narrowly defined markets are more likely to capture the relative competitive significance of these products, and often more accurately reflect competition between close substitutes. As a result, properly defined antitrust markets often exclude some substitutes to which some customers might turn in the face of a price increase even if such substitutes provide alternatives for those customers. ... Because the relative competitive significance of more distant substitutes is apt to be overstated by their

that represent virtually all of the revenue streams of the major labels exhibit nearly identical market structures and concentration effects of the merger – including the new digital products – reinforces the concern about the merger. In fact, the post-merger firm would have a powerful position in the digital product space, controlling six of the all-time top ten selling digital artists and albums (N*ielsen* 2012: 7).

The impact of the merger on digital album concentration is no different from the impact on physical albums. A weighted average concentration analysis for all albums shows the same impacts and levels as the physical and digital albums separately. Thus, it is not the case that different labels specialize in physical and digital products. The tight oligopoly that has existed for a decade in physical albums has transferred to digital albums and spans both physical and digital products. While the digital tracks market is somewhat less concentrated and the impact of the merger is slightly smaller, the merger falls in the highly concentrated, high impact area for this product. The control of digital content by the tight oligopoly of major labels means that new digital distribution services are dependent on labels for access to marquee content.

The presumption that flows from the market concentration analysis can be rebutted by examining other factors that the *Merger Guidelines* identify. The merging parties offer two theories on why the merger will not have the anticompetitive impact that the market structure analysis suggests. (Morgan, 2012; Pham, 2011)

- Digital technologies have created a dynamic environment in which large incumbents are at risk, should they engage in abusive pricing.
- Piracy will discipline abusive pricing.

In this case, however, these other factors only strengthen the case against the merger. Neither of these claims withstands scrutiny when subject to examination by the additional methods that the *Merger Guidelines* lay out for reviewing mergers. In other words, the merger fails the first big test, and every one of the secondary tests.

2. History

One particularly important set of factors to be considered is the history of market structure and firm conduct in the industry. "The Agencies give more weight to market concentration when market shares have been stable over time, especially in the face of historical changes in relative prices or costs" (DOJ/FC, 2010:18). This line of analysis addresses the first defense of the merging parties to rebut the market structural impact of the merger. The same small number of firms have been at the top of the music industry for almost a quarter of a century, in spite of two major changes in the medium on which music is recorded that caused dramatic change in the cost of production and the nature of the product (Exhibit III-2).

In order to appreciate the remarkable stability of the dominant firms, Exhibit III-3 presents two views of the history of technological change as the backdrop for ownership stability, which the *Guidelines* stress. The top graph in Exhibit III-3 shows the absolute value of revenues earned by the sale of different media across time. It depicts dramatic change in technology and growth across time. The bottom graph identifies the same technological change, but it puts the growth in perspective, by calculating the real expenditures. Technology has changed, to be sure, but a large

share of sales, when the Agencies rely on market shares and concentration, they usually do so in the smallest relevant market satisfying the hypothetical monopolist test." (DOJ/FTC, 2010:7-8-9)

EXHIBIT III-2: STABLE LEADING FIRMS IN THE U.S. MUSIC INDUSTRY

Major labels 1988–1998 (Big Six)
1. Warner Music Group
2. EMI
3. Sony Music
   (AKA CBS Records until 1991)
4. BMG Music
5. Universal Music Group
6. Polygram

Major labels 1998–2004 (Big Five
1. Warner Music Group
2. EMI
3. Sony Music
4. BMG Music
5. Universal Music Group
   (Polygram absorbed into UMG)

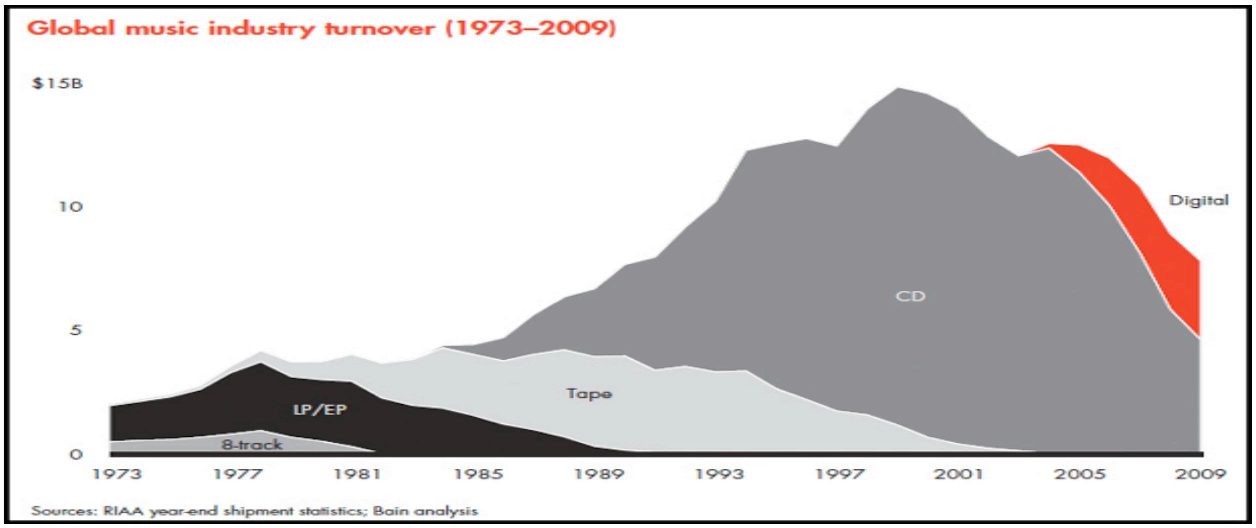
Major labels 2004–2008 (Big Four)
1. Warner Music Group
2. EMI
3. Sony BMG
   (Sony and BMG joint-venture)
4. Universal Music Group

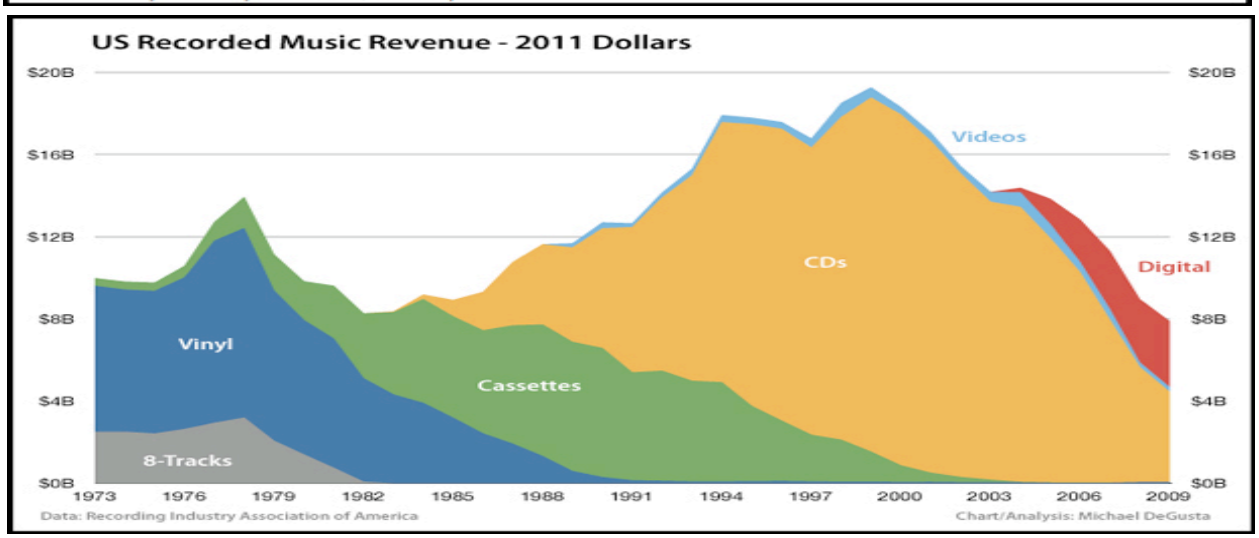
Major labels 2008–2011 (Big Four)
1. Sony Music Entertainment
2. EMI Group
3. Warner Music Group
4. Universal Music Group

Major labels 2012 (if approved)
1. Sony Music Entertainment
2. Warner Music Group
3. Universal Music Group

Source: http://en.wikipedia.org/wiki/Record_label

EXHIBIT III-3: THE REPEATED CASCADE OF MUSIC MEDIA





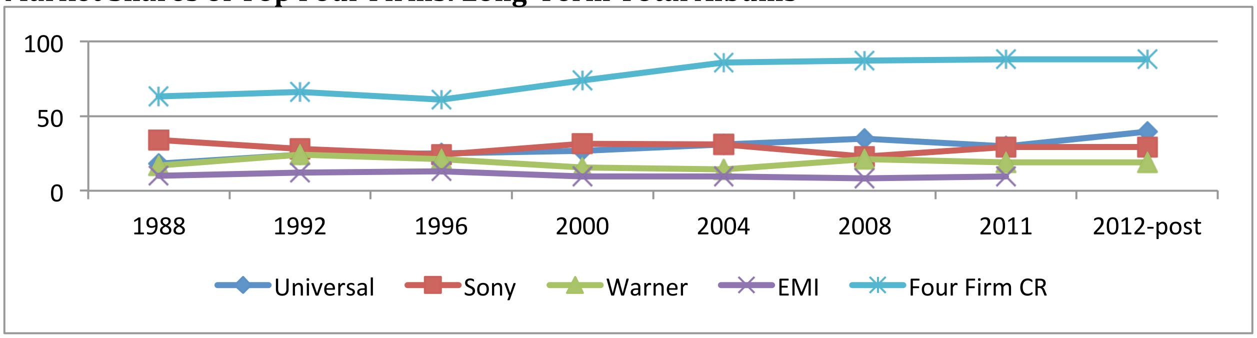
Source: Michael Degusta, *The Real Death of the Music Industry,* February, 16, 2011; Bain & company, *Publishing in the Digital Age,* January 1011.

part of the apparent growth was due to inflation.   Above all, the firms that were dominant at the onset of the transition to CDs are the same firms that are dominant after the transition to digital distribution.

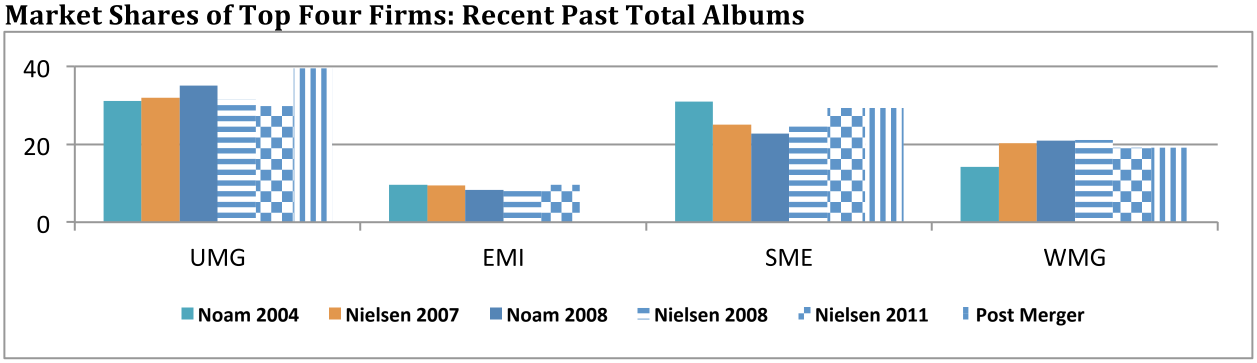
Exhibit III-4 shows the two primary measures of market concentration. Using the overlap in the data between Noam and Nielsen, the bottom graph shows the long term measure of concentration that covers almost thirty years, with the post-merger market as the endpoint. This merger would constitute the largest increase in concentration in an industry that has been a tight oligopoly for over a decade, a tight oligopoly that has persisted in spite of a major technological change. The long-term trend reinforces the concern about market power in the initial market structure analysis of Section II.

EXHIBIT III-4: MEASURES OF LONG-TERM MARKET STRUCTURE

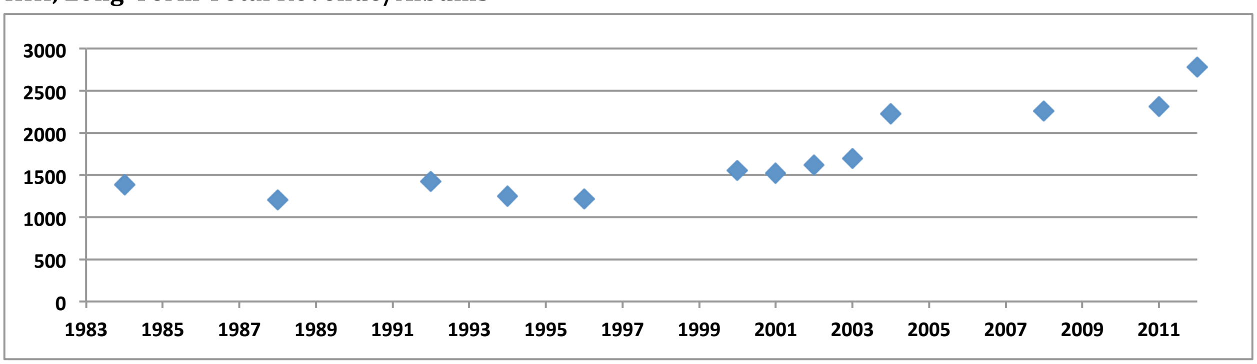
Market Shares of Top Four Firms: Long-Term Total Albums



Market Shares of Top Four Firms: Recent Past Total Albums



HHI, Long-Term Total Revenue/Albums



Source: Eli Noam, *Media Ownership and Concentration in America* (New York: Oxford University Press, 2009), Table 7.3; *The Nielsen Company & Billboard's 2011 Music Industry Report*, various years.

B. CONDUCT

A second important type of evidence to which the antitrust authorities look in order to gain insight into how the merger will affect future conduct in the sector is to examine past behavior, particularly "industry participants' behavior in tracking and responding to price changed by some or all rivals"(DOJ/FTC, 2010:11). Here the record is particularly troubling. The leading firms in the sector have engaged in a repeated pattern of anti-consumer and anticompetitive behavior.

In the mid-1990s, the major record labels engaged in two practices that imposed severe harm on consumers and competition. They eliminated the sale of singles, even though the CD was well-suited for the sale of singles. They adopted a price fixing scheme to keep album prices high, even though the new compact disc (CD) format dramatically lowered their costs and discounters had lowered prices. In short, they restricted output and raised prices, forcing consumers to unnecessarily purchase hundreds of millions of overpriced CDs to get the music that they wanted. An antitrust consent decree ended price fixing (FTC: 2000) and digital distribution made the sale of singles a compelling alternative. (Nestor, 2012)

1. Product Offerings: The Elimination of Singles

Exhibit III-5 shows the pattern of sales, measured in units shipped across almost 40 years. The upper graph shows the absolute value, while the lower graph shows shipments per capita. Singles constituted a large part of the output of the industry through the 1980s but began to decline with the introduction of the CD in the mid-1980s. Singles declined slightly for a decade, then dropped precipitously between 1997 and 2002, falling by 99 percent. The record labels eliminated singles over the objection of retailers and to the dismay of consumers. The growth of sales of singles after the advent of digital distribution is quite dramatic made much more so by the ill-considered suppression of singles during the CD era.

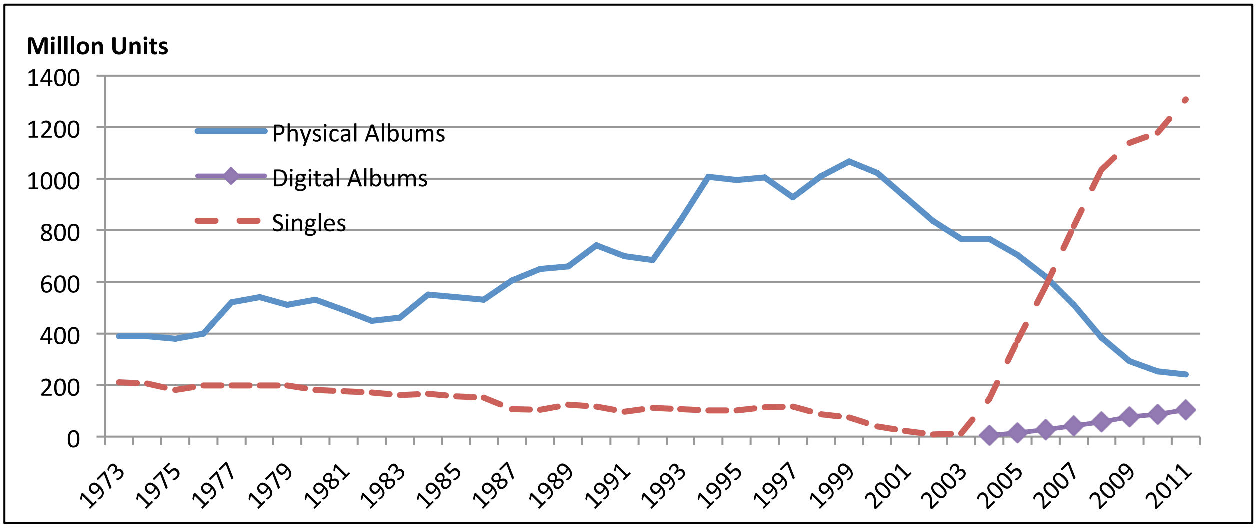
The elimination of singles was a profit-seeking policy that had adverse implications for long-term music sales:

> [S]ingles made up a hefty part of the record industry's income… But things have changed. Record companies want consumers to buy full length CDs when they fall in love with a song. So they have shut off the spigot when it comes to releasing less expensive commercial singles to retail…
>
> The debate rages. Labels insist they simply cannot make a big enough return if fans are buying $3 singles instead of $16 albums. Retailers, though, fume that they are suffering without singles, which have historically increased foot traffic in stores, especially among younger shoppers.
>
> Labels like the single when it suits their purposes; during parts of the overheated 1990s, labels released them in floods at deeply discounted prices to help promote blockbuster albums and claim fanciful new sales records…
>
> But that was then, this is now, and the music fans are the losers. (Boelhert, 2004)

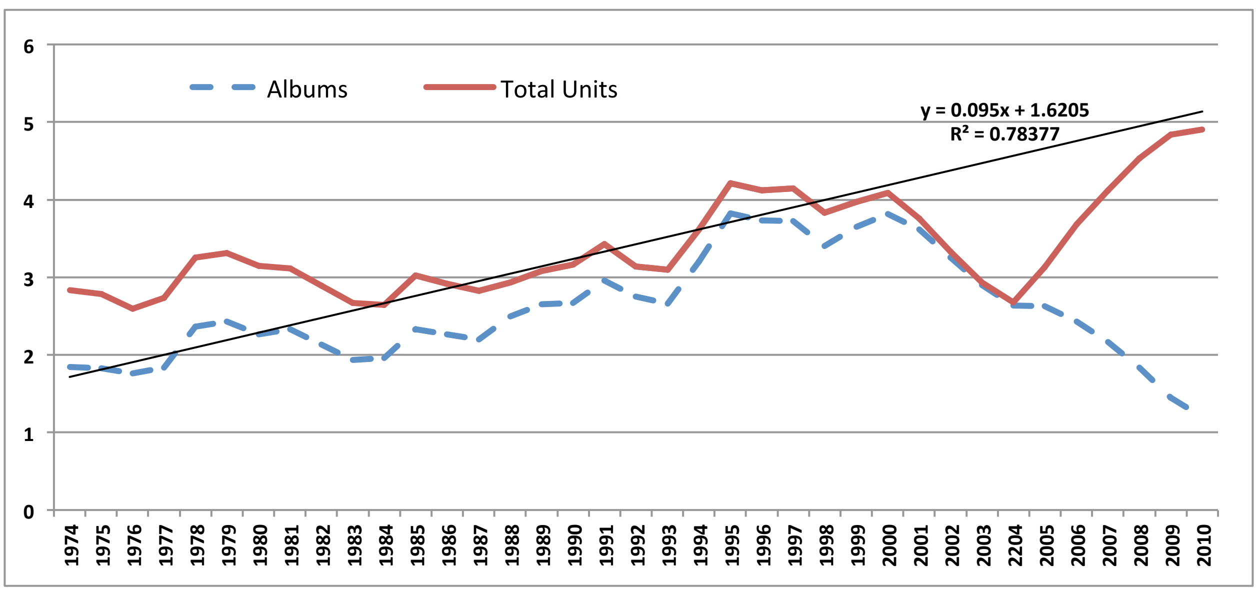
The units shipped per capita data in the lower graph suggests that the recent shift back to singles has returned the industry to its historical pattern of demand. Using the trend in the CD era for total units shipped, we find that the total projected units per capita are close to the actual number of units per capita shipped today. This puts the affinity for singles in perspective and suggests more continuity in consumption than is generally recognized. The aberration is the period in the 1990s when the companies suppressed sale of singles and used anticompetitive practices to prop up the price and sale of CD albums. To the extent that there was a bubble in units shipped in the mid-1990s, it was likely the result of a massive library replacement as consumers adopted the new, much more convenient CD medium for their existing stock of music. (Knopper, 2010: 61, 213; Oberholzer-Gee and Stumpf, 2007:16; Hong, 2004)

EXHIBIT III-5: U.S. SHIPMENTS OF ALBUMS AND SINGLES

Number of Units Shipped



Units Shipped Per Capita



Source: Recording Industry Association of America, *Year-End Shipment Statistics,* various years. U.S. Bureaus of the Census, for Population

Some analysts count the resistance and hostile reaction to the new digital technology in this line of suspect conduct (Nestor, 2012; Knopper, 2010, Tschmuck, 2009; Handke, 2006). Be that as it may, after a period of resistance to the new digital medium, the industry adopted a business model that finally made digital music available in 2003. Simultaneously, a second consent decree went into effect. The availability of digital singles spurred an immediate and huge growth in units shipped as the demand that had been suppressed by the elimination of singles was expressed and the convenience of the new medium unleashed. Digital album sales developed somewhat later but have recently been the largest growing source of revenue. Here the growth can be attributed to the convenience and price advantage of the new medium.

2. Pricing Patterns: Illegally Fixing the Price of CDs

Coincident with the elimination of singles, the industry stepped up its efforts to increase prices. Keeping prices high with anticompetitive practices and eliminating singles in order for the new CD format to thrive created a windfall for the record labels. "'The record companies minted money,' one major-label exec told me. 'We made huge margins off CDs. We'll never have those margins again.'"(Mnookin, 2007)

However, a survey of consumers at the time of the first consent decree in 2000 revealed significant consumer dissatisfaction with recording industry pricing (Wilson-Morris, 2000). Three-quarters of respondents felt that pricing levels were unreasonable and almost as many felt they were excessive compared to other forms of entertainment. They said they would increase their purchases of music if prices fell substantially, and almost all the respondents said they would not be willing to buy digital downloads at the same prices as CDs. The public was clearly not satisfied.

The consent decrees entered into by the major labels in 2000 and 2003 suggest that the industry had engaged in abusive pricing practices in the 1990s as the CD rose to become the dominant medium for music distribution. This is an important reminder that technological change is no guarantee that anticompetitive and anti-consumer behavior in violation of the antitrust laws cannot take place.

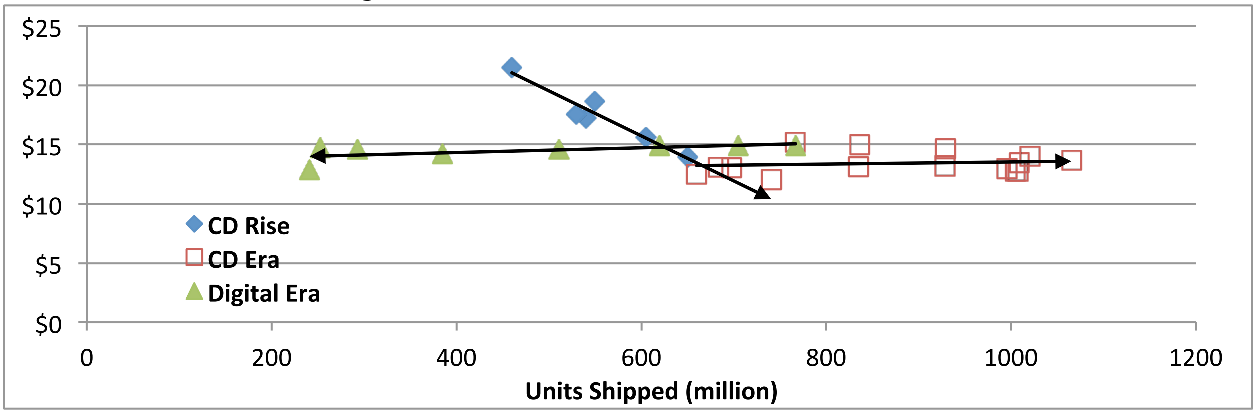
The pricing pattern of the 1990s shows that price fixing by the industry was intended to "manage" the dramatic decline in prices that a combination of new technology and vigorous competition had imposed on the industry (FTC, 2000; Knopper, 2010, 108-112). The top graph in Exhibit IV-2 breaks the history of CD prices into three periods using nominal prices – the rise of the CD when the technology and economies of scale were reducing costs; the period of CD dominance, when price fixing stopped the price reductions and increased prices; and the digital era, when consent decrees and a new distribution medium put downward pressure on prices. The middle graph shows the three periods in real prices.

The bottom graph in Exhibit III-6 shows the strong correlation between market concentration and nominal CD prices in the period of price fixing. Real CD prices were flat, which represents the cessation of the process of price reductions that had typified the CD era up to that point. The industry concentrated strongly over the period when pricing abuse began. Theory provides the link between the two, suggesting that concentration made price fixing more effective.

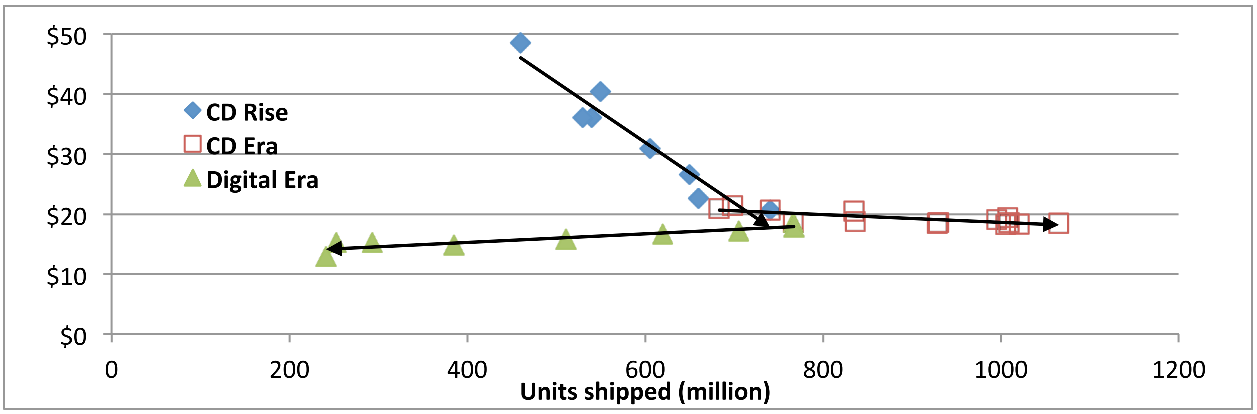
The fact that the industry had significant ability to manipulate the availability and price of product is the key historical take away for evaluating the current conditions in the music market. Consumers benefitted greatly from the technological change after the introduction of CDs until the tight oligopoly was again able to pursue anti-consumer, anticompetitive practices.

EXHIBIT III-6: MARKET STRUCTURE AND CD PRICING

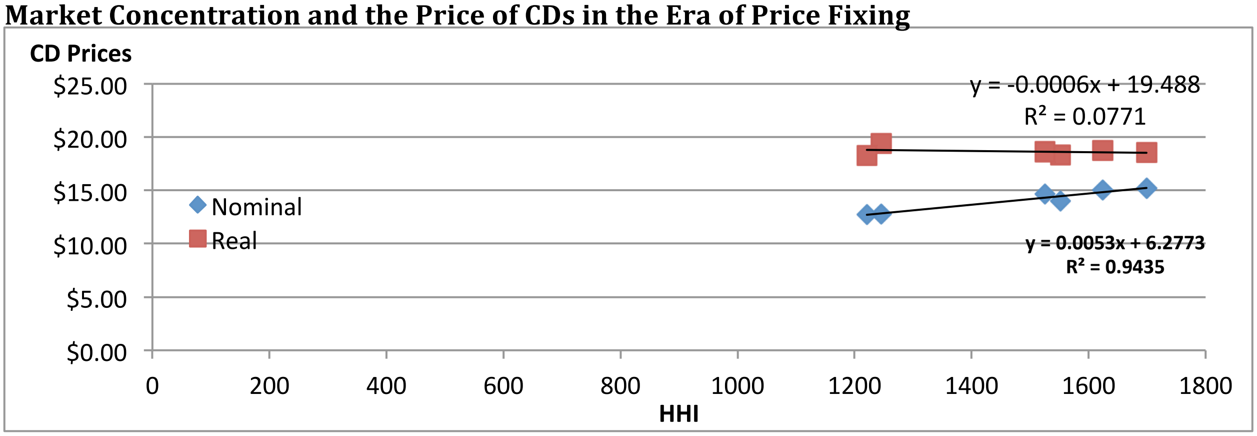
Three Periods of CD Pricing: Nominal Prices



Three Periods of CD Pricing: Real Prices



Market Concentration and the Price of CDs in the Era of Price Fixing



Source: RIAA, Eli Noam, Media *Ownership and Concentration in America* (New York: Oxford University Press, 2009), Table 7.3 Recording Industry Association of America, *Year-End Shipment Statistics,* various years.

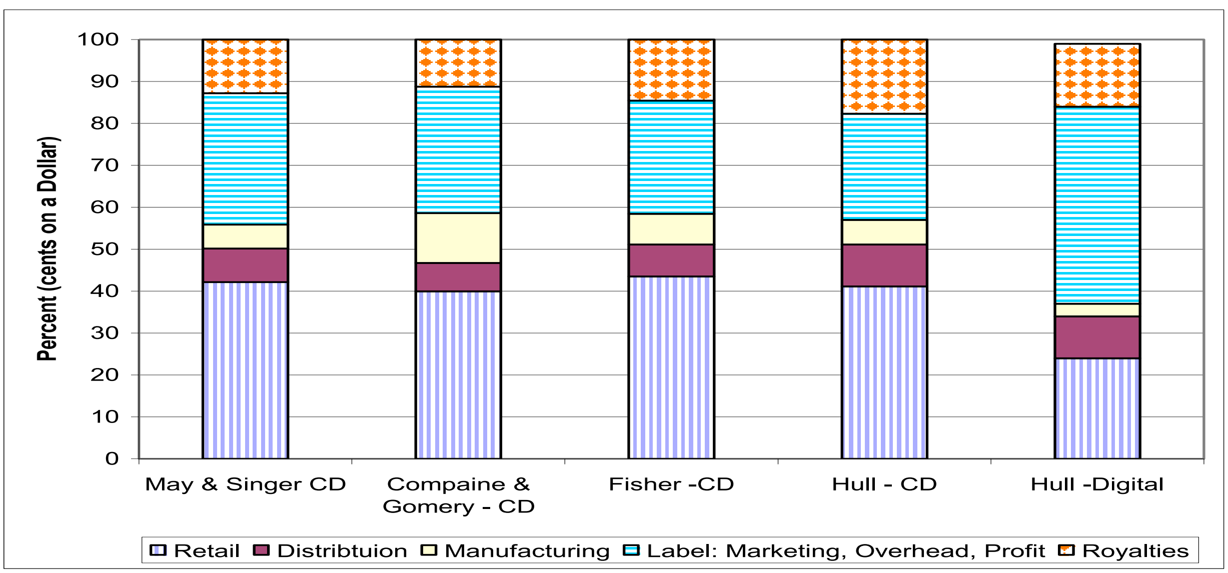
3. Margins

The *Merger Guidelines* identify analysis of margins as an important consideration in the analysis of the potential for post-merger market power. "The higher the pre-merger margin, the smaller the recapture percentage necessary for the candidate market to satisfy the hypothetical monopolist test" (DOJ/FTC, 2010: 12). This observation on margins leads us to conclude that, as powerful as the incentives to engage in anticompetitive behavior were in the 1990s, they are even more powerful today.

In the mature, advanced industrial society of the late 20th century, distribution and transaction costs came to represent a large share of the total costs of goods and services. In the content industries, like book publishing, music, and newspapers, transaction costs are as much as 80 cents on the dollar. Digital technologies can lower production and distribution costs and give consumers much greater flexibility and choice, thereby dramatically improving the fit between what is produced and what is consumed. As technologies lower the cost of production and distribution, a scrum develops over the social surplus that is released. The sellers of information goods seem to think that because consumers were willing to pay a high price for their physical products in the past, they can keep the price high for digital products and pocket the cost savings as increased profit (higher margins).

Exhibit III-7 compares the breakdown of costs on physical CDs and digital products. Royalties for all creators remain about the same when labels are involved. The big difference is in the retailer and manufacturing costs. While there is no good evidence on exactly what the margins are at present, the labels have the incentive to push prices up and increase their margins. In vigorously competitive industries (i.e. with large numbers of buyers and sellers and high elasticities of supply and demand), the vast bulk of the cost savings will be passed through to consumers. That is the why the antitrust laws are the front line of consumer protection.

EXHIBIT III-7: WHO GETS WHAT FROM THE MUSIC CONSUMER DOLLAR

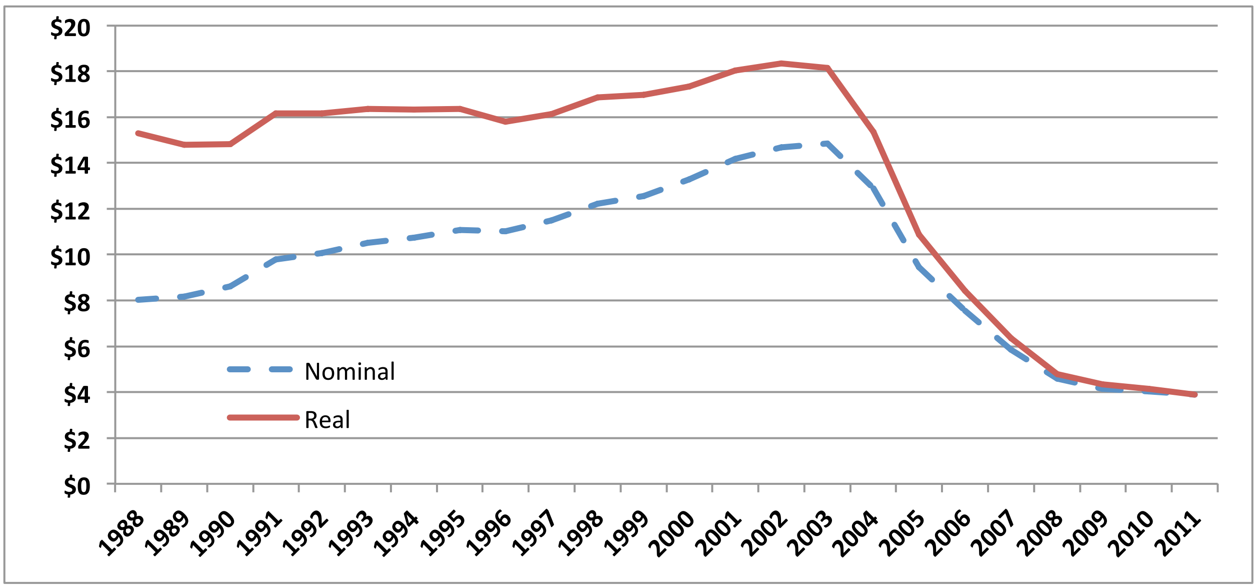


Sources: William Fisher, Promises to Keep (Stanford, Stanford University Press, 2004), Appendix for May and Singer, Compaine and Gomery and Fisher; Geoffrey P. Hull, The Recording Industry (New York: Routledge, 2004), 2nd ed., pp. 182 and 259 for CDs and Digital, respectively.

To appreciate the full impact of the technological change, Exhibit IV-4 shows the revenue per unit shipped, which combines singles and albums, in nominal and real terms. It is interesting that the industry uses the figure of revenue per unit shipped as its bottom line measure of performance. When the medium was a physical product (a vinyl record, 8-track tape or CD), this physical unit made sense. The marginal cost of adding songs to the physical unit was small, if not zero. In the digital age, it makes sense as well for the same reason. The marginal cost difference between shipping a digital single or an album is small.

The revenue difference between singles and albums is large and that accounts for the dramatic changes reflected in Exhibit III-8. In 2003, the RIAA reports no digital shipments. By 2011, 80 percent of all shipments were digital singles and 5 percent were digital albums. The numbers are stunning, but a glance back at Exhibit III-3 shows that it took about the same amount of time for CDs to cover the same amount of ground in terms of market share. In a little over a decade (the 1999 peak of CD albums to the 2011 peak of digital units and CD albums), the number of units increased by 50 percent and the amount of revenue declined by 50 percent (compare Exhibits IV-1 and IV-4). In 1988 CDs made up a small percentage of units shipped; a decade later they were 99 percent. The difference is that the oligopoly used its tight control to shift all sales to singles and pump up prices.

EXHIBIT III-8: REVENUE PER UNIT SHIPPED



Source: Recording Industry Association of America, *Year-End Shipment Statistics,* various years. U.S. Bureaus of the Census, for Population

In 2011, consumers bought about 1.3 billion digital singles at an average of just over $1 per single, for a total cost of $1.5 billion. Since consumers typically want two songs per album (Knopper, 2010; Nestor, 2010), if the anti-consumer, anticompetitive practices of the recording industry had not been thwarted by law and technology, consumers would have been forced to buy about 500 million more albums at an average cost of about $13 per CD to get the music they wanted. The total cost would have been about $6.5 billion. Digital singles allowed consumer needs to be met more efficiently at a consumer savings of more than $5 billion. Consumers paid half a billion less for digital albums sales, as shown below in Section V.

The shift is remarkable and may seem unsustainable, but the economic cost savings flowing from digital technologies can explain a large part of the shift, as shown in Exhibit IV-3 above. Physical manufacturing, retail, and distribution accounted for about 60 percent of the total cost of a CD, even with the record label margins inflated by price fixing. These costs can be dramatically reduced if not eliminated by digital production and distribution. As the need to administer a large physical production and distribution networks and spend a lot of resources trying to match supply and demand decline, the label costs should fall significantly as well. A revenue reduction of 75 percent is matched by a cost reduction of 75 percent with a 50 percent increase in units shipped to spread the remaining fixed costs.

IV. PIRACY v. EFFICIENCY
AS EXPLANATIONS FOR THE TRANSFORMATION OF THE MUSIC MARKET

We pointed out almost a decade ago that this period of artificially inflated revenues was used by the recording industry to make outrageously inflated claims about piracy in the digital age (Consumer Federation of America, 2005, Cooper, 2005, 2008 and 2011). We believe this market structure data lays the basis for rejecting the claim being made today that piracy and digital technology mitigate the concerns about market power in the industry. The dominant firms are still dominant and they still have the ability to use their market power in anticompetitive and anti-consumer ways. The overestimation of past piracy claims is one reason antitrust authorities should be skeptical of the claims being made for piracy with respect to its ability to deter the abuse of post-merger market power today. There is also considerable direct evidence that requires the antitrust authorities to reject that claim.

This section examines pricing and other behavior in the music market to assess the claim that piracy is a dominant force in the music sector. It shows that this claim is highly implausible. We begin with the contemporary evidence that piracy cannot be counted on to prevent pricing abuse and then show that the role of piracy in the past was overstated.

A. The Claim that Piracy can Discipline Market Power Does Not Ring True

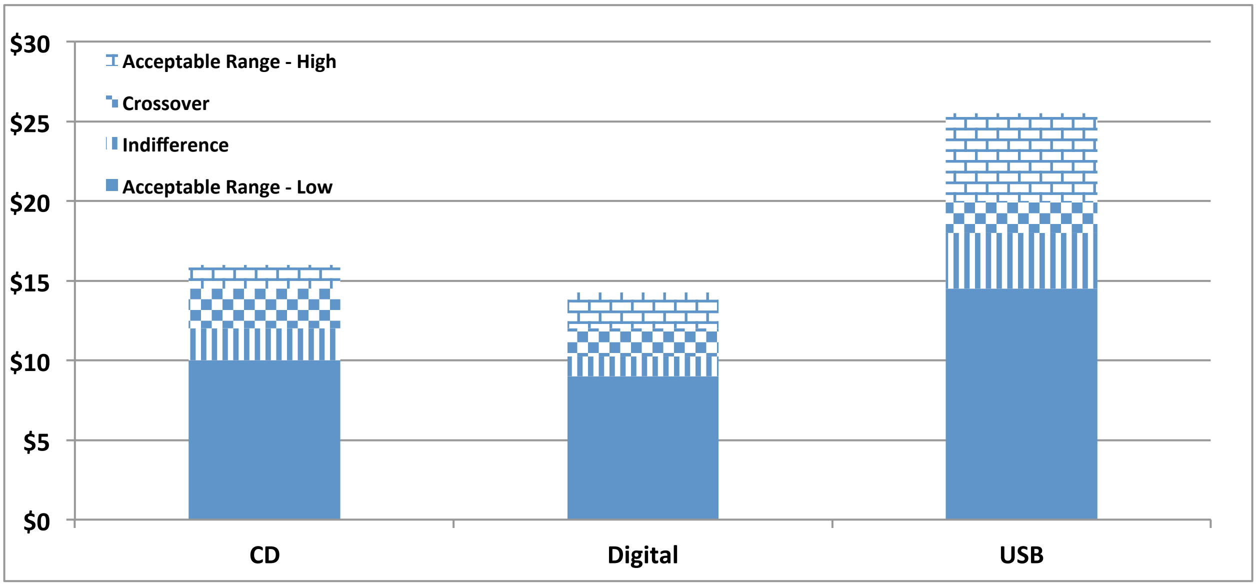
In today's music market, the claim that piracy will discipline the abuse of market power is contradicted by a great deal of evidence on actual consumer behavior. Consumers spent almost $2.5 billion on digital products last year. They would have to be fools to do so if piracy were as easy as the record labels claim. More to the point in terms of this merger review, why would consumers who paid $10.40 per digital album (on average in 2011) suddenly resort to piracy if the price of digital albums went up to $11? Here, it is important to keep in mind that under the *Merger Guidelines* this is the order of magnitude of a price increase that commands the attention of antitrust officials.

> The Agencies most often use a SSNIP [Small but Significant and Non-transitory Increase in Price] of five percent of the price paid by customers for the products or services to which the merging firms contribute value. However, what constitutes a "small but significant" increase in price, commensurate with a significant loss of competition caused by the merger, depends upon the nature of the industry and the merging firms' positions in it, and the Agencies may accordingly use a price increase that is larger or smaller than five percent. (DOJ/FTC: 10)

The idea that piracy eliminates or even substantially alters the elasticity of demand is contradicted by industry-generated studies and evidence. An econometric study commissioned by a major label to examine the impact of pricing flexibility in digital single sales, found that the elasticity is small and that raising prices by 30 percent increased revenues (Danaher, 2011). If piracy were the strongly disciplinary force that UMG claims, the study of pricing flexibility would have found that raising prices does not increase revenues. The implicit price elasticity of demand in that study is -.36, i.e. a 1 percent increase in price results in a .36 percent decrease in demand. Other studies put the price elasticity at -.55 (Klein and Slonaker). This is a relatively low elasticity, when the piracy argument would lead us to expect a very high number. These elasticities are also in a range that makes price increases profitable.

A Warner Music Group presentation to the Federal Communications Commission on the music consumer made this point in another way. It reported on a classic marketing study that used interviews with consumers to estimate the price points for albums delivered on different media (see Exhibit IV-1). The analysis is careful to caution that it is not advocating any specific pricing strategy, but instead showing the range of possibilities.

EXHIBIT IV-1: PRICE POINTS FOR DIFFERENT ALBUM TECHNOLOGIES



Source: Warner Music Group, *Consumer Insights Discussion for FCC,* April 2010.

However, from the point of view of the antitrust authorities reviewing a merger, the range of possible prices is the issue. Competition would drive prices to the low end of the range, market power would push it to the higher range and would give the industry the incentive to move demand to the higher cost products (as we have seen in the elimination of singles in the 1990s). Within the individual types of products, the "acceptable" range represents 50 percent or more of the price of the final product. The highest priced product would be about twice as expensive as the lowest cost product. There is plenty of room for the exercise of market power in these pricing scenarios and plenty of cause for concern for antitrust authorities.

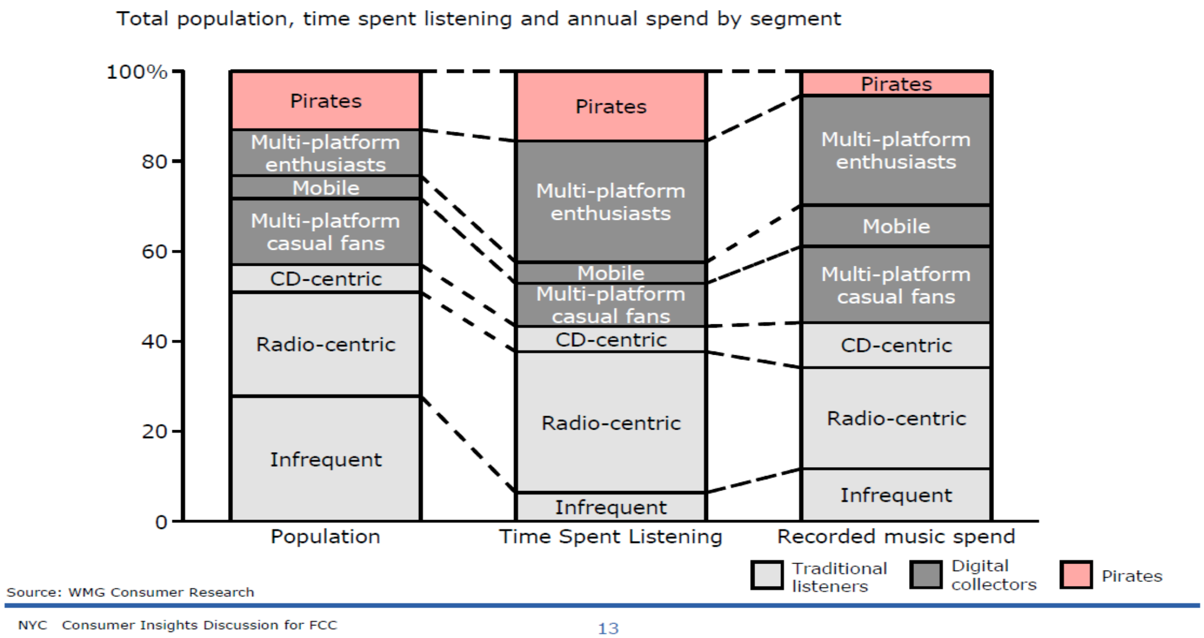
In fact, the presentation made by Warner Music showed that piracy was a very small factor in recorded music spending (see Exhibit V-2). In this analysis, pirates represent a relatively small fraction of the population and total listeners. Their spending is less than their share of the population or time spent listening, but the record labels "lose" more sales to radio listeners than they do to pirates. Compared to the period when the record labels were claiming losses to piracy that equaled more than half of their projected revenues,[6] piracy is a small problem today. In fact, as discussed below, the early debate over the extent of piracy identified a number of reasons that the difference between listening and purchases may not actually represent loss of sales.

Moreover, for the purposes of the antitrust analysis, the question is whether this is a big enough part of the market or one that would expand quickly enough to discipline the abuse of post-

[6] The RIAA web starts by pointing out a reduction in revenues of $6.5 billion and then states that 4 out of 5 digital downloads are through illegal sites, leaving almost none of the reduction in revenue to be attributed to the shift to low cost, legal singles and digital albums. In fact, the consumer savings discussed in the previous section suggest that at least six-sevenths of the reduction in revenue are due to the shift to lower cost digital products.

merger market power. Given the overall elasticities calculated for the music market and the small size of this group, that seems highly unlikely.

EXHIBIT IV-2: THE SMALL IMPACT OF PIRACY ON MUSIC SPENDING: TIME SPENT LISTENING V. MUSIC SPEND



Source: Warner Music Group, *Consumer Insights Discussion for FCC,* April 2010,

B. THE ORIGINAL CLAIMS OF PIRACY WERE VASTLY OVERSTATED

Debunking the piracy claim is important not only because it has been erroneously invoked as a justification for a grossly anticompetitive merger, but also because it tends to downplay the benefits that digital disintermediation can deliver. This can potentially mislead policy makers into thinking that the costs of anti-consumer, anticompetitive behavior are small in the digital age.

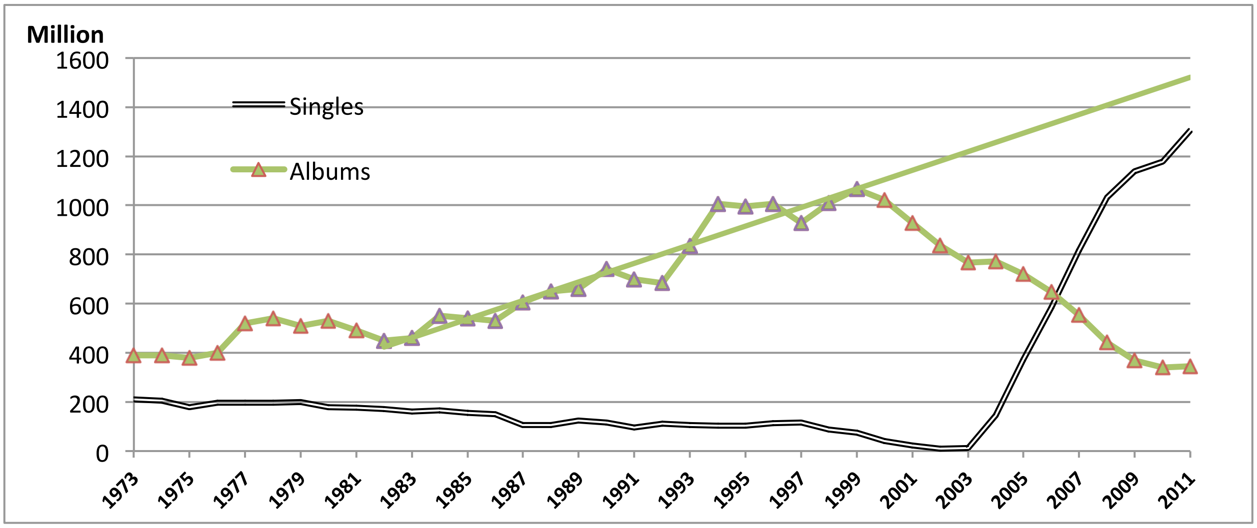
In order to understand the magnitude of the overestimation of the impact of piracy, we must start from the anti-consumer, anticompetitive practices that typified the industry in the 1990s. The industry might have believed the elimination of singles and price fixing that kept prices up were permanent parts of the industry structure and the sales of library replacements would continue. They certainly acted that way. (Knopper, 2010) Therefore, the industry might have thought that a decade later the industry would be selling about 1.5 billion albums at a retail value of $22.5 billion (see the top graph in Exhibit IV-3). Today it is selling 1.6 billion units at a total revenue of less than $8 billion. They are selling more units, but at a lower price.

> "Stealing music is not [what's] killing music," says Robert Pittman, cofounder of MTV and former chief operating officer of the ill-fated AOL time Warner merger. "When I talk to people in the music business, most of them admit the problem is they are selling songs and not albums. I mean, you do the math (Knopper, 2010:181).

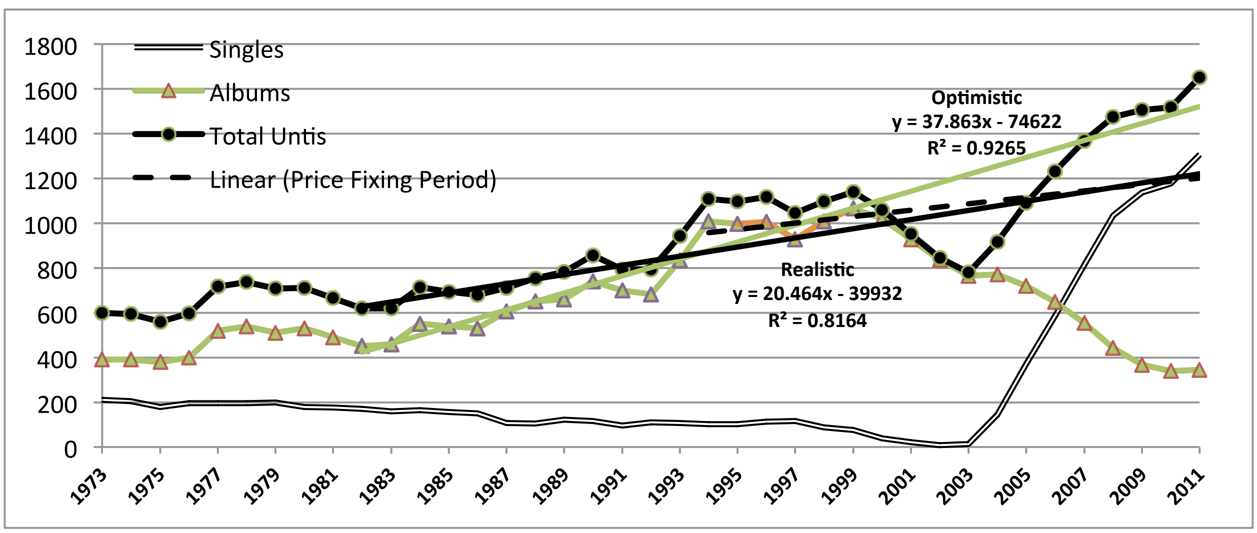
However, it is easy to write the counter story. In the mid-1990s the industry was extremely, excessively profitable (see the bottom graph in Exhibit IV-3). The elimination of singles had pushed the revenue and margins per unit shipped to record levels. The new medium had created a bubble in demand in the form of library replacement.[7] Price fixing had stopped the decline in revenue per unit, even though cost savings continued, expanding margins. The tight oligopoly behaved the way rent collectors do. They failed to maintain quality and slashed the turnover of product. A substantial decline in revenue was inevitable as the process of library turnover was exhausted and demand was destroyed by pricing/product choices and quality decisions.

EXHIBIT IV-3: ALTERNATIVE VIEWS OF THE EXTENT OF PIRACY

Optimistic View of Future Album Sales



A Realistic View of Future Sales



Source: Recording Industry Association of America, *Year-End Shipment Statistics,* various years.

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[7] Another possibility is that the 1990s were an aberration in that sales were abnormally high during the decade. A possible cause is that consumers were replacing their vinyl collections with CDs, a behavior that was largely completed by the turn of the century. The subsequent decline in the unobserved component may merely represent a return to more historically representative sales level. (Klein and Solaner)

If we form our expectations in this way based on total units shipped and use the pre-bubble, pre-price fixing CD period (1983-1992), we arrive at a much lower projection, as in the lower graph in Figure IV-3. In fact, during the price fixing period, before Napster (1995-1999), sales had flattened, so a projection based on that period results in a long term projection that is much closer to the one based on total units shipped, not albums. In this counter view piracy was less than half of what the industry claimed. More importantly, this view is consistent with the direct evidence on piracy discussed above. It is no longer a major factor in determining sales and price. The deficit of units shipped in this scenario is half the optimistic view. The difference in revenue per unit shipped, if singles had only maintained their level of the early 1990s, would account for another ten percent of lost revenue.

Econometric studies of the impact of piracy in the pre-iTunes period that take the countervailing factors into account put the decline in sales due to piracy at about 20 percent of the total reduction in revenue. (Hong, 2011; Peitz and Walbroeck, 2004) With digital distribution models in the marketplace and digital sales booming, there is little basis to argue that piracy is a major factor today and a great deal of econometric evidence that finds it does not cannibalize sales of legal content. (Smith and Telag, 2009, Danaher, et al. 2011) By 2011 units shipped are well above the pre-digital trend, reflecting the attractiveness of singles and the new technology. Economics, law and technology were caught up with the industry.

C. An Unsustainable, Anticompetitive, Anti-consumer Business Model

We have always linked the elimination of singles and price fixing in the mid-1990s together as a demonstration of the market power and anticompetitive, anti-consumer behavior of the tight music oligopoly. Knopper (2010) provides an even more direct link between the two. Singles played a vital role in the music industry – as promotion, to create foot traffic in music stores, as a sampling device, and as a low cost product that expanded the music market. When the labels eliminated them, they dramatically altered the supply side of the industry. Knopper argues they needed to use the Big Box stores as the vehicle to expand demand. This set off the tension between two distribution channels – the traditional specialty music stores and the Big Box retailers. Price fixing was their effort to resolve the tension. It lasted for about half a decade, but came crashing down under the simultaneous weight of the antitrust laws and technological change.

> McManus [a veteran Canadian producer and songwriter] began noticing he couldn't find a single anymore. "Here is where the North American music industry made its greatest mistake of the twentieth century… When it stopped making vinyl singles and offered nothing to replace them, the industry stopped a whole generation from picking up the record buying habit… If you think about water that's trying to reach the surface… As soon as Napster opened up, the single came roaring back up. I call Napster "the revenge of the single..."
>
> For years major labels used singles as cheap or free promotional tools. "The industry was looking for excuses to get rid of it. You had these arguments that singles were cannibalizing album sales. So they killed the single.
>
> By the late 1990s, the record business had boiled down much of the business to a simple formula: 2 good songs + 10 or 12 mediocre songs = 1 $15 CD…
>
> In the short term, dozens of artists and labels made mountains of cash off the formula… These were one hit wonders, but the acts were lucky enough to make records in an era when fans had no other choice but to buy the album to get the single. "If you only sold lotion in five gallon bottles, pretty soon people would be tired or it…" Albhy Galuten, a well-known producer who later became Universal Music Group's senior vice president for advanced technology – "You can't go around forcing people to buy something that they do not want."

> Yet that was precisely the direction the record industry wanted to go. How could the record companies make them huge? The answer was to sell more CDs, at bigger record stores… Best Buy could afford to drop the prices on CDs, even the hot new titles, when Tower and Hegewisch were stuck selling them for the usual price in order to make a profit. When the big boxes got in, they just used the same strategy that they used with everybody else… So the major labels came up with a policy: "Minimum Advertised Price"… The government cracked down hard… (Knopper, 2010:105-111)

Knopper picks up low cost of free singles as part of the marketing approach when he discussed digital distribution.

> Sales of iTunes singles surged… While CD sales continue to make up the bulk of major labels' profits, iTunes shifted the balance dramatically and quickly. Although this shift is great for consumers, it's a negative for record companies…
>
> The sad fact was employees at major record labels largely downplayed the internet as a marketing tool – even a decade after Napster and a half-decade after iTunes. In part his was due to corporate policy... [N]ew-media marketers and certain artists and managers had pushed for years to give away unprotected MP3s, for free or very cheap, to generate hype and publicity online and regain credibility with young, tech-savvy music fans… Even after iTunes went online in 2003, using peer-to-peer services as marketing tools was strictly forbidden, and God help a label marketer who proposed releasing a free MP3 as a promotional device. (Knopper: 198-199)

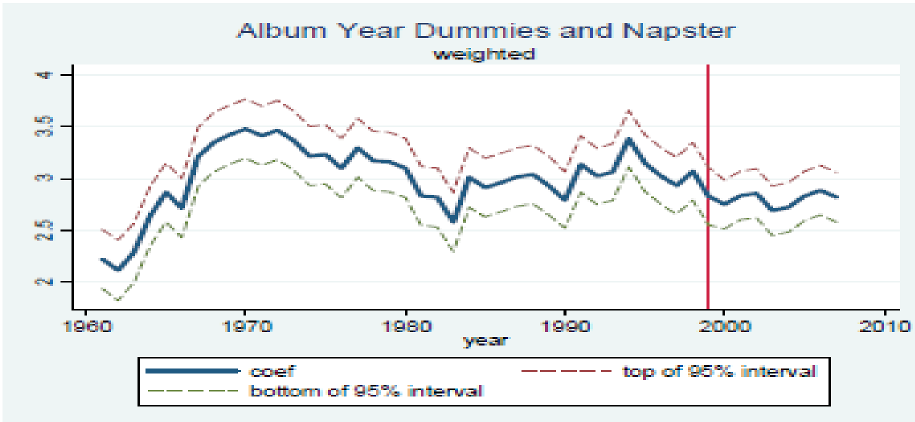
Waldfogel's recent analysis offers systematic support for Knopper's observation about the poor quality in the late 1990s. This is an additional potential cause for the drop off in sales at the turn of the century. A sharp decline in quality that began in the mid-1990s as the peak of album sales was approached (see Exhibit IV-4). At the very moment that the price had stopped declining, quality went south and singles were no longer available. The same thing is true with turnover at the top of the charts (see Exhibit IV-5).

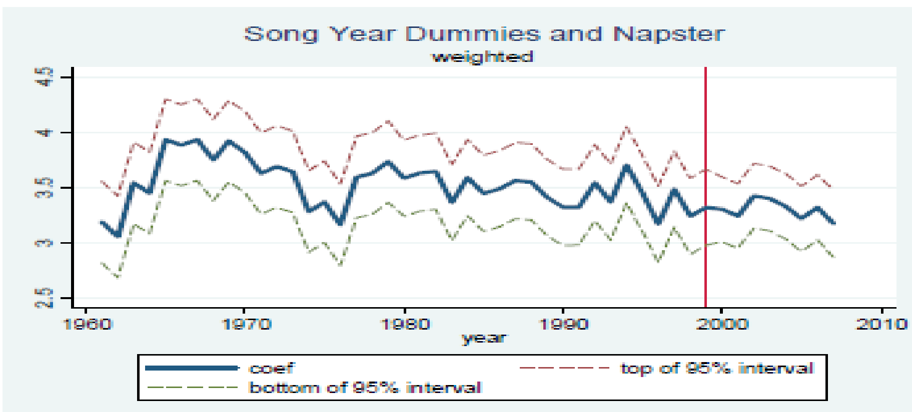
Demand was suppressed. The bottom in quality was at about the time that Napster entered the scene.

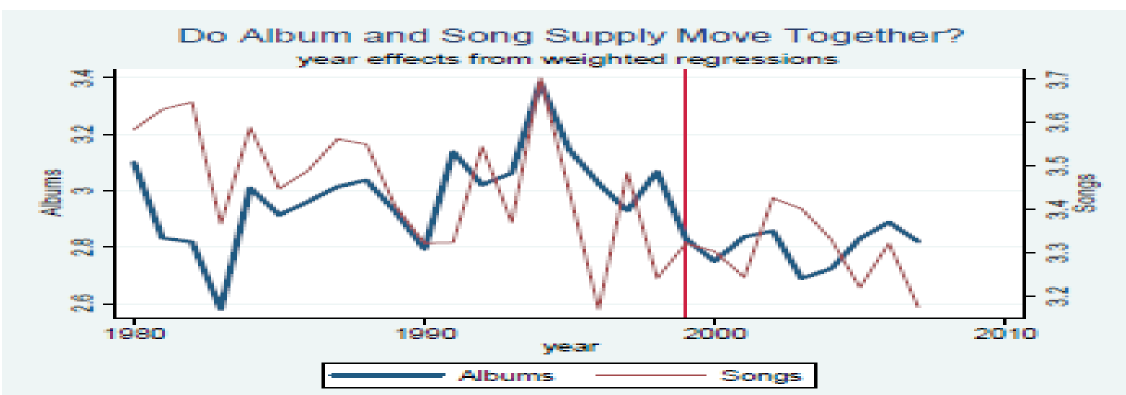
D. The Bottom Line on Piracy and the Real Lessons of Technological Change that the Industry Resisted so Strenuously

The industry got away with its fictional piracy story because the Grokster file sharing case was argued in early 2005 based on data that pre-dated iTunes and therefore did not reflect the growth of digital distribution business models. Even then, the early studies were all over the map. Some studies found increases in sales resulting from stimulation in certain population segments (older consumers) that offset losses in others (younger users, Boorstin, 2004). Other studies found little or no effect (Peitz and Waelbroeck, 2004). Still others found losses that are not large (Zentner, 2003). Moreover, because of recording industry pricing practices, even where recording industry revenue declined as a result of file sharing, consumer welfare may have increased (Robb and Waldfogel, 2004). One economic study of downloading found that the increase in consumer surplus was almost 200 percent larger than the loss of industry revenue. This underlying economic picture also casts doubt on the claims that every downloaded file is a lost sale. One can certainly argue that the combination of anticompetitive pricing and the elimination of singles hurt consumers in two ways. It priced a significant number of people out of the market and transferred a great deal of surplus from consumers to producers.

EXHIBIT IV-4: MEASURES OF THE QUALITY OF NEW RELEASES





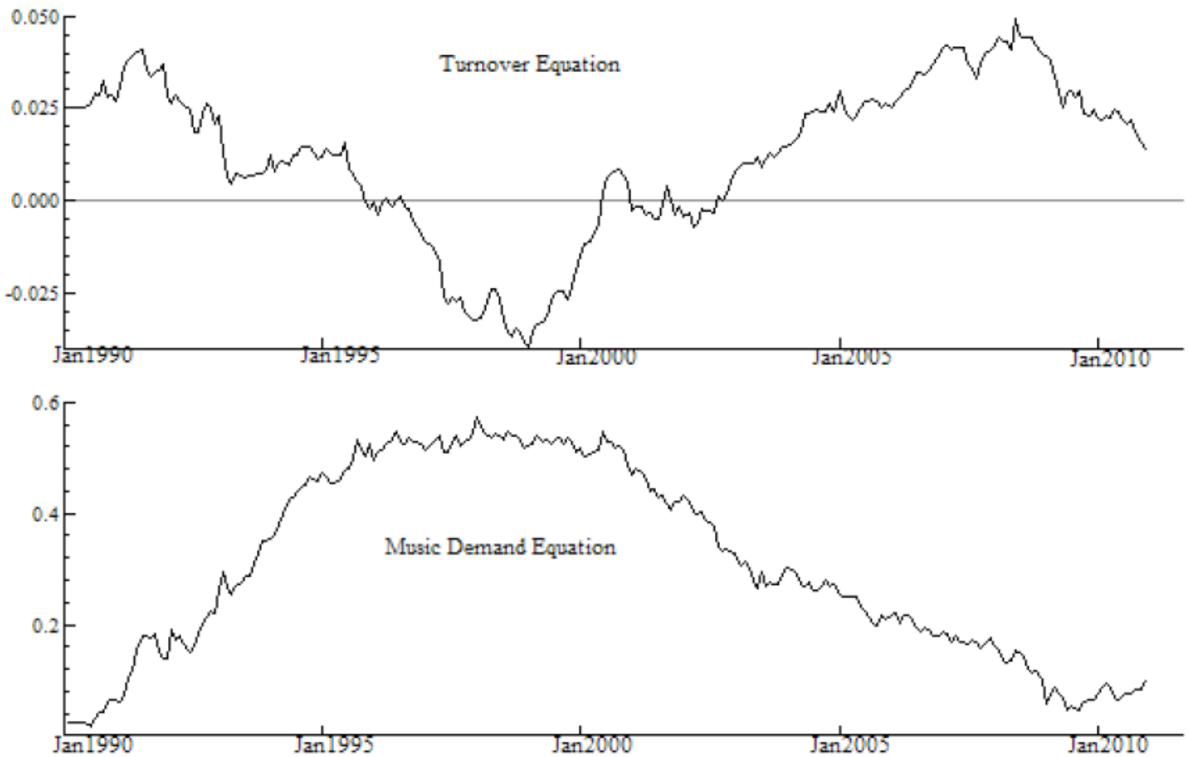


Source: Joel Waldfogel, *Bye Bye Miss American Pie? The Supply of New Recorded Music since Napster,* January 2, 1011.

EXHIBIT IV-5: COMPONENTS OF STOCHASTIC TREND

LAW **Price Fixing** **1st Decree** **2nd Decree**

TECHNOLOGY **Napster** **iTunes**



Source: Klein, Christopher and Shea W. Slonaker. Music Supply, Chart Turnover, and the Random Copying Hypothesis in the Digital Music Age,

The fact that singles now play a larger role than at any time in nearly three decades makes it clear that there was an immense, latent demand for singles that had been suppressed by the anti-consumer bundling practices of the industry. This demand was initially expressed in the form of illicit file sharing, but quickly shifted to legal sales when new business models made that possible. More than two-thirds of file sharing activity was dedicated to downloading of singles. Indeed, the most detailed study of downloading found that only one or two songs were downloaded from the most popular albums and that digital sales are concentrated in singles by more than twenty-to-one, breaking the long-worn chains of anti-consumer bundling and anticompetitive pricing. (Oberholzer-Gee and Stumpf, 2004) There was evidence that lower value songs are more likely to be downloaded than higher value songs. (Robb and Waldfogel, 2004; Oberholzer-Gee and Stumpf, 2005) This is consistent with the notion that some of the downloads would not have been purchased, so no sales are lost. There is evidence that downloaders in high purchase groups purchase some CDs after downloading some songs and that downloading increases purchases in those demographic groups least likely to purchase (Boorstin, 2004; Liebowitz, 2004). This supports the promotional function of downloading.

The majors can argue that their efforts to defend their property rights played a role in eliminating piracy, and there is some credible evidence to support that claim (Danaher, et al., 2012). However, the effectiveness of individual measures to reduce piracy is unclear in the research literature including digital rights management in general (Vernik, 2008, Desai, et al., 2009) as well as embedding destructive code (Christin, 2005, , Kemerer and Smith, 2011; Knopper, 2010) and the overall litigation approach. (Bhattacharjee, 2008 shows mixed results, Oberholzer-Gee and Stumpf, 2009, Danaher, et. al. 2010)

There is also evidence to support the proposition that the best antidote to piracy is to offer products in the form and with the technologies that consumers want at reasonable prices (Danaher, et al., 2010). The effectiveness of offering consumer-friendly products as the best approach to dealing with piracy is reinforced by the clear evidence that digital products can be managed as a distribution channel that does not cannibalize other channels for differentiated products. (Danaher, 2012; Deleersnyder, et al., 2002;Waldfogel, 2009; Danaher, et al., 2010; Hu and Smith, 2011)

The Warner discussion of music consumers introduced earlier supports the latter view (see Exhibit IV-6). Legal threats and enforcement play some role in deterring piracy, but other factors like quality and convenience are much more important. Whatever the causes of the reduction in piracy, the bottom line is that today it is not a primary factor in the sector.

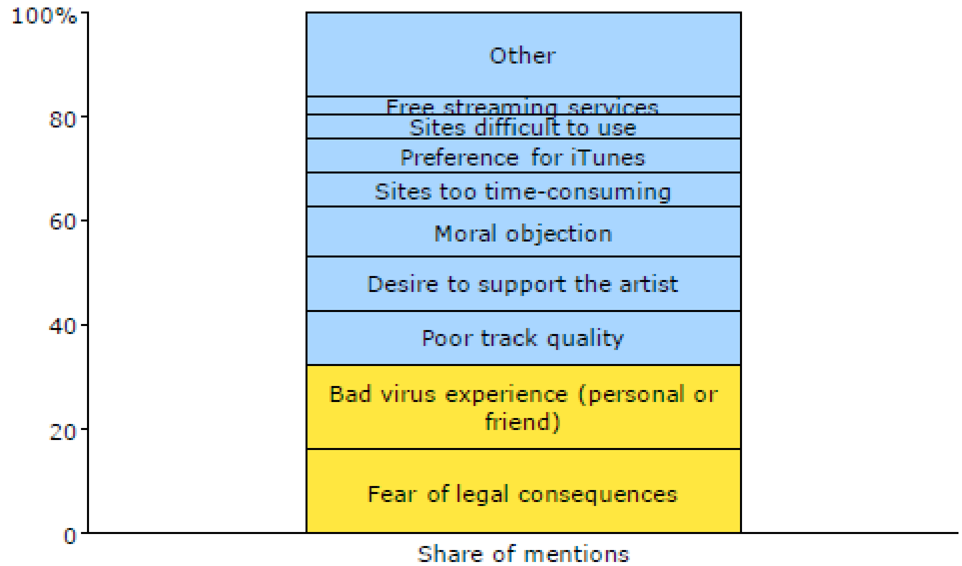
The story of digital disintermediation in the music industry is not a story of piracy; it is a story of efficiency. Supply-side costs have declined dramatically while diversity of product has increased. Consumer sovereignty has been restored, with a wider choice and a more efficient fit between consumer needs and available supply. The empirical evidence supports the conclusion that, in spite of declining per unit revenues, the supply-side of the music industry is doing quite well. In addition to the fact that total units shipped have increased, the number of artists, (Mortimer, Nosko and Sorensen, 2010), titles (Handke, 2012) and companies (Handke, 2006) has increased. Quality is as good or better than it was prior to digital disintermediation (Waldfogel, 2011a) and the turnover at the top of the charts has increased (Klein and Slonaker). Independent labels have increased their share of the most popular products (Waldfogel, 2011b) and smaller bands have benefited more than larger bands (Mortimer, Nosko and Sorenson, 2010, Handke, 2006). Complementary good output is up as well, including concerts (Mortimer, Nosko and Sorenson, 2010) and equipment. (Oberholzer-Gee and Stumpf, 2009; Handke, 2006)

The declining cost of production and distribution should be visible not only in increased units shipped, but also in increased diversity of the product released. As shown in Exhibit IV-7, the long term trend on the number of new titles released shows a sharp break in the output at the moment when digital distribution became a legitimate business model.

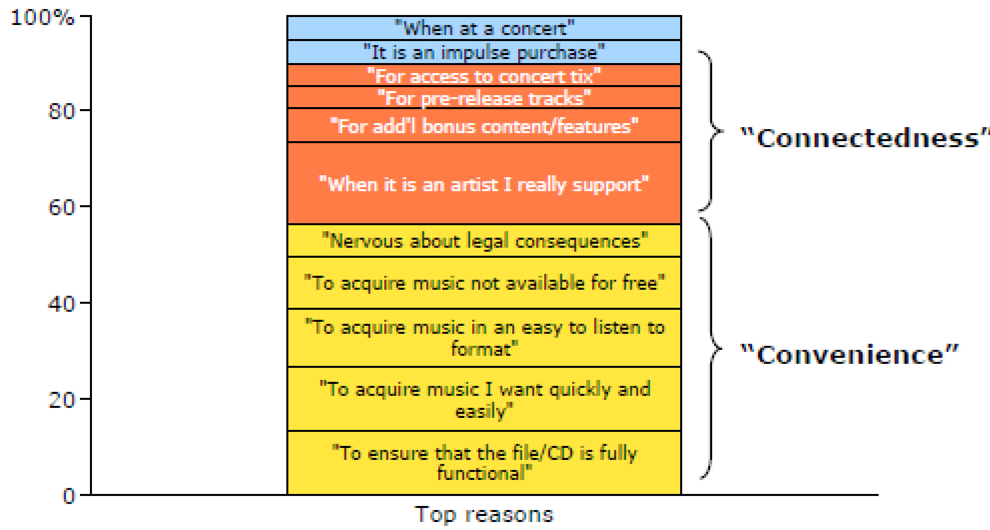
The analysis of piracy has moved well beyond the early phase of empirical experience when the landmark Supreme Court case, Grokster, was decided. The empirical evidence suggests overwhelmingly that the original claims were overstated and the dire predictions of the demise of the music sector have not come to pass (although the excessive ill-gotten profits of the major labels have been squeezed out). To see the piracy arguments revived here as an excuse to short-circuit the antitrust laws is particularly troubling and merits close examination. It does not stand up to the scrutiny.

EXHIBIT IV-6: FACTORS THAT AFFECT PIRACY V. PURCHASE

Top Reasons for Discontinuing P2P Use

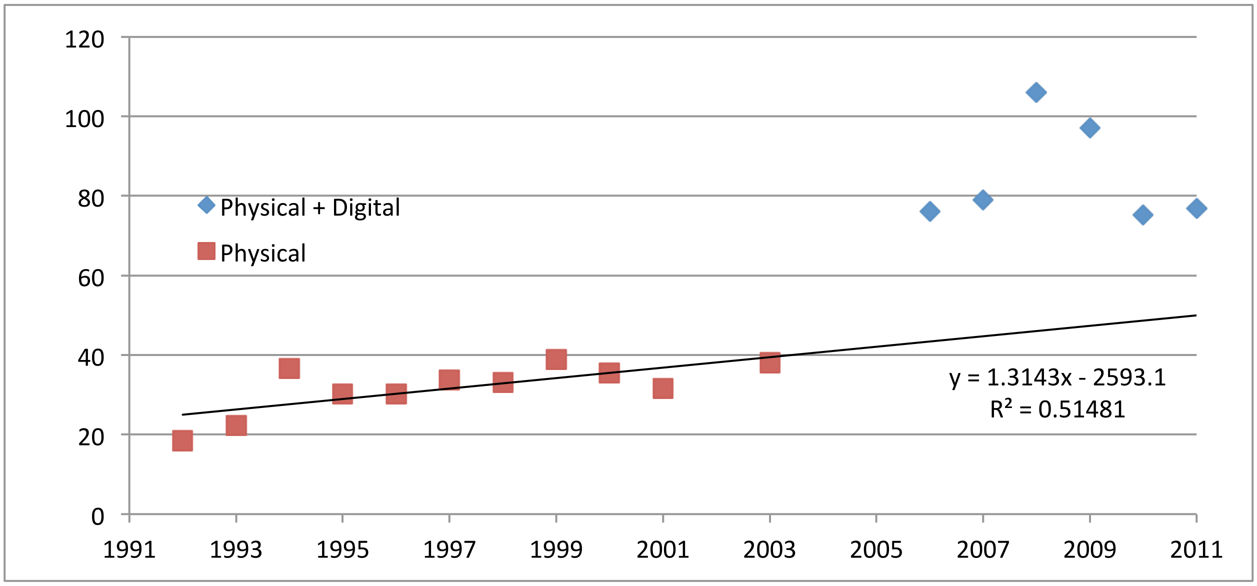


Why People Pay to Acquire Music



Source: Warner Music Group, *Consumer Insights Discussion for FCC,* April 2010.

EXHIBIT IV-7: NEW ALBUM TITLES RELEASED (000)



Sources: Statistical Abstract of the United States, Nielsen,/Soundscan, various issues

V. THE IMPORTANCE OF INCIPIENT COMPETITION, COORDINATION, MAVERICKS, AND MONPOSONY

Does all the good news that the digital revolution brings to the music space mean that antitrust authorities can relax? All of the structural and behavioral evidence indicates that they cannot. Several other lines of analysis reinforce this conclusion.

A. THE INCIPIENCY STANDARD

Antitrust law and practice have long recognized the importance of incipiency in merger review. Indeed, some have argued that the recent restatement of the *Merger Guidelines* "does much to bring the agencies back into line with the law." (Grunes and Stucke, 2011) The *Guidelines* mention incipiency twice, once in the general introduction and once in the section on "coordination."

> Given this inherent need for prediction, these Guidelines reflect the congressional intent that merger enforcement should interdict competitive problems in their incipiency and that certainty about anticompetitive effect is seldom possible and not required for a merger to be illegal. (DOJ/FTC, 2010, p. 1)
>
> Pursuant to the Clayton Act's incipiency standard, the Agencies may challenge mergers that in their judgment pose a real danger of harm through coordinated effects, even without specific evidence showing precisely how the coordination likely would take place. The Agencies are likely to challenge a merger if the following three conditions are all met: (1) the merger would significantly increase concentration and lead to a moderately or highly concentrated market; (2) that market shows signs of vulnerability to coordinated conduct (see Section 7.2); and (3) the Agencies have a credible basis on which to conclude that the merger may enhance that vulnerability. (DOJ/FTC, 2010, p. 25)

The *Guidelines* devote a considerable amount of attention to the potential effect a merger can have in facilitating coordination among the firms in a sector. [8] The sales of recorded music fit the circumstances under which coordination is a major concern to the antitrust authorities.

---

[8] "A merger may diminish competition by enabling or encouraging post-merger coordinated interaction among firms in the relevant market that harms customers. Coordinated interaction involves conduct by multiple firms that is profitable for each of them only as a result of the accommodating reactions of the others. These reactions can blunt a firm's incentive to offer customers better deals by undercutting the extent to which such a move would win business away from rivals. They also can enhance a firm's incentive to raise prices, by assuaging the fear that such a move would lose customers to rivals.

"Coordinated interaction includes a range of conduct. Coordinated interaction can involve the explicit negotiation of a common understanding of how firms will compete or refrain from competing. Such conduct typically would itself violate the antitrust laws. Coordinated interaction also can involve a similar common understanding that is not explicitly negotiated but would be enforced by the detection and punishment of deviations that would undermine the coordinated interaction. Coordinated interaction alternatively can involve parallel accommodating conduct not pursuant to a prior understanding. Parallel accommodating conduct includes situations in which each rival's response to competitive moves made by others is individually rational, and not motivated by retaliation or deterrence nor intended to sustain an agreed-upon market outcome, but nevertheless emboldens price increases and weakens competitive incentives to reduce prices or offer customers better terms. Coordinated interaction includes conduct not otherwise condemned by the antitrust laws. The ability of rival firms to engage in coordinated conduct depends on the strength and predictability of rivals' responses to a price change or other competitive initiative. Under some circumstances, a merger can result in market concentration sufficient to strengthen such responses or enable multiple firms in the market to predict them more confidently, thereby affecting the competitive incentives of multiple firms in the market, not just the merged firm.

Whether one believes incipiency is restricted to the narrow concern with coordination or a broad based concern under the antitrust laws, it demands consideration in this merger and is yet another reason that the merger poses a significant threat to competition. In this case, a new technology has recently entered the market and competitive models are nascent, while the incumbents, who have resisted the technology, control crucial inputs and continue to have high market shares. The number of firms that control these crucial inputs is quite small and will shrink from four majors to three with the proposed merger, so that the threat of harm to competition through the abuse of enhanced, post-merger unilateral market power or coordination is considerable. The post-merger market structure is dominated by three large firms that have multi-market contact across geographic and product markets. The merger raises the concentration substantially in a sector in which anticompetitive conscious parallelism has been recently found.

The Department of Justice made a strong case for concern about the impact of control of marquee content on incipient digital competition in its recent complaint against the Comcast-NBCU merger.

> Through the JV, Comcast seeks to gain control of NBCU's programming, a potent tool that would allow it to disadvantage its traditional video programming distribution competitors, such as cable, DBS, and the telcos, and curb nascent OVD competition by denying access to, or raising the cost of, this important content. If Comcast is allowed to exercise control over this vital programming, innovation in the market for video programming distribution will be diminished, and consumers will pay higher prices for programming and face fewer choices…
>
> The impact of the JV on emerging competition from the OVDs is extremely troubling given the nascent stage of OVDs' development and the potential of these distributors to significantly increase competition through the introduction of new and innovative features, packaging, pricing, and delivery methods.
>
> Comcast has an incentive to encumber, through its control of the JV, the development of nascent distribution technologies and the business models that underlie them by denying OVDs access to NBCU content or substantially increasing the cost of obtaining such content. As a result, Comcast will face less competitive pressure to innovate, and the future evolution of OVDs will likely be muted. Comcast's incentives and ability to raise the cost of or deny NBCU programming to its distribution rivals, especially OVDs, will lessen competition in video programming distribution. (DOJ, 2011: 4, 52, 54)

B. THE CONTINUING VULNERABILITY OF NON-MAJORS

The challenge for antitrust authorities is to understand the state of play between the nascent competitive business models and the dominant incumbents, keeping in mind that the law is particularly concerned about nascent competition and maverick firms.

"Therefore, the Agencies evaluate the risk of coordinated effects using measures of market concentration (see Section 5) in conjunction with an assessment of whether a market is vulnerable to coordinated conduct. See Section 7.2. The analysis in Section 7.2 applies to moderately and highly concentrated markets, as unconcentrated markets are unlikely to be vulnerable to coordinated conduct.

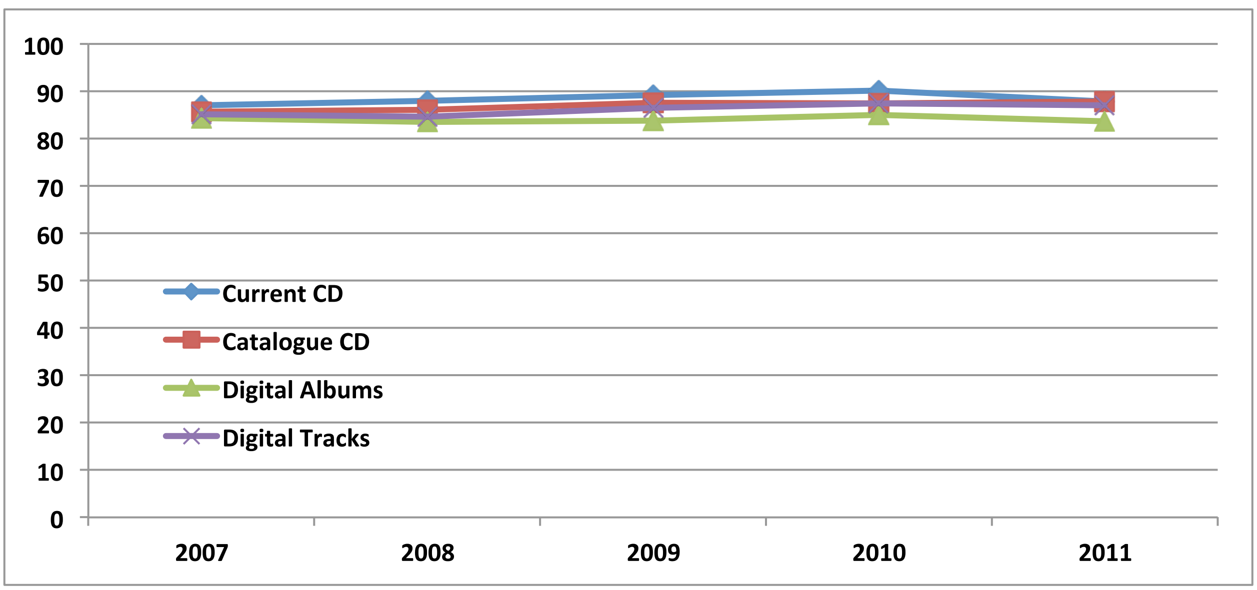
"The Agencies presume that market conditions are conducive to coordinated interaction if firms representing a substantial share in the relevant market appear to have previously engaged in express collusion affecting the relevant market, unless competitive conditions in the market have since changed significantly."

1. Independent Labels

As noted above, we do not see a great deal of difference between the digital and physical products in terms of the market share of other firms (i.e. the four firm concentration ratio across the products is similar, Exhibit V-1). There is no discernible trend toward a declining four-firm ratio in any of the products. Although detailed data is available for only the past four years, this period does involve the vast majority of growth in digital sales without exhibiting much reduction of market shares among the top four firms.

Exhibit V-1 reflects the attribution of sales to majors that has been standard. We are aware of the dispute between the majors and independent labels that would paint a different picture (Morgan, 2011). We believe this dispute proves the continued importance of the majors, not their imminent demise. While independent labels have grown, they have been unable to escape from the domination of the major labels. We interpret the recent brouhaha over the calculation of market shares as a demonstration that the independent labels have failed to diminish the market power of the dominant firms. The independent labels are dependent on the majors for distribution of over 60 percent of their content,[9] hardly a demonstration of their ability to challenge the majors with regard to fostering new distribution platforms. Recognizing their vulnerability to the exercise of market power, they oppose the merger, fearing the strengthened grip of a more concentrated market. (Spanier, 2012)

EXHIBIT V-1: FOUR FIRM CONCENTRATION RATIO BY PRODUCT IN THE DIGITAL ERA



Source: ***The Nielsen Company & Billboard's 2011 Music Industry Report*****, various years.**

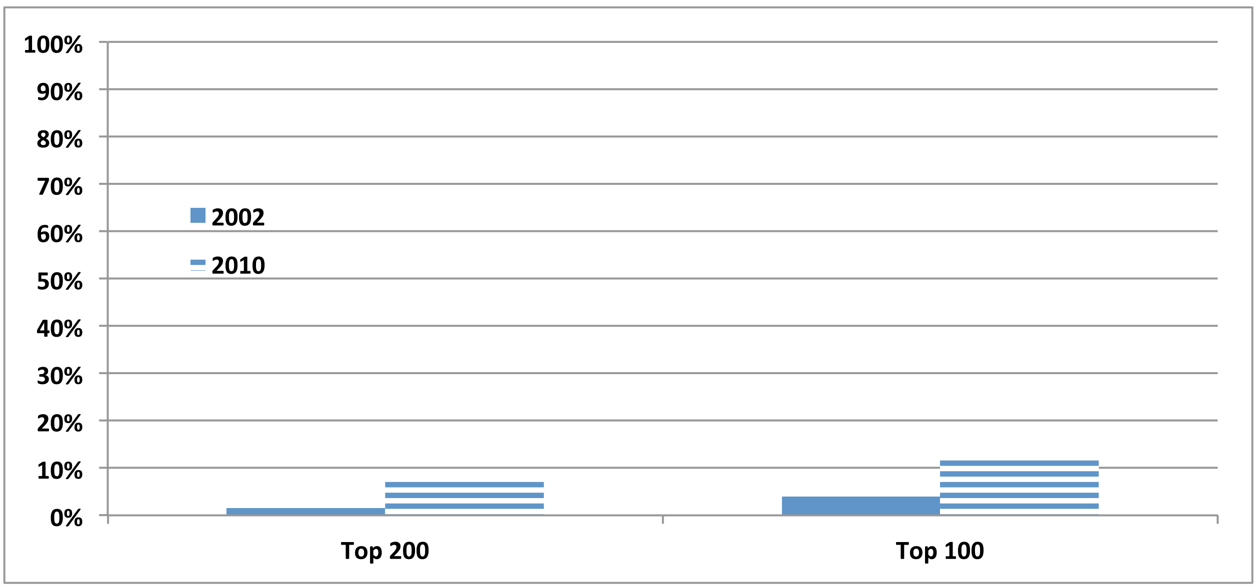
The eleventh hour conversion of Universal to counting the product distributed by the majors on behalf of the independent labels as truly independent is a flip-flop by Universal, which has long insisted that those sales be counted in its market share that calls the whole undertaking into question (Morgan, 2011). Another fact that calls this shift into question is the apparent

[9] The total independent label share with reclassification of the product distributed by the majors is just over 30 percent, while the content distributed by independent labels on their own behalf is attributed a market share of just over 12 percent.

increasing reliance of independent labels on majors for distribution. It appears that the share of the Independent labels direct distribution has declined substantially in the past half-decade, from 18 percent to 12 percent, while distribution of independent label content by majors has doubled, from 9 percent to 18 percent. The independent labels remain dependent on the major labels for distribution into the Big Box stores that dominate physical distribution (Morgan, 2010, Leeds, 2005). Changing the way market shares are counted on the eve of a major merger should not be the basis on which the merger is allowed to slip past close scrutiny. Moreover, because the reclassification of shares is not uniform (Universal's market share is less affected) the calculation of the HHI changes less than the simple average suggests.

Waldfogel's analysis of the role of the independent labels reinforces this conclusion (see Exhibit V-2). The independent label share of the top 100 and 200 albums has grown, but remains at fairly low levels. With 7.5 percent of the top 200 and 12 percent of the top 100 albums in 2010, it is hard to argue that the Indies significantly threaten the market power of the major labels. Progress has been made, but not enough to conclude that the transition to the digital medium has eliminated or even significantly reduced the concern about market power.

Exhibit V-2: Independent Label Share of Top Selling Albums Before and After Digital Sales



Source: Joel Waldfogel, *Copyright Protection, Technological Change and the quality of New Products: Evidence from Recorded Music Since Napster,* NBER Working Paper 17503, October 2011

However, although independent labels currently only command a small market share, their recent growth shows their potential to eventually grow into competitors to the major labels. Major labels can stifle this competition by limiting the number of successful digital distribution platforms, which are the very places where independent labels' offerings can compete with those of the major labels on a level playing field. The major record labels may accomplish this by withholding licenses entirely or by demanding high advances, royalties disproportionate to their market share, or an equity stake in the digital service as a condition of a license. Any of these tactics threaten the long-term sustainability of independent labels.

Access to the content of the majors currently remains indispensable to building new distribution models. It is not feasible to succeed on the basis of unsigned artists alone. The concentration of control of albums in the hands of a dominant player in a highly concentrated market poses a severe threat to competition and dynamic innovation in this space. As the majors gain greater leverage, alternatives and artists lose out.

The task of securing access to the necessary content to launch digital distribution undertakings is formidable. There have been some very notable failures in the past half-decade, and acquiring content may have played a role in making a difficult task even more difficult. For example, Beyond Oblivion, a digital music service founded in 2008 and backed by News Corp. and Allen & Co., aimed to provide users with a nearly unlimited selection of music on devices that held Beyond Oblivion software. The service filed for bankruptcy in late 2011 before it had even launched. Notably, bankruptcy proceedings revealed that Beyond Oblivion owed outstanding debts of $50 million each to Sony Music Entertainment and Warner Music Group—an astonishing figure for a service that was never actually used by a single customer. These kinds of high advance royalties can hinder a digital startup from launching a successful and sustainable product. They also discourage investors, who must shoulder higher levels of risk for any digital music distribution service that requires direct licensing from record labels. Another alternative distributor, the cloud-based music service LaLa originally launched as a CD-trading website in 2006. Eventually LaLa shifted from CD swapping to a cloud-based music service. Registered users could listen to songs once for free and then choose between purchasing a copy of the song or paying to stream the song. The service was subsequently purchased by Apple and shut down in 2010.

If the loss of a large independent competitor in a tight oligopoly market is a serious challenge to independent labels that are dependent on the majors for distribution of their content, it is an even more critical issue for alternative distribution models that possess no content whatsoever. Alternative distribution models must gain access to the content of the majors to succeed because, as we have already seen, the majors control such a large share of the music that sells across all media and genres. As control over marquee content that is indispensable to the success of alternative distribution models becomes more concentrated in the hands of the shrinking number of majors, their ability to determine the fate of alternative models grows.

2. Unsigned Artists

Digital technologies help the great mass of content creators and artists by expanding the market and making it easier for artists to directly reach the consumer. The striking thing about the breakdown of who gets what from a physical album sale discussed above is the small share that artists actually get. Needless to say, as the costs of physical distribution are eliminated, artists strive to increase their take. As noted above, digital disintermediation could give them greater leverage as against labels in the scrum over the rents both because they can go directly to the audience, and because they have more alternative distribution intermediaries.

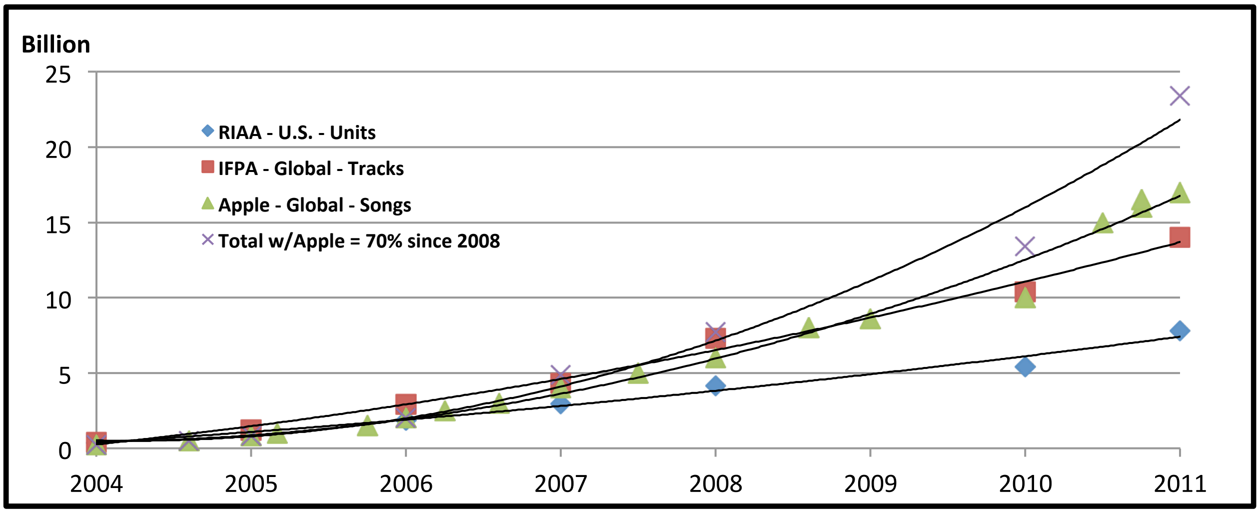
We think artists have benefited in this way. Millions of artists sell music on iTunes and other digital distribution services; the vast majority of these artists had no way to reach the consumer in the brick and mortar world because they could not get a recording contract. Digital distribution has diversified and de-concentrated the recorded music space, but as shown earlier, the major labels still dominate the revenue stream of the music industry through their control of albums and the alternative digital models are early in their evolution.

Estimating how large a role digital distribution plays in allowing unsigned artists to reach the public is difficult, in part because there are no centralized entities to count them. However, comparing the estimates of digital sales from distributors to the estimates of sales claimed by the representatives of labels, we do find a gap that today is close to 3 billion units for Apple songs alone. Assuming that Apple's market share declined to 70 percent, there would be 9 billion more digital tracks sold than claimed by labels (see Exhibit V-3).[10] This is certainly good news for unsigned artists, but the question the antitrust authorities face is whether the dramatic increase in concentration in control of albums would pose a threat to competition in the space.

3. Monopsony

With the merger creating greater control over distribution, the extremely tight oligopoly exercises greater control over access to the public and denies the independent labels and unsigned musicians a potential distributor to use to reach the public. The problem that afflicts the independent labels is even more acute for artists, a problem that the *Guidelines* deal with under the topic of monopsony power.

EXHIBIT V-3: DIGITAL MUSIC SALES



Sources: RIAA – *Annual Units Shipped*, IFPA, *Digital Music Reports*, various years, Apple, Milestones as reported in Wikipedia.

> Enhancement of market power by buyers, sometimes called "monopsony power," has adverse effects comparable to enhancement of market power by sellers. The Agencies employ an analogous framework to analyze mergers between rival purchasers that may enhance their market power as buyers...(2) A merger between two competing sellers prevents buyers from playing those sellers off against each other in negotiations. This alone can significantly enhance the ability and incentive of the merged entity to obtain a result more favorable to it, and less favorable to the buyer, than the merging firms would have offered separately absent the merger. (22)

The merger reduces the number of major options artists have in seeking record deals and moving between labels. A wider variety of record labels offers artists more options to find a recording contract that will best serve that artist and consumers interested in that artist's music. A record label may, for example, be heavily involved in the actual writing and production of the album, or act more like an investor with the right to accept or reject the finished product. Some labels are also more willing to experiment with new distribution models, or to support an artist's strategy to focus on building relationships with fans instead of focusing on mass marketing tactics.

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[10] The adjustment to Apple sales would include direct sales from artists to consumers, although the basis for estimating non-Apple sales in the press is not made clear.

With respect to artists, we have some notable examples of celebrities who have changed labels. For example, Katy Perry has been signed to the Red Hill, Island, Columbia, and Capitol (owned by EMI) record labels thus far in her career. However, signed artists currently can, at best, only choose between four major record labels with substantial market share, and must sign recording contracts that give the label the option to order additional albums (often five or seven) that the artist must deliver. If the artist would like to switch to another record label mid-contract, the artist must convince that new label to buy her contract from her current label, which can include reimbursing the original label for all of the money it has spent on previous albums and not yet recouped from record sales. Recording artists thus encounter much difficulty in trying to switch between major labels and have little bargaining leverage against record labels when they do get to negotiate a new contract. The UMG-EMI merger raises the broader concern that this merger will give artists even fewer options and even less bargaining power against the dominant labels.

The analysis of monopsony power requires a balanced perspective on the digital transformation similar to the balanced perspective we have argued for above with respect to pricing. The parallel is exact. There is no doubt that the digital transformation has benefited consumers, but that does not mean antitrust concerns can be abandoned. There is no doubt that the digital transformation has benefited artists, but that does not mean antitrust concerns can be abandoned either.

Thus, the structure of the music sector is a stable, tight oligopoly market structure in a market that is undergoing a shift in production and distribution technology. The tight oligopoly structure survived a similar shift in the recent past and the initial phase of the digital transformation has not changed the dominant firms. If anything is remarkable about the music business, it is the ability of the dominant firms to preserve their dominance.

C. The Role of Mavericks

The importance of coordination and prevention of leakage of content underscores another aspect of merger review – the role of mavericks. An individual firm can play a particularly important role in providing competition. This role can be heightened in the situation of systemic stress to the business model.

> The Agencies consider whether a merger may lessen competition by eliminating a "maverick" firm, i.e., a firm that plays a disruptive role in the market to the benefit of customers. For example, if one of the merging firms has a strong incumbency position and the other merging firm threatens to disrupt market conditions with a new technology or business model, their merger can involve the loss of actual or potential competition. Likewise, one of the merging firms may have the incentive to take the lead in price cutting or other competitive conduct or to resist increases in industry prices. A firm that may discipline prices based on its ability and incentive to expand production rapidly using available capacity also can be a maverick, as can a firm that has often resisted otherwise prevailing industry norms to cooperate on price setting or other terms of competition (DOJ/FTC,2010: 3-4).

EMI has been willing to experiment somewhat more in the new digital space. Knopper notes two instances in which EMI was in front on these issues, being the first (and at the time only) label to have DRM-free content in the iTunes store (Knopper, 2010:180) and then to drop copy protection altogether, which Knopper (2010: 231)describes as "like dropping a bomb."

EMI has been ahead on a number of other steps that break down the content barriers to entry of digital distribution models. Several of the accounts pull the incipiency, coordination and maverick issues together. EMI's willingness to license its music to a digital distribution site in which it did not have an ownership interest was another big move, at least according to a Forbes account, which also underscored the importance of having access to content for the new distribution business models.

> Are we there yet? Digital music fans have been waiting for years for the subscription download amusement park to open so they can rush in and play, purchasing tracks with great sound quality by the gigabyte.
>
> EMI broke critical ground by agreeing yesterday to license its music to pressplay, the digital music subscription service that competes with MusicNet--which EMI has a stake in. Until now, labels have been loath to license music to digital music sites that they don't own at least in part. The lack of a single Web site with a complete music library is one of the major roadblocks on the path to a legitimate digital music market, and this is a step in that direction. EMI, the world's third-largest record company and the only one of the top five that's not part of a media conglomerate, has a history of being the first to digital music deals.
>
> But this deal is hardly a victory given that neither pressplay, which is owned by Sony (nyse: SNE - news - people) and Vivendi's (nyse: V - news - people) Universal, nor MusicNet, owned by AOL Time Warner (nyse: AOL - news - people) and Bertelsmann as well as EMI, have even launched yet. The four other major music labels must follow EMI's lead by licensing to services other than those they own, if they ever want to compete with the free music-swapping services. (Patsuris, 2001)

Coordinated action and the importance of mavericks are demonstrated by EMI's role in the social network space.

> Music social net Project Playlist is still barred by Facebook and MySpace but a deal with EMI Music adds considerably to the startup's legit music firepower — and drops the number of majors still suing the startup to two.
>
> EMI Music is the second major to sign on, following a December deal with Sony (NYSE: SNE) Music Entertainment. The Sony and EMI deals are good news for those banking on Playlist's success. Bob Pittman's Pilot Group is an investor and Pittman is on the board; former Facebook COO Own Van Natta signed on as CEO. Project Playlist helps users find and share custom media playlists, providing tools to stream and download. But the tools work with or without copyright permission and this is what has the labels and the RIAA in a knot. MySpace, which is a partner with the four major labels in MySpace Music, quickly gave in and banned Playlist apps from working on its pages. Facebook finally followed after considerable pressure.
>
> EMI also has dropped out of the RIAA lawsuit filed against the Palo Alto-based company last April (Kramer, 2009).

The need for access to the full range of content is underscored by observations about Spotify and the cloud, with EMI again willing to step out early.

> Spotify, the Swedish music streaming service used by 10 million people across Europe, is close to landing a deal to license EMI Group's songs for use in the U.S., according to sources familiar with the negotiations.
>
> EMI, which publishes such acts as Kanye West, Pink Floyd and Garth Brooks, would be the second major label, after Sony Music Entertainment, to sign on to Spotify's plans to introduce its popular music service to the U.S. That leaves Universal Music Group and Warner Music Group as the two big holdouts.
>
> It's unclear whether Spotify would have enough songs to launch a service in the U.S. without Universal or Warner. EMI had 10% of the U.S. music market in 2010, while Sony accounted for 28% of the market last year, according to Nielsen SoundScan (Los Angeles Times, 2011).

> Apple has signed a cloud-music licensing agreement with EMI Music and is very near to completing deals with Universal Music Group and Sony Music Entertainment, multiple music industry sources told CNET.
>
> Warner Music Group already had a deal in place with Apple, CNET reported last month. The licensing agreements will enable Apple to launch a fully licensed cloud-music service to rival unlicensed offerings of rivals Amazon and Google.
>
> The negotiations with Sony Music Group and Universal Music Group could be wrapped up as early as next week, the sources said. What this means is that signed contracts with all four of the top four record companies will be in Apple's hip pocket on June 6 when Apple kicks off the company's Worldwide Developers Conference. The sources who spoke with CNET did not know when Apple would announce the deals or roll out the cloud service (Sandoval, 2011).

EMI had a history of leading in the digital space, releasing the first digital single in 1996 (Anonymous, 2010), being the first join iTunes press pass (Rose, 2009) and the first to support application developers.

> The music industry isn't exactly known for being easy to get along with when it comes to the app developer community. That's why a new deal announced today between music group EMI Music and 'music intelligence' startup The Echo Nest is particularly intriguing.
>
> The tie-up sees The Echo Nest host and manage a 'sandbox' for app developers. Through this portal, EMI Music will offer creative briefs and opportunities to collaborate on building apps for artists such as Gorillaz, The Pet Shop Boys and Tinie Tempah.
>
> Once developers have successfully registered for an API key, they're able to submit app concepts to EMI and The Echo Nest. Apps that are approved will then be released by EMI under a revenue sharing model that sees both developers and rightsholders paid, and the intellectual property for the technology retained by the developer. Both free-with-ads, and paid-for apps will be considered, across platforms such as the Web, iOS and Android.
>
> The initiative provides access to music from the famous Blue Note Records jazz label, and a catalog of thousands of songs from acts such as Culture Club, Shirley Bassey and The Verve. Developers will be able to make use of The Echo Nest's vast database of information about songs, from simple things like tempo and genre, to complex data about the 'mood' of songs. There's also access to dynamic playlist APIs, open source audio fingerprinting, audio analysis, and remix software (Martin, 2011).

Thus, we have a long series of innovative and maverick behaviors stretching across a decade and a half (1996, 2001, 2007, 2009, 2011). Combined with the overwhelming evidence that the merger will significantly lessen competition, this is another factor that adds to the case against the merger.

If the recorded music business was competitive and not protected by high barriers to entry, economic theory would have predicted that the supra normal profits of the mid-1990s would be competed away. This competition should have come from firms in the industry, but it did not.

> The market power of the oligopolistic music majors eroded, evidenced by decreasing sales figures. The only way to fight the erosion of their market power is by filing lawsuits against music services and heavy music downloaders on the Internet claiming copyright infringement. This is proof for the hypothesis that the existing copyright regime protects the 'old' music industry paradigm and restrains the unfolding of innovative business models.
>
> It is striking that promising new music models did not emerge from 'traditional' music industry actors, but from industry outsiders, like computer firms (e.g. Apple and iTunes) and telecommunications and dot-com companies (e.g. Ericsonn and Amazon.com). The commercially successful exploitation of

music on the Internet strongly depends on the licensing of music titles by the large publishing houses, which usually belong to major record producers. Since the licensing feeds amount to more than half of the total cost (plus tax) the new competitors run at a loss or only make marginal profits, such as iTunes in the US. (Tschmuck, 2009: p. 254)

One of the things that the e-book case makes clear is that the members of an industry under the stress of digital disintermediation feel a strong need to coordinate (DOJ, 2012). They recognize their fates are tied together and that leakage of any content into the new distribution model makes it difficult for others to hold out. In the music space Knopper (2010: 141-16, 172-175) exposes repeated attempts to coordinate the response to digital distribution including the initial litigation strategy against Napster, negotiations with Napster during the initial litigation, the lock-step pursuit of individual litigation after Napster, and several unsuccessful efforts to develop alternative digital technologies including the "secure digital music initiative," the DRM strategy, and the negotiations with Apple over iTunes. Time and again, the group of major labels is rounded up and holds together, over the grousing of individual firms and executives within firms. Coordination was the key to a long delay in making digital content available.

Whether or not this coordination of activity was illegal at the time, it does underscore how important coordination was perceived to be in response to a systemic threat to the business model. Allowing the majors to shrink to three makes the execution of the coordination easier.

D. Contemporary Pricing

Digital disintermediation has certainly undermined one of the primary tactics the tight oligopoly used to extract consumer surplus – the elimination of singles. There is no doubt that the sale of singles had a huge impact on the sale of albums. Liberated from the tyranny of CD albums at $15 per unit, consumers flocked to singles at $0.99 per unit. Recently, however, the sale of digital albums has experienced a strong upswing. There would appear to be a significant market for albums, when offered at a reasonable price. As shown in the top graphs of Exhibit V-4, digital albums carry a price tag that is one-third lower than physical albums. As shown in the bottom graph, it appears that the sales of digital albums have exerted downward pressure on physical album prices. In fact, looking at quantities and prices of physical and digital albums and singles, we find that the price and quantity of digital album sales are significantly related to the sales of CD albums in a model that explains virtually all the variance in CD album sales is notable.[11]

---

[11] To be sure, there is a great deal of co-linearity between all these measures and only small a number of data points, but this finding is consistent with the theory that digital albums are a closer substitute for physical albums than digital singles in an identifiable market for albums. Given the small number of observations, the statistical significance of both digital prices and digital sales in the expected direction is notable

Linear Regression: Sales of CDs (scda), Sales of Digital Albums (SDA), Real Price of Digital Albums (PDR)

Number of obs = 8; F(2, 5) = 242.77; Prob > F = 0.0000; R-squared = 0.9804; Root MSE = 34.582

scda	Coef.	Robust Std. Err.	t	P>|t|	Beta
sda	-3.36675	1.156151	-2.91	0.033	-.5736939
pdr	69.40882	23.4687	2.96	0.032	.4303183
cons	-174.6214	328.8535	-0.53	0.618	

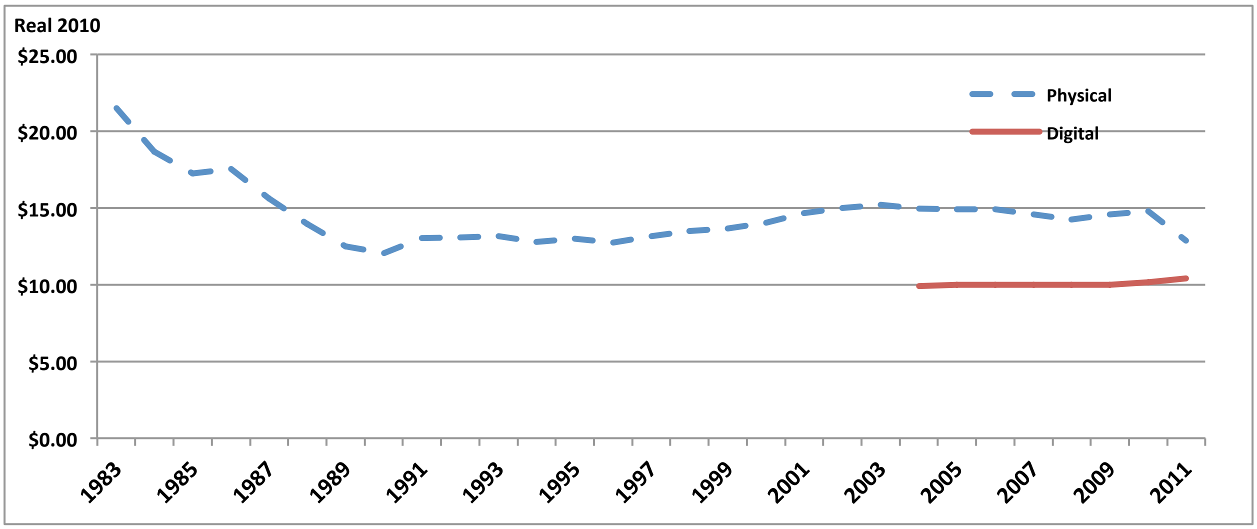
Variance Inflation Factors

Variable	VIF	1/VIF
pdr	9.20	0.108683
sda	9.20	0.108683
Mean VIF	9.20	

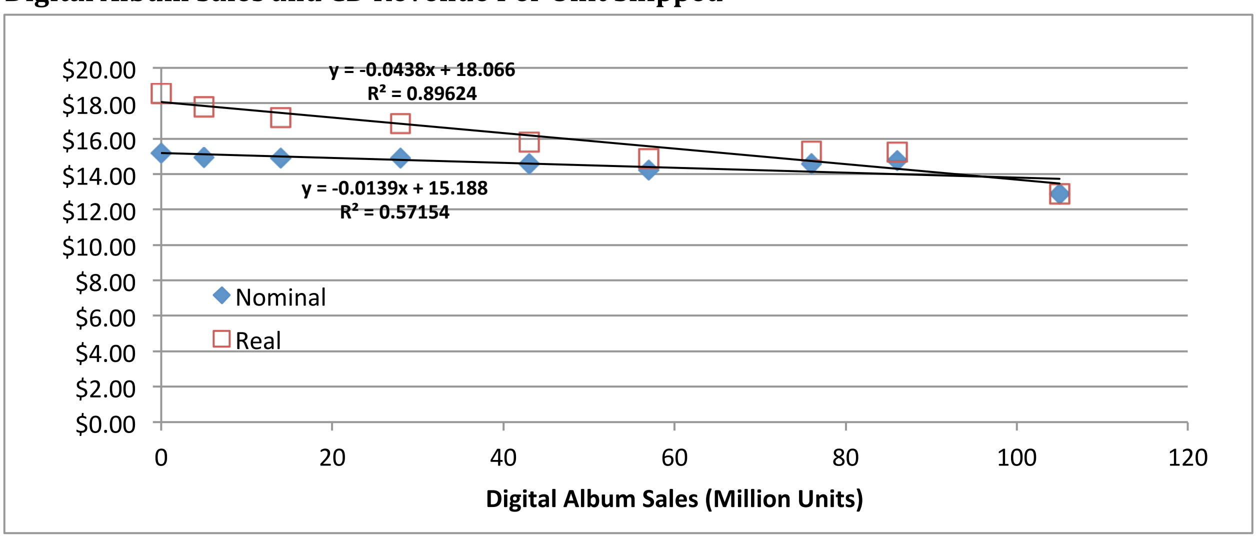
The price tag of $10 for a digital album and declining prices for physical albums may look like remarkably good deals for consumers given the history of pricing in the industry; digital technologies are transformative – dramatically lowering production, distribution and transaction costs. The fees that digital distributors like Apple have taken may be too high as well. With more competition and new business models, the price of a digital album could be lower and closer to the cost. Moreover, recent pricing patterns suggest that the industry has begun to figure out how to maximize price in a digital world (see Exhibit V-5). Raising price more sharply for singles than albums has the effect of shifting demand from singles to albums and increasing the total revenue and, more importantly, the revenue per unit shipped.

EXHIBIT V-4: THE IMPACT OF DIGITAL ALBUM SALES ON PHYSICAL CD REVENUE

Revenue Per Album Unit Shipped



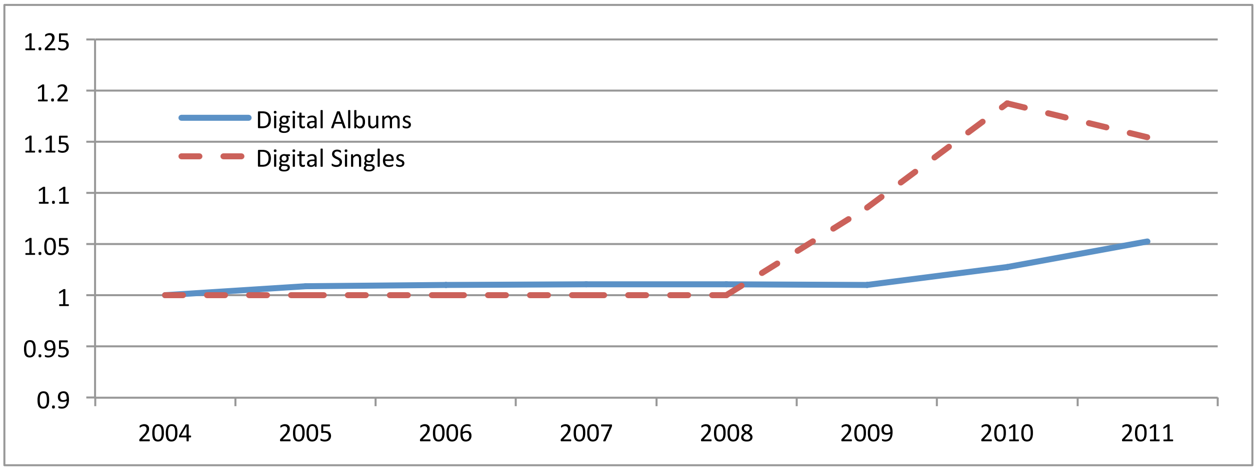
Digital Album Sales and CD Revenue Per Unit Shipped



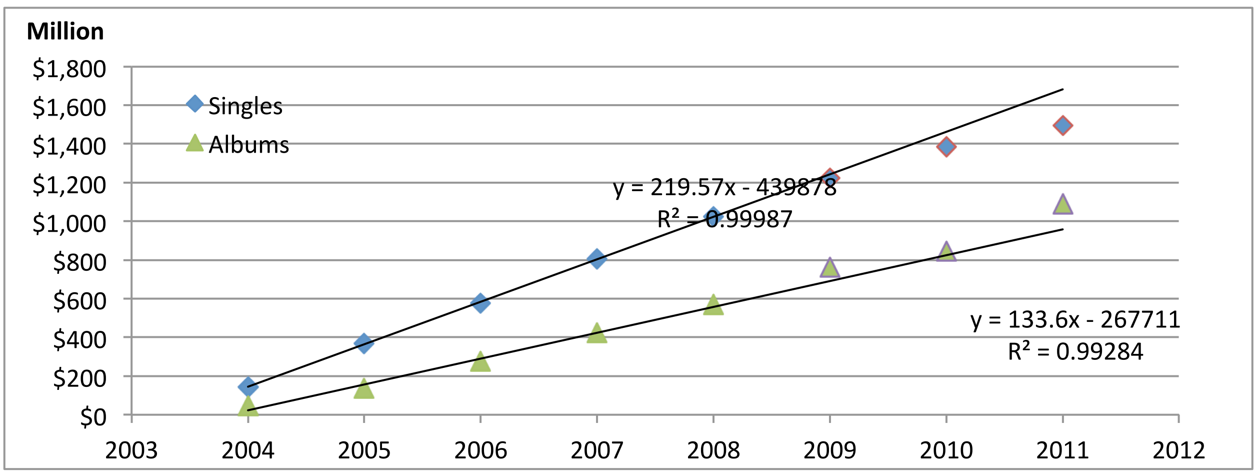
Source: Recording Industry Association of America, various years.

EXHIBIT V-5: THE RECORDING INDUSTRY PRICING STRATEGY IN THE DIGITAL ERA: RAISE SINGLE PRICES MORE THAN ALBUMS TO INCREASE ALBUM SALES AND REVENUE PER UNIT SHIPPED

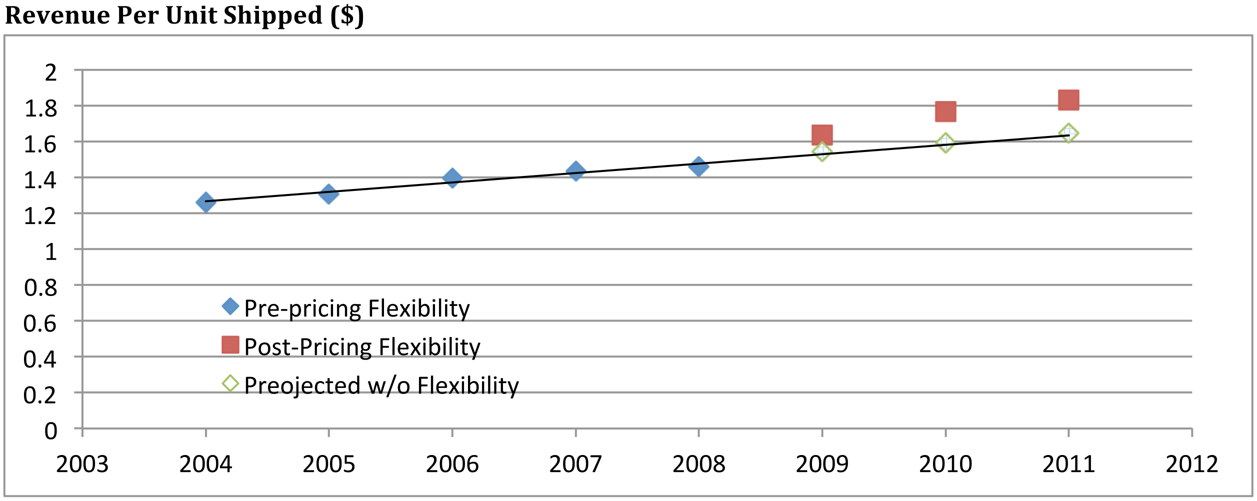
Price Indices for Digital Products (2004=1)



Total Revenue for Singles and Albums



Revenue Per Unit Shipped ($)



Source: Recording Industry Association of America, various years.

VI. LESSONS FROM THE DOJ E-BOOK PRICE FIXING CASE

The comparison we make between the UMG-EMI merger and the e-book price fixing complaint is important and appropriate for three primary reasons. Collusive price fixing and antitrust merger review are covered by the same statutes. While it is true that collusive price fixing is *per se* illegal and merger review is case-by-case, there are several reasons to draw a parallel between the two, beyond the fact that the book publishers claim that there was no collusion and the pricing behavior would pass muster if a*nalyzed* on a case-by-case basis.

First, the DOJ/FTC *Guidelines* note that one type of evidence to which they look for insight about the impact of a merger involves examples of similar actions or related markets.

> *Direct Comparisons Based on Experience:* The Agencies look for historical events, or "natural experiments," that are informative regarding the competitive effects of the merger… Effects of analogous events in similar markets may also be informative.
>
> The Agencies also look for reliable evidence based on variations among similar markets… (DOJ/FTC, 2010: 3).

While the e-book case does not involve a merger, it does show us that digital markets are not immune to abusive pricing behavior. Action by entities that controlled a market share that was not terribly greater than the post-merger market share of UMG-EMI was successful in pushing up the price with the goal of controlling competition from digital distribution.

Second, the economics and processes that are driven by digital disintermediation are similar in the two examples. Studying similar cases strengthens our understanding of the process. Layering cases builds a routine practice, which is how much antitrust enforcement unfolds.

Third, we believe that traditional antitrust practice has a critical role to play in ensuring that the emerging digital economy is as competitive and consumer friendly as it can be. There is nothing unique or unmanageable about the digital economy that renders antitrust law and practice inapplicable. Collusion and merger review are two of the mainstays of antitrust analysis and strong support for antitrust action in both of these cases is a powerful reminder of the continuing importance of antitrust.

A. THE CHALLENGE OF AND RESPONSE TO NEW DISTRIBUTION IN PUBLISHING AND MUSIC

Our analysis of the practices described in the publicly available accounts of the e-book market leads us to conclude that they constitute anticompetitive, anti-consumer collusive price fixing. Under current antitrust practice an individual firm's efforts to set minimum retail prices is subject to a case-by-case rule of reason test (we think it should be *per se* illegal, but that is a different issue). Even in a case-by-case environment, non-collusive; but coordinated behavior between firms to set minimum prices is illegal, as the Minimum Advertised Prices decrees show, especially when one of the first effects of the price fixing, after increasing consumer cost, has been to raise publisher profits.

Notwithstanding the complaints of the publishers and a few celebrity authors, vigorous action to block the price-fixing scheme will be good for consumers and the vast majority of authors. This year the cost to consumers of e-book price fixing will likely exceed $200 million and the abuse will grow dramatically, if the Department of Justice does not take action to stop this practice. The current magnitude of harm is more than enough to merit antitrust attention.

Claims that this collusive price fixing scheme is an efficiency enhancing strategy do not stand scrutiny. The publishers and authors present two classic efficiency claims to defend their practice. (Turow, 2012) They argue that it prevents the dominant firm from pricing in a predatory manner to undermine competition, particularly from physical space book stores. They also claim that book stores are vitally necessary to preserve an efficient marketplace for books and a cross-subsidy from e-book readers to physical book readers is necessary to do so.

In sector after sector, we hear the same complaints over and over; digital distribution will eliminate physical distribution, creativity will be stifled and sales will decline. The opposite occurs. Digital distribution replaces part of physical distribution and the output expands, while efficiency squeezes the margins of intermediaries. Discounters offer consumers economic benefits and high-price incumbents always complain about them. In a sector with rapidly declining costs, falling prices reflect efficiency. Arguments against them bear a heavy burden. The publishers and celebrity authors have not come close to meeting the burden.

The parallels between the music case and the e-book case go beyond the basic cost and efficiency economics. In the late-2000s the publishers had the same problem as the record labels did in the mid-1990s. They were caught between two very different distribution channels – the newer low-cost, high-volume channel and the traditional higher cost, lower volume specialty shops. They had the same reaction: they fixed prices to reduce the competitive pressures. The result was to increase profits. The FTC filed identical complaints against the major labels, but alleged no collusion. It was conscious parallelism, but illegal just the same.

In the case of e-books, the publishers may have perceived a more profound systemic threat, with the recognition that the new e-tailers could become publishers. The record labels did not face this threat from the big box stores selling CDs in the 1990s. By the 2000s, the systemic threat was greater and came from the outside in the form of new technology.

> The publishers and celebrity authors have been concerned about "cannibalization" rather than piracy for a decade. Interestingly, at the beginning of the decade, when the record labels were litigating copyright, the initial complaint in the book sector was about the effect of an efficient market for used-books. The Authors Guild of America and Association of American Book Publishers, sent a joint, "open letter to Jeff Bezos (CEO of Amazon.com)
>
> "As a leader in the bookselling industry, Amazon's [used book] sales practices can have a significantly deleterious effect on new book sales. If your aggressive promotion of used book sales becomes popular among Amazon customers, this service will cut significantly into the sales of new titles, directly harming authors and publishers." (Cited in Ghose, Smith and Telang, 2006)

In the middle of the decade, the publishers tried channel management and windowing (delaying the release of e-books to boost physical book sales). Various explanations were offered by the major publishers who would later become the co-conspirators.

> The publishing plan is focused on maximizing velocity of the hardcover before Christmas (HarperCollins). We think that this publishing plan gives us the opportunity to maximize hard cover sales. We can't sit back and watch years of building authors sold off at bargain prices (Hachete). The right place for the e-book is after the hardcover but before the paperback (Simon and Schuster). (cited in Hu and Smith, 2011)

By the end of the decade they had resorted to price fixing. As briefly excerpted in Exhibit VI-1, the wording of the antitrust complaints in the Minimum Advertised Price settlements and the e-book price fixing complaint are strikingly similar.

EXHIBIT VI-1: PARALLEL PROBLEM, PARALLEL ILLEGAL CONDUCT

In the Matter of BMG Music, Docket No. C-3973

PARAGRAPH THREE: The major distributors sell prerecorded music to numerous retailers including independent retailers, large national chains, mass merchandisers, regional chains and consumer electronics stores. They also sell prerecorded music to sub-distributors who in turn supply retailers not serviced directly by the prerecorded music distributors.

PARAGRAPH FOUR: There are two relevant markets in this matter. First, the commercial development, distribution and wholesale sale, by any means, of prerecorded music (hereinafter "wholesale market"). Second, the retail sale, by any means, of prerecorded music (hereinafter, "retail market"). The geographic scope of the wholesale market is the United States of America. The wholesale market is characterized by high entry barriers that seriously limit the likelihood of effective new entry.

PARAGRAPH FIVE: In the early 1990's, several large consumer electronics chains began selling compact discs and other prerecorded music products. These new entrants competed aggressively on price and offered consumers substantial savings on some prerecorded music products. A retail price war ensued and music retailers lowered their prices.

PARAGRAPH SIX: Some retailers, faced with newly invigorated price competition in the retail market, requested margin protection from BMG. In 1993, BMG, was also concerned that declining retail prices could have wholesale price effects. Thereafter, BMG decided to introduce a Minimum Advertised Pricing ("MAP") policy. In 1992 and 1993, the other major distributors adopted MAP policies. These policies set forth minimum advertised prices for most prerecorded music products. As discussed below, these MAP policies were modified between 1995 and 1996. In 1995 and 1996, retail prices increased. Since 1997, wholesale prices have also increased.

PARAGRAPH SEVEN: The MAP policy changes which occurred in 1995 and 1996 significantly tightened the programs. By February 1, 1997, each of the major distributors had implemented similar policies. The new MAP policies provided that any retailer who advertised the distributors' product below the established MAP would be subject to a suspension of all cooperative advertising and promotional funds for either 60 or 90 days.

PARAGRAPH NINE: Shortly after adopting the new MAP policies, the distributors began aggressively enforcing the policies. Several high profile enforcement actions that resulted in long periods of suspension were widely publicized by the trade press.

PARAGRAPH TEN: BMG's stricter MAP policy, in effect since January 1, 1997 and continuing to date, was implemented to eliminate aggressive retail pricing and to stabilize overall prices in the retail marketplace. This policy was successful.

PARAGRAPH ELEVEN: The purpose, effects, tendency or capacity of the acts and practices described in PARAGRAPHS SIX, SEVEN, EIGHT, NINE and TEN relating to the implementation and enforcement of MAP policies are and have been to restrain trade unreasonably and hinder competition in the retail and wholesale markets for prerecorded music in the United States, and constitute a violation of Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. § 45.

PARAGRAPH TWELVE: The aforesaid acts and practices of the respondent were and are to the prejudice and injury of the public. These acts and practices constitute unfair methods of competition in or affecting commerce in violation of Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. § 45. These acts and practices may recur in the absence of the relief requested.

United States v. Apple, et al., Complaint, 12-CV 2826, April 11, 2012

E-book sales have been increasing rapidly ever since Amazon released its first Kindle device in November of 2007… Amazon substantially increased the retail market for e-books. One of Amazon's most successful marketing strategies was to lower substantially the price of newly released and bestselling e-books to $9.99…

Publishers saw the rise in e-books, and particularly Amazon's price discounting, as a substantial challenge to their traditional business model. The Publisher defendants feared that lower retail prices for e-books might lead eventually to lower wholesale prices for e-books, lower prices for print books, or other consequences the publishers hoped to avoid. Each Publisher Defendant desired higher retail prices across the industry before "$9.99" became an entrenched consumer expectation. By the end of 2009, however, the Publisher defendants had concluded that unilateral efforts to more Amazon away from its practice of offering low retail prices would not work…. (1)

Together, Apple and the Publisher Defendants reached an agreement whereby retail competition would cease (which all the conspirators desired), retail e-book prices would increase significantly (which the Publisher Defendants desired), and Apple would b guaranteed a 30 percent "commission" on each e-book if sold (which Apple desired)….

Prior to the conspiracy, both print books and e-books were sold under the longstanding "wholesale model." Under this model, publishers sold books to retailers, and retailers, as the owners of the books, had the freedom to establish retail prices. Defendants were determine to end the robust retail price competition in e-books that prevailed, to the benefit of consumers, under they wholesale model. They therefore agreed jointly to replace the wholesale model for selling e-books with an "agency model"…

As Apple CO Steve Jobs described this company's strategy for negotiating with the Publisher Defendants, "We'll go to [an] agency models, where you set the prices and we get our 30%, and yes, the customer pays a little more, but that's what you want anyway"… (3-4)

Other price and non-price competition among e-book publishers and among e-book retailers also was unlawfully eliminated to the detriment of U.S. consumers…. (5)

The Publisher Defendants were especially concerned that Amazon was well positioned to enter the digital publishing business and thereby supplant publishers as intermediaries between authors and consumers. Amazon had, in fact, taken steps to do so, contracting directly with authors to publish their works as e-books –at a higher royalty rate than the Publisher Defendants offered. Amazon's move threatened the Publisher Defendants' traditional position as the gate-keepers of the publishing world (10 -11).

Penguin Group CEO John Makinson conveyed the same message

Competition for the attention of readers will be most intense from digital companies whose objective may be to disintermediate traditional publishing altogether. This is not a new threat but we do appear to be on a collision course with Amazon, and possibly Google as well. It will not be possible for any individual publisher to mount an effective response, because of both the resources necessary and the risk of retribution, so the industry needs to develop a common strategy. This is the context for the development of the Project Z initiatives [joint ventures] in London and New York. (15)

B. Efficiency

Defenders of the price fixing scheme claim that the sector will be less efficient if online sales undermine the distribution of physical books. The argument is that physical book stores are vital to the functioning of the sector because it is the only way for readers to discover new books and unknown authors. The claim is that readers encounter new books when they browse the shelves in physical space book stores and it is the lucky, unknown authors who happen to be on the shelves that the browsers stumble upon.

In the digital age there is a much more efficient way for browsers to examine many more books of many more authors. They can use Internet browsers to search for books online. Moreover, cyberspace lowers transaction costs so much that authors can, unlike in physical space, find their audiences directly, without needing to rely on publishers. Needless to say, by cutting out the middleman they dramatically increase their income from selling books.

As online distribution for many goods and service has grown, physical networks have become smaller. Physical goods play a smaller part in the post-digital market and serve customers with specific needs and desires, while the vast majority of consumers benefit from digital distribution. Consumers who are willing to pay for physical goods and value the services of bookstores can and will support those stores. Publishers fixing prices is not the way to find the efficient division of labor between physical space and cyberspace distribution.

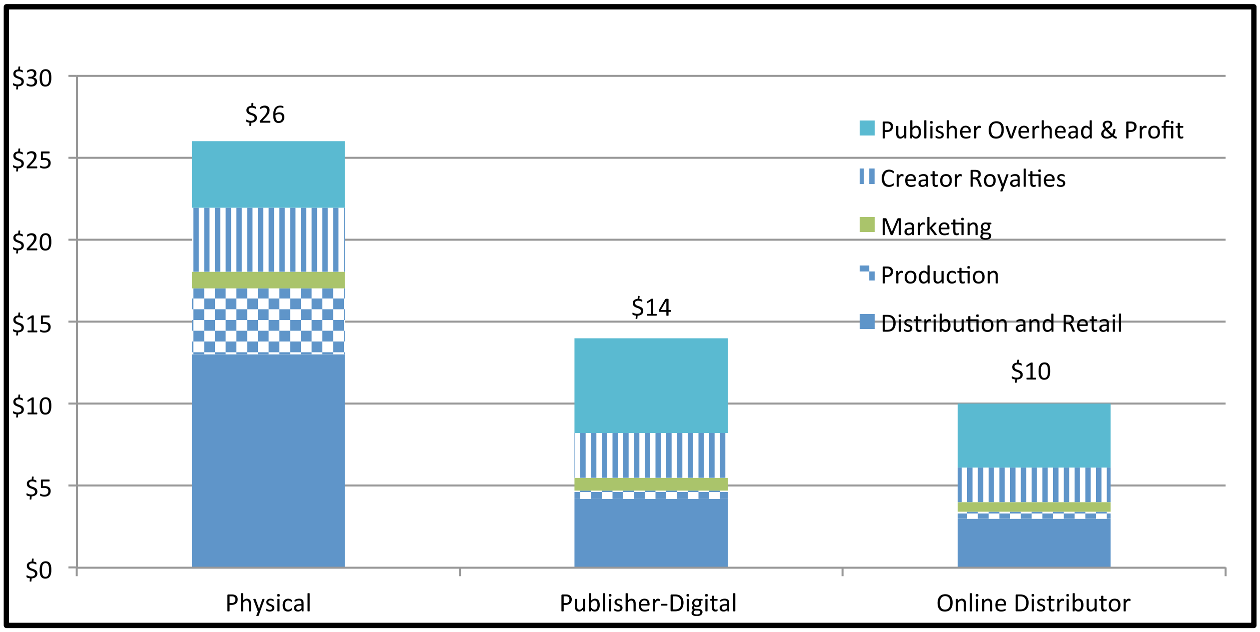
The examples where online distribution played an important role in transforming the distribution of goods are familiar – music, Tower Records; computers, CompUSA; electronic devices, Circuit City; video cassettes, Blockbuster; books, Borders; newspapers, too numerous to name. Rescuing the remnants of the inefficient, brick and mortar distribution network would be a full-time undertaking that imposes massive costs on society. Whether these distribution networks deserve to be subsidized by the public should not be decided by anticompetitive actions of private corporations.

The academic research into the relationship between digital and physical books yields results that are similar to the music space, although there is less of it. (Ghose, Smith and Telang, 2006, Kannan, Pope and Jain, 2009, Hu and Smith, 2011) Cannibalization is less of a problem than it seems. Lower cost used books expand the market. The driver is not only price, it is also much more efficient distribution. Research on new e-books also shows that the digital and physical products are differentiated. Withholding e-books does not greatly increase sales of physical books. The loss of digital sales is much larger than the increase in physical sales. The more efficient digital production and distribution models will certainly put downward pressure on prices, but cost savings mean that more output is delivered more efficiently to the consumer.

1. Consumer Cost Savings

The economic impact of digital disintermediation in the distribution of books parallels the impact on music, characterized by fierce battles over capturing rents made possible by more efficient production and distribution. As shown in Exhibit VI-2, the cost of production and distribution of books declined from about $17 per book to less than $4 per book. Publishers defend high prices for digital books in the name of preserving bookstores,[12] but there is a widespread belief that they are also seeking to avoid downward pressure on the pricing of physical books.[13]

EXHIBIT VI-2: WHO GETS WHAT FROM BOOK PURCHASE PRICE?



Sources & Notes: Average of Motoko Rich, "Math of Publishing Meets the E-Book," ***New York Times,*** **February 28, 2010; Jeffrey A. Tractenberg, "E-Book Prices Prop Up Print Siblings,"** ***Wall Street Journal,*** **September 12, 2011.**

The cost structure in the music and book sectors is strikingly similar in physical space (Cooper, 2011). Physical space distribution and retailing account for about half the price paid by the consumers. Manufacturing is about 10 percent. Labels take 20 percent for marketing and overhead. Royalties for creators are about 15 percent (which the recording artist only receives after paying the label back for all of its investment in the album). Digital technologies dramatically lower the cost of books.

The cost savings of digital distribution and production dramatically lowers the cost and triggers a battle over who should reap the benefits. At $9.99 for an e-book, the margin before overhead for publishers equals the margin on a physical book. At $12.99 to $14.99 for an e-book the publishers' margin per book for overhead increases dramatically, 30 to 50 percent. Moreover, even if the margin did not increase, the rate of profit would likely rise because the publishers have a smaller physical business to manage, which means one might expect overhead to decline. Advertising costs also can go down with access to online advertising, especially for an online

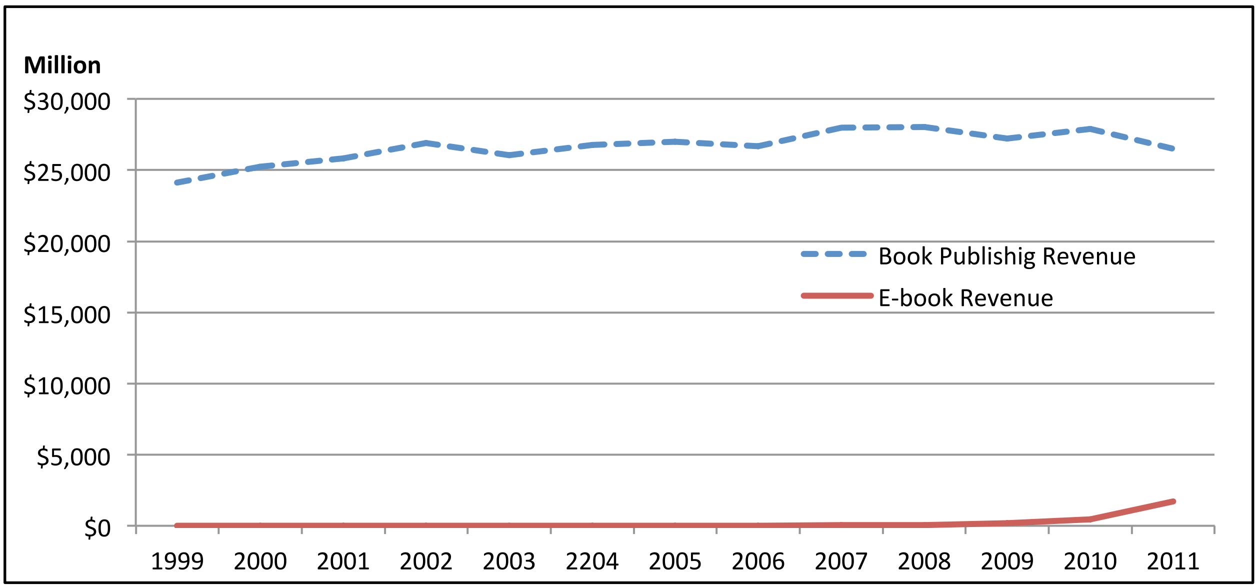
[12] Another reason publishers want to avoid lower e-book prices is that print booksellers like Barnes & Noble, Borders and independents across the country would be unable to compete. As more consumers buy electronic readers and become comfortable with reading digitally, if the e-books are priced much lower than the print editions, no one but the aficionados and collectors will want to buy paper books. Motoko (2010: B1) ("If you want bookstores to stay alive, then you want to slow down this movement to e-books," said Mike Shatzkin, chief executive of the Idea Logical Company, a consultant to publishers. "The simplest way to slow down e-books is not to make them too cheap.").

[13] The argument involves shifting cost recovery between hardbacks and paperbacks. *Id.* ("Moreover, in the current print model, publishers can recoup many of their costs, and start to make higher profits, on paperback editions. If publishers start a new e-book's life at a price similar to that of a paperback book, and reduce the price later, it may be more difficult to cover costs and support new authors.").

audience. Since the publishers' costs are declining while their margins are rising, we should not be surprised to find, as *Time Magazine* put it "Large book publishers' most recent earnings reports reflect a new normal: Revenues are roughly flat, but profits are up—in large part due to e-books" (Owen, 2012).

E-book sales are a small fraction of total book sales today and it is unclear the extent to which e-books will supplant physical books (see Exhibit VI-3). One thing is clear; a price fixing strategy that is intended to retard the growth of the digital alternative and preserve the incumbent model must not be allowed to distort or frustrate the efficient outcome.

EXHIBIT VI-3: BOOK PUBLISHING REVENUES



Sources: Bureau of the Census, *Statistical Abstract of the United States*, Publishing Industries, various issues; Association of American Publishers, BookStats , 2011 e-book revenue based on Ian Simpson, "One-fifth of U.S. adults read e-books as market booms: survey," *Chicago Tribune,* April 04, 2012, Citing Albert Greco on e-book sales; Assumes a 4.1 percent decline in total revenue based on Jeremy Greenfield, "New Data: U.S. E-Book Revenues up 117% in 201," *Digital Book World,* February 27, 2012

2. Author Benefits

The empowerment of content creators is evident in the book publishing space, as it was in the music space. The dramatic improvement in the discovery and information function of the market expands sales. Examples from book publishing, where digitization of distribution is just beginning, highlight the importance of the transformation of the relationship between the creator and the audience.

Readings have long been a way for authors to reach audiences. This is part of the discovery function. Podcasts change the arithmetic.

> Horror writer Scott Sigler, one of the pioneers in this area, began regularly posting readings of his first book in March 2005. "EarthCore," broken up into 45-minute chunks that he posted on a weekly basis, won an audience of 10,000 listeners. His second book, "Ancestor," did even better, scoring 30,000 subscribers. . . .
>
> This month, Sigler's fourth book debuted in a hardcover release for the first time, from Crown Publishing Group, an imprint of Random House.   Crown has printed an initial run of 100,000 copies . . .

> That's a high figure for the book industry, where mostly unknown authors usually get an initial print run of only a few thousand (Musgrove, 2008: F01).

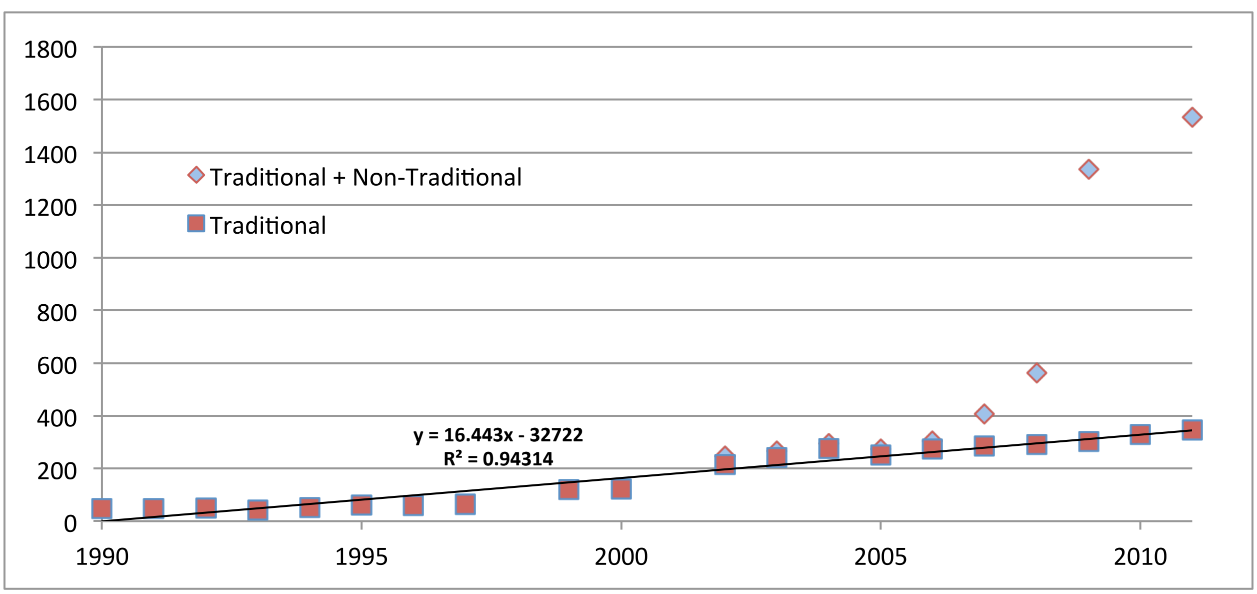
Sigler is an unsigned artist who has used the new distribution medium to break into the system. The new medium not only makes it possible to reach fans, but it involves elements of viral communications. "Sigler's editors say the company has been impressed that Sigler fans have requested promotional materials about the book to try to spread the word about the new hardcover edition… At [another author's] Hutchins's Web site, a 'minister of propaganda' routinely sends his readers on missions that vary from burning CDs and passing them along to printing out promotional postcards and slipping them onto shelves at the local bookstore." Direct involvement and collaboration are also possible. "To further build reader interest and loyalty, Hutchins recently opened up his fictional world to fans and invited them to add their own stories" (Musgrove, 2008: F01).

Giving content away for free, the center of the recording industry's concerns, is one of the many strategies that artists can use to stimulate future sales.

> . . . Tor Teen books is publishing the dead-tree version, and it will also be available . . . as a free download in formats that will be easy to read on, say, the screen of a PDA.
>
> As with podcasts, the idea is to win over potential converts with free content in the hopes that readers or listeners buy something down the road (Musgrove, 2008: F01).

Having observed the strong similarities between digital distribution in the music and book publishing spaces in terms of cost structure, growth of sales, pricing and artist use of new communications media to reach their audience, we offer one final similarity; the production of new works. As shown in Exhibit VI-4, digital technologies brought a flood of non-traditional books, even excluding as the exhibit does 2011, in which the output of non-traditional books was three times 2009 and 2010. The timing is coincident with the release of the second generation of readers and vigorous competition in the pre-price fixing period.

EXHIBIT VI-4: TITLES PUBLISHED PER YEAR (MILLION)



Sources: Statistical Abstract, Bowker,

C. PREDATORY PRICING

A claim of price predation must show that the product is being sold below cost with the intention of driving competition out of the market (or preventing it from entering) and later increasing prices to make up the loss. Predatory pricing is an important antitrust complaint that is frequently made by high-priced incumbents against discounters and new entrants. It is difficult to prove and the remedy is not the formation of a private cartel to raise prices. For several reasons, the predatory pricing arguments offered by the publishers and celebrity authors in the e-book case are implausible at best, flat out wrong at worst.

First, the defenders of the e-book price fixing scheme point to the wrong costs as the predatory threshold. They use the wholesale cost of delivering physical books to brick and mortar retailers, not the cost of delivering digital books to e-tailers. The physical cost is far above the digital cost, so the publishers are pointing to a price that embodies an effort to capture a great deal of additional rent.

Second, the defenders of the price fixing scheme would have to show that the price of the bundle of e-readers and e-books, not just the e-books alone, is below the cost of the components of the bundle of hardware and software. Pricing of e-readers and e-books exhibits a strategy that is the obverse of a standard physical space marketing strategy popularized over a century ago by Gillette: selling the razor at a low price and making bigger margins on razor blades. The pricing strategy of discounting strong complements not only has a long history in our capitalist economy, it is common in the digital space.

Third, a plausible case would have to be made that there is a pricing strategy to recover any losses in a time frame that makes predation profitable. The behavior of the e-book product space does not suggest that this is likely. Prior to the price fixing scheme, anticompetitive tactics, like demanding exclusive deals or most-favored nation clauses were not prevalent. Economies of scale and clever marketing are not suspect practices. Digital markets frequently manifest winner-take-most outcomes. This can be a concern, if the markets do not also exhibit rapid entry and exit and declining prices. Stable low prices for e-books and declining prices of e-readers typified the product space; at least until the price fixing scheme was instituted. This makes it difficult to execute the final leg of the predatory strategy.

D. CONCLUSION: THE IMPORTANCE OF DIGITAL DISINTERMEDIATION AND THE ROLE OF ANTITRUST

One of the most important focal points of public interest advocacy in understanding the impact of the digital revolution on consumers is to understand on how digital disintermediation has increased efficiency in distribution and benefited consumers in many markets including digital content industries like music, e-books, newspapers, and video, as well as physical space industries. We believe that the UMG-EMI merger and the e-book complaint both come at a crucial moment for both antitrust and the development of the digital economy.

The Internet and the digital technology on which it rides are coming to maturity, after about 20 years of development in commercial applications (Cooper, 2012). Unlike many other disputes over digital distribution of content, these do not involve claims of piracy or concerns about privacy. They are entirely about efficiency and tactics that are intended to squelch competition from a more efficient, consumer-friendly approach to the production and distribution of products. Stopping these practices will send a strong signal that physical space incumbents will not be allowed to use anticompetitive practices to distort or undermine emerging digital alternatives.

The UMG-EMI merger is part of a long list of issues that antitrust authorities have faced in recent years as digital disintermediation unsettles important product markets. Access to content for distribution in new digital models has been a prominent part of several antitrust actions, including the e-book complaint and the complaint that laid the basis for the settlement in the Comcast-NBC merger.[14] It also factored into the resistance of antitrust authorities to suspend the antitrust laws in order to allow newspapers to control digital distribution of news content (Cooper 2010b).

These content-focused actions to preserve competition are part of an even longer list of cases in which the DOJ, the FTC, and the Federal Communications Commission have recognized the importance of stopping old-fashioned anticompetitive behavior from undermining nascent competition and the development of alternative business models online. Their efforts run the gamut from traditional concerns about horizontal concentration (AT&T-T-Mobile) and anticompetitive, most favored nation clauses (Visa-Master Care; Blue Cross Blue Shield), to unilateral anticompetitive monopolization (Microsoft; Intel), to vertical leverage in physical space products (Ticketmaster), to vertical leverage in digital products (Google-ATA).

This sharp increase in antitrust activity stems from two factors. On the one hand, the antitrust authorities have come back to life after a long slumber. On the other hand, the dramatic transformation of the economy driven by digital technologies is part of the "quarterlife crisis" of the third industrial revolution. (Cooper, 2012b) The incumbent economic order is being overturned. The most powerful actors who are entrenched in the old order will use their resources to promote their interests at the expense of the public interest unless antitrust enforcement steps in.

Antitrust in the 21st century will have to be sensitive to the new economic reality, where small numbers of platforms play an important role. Large firms dominate platforms at the center of the digital economy because of the superior economics made possible by dramatic reductions in transaction costs and the ease and importance of vertical linkage in digital production. Because basic economics drive platform dominance, it becomes vitally important to ensure open competition for the complements that flow on those platforms.

The need for openness is a two edged sword. The owners of the platforms must not be allowed to leverage their market power to distort competition on the platform. The suppliers of the complements (in this case, music) must not be allowed to manipulate the supply of "marquee" content to distort platform competition or extract monopoly rents, especially in the name of defending inefficient, outdated, physical space business models. Blatantly anticompetitive practices that are intended to frustrate efficient processes like digital disintermediation must not be tolerated.

The digital world is different from the traditional models in some respects and not so different in others. Digital technologies lower costs and force record labels (and book publishers, newspapers, video distributors) to give consumers new choices. Digital technologies do not eliminate the concern about market power; if dominant incumbents have control over marquee content or bottleneck facilities, they can abuse their market power. Thus, we view vigorous action to address the anticompetitive threat of the UMG-EMI merger as an important part of the effort to

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[14] Acting Assistant Attorney General, Sharis A. Pozen, Remarks*,* Brookings Institution, April 23, 2012. The Comcast-NBC merger also demonstrated how behavioral merger conditions must be monitored and enforced to be effective in protecting competition.

reinvigorate antitrust in America and the battle to ensure that consumers get the full benefit of the digital revolution.

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APPENDIX:
THE WELFARE ECONOMICS OF DIGITAL DISINTERMEDIATION

Walfogel, one of the first analysts to challenge the music industry's overstated claims of piracy, has recently argued that "it may be time to devote more attention to other aspects of the technological revolution we are now experiencing (Waldfogel, 2012). He outlines a number of issues, including:

> effects on demand, marginal cost, and on fixed costs… the level of copyright needed to assure a steady flow of new creative work… measurement of sales displacement caused by unpaid consumption… new pricing and distribution models possible with zero marginal cost, effects on the development of new products given that costs have declined, and… effects on consumer discovery of new products, given the possible proliferation of new products (Waldfogel 2012: 1-2)

A number of scholars made this shift early on (e.g. Handke, Tschmuck), some drawing a distinction between "Plain Destruction or Creative Destruction (Handke 2006). The underpinning of this shift must be an appreciation of the full welfare economics (i.e. supply and demand-sides) of radical technological change, a task we undertook in 2008. We need a general account of the three key factors at the center of this analysis, declining costs, eroding market power both in the products and prices offered to the public, and the shift in demand for a new, more consumer friendly product (Cooper 2008).[15] The discussion is excerpted below, with the graphic representation built up in steps.

> The effort by record companies to keep singles out of the market and to keep CD prices high was a bald effort to continue exercising market power to increase producer surplus by capturing the bulk of the cost savings and preventing consumers from enjoying the benefits of more efficient distribution that would flow to them in a competitive market [Exhibit A-1].
>
> Of equal if not greater importance with the consumer savings is the fact that the transformation reflected fundamental economics, not illegal behavior; an explosion of digital singles was inevitable. In a world of physical distribution, with high fixed costs and near-zero marginal cost, it is good business to put as many songs as one can on each CD. The need for brick and mortar distribution infrastructure for physical products reinforced this logic. However, recall that singles had thrived in that environment and retailers liked them because they attracted traffic to stores. With the advent of digital distribution, fixed costs of distribution all but disappear, physical infrastructure is no longer necessary, and transaction costs are slashed.
>
> From the consumer's point of view this transformation is perfectly consistent with economic theory and can be explained in the classic terms of welfare economics. Between the shift in the cost curve [Exhibit A-2] and the elimination of market power (pricing shifting from the marginal revenue curve to the demand curve [Exhibit A-3]) consumers were the big winners…
>
> From the artists' point of view, the benefits of the transformation are also readily explained in classic welfare economic analysis. In the oligopoly environment, producer surplus is inflated by high cost products and results in the large surplus earned by a small number of recording companies that produce "high value" blockbuster albums. In the digital environment, producer surplus is much smaller and made up of the low cost output earned by unsigned artists.
>
> The mechanism through which the vast majority of artists became beneficiaries of the new market structure is easily explained by the reduction of transaction costs.
>
> To complete the formal economic analysis, it seems clear that the output expanding effects of the digital transformation go beyond the impact of cost reduction and the elimination of the exercise of

[15] The element was present in the 2005 analyses, but the formal welfare economic discussion was not included at the time.

market power [Exhibit A-4]. Demand shifts as well, as a result of both production and transaction changes. New flexible, consumer friendly formats expand demand.

The industry vastly overestimated the role piracy played in upending the oligopoly of record company power, but, more importantly, that the digital revolution radically transformed the fundamental economics of the industry in a direction that is consumer-friendly and also benefited the vast majority of artists. Now that the dust has settled, the outcome of the first round of the digital intellectual property wars suggests fundamental changes in economic structure that the content oligopolies of the industrial age will have great difficulty resisting [Exhibit A-5]. Beyond the narrow question of the overestimation of "piracy," the recent evidence points overwhelmingly in favor of those who saw it as improving the performance of the market.

Exhibit A-1:

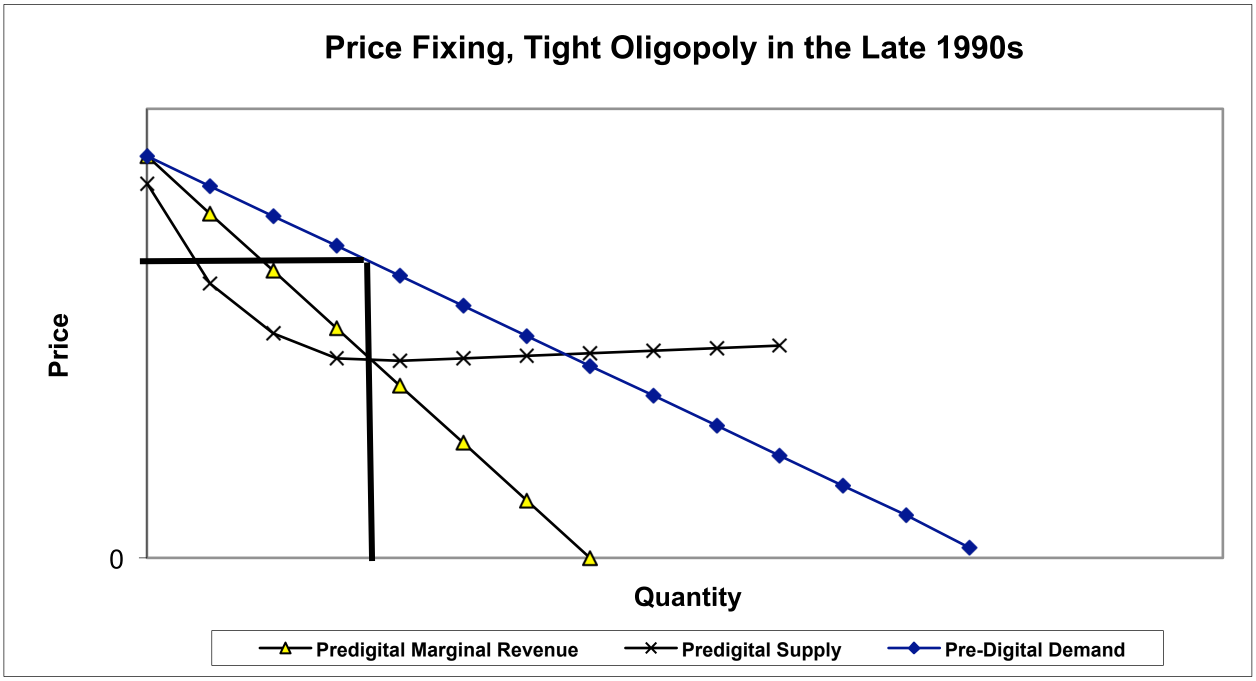


Exhibit A-2:

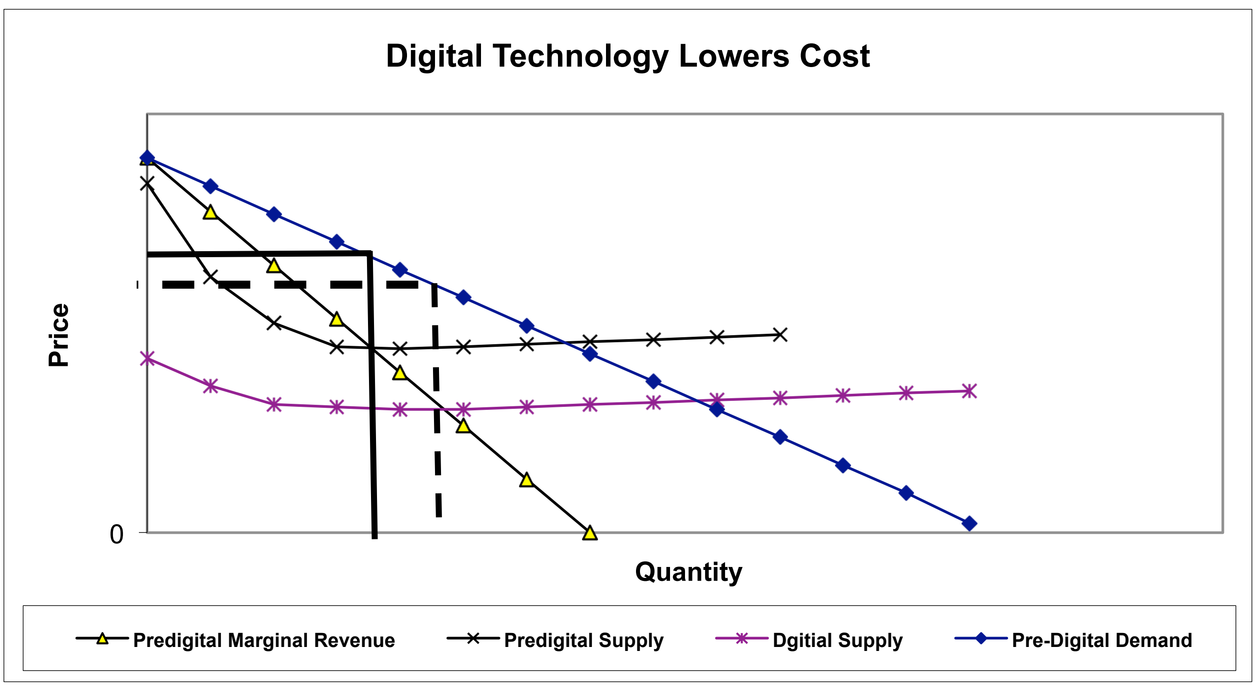


Exhibit A-3:

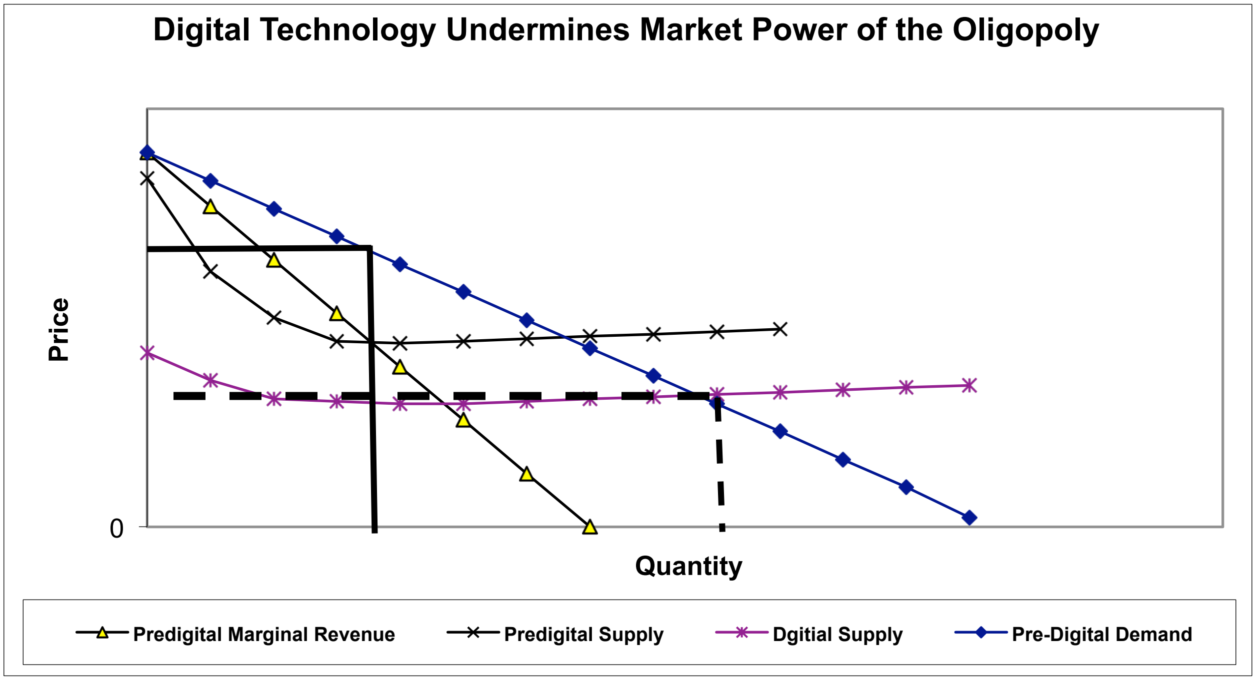


Exhibit A-4:

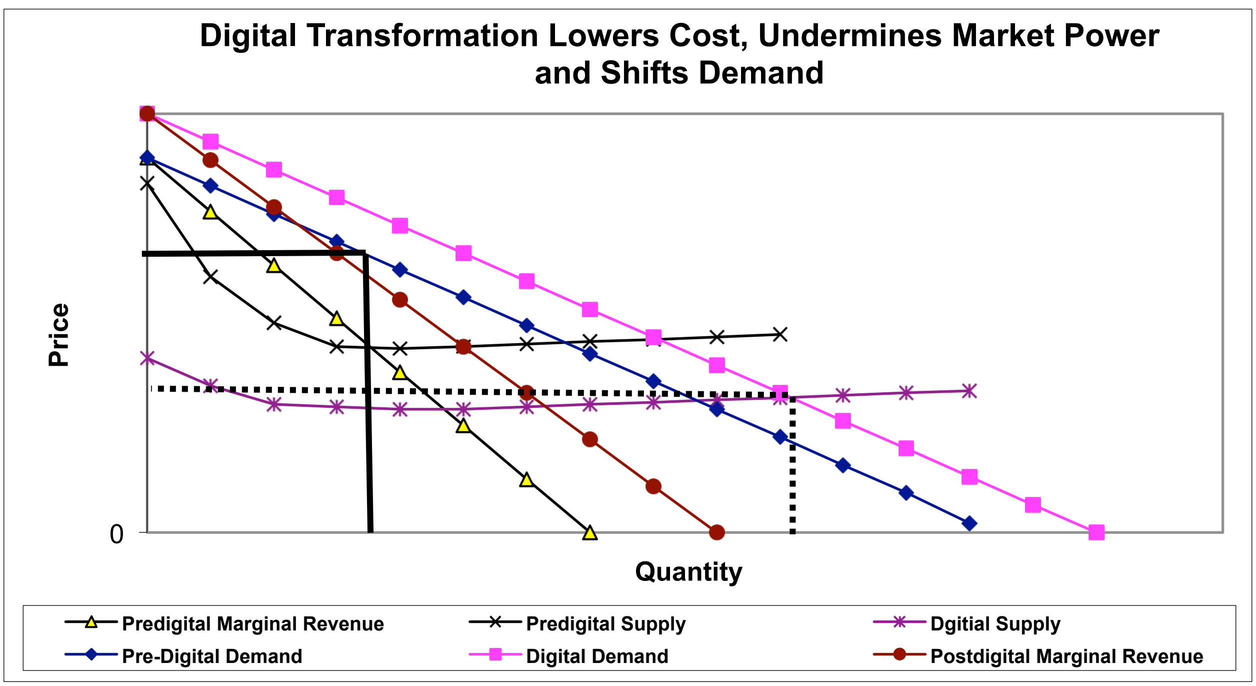
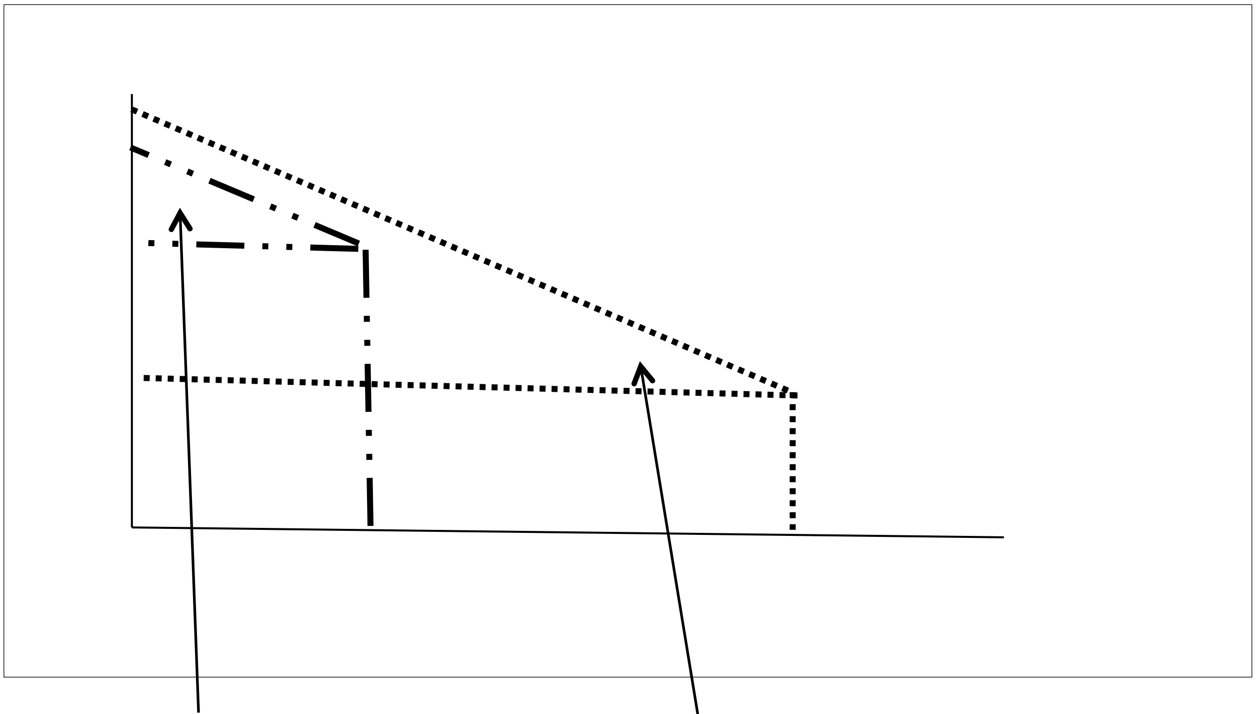


Exhibit A-5:


Consumer surplus under tight CD oligopoly
Added consumer surplus under digital Competition