

“Angels of Rock” vs. “Old School Pterodactyls”: A new hope for Indie musicians?

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The present paper is divided in three Parts. Part I introduces the new scenario in the Music Business, revolutionized by technological developments in the Industry. It also refers to the pros and cons of these changes for indie musicians, introducing the main issue: can venture capitalists and angel investors get into the Music Business, for the benefit of indie musicians who cannot access the old-fashioned major record labels' music contracts? Is it feasible for a private investor of the abovementioned characteristics to invest in a portfolio of indie musicians? Part II analyzes in detail the feasibility and probability of such investments, describing the rationale of angel investors and venture capital funds towards risk management and diversification. Also, additional factors regarding investment decision-making are duly analyzed under the investor's perspective. Finally, Part III introduces a new approach for the new business model that is forging today, but which cannot be defined in one single paper.

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Part I: The Big Bang

Introduction

“I am a musician”, Prall says, “and I want to make a living pursuing my passion...”¹

This paper addresses the possibilities (and probabilities) of success² that an indie musician³ might have, considering the new tools that the technological revolution is providing increasingly to the music business. A new hope seems to spread among those who believe that the “old dinosaurs of the industry”⁴ are dying at last, and that a new (more democratic) regime will emerge as a result of the appearance of new players in the game.

The balance of power in the Music Industry has been broken. This fact appears to be unquestionable, and not even a large number of disputes over Intellectual Property rights between the dinosaurs and the revolutionaries can return this new reality to the previous *status quo*. The outcome of the ongoing changes is yet uncertain; however, the same hammer that was given to the musicians to kill the dinosaurs can turn against their wielders, and even worse, the blow might have been ineffective. As with France in the late eighteenth century, will the Revolution devour its own children? Will the beheading of the “Industry kings” and the present sense of anarchy end up in a new, stronger tyranny? Or will new players take command and build the foundations of a new business model?

The dynamic of this paper is to show that the changes in technology have produced significant changes in the industry, but not all the ones desired by the most idealistic. Also, it analyzes the possible structure of a new business model for the music business, taking into consideration all the financial and technological weapons at hand: the old pillars of the Industry (this is, the “living” dead dinosaurs); investment funds; new players (distributors and taste-makers).

Paraphrasing Ortega y Gasset’s words, the underlying question is: “are we in presence of a change of uses, or of a change of abuses?” The answer will determine if we are facing a true revolution, or just a re-distribution of tasks and shares.

For purposes of this paper, the universe of musicians herein addressed are those that consider themselves to be “professional musicians” (indie or not), and that expect to “succeed” by making a decent living through an income derived from their profession.

¹ Henry H. Perritt Jr., *New Architectures for Music: Law Should Get Out Of The Way*, 29 Hastings Comm. & Ent. L.J. 259, 335 (2007).

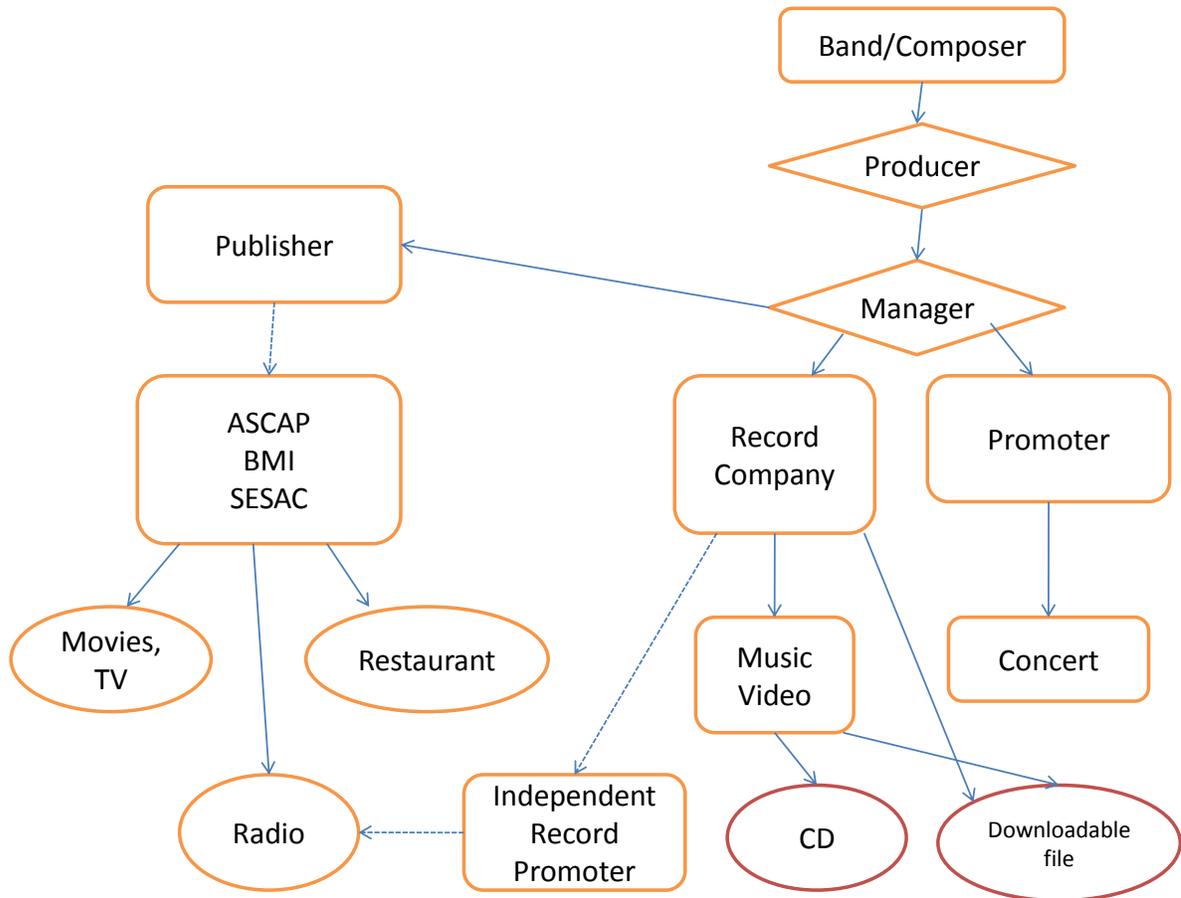
² For purposes of this paper, “success” is defined as the ability of making a living out of the chosen profession: musician.

³ For purposes of this paper, “indie musician” is defined as one that has no signed contract with any record label.

⁴ The “old players” include record labels and traditional retailers and distribution companies. The structure of the old regime will be explained later in this paper.

The traditional business model: archaic architecture, but part of the future.

The traditional business model is formed by artists (composers, performers), publishers (record labels), distributors and the public (music buyers and listeners).⁵ The following figure shows the classic structure⁶:



The band may write its own music and lyrics, or it may purchase music from an outside composer.⁷ The bands have managers who represent them and take a share of their earnings in

⁵ Michael X. Zhang, *A Review Of Economic Properties Of Music Distribution*, 2 (November 15th, 2002) (unpublished, MIT Sloan working paper), <http://web.mit.edu/zxq/www/mit/15575/musicreview.pdf>. The latter author adds, on footnote 1, that “a more precise segmentation would be: artists, labels/record companies, direct distribution companies, traditional retailers, online retailers, secondary market providers”.

⁶ Marie Connolly and Alan B. Krueger, *Rockonomics: The Economics Of Popular Music*, 72 (April 2005) (unpublished, on file with Princeton University), <http://www.irs.princeton.edu/pubs/pdfs/499.pdf>, Figure 2.1.

⁷ *Id.*, also 5.

exchange for their managerial services.⁸ On behalf of the bands, managers make contracts with promoters to promote live concerts.⁹ The promoter secures a venue, advertises the event, and takes care of other arrangements.¹⁰ Successful bands also have contracts with recording companies to produce and market CDs.¹¹ Record companies are occasionally involved in promoting concert tours, but they typically play only a peripheral role in concerts, when they are involved at all.¹²

The publisher contracts with a performing rights organization, which licenses the music for radio stations, television and other users, monitors the use of the music, and collects royalties.¹³ The publisher usually takes half the royalties, and the composer receives the other half (some of which goes to the manager).¹⁴ Under labels' contracts, bands receive little income from record companies.

The recording contracts: Old school basics.

A recording contract (commonly called a "record deal") is a legal agreement between a record label and a recording artist (or band), where the artist makes a record (or series of records) for the label to sell and promote.¹⁵ Artists under contract are normally only allowed to record for that label exclusively; guest appearances on other artists' records will carry a notice "By courtesy of (the name of the label)", and that label may receive a percentage of sales (if consented to by the label).¹⁶

Labels typically own the copyright in the records their artists make, and also the master copies of those records.¹⁷ An exception is when a label makes a distribution deal with an artist; in this case, the artist, his manager, or another party may own the copyright (and masters), while the record is licensed exclusively to the label for a set period of time.¹⁸ Promotion is a key factor in the success of a record, and is largely the label's responsibility, as is proper distribution of records.¹⁹

⁸ Id.

⁹ Id.

¹⁰ Id.

¹¹ Id. This is, since most "records" are CD's.

¹² Id.

¹³ Id.

¹⁴ Id.

¹⁵ http://en.wikipedia.org/wiki/Recording_contract

¹⁶ Id.

¹⁷ Id.

¹⁸ Id.

¹⁹ Id.

While initial recording deals usually yield a relatively small royalty percentage to artists, subsequent (or renegotiated) deals can result in much greater profit, or profit potential.²⁰

Unless expressly stated otherwise, any advances or upfront money paid to a recording artist is owed back to the label, whether the recordings to follow sell well or not.²¹

Record companies generally increase royalties or give artistic freedom to get acts to re-sign contracts with them, and generally must offer the best deal to retain an artist.²²

(i) Advances, Royalties and Recording Costs

The financial side of any recording contract is complex: some of the money may be "recoupable" (this is, that it can be earned back from record sales), and some of it is money that the label is simply expected to pay out.²³ In very basic terms, the record company is will act as a bank, providing the artist with a loan of a significant amount of money with which to create a record. Subsequently, the loan is paid back gradually through sales.²⁴

For every sale, the artist receives a royalty, which is calculated on a very complex formula (usually, against the artists interests): recording costs are deducted from the sales, and packaging costs are deducted as well.²⁵

(ii) Videos

Promo clips (or "music videos") are heavy financial commitments made by the record companies.²⁶ According to several sources, most video shoots cost between \$ 60,000 and \$100,000 (more renowned artists are able to command budgets of \$500,000 or more).²⁷

(iii) Tour Support and Equipment

Labels make provisions made for the prospect of the band touring, as many artists build up their fanbase in this way.²⁸ This usually includes certain advances made in the way of tour support or equipment being bought.²⁹ This clause varies significantly from deal to deal.³⁰

²⁰ Id.

²¹ Id.

²² Id.

²³ Id.

²⁴ Id.

²⁵ Id.

²⁶ Id.

²⁷ Id.

²⁸ Id.

²⁹ Id.

³⁰ Id.

In this regard, the best way for a tour to increase an artist's fanbase is for the artist to book appearances not only as a headliner, but also as a supporting performer at large festival tours or an opening performer for other bands.³¹ Mainly popular in Europe, though with some North American examples, the festival concert draws the largest audience possible in the touring aspect of the industry, with the exception of televised concerts.³² Also, festivals offer fans of diverse demographics and tastes to partake of several different bands at one venue over a period of days.³³

Many of the major labels have their own "in-house" touring departments which handle nearly all aspects of an artist's tour, from transportation and equipment, to promotion and investment.³⁴ In such scenarios, usually only external bookers are required.³⁵ Such touring departments are also responsible for the hiring and payment of touring personnel, such as roadies and drivers.³⁶

(iv) Promotional Duties

Most contracts contain provisions whereby the artist agrees to promote the release of records free of charge other than the reimbursement of out-of-the-pocket expenses.³⁷

Promotional activities include, for example, press interviews, photo sessions, appearing on radio and television and making personal appearances.³⁸

Some conclusions about the classical scheme

The traditional music distribution industry was composed of the record labels characterized by the "big five" which include Warner Music (a division of United States-based AOL Time Warner), Universal Music Group (a division of French media group, Vivendi Universal SA), EMI Recorded Music (a division of United Kingdom-based EMI Group), BMG Entertainment (a division of German media conglomerate, Bertelsmann AG), and Sony Music Entertainment (a division of Japanese giant, Sony).³⁹

³¹ Id.

³² Id.

³³ Id.

³⁴ Id.

³⁵ Id.

³⁶ Id.

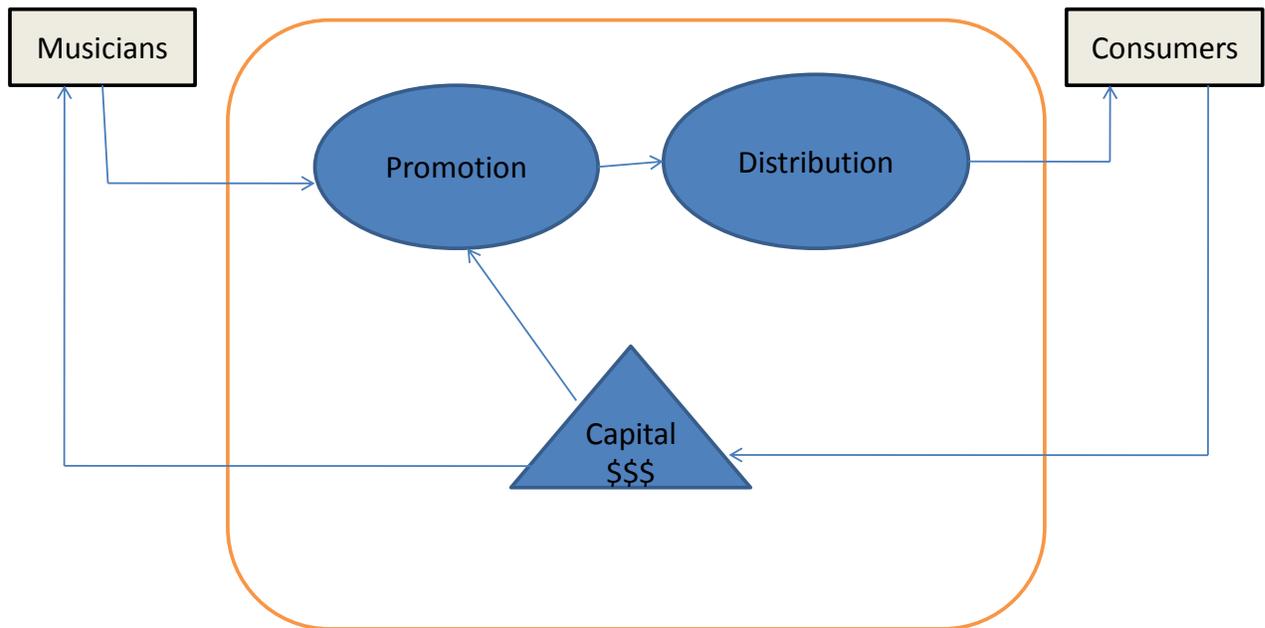
³⁷ Id.

³⁸ Id.

³⁹ Michael X. Zhang, *A Review Of Economic Properties Of Music Distribution*, 3 (November 15th, 2002) (unpublished, MIT Sloan working paper), <http://web.mit.edu/zxq/www/mit/15575/musicreview.pdf>.

In this market, music works are packaged, marketed, distributed and retailed.⁴⁰

As it can be concluded from the previous paragraphs, the whole traditional business model was in the hands of everyone but the musicians. Basically, the capital (this is, initial money investment), the promotional activities and the distribution were provided and controlled by the “old dinosaurs”, who practically owned almost every economic factor. This structure is described in the figure below:



In this way, the round-cornered square represents the record company and its rights and obligations: it owns the initial investment capital and the subsequent sales income (which only went to the musicians as royalties, but through the record company); it is in charge of the promotional duties; and it owned/handled the distribution operations.

⁴⁰ Id. In the traditional scheme, the “big five” typically market music under the brands of formerly independent labels that were previously acquired by the “old dinosaurs”. Since major record labels have the power of investors and a major record company to back them, the acquisition of smaller, independent labels is part of the normal economic process that leads to market efficiency.

The intermediation process used to be under the control of the big corporations, who could master both the supply and the demand curves: the former, by owning the IP rights and the distribution channels; the latter, by controlling the taste-makers (radios, TV broadcasts, etc.). In other words, there was an appearance that “the musician owed the record labels for everything”, and so the highly disproportionate distribution of income could be justified.

Record companies had the initial capital to invest; the economic incentive/rationale to do so; the expertise; the way to manipulate the public’s/consumers’ choice through control over the taste-makers; ownership or direct control over the distribution channels; etc. In this way, musicians who sought the opportunity of making significant income through their music were left with no feasible alternative other than the ways of the old regime.

Record labels survived for years on the value they added to the process.⁴¹ They made it possible for bands to make records and get them into the stores and then used their marketing weight to get those records played on the radio and featured in magazines. In the process they made enormous profits by overcharging fans and underpaying artists.⁴²

However, they no longer add value to the process⁴³ –or at least such value is strictly limited to the promotion function. In fact, many believe that they act as a barrier between fans and musicians.⁴⁴

Some facts about the Record Industry’s decline

The transition from the old regime to the modern era has some irrefutable consequences: more than 5,000 record-company employees have been laid off since 2000,⁴⁵ and the number of major labels dropped from five to four when Sony Music Entertainment and BMG Entertainment merged in 2004.⁴⁶

Also, about 2,700 record stores have closed across the United States since 2003, according to the research group Almighty Institute of Music Retail.⁴⁷ For example, Tower Records went out of business, and Musicland, which operated more than 800 stores under the Sam Goody brand, among others, filed for bankruptcy.⁴⁸ Around sixty-five percent of all music sales now take place

⁴¹ <http://blogs.telegraph.co.uk/technology/shanerichmond/sept07/radiohead.htm>

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ http://www.rollingstone.com/news/story/15137581/the_record_industrys_decline/2

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

in big-box stores such as Wal-Mart and Best Buy, which carry fewer titles than specialty stores and put less effort behind promoting new artists.⁴⁹

It is said that “the Internet appears to be the most consequential technological shift for the business of selling music since the 1920s, when phonograph records replaced sheet music as the industry's profit center”.⁵⁰

The New Deal

Fortunately, thanks to technological developments, the picture changed drastically. Due to digital music and MP3 (among various digital formats), CD has become obsolete. The new formats in which music can be traded have generated new ways of distributing albums to the public, and the entrance of new players to perform distribution functions is almost inevitable: those who could support such format-based distribution would have the lead. And so it was that new players such as Amazon.com and iTunes stepped in, providing numerous advantages for both musicians and consumers (and even for record companies): the distribution costs decreased almost to zero, and the possibility of selling per song rather than per album (10-12 songs each) reduced significantly both the costs of production and distribution.

Peer-to-peer file sharing: Napster's legacy

In late 1999, the Recording Industry Association of America (RIAA) filed a lawsuit against Napster for copyright infringements.⁵¹ Napster used a peer-to-peer architecture for members to exchange MP3 files freely without transaction costs other than the connection fee and the opportunity costs of members.⁵²

Although Napster lost in court, the technology inspired many people fundamentally to change the current economics of music distribution.⁵³ Some artists have decided to quit the major recording labels and establish direct connection with the music buyers through web music publishing.⁵⁴ Major recording companies also started online services such as MusicNet, Pressplay or Rhapsody to fight back the digital invasion from smaller players.⁵⁵ Other innovative

⁴⁹ Id.

⁵⁰ Id.

⁵¹ Michael X. Zhang, *A Review Of Economic Properties Of Music Distribution*, 3 (November 15th, 2002) (unpublished, MIT Sloan working paper), <http://web.mit.edu/zxq/www/mit/15575/musicreview.pdf>.

⁵² Id.

⁵³ Id.

⁵⁴ Id.

⁵⁵ Id.

business models emerged: for example, MusicLink.com allows music fans to pay the artists directly and voluntarily.⁵⁶ Also, MP3.com allows people to preview songs and purchase them individually or direct fans to buy albums online.⁵⁷

Some other relevant facts reflect the new reality:

- In June 2007, Warner announced a deal with the Web site Lala.com that allowed consumers to stream much of its catalog for free, in hopes that they will then pay for downloads.⁵⁸
- In May 2007, EMI began allowing the iTunes Music Store to sell its catalog without the copy protection that labels have insisted upon for years.⁵⁹
- When YouTube started showing music videos without permission, all four of the labels made licensing deals instead of suing for copyright violations.⁶⁰
- To the dismay of some artists and managers, labels are insisting on deals for many artists in which the companies get a portion of touring, merchandising, product sponsorships and other non-recorded-music sources of income.⁶¹

Despite the industry's woes, people are listening to at least as much music as ever.⁶² Consumers have bought more than 100 million iPods since their November 2001 introduction, and the touring business is thriving, earning a record \$437 million in 2006.⁶³ According to research organization NPD Group, listenership of recorded music -- whether from CDs, downloads, video games, satellite radio, terrestrial radio, online streams or other sources -- has increased since 2002.⁶⁴ The problem the business faces is how to turn that interest into money.⁶⁵

On the other hand, new players are stepping in: for example, Paul McCartney recently abandoned his longtime relationship with EMI Records to sign with Starbucks' fledgling Hear Music.⁶⁶ Video-game giant Electronic Arts also started a label, exploiting the promotional value of its games, and the newly revived CBS Records will sell music featured in CBS TV shows.⁶⁷

⁵⁶ Id.

⁵⁷ Id.

⁵⁸ http://www.rollingstone.com/news/story/15137581/the_record_industrys_decline

⁵⁹ Id.

⁶⁰ Id.

⁶¹ Id.

⁶² Id.

⁶³ Id.

⁶⁴ Id.

⁶⁵ Id.

⁶⁶ Id.

⁶⁷ Id.

Licensing music to video games, movies, TV shows and online subscription services is becoming an increasing source of revenue, and the record companies are looking to increase their takes in the booming music publishing business, which collects songwriting royalties from radio play and other sources.⁶⁸ The performance-rights organization ASCAP reported a record \$785 million in revenue in 2006, a five percent increase from 2005.⁶⁹

Spoils of war: Opportunities for Indie Musicians.

As said before, new digital technologies (especially Internet technologies that enable direct downloading of music) have reduced distribution costs almost to zero, thus allowing new entrants.⁷⁰ In that fashion, global Internet sales have changed the balance of power within the music market, thereby allowing music producers to bypass the record companies as well as allowing consumers worldwide direct access to their favorite artists at discounted prices.⁷¹ Electronic payment and download is the means of payment and distribution.⁷²

In this new scenario, indie musicians have the historic opportunity to seek alternative sources of funding, in order to be able to record and promote their works without relying on the record label as the only available source. The question remains: can indie musicians benefit from the present state of apparent anarchy?

In the present day, the sources of funding in the money market are numerous: Investment companies, traditional banking institutions, private equity/venture capital funds, hedge funds, angel investors... or even the most altruist wealthy patrons. Indie musicians could seek to attract such sources of capital by providing a solid business plan to them, in order to obtain enough funding to perform the rest of the tasks formerly rendered by the “old dinosaurs”: recording, promotion and distribution. In other words, the musician becomes his/her own boss and enterprise, with all the risks and benefits involved therein.

Nonetheless, indie musicians will be entering into a world that remain hidden behind the curtains of the record labels’ intermediation. By eliminating the “middle-man”, indie musicians stand naked against the logic of capital investment, which is purer than the one presented by the record labels. The investors know nothing about the industry, and even if they do, the risks faced are totally different than those investing on stock and conventional start-up companies. The latter statement introduces the main issue at stake: are venture capitalists and/or angel investors a

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ See Birgitte Andersen et al., *Rents, Rights N’Rhythm; Conflict And Cooperation In The Music Industry*, 23 (2007) unpublished), <http://www.copyright.bbk.ac.uk/contents/publications/workshops/theme2/banderson.pdf>.

⁷¹ *Id.*

⁷² Albert Lin, *Understanding the Market for Digital Music*, SURJ 51 (2005), <http://surj.stanford.edu/2005/pdfs/Albert.pdf>.

feasible alternative for indie musicians? Are these sources of funding the ones to replace the decaying “big four”?

As stated in the introductory lines, this paper focuses on the feasibility of such an investment, taking into consideration basic financial concepts applied to the economic rationale of investment decision-making.

Part II

Are venture capital funds an option?

As Paul Simon said, “*the fact of the matter is that popular music is one of the industries of the country. It’s all completely tied up with capitalism. It’s stupid to separate it.*”⁷³

In this new technological scenario, there are those who believe that “major labels represent an institutional structure designed for the past –a past in which the most important forms of intermediation were artist-selection to reduce consumer search costs, advertising, promotion and distribution of physical formats. Their enterprises structured to reflect the economies of scale of CD manufacture, promotion of radio play by staffs of agents, and advertising in major publications”.⁷⁴ In this sense, “more artists will bypass the major labels, choosing to reach consumers directly or through new firms that have grown up around the new technologies”.⁷⁵

The purpose of this Part II is to put this assertion to the test: could indie musicians rely on venture capital funds or angel investors for purposes of bypassing the major labels and performing all the duties inherent to the old dinosaurs by themselves?

When it comes down to ratios, returns, profits and potential losses, the guitars are silenced and the economic rationale takes the stand. Venture capital funds are essentially money (in all its forms), and the rules of money are those of plain and simple (though hard and complex) finance and economics. Here, venture capital funds are referred to as those funds that live (and die) under the rules of portfolio diversification, risk analysis, trade-off and profit maximization -funds that leave the music to the public, and the business to themselves.

Taking all this into consideration, would a venture capital fund invest in a portfolio of indie musicians?

Introduction to venture capital funds

According to the National Venture Capital Association⁷⁶, “Venture capital is money provided by professionals who invest alongside management in young, rapidly growing companies that have the potential to develop into significant economic contributors. Venture capital is an important source of equity for start-up companies.”⁷⁷

⁷³ Marie Connolly and Alan B. Krueger, *Rockonomics: The Economics Of Popular Music*, 2 (April 2005) (unpublished, on file with Princeton University), <http://www.irs.princeton.edu/pubs/pdfs/499.pdf>.

⁷⁴ Henry H. Perritt Jr., *Music Markets and Mythologies*, ____ Setton Hall J. Sports & Ent. Law ___, 8 (2007) (in press).
⁷⁵ Id.

⁷⁶ <http://www.nvca.org>

⁷⁷ <http://www.nvca.org/def.html>

Professionally managed venture capital firms generally are private partnerships or closely-held corporations funded by private and public pension funds, endowment funds, foundations, corporations, wealthy individuals, foreign investors, and the venture capitalists themselves.⁷⁸

Venture capitalists generally:

- Finance new and rapidly growing companies;
- Purchase equity securities;
- Assist in the development of new products or services;
- Add value to the company through active participation (this, of course, implies previous knowledge of the industry in which they invest);
- Take higher risks with the expectation of higher rewards;
- Have a long-term orientation

When considering an investment, venture capitalists carefully screen the technical and business merits of the proposed company.⁷⁹ Venture capitalists only invest in a small percentage of the businesses they review and have a long-term perspective.⁸⁰ They actively work with the company's management by contributing their experience and business savvy gained from helping other companies with similar growth challenges.⁸¹

Venture capitalists mitigate the risk of venture investing by developing a portfolio of young companies in a single venture fund.⁸² Many times they co-invest with other professional venture capital firms.⁸³

(i) Truth vs. Myth

The typical depiction of a venture capitalist is that of a wealthy financier who wants to fund start-up companies.⁸⁴ The perception is that a person who develops a brand new change-the-world invention needs capital; thus, if he cannot get capital from a bank or from their own pockets, they enlist the help of a venture capitalist.⁸⁵

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.*

In truth, venture capital (and private equity) firms are pools of capital, typically organized as a limited partnership, that invest in companies representing the opportunity for a high rate of return within five to seven years.⁸⁶ The venture capitalist may look at several hundred investment opportunities before investing in only a few selected companies with favorable investment opportunities.⁸⁷ Far from being simply passive financiers, venture capitalists foster growth in companies through their involvement in the management, strategic marketing and planning of their investee companies.⁸⁸ They are entrepreneurs first and financiers second.⁸⁹

Even individuals may be venture capitalists.⁹⁰ In the early days of venture capital investment, in the 1950s and 1960s, an individual investor was the archetypal venture investor.⁹¹ While this type of individual investment did not totally disappear, the modern venture firm emerged as the dominant venture investment vehicle.⁹²

(ii) Investment Focus

Venture capitalists may be generalist or specialist investors depending on their investment strategy.⁹³ Venture capitalists can be generalists, investing in various industry sectors, or various geographic locations, or various stages of a company's life.⁹⁴ Alternatively, they may be specialists in one or two industry sectors, or may seek to invest in only a localized geographic area.⁹⁵

A venture capitalist may invest before there is a real product or company organized (so called "seed investing"), or may provide capital to start up a company in its first or second stages of development known as "early stage investing."⁹⁶ Also, the venture capitalist may provide needed financing to help a company grow beyond a critical mass to become more successful ("expansion stage financing").⁹⁷

The venture capitalist may invest in a company throughout the company's life cycle and therefore some funds focus on later stage investing by providing financing to help the company grow to a critical mass to attract public financing through a stock offering.⁹⁸ Alternatively, the

⁸⁶ Id.

⁸⁷ Id.

⁸⁸ Id. As stated previously, the involvement implies previous knowledge of the industry and a subsequent expertise on this area.

⁸⁹ Id.

⁹⁰ Id.

⁹¹ Id.

⁹² Id.

⁹³ Id.

⁹⁴ Id.

⁹⁵ Id.

⁹⁶ Id.

⁹⁷ Id.

⁹⁸ Id.

venture capitalist may help the company attract a merger or acquisition with another company by providing liquidity and exit for the company's founders.⁹⁹ Of course, the **later stage investment** does not apply to the present analysis, since it would turn the argument circular: in order to get to the "later stage", indie musicians must achieve previous success, recognition and business-appeal, all of which must be achieved by prior venture capital investment.

(iii)The practical approach

Putting the theory into practice, the things that venture capital investors want to know are¹⁰⁰:

- How much Return on Investment could they make: 40% ROI is usually expected;
- How much potential losses are involved: The total possible amount plus, among others, any loan guarantees and legal disputes;
- Product quality: Third party verification of all business plan items;
- Partners in the deal: The management and investment team and their qualifications in this field;
- Market size and strategy: Verification of marketability;
- Timing and means of exit strategies: Initial Public Offering ("IPO"), acquisition or merger.

For these purposes, the entrepreneurs (in this case, the indie musicians) should be able to present the following to hold a venture capital investor's interest:¹⁰¹

- Executive summary. 3 - 5 pages;
- Business plan: 50 pages maximum, and focused on the above issues;
- Due diligence material, including market studies, research papers, patents, etc.;
- Business valuations company and investor pre- and post-investment values;
- Deal structures to sell minimum shares for maximum investment.

Finally, venture capital investors will focus on the following "management" critical factors.¹⁰²

⁹⁹ Id.

¹⁰⁰ http://www.corporateangels.com/how_to_get_venture_capital.html

¹⁰¹ Id.

- Can the management (in this case, the indie musician himself) maintain a sustained effort?
- Does the management (idem) have extensive market familiarity?
- Is the entrepreneur (idem) a leader?
- Can the investment provide at least a 10 (ten) times the amount invested in 5 to 7 years?

The Investment rationale: The Risk-Return Trade-Off

Investors invest for anticipated future returns, but those returns rarely can be predicted precisely. There will almost always be risk associated with investments¹⁰³. Actual or realized returns will almost always deviate from the expected return anticipated at the start of the investment period¹⁰⁴.

Naturally, *ceteris paribus*, investors would prefer investments with the highest expected return.¹⁰⁵ The “expected” return is not the return investors believe they necessarily will earn, or even their most likely return.¹⁰⁶ It is instead the result of averaging across all possible outcomes, recognizing that some outcomes are more likely than others.¹⁰⁷ It is the average rate of return across possible economic scenarios¹⁰⁸: it is computed by adding the products of ROI times the probability of that ROI being achieved.

However, if higher expected returns are desired, a price must be paid in terms of accepting higher investment risk.¹⁰⁹ If higher expected return can be achieved without bearing extra risk, there will be a rush to buy the high-return assets, with the result that their prices will be driven up,¹¹⁰ and individuals considering investing in the asset at the now-higher price will find the investment less attractive.¹¹¹ If the purchase price is higher, the expected rate of return (that is, profit per dollar invested) is lower.¹¹² The asset will be considered attractive and its price will continue to rise until its expected return is no more than commensurate with risk.¹¹³ At this point,

¹⁰² Id.

¹⁰³ Bodie et al., *Investments 10-11* (Seventh Edition, McGraw Hill International Edition) (2006).

¹⁰⁴ Id.

¹⁰⁵ Id.

¹⁰⁶ Id.

¹⁰⁷ Id.

¹⁰⁸ Id.

¹⁰⁹ Id.

¹¹⁰ Id.

¹¹¹ Id.

¹¹² Id.

¹¹³ Id.

investors can anticipate a “fair” return relative to the asset’s risk, but no more.¹¹⁴ Similarly, if returns were independent of risk, there would be a rush to sell high-risk assets.¹¹⁵ Their prices would fall (and their expected future rates of return rise) until they eventually were attractive enough to be included again in investor portfolios.¹¹⁶ Therefore, it can be concluded that there is a risk-return trade-off in the capital markets.¹¹⁷

Of course, the argumentation above leads to several questions: How should one measure the risk of an asset?¹¹⁸ What should be the quantitative trade-off between risk (properly measured) and expected return?¹¹⁹ One would think that risk would have something to do with the volatility of an asset’s returns, but this guess turns out to be only partially correct.¹²⁰ When assets are mixed into diversified portfolios, the interplay among assets and the effect of diversification on the risk of the entire portfolio must be considered.¹²¹ *Diversification* means that many assets are held in the portfolio so that the exposure to any particular asset is limited.¹²²

Some basic concepts of risk measurement and portfolio diversification.

Risk is best judged in a portfolio context.¹²³ Rational investors do not “put all the eggs in one basket”: they diversify.¹²⁴ Thus, the effective risk of any asset cannot be judged by an examination of that asset alone.¹²⁵ Part of the uncertainty about the asset’s return is diversified away when the asset is grouped with others in a portfolio.¹²⁶

Risk in investment means that future returns are unpredictable.¹²⁷ This spread of possible outcomes is usually measured by variance and standard deviation.¹²⁸ The variance of the market return is the expected squared deviation from the expected return.¹²⁹ The standard deviation is simply the square root of the variance.¹³⁰

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *Id.*, also 11.

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² *Id.*

¹²³ Brealey-Meyers, *Principles of Corporate Finance* 178-179 (7th edition, 2003).

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ *Id.*, also 160.

¹³⁰ *Id.*, also 161.

The *market portfolio* is made of similar assets in the same market (for example: stocks), and its standard deviation is measured by an Index (ie. Standard and Poor's Composite Index in the case of stocks) that serves as a benchmark.¹³¹

Most individuals have higher standard deviations than the market portfolio's, but much of their variability represents *unique* risk¹³² that can be eliminated by diversification.¹³³ However, diversification cannot eliminate *market* risk.¹³⁴ Diversified portfolios are exposed to variation in the general level of the market.¹³⁵

Also, an asset's contribution to the risk of a well-diversified portfolio depends on how the asset is liable to be affected by a general market decline.¹³⁶ This sensitivity to market movements is known as *beta* (β).¹³⁷ Beta measures the amount that investors expect the asset price to change for each additional 1% (one percent) change in the market.¹³⁸ The average beta of all assets is 1.0.¹³⁹ An asset with a beta greater than 1 (one) is unusually sensitive to market movements; an asset with a beta below 1 (one) is unusually insensitive to market movements.¹⁴⁰ The standard deviation of a well-diversified portfolio is proportional to its beta.¹⁴¹ Thus, a diversified portfolio invested in stocks with a beta of 2.0 will have twice the risk of a diversified portfolio with a beta of 1.0.¹⁴²

Portfolio Theory applied

Consistent with Harry Markowitz's "Portfolio Theory"¹⁴³, the basic principles of portfolio selection are:

- Investors like high expected return and low standard deviation. (common stock) portfolios that offer the highest expected return for a given standard deviation are known as *efficient portfolios*.¹⁴⁴
- If the investor can lend or borrow at the risk-free rate of interest, one efficient portfolio is better than all others: the portfolio that offers the highest ratio of risk premium to

¹³¹ See *Id.*, also 178.

¹³² *Unique* risk may be called *unsystematic risk*, *residual risk*, *specific risk*, or *diversifiable risk*.

¹³³ Brealey-Meyers, *Principles of Corporate Finance* 178-179 (7th edition, 2003).

¹³⁴ *Id.* Market risk may be called *systematic risk* or *undiversifiable risk*.

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ *Id.*

¹³⁸ *Id.* In other words, Beta measures the marginal contribution of an asset to the risk of the market portfolio.

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Id.*, also 179.

¹⁴³ See H.M. Markowitz, *Portfolio Selection*, *Journal of Finance* 7, 77-91 (March 1952).

¹⁴⁴ Brealey-Meyers, *Principles of Corporate Finance* 196-197 (7th edition, 2003).

standard deviation. A risk-averse investor will put part of his money in this efficient portfolio and part in the risk-free asset. A risk-tolerant investor may put all his money in this portfolio or he may borrow and put even more.¹⁴⁵ In order to determine which portfolio is efficient, the investor must be able to state the expected return and standard deviation of each asset and the degree of correlation between each pair of assets.¹⁴⁶

- The composition of this best efficient portfolio depends on the investor's assessments of expected returns, standard deviations, and correlations. If there is no superior information (this is, that all investors have the same assessments), each investor should hold the same portfolio as everybody else, this is, the market portfolio.¹⁴⁷

In an investment decision, two main factors must be taken into consideration: a) the average rate of return of the investment; and b) the sigma of the investment (this is, the standard deviation of the diversified portfolio). Generally, investors tend to focus on the average rate of return as the main decision-making factor, since there is great speculation based on the figures presented in each business plan/investment opportunity. Nonetheless, the sigma factor remains unquestionably vital in the investor's rationale: the risk of getting such return is as important as the average rate of return, since both are inseparable for investment decision-making purposes, and hence plays a more significant role than it is normally assigned.

In the case of venture capital firms or individuals, the same rules and considerations apply when they engage in any kind of investment. The average rate of return on a portfolio of indie musicians could be quantified by creating a database of such "assets" available in the music market, and then estimating the average returns generated by those assets. Notwithstanding the foregoing, the estimation of the sigma of such investment appears to be more complex than it seems: probably, the universe of assets to be considered will be a percentage of those assets that achieved a determined benchmark (ie. 10 times the amount of invested). That "probability of success" percentage will play a crucial role in quantifying the size of the portfolio, in order to properly diversify the risk to considerable levels.

The benchmarks for venture capital funds

General guidelines for venture capital investment returns are¹⁴⁸:

- Start ups: 10-12 times cash return in 5-7 years.

¹⁴⁵ Id, also 197.

¹⁴⁶ Id, also 210.

¹⁴⁷ Id, also 197.

¹⁴⁸ http://www.1000ventures.com/venture_financing/vc_basics_byvpa.html

- Existing early stage companies: 5-7 times cash return in 4-5 years.

Cash Returns, Investment Periods, and Rates of Return ¹⁴⁹							
Return	Investment Period						
	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs
2 x	41.4%	26.0%	18.9%	14.9%	12.2%	10.4%	9.1%
3 x	73.2%	44.2%	31.6%	24.6%	20.1%	17.0%	14.7%
4 x	100.0%	58.7%	41.4%	32.0%	26.0%	21.9%	18.9%
5 x	123.6%	71.0%	49.5%	38.0%	30.8%	25.8%	22.3%
6 x	144.9%	81.7%	56.5%	43.1%	34.8%	29.2%	25.1%
7 x	164.6%	91.3%	62.7%	47.6%	38.3%	32.0%	27.5%
8 x	182.9%	100.0%	68.2%	51.6%	41.4%	34.6%	29.7%
9 x	200.0%	108.0%	73.2%	55.2%	44.2%	36.9%	31.6%
10 x	216.2%	115.4%	77.8%	58.5%	46.8%	38.9%	33.4%
11 x	231.7%	122.4%	82.1%	61.5%	49.1%	40.9%	35.0%
12 x	246.4%	128.9%	86.1%	64.4%	51.3%	42.6%	36.4%

As the table above indicates, an investment with a 5-year investment period will require a cash return of 5 times the amount invested in order to achieve a 38% ROI. In the same way, an investment with a 7-year investment period will require a cash return of 10 times the amount invested in order to achieve a 38.9% ROI.

For purposes of this paper, hedge funds are not even taken into consideration, since their investments are varied in strategy, time-length and quality of investors.¹⁵⁰

A note on Angel Investors

Angel investors are a private source of investment money, which is usually used to help a promising company grow and meet their potential.¹⁵¹ The angels fulfill a need for capital that

¹⁴⁹ Id.

¹⁵⁰ "A hedge fund is a fund that can take both long and short positions, use arbitrage, buy and sell undervalued securities, trade options or bonds, and invest in almost any opportunity in any market where it foresees impressive gains at reduced risk. Hedge fund strategies vary enormously -- many hedge against downturns in the markets -- especially important today with volatility and anticipation of corrections in overheated stock markets. The primary aim of most hedge funds is to reduce volatility and risk while attempting to preserve capital and deliver positive returns under all market conditions."

¹⁵¹ http://articles.directorym.com/Angel_Investor-a988.html

cannot be met by bank loans or the private means of the current owners.¹⁵² Sometimes they also offer consulting and management advice.

Angel investors are individuals who invest in businesses looking for a higher return than they would get from more traditional investments.¹⁵³ Usually they are the bridge from the self-funded stage of the business to the point that the business needs the level of funding that a venture capitalist would offer.¹⁵⁴ Funding estimates vary, but usually range from \$150,000 to \$1.5 million.¹⁵⁵

The term "angel" comes from the practice in the early 1900's of wealthy businessmen investing in Broadway productions.¹⁵⁶ Today, these "angels" typically offer expertise, experience and contacts in addition to funding.¹⁵⁷ The total investment from angels has been estimated at anywhere from \$20 billion to \$50 billion as compared to the \$3 to \$5 billion per year that the formal venture capital community invests.¹⁵⁸

The Center for Venture Research at the University of New Hampshire, which does research on angel investments, has developed the following profile of angel investors¹⁵⁹:

- Informal investors are older, have higher incomes, and are better educated than the average citizen, yet they are not often millionaires. They are a diverse group, displaying a wide range of personal characteristics and investment behavior. The "average" private investor is 47 years old with an annual income of \$ 90,000, a net worth of \$ 750,000, is college educated, has been self employed and invests \$37,000 per venture;
- Most angels invest close to home and rarely put in more than a few hundred thousand dollars. Seven out of 10 investments are made within 50 miles of the investor's home or office;
- Informal investment appears to be the largest source of external equity capital for small businesses. Nine out of 10 investments are devoted to small, mostly start-up firms with fewer than 20 employees;
- *Investors expect an average 26% annual return at the time they invest, and they believe that about one-third of their investments are likely to result in a substantial capital loss;*

¹⁵² Id.

¹⁵³ <http://www.smallbusinessnotes.com/financing/angelinvestors.html>

¹⁵⁴ Id.

¹⁵⁵ Id.

¹⁵⁶ Id.

¹⁵⁷ Id.

¹⁵⁸ Id.

¹⁵⁹ Id.

- Investors accept an average of 3 deals for every 10 considered. The most common reasons given for rejecting a deal are insufficient growth potential, overpriced equity, *lack of sufficient talent of the management, or lack of information about the entrepreneur or key personnel.*

Return objectives range from a projected internal rate of return of 30% over five years to sales projections of \$20 million in the first five years to the potential return of five times cash return in the first five years.¹⁶⁰ Most angel investors are looking for anything from five to twenty five percent share of the business.¹⁶¹ Some want securities - either common stock or preferred stock with certain rights and liquidation preferences over common stock; others even ask for convertible debt, or redeemable preferred stock, which provides a clearer exit strategy for the investor, but also places the company at the risk of repaying the investment plus interest.¹⁶²

The benefits of angel investors compared to venture capital funds are¹⁶³:

- Funding is less expensive;
- They provide industry expertise;
- Are willing to take higher risks.

On the other hand, angel investors:¹⁶⁴

- Are difficult to find and manage;
- May generate valuation issues for the next round of investors; and
- May not realize the level of risk.

Most certainly, angel investors may appear to be a more informal –and less demanding- source of funding for indie musicians than venture capital funds are. The fact is, however, that angel investors tend to behave in a rational way regarding investment opportunities: they expect the highest return possible on the investment performed. Opposite to the popular misconception that angel investors are wealthy people looking for a hobby and somebody else’s idea or talent to invest in, these investors are well-educated individuals with an economic rationale, and they are very serious about their investments.

¹⁶⁰ Id.

¹⁶¹ Id.

¹⁶² Id.

¹⁶³ Bottorf et al., *Venture Capital in the Medical Technology Space* (April 7th, 2003) (unpublished, on file with Stanford University), http://www.onset.com/assets/resources_medicaltech.pdf.

¹⁶⁴ Id.

Angel investors and venture capitalists behave similarly regarding investment analysis and portfolio diversification. It could be said that angel investors are “informal, more accessible venture capitalists”. The same concepts of financial analysis apply, however, to both types of private funding: angel investors are not a feasible source of funding for indie musicians from the perspective of a rational investor.

The music industry for venture capital firms: speculation or gambling?

One definition of *speculation* is “the assumption of considerable investment risk to obtain commensurate gain”.¹⁶⁵ In the latter definition, “considerable risk” means that the risk is sufficient to affect the decision: an individual might reject an investment that has a positive risk premium because potential gain is insufficient to make up for the risk involved. “Commensurate gain” means a positive risk premium, that is, an expected profit greater than the risk-free alternative. This is the *incentive* to investment.¹⁶⁶

On the other hand, gambling is “to bet or wager on an uncertain outcome”. If one compares this definition to that of speculation, one sees that the central difference is the lack of “commensurate gain”. Economically speaking, a gamble is the assumption of risk for no purpose but enjoyment of the risk itself, whereas speculation is undertaken *in spite* of the risk involved because one perceives a favorable risk-return trade-off. To turn a gamble into a speculative prospect requires an adequate risk premium to compensate risk-averse investors for the risks they bear. Hence, *risk aversion and speculation are not inconsistent*.¹⁶⁷

In the scenario under testing and analysis, indie musicians are the “assets” in the music market considered for investment by venture capital funds. These funds, pursuant to the Theory of Efficient Portfolios –or “Portfolio Theory”- explained before, must be able to make an assessment on: (i) the standard deviation of the market portfolio; (ii) the number of assets that must be included in the portfolio; (iii) determine the variances among the assets, in order to ultimately quantify the portfolio’s sigma (or standard deviation); (iv) finally, assess the correspondent expected rate of return.

Since venture capital funds seem to have a “standardized” expected rate of return (as shown in the last figure), the sequence described in the previous paragraph must follow the inverse path: once the goal is set (ie. 10 times cash return on a determined investment period), the fund must “arrange” a portfolio of assets in accordance. Unfortunately, this is the point where *speculation* seems to turn into *gambling*: as it will be demonstrated in the following paragraphs, indie musicians are assets with a very high *unique* risk that seems almost impossible to diversify.

¹⁶⁵ Bodie et al., Investments 10-11 (Seventh Edition, McGraw Hill International Edition) (2006).

¹⁶⁶ Id, also 166.

¹⁶⁷ Id.

An example

Following the above mentioned rules of finance and the expected returns on investment as shown in the previous figure, a typical venture capital firm, as an example, would expect to experience the following results on 10 portfolio companies:

- Three total losses (ie. \$ 0 return).
- Five cash returns of 2x-5x the amount of money invested (Average = 3.5x).
- Two major successes of 20x the amount of money invested.

To attract investors, the fund must offer a minimum projected 40% annual compounded return (net of management fees and performance fees). Most funds have a 10 year term, so they must get back \$ 28.925 for every dollar accepted from investors [amortization of capital $\times (1 + .40)^{10} = 28.92$].

Assuming that in a 10-year fund: (i) the manager can invest in two sets of five year liquidation horizons; and (ii) the fund raises \$ 10 million and invests 10% of its capital in 10 companies in each five year period, then the fund would need to get back more than \$ 330 million from its investments to obtain the 40% ROI, net of 2% management fee and 20% performance fee.

First five years		
Company	Amount invested	Return
1	\$ 1,000,000	\$ -
2	\$ 1,000,000	\$ -
3	\$ 1,000,000	\$ -
4	\$ 1,000,000	\$ 3,500,000
5	\$ 1,000,000	\$ 3,500,000
6	\$ 1,000,000	\$ 3,500,000
7	\$ 1,000,000	\$ 3,500,000
8	\$ 1,000,000	\$ 3,500,000
9	\$ 1,000,000	\$ 20,000,000
10	\$ 1,000,000	\$ 20,000,000
Total	\$ 10,000,000	57,500,000

Second five years		
Company	Amount invested	Return
11	\$ 5,750,000	\$ -
12	\$ 5,750,000	\$ -
13	\$ 5,750,000	\$ -
14	\$ 5,750,000	\$ 20,125,000
15	\$ 5,750,000	\$ 20,125,000
16	\$ 5,750,000	\$ 20,125,000
17	\$ 5,750,000	\$ 20,125,000
18	\$ 5,750,000	\$ 20,125,000
19	\$ 5,750,000	\$ 115,000,000
20	\$ 5,750,000	\$ 115,000,000
Total	\$ 57,500,000	330,625,000

Re-investment

Total End Amortization	\$ 330,625,000
Beginning Amortization	\$ 10,000,000
Gross Profit	<hr/> \$ 320,625,000
Management fee	\$ 2,000,000
Net Gain	<hr/> \$ 318,625,000
Performance fee	\$ 63,725,000
Net \$\$ Returned to Investors	<hr/> \$ 264,900,000
Annual ROI (Compounded)	<hr/> 38,75% approx.

As a general practice, venture capital funds will demand an “exit strategy” after 3-5 years, when they expect to collect on that specific set of liquidation horizon.

Quantifying assets: Indie musicians in figures.

In order to answer the question about the feasibility of venture capital funding directly to the indie musician, taking into account the basic concepts of finance that apply to venture capital funds’ investments (portfolio, diversification of risk, return, exit strategy), some estimated figures are set as real examples.

(i) Return:

First of all, if an indie musician wanted to be financed by a venture capital fund, it should be able to present a feasible business plan to the firm. Even though new technologies allows a sound engineer with the requisite skills to record and mix as good a sound track on \$5,000-\$10,000 worth of PC hardware and software as he can in a one million dollar recording studio¹⁶⁸, the fact is that even in the best possible scenario (with measured optimism), an indie musician might be able to make around \$13,730 per year of gross income¹⁶⁹. This last figure, of course, does not include any costs, so the net profit will be evidently smaller.

Moreover, the gross income of \$13,730 per year will be used entirely by the indie musician to pay his/her living expenses and bills (most certainly, such amount of money will only cover a low percentage of these expenses, taking into consideration the market value of each “basic” item –ie. Rent, electricity, food, clothes, etc.). Therefore, there is no room left for real return over an actual investment. In this scenario, all the profits –if any- will have to be reinvested continuously, with the hope (of a *gambler*) that the musician will grow enough (definitely, in more than 10 years) to start showing some an attractive rate of return to small investors.

Unfortunately, the percentage of indie musicians that might break the overestimated threshold of \$ 13,730 per year is as low as an estimated 3%. In other words, only three out of a hundred indie musicians will be able to generate a gross income that exceeds the \$ 13,730/year.

Notwithstanding the foregoing, the estimated “success rate” of the abovementioned 3% is even lower: out of that 3%, only an optimistic 1% might be able (the uncertainty grows at this point)

¹⁶⁸ Henry H. Perritt Jr., *Flanking the DRM Maginot Line Against New Music Markets*, 16 Mich. St. J. Int’l Law 577, 177 (2007).

¹⁶⁹ Live performances twice a week, for 48 weeks, including: 10 CDs per performance at \$7 each + \$10 cover times 50 paying consumers per performance + \$0.99 songs on OutStage.com or personal blog times 200 sales. All of which is divided by four (based on a four-persons band).

to generate a gross income worthy of venture capitalists' attention¹⁷⁰. Only at this point an investment towards "business expansion" may be possible.

(ii) Efficient Portfolio and Diversification of risk.

In order not to fall into a fallacy, it must be said that the 1% "success rate" out of the privileged and lucky 3% of indie musicians that might be able to generate a gross profit exceeding the \$13,730/year figure is the result of a truly optimistic analysis. Also, it must be established that not all indie musicians will actually generate the estimated amount of \$ 13,730 per year¹⁷¹: the possibility of doing so does not necessarily mean that they will for certain.

But even if the venture capital fund could be able to identify the three (3) indie musicians that could profitable out of a pool of 10,000 fellow musicians¹⁷², the venture capital fund must structure its portfolio based on risk, and the numbers turn against indie musicians once again.

In this sense, how many musicians does a venture capital fund would need to have in its portfolio in order to diversify risk among successful and failed projects? Moreover, even if the fund disregards the fact that only the *average number* of indie musicians will actually generate the gross profit of \$13.730 per year, the amount of money to be invested would seem unquantifiable.

For example, even if any indie musician requires an investment of \$20,000 (which has to include recording and promotion costs¹⁷³; if not, the investment will lack the key element required to succeed), how much money must the venture capital invest in order to averse the 99,97% default risk? The 0,03% success rate would mean "an eventual, unknown, unpredictable" return generated by only three successful indie musicians, from a minimum investment of \$ 200,000,000.

It must be added that out of a pool of 10,000 assets, only three will represent a real significant income (yet unquantifiable nor even predictable), so there is no certainty of any ROI, since the

¹⁷⁰ Even though the venture capitalists are mainly interested in the "potential" income that the asset could generate, they will require certain minimum benchmarks in order to shift the risk allocation as much as possible. These benchmarks consist on determined cash flow amounts (or capital requirements, depending on the valuation method) that may vary according to the industry. However, an estimated \$2,000,000 average cash flow benchmark is applicable for indie musicians, since the volatility involved in the success/failure rate of individual assets/musicians in the music business market is beyond average compared to more conventional ones.

¹⁷¹ Since a very large percentage of indie musicians have day-time, "insurance cubicle" jobs, their real income as musicians is probably way below a \$1,000/year threshold. Therefore, out of the universe delimited in the Introduction section of this paper, an extremely low percentage can really make the optimistic income figure.

¹⁷² $(0.01 \times 0.03) \times 100 = 0.03$ out of 100 musicians = 3/10,000.

¹⁷³ The costs of promotion are based on the following estimations: (i) A Public Relations professional's salary = \$1,500/month (although this amount could be reduced under an "economies of scale" structure); (ii) Concert promoter's share = 20% of the net profit; (iii) Advertising = \$500 per half a page on a local newspaper + \$500 per one week of radio playing time + \$5000 for TV ads. Accordingly, the annual costs of promotion for each musician clearly exceed the suggested investment amount of \$20,000 per asset/musician.

eventual profits are unknown and the losses are both certain and enormous. What rational investor would invest \$200,000,000 in 10,000 indie musicians –that he/she must somehow manage to select out of a bigger pool of hundreds of thousands throughout one or many countries-, with the hope of getting a significant profit that will most certainly (99.97% chance) not cover his/her investment, after a 5-10 year “investment period” (significant revenues out of success in the music industry will demand such waiting period for professional growth and public recognition), and with almost certain non- return at all?

(iii)Exit strategy.

Finally, a venture capital fund will be looking for an exit strategy after a successful or a failed investment. If successful, the Initial Public Offering would be the normal exit. However, it is obvious that this is not the case: the musicians do not offer “stocks”¹⁷⁴, only services. Notwithstanding the foregoing, indie musicians could provide some kind of intangible rights: Intellectual Property (IP) rights. Efficient protection of IP rights could provide an incentive to venture capital funds, which could trade those rights after the 3-5 year investment period.

Unfortunately, here is where technology turns against the musicians. The new MP3 formats have favored free downloading all around the globe. Some believe this is a social benefit, even if hurts the very core of the industry. But the fact is that IP rights find themselves completely unprotected, making indie musicians lose their only possible bargaining chip. Like during the days of Robespierre, the revolution devours its children.

Conclusion

Venture capital funds do not have the incentive to invest in indie musicians. They cannot replace the expertise and inherent interest that record labels have in the industry. The involvement of such funds in the music business is limited to the investment in startup companies/small labels that are already part of the business (“baby dinosaurs”). Venture capital funds invest in companies, not people (unless these people can prove themselves tangible or intangible tradable assets).

¹⁷⁴ It should be noticed that musicians could create corporations and sell their stocks to investors. This case is not considered for purposes of the present analysis, since such a scheme would mean a totally different business plan: these corporations would function as independent record labels, promoting the same indie musicians that created them, and seeking funding from private investors. However, this business model does not differ from the actual: those independent record labels are nothing else but “baby dinosaurs”, part of the old regime, and would probably tend to merge with the “old dinosaurs” after several years of growth and development. Hence, the omission of this alternative.

Part III

According to the analysis presented in Part II of this paper, venture capital funds and angel investors do not have the necessary economic incentives to provide an alternative source of capital to indie musicians.

From a theoretical point of view, it has been established that the entry barriers for “new players” –regarding financial support- are too high: venture capitalists need to invest at least \$200,000,000 in a portfolio of 10,000 assets/indie musicians in order to cover recording and promotion costs (which exceed the suggested investment amount of \$20,000 used as an example) for each indie musician, with the irrational expectation of obtaining an incalculable –and improbable- net profit from only 3 out of the 10,000 assets/indie musicians in the portfolio.

Therefore, traditional record companies still have a comparative advantage over the prospective alternative sources of income –at least in the short term. Ultimately, the question is: can the “old dinosaurs” be replaced by new players that will take over each of the functions that the “Big four” have been performing until now? The answer to the latter presents an idea of the new business model that might emerge from the revolution.

Based on the traditional business model, major record labels offered the following advantages to support the old business architecture:

- (i) Transaction costs and efficiency.

The music industry is established on the premises of transaction cost economics.¹⁷⁵ The cost for the musicians to distribute the music to as large an audience as possible would be forbidding without the music distributing market mechanism.¹⁷⁶ As a kind of experience good, music needs to be experienced before anyone wants to purchase (except perhaps for the reputation effect of famous musicians).¹⁷⁷ Large amounts of money are invested in marketing and promotion for particular musicians or albums, and the royalty collection mechanism brought about by ASCAP, BMI and SESAC helps the industry to lower the transaction cost in assuring to get the musicians compensated.¹⁷⁸

Also, contractual arrangements between bands, promoters and record labels are heterogeneous regarding standard forms and terms contained in them¹⁷⁹. In terms of the efficient division of

¹⁷⁵ Michael X. Zhang, *A Review Of Economic Properties Of Music Distribution*, 5 (November 15th, 2002) (unpublished, MIT Sloan working paper), <http://web.mit.edu/zxq/www/mit/15575/musicreview.pdf>.

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

¹⁷⁹ Connolly and Alan B. Krueger, *Rockonomics: The Economics Of Popular Music*, 6 (April 2005) (unpublished, on file with Princeton University), <http://www.irs.princeton.edu/pubs/pdfs/499.pdf>.

risk, incentives and rewards, the reputation and the prospect of repeated contracts are essential for contract enforcement.¹⁸⁰

(ii) Portfolio Theory: Risk and Diversification.

A label takes a risk when it signs an artist and the artist-label relationship is full of uncertainty.¹⁸¹ At the very least, future earnings need to cover earlier disbursements.¹⁸² A label is a multi-product firm in which not all of the artists in its roster will recover the recording advance: the label budgets this loss.¹⁸³ Successful artists finance less successful ones.¹⁸⁴

(iii) Property rights

As explained in Part II, Intellectual Property rights are very important in determining incentives to invest.¹⁸⁵ Without well-defined and protected IP rights, most rational investors lack the incentives to invest in the music product.

Dinosaur DNA: a new genome in the Music Industry

As described in Part I, however, the circumstances have changed dramatically. Traditional music distribution might be an efficient way to address the problem of transaction costs, but it might no longer be so in the face of the Internet technology, which enables very effective communication between sellers and buyers.¹⁸⁶ With the use of the Internet, the music producers can directly publish the music and potentially increase the audience significantly; on the other hand, the music buyers can have a much larger pool from which to select music works.¹⁸⁷ The lowered transaction cost is having profound effects on the music distribution companies.¹⁸⁸

A new business model is emerging and has started to develop, but even its basic structure is still unclear. For this reason, in order to understand the possibilities generated by the technological

¹⁸⁰ Id, also 9.

¹⁸¹ Peter Alhadeff and Barry Sosnick, *Record Labels, Artists, and Finance. A Contribution to the Economic Analysis of Costs and the Equity of Recoupment Practices in the Music Industry*, 2 (2005), http://earful.info/Alhadeff_Sosnick%20Edited%20for%20Publication.pdf.

¹⁸² Id.

¹⁸³ Id.

¹⁸⁴ Id.

¹⁸⁵ Michael X. Zhang, *A Review Of Economic Properties Of Music Distribution*, 7 (November 15th, 2002) (unpublished, MIT Sloan working paper), <http://web.mit.edu/zxq/www/mit/15575/musicreview.pdf>.

¹⁸⁶ Id., also 6.

¹⁸⁷ Id.

¹⁸⁸ Id.

revolution, each stage of the music business must be analyzed separately, in order to determine if the “old dinosaurs” will mutate and adapt, or finally cease to exist.

As explained in Part I, major record companies had control over the following areas of the music business: capital investment; musician selection; promotion; and distribution. In more detail: (i) capital investment, including such elements as initial capital for recording (equipment and studio time); (ii) promotion, including the control over the “taste-makers”, such as radios and TV; and (iii) distribution: complete control over the physical format and its distribution channels. In other words, the “old dinosaurs” managed to control both demand and supply curves in the music market.

Thanks to the Internet and Peer-to-Peer (P2P) technology (this is, file sharing), which includes Napster, however, the model would not resist the *ceteris paribus* analysis: almost every single variable in the economic equation for the music market has changed. Thus, the balance of power was definitely broken, and the new scheme is yet to be determined. Nonetheless, there are some clear examples of business approaches towards the present sense of anarchy: new ideas have risen and materialized, therefore “shaping” the new business model.

1. Initial Capital investment for music production.

As described in detail in Part II, venture capitalists and angel investors will not step in as alternative sources of funding for indie musicians. The latter, however, does not mean that the “old dinosaurs” will continue to monopolize the availability of funding; other alternative sources of income are now available.

A fascinating concept was developed by the website “Slicethepie.com”. Slicethepie enables artists to raise money directly from their fans to record and release an album professionally.¹⁸⁹ They claim to do this “by turning every music fan into a record label. The existing industry model is based on a few record labels providing a lot of money to hundreds of artists. Slicethepie enables a model where millions of music fans each provide a little money to thousands of artists.”¹⁹⁰

In this way, fans can become emotionally and financially involved at all levels of the music industry - scouting, breaking, investing in and influencing real artists.¹⁹¹ Also, investors can gamble on, trade in and profit from the success of these artists.¹⁹²

In addition, artists who secure finance pay Slicethepie a small royalty on album sales but keep all their copyright and publishing rights.¹⁹³

¹⁸⁹ <http://www.slicethepie.com>

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

¹⁹² *Id.*

Under the fund raising system created by Slicethepie, the mechanics of the project are as follows:¹⁹⁴

- Artists sign up, upload their profile and join an Arena;
- When the Arena is full (up to 1,000 Artists), the Scout Room opens;
- Music fans earn money scouting each track at least 10 times rating it 1-10 and writing detailed reviews;
- The 20 highest rated artists from the Scout Room go forward to the Showcase;
- Music fans vote for and finance Showcase Artists by buying Backstage Passes;
- Backstage Passes give fans exclusive access to the artist, participation in the recording process, a free copy of the album and exclusive rights to buy contracts in the artist at a discount;
- Fans buy contracts that entitle them to a return based on the number of singles and albums sold by the Artist over a 2 year period;
- The artist receives the money (non-recoupable) and goes off to record the album, keeping in close contact with Backstage Pass holders in a private area of the site;
- The contracts become fully tradable on the Slicethepie Exchange, fluctuating in value depending on the anticipated number of album and single sales;
- The album is released and Slicethepie receives £2 royalty on every album sale;
- The artists keep all their copyright and publishing rights and remain free to sign a record deal at any time.

If someone has a dedicated fanbase of over 5,000 fans, then that indie musician may be able to go directly to the financing stage –this is, avoiding the Scout Room-.¹⁹⁵

Artists have the opportunity to secure a minimum of £15,000 of finance to record an album and further their career directly from their fans (as well as from new fans they find on Slicethepie).¹⁹⁶

¹⁹³ Id.

¹⁹⁴ Id.

¹⁹⁵ Id.

¹⁹⁶ Id.

In order to make a profit out of this business model, Slicethepie takes a fixed 20 percent royalty for a 2 year period on the sale of every track on the album recorded following the receipt of finance.¹⁹⁷ It also makes money from commissions on the trading of contracts.¹⁹⁸

Most certainly, the business model presented by Slicethepie is very useful for indie musicians, and it could replace traditional funding for the famous, successful artists of the future.

2. Promotion.

This is the key function of traditional record labels. Since the old business model was designed on the basis of the major labels' absolute control, the music industry turned into an elite club of contacts and connections. The "old dinosaurs" provided, controlled and actually "were" the contacts. Hence, the most important power that the record labels had was the control over the taste-makers, who influenced the audience/consumers and biased them towards a pre-determined selection.

Fortunately, as explained in previous paragraphs –regarding the effects of P2P technology and the benefits of the Internet-, the intermediation between the consumers and the access of music has been reduced to zero. Even though some would argue that intermediation is no longer needed, the fact is that there must be some sort of "selection process" by which the product gets to the right consumer. In other words, it could be dangerous for the industry to "drown" the consumers in a sea of infinite options: either the consumer will desist from looking for what he/she likes, or he/she might never connect with what he/she is looking for.

For purposes of promoting themselves, indie musicians have increasing opportunities to do so without the need of a contract with a major label. By means of the Internet, there are many websites that provide a source of "ranking and selection" among the indie musicians (with the potential purpose of getting a record company's attention and a consequent contract).

A good example of this type of websites is OurStage.com.¹⁹⁹ Although it has a similar outcome (this is, a prize) to Slicethepie, OurStage has a well defined artist selection process that provides a clear example of how new taste-makers are stepping in.

¹⁹⁷ Id.

¹⁹⁸ Id. Under federal Securities laws, these contracts are deemed to fall under the definition of "securities". Therefore, the U.S. Securities and Exchange Commission (SEC) has jurisdiction over the offering (and selling) of these securities, which must be registered with the SEC (unless an exemption is applicable). It will be interesting to observe the development of the SEC's regulations and jurisprudence regarding this issue related to the music industry and the new business models.

¹⁹⁹ <http://www.ourstage.com>

OurStage claims to be “the only democratic competition where the fans decide who is best in emerging entertainment. That means fans have the real voice –thanks to the patent-pending judging system that eliminates cheaters, and artists get a fair shot.”²⁰⁰

OurStage works as follows:

- The artist uploads his/her music or video and decides which channel competition to enter;
- Then, fans judge the work side by side with the work of others. OurStage’s unique judging capability (called Peer Relative Ranking) makes sure that each piece is judged fairly by the real audience (“with no rigging, no cheating, and no celebrity judges”);
- At the end of each month, the top 20 and the top 10 in each channel go head-to-head in a special judging channel to determine the winner of that channel, and then a site-wide judging contest to determine the Grand Prize winner.

Interestingly, OurStage was started and funded by enthusiasts and angel investors who claim to be “really passionate about one thing: bringing true democracy to entertainment. Our aim is to make sure that artists get a fair shot... and that fans can find emerging artists they will love”.²⁰¹

OurStage is designed to leverage the power of the Internet to connect fans to emerging artists.²⁰² There is a monthly cash prize of \$100 for the top entry in each channel and a \$5,000 grand prize for music.²⁰³ There is also a \$1,000 Grand Prize offered for video.²⁰⁴

Songs sold by OurStage.com do not have Digital Rights Management (DRM): once someone buys a song from OurStage.com, the buyer possesses a copy of that song and he/she can use it as he/she wishes for playback.²⁰⁵ Songs that are purchased off OurStage.com can be played back in any player that supports the MP3 Format.²⁰⁶ This includes iTunes, Windows Media Player, Media Player Classic, or just about any other modern program.²⁰⁷

Artists are paid on a quarterly basis (at the end of March, June, September and December) and only after their accounts have accumulated a balance of twenty dollars.²⁰⁸ If their account

²⁰⁰ Id.
²⁰¹ Id.
²⁰² Id.
²⁰³ Id.
²⁰⁴ Id.
²⁰⁵ Id.
²⁰⁶ Id.
²⁰⁷ Id.
²⁰⁸ Id.

balances are below twenty dollars, they will continue to grow until the end of the following quarter, and so on, until the balances reach twenty dollars.²⁰⁹

OurStage is currently gives the entire 99 cents from each sale to the artist -not taking out any processing or handling fees at all.²¹⁰

Another good example of modern taste-making for indie musicians is Pitch Fork Media.²¹¹ This website is a very well-known blog for indie musicians and real music lovers, and has served as a virtual “thermometer” of public opinion on indie musicians.

In other words, the prestige obtained by this website throughout the past few years due to the constant support and quality of its community of bloggers has created a fierce competition among indie musicians for the top ten places in the website’s ranking/chart. Consequently, indie musicians that manage to be seeded among the top ten of the mentioned ranking will increase their chances of success (independently, or by getting a contract thanks to the community’s votes), due to the fact that the website will be serving as a significant taste-maker.

Finally –but not least-, there are other simpler ways of alternative taste-making available: music festivals. Live performances in major music festivals are an invaluable source of promotion for indie musicians²¹². Fortunately, as part of the same revolution that is taking place in the industry, the number of music festivals gathered in different places have been increasing over the years²¹³. For example, the top U.S. concert festivals that took place in 2007 were: Bonnaroo (Manchester, Tenn.); Coachella (Indio, CA); Austin City Limits (Austin, TX); Lollapalooza (Chicago, IL); Virgin Festival (Baltimore); Stagecoach (Indio, CA); and Bamboozie (East Rutherford, NJ).²¹⁴ In 2008, four other major festivals will have their debut: Outside Lands (San Francisco, CA); Mile High (Commerce City, CO); Rothbury (Rothbury, Mich.); and All Points West (Jersey City).²¹⁵

As in the previous cases, these concert festivals appear to be very attractive to new investors, so they might be a way of indirectly bypassing the “old dinosaurs” involvement, for the clear benefit of indie musicians.

3. Distribution.

²⁰⁹ Id.

²¹⁰ Id.

²¹¹ <http://www.pitchforkmedia.com/>

²¹² Nonetheless, the barriers of entry could be an issue, depending on each case.

²¹³ This is consistent with the idea that that new business model is going towards more live performances as the principal source of revenue (despite the fact that, historically, live performances have always been the largest source of revenue).

²¹⁴ See Redeye (Chicago Tribune), April 8th 2008, at 6-7.

²¹⁵ Id.

This is the greatest defeat of the traditional business model. After the creation of .mp3 format and the P2P revolution, physical format distribution mechanisms were virtually dead. Along with these changes came a reduction of distribution costs down to zero, and new business models emerged (together with new players).

At the beginning it was Napster. Then several distributors followed: Kazaa, RealNetworks' Rhapsody, Apple's iTunes, among others. The "old dinosaurs" were virtually out of business in this regard.

Of course, this new scenario had inherent vital deficiencies: music was virtually turned into a public good. Not even the Napster case could stop the uncontrollable: free downloading and free riding as the new *de facto* regime. For this reason, both musicians and new distributors (and even the "old dinosaurs") found themselves immersed in a problem worse than in the traditional scenario: free downloading meant no direct sale revenue at all.

In order to counter rest the harmful effects of free unlimited access to music albums and/or songs through the Internet or mobile phone networks, several business models have been conceived for the distribution of music.

a) The subscription model

The idea of paying a monthly fee for unlimited access to a catalogue of music is becoming increasingly popular, and record labels are making moves to adapt.²¹⁶ Jointly, Universal Music Group, Sony BMG, and perhaps Warner Music are planning a service called "Total Music", where manufacturers of MP3 players, advertisements, and Internet service providers would cover subscription costs.²¹⁷

Total Music is, in essence, a subscription service.²¹⁸ A number of experts have recently been claiming that subscriptions will eventually lead the record industry towards salvation, and they also proclaim the need for the industry to shift away from product marketing and distribution to servicing.²¹⁹ The business model is intriguing: mobile phone manufacturers or providers would absorb a prepaid subscription fee that equates to roughly \$5 (five dollars) per month for the consumer.²²⁰ This is based on research that says that the average consumer has a mobile device for approximately eighteen months before replacing it with a new device.²²¹ A consumer would in fact pay for the subscription in a novel scheme: an upfront payment for the device so that the

²¹⁶ Charlton Washington II, *Subscription: The New Business Model*, Music Business Journal, Vol. 3, Issue 6 (December, 2007) (www.thembj.org).

²¹⁷ *Id.*

²¹⁸ Kenny Czadzeck, *Open Your Umbrellas: Welcome Total Music*, Music Business Journal, Vol. 3, Issue 6 (December, 2007) (www.thembj.org).

²¹⁹ *Id.*

²²⁰ *Id.*

²²¹ *Id.*

subscription fee would be included into that cost.²²² In this way, the music would seemingly be “free”.²²³

With this model, artists receive a 50/50 split with their labels after the publishing is taken care of (and the publishing percentage is still being negotiated).²²⁴ Each play or download could be tracked, and the artist would be paid accordingly.²²⁵

Some would argue that the \$5 (five dollars) per month is not going to provide enough revenue to support the record companies and pay the artists, and that this model will not stop someone from just constantly downloading music.²²⁶ However, the answer lies in a business concept called “breakage”.²²⁷ Many businesses rely on breakage to realize profit.²²⁸ One of the best examples of this is an “all you can eat” buffet at a restaurant:²²⁹ for every one person that comes in and eats five plates of food, there are many more who come in and only eat one.²³⁰ This is the same concept that will occur with a system like Total Music: for every listener who downloads ten albums per week, there will be many more who download one, or maybe even less.²³¹

b) The “a la carte” model

The “a la carte” download model offers the possibility for the customer to choose and pay song track by song track.²³² This is the model used by most new download websites. Then, there are two alternatives: either a play-for-play model where the user pays every time he/she listens, or a pay-for-download service where the user just pays once.²³³ Apple’s iTunes is the best example of the second alternative for this business model.

c) The online radio model

RealOne, operated by RealNetworks, offers radio and music subscription service with MusicNet.²³⁴ Launch Media offers to their subscribers the possibility to design their own radio station that plays their preferred selections.²³⁵

²²² Id.

²²³ Id.

²²⁴ Id.

²²⁵ Id.

²²⁶ Id.

²²⁷ Id.

²²⁸ Id.

²²⁹ Id.

²³⁰ Id.

²³¹ Id.

²³² Dubosson-Torbay et al., *Business Models for Music Distribution after the P2P Revolution*, 2 (2006) (unpublished, on file with University of Lausanne), <http://www.hec.unil.ch/yp/Pub/04-wedlemusic.pdf>.

²³³ Id.

²³⁴ Id.

²³⁵ Id.

d) The distribution model

On Demand Distribution (ODD) business strategy is based on the premise that most people investing in online music want to be selling and far fewer are interested in distribution.²³⁶ It is an online music rental service offering consumers the opportunity to stream whole catalogs of music before selecting the ones they want to rent for a fixed price as time-limited downloads.²³⁷ ODD distributes encrypted licensed copies to e-tailers.²³⁸ The e-tailers sell music to online customers who can play music only if they have the individual digital license required.²³⁹ Each purchase is registered and credited to ODD, which pays royalties to the musicians.²⁴⁰

e) The promotion model

In 2002, the rock band Smashing Pumpkins used Napster to distribute music on the Internet without traditional marketing.²⁴¹ Since ticket sales, t-shirts sales and commercial endorsements are a function of an artist's popularity, the Internet could be considered as a valuable tool for increasing popularity by offering music for free and thereby increasing band revenue as a result of increased fame.

Similarly, the British pop band Radiohead launched its latest album directly in downloadable format, so that its fans could pay whatever amount they considered appropriate. In this way, Radiohead bypassed the involvement of a record company, establishing a direct connection with its fans. This type of business model, however, might not be feasible for most indie musicians, since they do not have either the popularity or the "fanbase" that Radiohead has (due to previous commercialization efforts by the "old dinosaurs").

f) The merchandise model

The merchandise business model aims at offering music for free and earning revenues by selling related music merchandise ("merch"), such as tee shirts, posters, coffee cups, beer mugs, pins and sweaters. Through the sale of merchandise, royalties are paid to artists for tracks which songs are downloaded.²⁴² The costs of controlling the revenue income and distribution, however, seriously affect the viability of this model.

g) Voluntary Collective Licensing

²³⁶ Id, also 3.

²³⁷ Id.

²³⁸ Id.

²³⁹ Id.

²⁴⁰ Id.

²⁴¹ Id, also 5.

²⁴² Id, also 6.

The concept is simple: the music industry forms a collecting society, which then offers file-sharing music fans the opportunity to avoid potential lawsuits in exchange of a reasonable payment (ie. five dollars per month). The money collected gets divided among rights' holders based on the popularity of their music. The feasibility of such a scheme appears to be very low, since the formation of a universal collecting society is more a dream than a plausible idea.

Conclusion

By the end of 2008, digital music sales either as a-la-carte downloads or subscriptions are expected to reach \$1.8 billion, up from \$187 million in 2004.²⁴³

Another interesting fact that confirms the mutation of major labels' traditional business is that all but one (ie. EMI) of the "big four" are highly diversified media conglomerates, in which music revenues account for between 10-33% of their global revenues.²⁴⁴ This means that the technological revolution has increased the risks of the major labels' traditional investments in the music industry, forcing them to search for new investment opportunities in order to shift the allocation of such risk increase and diversify the total portfolio risk as much as possible.

It is clear that the future of the music industry is moving towards the crystallization of new business models rather than defending old ones. The analysis presented in this paper, however, suggests that these new models will be built from the legacy of the "old dinosaurs". Major record labels must and will mutate in the short-term, trying to adapt to the new era of technological revolution. There will not be a "Big Bang" that will exterminate them all in once: there will be a "natural selection" process, where only those that adapt will survive.

It would be imprudent to believe that a new music industry could be created only from musicians and Internet connections. Business success is far more than artistic talent and technological resources.

²⁴³ Albert Lin, *Understanding the Market for Digital Music*, SURJ 50 (2005), <http://surj.stanford.edu/2005/pdfs/Albert.pdf>.

²⁴⁴ Birgitte Andersen et al., *Rents, Rights N'Rhythm; Conflict And Cooperation In The Music Industry*, 20 (2007) unpublished), <http://www.copyright.bbk.ac.uk/contents/publications/workshops/theme2/banderson.pdf>.