EXHIBIT L



The Music Industry on (the) Line? Surviving Music Piracy in a Digital Era

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1. Introduction

After successive years of growth during the 1990s, decreasing compact disc (CD) sales have been plaguing the music industry since 2000. Although several reasons have been cited to explain the decline in sales, the music industry mainly puts the blame on physical and digital piracy, more specific on CD and Internet piracy [1].

Piracy is not a new phenomenon. In the last decades, technological developments have allowed the music industry to discover and promote new music formats, but have also enabled commercially-minded pirates and private citizens to pirate music on a larger scale. Piracy was a minor problem for the music industry until the arrival of the compact tape cassette in the late 1960s and the wide-spread availability of home cassette recorders in the 1970s [2]. The advent of the CD in 1982 heralded a new era. Although this format boosted global music sales, the technology enabled master-quality copying in large quantities. Firstly, the development of encoding formats such as MP3 allowed users to easily transfer music to computers, transmit it via the Internet or decode the digitally recorded music for recording onto CDRs [3]. Secondly, when the switch was made from cassettes to CDs, most computers had limited storage capacity and were not always equipped with a sound card or external speakers. During the last decade, however, personal computers have become much faster and more powerful and most of them nowadays come with CD-ripping software and CD-burners. Contemporary pirates are now able to create perfect, quasi-identical copies.

The possibilities offered by the new technologies did not go unnoticed. Whereas the music industry always had some sort of monopoly over the distribution of music to customers, they soon met with competition from entrepreneurs making the most of their chances to get a piece of the pie. Besides concerns about private citizens copying CDs onto CD-Rs, the music industry was – and still is – gravely concerned about full scale commercial music piracy. It did not take long for them to link full scale commercial piracy to organized crime [4]. Organized criminals would use CD revenues to finance other activities such as trafficking drugs, humans or weapons [5]. In combating organized crime, the music industry has found an ally in public and law enforcement authorities. They too, link – to some extent – CD piracy to organized crime [6]. In several criminal cases, links have indeed been established between criminal organizations and CD piracy and counterfeit products in general [7].

Music industry's monopoly position being shattered, consumers are now able to shop around. It is not, however, physical piracy that has received a lot of attention recently, but digital piracy (due the rise of the Internet and the plummeted costs of personal computers) which is seen as one of the biggest threats to the music industry today. Although Internet piracy can take many forms, one variant, file sharing through peer-to-peer (P2P) networks, is said to have a devastating impact on global CD sales [8]. The very idea behind these



networks is to allow users to share music files with others for free. With the global wide-spread of the personal computer (PC)[9], the increasing pervasiveness of the Internet and broadband connections[10], and the emergence of digital compression technologies, this type of piracy can indeed assume vast proportions.

New technologies provide both opportunities as well as challenges. This article discusses opportunities to tackle organized crime involvement in music piracy and opportunities for the music industry to survive in the digital era. In a first part, the piracy problem facing the contemporary music industry is examined. In this context, the music industry is scanned for its own vulnerabilities and on the involvement of organized music pirates. In a second part, the future for the music industry and organized music pirates in the digital era is examined. Finally, options for the music industry in dealing with piracy in the digital era are proposed. The ideas and findings presented in this article apply only to those countries and regions where Internet pervasiveness is high. If there is no access to the Internet, there is no digital piracy.

2. The music industry and piracy

According to the International Federation of the Phonographic Industry (IFPI), CD sales have been falling continuously (except for a status quo in 2004) from 2,5 billion units in 2000 to 1,8 billion in 2006 (see figure 1). This decline is without doubt hurting the music industry since CD sales still account for a crucial part of the recorded music sales. From 1999 till 2002, global sales dropped 19.8 percent (from US\$38,6 billion to US\$30,9 billion). While the industry was doing better in 2003 (+ 3.3%) and 2004 (+4.7%), global sales dropped again in 2005 (-0.5 percent) and in 2006 (-4.9 percent) (see figure 2) [11].

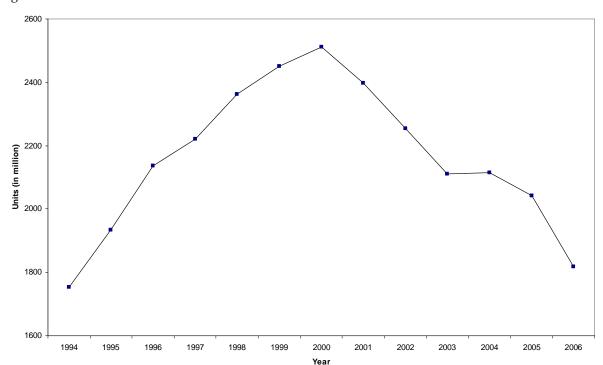


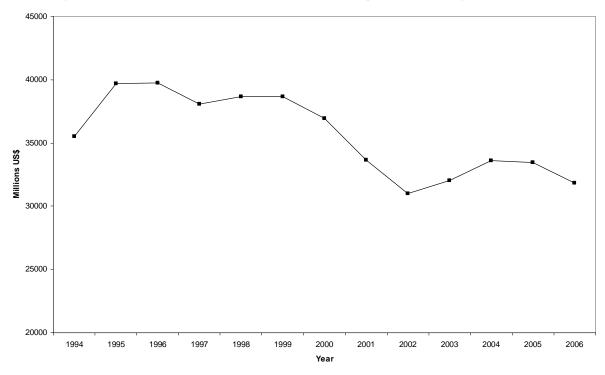
Figure 1: Global CD sales in million units

Source: IFPI, 2004 and IFPI "The recording Industry" 2000-2007: http://www.ifpi.co.uk/content/section_statistics/index.html.



The reasons cited for the disappointing results are numerous. Some simply blame the economy; others point the finger at major labels' practices, including price-fixing by the Big Five[12] making consumers pay too much for their CDs [13]. From 1999 to 2001, the average price of a CD rose 7.2 percent from US\$13.04 to US\$14.19. Simultaneously, new album releases went down as well, making it rather difficult to procure similar revenues to the year before [14]. Oberholzer-Gee and Strumpf also point towards an evolution in how music is distributed (from record stores to discount retailers), the ending of a period of high sales when consumers replaced older music formats with CDs, and the growing competition from video games and DVDs [15].

Figure 2: Global music sales in millions US\$ (IFPI, 2004) Local currency values are converted to dollars at the exchange rate of each year.



According to the music industry, however, physical and digital music piracy is the very culprit for the decline in CD sales. Each year, the IFPI releases a figure indicating the global value of pirated music. In 2005, the IFPI estimated the value of the global traffic of pirate products at US\$4.5 billion [16]. It equals out at about 13.5 percent of the total amount of global legitimate music sales. Not included in this figure, however, is file sharing over peer-to-peer (P2P) networks, which is said to be responsible for a fall in global music sales of 22 percent between 1999 and 2004 [17]. The IFPI distinguishes CD-R piracy, pressed CD piracy, cassette piracy, Internet piracy and new forms of digital piracy such as LAN file sharing, digital stream ripping and mobile piracy. Internet and CD piracy are reported to have the biggest impact on legitimate CD sales [18].

2.1. Internet Piracy

Internet piracy can take many forms. It can involve making available databases of music files on websites or File Transfer Protocol (FTP) sites, up- and downloading files via Internet newsgroups or sharing files via peer-to-peer (P2P) networks. According to the music industry, there is a causal relationship between the growth of P2P networks and the decline



of CD sales [19]. Liebowitz estimates that between 2000 and 2003 online file sharing reduced CD sales by as much as 30 percent, or about \$4 billion annually [20]. A lot of research has been conducted into the effects of Internet piracy on CD sales. The outcome of this research is not unambiguous. Some studies found that file sharing had no or little impact on music sales [21]. In a recent study, Andersen and Frenz found that P2P file-sharing tends to increase rather than decrease music purchasing [22]. Still there are many others who confirm the impact of file sharing on the music sales decline [23]. Others argue that a causal relationship is quasi-impossible to ascertain and piracy figures are often used for their rhetorical impact [24].

According to the data in figure 1 and 2, presented by the music industry, the year 1999 can be considered as a turning point. Although in figure 1 the decline starts in the year 2000 (due to regional dissimilarities), global sales (figure 2) started to drop in 1999. It is in that same year that Shawn Fenning started Napster, a type of P2P network, which would eventually attract as many as 70 million registered users [25]. While other factors (such as the economic climate for example) undoubtedly will influence global music sales, based on the data presented in figure 1 and 2, music industry's claim that P2P file sharing is at least partially responsible for the decline in CD sales seems legitimate.

2.2. CD Piracy

The amount of attention given to physical piracy, such as CD piracy, in literature does not quite correspond to the significance of the problem. All the indications are that the scale of the pirate business is considerable. It is thought that more than one in three of all music discs purchased around the world is an illegal copy. In 2005, the global value of traffic of pirate music products was estimated at US\$4.5 billion. 1.2 billion pirate CDs would have been sold worldwide in that same year [26]. Because the prices for pirated discs are used and not the legal prices, the full economic loss to the music industry is not measured [27].

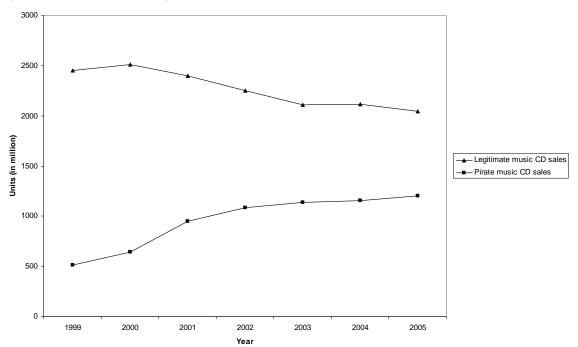


Figure 3: The evolution in legitimate music CD sales and pirate music CD sales

Source: IFPI, 2004; IFPI "The recording Industry" 2000-2007 and IFPI piracy reports 2000-2006: http://www.ifpi.co.uk/content/section_statistics/index.html.



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