Athens Institute for Education and Research
ATINER

ATINER's Conference Paper Series
MED2012-0078

Supply Chain Music Industry and Changing Business Models in Italy

Antonella Ardizzone
IULM University,
Institute of Economics and Marketing,
Via Carlo Bo 8, 20143,
Milan, Italy

Athens Institute for Education and Research
8 Valaoritou Street, Kolonaki, 10671 Athens, Greece
Tel: + 30 210 3634210 Fax: + 30 210 3634209
Email: info@atiner.gr URL: www.atiner.gr
URL Conference Papers Series: www.atiner.gr/papers.htm

Printed in Athens, Greece by the Athens Institute for Education and Research.

ISSN **2241-2891**
4/09/2012

An Introduction to ATINER's Conference Paper Series

ATINER started to publish this conference papers series in 2012. It includes only the papers submitted for publication after they were presented at one of the conferences organized by our Institute every year. The papers published in the series have not been refereed and are published as they were submitted by the author. The series serves two purposes. First, we want to disseminate the information as fast as possible. Second, by doing so, the authors can receive comments useful to revise their papers before they are considered for publication in one of ATINER's books, following our standard procedures of a blind review.

Dr. Gregory T. Papanikos
President
Athens Institute for Education and Research

This paper should be cited as follows:

Ardizzone, A. (2012) "**Supply Chain Music Industry and Changing Business Models in Italy**" Athens: ATINER'S Conference Paper Series, No: MED2012-0078

.

Supply Chain Music Industry and Changing Business Models in Italy

Antonella Ardizzone
IULM University,
Institute of Economics and Marketing,
Via Carlo Bo 8, 20143,
Milan, Italy

Abstract

The music industry is the first media market overcome by the recent technological evolution. This study presents an empirical analysis on the Italian music industry supply chain.
The music industry is a complex system in which many different actors interact. In this system there are suppliers of musical instruments, music schools, authors, singers, recording companies, music publishers, live events organizers and also the suppliers of those electronic devices needed to listen to the music. In this study we calculate the size of each segment in 2009 and the changes over the previous year, identifying and analyzing the key nodes in this system. The final outcome is the estimation of the total value of this media market in Italy.
Italian data show that the music industry makes more money from discotheques, live exhibitions and physical sales. The music market is not only a recording industry but a more complex system, even if historically the recording industry was its most important section,. Thus, a broader analysis of the supply chain sheds light on more general dynamics allowing deeper explanations of trends. The last years "CD crisis" makes clear that recording companies now do not only sell CDs or digital music (niche market), but also give a wide range of services to artists: merchandising, organization of live events, licencing, product placement, management, co-branding, etc. Definitely, above all, the big recording companies (Majors) are changing business models to survive. For small recording companies it is harder and many of them are going out of the business.
Because of its complexity and, above all, the absence of data for too many countries, it is not possible to make the same analysis at a world or European level but we can presume a similar trend is in developed countries.

Keywords: Music industry revenues, supply chain analysis, emerging business models

Contact Information of Corresponding author: antonella.ardizzone@iulm.it.

Introduction

More then the other media markets (publishing, home video, cinema, video games), the recording industry in the last few years has been consumed by the technological change. Digitization of information allows for copying and sharing music in an easier way, with the same quality and without additional costs. Often in contrast with copyright laws, from the demand side, this modified consumers' attitudes towards music. From one side, online piracy is now out of control and it has reached very high levels despite the new laws against it (the so called "graduated response" measures). From the other side, the willingness to pay for music has decreased because of the ease of availability of illegal copies. From the supply side, at the beginning, enterprises in the music industry were only looking at the changing market, trying only to fight piracy. The recording industry is now in a long period of crisis and is seeking different business models. But the recording industry is not the music industry and a deep sector analysis cannot be avoided. The music industry is a broader market where many actors play different roles in different stages of the production chain: musical instruments producers, authors, performers, publishers, recording companies, radio, live concerts organizers, collecting societies, distributors, etc.

The aim of this paper is fourfold: create an original model of the music industry supply chain; estimate the value of the entire supply chain in Italy; identify the more general dynamics of the sector; and discuss the emerging business strategies of the recording companies.

The paper is organized as follows: the first section is a review of the academic literature about the music industry; the second section addresses the definition of the sector boundaries and the production chain; the third section calculates the size of the different stages contained in the model; and the last section concludes with a discussion of general trends and changing business models.

1. Literature review

In the last twenty years and above all since 1999 (from the first Napster service), a lot of economic academic research has been advanced on music from different points of view because of its link with various topics: intellectual property protection, digital piracy, new consumption trends, digital economy, etc. After the digital revolution, experimental economics and empirical investigations also contributed to the analysis of the ongoing transformations. But a systemic analysis of the music sector, like the one proposed in this paper, has not yet been conducted because no data or only partial data are available on the different stages of the production chain, both at a national and international level.

Regarding this study objectives, there are at least four critically important strands of research: sector structure, live exhibitions, piracy and music demand.

Alexander (1994a), in one of the first studies on the recording industry market structure, highlighted the strong market concentration, distinguishing between "Majors" and "Indies", and recognized in promotion and distribution activities the most important barriers to entry. The interaction between technological evolution, causing drops in production costs and market concentration (thanks to the entry of new firms), and subsequent mergers (again increasing the concentration) is the cyclical trend characterizing the sector (Alexander, 1994b; Ramello, 1997; Ramello & Silva, 1999; Handke, 2006; Bishop, 2005; Andersen et al., 2000; Hannaford, 2007;

Ardizzone & Ramello, 2007b). The recording industry is a vertically differentiated oligopoly market (Ramello, 1997), in which a few big competitors sell differentiated products. They do not compete on price (Blank & Greer, 1987) and spend too much in marketing and promotional activities. More recently, Hannaford (2003 and 2007) defined the sector an "oligonomy" to highlight that recording companies are both oligopolists and oligopsonists. On the Italian recording industry market, the Ramello and Silva's study (1999) have defined the structural characteristics and Ardizzone and Ramello's (2005, 2006, 2007a) the more conjunctural changes occurring in the last years. Ardizzone and Ramello (2007b) have also demonstrated the high economic efficiency of Italian Indies. Finally, Brousseau and Feledziak (2006) studied the French music sector (not only recording industry) analyzing authors', composers', performers', publishers', recording companies' and sellers' revenues in detail. They obtained similar results to this study; even if recorded music sales decrease, other markets, especially the live music, increase and thus the recent crisis harmed only the recording industry. Recording companies have to change their business model exploiting in a different way their intermediary role between artists and the public (Brousseau, 2008). This study is based on data collected in annual reports on the Italian music industry (Ardizzone & Barbarito, 2008, 2009, 2010) and a previous study (Ardizzone & Barbarito, 2010).

Concerning the market structure, there is a strand of research on the star system. Rosen (1981) explained there are a few stars earning too much money and a lot of other artists earning too little or have been driven out of the market, regardless of their level of talent. According to Adler (1985), this happens in spite of differences in talent because of network externalities. Similarly, McDonald (1988) proposed a model where future performances depend on past performances. Entertainment markets are typical winner-take-all markets (Frank & Cook, 1995). Some empirical investigations confirm Rosen's theory (Krueger, 2005; Towse, 1999; 2001).

In the second research strand, live exhibitions, Krueger (2005) has shown the decline in the demand for live concerts in the US has been caused by the availability of free music on p2p networks. This result is consistent with Motimer & Sorensen (2007) on the US market and Balducci (2009) on the Italian market. Since live concert revenues increase and physical music sales decrease, according to Courien & Moreau (2005) recording companies, instead of fighting piracy, would vertically integrate live concert organizers, contract better conditions or internalize the promoter activity (Balducci, 2009). But according to Shultz's model (2009), the recording industry without copyrights and performance rights would not have the same level of differentiation and variety of music content.

In the third research strand, digital music piracy, both notional and empirical models reached contradictory results. Contradictions depend on base hypotheses, non-homogeneous data, proxy variables (on sales and downloading), methodologies and objectives. For a review of theoretical models see the Peitz & Waelbroeck (2006). In some cases, studies admit "indirect appropriability" of rents or the capability of firms to capture indirect benefits from illegal copies (Krueger, 2005; Connoly & Krueger, 2006; Liebowitz, 1985; Besen & Kirby, 1989; Bakos & al. 1999; Gayer & Shy, 2006). About complementarity between digital illegal copies and purchased music, Bhattacharjee & al. (2006a; 2006b) claim that file-sharing increases digital sales (but decreases physical sales) and a reduction in piracy could not imply an increase in profits. Piracy seems to harm more stars than other artists (Gopal & al., 2006). If quality of copies increases and costs decrease, a lot of new customers will join the illegal market but they were not consumers because of a lack of willingness to pay (Michael, 2004a; Maffioletti & Ramello, 2004; Ardizzone, 2010).

Empirical models are more contradictory than notional ones. According to Blackburn (2004), Liebowitz (2004, 2006a, 2006b), Peitz & Waelbroeck (2004), Michel (2004b), Zentner (2005; 2006), Rob & Waldfogel (2006) and Stevans & Session (2005), file sharing had a negative impact on sales. According to Oberholzer-Gee & Strumpf (2005; 2007), Maffioletti & Ramello (2004) it had no impact. According to Boorstin (2004), Oberholzer-Gee & Strumpf (2007), Andersen & Frenz (2008) for some users, the impact could be positive.

The last interesting strand of research concerns consumers and demand trends. Empirical investigations have shown that piracy increased price elasticity for physical products (Stevans & Sessions, 2005). Consumers now prefer digital products because of portability, low price and high technological content. Balducci (2009) identified two different demands for music: “high tech lovers”, who only collect illegal music but have no actual musical interest, and “music lovers”, who buy music and tickets for live exhibitions.

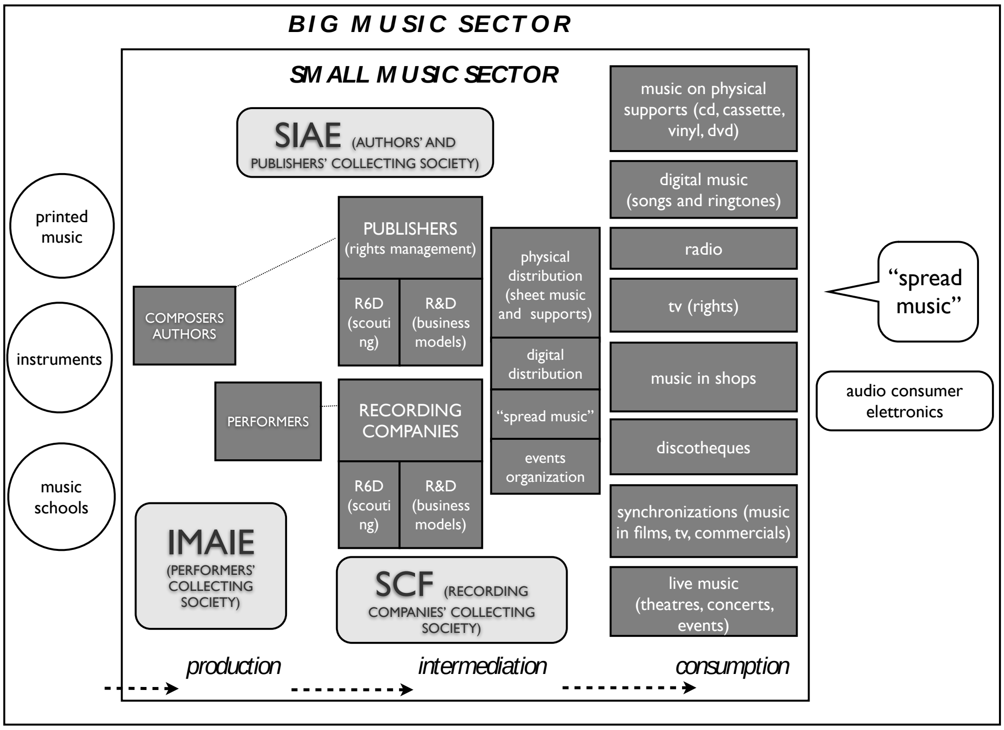
This paper analyzes the results of an empirical investigation of the Italian music industry supply chain to measure the economic dimension of each section and to understand evolutionary trends and changing business strategies.

2. The music industry supply chain

From production to distribution, the music industry supply chain is defined in Figure 1. Other studies on the music industry did not define the same boundaries: rather, on an international level, only the recording industry is considered “the music market”. In this study we broaden the point of view that all the other economic activities would not exist without music or in which music is an important input.

We distinguish between a “big sector” and a “small sector”. The “big sector” subsumes the “small sector” and other complementary economic activities: production of musical instruments, “printed music” (sheet music, books, etc.), education (music schools) and audio consumer electronics (mp3 players, car audio, etc.). The first three activities give inputs to produce music; the last one is functional to listen to music. Inside the “small sector” there are songwriters, composers and music performers (singers and musicians) in the production stage; and publishers (artists and composers’ managers), recording companies (singers’ managers), online and physical distributors and live concert organizers in the intermediation stage. The last stage in the “small sector” is consumption. We distinguished six forms of consumption: music in physical format (CDs, DVDs, etc.), digital music, “spread music”, synchronizations and live concerts. “Spread music” is one listens to when engaged in other recreational activities. In radio, television and discotheque music is considered an important factor of production or the most important factor (“spread music – primary activity”). In shops, shopping malls, bars, gyms and other commercial activities music is a less important input in the purchase process (“spread music – secondary activity”). By “synchronizations” we consume music in commercials and cinema. In the intermediation stage of the “small sector” we also considered copyright and performance rights collecting societies, whose financial flows they give to legal owners are added to the relative stages or consumption forms.

Figure 1 The music industry supply chain



Recording industry is the "core business" of the music industry but also the "bottleneck". The four big Majors (Sony/BMG, Emi, Warner and Universal) collect a cumulative worldwide market share of about 75-80% and control the distribution, realizing scale and scope economies. Historically, there are three entry barriers in the recording industry: distribution costs, promotion costs and star system costs. On the contrary, production and consumption stages are competitive since there are many authors, composers and performers and a lot of consumers (even if some radio and television companies are bigger than others). The small firms in the recording industry (Indies) are typically both publishers and recording companies. They are about one thousand in Italy (Ardizzone & Ramello, 2007b) and they are the real "Schumpeterian's innovators" in the sector, because they often discover and bring out new artists and musical trends (Ramello & Silva, 1999). Competition is not based on price but above all on the ability to have the best artists, since on average only one CD over ten is profitable (Vogel, 1998). This historical centrality of the recording industry is now less strong because of the steady reduction in its economic dimension. Other big independent "distributors" have emerged (for example I-Tunes) and other stages of the productive chain became more profitable (i.e. live concerts).

3. The value of the Italian music industry supply chain

3.1 The "big" sector

Among the three upstream activities ("printed music", musical instruments and education) and the one downstream activity in the "big sector" (audio consumer electronics), "printed music" is the smallest one. This market had a value of only €18 million in 2009 (Dismamusica, 2010) and a quite static trend in the last few years (despite a decrease of 1.7% in 2009). "Printed music" is also a small market in respect to the other European countries, showing a per capita consumption of only €0.30 (about €1.5 in the USA). Since publishers externalize printing and distribution activities, the market is highly concentrated; the first two competitors collect a market share of about 80%. Publishers give to authors and composers a copyright of a minimum of 5% share of the market price (depending on contracts).

The musical instruments market had a value of € 386 million in 2009 (Dismamusica, 2010), steadily increasing over the last years, despite the economic crisis. The most sold instruments in Italy are electric guitars, percussion instruments and classic guitars. Recently, more successful products were high quality (and high price). This market is small in respect to the other European countries.

We were not able to measure the value of the education market. In Italy higher education is given by 57 conservatories and 20 "state-recognized music schools". Basic education is provided by 650 middle public schools (with areas of specialization in music), about 180 local music schools and hundreds of private schools. It is quite troublesome that the last years' data showed an increase in enrollment for short courses and a strong decrease in graduated students (source: Banca dati dell'Alta formazione artistica e musicale).

The downstream activity in the music industry is the audio consumer electronic production. According to GfK, this market in Italy has been in a strong crisis for years, since in 2006 it had a value of more than €1.1 billion while in 2009 about €600 million (-45%). Both "static audio" (hi-fi, amplifiers, loudspeakers, CD readers and home theatre), "portable audio" (mp3 and mp4 readers, radios, etc.) and "car audio" (satellite navigators, car radio, etc.) lost a quarter of their value between 2008 and 2009. This is partly due to the maturity stage of these markets but mostly to the substitution effect with other music devices (mobile phones in primis).

Another market linked to the music sector is the audio devices production market. In Italy a variable percentage of the final price of blank CDs, DVDs, USB memories, hard disks and all the other registration devices (mobile phones, mp3 readers, computers) is paid to the collecting societies to compensate for losses caused by piracy. By law these earnings are strongly increasing and in 2009 were of about €20.5 million (sum of authors' and performers' rights).

3.2 The "small" sector

Physical music sales are not simple to quantify since there are no unambiguous, complete and reliable data sets (Ramello & Silva, 1999; Ardizzone & Ramello, 2005, 2006, 2007a; Ardizzone & Barbarito, 2010). Different sources are available (SIAE, FIMI and Musica&Dischi magazine) but data are not homogeneous. Combining different sources (SIAE[1] and FIMI[2]), we estimate the value of the Italian recording industry, taking into account that recording companies have to endorse copyrights (9% of the wholesalers' price) to authors and publishers through their collecting society and that they contract different royalties with different singers. We multiplied the total amount of licenses given by the Italian collecting society to recording companies times the average price of CDs. To estimate the average price we made a survey on a sample of 8,918 CDs in 6 shops and 4 newsstands. Applying a calculation for dumping factors algorithm to different types of licenses, total sales amounted to €375 million in 2009 (all types of physical supports). The drop in sales was of 25% in

[1] The Italian authors' collecting society (Società Italiana Autori ed Editori).
[2] The Italian recording companies' national association (Federazione Industria Musicale Italiana).

2009 and quite stable in 2008. In the last ten years in Italy sales value and volume dropped by more 60%. Also average price of physical products decreased by 6% from 2008 to 2009 and the number of CDs in CD packs increased.

Digital sales registered an estimated value of €44 millions in 2009 (+13% 2008/2009), following an increasing trend since its birth. We calculated this value adding to the FIMI data the wholesalers' margin (about 30%), the taxes (20%) and the estimated independent producers' market share. But €44 million are only 1/8 of the physical market and thus it is not much for a niche market. Both physical and digital markets are a lot smaller than in the main other European countries, coherently with the IFPI data, ranking the Italian market respectively in fourteenth and ninth position. From digital sales, authors and publishers get a copyright of 8% of the final price, instead recording companies directly contract its performance right with the on line distributor (according to their contracts a percentage is given to the artists). In 2009, streams (Youtube) produced about 1/3 of the single tracks digital sales value (in 2007 it was practically absent).

In the "spread music" consumption we totaled the value generated for the music industry by untraditional methods of consumption: music consumed in ways/places different from home or through hi-fi (radio, tv, discoteques, shops and shopping malls).

Since, for the most part, radios are not conceivable without music, we considered the total turnover of Italian radios in 2009: €371 million (-7.8% in 2008/2009) (AgCom, 2010). We do not add copyrights and performance rights paid to the collecting societies because they are included in this datum. Even if in contraction, the registered reduction represents a relatively good result taking into consideration the economic crisis and the general dropping trend in the advertising market.

Like radios, since discotheques are not conceivable without music, we added to the music business their total turnover. In 2009, the total sales of discotheques amounted to €885 million (-5.2%) (SIAE, 2010). About 10% of this value was paid to authors and publishers by SIAE and 0.2% to performers by SCF[1]. Radios and televisions paid copyrights and performance rights to collecting societies in proportion to their turnover: radios about 5.8% and televisions about 1.4%.

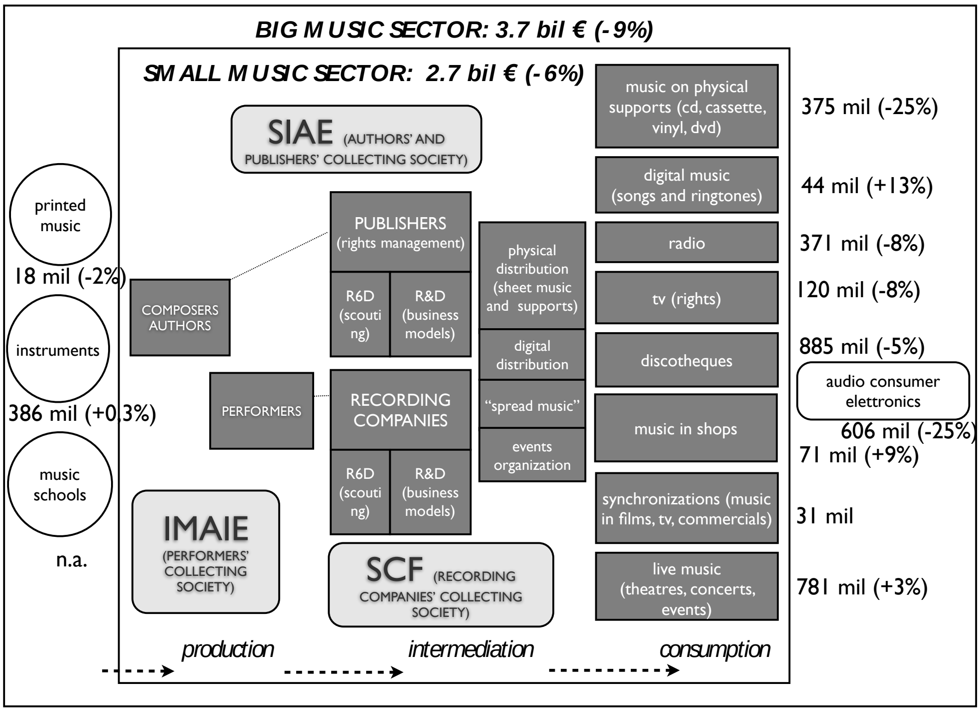
On the contrary, music is not the main input for televisions and shops (bars, restaurants, supermarkets and shopping malls). In these two cases, their contribution to the music industry is calculated summing only copyrights and performance rights paid to collecting societies. In 2009, Italian television companies paid €119.8 million (-8%) (SIAE, 2010) and shops €71.3 million (+8.6%) (SCF, 2010). Mainly shops and GDO in the last few years showed a strong increasing trend in payments.

We estimated "syncronizations" by means of a survey to the main Italian publishers and recording companies. To use music in a commercial or in a film, firms have to contract a remuneration with publishers and recording companies and then pay a variable percentage to the authors' collecting society. The final value in 2009 was €31 million, but this is a conservative estimate.

The last form of consumption is live music. In 2009 the total sales of every kind of live exhibitions in Italy were €780.6 million (+3.4%) (SIAE, 2010). Despite the economic crisis and the average drop in Italian consumption in the last years, this sector showed a good performance mainly because of an increase in the average ticket price and by participation in light music events.

[1] The Italian performers' collecting society (Società Consortile Fonografici).

Figure 2 The final outcome of the Italian music industry supply chain (millions) in 2009 and percentage variations (2009/2008)

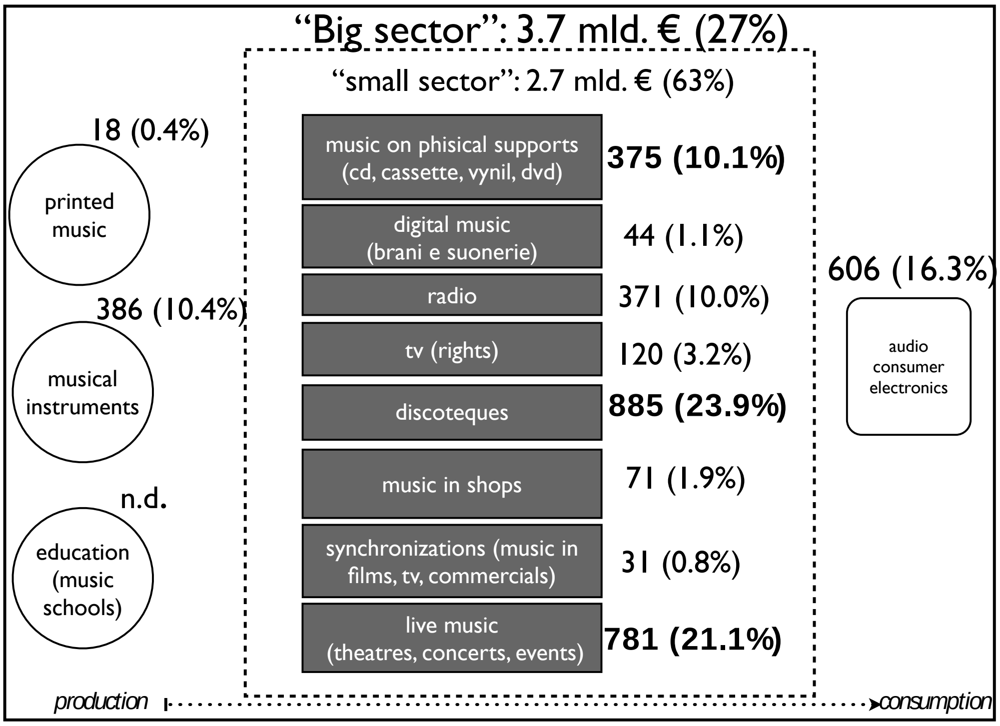


Results and conclusions: the changing market and business models

In 2009, the final value of the Italian music industry supply chain was €3.7 billion (Figure 2). Firstly, this turnover is noteworthy if compared to other media markets: the 2009 television industry had a value of €8.6 billion, publishing industry (newspapers, periodicals and books) of €4.6 (AgCom, 2010), and cinema and home video of €1.3 (IEM, 2011). Secondly, this final turnover showed a decrease of 9% in 2009 and of 8% in 2008, mainly caused by the collapse in consumer electronics and music in physical format. We discovered quite the same scenario prior to the economic crisis: in 2008 all the segments of the value chain were increasing or in a stable trend except for consumer electronics and music in physical format. Therefore, the music industry as a whole is not in such a crisis as is the recording industry.

This study brings out strongly different contributions to the final value from the single stages of the value chain (Figure 3). The "big sector" alone counts for 27% of the total value (1 billion) and the "small sector" for 73%: upstream activities and downstream activities are of residual value in the industry, mainly because of the fall in audio consumer electronic sales. Music sheet market, synchronizations and digital music are only niche markets. Digital music counts only for 1.1% of the total value and thus has far to go to become a pivotal market and cannot compensate for the losses in the physical music supports market. Even if considered the "core business" of the music industry, the recording industry (its physical sales) counts for 10% total value, as well as musical instruments market and radio. The most valued markets are discotheques (24%), live exhibitions (21%) and "spread music" (15% without discotheques and 39% with discotheques). Discotheques and live music markets alone generate a total value more than double that of the physical music sales.

Figure 3 Percentage shares of the different activities in respect to the total value of the music industry, 2009



Recording companies' strategies are changing because of changing market conditions. Firstly, they are trying to earn as much as possible from performance rights (and world data confirm this general trend). Secondly, they are vertically integrating in the live music market (Sony and Warner in 2009 bought the Italian biggest concert organizers). In general, they are adopting a broader artist management strategy: tv appearances, live exhibitions, promotions, merchandising, licencing, product placement, management, co-branding, etc. They can no longer only sell CDs. Again, international data confirm these trends. Thirdly, they did not find new and effective business models in digital music, paying a penalty for the strong delay before finally entering the market. Advertising models (free streaming and downloading in exchange for commercials) and agreements with telco firms didn't give the expected results. Fourthly, because of collapsing turnover, they are investing less and less in new artists, leaving talent scout activity to talent shows. Finally, they are carrying on the lobbying activity toward governments to obtain more severe and effective laws against digital piracy. Recently "graduated response measures" have been approved in many countries but results are not yet clear. Small recording companies and publishers are more in trouble than Majors, because of less economic robustness (but often more efficiency). They frequently work in niches but stable music markets, even since the decreasing total market value, a lot of them are going out of business. Large businesses are also merging to increase their competitiveness and profitability (Universal Music and Sony/BMG are merging with Emi Music).

Two last considerations: first, financial flows of copyrights and performance rights generated by the different forms of consumption highlighted the existence of too many and too different kinds of rights. A simplification could help the market; second, music teaching in Italian public schools should be increased for its social and cultural value. This measure could also boost music consumption.

References

Adler, M. (1985). "Stardom and Talent". *American Economic Review* 75: 208–212.

AgCom (2010). *Relazione annuale*. Available at http://www.agcom.it/Default.aspx?message=viewrelazioneannuale&idRelazione=19 (11 April 2012).

Alexander P. J. (1994a). "Entry Barriers, Release Behavior, and Multi-Product Firms in the Music Recording Industry". *Review of Industrial Organization* 9: 85-98.

Alexander P. J. (1994b). "New Technology and Market Structure: Evidence from the Music Recording Industry". *Journal of Cultural Economics* 18: 113-123.

Andersen B., M. Frenz (2008). "The Impact of Music Download and P2P File-Sharing on the Purchase of Music: A Study for Industry Canada". Working Paper, Birbeck, University of London.

Andersen B., Z. Kozul-Wright & R. Kozul-Wright (2000). "Copyrights, Competition and Development: The Case of the Music Industry". UNCTAD Discussion Paper n. 45.

Ardizzone A. (2010). "Music piracy: recording companies against p2p networks". In Yorgo Pasadeos (ed.) *Advances in Communication and Mass Media Research*, ATINER, 2010

Ardizzone A., L. Barbarito (2008). "Economia della musica in Italia, Rapporto 2010", Fondazione Università IULM.

Ardizzone A., L. Barbarito (2009). "Economia della musica in Italia, Rapporto 2010", Fondazione Università IULM.

Ardizzone A., L. Barbarito (2010). "Economia della musica in Italia, Rapporto 2010", Fondazione Università IULM.

Ardizzone A., L. Barbarito (2010). "Il settore musicale in Italia". *L'Industria* 3: 423-458.

Ardizzone A., Ramello G.B. (2005). "Musica registrata". In: A.A. V.V. (Ed.), *L'Industria della Comunicazione in Italia*. Guerini e Associati, Milano.

Ardizzone A., Ramello G.B. (2006). "Musica registrata". In A.A. V.V. (Ed.), *L'Industria della Comunicazione in Italia*. Guerini e Associati, Milano.

Ardizzone A., Ramello G.B. (2007a). "Musica registrata". In A.A. V.V. (Ed.), *L'Industria della Comunicazione in Italia*, Guerini e Associati, Milano.

Ardizzone A., Ramello G.B. (2007b). "La produzione di musica registrata in Italia". In A.A. V.V. (Ed.), *L'Industria della Comunicazione in Italia*, Guerini e Associati, Milano.

Bakos, J. Y., Brynjolfsson, E., G. Lichtman (1999). "Shared Information Goods". *Journal of Law and Economics* 48: 117-156.

Balducci F. (2009). "Music or High-tech Lovers? Inferring into the Determinants of Music Consumption". *Rivista Italiana degli Economisti* 2.

Banca dati dell'Alta formazione artistica e musicale (2010). Available at http://statistica.miur.it/scripts/AFAM/vAFAM1.asp (11 April 2012).

Besen S., S. N. Kirby (1989). "Private Copying, Appropriability, and Optimal Copying Royalties". *Journal of Law and Economics* 32: 255-280.

Bhattacharjee S., R.D. Gopal, K. Lertwachara, J.R. Marsden (2006a). "Whatever happened to Payola? An Empirical Analysis of Online Music Sharing". *Decision Support Systems* 42(1): 104-120.

Bhattacharjee S., R.D. Gopal, K. Lertwachara, J.R. Marsden (2006b). "Consumer Search and Retailer Strategies in the Presence of Online Music Sharing". *Journal of Management Information Systems* 23(1): 129-159.

Bishop J. (2005). "Building International Empires of Sound: Concentrations of Power and Property in the "Global" Music Market". Popular Music and Society 28(4): 443 – 471.

Black M. & D. Greer (1987). "Concentration and Non-price Competition in the Recording Industry". *Review of Industrial Organization* 9: 85-98.

Blackburn D. (2004). "On-line Piracy and Recorded Music Sales". Job Market Paper, Department of Economics, Harvard University.

Boorstin E. S. (2004). "Music Sales in The Age of File-sharing". Senior Thesis, Department of Economics, Princeton University.

Brousseau E. (2008). "The Economics of Music Production: The Narrow Paths for Record Companies to Enter the Digital Era". *Communications & Strategies* 72: 131.

Brousseau E., B. Feledziak (2006). "Etude sur l'Economie des Droits d'Auteurs dans le Domaine de la Musique". Etude réalisé pour le Ministère de la Culture et de la Communication.

Connolly M., A. B. Krueger (2006). "Rockonomics: The Economics of Popular Music". In V. Ginsburgh and D. Throsby (eds.) *Handbook of the Economics of Arts and Culture*, Amsterdam, Elsevier.

Curien N., F. Moreau (2005). "The Music Industry in the Digital Era: Towards New Business Frontiers?", Working Paper, CNAM, Paris. Available at http://gdrtics.u-paris10.fr/pdf/ws/2005-06_2/CurienMoreau2.pdf (31 march 2012).

Dismamusica (2010). Dati di mercato. Available at http://www.dismamusica.it/index.php/datidimercato/dati-2008/102 (11 April 2012).

FIMI (2010). Comunicato stampa del 17/02/2010. Available at http://www.fimi.it/dett_ddmercato.php?id=49 (11 April 2012).

Frank, R.H., P.J. Cook (1995). *The Winner-Take-All Society*. The Free Press, New York.

Gayer A., O. Shy (2006). "Publishers, Artists and Copyright Enforcement". *Information Economics and Policy* 18(4): 374-384.

Gopal R.D., Bhattacharjee S., Sanders G. L. (2006). "Do Artists Benefit from Online Music Sharing?". *Journal of Business* 79(3).

Handke C. (2006). "Plain Destruction or Creative Destruction? Copyright Erosion and the Evolution of the Record Industry". *Review of Economic Research on Copyright Issue* 3(2): 29-51.

Hannaford S. (2003). "Oligonomy defined". *Oligopoly Watch*. Available at http://www.oligopolywatch.com/2003/08/04.html (20 March, 2012).

Hannaford S. (2007). *Market Domination, the Impact of Industry Consolidation on Competition, Innovation and Consumer Choice*. Praeger Publishers.

IEM (2010) (eds.). *L'industria della comunicazione in Italia – tredicesimo rapporto*. Fondazione Rosselli. Available at http://culturaincifre.istat.it/sito/varie/2011_XIII_rapporto_IEM.pdf (11 April 2012).

Krueger A. B. (2005). "The Economics of Real Superstars: The Market for Rock Concerts in the Material World". *Journal of Labor Economics* 23(1).

Liebowitz (2005). "MP3s and Copyright Collectives: A Cure worse than the Disease?". In L. Takeyama, W. Gordon, R. Towse (eds.), *Developments in the Economics of Copyright: Research and Analysis*. Edward Elgar, Cheltenham 37-59.

Liebowitz S. (1985). "Copying and Indirect Appropriability: Photocopying of Journals". *Journal of Political Economy* 93: 945-957.

Liebowitz S. J. (2002). "Retinking Network Economy". *CESifo Economic Studies* 51(2-3): 435-473.

Liebowitz S. J. (2004). "Will MP3 downloads Annihilate the Record Industry? The Evidence so Far". In *Advances in the Study of Entrepreneurship, Innovation, and Economic Growth* 15: 229-260.

Liebowitz S. J. (2006a). "File-Sharing: Creative Destruction or just Plain Destruction?". *Journal of Law and Economics* 49: 1-28.

Liebowitz S. J. (2006b). "Economists Examine File-Sharing and Music Sales". In G. Illing and M. Peitz (eds.) *Industrial Organization and the Digital Economy*. Cambridge: MIT Press.

MacDonald, G. (1988). "The Economics of Rising Stars". *American Economic Review* 78: 155–166.

Maffioletti A., G.B. Ramello (2004). "Should We Put Them in Jail? Copyright Infringement, Penalties and Consumer Behaviour: Insights from Experimental Data". *Review of Economic Research on Copyright Issues* 1: 81-95.

Maffioletti A., G.B. Ramello (2004). "Should We Put Them in Jail? Copyright Infringement, Penalties and Consumer Behaviour: Insights from Experimental Data". Review of Economic Research on Copyright Issues 1: 81-95.

Michel N. (2004a). "Internet File-sharing: The Evidence So Far and What It Means for the Future". Backgrounder, No 1790, The Heritage Foundation.

Michel N. (2004b). "The Impact of the Digital Age on the Music Industry: a Theoretical and Empirical Analysis". Working Paper (PhD Dissertation), University of New Orleans and The Heritage Foundation.

Mortimer J., Sorensen A. (2007). "Supply Responses to Digital Distribution: Recorded Music and Live Performances". *American Economic Association annual papers*, Stanford working paper. Available at http://www.aeaweb.org/annual_mtg_papers/2006/0107_0800_0702.pdf (31 March 2012).

Oberholzer-Gee F., K. F. Strumpf (2005). "The Effect of File Sharing on Record Sales: An Empirical Analysis". Working Paper, Harvard Business School and the University of North Carolina at Chapel Hill.

Oberholzer-Gee F., K. F. Strumpf (2007). "The Effect of File Sharing on Record Sales: An Empirical Analysis". *Journal of Political Economy* 115: 1-42.

Peitz M., P. Waelbroeck (2004). "The Effect of Internet Piracy on CD Sales – Cross Section Evidence". *Review of Economic Research on Copyright Issues* 1: 71-79.

Peitz M., P. Waelbroeck (2006) "Piracy of Digital Products: A Critical Review of the Theoretical Literature". *Information Economics and Policy* 18 (4):449-476.

Ramello G. B (1997). "Copyright e Pirateria nel Mercato Fonografico". *L'Industria* 18: 317-339.

Ramello G. B., Silva F. (1999). *Dal Vinile a Internet. Economia della musica tra tecnologia e diritti*. Edizioni della Fondazione Giovanni Agnelli, Torino.

Rob R., J. Waldfogel (2006). "Piracy On The High C's: Music Downloading, Sales Displacement, and Social Welfare In A Sample Of College Students". *Journal of Law and Economics* 49: 29-62.

Rosen, S., (1981). "The Economics of Superstars". *The American Economic Review* 71(5): 845-858.

SCF (2010). Bilancio di esercizio 2010.

Schultz M. F. (2009). "Live Performance, Copyright, and the Future of the Music Business". *University of Richmond Law Review* 43: 2.

SIAE (2010). *Rapporto Musica 2010*. Available at http://www.siae.it/edicola.asp?link_page=Siae_ArchivioDati.htm&open_menu=yes#doc (11 April 2012).

Stevans L., D. Sessions (2005). "An Empirical Investigation into the Effect of Music Downloading on the Consumer Expenditure of Recorded Music: A Time Series Approach". *Journal of Consumer Policy* 28(3): 311-324, 09.

Stevans L., D. Sessions (2005). "An Empirical Investigation into the Effect of Music Downloading on the Consumer Expenditure of Recorded Music: A Time Series Approach". *Journal of Consumer Policy* 28(3), 311-324, 09.

Towse R. (1999). "Copyright, Incentives and Performers' Earnings". *KYKLOS* 52(3): 369-390.

Towse R. (2001). *Creativity, Incentive, and Reward: An Economic Analysis of Copyright and Culture in the Information Age*. Cheltenham, UK, Edward Elgar Publishing.

Towse, R. (1999). "Incentivi e redditi degli artisti derivanti dal diritto d'autore e diritti connessi nell'industria musicale". In Silva F. & Ramello G. (ed.) (1999) Dal vinile ad Internet, Edizioni Giovanni Agnelli.

Vogel H. (1998). *Entertainment Industry Economics*. Cambridge, MA: Cambridge University Press.

Zentner A. (2006). "Measuring the Effect of Music Downloads on Music Purchases". *Journal of Law and Economics* 49.

Zentner, A. (2005). "File Sharing and International Sales of Copyrighted Music: An Empirical Analysis with a Panel of Countries". *Topics in Economic Analysis & Policy* 5(1): 21. http://www.bepress.com/bejeap/topics/vol5/iss1/art21 (24 March 2012).