



---

THE INFLUENCE OF AWARDS ON THE DEMAND FOR RECORDED MUSIC  
MASTER THESIS (CULTURAL ECONOMICS & ENTREPRENEURSHIP)

ZUZANA JURKOVIČOVÁ, 371379

SUBMITTED: 9TH JUNE 2014

SUPERVISED BY DR. C. W. HANDKE

SECOND READER: DR. A. MIGNOSA

## **ABSTRACT**

The role of expert opinion is well established in the cultural economics literature. It seems that the role of experts and critics are indeed multifaceted and inherent in the sole characteristics and nature of creative content. Essentially, critical reviews, expert opinions as well as awards serve as key informants to reduce consumers' uncertainty. Even though literature on the role and effect of expert opinion has been researched on mostly in the field of cinema, studies related to awards are rather limited. There have even been fewer studies carried out to evaluate the effect of awards and prizes in the popular music industry. As such, this paper analyses the effect of music awards and nomination on subsequent chart performance using a dataset of music albums and singles that were nominated for awards between 2008 and 2013 in the United States. Furthermore it empirically investigates the impact of three different music awards on demand for music recordings. This study distinguishes between two types of awards based on jury formation.

In order to arrive at a conclusion, the thesis incorporates an interrupted time series analysis; a segmented regression in particular. The analysis indicates, that a nomination or winning a prize has a weak positive effect on successive chart performance. The precise effect differs depending on the particular prize. The effect of nomination or winning of awards decided by a jury of experts generally outweighs the effect of awards decided by a general public. Thus these results are consistent with the word-of-mouth effect theories.

**KEY WORDS:** Awards, expert opinion, consumer choice, the recorded music industry

## **ACKNOWLEDGEMENT**

I would especially like to thank to Dr. Christian Handke for consistently devoting his valuable time to coach me throughout the writing of this thesis. His advice and encouragement were highly appreciated. Further acknowledgment goes to Abdul-Razak Tahiru, a recent graduate of MA Cultural Economics and Entrepreneurship at Erasmus University of Rotterdam for his time to contribute towards my thesis. His efforts and inputs contributed to the successful writing of this thesis.

## **TABLE OF CONTENTS**

<b>1 INTRODUCTION</b>	<b>6</b>
1.1 RESEARCH GAP	6
1.2 MOTIVATION	8
1.3 OBJECTIVES OF THE RESEARCH	8
1.4 STRUCTURE OF THE RESEARCH	9
1.5 <u>DEFINITIONS OF TERMS</u>	10
1.5.1 THE RECORDED MUSIC INDUSTRY	10
1.5.2 THE AMERICAN MUSIC AWARDS	11
1.5.3 MTV VIDEO MUSIC AWARDS	12
1.5.4 GRAMMY AWARDS	13
1.5.5 BILLBOARD CHARTS	13
<b>2 THEORETICAL BACKGROUNDS</b>	<b>16</b>
2.1 CONSUMERS' PREFERENCES AND CREATIVE CONTENT	16
2.1.1 SEARCH-EXPERIENCE-CREDENCE GOODS PARADIGM	16
2.1.2 SEARCH-EXPERIENCE-CREDENCE GOODS PARADIGM IN CONTEXT	17
2.2 EXPERT OPINION AS A SOURCE OF INFORMATION	20
2.3 EXPERT OPINION AS A SIGNAL OF QUALITY	24
2.4 SUMMARY	27
<b>3 RESEARCH METHODOLOGY</b>	<b>28</b>
3.1 RESEARCH UNIT	28
3.2 SAMPLING	28
3.3 TIME SPAN OF THE RESEARCH	30
3.4 <u>TOWARDS THE MEASUREMENT</u>	31
3.4.1 STATISTICAL METHODS AND TESTS	31
3.4.2 DEPENDENT VARIABLES	33
3.4.2.1 DEFINITION OF VARIABLES	34
3.4.3 INDEPENDENT VARIABLES	34
3.4.4 SUMMARIZING DIFFERENCES IN THE SAMPLE	34
3.4.4.1 DEFINITION OF VARIABLES	35
3.4.5 EXPECTATIONS	37
3.4.6 DATA COLLECTION	38
3.4.7 DATA PROCESSING AND REPORT	38

<b>4 ANALYSIS OF RESULTS</b>	<b>40</b>
4.1 OVERVIEW OF THE SAMPLE	40
4.2 CHARACTERISTICS OF THE SAMPLE AND ITS COMPARISON	41
4.3 <u>EFFECTS OF AWARDS ON CHART PERFORMANCE</u>	42
4.3.1 DESCRIPTIVE STATISTICS: PRE AWARD AND POST AWARD PERIODS AND CHART PERFORMANCE	42
4.3.2 SEGMENTED REGRESSION ANALYSIS	44
4.3.4 SEGMENTED REGRESSION ANALYSIS: AMA/VMA VS. GRAMMY	49
<b>5 CONCLUSIONS AND RECOMMENDATION</b>	<b>52</b>
5.1 CONCLUSIONS	52
5.2 LIMITATIONS AND RECOMMENDATIONS	54
BIBLIOGRAPHY	56

## **1 INTRODUCTION**

In the United States only, the current list of music awards count up to 91 and perhaps more. Some of them are rather marginal, however a few enjoy a considerable amount of attention in the media. Award ceremonies are long awaited events for viewers as well as players in an industry. Some see awards as a necessary industry acknowledgment and recognition of high creative standards and achievement. Others perhaps see them as a distraction from what really matters. For winners, there is definitely prestige attached with going home with a golden statute. Also, in music business the Grammy finalist year after year represent the most artistically impressive music records, technological proficiency and overall excellence. The importance of such prestige and peer recognition has been long established. Especially the symbolic aspect bestowed upon Grammy winners provides great opportunities in the future. It is believed that awarded artists secure new contracts easier. Prominent awards bring opportunities for producers as well. Apparently, the quote “this is cool, they have Grammy winners here” is a good strategy to attract new talent for a label. Also, the potential of the awards as a marketing tool has been long proven. Labels such as “Grammy winner” or “Grammy nominee” have been used as advertising strategies for many decades. Thus, it seems that winning a major industry awards has been an arbiter of commerce as well as a signal to a certain level of legitimacy and recognition.

The important question to ask however is, how impressed the consumers are with such awards? Are consumers concerned with artistic values that are deeply emphasized by experts? Or do they rather conform to the masses and seek for more conventional values and entertainment? Some might be convinced that people rely on recommendations of friends or reviewers they trust. This might be somebody who is closer to own tastes and preferences.

Furthermore, the controversy and criticism around the objectivity of juries across many fields of creative industries have been prominent. One might argue, that the golden statue is increasingly becoming nothing more than a shiny paperweight. Does it really matter then who won?

### **1.1 RESEARCH GAP**

Theoretical work in cultural economics has long been concerned with different roles of experts, critics and awards in cultural and creative industries. The importance of these roles is well established in the field and it is extensively covered in academic literature. Several handbooks (Ginsburgh & Throsby, 2013; Towse, 2011; Caves, 2000; Throsby, 2001;

Towse, 2010; Ginsburgh & Throsby, 2006) on cultural economics also discuss the issue to some extent. Also, a handful of texts in media studies (Vogel, 2011; Alexander, et al., 2004; Greco, 2000), a close cousin to creative and cultural studies, have touched upon some of the implications of the subject matter. It seems that the roles of experts' and critics' opinion are indeed multifaceted and inherent in the sole characteristics and nature of creative content. The most extensive accounts on awards, prizes and their economic impact could be found in the most recent Handbook of the Economics of Art and Culture (English, 2013). The relative chapter covers the most important aspects of the phenomena; the relationship between prizes and commerce and the relationship between prizes and prestige. In the recent decade, literature on impact of critique and expert opinion on market performance has been growing, especially in the field of cinema (Gemser et al., 2007; Reinstein & Snyder, 2005; Basuroy et al., 2003; Eliashberg & Shugan, 1997), theatre (Boorsma & Maanen, 2010; Urrutiaguer, 2002; Hirschman & Pieros, 1985) and the publishing industry (Clement et al., 2007; Sorensen, 2007).

Even though the literature on the role and effect of expert opinion have been mostly researched on, the studies related to awards are rather limited. The very few that have been done are centred around the effect on winning artist's works and its face in the marketplace. Such studies have been carried out in fictional literature (Ashworth et al., 2010), movies (Ginsburgh, 2003) and classical music (Ginsburgh & Ours, 2003). Furthermore, the differences in jury formation are also rarely addressed in academic literature. Most of the research focuses on industry awards such as the Oscars' in cinema; Brokers Prize in literature or Grammy's in popular music; underestimating the potential of consumer choice awards; such as the American Music awards. The jury of the former consist of professional experts, while the later reflects consumers' preferences. While not considering awards and prizes as such, Holbrook (1999) addresses differences between consumers' choice and experts' choice in motion pictures. Also, Haan et al. (2005) investigate, who is a better judge in quality, experts or public in the Eurovision song contest.

With respect to the popular music industry, studies revolving around issues such as copyright, piracy and related legal issues dominated the research. However, empirical studies on awards in this industry are lagging behind. There has been almost no systematic research undertaken to evaluate the effect of awards, prizes and rewards and/or nomination on demand for individual popular music tracks. Watson and Anand (2006) however address the influence of Grammy awards in the music industry. Their approach focuses on the establishment of associated prestige and influence on canon formation in popular

music. They conclude that the Grammy awards have had a tremendous influence on popular choice. More so, various factors that can influence the success of music albums have been the object of several studies relating to this sector of creative industries. These include the phenomenon of superstardom (Rosen, 1981; Adler, 1985; Chung & Cox, 1994; Crain & Tollison, 2002); the effect of initial debut ranking (Strobl & Tucker, 2000); the appearance on ranked lists (Bradlow & Fader, 2001); the influence of radio airplay (Montgomery & Moe, 2000) and most recently the effect of online downloading and digital sharing (Bhattacharjee et al. 2005-2007).

In a nutshell, it can be seen that fewer (if any) studies have been identified in the area of awards and prizes in the popular music industry. Therefore, a study investigating effects of awards and/or nomination on demand for music records will contribute to a deeper understanding and knowledge of the phenomena in this respect.

## 1.2 MOTIVATION

The research undertaken in this thesis is very interesting for me personally. Throughout my studies at the Erasmus University of Rotterdam I have been interested in the role of experts and critics appraisal with respect to creative and cultural industries. Throughout the master program, the question of quality, its definition, importance of thereof as well as who ultimately decides came up several times in discussions. This has given me the opportunity to deepen my understanding of this phenomenon. As a result, I wrote a couple of relatively successful essays; one with general focus, another with attention to live performances. Therefore, this master thesis gives me a great opportunity to take a step further and explore the influence of awards in the recorded music industry.

## 1.3 OBJECTIVES OF THE STUDY

The purpose of this study is to examine the effect of awards on the demand for music records, especially in the period from 2008 till 2013 in the recorded music industry in United States of America.

The nature and impact of music awards and recognition are very broad and can be studied from many angles. The one taken in this study is that of music recordings; music singles and music albums in particular. Moreover, awards as a form of recognition is interpreted with regards to its impact on the success of music records. Traditionally, rankings are the standards to measure success in a number of domains, for instance music, movies, books, sports and academics (Bhattacharjee et. al 2007; Sorensen, 2007). In the



case of music industry, rankings and the longevity on the charts are important indicators of a music recordings' performance and popularity. Therefore, the Billboard Chart serves as a proxy of success in this study.

Thus the main research question is:

**To what extent do music awards and nominations in the recorded music industry influence subsequent chart performance?**

Furthermore, this thesis examines whether the impact of consumers' choice awards differs from those of experts' choice. Also the differences between the consumers' choice and experts' choice awards will be taken into consideration.

A deductive approach was chosen for the research design in this study. The study starts with a general investigation and proceeds to more specific investigation into the recorded music industry. In order to answer the research question, it is necessary to start by answering the following sub-questions:

1. What is the role of awards in creative industries?
2. How do different awards influence consumer behaviour?

Subsequently, several hypotheses are formulated to answer the main research questions. In order to arrive at conclusions, relevant statistical tests are carried out. These mainly include paired sample t-test and segmented regression analysis of interrupted time series. Thus, by answering the research question the study aims at contributing towards the understanding of role of awards in the recorded music industry as well as its influence on the demand for music records.

#### 1.4 STRUCTURE OF THE RESEARCH

The first chapter of this thesis is the introduction. This is where the research question as well as all related sub-questions is presented. Also in this section, basic characteristics of research design are stipulated. Furthermore, related terminologies are defined and conceptualized to provide the dimension chosen for the research.

Chapter two consists of the review of associated literature. Firstly, theoretical background on some characteristic features of creative content is highlighted. This section also points out some of the relevant characteristics with respect to the recorded music industry. Secondly, the theories on superstar effects and informational cascades and their subsequent impact on consumers' behaviour are presented. Also, various literatures on the role of critique and experts' opinion are systematically presented to provide a framework for the thesis.

Furthermore, the method used to carry out the research is explained in chapter three. This is where variables to measure the impact of award on the demand for music records are established and basic hypotheses are constructed in order to arrive at a conclusion of the research. Also, all methods used for data collection for this research are presented in this section.

Chapter four consists of the findings of the research. This is where the output of analysis based on the primary data is analysed by the use of graphs, tables and charts to provide a clearer picture of the effects of awards on the demand for selected music singles and albums.

Conclusions and recommendations supplement the thesis in chapter five. This is where it is clarified whether the theories explained earlier conform to the results of the analysis or otherwise. Finally, some limitations and recommendations are presented to help future researches in this field.

## 1.5 DEFINITIONS OF TERMS

### 1.5.1 THE RECORDED MUSIC INDUSTRY

According to Vogel (2011), music is the most fundamental of all entertainment industries. Conolly and Krueger (2006) agree the idea and explain that that popular music is indeed an important element in cultural industry. This is because; even before the invention of recording technologies, music has been a part of every level of society. Hence, the emotional and social aspects of its consumption are of great importance. Moreover, transformation in the industry contributed to some political, economic and cultural changes (Peterson, 1990). In literature, popular music has been characterized as music that has a wide following, produced by contemporary artists and producers as well as does not require public subsidy (Conolly & Krueger, 2006). This naturally leaves out classical music and thus includes genres such as rock and roll, pop, jazz, rap, hip-hop, rhythm and blues and many others. The principal task of companies operating in the music industry is recording

and selling of music albums and singles (Rothenbuhler & McCourt, 2004; Strobl & Tucker, 2000).

The structure of the industry originated in North America and is largely followed in the rest of the world. Also, the United States has been long accounted for large proportions of the world's recorded music business. For many years, the music industry consisted of two components: the concert industry and the recorded music industry. Since 80's and 90's mainly due to the CD's sales, the recorded music industry has become the most dominant in terms of revenues and visibility (Koster, 2011). During 90's and 00's, the music industry underwent significant changes as a result of software applications that tipped this industry into a full-blown crisis of reproduction (Leyshon, 2001). The physical product has been replaced by digital product, which can be distributed via the Internet. One of the consequences of this development; the rise of piracy has threatened the position of many record labels. It has been argued, that illegal downloading dwarfed the legal sale of recorded music in both physical and digital formats. However, it seems that other factors also contributed to the downturn in the industry. These include changing tastes, rise of entertainment alternatives such as DVD's, video games; cell phones and the Internet itself compete for disposable consumers' income and time (Hracs, 2012).

Despite the sudden drop of 44% in sales of physical records, the industry improved its position by joining the digital world. Contracts with organizations that provide music-downloading services, Apple in particular, earned the industry 1.7 billion dollars in digital music downloading in 2007 (Koster, 2011). Nowadays, the recorded music industry is fast changing, dynamic and optimistic (IFPI, 2014). According to the latest report compiled by the International Federation of Phonographic industry (IFPI), the US market continued to stabilize in 2014. This is mainly due to increasing demand for music streaming services. All in all, the digital industry revenue grew to 5.9 billion US dollars, which accounted for 39% of its total income. Revenues from subscription services grew by 51.3% since 2013, reaching approximately 1 billion US dollars. However, the digital download model remains the key revenue stream (67% of total digital revenues). Nevertheless, physical music sales still account for a major proportion of industry revenues. It seems thus, that the recorded music industry is of economic importance.

### 1.5.2 THE AMERICAN MUSIC AWARDS

The American Music award is an annual award ceremony that takes place in the fall of every year. The goal of this award is to celebrate contemporary music artists. The

American Music Award bases its nomination on sales and airplay as compiled by SoundScan (Martens, 2009). Since 2010, the voting public then chooses all winners (Sinha-Roy, 2013). All records, singles as well as albums published between December the previous year to September the current year are eligible for a nomination. The poll takes place annually online, on major social media websites (Dick Clark Publications, Inc., 2014). The voting system for the award is not restricted to one vote per voter. On the contrary, voters can cast their vote multiple times during the “voting window” time period. Traditionally, the voting window is open for a month during nomination period; from October to November every year. All results are revealed during the “American Music Awards” ceremony that is broadcasted live at the end of November each year.

The award currently lists 22 categories that are heavily focused on artists rather than music recordings. Nevertheless, 4 categories are focused on albums. Unlike, the industry driven Grammy award that rewards “the best”, the American Music Awards rewards “favourite” artists and albums. Thus, the American Music Awards is rather a reflection of popularity and recognizes the best selling artists and music albums. In other words, the American Music Awards is market oriented. Also, the voting system and results is fan based rather than quality based. Therefore, it could be inferred that albums nominated for this award receive a considerable amount of popular recognition. Such popular recognition is reflected in higher sales and longer survival on charts.

### 1.5.3 MTV VIDEO MUSIC AWARD

The MTV Video Music Award (commonly abbreviated as VMA) is an annual ceremony that traditionally takes place at the end of the summer; in the beginning of September. The award is presented by a cable channel MTV and honours the best music videos. The nomination and voting system is fairly similar to the American Music Awards. Producers and executives of the music channel choose all nominated artists and music videos. Later on, a public decide all the winners. Similarly to the American Music Awards, the MTV video award’s voting system utilizes online and social media (Viacom, Inc.). Traditionally, the voting window is open for a month during the nomination period; from July to August every year. The ceremony aims at drawing attention to young viewers and is often called the “Oscar for youth”. Its targeted audience is young teenagers and 20-something audience. Its ability to draw attention of the audience has been the subject of criticism. This is due to its scandalous reputation and controversial acts of performing artists (Elliott, 2004). The ideology of the show rests upon entertainment values and promotional activities of its

sponsors as well as performing celebrities. In this sense, the MTV Video Music Award celebrates commercialism and popular culture. Therefore it could be inferred that albums nominated for this award receive a considerable amount of media attention. Such attention is reflected in higher sales and hence, longer survival on charts.

#### 1.5.4 GRAMMY AWARD

The Grammy award is presented by the National Academy of Recording Arts and Sciences of the United States to honour outstanding achievements in the music industry. On the contrary to AMA's and MTV's, the Grammy aims to celebrate artistic merits of the phonography industry. The award is based on peer recognition rather than album sales and chart positions (The Recording Academy, 2014). The association was founded in 1957 to reward musicians on artistic level. It is a professional organization consisting of "creative personnel" such as recording artists, conductors, songwriters and engineers, excluding anybody associated with the music business (Watson & Anand, 2006). The Academy consists of eleven voluntary committees, two of which overlook the nomination and voting for the Grammy award. Each year labels submit eligible entries for consideration. Subsequently, more than 100 Academy members vote in several rounds until a final list of nominees is created. Each member is authorized to vote for 8 out of 16 categories in addition to Top Four (Record of the Year, Album of the Year, Song of the Year, and Best New Artist). This is to ensure objectivity in voting (Anand & Watson, 2004). The final tallies are processed by an audit firm and kept a secret until the envelope is opened during the ceremony. The Grammy awards thus reflect professional recognition. The ceremonial form of the Grammy awards bestow symbolic element and arbitrage prestige. Furthermore such ceremonies have important influence on the way cultural products are produced and brought to attention of a buying public, consumed and appreciated (Anand & Watson, 2004; Watson & Anand, 2006). Currently, the Grammy awards list 78 categories including classical and instrumental music. General categories of the best single and the best album are considered in this study.

#### 1.5.5 BILLBOARD CHARTS

Since 1913, the Billboard magazine has chronicled the rise and fall of many sound recordings. Initially, these rankings were published in retail stores. These charts included bestsellers, top played songs on radio and songs most-played on jukeboxes (Bradlow & Fader, 2001). On 20 July 1940 Billboard became the first magazine to publish independent

popularity chart of sound recordings. Since 1955, the Billboard has published charts based on sales, which has become the primary source on market success. As of 1975, the magazine started surveying airplay and sales to determine records exposure. This was done by a current sales form, which had been returned to Billboard on an 8 – day basis. These forms were sent to retailers as well as radio stations to rank selected recordings.

Subsequently record popularity was determined by weighting sales outlet twice as heavily as radio airplay (McCourt & Rothenbuhler, 1997). This method however, proved to be rather inaccurate. The literature suggests, that Billboard rankings were highly subjective, inherently biased and subject to various distortions. Also, several cases of data manipulations and bribery are known in the industry (McCourt & Rothenbuhler, 1997). Technological change, as in many other industries has also influenced the appearance of Billboard charts. Computerized point-of- purchase systems allowed companies to gather data more systematically and perhaps more objectively. Soundscan, Inc. was amongst the first companies to offer digitized solution of information gathering in entertainment industries. Soundscan owns exclusive rights to the data obtained from a sample of 14 000 retail stores. This sample represents 85% of all over the counter album and single sales in the United States. Furthermore, information about the weekly radio airplay for each single and album is collected via Broadcast Data System (BDS). This system identifies and tracks the airplays of songs across 560 radio stations in the United States.

This is done electronically using a computer system that can recognize 110 000 songs by its unique digital pattern. SoundScan tabulates these data at the end of each week and charts are compiled based on actual sales at those stores (McCourt & Rothenbuhler, 1997).

However, this system has also attracted a considerable amount of criticism. This is because of several reasons. Firstly, the exclusivity of the access to the obtained information is problematic. Moreover, retailers are compensated according to their shares of sales in the local markets. All stores are contractually bound to keep all sales information confidential to other parties. These data are thus only available to SoundScan costumers as a part of aggregate market reports. Such reports are however highly priced and beyond the reach of small independent companies. Secondly, the point-of-purchase scanning systems gathers data only from stores those are equipped with the required technology. Again, this led to marginalization of independent retailers and stores. Lastly, according to McCourt and Rothenbuhler (1997), SoundScan focused only on retailers who follow the market, rather than those who start the market. Consequently, independent labels that feature alternative or niche genres of music remain out of reach of SoundScan (McCourt & Rothenbuhler ,

1997; Montgomery & Moe, 2000). Despite these drawbacks in methodology, Billboard charts have been the dominant source of information about the popularity of music album in the United States (McCourt & Rothenbuhler, 1997; Schmutz, 2005). Throughout the decades, the Billboard Magazine has become an authority in the music business and publishes various charts covering a wide range of genres.

The current formula for all Billboard charts is far more complicated than its original. The sample of tracked purchases does not only include music stores and music departments, but it also includes all transactions made on Internet (both physical and digital formats). Furthermore, the Hot 100 also includes data that compile online streaming activities. This incorporate on-demand play requests and listener-controlled radio channels on leading subscription services for instance Spotify, Slacker, Rdio, and MOG (Eakin, 2013). Some of the charts reflect pure sales data, airplay data or streaming data. The Hot 100 charts however, mingles all sources of data. Generally, the Hot 100 formula targets a ration of sales (35-45%), airplay (30-40 %) and streaming (20-30%). This formula is adapted every week. Recently, activity on You-Tube has also been added to the mix of data sources to compile a list of the most popular tracks (Trust, 2013; Billboard, 2014). All data used in these charts are processed and gathered by Nielsen and forwarded to Billboard (Eakin, 2013). At this point it is important to note, that all streaming as well as sales and radio airplay data are quoting U.S. – based numbers. This naturally differed from the ones that are instantly available online on respective websites of mentioned social and streaming media.

## **2 THEORETICAL BACKGROUNDS**

The following section constitutes the review of associated literature on relevant topics for this thesis. Firstly, this section describes some basic features of such creative content in general and also in the context of the recorded music industry. The experience goods attributes of works of art are central in this study. Secondly, this chapter touches upon some associated effects connected to consumers' behaviour in markets where quality is uncertain. These mainly cover the superstar effect and informational cascades. Thirdly, the theories concerning roles of expert critique as well as its subsequent impact on consumers' choice of creative content is presented. Namely, the expert opinion as a source of information and expert opinion as a signal of quality are central in this chapter. Lastly, the section answers the sub-questions of the research, which were formulated in the introduction.

### 2.1 CONSUMERS' PREFERENCES AND CREATIVE CONTENT

#### 2.1.1 SEARCH-EXPERIENCE-CREDENCE GOODS PARADIGM

Naturally, the nature of creative content has been widely discussed in academic as well as professional circles. Even though, creative content or products with creative or cultural nature has been given many labels. The bottom line is that such products are unique in nature and hence difficult to classify. The approach taken in this study is the one of traditional cultural economics. This means, that the creative content is characterized, among other things, as "experience good". The notion of experience good could be interpreted as that the utility of these products are only ascertained upon consumption (Caves, 2000; Towse, 2010). In other words, a certain level of experience is required in order to evaluate its utility or quality. The presumption of consumers' inability to make well-informed decisions is well established in cultural economics texts, especially with respect to "high arts". This is also the reason why the role of experts' opinion has been fundamental in arts and culture. However, the notion of experience good as such has been developed outside the field of cultural economics. In his seminal work, Nelson (1970) differentiated between search and experience goods. Search goods are goods dominated by product attributes for which full information is easily required prior purchase. On the other side of the coin, experience goods are goods dominated by attributes that cannot be known prior to purchase. This is because; the search for information is more costly or difficult than direct purchase (Klein, 1998; Nelson, 1970). Thus, Nelson's approach is centred on consumer's lack of information. Also, it is important to note, that the search for information, in most of the instances concern the information about the quality of a product



rather than its price. One of the possibilities to obtain such information is sample purchase. Thus, a consumer relies on his own experience of different brands of a particular product in order to determine his/her own preferences. In this scenario, the sampling via purchase is cheaper than search for information. However, if sampling becomes too expensive, consumers opt for alternative ways to acquire necessary information about a product or service. Such alternative ways usually include, word of mouth, consumers' reviews or even advertising. In other words, the consumer has a choice between experiencing and searching to get information about goods' qualities. Note, that costs to obtain such information are crucial in consumer's decision making. It seems that consumers are inclined to select an alternative that is less costly. Later, Darby and Karni (1973) added credence attributes to the categorization. These credence attributes are characterized as attributes that cannot be verified even after its use. To further explain, a consumer may not be able to evaluate attributes of a good even after its consumption. This is because a certain level of knowledge is required to do so. In this scenario, the consumer is thus, ill prepared to make a comprehensive evaluation of credence qualities of a certain product or service. For instance, any evaluation of professional aspects of a product is rather difficult (Alford & Sherrell 1996; Darby & Karni, 1973). Therefore, if a good exhibits credence qualities, consumers often rely on personal recommendations or positive word of mouth. Furthermore, Norton and Norton (1988) extended the segmentation of experience good into durables and nondurables. Such goods differ in frequency of purchase and thus also the value of word of moth and personal recommendations differ. In this sense, for goods that are purchased infrequently and are durable in nature, advice will be used more often than for non-durable goods. Also, recommendations of others will be used more often for purchases of experience and credence goods than search goods.

### 2.1.2 SEARCH-EXPERIENCE-CREDENCE GOODS PARADIGM IN CONTEXT

In the past, music could be heard and experienced. More specifically it was tied to a specific social event. The 20<sup>th</sup> century's technology advancement changed all that, turning music into a product. Since then, music could be bought, sold, traded, exchanged and played endlessly in any context (Byrne, 2007). This has given birth to economics of music. The music business centred on product/service in which the sound-carrier ranged in formats; from singles and albums to compilations, from vinyl's to cassettes and later on CD's. As any other creative activity, the production, distribution and marketing of such content revolve around its demand. On the one hand, artistic and cultural projects are

expected to be of high-standard artistry. On the other hand the success of a performance is almost impossible to determine in advance. Thus, the demand for creative products bears risk and uncertainty. This uncertainty lies in the reaction of consumers and their valuations thereof. Also the recorded music industry is highly vulnerable to changes in audience interests. Furthermore, taste and preferences are highly subjective in nature (Vogel, 2011; Rothenbuhler & McCourt, 2004; Caves, 2000). More so, in the context of music business, it is not only consumer taste that changes quickly and unpredictably, but also the evolution of music genres is nothing but well defined. In order to overcome such uncertainty, producers and publishers of music rely on aggressive marketing and promotional activities. At the extreme, promotion of performers has been considered as one of the industry's products. Record companies do not only produce hits but also positions on charts and superstars (Rothenbuhler & McCourt, 2004). The recording industry promotes stars because known performers are safe investment. Ultimately, the final product offered to consumers is a result of a selection process that filter out those records that are the most likely to thrive in the light of recent success.

Also, radio airplay plays an important role in music advertising. During the 60's, recording companies paid radio stations to play their songs, however this practice has died due to federal legislations in the United States. Nevertheless, there has been a significant interest in the influence of radio airplay on album sales. This is because; repeated playing of an album can positively impact the public perception on what type of music is enjoyable (Montgomery & Moe, 2000). Another way to promote a particular album is the release of a single. Traditionally, in the music business; a release of a single precedes a release of an album, creating promotional effect (Christianen, 2008; Bhattacharjee et al., 2005). Thus it could be inferred, that the demand is supply-induced. Moreover, consumers are exposed to some signals about product's characteristics and attributes. In other words, consumers can form certain expectations before the acquisition of music recordings. In statistical terms thus, consumers correlate past experience with future outcomes. These consumers also try to lower the variability in their expectation of individual artists by choosing well-known entertainers (MacDonald, 1988; Gopal et al., 2006). However, the valuation of the product is rather subjective and possible only after the purchase. Therefore, having the previously presented paradigm in mind, music recordings do indeed exhibit low search property attributes and higher experience and credence property characteristics. With respect to Nelson's theory (1970), buyers of recorded music will consider personal recommendations and advice prior to purchase.

A phenomenon closely related to this issue, is the theory of superstars. This theory was introduced by Rosen (1981) and later by Adler (1985, 2006). The former explains, that the phenomenon exists in market with small numbers of people who earn great amounts of money and they seem to dominate the fields in which they engage (Rosen, 1981). Furthermore, small differences in quality seem to be reflected in the earnings differences. These differences become greater at the top level of the scale. Thus the theory of Rosen is based on talent hierarchy. The imperfect substitutability also plays an important role in purchase behaviour. In this scenario, consumers are willing to pay more for fewer high quality products than for more products of lesser quality. The main arguments of the latter are that the phenomenon of stars exists where consumption requires knowledge. In his paper, Adler (1985) argues, that the cost for searching for information is minimized if one chooses for a popular artist. This is because; consumption of arts requires a certain amount of time; time to consume the art itself and time to discuss the art with other knowledgeable individuals. If every individual favours different artist, no discussion is possible. Thus, a certain amount of consumption capital is necessary to engage in markets of creative content. These arguments of Adler (1985) are based on the theory of “addictive consumption” developed earlier by Stigler and Becker (1977). According to this theory, consumers are inclined to consume the same good in the future due to the increasing marginal utility in consumption.

In other words, one is better off discussing the same artists as others despite the quality of the art. Thus, markets that are prone to superstar phenomena are also subject to network externalities. In such markets, talent or quality is no longer a motive to choose a particular artist (Menny, 2012). Empirical testing of Crain and Tollison (2002) does indeed confirm the hypothesis of Adler (1985) in the context of the recorded music industry. Their results suggest, consumers do not always choose if consumption capital is costly.

However, especially nowadays, music is becoming the most easily personalized and accessible form of entertainment (Vogel, 2011). In the age of wireless Internet and smart phones, where everything is digital; music becomes extremely portable and available everywhere at any time through global music service providers. Furthermore, the introduction of online music stores, supported by a great success of Apple’s iTunes and iPod in the early 2000’s have changed and enlarged the way music is bought and used. It seems that every day, labels announce new agreements with digital music stores. These agreements allow the distribution of music online including various streaming services that are often free. Such developing business models have also consequences on consumption

and demand for music recordings. With respect to the previously mentioned paradigm; it appears that physical products of music content such as CD's with dominant experience goods attributes are changing into services with dominant search goods qualities. This is because, the information about the quality of a music recording is readily available online. Also, free access to the music content digitally via the Internet (legal or illegal) significantly lowers the costs of sampling and the search for information. In this scenario, a consumer of music content relies on own experience to determine his/her preferences rather than through personal recommendations or expert advice. Thus, the role of the word of mouth and expert review diminishes, as access to information increases. As a result, the superstar effect might dilute and purchase behaviour might be driven by values attached to the album rather than the prestige of an artist. Research in this matter is however inconclusive. Gopal (2006) found that consumers tend to sample unknown music items, which also seems to have beneficial impact on sales of these items. As a result, the superstar status is threatened by the advent of digital and online sharing technologies.

On the contrary, the research of Bhattacharjee et al. (2005) suggest, that the information overload is likely to occur rather quickly. As a result, consumers tend to search for music items for which information availability is high. This only confirms, Adler's hypothesis, that consumers prefer well-known products. In this sense, there is generally higher downloading and sharing activity for popular albums that also have higher sales.

## 2.2 EXPERT OPINION AS A SOURCE OF INFORMATION

As already anticipated in the previous chapter, because quality attributes of creative content is difficult to evaluate prior consumption, consumers seek signals to reduce their uncertainty. One of the characteristics of the recorded music industry is indeed oversupply of music content. Over 30 000 albums are released each year, but only a small fraction of these albums appear on the charts. Furthermore, the albums that make it to the charts, the life cycle is rather short. According to their research, (Bhattacharjee et al., 2007) the majority of albums drop off the Billboard chart within the first three months. So far it has been argued, that the popularity and familiarity of a particular musician is an important factor is to success of music recordings.

However, there are other sources available to obtain information about a particular product. Third-party review information on products such as critics, opinion leaders and industry experts may serve as key informants for consumers. Such independent information market provides consumers with guidance and reference regarding products' quality and its

attributes. Throsby (2001) argues, that the input of expertise especially in aesthetic, historical and authenticity value are essential. This is due to the fact that particular skills, training and experience can contribute to a better-informed evaluation. In other words, experts reduce hasty, ill informed and prejudiced decisions. Towse (2010) alike, points out the information problem. Namely, the lack of information on the part of the consumer to judge the true utility of cultural good or service which is one of the characteristics of experience good as well as credence good attributes. With information asymmetry in place, the consumer is inclined to trust the expert. Thus, such key informants perform several economic functions in the market. Experts reduce information asymmetry and contribute to lower search costs. Hence, they decrease great uncertainty and risk in the markets of creative content. In the context of recorded music industry, reviewers generally provide tests in the form of reviews. As a result, these music critics may become opinion leaders and hence they have the ability to have a critical impact on albums' sales. The question of how much do critics influence the success of experience goods have been already addressed in the movie industry (Eliashberg & Shugan, 1997; Gemser et al., 2007; Reinstein & Snyder, 2005), theatre (Boorsma & Maanen, 2010; Urrutiaguer, 2002; Hirschman & Pieros, 1985), publishing industry (Clement et al., 2007; Sorensen, 2007). Despite some differences among the sub-sectors of creative industries, the results show that experts and critics have positive impact on the success of creative content. This is because, as Eliashberg and Shugan (1997) argue, such opinion leaders seem to enjoy greater credibility than advertisement. Clement et al. (2007) identified three main effects of expert opinion in the publishing industry. Firstly, it is the information effect. This information is a focus of this section as its economic function has been touched upon earlier. Secondly, it is the promotional effect generated by a review published in mass media. This effect is naturally closely connected to the information effect and is can seldom be separated. This is because, the review calls attention to a certain product, which generally affect its success positively. A typical connection is the bond between the Grammy and the the National Association of Record Merchandisers (NARM), an umbrella group representing music distributors, wholesalers and retailers. In 1983, an idea to use Grammy as a promotional vehicle emerged. Stickers such as "Grammy nominee" or "Grammy winner" were provided to merchandisers to boost sales and promotions. Later on, the televised broadcasting of the ceremony also complemented marketing efforts of record labels. Furthermore, the timing of the ceremony, mid February seems to be crucial to promote records, after the peak season of Christmas and New Years (Watson & Anand, 2006). Lastly, it is the opinion effect,

which is the subject of the following section. The research in the recorded music industry on this topic is rather limited. Schmutz (2005) investigates the role of popular acclaim, professional recognition and critical appraisal in popular music. Specifically, his research centres on the influence of specific types of legitimacy on retrospective consecration by *Rolling Stones*' "500 Greatest Albums". One of his findings suggest that expert opinion may not determine whether an album appears on Billboard charts, but it may exert some influence on what albums generate more attention and public interest. Subsequently, this may lead to increased sales.

It is not only critics and their reviews that influence the success of products with creative content. Throughout the decades, awards have become widespread in the field of art, literature and entertainment. Despite the jury formation, whether it is comprised of academic experts, arts celebrities, practicing artists, ordinary consumers or mixture of all, its relationship with the industry and marketplace has been established (English, 2013). Even though, they have received a little attention from economists, it could be presumed that they generate similar effects as reviews. Nevertheless, the empirical works again, especially studies of the correlation between awards and sales figures indicate a positive short-term effect on success. For instance, Todd (1996) found that Booker prize-winners enjoy a greater post-award commercial boost. Also Ginsburgh (2003) shows the correlation of cinema awards and DVD rentals as well as box office revenue shortly after the award. However, some caution has to be exercised when interpreting the results. This is because; it has proven to be difficult to isolate the pure effect of the award from the inherent qualities of a product of creative content. As English (2013) demonstrates, there are prize winning works that have succeeded well commercially, but also there are non-prize winning works that have succeeded even better

However, with the advent of digital technology and the rise of user generated content, the online user review also became a valuable source of information about a product's characteristics and attributes. These reviews complement already existing forms of information mentioned earlier. The advantage of online information transmission is that it overcomes traditional contact boundaries (Duan et al., 2008). Stated differently, everyone can share their thoughts and influence others' decisions. This is because, how people respond to products where quality is uncertain depends on what they observe about others' actions. Herd behaviour, bandwagon effects and most recently network effects are familiar examples (e.g. Caves, 2000). Originally, Liebenstein (1950) attributed these non-functional utilities to bandwagon effect. Non-functional utility refers to factors other than quality

inherent to a product. Such utilities are then usually enhanced as the number of users of the same product increases. Adler also pointed out this particular relevance in relation to consumption capital. Bikhchandani et al. (1992) as well call such behaviour “informational cascades”. The model developed by a team of researchers explains not only conformity in mass behaviour but also fast and short-lived fads booms and crashes. As they explain, information cascade occurs when it is optimal to follow the behaviour of the previous individual without considering own judgements. In other words, individual’s action does not depend on his own information. Menny (2012) further adds that herding behaviour occurs not only if there is a lack of public information on product’s quality, but also because the popularity of a producer forces consumers to ignore their own judgements. The author thus links the phenomenon of superstars and information cascade theory. It seems that the former contributes to the latter. The author explains that consumers herd after the same producer to decrease uncertainty. More so, such cascade based stardom phenomena become less sensitive to public information releases or the arrival of a better-informed decision maker. This is due to its intrinsic pay off externalities (Menny, 2012). According to these theories, consumers receive a relatively high pay off from consuming goods that are considered trendy or popular. This means then, that works produced by artists or musician with a certain level of star power attracts new consumers. This is because they conform or want to be associated to a certain groups of consumers or to discuss with other knowledgeable individuals.

Research in this matter especially in the context of publishing industry (Chevalier & Mayzlin, 2006) and movie industry (Duan et al., 2008) suggest that online customer word-of-mouth affects consumers purchase behaviour. Also, a report of Forrester Research <sup>1</sup> indicates that more than 50% of young Internet users rely on word-of-mouth recommendation to purchase books, CD’s, movies, videos or DVD’s (Duan et al., 2008). Similarly, the empirical evidence presented by Menny (2012), suggest that phenomenon such as cascade based herding significantly influences the choice of art consumer. In the field of recorded music, Chung and Cox (1994) found that the probability of choosing a record rises with the number of individuals who previously selected this record. Experimental study of Salganik et al. (2006) demonstrates the influence of others by creating artificial music market. Participants in this experiment were asked to download songs. One group was forced to rely on own judgement and thus received no additional

---

<sup>1</sup> An independent technology and market research company

information. The second group was provided information on which song had been previously downloaded and how often. The results of this study showed again, that popular songs are more popular and unpopular songs are less popular. This is because; the observation of downloading behaviour of others influenced own decision-making.

Could it then be the fact that award decided by a poll of general public have an effect on demand? Nomination or winning a title of “favourite” or “the best” album or single serve a form of a recommendation and confirmation to other consumers. Thus consumers’ choice awards could trigger an information cascade in the recorded music industry. More so, combined with previously discussed superstar effects, it could be inferred that popular artists enjoy a boost of attention after the nomination for AMA or VMA. As a result, this attention is demonstrated in increased sales and popularity as reported by Billboard charts.

### 2.3 EXPERT OPINION AS A SIGNAL OF QUALITY

As already anticipated in the previous section, expert opinion plays an important role in consumer decision making, especially as a source of information on the one hand. On the other hand, it stands as established marketing tool in creative industries, which contributes towards a promotional effect. However, expert opinion in the form of reviews or awards also provides insights into attributes of creative content’s quality. Given the nature of creative works, the abundance thereof and experience goods characteristics in particular; it is impractical to consume them on random and hope for enjoyable experience (English, 2013). Therefore, quality judgments become essential to determine what is good and what is bad in creative content (Caves, 2000). However, the role of expert opinion in terms of quality evaluation has been challenged. This is due to critical voices of people who believe, that the quality and value of a creative work is impossible to establish objectively. Caves (2000) argues, that self-interest and the issue of “payola”, a bribe paid in order to influence experts choice have an impact on objective judgement. Clement et al. (2007) add other reasons why experts and critics fail to judge creative works objectively. These include (i) interest of their employers, (ii) own image and brand, (iii) public pressure to select already popular works, (iv) preference of young and unknown artists, (v) critics as representatives of “elite taste”, (vi) opinion of their colleagues. Simply put, expert critics are prone to biased judgements.

Furthermore, as Eliashberg and Shugan (1997) point out, as more people see the movie, the relative impact of expert opinion should diminish. This is because; audience



chose a particular product on other factors such as advertisements or personal recommendations from friends or family. This selection bias is especially important when testing the influence of awards and prices. Since, the major awards in the cinema as well as music industry take place retrospectively and on annual basis, the power of influence on demand for such works might be weak.

On the contrary, the theories of informational cascades (Bikhchandani et al., 1992), where information about quality attributes of a product are heterogeneous, expert opinion influence the formation of these cascades. Even though, the effect of expert opinion is stronger in the first positions of decision sequence, it can also influence the already existing one. Therefore, such informational cascades are easily shattered. This is also a reason, why evaluation shortly after the release of a product with creative content is prone to judgment based on fashion, personal preferences as well as political and economic circumstances. Statistics show that there is a little uniformity between short and long-term opinions among experts. The research of Ginsburgh and Weyers (2008) confirms that short-term evaluation in the form of awards and prizes given annually fail to identify the long-term quality. In other words, critics and industry experts made different choices as time passed by.

The relationship between expert opinion and its influence on the success of creative content is further complicated by the notion of credence goods introduced by Darby and Karni (1973). In this scenario, consumer judges the experience of a good not solely on its experience, but also accepts the expert opinion as a signal of legitimacy. To rephrase that, the consumer is drawn to such creative work due to its “higher” value rather than the enjoyment of its consumption. Becker (1982) also points out, that works often last not because a large number of people appreciate them, but because they are historically important. Moreover, the research (Haan, Dijkstra, & Dijkstra, 2005; Holbrook, 1999) addressing differences between consumer and expert judgement rely at least at some differing. Even though, they do not deny the fact that consumers are able to make good quality judgments, they are prone to gravitate towards content that has familiar setting and project conventional values. On the contrary, experts are inclined to look for more abstract and artistic values and styles. Furthermore, these researches demonstrate, that judges are less sensitive to exogenous factors such as blockbuster attributes and big starts.

However, despite the evidence of superstar phenomenon presented earlier in this section, the research of Hamlen (1991) concludes that consumers of popular music do indeed recognise quality in popular music. The author uses the “voice quality” as a measure of quality based on literature in professional singing. The measure combining harmony,

richness and depth of selected singles was a significant explanatory variable in his research. Research in the field of theatre by Hirschman and Pieros (1985) yielded similar results. The authors noted, that the perception of aesthetic value between critics and theatre goes was not in conflict. Thus, even though such classification of creative content is most appropriate at the higher end of artistic and cultural works than the lower end of entertainment, the credence effect might arise in connection with a major retrospective award such as the Grammy (English, 2013). Hence, it could be presumed that consumers recognize quality attribute of a music recording similar to the respective experts in the industry. As a result, works nominated and for awards decided by a jury of experts may enjoy a boost of consumers' attention even after a longer period of time since its release.

Furthermore, awards and prices carry a significant amount of symbolic capital. This implies that, a major industry price or award has an effect on artist's reputation and a work's aesthetic as well as artistic values (English, 2013; Watson & Anand, 2006). Watson and Anand (2006) discuss the role of Grammy awards in the field of popular music. The authors suggest that the ceremonial form contributes to its ability to draw attention and distribute prestige. Their data indicate, that the most visible commercial impact of winning a Grammy award is increased sales. However, the authors point out that this is not because of merely receiving a status of "the best". Except customers' awareness, the potential of the awards as a marketing tool has been long established. Winning a Grammy guaranteed a greater exposure in retail stores and influenced dealers. Thus it seems that again the opinion effect is intertwined with promotional effect. Nevertheless, the correlation between works that win a prestige price and demand for the work has become basically non-existent (English, 2013). This is due to the nature of such works themselves. In other words, the status of a more elite appeal inherent in major expert of industry award does not win general audience. The research that revolves around the role of critique in live performance attendance (Boorsma & Maanen, 2010; Urrutiaguer, 2002; Abbé-Decarroux, 1994) provides similar insights. The results all point out to the fact, that critic reviews influence only a small part of audience; whilst to a greater extent its impact is insignificant. Therefore, it could be inferred that an academy award winner is not a bestseller. Such hypothesis was also confirmed in the publishing industry (Clement et al., 2007) and fine arts (Menny, 2012). The research of the former points out that readers that are who are interested in entertainment values especially avoid authors who won awards decided by expert jury. The research of the latter shows, that talent has a weak influence on the ability of an artist to generate auction volume. Thus far it seems that the influence of critical

appraisal as well as underlying theories is rather dubious. The empirical results are inconsistent and in the context of the recorded music industry rather limited. Nevertheless, it could be inferred that the expert choice award such as Grammy could boost consumers' attention. This is because of the opinion and credence goods effects presented in this section. In other words, a nomination or a title of the "best" album or single signal a certain level of quality that appeals to a certain fraction of popular music audience. Also, the basic principles of information cascade theory suggest that individuals with superior knowledge easily influence consumers. However, due to the timing of the award, the effect is weak.

#### 2.4 SUMMARY

This chapter demonstrates, that the role of awards in creative industries is two-fold. Firstly, expert opinion is a fundamental source of information in the markets where quality is uncertain. In these markets, the quality and utility of creative content is possible to determine only after its use. Secondly, for the same reason, expert opinion has been regarded as a signal of quality. Signals of quality are especially important in markets where previous knowledge or a certain amount of consumption capital is essential in order to evaluate intrinsic quality attribute of creative content.

However, these roles of expert opinion that are also reflected in experts' choice awards are further complicated by underlying principles of superstar phenomenon and information cascades. It seems that popular or trendy products enjoy their firm position on the market even after a release of additional information about the quality of the product.

Furthermore, especially after the advent of digital technologies and instant access to online information, expert opinion competes with consumers' reviews and awards decided by the general public. Nevertheless expert opinion seems to have rather positive effect on demand of creative content. It seems that nominated and awarded creative content enjoy short-term attention of the consumers. The effect of consumers' choice however seems to outweigh experts' choice.

Taken all together, with respect to the recorded music industry, expert opinion deep-rooted in the Grammy award could continue to have an impact late in the life cycle of a music recording. Yet, word of mouth and personal recommendation essential to the American Music award outweighs the effect of expert opinion. As a result, it is expected that singles and albums nominated either for consumers' choice awards such as the American Music awards or for experts' choice awards like the Grammy, experience a wave of consumers' attention shortly after the award ceremony.

### **3. RESEARCH METHODOLOGY**

The aim of this study is to test the influence of awards on the demand for popular music recordings. Furthermore, in this study, it will be examined whether the impact of consumers' choice awards (AMA and MTV Video awards) differ from experts' choice (Grammy awards). The approach of this study hinges on the timing of awards and their effect on Billboard chart rankings in particular. As such, this research incorporates the longitudinal research design. Such research design involves the collection, analysis and interpretation of longitudinal data. According to the literature (Alasuutari et al., 2008), majority of longitudinal data are those that describe what has happened to a set of research cases over a series of time points. Also, the purpose of the research presented in this thesis rests upon longitudinal data collected retrospectively. Thus, all Billboard Chart data consisting of weekly rankings over the period of 2008-2013 will be incorporated; especially the pre and post awards' nomination time frames.

#### **3.1 RESEARCH UNIT**

The research unit of this thesis will consist of singles and albums of all winners as well as nominees for chosen category of each individual award. The scope of this study will cover those music recordings that were released in the United States. The music awards selected for this research are: (i) the Grammy awards; (ii) the American music awards and (iii) the MTV video music awards. Only two categories of each individual award will be the focus of this study. These include: (i) the best (favourite) single/video of the year and (ii) the best (favourite) album of the year.

#### **3.2 SAMPLING**

At this stage of the research, the sample will be constructed to include all nominated and awarded singles as well as albums for the period of 2008-2013. However, the number of nominees of every award differs. Also, new categories are added or removed from the list occasionally to adjust to the recent trends and development in the industry. This is especially the case of the market-oriented American music awards. For instance, the category of best single was added to the list of all categories only in 2013. In previous years, albums were awarded per genre. Also, the list of genres included in the American music awards was not stable. Currently, the best album of the year is further sub-divided into the following categories: (i) pop/rock; (ii) country; (iii) rap/hip-hop and (iv) soul/rhythm and blues (R&B). The category of the best rap/hip-hop albums is the latest

addition to the list. This award in particular has been awarded since 1989. A general category for best albums has not been so far introduced. Also, the MTV video music award does not honour best albums in a particular year. This is because; the MTV video award focuses on individual singles and their respective music videos.

Thus, the number of nominees every year of each category as well as award is rather inconsistent. Overall, the sample of singles consists of 64 cases and the sample of albums consists of 92 cases. These two categories combined, reaches a total number of research cases to 156. The following tables (Table 3.1 and Table 3.2) provide a detailed overview of research cases per year per award and per category.

Table 3.1: Research cases: singles

	2008	2009	2010	2011	2012	2013
Grammy	5	5	5	5	6	5
AMA	0	0	0	0	0	3
VMA	5	5	6	4	5	5
<b>Total number of research units</b>	<b>10</b>	<b>10</b>	<b>11</b>	<b>9</b>	<b>11</b>	<b>13</b>

Table 3.2: Research cases: albums

	2008	2009	2010	2011	2012	2013
Grammy	5	5	5	5	5	5
AMA / favourite country album	3	3	3	3	3	3
AMA / favourite pop rock album	3	2	2	2	3	1
AMA / favourite soul R&B album	2	2	3	3	3	3
AMA / rap hip-hop album	0	3	3	3	3	3
<b>Total number of research units</b>	<b>13</b>	<b>15</b>	<b>16</b>	<b>16</b>	<b>17</b>	<b>15</b>

At this point, it is important to note that in several instances a particular single or album was nominated for several awards as well as for several categories. If a particular single was nominated or awarded for two different awards, this single or album has been counted multiple times. This is because, the focus of this study lies on the effect of different awards on weekly chart rankings using time series analysis. For this purpose the unit of analysis changes from individual singles and albums to specific time points, in this case weeks.

Therefore, if a particular single or album has been nominated or awarded for the same award but for different categories, this single or album has been counted only once. In such a scenario, the winning category has been taken into consideration.

For comparative purposes, only primary cases will be considered.

### 3.3 TIME SPAN OF THE RESEARCH

The approach of this study revolves around the timing of awards and its effect on the chart's position. For this purpose, this period refers to fifty weeks prior and fifty weeks post to the award ceremony. All weeks prior to the award ceremony are assigned weeks' number from 1 to 25 in this research. The peak of this period represents the actual award ceremony week. The ceremony week is assigned week number 26 in this research. All post award weeks are assigned week numbers from 27 till 50. The following table (Table 3.3) provides a detailed overview of the nomination and award periods with respect to the actual calendar weeks.

**Table 3.3: Time span overview**

	<b>Pre-award period</b>	<b>Award Ceremony</b>	<b>Post-award period</b>
<b>Assigned week no.</b>	wk 1 - wk 25	wk 26	wk 27 - wk 50
<b>Actual calendar week</b>			
Grammy 2008	wk 33 - wk 5	wk 6	wk 7 - wk 30
Grammy 2009	wk 32 - wk 4	wk 5	wk 6 - wk 29
Grammy 2010	wk 34 - wk 6	wk 7	wk 8 - wk 31
Grammy 2011	wk 34 - wk 6	wk 7	wk 8 - wk 31
Grammy 2012	wk 33 - wk 5	wk 6	wk 7 - wk 30
Grammy 2012	wk 31 - wk 3	wk 4	wk 5 - wk 28
AMA 2008	wk 22 - wk 46	wk 47	wk 48 - wk 19
AMA 2009	wk 22 - wk 46	wk 47	wk 48 - wk 19
AMA 2010	wk 22 - wk 46	wk 47	wk 48 - wk 19
AMA 2011	wk 21 - wk 45	wk 46	wk 47 - wk 18
AMA 2012	wk 21 - wk 45	wk 46	wk 47 - wk 18
AMA 2013	wk 21 - wk 45	wk 47	wk 48 - wk 19
MTV 2008	wk 11 - wk 35	wk 36	wk 37 - wk 8
MTV 2009	wk 12 - wk 36	wk 37	wk 38 - wk 9
MTV 2010	wk 12 - wk 36	wk 37	wk 38 - wk 9
MTV 2011	wk 9 - wk 33	wk 34	wk 35 - wk 6
MTV 2012	wk 11 - wk 35	wk 36	wk 37 - wk 8
MTV 2013	wk 9 - wk 33	wk 34	wk 35 - wk 6

### 3. 4 TOWARDS THE MEASUREMENT

#### 3.4.1 STATISTICAL METHODS AND TESTS

The initial data processing will consist mainly of descriptive statistics and reports. Subsequently, simple statistical tests will be carried out and analysed. In order to establish differences of two groups within the sample, an independent sample t-test will be carried out. The procedure thus computes the mean difference in values of each case before and after the selected period. According to Box and Tiao (1975), these tests for change in means have played an important role in this field of this study. However, these tests are valid observations before and after varied in means ( $\mu_1 \neq \mu_2$ ), not only normally, with the presumption of constant variance but also independently. In the case of time series data, these are usually successive observations and hence serially dependent. Therefore, time order has to be accounted for. This assumption is formalized in the notion of autocorrelation; correlation of a variable with itself over time in particular (Chatfield, 1995; Yaffee & McGee, 2000; Yanovitzky & Vanlear, 2008). Therefore, a Paired-sample t-test also (called dependent t-test) is more suitable to evaluate the effect of a particular intervention in time series. With respect to the scope of this study, it is thus before and after an award ceremony.

To further explore the effects of award on music recordings, an intervention analysis of time series data will be conducted. This method has been widely used in many fields, for instance pharmacology (Ansari, et al., 2003; Wagner, et al., 2002); in assessing the impact of market disturbances (Wichern & Jones, 1977); in evaluating the effectiveness of policies (Box & Tiao, 1975). This kind of analysis answers questions such as: Is there a change in a time series before and after a certain event? In order to evaluate effects of such intervention, an interrupted time series analysis (ITS) is the most common design to arrive at valuable conclusions (Yaffee & McGee, 2000; Yanovitzky & Vanlear, 2008). One of the methods to estimate the intervention effect in an interrupted time series study is segmented regression (Ansari, et al., 2003; Wagner, et al., 2002). This method is used to assess how much an intervention changed an outcome of interest, especially across time. Furthermore, segmented regression is used when a control group is missing. This is because; the level and the trend (two parameters of the segmented regression) of the pre-intervention segment serve as a control for the post-intervention segment in time series. This method thus has two outcomes: (i) change in level immediately after the intervention (step-change), and (ii) difference between the slopes of pre and post-intervention (change in trend). Changes in the level at the time of intervention or impact, are presumed to be the

response to the intervention (Yaffee & McGee, 2000). The magnitude of the slope indicates the size of rise or drop in the level.

Therefore, given the nature of the sample and the research question, this study focuses on this method of statistical inquiry. Furthermore, an integrated t test will be used to evaluate the significance of changes in the level and slope of the regression line before and after the award ceremony. With respect to the previously formulated expectations, in this kind of analysis, it could be presumed that there is a change in the level or slope at the time of intervention, in this case an award ceremony. These changes are especially evidence in the first two weeks after the award ceremony. If this is the case, what can be said about the nature of magnitude of the change?

The model (1) of the above-mentioned regression could be further specified as follows:

$$(1) \quad Y_t = \beta_0 + \beta_1 * \text{time}_t + \beta_2 * \text{intervention}_t + \beta_3 * \text{time after intervention}_t + e_t$$

Therefore, the difference between the pre-award and post-award period segments can be quantified by testing the change in these two parameters. In this model, thus

$\beta_0$  = baseline model of outcome at the beginning of the time series (constant);

$\beta_1$  = estimates the pre-award trend (the slope of pre-intervention regression line; variable WEEK coefficient);

$\beta_2$  = estimates the change in the post-award level (change in intercept of post-intervention regression line, variable PHASE coefficient);

$\beta_3$  = estimates the trend in post-award period (change in slope of post-intervention regression line, variable AFTER coefficient);

$e_t$  = includes random error and autocorrelation.

Also, the sum of  $\beta_1$  and  $\beta_3$  is a post-award segment trend (slope).



### 3.4.2 DEPENDENT VARIABLES

#### *Weekly Billboard Charts*

To study the market impact of awards on singles, this study uses original sales information from the Billboard's Hot 100 Chart.

To study the market impact of awards on albums, this study uses original sales information from the Billboard's 200.

#### 3.4.2.1 DEFINITIONS OF VARIABLES

*Weekly chart rank* (WK1 – WK50) is a position of each individual single on the Hot 100 and Billboard 200 charts for selected period of time. Numerically, higher ranked singles are less popular. Also, the fact that these singles and albums drop below 100 or 200 on the Billboard chart, the associated data are not readily available to include these music recordings in the analysis. As a result, such amount of missing values can contribute to biased results. In order to achieve a more precise statistical analysis, each single and album has been assigned a score. This method assigns 100 points for rank position 1 down to 0 points for rank positions below 100 for singles and 200 for albums.

*Average rank position on chart before award ceremony*. This variable (PRE\_AWD) calculates a mean of weekly chart scores before an after an award ceremony. These include weeks from 1 till 25.

*Average rank position on chart after award ceremony* (POST\_AWD). This variable calculates a mean of weekly chart scores after an award ceremony. These include weeks from 26 till 50. Both PRE\_AWD and POST\_AWD will be used in the initial stages of analysis, especially paired sample t-test.

*Mean of weekly scores*. This aggregate continuous variable (CHART) calculates mean of scores calculated on the basis of weekly Billboard charts. The variable will be used in all time series analysis in this thesis. It is calculated separately for singles and albums as well as for AMA, VMA and the Grammy.

### 3.4.3 INDEPENDENT VARIABLES

To further explore the effects of awards on chart's performance, a segmented regression analysis has been carried out. In order to do this, several segments of a time series (in this case weekly Billboard charts) needed to be defined. Such segment consists of a sequence of measures divided into two or more portions at a particular change point. Change point refers to a specific point of time in a time series that is expected to exhibit change in values.

The continuous variable WEEK indicates time in weeks from the beginning of the observation period (50 weeks). These weeks refer to 25 weeks before an award nomination and 25 weeks after an award nomination.

The following step required defining segments in the time series. In order to estimate the effect of awards, it was necessary to create an indicator variable (PHASE). This variable was coded as an extended pulse indicator (Yaffee & McGee, 2000). In this scenario, weeks before an intervention (from 1 to 25) received value 0 and a value of 1 for weeks where the impact of the award ceremony seems to be the most apparent (weeks from 26 till 30).

The continuous variable AFTER counts number of weeks after the intervention, coded 0 for the period before the award ceremony and (WEEK - 25) after the intervention (Wagner et al., 2002).

### 3.4.4 SUMMARIZING DIFFERENCES IN THE SAMPLE

In order to establish differences in compositions and characteristics of nominated and awarded singles as well as albums for two different awards, following variables have been developed.

#### 3.4.4.1 DEFINITIONS OF VARIABLES

*Award type.* This variable (PUBPROF) distinguishes consumers' choice awards (AMA's and VMA's) with professionals' choice (Grammy). The former receives a value of 1; the latter receives a value of 2.

*Star power.* For this variable (SUPER) a set of 4 measures was developed. The first measure identifies musicians who won or were nominated for any of the chosen awards in the category of the Artists of the Year or its equivalent in the previous year (NOMAWD). In this measure, any nominated artists receive a weight of 1 and any awarded artists receive

a weight of 2. Featuring artists received a 0.5. Based on this measure, 13 singles of the 56 exhibited the star power. Furthermore, 15 albums of the 78 show star power.

The second measure identifies musicians who were listed in top-grossing (top 10) artists in the previous year (TOPG). In this measure, any single or album that has been recorded by a musician who was listed in the top-grossing chart for the previous year receives a weight of 1. Those who were not listed in the top-grossing list received a 0. Featuring artists received a 0.5. Based on this measure, 7 out of the 56 singles had star power and 13 out of the 78 albums had star power.

Finally the third measure identifies singles and albums that are debuts or sequels (DBTSQL). Any debuting single or album in the sample receives a value of 0 and any sequel single or album received a value of 1. Based on this measure, 4 out of the 56 singles were debuting singles and thus 52 singles were established artists. With regards to albums, 9 out of the 92 are debut albums bringing up to 83 albums to be established recording artists.

All in all, each single and album were assigned a numerical value (SUPER), which ranged from a maximum of 4 (for Lady Gaga, Taylor Swift, Carrie Underwood and Katy Perry) to a minimum of 0 for music recordings with no star power.

*Critics score.* In this variable (CRTS), albums are assigned numerical values as they are taken from a metacritic.com website. This website aggregates reviews of music, games, movies, TV shows, DVD's and books. Traditionally, the reviews are published shortly after the official release of a music recording. In some instances, however, critics review date as late as two months after the release. Every product, receives a numerical score from each review and the total is averaged. Furthermore, this average is weighted based on the critic's fame and stature. Categorically, the major periodicals have a greater effect than the niche ones. In other words, this measure indicates expert opinion about a particular music recording. Thus, reviews published on this website, provide product information as well as indicate a certain level of quality. Numerically, the higher the score music records receive the better the review.

*Users score.* In this variable (USRS), albums are assigned numerical values as they are taken out from a metacritic.com website. The website provides information on average user scores. On the contrary to critics review, the average user score comprises of all user ratings of a particular music recording from its release until date. This user score is an

indicator of consumer's opinion. Thus it signals a certain level of quality as well as provides information about a particular music recordings. Numerically, the higher the score of a single or an album, the better the general appeal of a music recording.

*Genre.* This variable (ARTMAIN) was coded as follows; the variable receives a value of 1 if the single or album is classified as alternative or independent and a value of 0 for mainstream genre. Singles and albums identified as alternative or independent are expected to contain artistic elements. This category thus comprises of genres such as alternative rock, indie rock, alternative or indie pop, folk, reggae and recordings with jazz elements.

Singles and albums identified as mainstream include mainly genres such as pop, rock, rhythm and blues, soul and current popular genres such as electronic and dance music as well as hip-hop.

Based on this measure, 8 singles have been identified as alternative or independent genre and 48 singles were identified as mainstream genre. Furthermore, 5 albums have been identified as alternative or independent genre and 73 albums as mainstream genre.

*Total weeks on chart.* This variable (TWCH) measures the survival time of singles and album on charts. This survival rate is measured in number of weeks on the chart (Billboard Hot 100 and Billboard 200).

*RIAA certification.* The certification programs of the Recording Industry Association of America's (RIAA) are an objective approximation of achievement in the music industry. These programs validate gold (500, 000 units sold), platinum (1 000 000 units sold), multi-platinum and diamond (10 million units sold). They are generally recognized as a measure of sales performance in the industry (Watson & Anand, 2006; Schmutz, 2005). Thus, they provide insights into number of copies sold of each individual records. This study relies upon these certified sales data as of March 2014 as a measure of long-term achievement. This variable is coded as categorical variable consisting of 12 categories, where 0 represent sales lower than 500 000 and 12 diamond certification.

The Table 3.4 provides detailed overview of these variables.

Table 3.4: Variables' overview I

		Singles		Albums	
		Frequency	%	Frequency	%
<i>Award Type</i>					
	Consumers' choice	33	51.6	62	67.4
	Experts' choice	31	48.4	30	32.6
<i>Star Power</i>					
Artist of the Year	None	43	76.8	64	82.1
	Nominated	5	8.9	12	15.4
	Awarded	8	14.3	2	2.6
Top grossing	None	48	85.7	65	83.3
	Grossing	8	14.3	13	16.7
Debut vs. sequel	Debut	4	7.1	7	9.0
	Sequel	52	92.9	71	91.0
<i>Genre</i>					
	Artistic	8	14.3	5	6.4
	Mainstream	48	86.8	73	93.6

### 3.4.5 EXPECTATIONS

With respect to the main research question as well as sub-questions, it is expected that:

- a) The nominations of selected awards will have a positive effect on chart rankings of singles as well as albums. This means that chart scores will temporarily rise and then subsequently fall to its original pattern shortly after the award ceremony.
- b) Furthermore, the effect of American Music Award outweighs the effect of Grammy award.
- c) Both singles and albums nominated for the AMA's and VMA's differ from those nominated for Grammy awards.
- d) In this sense, albums and singles nominated for AMA's or VMA's remain on the chart longer than singles and albums nominated for Grammy awards. Also, AMA and VMA nominated singles and albums reach higher sales than Grammy nominees.
- e) With regards to the genre and nature of music recordings, the number of music records defined as alternative and independent is higher for Grammy awards than AMA or VMA.

- f) Also, the number of music recordings nominated for AMA's and VMA's are expected to have higher star power than Grammy nominees.
- g) Singles and albums nominated for AMA's and VMA's receive lower critics score than Grammy nominees.
- h) Nevertheless, it is expected that consumers are able to recognize some quality attributes of a music record. Therefore, the users scores do not differ significantly between AMA/VMA nominees and Grammy nominees.

#### 3.4.6 DATA COLLECTION

Data collection provided information on 66 awarded or nominated singles throughout the period of 2008-2013 and 92 awarded or nominated albums. The list of all awarded and nominated singles for the selected period were gathered from official websites of each individual reward. These websites include: (i) [www.grammy.com](http://www.grammy.com), (ii) [www.theamas.com](http://www.theamas.com), (iii) [www.mtv.com](http://www.mtv.com). Furthermore, data collection includes a variety of information such as the name of the artists, label affiliation, genre and date of releases. It needs to be noted that, the data required for this study focused on measures of chart rankings, critical and user reviews and sales certification dates as reported by RIAA. All the data were collected manually from the official websites.

Firstly, the official Billboard website ([www.billboard.com](http://www.billboard.com)) provides a list of weekly top hundred singles (The Hot 100). Secondly, the information on general appeal of a music recording among reviewers and the public have been gathered from the Metacritic website ([www.metacritic.com](http://www.metacritic.com)). For the purpose of this study, information on the total score by reviewers as well as users has been collected. Finally, the searchable database of RIAA ([www.riaa.com](http://www.riaa.com)) provides information on certification dates as a measure of achievement in the recorded music industry. The RIAA award programs consist of gold, platinum, multi-platinum and diamond certifications and give a close approximation of a music recording performance in the market.

#### 3.4.7 DATA PROCESSING AND REPORT

The research has been conducted in several stages. The information that has been retrieved from respective web sites and other relevant sources will be processed and elaborated using

the 22.0 version of the Statistical Package for Social Science (SPSS). Also, the time frame of the research at this stage will be incorporated.

Secondly, the graphical representation of tables and charts will be explained with respect to the theories involved.

Lastly, conclusions will be made based on the outcomes of the data and the hypothesis developed in the research.

## 4 ANALYSIS OF RESULTS

### 4.1 OVERVIEW OF THE SAMPLE

The most successful single in the sample, in terms of chart survival remained 83 weeks on Billboard Hot 100 (*Radioactive* by Imagine Dragons; nominated for Grammy 2013). In terms of chart performance, Grammy nominated single (2009) *I gotta feeling* (by The Black Eyed Peas), occupied number one position for 14 weeks. In terms of highest sale figures (according to RIAA certification), singles *Bad romance* (Lady Gaga; VMA winner 2010) and *Love the way you lie* (Eminem featuring Rihanna; Grammy nominee 2010) are certified Diamond singles (10 million copies sold). The most nominated artists were Lady Gaga (1 win and 3 nominations) and Bruno Mars (4 nominations).

The most successful albums in the sample, in terms of chart survival stayed 163 (*21* by Adele) and 164 (*The Foundation* by Zac Brown Band) weeks on the Billboard 200. The former was a twice-nominated album (Grammy and AMA in 2011), whilst the latter was an AMA nominee for the category of “The favourite country album” in 2009. In terms of chart performance, the album *21* by Adele occupied number one position for 14 weeks. The same album is also an RIAA Diamond certified (10 millions copies sold). The most nominated artists were Lady Gaga (5 nominations) and Taylor Swift (4 times winner and 1 nomination). The following table (Table 4.1) provides a complete overview of variables describing the sample.

Table 4.1: Variables’ overview II

	Min.	Max.	Mean	S.D.
<i>Singles</i>				
Total weeks on chart	5	83	34.86	15.773
RIAA certification	0	12	4.39	3.535
Award type	1	2	1.45	0.502
Star Power	0	4	1.44	1.023
Critics score	51	92	69.85	9.839
Users score	5	9	7.519	0.9087
Genre	0	1	0.14	0.353
<i>Albums</i>				
Total weeks on chart	19	164	60.04	35.001
RIAA certification	0	12	3.15	2.181
Award Type	1	2	1.21	0.406
Star Power	0	4	1.276	0.8476
Critics score	38	92	69.25	10.568
Users score	0	9.2	6.87	1.7949
Genre	0	1	0.06	0.247



#### 4.2 CHARACTERISTICS OF THE SAMPLE AND ITS COMPARISON

The results of Independent sample t-test show that singles chosen by general public do not differ significantly with singles recognized by peer in the industry. With regards to the previously presented expectations, it has been found that:

- a) Singles and albums nominated for the AMA's and VMA's do have slightly higher star power than singles and albums nominated for Grammy awards. The former received 1.53 points on average for singles and 1.33 for albums. Whilst the latter received 1.26 points on average for singles and 1.27 for albums. Note, that this variable combines 4 measures of star power and receives a final score, where 0 represent no star power and 4 maximum star power.
- a) Singles and albums nominated for AMA's and VMA's receive lower critics score than Grammy nominees. Singles nominated for the former received 67.9 critics' score on average and albums, whilst the latter received 70 critics score on average. Albums nominated for AMA's received 66.6 critics score on average and Grammy nominees received 74 critics score on average.
- b) Consumers do not rate AMA and VMA nominees differently than Grammy nominees. Singles nominated for AMA's and VMA's received 7.3 user score on average and singles nominated for Grammy received 7.4 user score on average. Also, the AMA's nominees received lower user scores (6.5 on average) than nominees for the Grammy awards (7.7 on average). It could be noted that users assign higher scores in general than critics. As expected, the Grammy nominated albums that exhibited more artistic elements than albums nominated for the American Music Awards.
- c) Furthermore, singles and albums nominated for Grammy award remains longer period of time on Billboard charts. On average, singles remained on chart 40 weeks and albums 70 weeks. Whilst singles nominated for AMA and VMA stayed on chart 32 weeks on average and albums 62 weeks. Also, the single Grammy nominees reached slightly higher sales volume than AMA's and VMA's nominated singles in terms of sale. On the contrary, albums nominated for AMA's reached slightly higher sales than the Grammy nominees.

Table 4.2 provides detailed information on these tests.

Table 4.2: Descriptive statistics and Independent sample t-test

	Consumers' choice (AMA's & VMA's)		Experts' choice awards (Grammy)		Sing. <i>p</i>
	Mean	S.D.	Mean	S.D.	
<b>Singles</b>					
Star power	1.53	1.089	1.26	0.815	0.26
Critics score	67.94	8.61	70.35	10.704	0.331
Users score	7.323	1.0794	7.494	0.8948	0.5
Genre	0.09	0.292	0.19	0.402	0.25
Total weeks on charts	32.23	13.482	40.39	16.134	0.042*
RIAA certification	4.27	3.818	5.35	3.083	0.216
<b>Albums</b>					
Star power	1.331	0.8822	1.267	0.9072	0.747
Critics score	66.64	9.144	73.93	10.789	0.003*
Users score	6.494	1.8243	7.71	0.9876	0.000*
Genre	0	0	0.17	0.379	0.001*
Total weeks on charts	62.56	35.506	70.8	39.981	0.32
RIAA certification	3.47	2.252	3.27	2.49	0.699

\*  $p < 0.05$  (two-tailed)

### 4.3 EFFECTS OF AWARDS ON CHART PERFORMANCE

#### 4.3.1 DESCRIPTIVE STATISTICS: PRE AWARD AND POST AWARD PERIODS AND CHART PERFORMANCE

Based on the initial results, it seems that the albums tend to perform worse after an award ceremony for which a particular album had been nominated. The performance of selected album is tracked on the base of an index of scores derived from Billboard chart 200. The differences between period prior and post award ceremony were compared in three stages. 25 weeks before and 25 weeks after the ceremony periods have been compared. At this stage, albums nominated for any of the selected awards, scored 33 points on average in the post award period, which is considerably lower than in the pre award period (52.8 points on average). Considering the average survival of albums on charts such as Billboard 200 (65 weeks, see table xx in the previous section); an observation period of 50 weeks might not be suitable to find short-term effects of awards on chart performance. This is also the case of singles, which survived only 36 weeks on average on the chart. Therefore, a shorter period of observation has been also included in the analysis. These were periods of 10 and 5 weeks before an award ceremony and 10 and 5 weeks after an award ceremony. Also the

descriptive statistics of shorter observation period suggest that nominated and awarded albums for any of the selected awards do not perform better after the ceremony. Albums nominated for any of the selected awards, scored 40 points on average 10 weeks after an award, which is lower than in the before award period (49.5 points on average). Also, 5 weeks prior to an award, albums scored higher (46.5 points on average) than in post award period (35.6 points on average). The following table (Table 4.3) provides descriptive statistics of these two periods pictorially.

Also, paired sample t-test confirms this presumption. The results of these tests indicate, that with respect to 25 weeks pre and post award periods, albums dropped by 19.5 chart positions on average after an award ceremony. With respect to 10 weeks pre and post award periods, albums dropped by 9.5 chart positions on average after an award ceremony. Lastly, 5 weeks pre and post award periods showed albums dropping by 4 chart positions on average after an award ceremony, as can be seen below.

Table 4.3: Descriptive statistic: pre and post award performance

	Pre award period		Post award period		Sig.
	Mean	S.D.	Mean	S.D.	<i>p</i>
<i>Albums</i>					
25 weeks	52.76	26.487	33.17	33.700	.000*
10 weeks	49.54	32.681	40.04	35.856	.000*
5 weeks	46.55	35.125	42.45	35.583	.000*
<i>Singles</i>					
25 weeks	42.25	35.086	14.40	23.185	.000*
10 weeks	36.91	39.142	23.37	33.398	.000*
5 weeks	33.15	40.032	28.90	38.426	.000*

\*  $p < 0.05$

Table 4.4: Pair sample test

	Pair differences		Sig.
	Mean	S.D.	<i>p</i>
<i>Albums</i>			
25 weeks	19.591	26.487	.000*
10 weeks	9.501	15.895	.000*
5 weeks	4.091	14.161	.007*
<i>Singles</i>			
25 weeks	27.856	29.972	.000*
10 weeks	13.541	19.648	.000*
5 weeks	4.253	13.807	.016*

\*  $p < 0.05$

Also, singles tend to perform worse after an award ceremony for which a particular album had been nominated. The performance of selected albums is tracked on the basis of a score index derived from Billboard Hot 100. Singles nominated for any of the selected awards, scored 42 points on average 25 weeks before an award ceremony, which is lower than in the pre award period (14.4 points on average). The singles then dropped by 27.8 chart position on average after an award. Singles nominated for any of the selected awards, scored 36.9 points on average 10 weeks after an award, which is lower than in the before award period (23.4 points on average). In this scenario, singles dropped by 13.5 chart position on average after an award. Also, 5 weeks prior to an award, albums scored higher (33.1 on average) than in post award period (29 points on average). Here, singles dropped by 4.2 chart positions on average after an award ceremony. The table 4.4 provides descriptive statistics of these two periods in more details.

All in all, it seems that there is no positive effect of music awards on the demand for music albums.

#### 4.3.2 SEGMENTED REGRESSION ANALYSIS

In order to answer the research question, it was necessary to test previously formulated segmented regression model against the null hypothesis, where

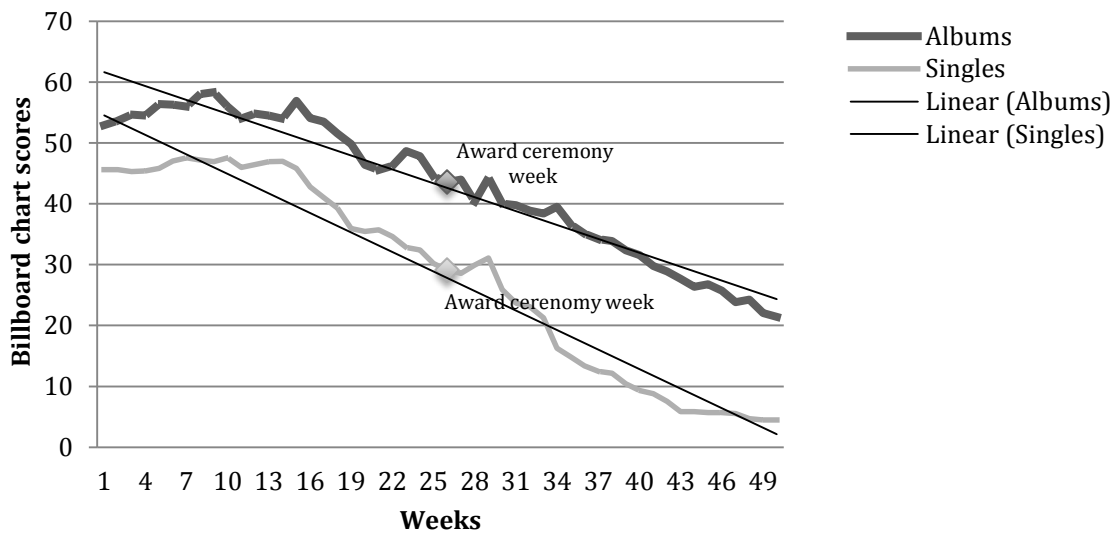
$$H_0: \beta_2 = \beta_3 = 0.$$

In other words, there is no change in level or trend between pre and post-intervention period.

The first step to analyse these time series data is visual inspection. In order to do this, a simple sequence chart has been created, where the variable WEEK represents the time axis y and the variable CHART represents the x-axis.

Looking at the data in figure 4.1, the post award time series pattern has not changed noticeably in relation to the pre award time series pattern. The albums continue to fluctuate over time. Also there seems to be no change in the level at the time of intervention. However the magnitude of the slope immediately after the award ceremony (week 26) seems to rise noticeably upward and returns to its earlier pattern.

Figure 4.1: Billboard chart scores: albums and singles



Moreover, the plot presented above shows that data points used in this analysis are likely to be non-stationary. This means that such time series contain trends, seasonal effects or cycles. In statistical terms, non-stationary data have means, variances and covariance that change over time. In the case of Billboard chart score, the measurements tend to gradually decrease over time and hence exhibit a trend. This presumption has been confirmed by the autocorrelation function (ACF). This is a commonly used tool to check for randomness in time series data over time. Such randomness is acquired by computing correlations for data values at varying time lags (Yanovitzky & Vanlear, 2008). The below ACF function of albums and singles (figure 4.2 and 4.3) is decaying rather slowly and remains well above the significance range (black line). This indeed indicates that the time series is non-stationary. Also, all of the autocorrelations of albums as well as singles are significantly nonzero (see table 4.5 for further details). This thus confirms the non-randomness in the time series data.

Common time series techniques however require the data to be stationary. Time series can be made stationary by differencing. This method replaces each data point with the difference of the current data point and its adjacent point  $k$  steps backward in time (Yanovitzky & Vanlear, 2008). This study uses first differenced data points. Furthermore, time series data are prone to exhibit seasonal fluctuations. Such seasonality has similar effect as trends, but it tends to repeat itself in systematic intervals over time (Yanovitzky & Vanlear, 2008). The method of moving averages dampens the fluctuations in time series data.

Table 4.5: ACF function: singles and albums

Chart scores albums			Chart scores albums		
Lag	Autocorrelation	$p$	Autocorrelation	$p$	
1	0.944	0.000	0.961	0.000	
2	0.89	0.000	0.916	0.000	
3	0.838	0.000	0.871	0.000	
4	0.781	0.000	0.822	0.000	
5	0.726	0.000	0.769	0.000	
6	0.67	0.000	0.711	0.000	
7	0.609	0.000	0.649	0.000	
8	0.544	0.000	0.585	0.000	
9	0.479	0.000	0.52	0.000	
10	0.416	0.000	0.454	0.000	
11	0.358	0.000	0.389	0.000	
12	0.297	0.000	0.324	0.000	
13	0.239	0.000	0.258	0.000	
14	0.187	0.000	0.191	0.000	
15	0.125	0.000	0.125	0.000	
16	0.072	0.000	0.062	0.000	

Figure 4.2: Correlogram: albums

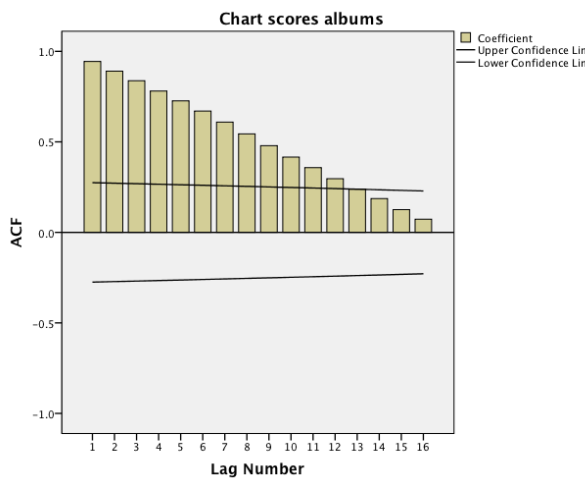
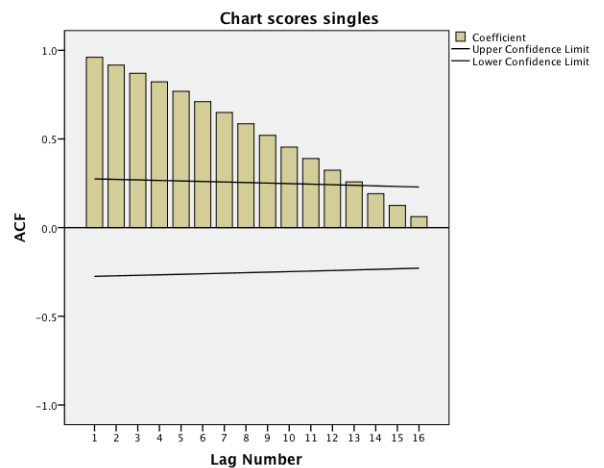


Figure 4.3: Correlogram: singles



With respect to the Billboard chart scores series, different weeks from different years are centred on an award ceremony week. In other words, the weeks 1 – 50 are not real calendar weeks of the year (see table 3.3 for details). Therefore, seasonal fluctuations are highly unlikely to occur. This presumption is evident in the ACF function (table 4.5) and its respective correlograms (fig.4.2 and fig. 4.3), where the trend is gradually decaying.

Thus, based on the preliminary data analysis the ARIMA (p,d,q) model used in this study is

ARIMA (1,1,0). The three integer components (p,d,q) are: AR (first order autoregressive process), the degree of differencing and (I) and MA (moving average process). In other words, this thesis applies first differenced first order autoregressive model.

Table 4.6 and 4.7 contain parameter estimates from the linear segmented regression model specified in the previous section of effects of music awards on selected albums in the period from 2008 to 2003. With respect to albums, before the award ceremony, there was a negative change of 0.076 of Billboard chart scores on average ( $p = 0.024$ ). In other words, the nominated and awarded albums on average dropped by 0.076 positions on the charts. Right after the award ceremony (weeks 26 to 30), the estimated mean of received scores increased approximately by 0.339 points, with respect to the previous weeks. However, this change in level is not statistically significant ( $p = 0.616$ ). Also, the positive change in trend of 0.086 on average before and after the award period has proven to be statistically insignificant ( $p = 0.131$ ). This could indicate that the performance of albums on Billboard charts improved two weeks after the award ceremony, however very slightly.

Table 4.6: Coefficients: albums

ARIMA models parameters			
	Estimate	SE	Sig.
Constant ( $\beta_0$ )	0.717	0.528	0.182
Pre-trend ( $\beta_1$ )	-0.076	0.032	0.024*
Level change ( $\beta_2$ )	0.339	0.671	0.616
Post-trend change ( $\beta_3$ )	0.086	0.056	0.131

\*  $p < 0.05$

Table 4.7: Coefficients: singles

ARIMA models parameters			
	Estimate	SE	Sig.
Constant ( $\beta_0$ )	0.77	0.578	0.19
Pre-trend ( $\beta_1$ )	-0.11	0.036	0.003*
Level change ( $\beta_2$ )	0.856	0.731	0.248
Post-trend change ( $\beta_3$ )	0.174	0.061	0.007*

\*  $p < 0.05$

Considering singles, before the award ceremony, there was a negative change of 0.077 of Billboard chart scores on average ( $p = 0.19$ ). In other words, the nominated and awarded albums on average dropped by 0.077 positions on the charts. Right after the award ceremony (weeks 26 to 30), the estimated mean of received scores increased by approximately 0.856 points, with respect to the previous weeks. However, this change in level is not statistically significant ( $p = 0.248$ ). Nevertheless, the positive change in trend of 0.174 on average before and after the award period has proven to be statistically significant ( $p = 0.131$ ). This could indicate that the performance of singles on Billboard charts improved two weeks after the award ceremony, however very slightly.

#### 4.3.4 SEGMENTED REGRESSION ANALYSIS: AMA/VMA AWARDS VS. GRAMMY

In order to answer the sub-question of this study; whether the impact of consumers' choice awards (AMA and MTV Video awards) differs from those of professionals with certain level of expertise (Grammy awards), it was necessary to carry out these tests for albums nominated for AMA awards and Grammy awards separately. The steps involved in this phase were similar to the previous one. The same model (1) of segmented regression analysis was used. Also, based on the preliminary data analysis, the ARIMA (p,d,q) model used in this study is ARIMA (1,1,0).

Eyeballing the sequence charts for both series (Fig. 4.4 and fig. 4.5), it seems that the impact of public oriented awards indeed differs from awards decided by peers in the industry. With respect to the former, the post award time series pattern has not changed noticeably in relation to the pre award time series pattern. The chart scores of albums continue to fall. Also there seems to be no change in the level at the time of intervention. However the magnitude of the slope immediately after the award ceremony (week 26) seems to rise slightly and returns to its earlier pattern.

Whilst with respect to the latter, the pre and post award period pattern seems to also change slightly. The magnitude of the slope immediately after the award ceremony (week 26) seems to rise and returns to its earlier pattern shortly thereafter. Interestingly, Grammy nominated albums appeared to perform better than AMA nominated album. This pattern is evident also several weeks before the award ceremony. This may indicate that there is a positive response to the nominations, which has taken place several weeks before the actual award ceremony. Such presumption was realized in the segmented regression analysis as well. The indicator variable PHASE has been re-coded as follows: weeks before an intervention (from 1 to 20) received value 0 and a value of 1 for weeks where the impact of



the intervention seems to be the most apparent (weeks from 20 till 30). This only applies to Grammy nominated albums.

Figure 4.4: Albums Billboard chart scores over time: American Music awards vs. Grammy awards

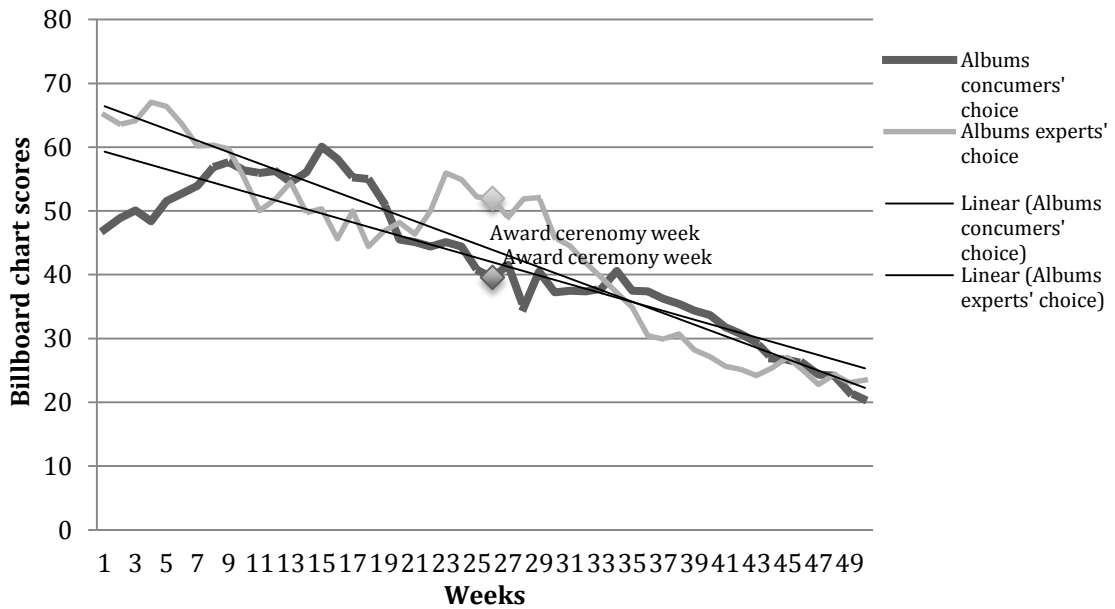
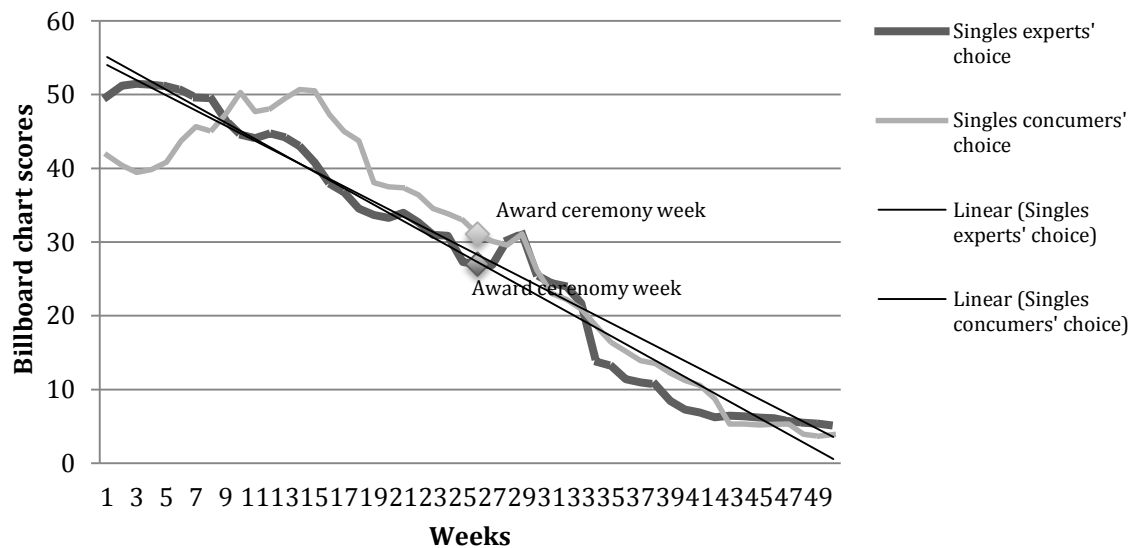


Figure 4.5: Singles Billboard chart scores over time: American Music awards vs. Grammy awards



In order to answer the research sub-questions, it was necessary to test previously formulated segmented regression model against the null hypothesis, where

$$H_0: \beta_2 = \beta_3 = 0.$$

In other words, there is no change in level or trend between pre and post-intervention period.

Table 4.8 contains parameter estimates from the linear segmented regression model for both awards and its effects on demand for selected albums in the period from 2008 to 2003. Before the award ceremony, there has been a negative change of 0.12 ( $p = 0.01$ ) Billboard chart scores on average for AMA nominated albums and a negative change of 0.049 ( $p = 0.629$ ) Billboard chart scores on average for Grammy nominated albums. Right after the award ceremony, the estimated mean of received scores increased by approximately 0.79 Billboard chart scores for AMA nominees with respect to the previous weeks. In the case of the Grammy nominees, the change was greater, 1.41 scores on average. However, this change in level is not statistically significant for AMA awards ( $p = 0.4$ ) as well as Grammy awards ( $p = 0.184$ ). Also, the change in trend before and after the award period has proven to be statistically insignificant. With respect to AMA awards, the slope rose by 0.15 ( $p = 0.068$ ) scores on average. The slope of Grammy nominated albums after the award ceremony rose by 0.07 ( $p = 0.618$ ) scores on average. This could indicate that the performance of albums on Billboard charts improved after two weeks since the award ceremony. Furthermore, the impact of Grammy awards on Billboard chart performance is greater than the impact of American Music awards.

Table 4.8: Coefficients: albums (Grammy vs. AMA music awards)

	ARIMA model parameters					
	“Consumers’ choice” awards (AMA’s)			“Experts’ choice” awards (Grammy)		
	Estimate	SE	<i>p</i>	Estimate	SE	<i>p</i>
Constant ( $\beta_0$ )	1.55	0.727	0.039	-0.602	1.236	0.629
Pre-trend ( $\beta_1$ )	-0.12	0.045	0.01*	-0.049	1.236	0.629
Level change ( $\beta_2$ )	0.786	0.924	0.4	1.408	1.044	0.184
Post-trend change ( $\beta_3$ )	0.144	0.077	0.068	0.069	0.138	0.618

\*  $p > 0.05$

Similarly, table 4.9 contains parameter estimates from the linear segmented regression model for both awards and its effects on demand for selected singles in the period from 2008 to 2003. Before the award ceremony, there has been a negative change of 0.126 ( $p = 0.01$ ) Billboard chart scores on average for AMA and VMA nominated albums and a negative change of 0.091 ( $p = 0.052$ ) Billboard chart scores on average for Grammy nominated singles. Right after the award ceremony, the estimated mean of received scores increased by approximately 0.29 Billboard chart scores for AMA and VMA nominees with respect to the previous weeks. In the case of the Grammy nominees, the change was greater, 1.46 scores on average. However, this change in level is not statistically significant for AMA and VMA awards ( $p = 0.758$ ) as well as Grammy awards ( $p = 0.12$ ). However, the change in trend before and after the award period has proven to be statistically significant. With respect to AMA and VMA awards, the slope rose by 0.182 ( $p = 0.029$ ) scores on average. The slope of Grammy nominated singles after the award ceremony rose by 0.164 ( $p = 0.041$ ) scores on average. This could indicate that the performance of singles Billboard charts improved after two weeks since the award ceremony. Furthermore, the impact of Grammy awards on Billboard chart performance is greater than the impact of American Music awards and MVT Video Music awards.

Table 4.9: Coefficients: singles (Grammy vs. AMA/VMA awards)

	ARIMA model parameters					
	“Consumers’ choice” awards (AMA’s and VMA’s)			“Experts’ choice” awards (Grammy)		
	Estimate	SE	$p$	Estimate	SE	$p$
Constant ( $\beta_0$ )	1.271	0.761	0.102	0.215	0.741	0.773
Pre-trend ( $\beta_1$ )	-0.126	0.047	0.01*	-0.091	0.045	0.052
Level change ( $\beta_2$ )	0.293	0.946	0.758	1.462	0.923	0.12
Post-trend change ( $\beta_3$ )	0.182	0.08	0.029*	0.164	0.078	0.041*

\*  $p > 0.05$

## 5 CONCLUSIONS AND RECOMMENDATIONS

### 5.1 CONCLUSIONS

The main point of interest of this study centres on whether music awards influence the subsequent chart performance of selected music recordings. Also, the potential differences in the jury formation play a role in the effect they create. All in all, the results of the analysis confirm with the hypotheses presented earlier, however there are some inconsistencies.

The first sets of results indicate, that in general albums and singles nominated for awards decided by the general public do not differ significantly from those nominated for awards decided by a jury of experts and professionals in the industry. Nevertheless, the results point out to the fact, that quality oriented awards such as the Grammy tend to nominate music records with more artistic features than market oriented awards such as the American Music award. This is reflected in higher critics as well as users score in online review site. Such results are consistent with earlier researches of Haan et al. (2005) and Hoolbrook (1999). With respect to superstar phenomena, the sample group do not differ from each other significantly. Both, the consumers' choice awards and experts' awards are gravitating towards music records of established musicians with a certain level of star power.

The second sets of results show, that awards generate a weak positive effect on subsequent chart performance. At the simplest level, an award ceremony prevents the selected singles and albums to further drop on the charts. This effect is however very short. The nominated and awarded music recordings return to their previous patterns immediately within the periods of 2 to 4 weeks after the award ceremony. The precise results differ, depending on the jury formation. The positive effect of awards based on experts' judgments outweighs the positive effect of awards decided by a poll of the general public, which is contrary to original expectations. This applies to both singles and albums. Especially the changes in level and trend in post-award's chart performance pattern are positive and significant.

Thus, it could be inferred that labels such as "favourite" and "the best" trigger the word-of-mouth effects, resulting in increased consumers' attention that is subsequently reflected in slight short-term increase in chart positions. On the one hand, it is possible that consumers consider the American music awards and MTV video music awards as a personal recommendations or advice from the rest of the consumers of popular recorded music. These results are consistent with previous researches in other sectors of creative

industries on the role of the word-of-mouth (Chung & Cox, 1994; Chevalier & Mayzlin, 2006; Salganik, et al., 2006; Duan, et. al., 2008; Menny, 2012).

On the other hand, nomination or winning the Grammy serves as a signal of quality. Thus, the pattern is consistent with dual roles of expert opinions resulting in information and opinion effects. It is also possible that consumers respond to the credence goods attributes emphasized in the nomination for the Grammy. However, the promotional effect should not be underestimated. First, nominations for a prestigious award such as Grammy receive a considerable amount of media attention that could eventually lead to increased sales and popularity. This is evident in patterns of chart performance of Grammy nominated singles shortly before and after the award ceremony. Thus, the results of this research comply with earlier research of Watson and Anand (2006). However it contradicts to the presumption made by superstar theorists such as Adler (1985) on the notion that consumers favour popular artists despite the quality of their work.

The results of this study rest upon selected singles and albums in a particular period of time. The selection criteria are based on the researchers judgement about which one will be the most useful. Such selection refers to the type of music awards that have been selected for the study and time period selected for the study. In other words, this study relies upon purposive sampling method; which restricts the ability to generalize. A sampling method that is conducting according to the canons of probability such as random sampling would allow for more precise inferences about the whole population. Furthermore, another pitfall of longitudinal research designs and time series analysis is the survival of singles and albums on charts. This issue has been previously discussed and it has been pointed out, that the average survival of music single in particular is 32 – 40 week. It has been recommended, for an appropriate time series analysis to include at least 50 time points of observation (Yanovitzky & Vanlear, 2008; Yaffee & McGee, 2000; Chatfield, 1995). This proved to be rather difficult for music singles, both in terms of sample size and necessary time points of observation. Only 24 singles out of 62 survived long enough to test the effect of awards on the singles performance on Billboard charts. This considerable drop in sample size had consequences for the time series analysis as well as for the precision of the sample. Nevertheless, larger samples for both categories would contribute towards more precise and meaningful results.

Moreover, the data reflecting performance of selected singles and albums, (in this case Billboard charts) were in several instances incomplete. The publicly available chart data are in several instances incomplete. Therefore, an alternative method of performance measurement yet needs to be developed and more rigorous collection of data is required. The drawbacks of interrupted time series have been discussed extensively in academic literature. With respect to the research question and the nature of time series data used in this study, several of the drawbacks are also of importance for the analysis and interpretation of results. First of all, changes in the measurements of outcome occurring at the time of intervention and related changes in the composition of the study population. As a result, these changes could threaten the internal and external validity of the analysis. This limitation in particular has to be kept in mind when discussing the effects of music awards on the chart performance of selected albums and singles. This is because, as mentioned earlier, the process of nominations and criteria for nominations for selected awards undergo constant changes, which affect the nature and characteristics of nominated and awarded singles. By the same token, the underlying formulas and mechanism of the Billboard charts is rather flexible over time. The recent introduction of streaming data and

social media activity to the formula has changed the composition of the Billboard charts and the performance of music recordings.

Secondly, the use of a control group that is similar to the study group but does not experience the intervention would allow separating the effect of the intervention from other which may have may occurred during the same time. For instance random selection of singles and albums from the respective charts and its comparison to the nominated and awarded music recording would allow a better evaluation of the intervention effect.

Hence, with respect to these limitations, a more rigorous quantitative data is required for this kind of research. A larger sample size would contribute to more accurate results. Such research would require for instance, longer time span or the introduction of a control group. In other words, future researches could be instituted to cover for a duration that is longer than five years and closer to ten years or even more. With the longitudinal research designs, a sample size greater than 100 and more than 50 observation time points could provide a good support to complement the research process. This would contribute to a deeper understanding of the effects of awards on chart performance of music recordings. More so, this will relatively reduce false generalizations and misrepresentations.

## BIBLIOGRAPHY

- Abbé-Decarroux, F. (1994) “The Perception of Quality and the Demand for Services: Empirical Application to the Performing Arts”. *Journal of Economic Behavior and Organization*, 23, 99–107.
- Adler, M. (1985). Stardom and talent. *The American Economic Review*, 75 (1), 208-2012.
- Adler, M. (2006). Stardom and talent. In V. Ginsburgh, & D. Throsby, *Handbooks in economics: Art and Culture* (Vol. 1, pp. 895-906). Oxford: North-Holland.
- Alasuutari, P., Bickman, L., & Brannen, J. (Eds.). (2008). *The SAGE Handbook of Social Research Methods*. London: SAGE Publications.
- Alexander, A., Owers, J., Carveth, R., Hollifield, C., & Greco, A. (Eds.). (2004). *Media Economics: Theory and Practice*. London: Lawrence Erlbaum Associates.
- Alford, B., & Sherrell, D. (1996). The role of affect in consumer satisfaction judgments of credence-based services. *Journal of Business Research*, 37, 71-84.
- Anand, N., & Watson, M. (2004). Tournament rituals in the evolution of fields: The case of the Grammy awards. *Academy of Management Journal*, 47 (1), 59-80.
- Andreasen, A., & Belk, R. (1980). Predictors of attendance at performing arts. *The Journal of Consumer Research*, 7 (2), 112-120.
- Ansari, F., Gray, K., Nathwani, D., Phillips, G., Ogston, S., Ramsay, C., et al. (2003). Outcomes of an intervention to improve hospital antibiotic prescribing: interrupted time series with segmented regression analysis. *Journal of Antimicrobial Chemotherapy*, 52, 842–848.
- Arora, P., & Vermeulen, F. (2013). The end of the connoisseur? Experts and knowledge production in the visual arts in the digital age. *Information, Communication & Society*, 16 (2), 194-214.
- Ashworth, J., Heyndels, B., & Werck, K. (2003). Expert judgements and the demand for novels in Flanders. *Journal of Cultural Economics*, 34, 197–218.
- Basuroy, S., Chatterjee, S., & Ravid, A. (2003). How critical are critical reviews? The box office effects of film critics, star power, and budgets. *Journal of Marketing*, 103-117.
- Becker, H. (1982). *Art Worlds*. Berkeley: University of California Press.
- Bhattacharjee, S., Gopal, R., Lertwachara, K., & Marsden, J. (2007). Stochastic dynamics of music album lifecycle: An analysis of the new market landscape. *International Journal of Human-Computer Studies*, 65.
- Bhattacharjee, S., Gopal, R., Lertwachara, K., & Marsden, J. (2005). Using P2P sharing activity to improve business decision making: proof of concept for estimating product life-cycle. *Electronic commerce research and Applications*, 4, 14-20.



Bikhchandani, S., Hirshleife, D., & Welch, I. (1992). A theory of fads, fashion, custom and cultural change as informational cascades. *The journal of political economy*, 100 (5), 992-1026.

Billboard. (2014). *Billboard Charts Legend*. Retrieved Apr. 25, 2014 from [www.billboard.com: http://www.billboard.com/biz/billboard-charts-legend](http://www.billboard.com/biz/billboard-charts-legend)

Boorsma, M., & Maanen, H. (2010). View and review in the Netherlands: the role of theatre critics in the construction of audience experience. *International Journal of Cultural Policy*, 9 (3), 319–335.

Box, G., & Tiao, G. (1975). Intervention Analysis with Applications to Economic and Environmental Problems. *Journal of the American Statistical Association*, 70 (349), 70-79.

Bradlow, E., & Fader, P. (2001). A Bayesian lifetime model for the “Hot 100” Billboard songs. *Journal of the American Statistical Association*, 96 (454), 368-381 .  
Byrne, D. (2007).

Byrne, D. (2007). David Byrne’s survival strategies for emerging artists and megastars. *Wired Magazine*, 16 (1), 18.

Caves, R. (2000). *Creative Industries: Contracts between Art and Commerce*. Cambridge: Harvard Univ. Press.

Chatfield, C. (1995). *The Analysis of Time Series: An Introduction* (5th ed.). London: Chapman & Hall/CRC.

Chevalier, J., & Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. *Journal of Marketing Research*, 43 (3), 345-354.

Christianen, M. (2008). Cycles in symbol production? A new model to explain concentration, diversity and innovation in the music industry. *Popular Music*, 14 (1), 55-93.

Chung, K., & Cox, R. (1994). A Stochastic Model of Superstardom: An Application of the Yule Distribution. *Review of Economics and Statistics*, 76, 771–775.

Clement, M., Proppe, D., & Rott, A. (2007). Do Critics Make Bestsellers? Opinion Leaders and the Success of Books. *Journal of Media Economics*, 20 (2), 77-105.

Conolly, M., & Krueger, A. (2006). Rockonomics: The economics of popular music. In V. Ginsburgh, & D. Throsby, *Handbook of the Economics of Art and Culture* (Vol. 1, pp. 667-719). Oxford: North-Holland.

Crain, W., & Tollison, R. (2002). Consumer Choice and the Popular Music Industry: A Test of the Superstar Theory. *Empirica*, 29, 1-9.

Darby, M., & Karni, E. (1973). Free Competition and the Optimal Amount of Fraud. *Journal of Law and Economics*, 16, 67–86 .

Dick Clark Publications, Inc. (2014). *Voting FAQ*. Retrieved April 22, 2014 from theamas.com: <http://www.theamas.com/voting-faq/>

Duan, W., Gu, B., & Whinston, A. (2008). Do online reviews matter? — An empirical investigation of panel data. *Decision Support Systems*, 45, 1007–1016.

Eakin, M. (2013, Mar. 8). *Billboard's director of charts explains how a track like "Harlem Shake" can shoot to No. 1*. Retrieved Apr. 25, 2014 from [www.avclub.com](http://www.avclub.com).

Eliashberg, J., & Shugan, S. (1997). Film Critics: Influencers or Predictors?. *Journal of Marketing*, 61, 68-78.

Elliott, S. (2004, Aug. 20). *The media business: Advertising; MTV's sponsors hope the Video Music Awards can draw a crowd, without wardrobe malfunctions*. Retrieved Apr. 23, 2014 from [www.nytimes.com](http://www.nytimes.com): <http://www.nytimes.com/2004/08/20/business/media-business-advertising-mtv-s-sponsors-hope-video-music-awards-can-draw-crowd.html>

English, J. (2013). The Economics of Cultural Awards. In V. Ginsburgh, & D. Throsby, *Handbook of the Economics of Art and Culture* (Vol. 2, pp. 119-141). Oxford: North-Holland.

Gemser, G., Oostrum, M., & Leenders, M. (2007). The impact of film reviews on the box office performance of art house versus mainstream motion pictures. *Journal of Cultural Economics*, 31, 43-63.

Ginsburgh, V. (2003). Awards, success and aesthetic quality in the arts. *Journal of economic perspectives*, 17 (2), 99-111.

Ginsburgh, V., & Ours, J. (2003). Expert Opinion and Compensation: Evidence from a Musical Competition. *The American Economic Review*, 93 (1), 289-296.

Ginsburgh, V., & Throsby, D. (2006). *Handbook of the economics of art and culture* (Vol. 1). Oxford: North-Holland.

Ginsburgh, V., & Throsby, D. (2013). *Handbook of the economics of art and culture* (Vol. 2). Oxford: North-Holland.

Gopal, R., Sanders, G., & Bhattacharjee, S. (2006). Do Artists Benefit from Online Music Sharing? *The Journal of Business*, 79 (3), 1503-1533.

Greco, A. (Ed.). (2000). *The media and entertainment industries: Readings in mass communications*. Boston: Allyn and Bacon.

Haan, M., Dijkstra, G., & Dijkstra, P. (2005). Expert judgment versus public opinion – Evidence from the Eurovision song contest. *Journal of Cultural Economics*, 29, 59–78.

- Hamlen, W. (1991). Superstardom in Popular Music: Empirical Evidence. *The Review of Economics and Statistics*, 73 (4), 729-733.
- Hirschman, E., & Pieros, A. (1985). Relationships among indicators of success in Broadway plays and motion pictures. *Journal of Cultural Economics*, 9 (1), 35-63.
- Holbrook, M. (1999). Popular appeal versus expert judgments of motion pictures. *Journal of Consumer Research*, 26 (2), 144-155.
- Hracs, B. (2012). A creative industry in transition: The rise of digitally driven independent music production. *Growth and Change*, 43 (3), 442-461.
- IFPI (2014). *IFPI Digital Music Report 2014: Lighting up new markets*.
- Klein, L. (1998). Evaluating the Potential of Interactive Media through a New Lens: Search versus Experience Goods. *Journal of Business Research*, 41, 195-203.
- Leyshon, A. (2001). Time-space (and digital) compression: software formats, musical networks, and the reorganisation of the music industry. *Environment and Planning A*, 33, 49-77.
- Koster, A. (2011). The emerging music business model: back to the future? *Journal of Business Case Studies (JBSCS)*, 4 (10), 17-22.
- MacDonald, G. (1988). The economics of rising stars. *American Economic Review*, 78 (1), 155-166.
- Martens, T. (2009, Oct. 13). *The L.A. Times Music Blog: Taylor Swift, Michael Jackson dominate American Music Awards nominations [UPDATED]*. Retrieved Apr. 22, 2014 from latimes.com: [http://latimesblogs.latimes.com/music\\_blog/2009/10/taylor-swift-michael-jackson-dominate-american-music-awards-nominations.html](http://latimesblogs.latimes.com/music_blog/2009/10/taylor-swift-michael-jackson-dominate-american-music-awards-nominations.html)
- McCourt, T., & Rothenbuhler, E. (1997). SoundScan and the consolidation of control in the popular music industry. *Media Culture Society*, 19, 201-218.
- Menny, P. (2012). *Superstars and Informational Cascades* (doctoral dissertation). University of Tubingen.
- Montgomery, A., & Moe, W. (2000). Should Record Companies Pay for Radio Airplay? Investigating the Relationship Between Album Sales and Radio Airplay.
- Nelson, P. (1970). Information and Consumer Behavior. *The Journal of Political Economy*, 78 (2), 311-329.
- Peterson, R. (1990). Why 1955? Explaining the advent of rock music. *Popular Music*, 9 (1), 97 - 116.
- Reinstein, D., & Snyder, C. (2005). The influence of expert reviews on consumer demand for experience goods: A case study of movie critics. *The Journal of Industrial Economics*, 53 (1), 27-51.

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

Rothenbuhler, E., & McCourt, T. (2004). The Economics of the Recording Industry. In A. Alexander, J. Owers, R. Carveth, C. Hollifield, & A. Greco, *Media Economics: Theory and Practice* (3rd ed., pp. 221-249). Mahwah: Lawrence Erlbaum Associates.

Salganik, M., Dodds, P., & Watts, D. (2006). Experimental study of inequality and unpredictability in an artificial cultural market. *Science*, 311, 854-856.

Schmutz, V. (2005). Retrospective cultural consecration in popular music: Rolling Stone's greatest albums of all time. *American Behavioral Scientist*, 48 (11), 1510-1523.

Seaman, B. (2006). Empirical studies of demand for the performing arts. In A. Ginsburgh, & D. Throsby, *Handbook of the Economics of Art and Culture* (Vol. 1, pp. 416-472). Amsterdam: North-Holland.

Sinha-Roy, P. (2013, Nov. 25). *Taylor Swift sweeps top prize at American Music Awards*. Retrieved Apr. 22, 2014 from [www.reuters.com: http://in.reuters.com/article/2013/11/25/music-american-music-awards-idINDEE9AO04520131125](http://in.reuters.com/article/2013/11/25/music-american-music-awards-idINDEE9AO04520131125)

Sorensen, A. (2007). Bestseller lists and product variety. *The Journal of Industrial Economics*, 55 (4), 715-738.

Stigler, G., & Becker, G. (1977). De gustibus non est disputandum. *The American Economic Review*, 67 (2), 76-90.

Strobl, E., & Tucker, C. (2000). The dynamics of chart success in the U.K. pre-recorded popular music industry. *The Journal of Cultural Economics*, 24, 113-134.

Swanson, S., Davis, J., & Zao, Y. (2008). Art for art's sake? An examination of motives for arts performance attendance. *Non Profit and Voluntary Sector Quarterly*, 37 (2), 300-323.

The Recording Academy. (2014). *Overview*. Retrieved Apr. 23, 2014 from [www.grammy.org: http://www.grammy.org/recording-academy](http://www.grammy.org/recording-academy)

Todd, R. (1996). *Consuming fictions: The Booker prize and fiction in Britain today*. London: Bloomsbury.

Throsby, D. (2001). *Economics and culture*. Cambridge: Cambridge University Press.

Towse, R. (2010). *A textbook of cultural economics*. Cambridge: Cambridge University Press.

Trust, G. (2013, Sept. 29). *Ask Billboard: How Does The Hot 100 Work?* Retrieved Apr. 25, 2014 from [www.billboard.com](http://www.billboard.com/articles/columns/chart-beat/5740625/ask-billboard-how-does-the-hot-100-work): <http://www.billboard.com/articles/columns/chart-beat/5740625/ask-billboard-how-does-the-hot-100-work>

Urrutiaguer, D. (2002). Quality Judgements and Demand for French Public Theatre. *Journal of Cultural Economics* , 22, 185-202.

Viacom, Inc. (n.d.). *2013 MTV Video Music Awards Voting*. Retrieved Apr. 23, 2014 from [www.mtv.com](http://www.mtv.com): <http://www.mtv.com/content/ontv/vma/2013/xml/popUpRules.html>

Vogel, H. (2011). *Entertainment industry economics: A guide for financial analysis* (8th ed.). Cambridge: Cambridge University Press.

Wagner, A., Soumerai, S., Zhang , F., & Ross-Degnan, D. (2002). Segmented regression analysis of interrupted time series studies in medication use research. *Journal of Clinical Pharmacy and Therapeutics*, 27, 299-309.

Watson, M., & Anand, N. (2006). Award ceremony as an arbiter of commerce and canon in the popular music industry. *Popular Music*, 25 (1), 41-56.

Wichern, D., & Jones, R. (1977). Assessing the Impact of Market Disturbances Using Intervention Analysis. *Management Science*, 24 (3), 329-337.

Yaffee, R., & McGee, M. (2000). *Introduction to Time Series Analysis and Forecasting: with Applications of SAS and SPSS*. New York: Academic Press, Inc.

Yanovitzky, I., & Vanlear, A. (2008). Chapter 4: Time Series Analysis: Traditional and Contemporary Approaches. In A. Hayes, M. Slater, & L. Snyder, *The SAGE Sourcebook of Advanced Data Analysis Methods for Communication Research* (pp. 89-124). SAGE Publications, Inc.

#### ONLINE DATA SOURCES

[www.grammy.com](http://www.grammy.com)

[www.theamas.com](http://www.theamas.com)

[www.mtv.com](http://www.mtv.com)

[www.billboard.com](http://www.billboard.com)

[www.metacritic.com](http://www.metacritic.com)

[www.riaa.com](http://www.riaa.com)