



Demand for cinema and diverging tastes of critics and audiences



Erik Wallentin

Jönköping International Business School, Department of Economics Finance and Statistics, Gjuterigatan 5, 553 18 Jönköping, Sweden

ARTICLE INFO

Article history:

Received 5 February 2016

Received in revised form

20 June 2016

Accepted 3 August 2016

JEL classification:

D12

D81

L11

L82

Keywords:

Cinema

Movies

Consumer demand

Reviews

Critics

ABSTRACT

Cinema is an experience good and consumers will use reviews by professional critics to reduce the inherent uncertainty of consumption. Two aspects of demand for cinema is analyzed; the demand of critics and the demand of the audience. Estimations are done in two steps on a set of Swedish data covering cinema ticket sales and review scores. I conclude that there is a great deal of discrepancy between which characteristics the audience favor and which ones professional critics value. On average it is however concluded that there is a positive relationship between review scores and ticket sales. Due to data limitations one cannot conclude whether this is a case of predication or influence.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Global movie box office revenue amounted to 36.4 billion USD in 2014 (MPAA, 2015) making it more than twice the size of the global music industry (IFPI, 2016).¹ Even though cinema attendance is stagnant or constant in most of the western world the growth in Asia and other developing parts of the world imply that the movie industry will continue to be a global economic force whose influence reaches far outside the silver screen.

Cinema should be viewed as an experience good whose inherent quality will be hard for consumers to judge before consumption. To reduce uncertainty consumers will use different sources of information to gain knowledge about the product. Product reviews by professional critics will likely be one important such stream of information. Much as is the case with advertising however, the effect of reviews is often taken for granted and relatively little attention has been given to discerning whether they actually have any effect, if all reviews are created equal or if there are interactions between reviews.

This study aims at analyzing differences in, and discrepancies between, demand for cinema of critics and the general audience. The concept of demand differs somewhat between these two

groups. For the general audience demand in this study is measured in the traditional market sense and represented by the number of tickets sold for a movie during its theatrical run. The demand of professional critics is operationalized in a slightly different manner, namely by the review scores that critics have given movies.

The estimations are done in two steps. The first, estimated by ordered logit, is aimed at finding determinants of the review score, hence demand by critics, a movie has received. The second, estimated by OLS, is aimed at finding determinants of the gross box-office ticket sales, hence audience demand. Ideally one would like to be able to analyze this as a dynamic process i.e. to observe at what time reviews are released and what affect this has on movie attendance (see e.g. Reinstein and Snyder (2005) and Sawhney and Eliashberg (1996)). This type of dynamic data set is however generally quite costly and difficult to acquire. In absence of this first best option I have here opted to employ what can reasonably be described as an *ex post* analysis, meaning that the analysis is aimed at explaining how favorably a movie has been received by critics and the audience throughout its theatrical run. This implies that only conclusions about *prediction* will be drawn, not *influence*. This is due to the fact that to separate between the effect of critical reviews and the effect of higher attendance due to higher quality we would need to know exactly when a review was released to say that the review had an effect *ceteris paribus*.

This paper adds to the current literature by suggesting a novel way of examining demand for consumer goods which are

E-mail address: erik@enveco.se

¹ Estimated at \$15 bn. in 2014.

systematically reviewed by critics. It differs from the majority of previous efforts in that the determinants of reviews are specifically investigated. It further employs a unique data set on Swedish cinema consumers. The results are of relevance to e.g. distributors and producers of movies and but also of more general academic interest with regards to cultural goods that are appraised by critics. One does however need to be aware of regional heterogeneity of tastes and preferences. Home country bias is one such importance instance.

Data on characteristics and reviews from all major Swedish news outlets was collected for 1966 movies shown in Swedish cinemas from the years 2001–2009. Sweden provides an interesting example given that it has relatively large domestic movie industry but is also generally considered to be an early adopter of foreign cinema and does not employ any type of dubbing for foreign cinema. Further the government financed Swedish Film Institute provides an excellent data source.

The main results are that on average the mean value of review scores have a positive relationship with gross box office ticket sales but there are large and important discrepancies between what characteristics critics value and which ones the audience favor. For critics some important drivers are documentaries and Asian cinema whereas for the audience Swedish and US movies are strong demand drivers.

The remainder of this study starts with a background discussion of the issue of consumer demand and critical reviews. This is followed by an outline of the proposed two step model, some notes on empirical identification and a presentation of the data set. The results are then presented, discussed and finally summarized.

2. Background

In line with Nelson (1970) I separate between *search* and *experience* goods. Search goods are those whose inherent quality can be accurately judged by examining them prior to purchase. Experience goods on the other hand are those whose quality cannot be judged accurately prior to consumption. One can also imagine that the quality of an experience good *can* be judged *ex ante* but that the cost of doing so relative to the value of the good does not permit this. I suggest that cinema is a *pure experience* good, whose objective properties to a large degree can be judged prior to consumption, but whose subjective quality to the consumer cannot. It thus shares characteristics of both aforementioned categories. The current study is limited to movies shown in cinemas, rather than the full demand over the life-cycle of a movie which is substantially longer than the period when it is shown in cinema theaters (Vogel, 2004). The motivation for this is that there arguably exists a large difference in the experiential quality of seeing a movie in a cinema versus seeing it at home. This is true both with regards to complementary goods, quality of screening and social aspects. It seems reasonable to assume that this difference will decline over time with widespread access to advanced home-cinema systems, but that it in all likelihood will persist at least with respect to the social aspects of cinema going.

I argue that a convenient manner of receiving information about the quality of a good is to rely on reviews by professional critics and that collecting information such as reviews and recommendations is generally perceived by consumers as a rational means of reducing uncertainty. While originally focusing on traditional arts and culture, critics today give their opinions on everything from computer games to take out food. Recent research finds that these reviews in many cases do have a significant effect on purchase behavior and that the inclusion of these types of variables solves some of the issues of overstating the effect of

current quality (Landon and Smith., 1997; Bonnard et al., 2010). Ginsburgh (2003) compares the effects of reviews and awards for movies, books and music. He finds that there is an effect of these on all three categories, but that is the most visible for music. Ginsburgh and Weyers (1999) study the robustness of critical acclaim by studying which movies received awards in Cannes or at the Oscars in the period 1950–1970. They find that awards from this period are very poor predictors of the quality assessments these movies receive by contemporary critics. Clement et al. (2007) develop a broad typology of possible critic biases in the context of book reviews. Sawhney and Eliashberg (1996) construct a parsimonious model to forecast box-office sales. They model the consumers' decision in two stages; firstly the time to decide whether or not to purchase and secondly the time to act upon that decision, where the first should capture the intensity of the information flow from critics and WOM. They find that even with a limited amount of early sales data, reasonably accurate predictions of aggregate box-office sales can be made.

In the present study I explicitly model the influence of diverging reviews. Relatively little has been written on the topic with regards to cultural goods but Debendetti and Larceneux (2011) provide an excellent cross-disciplinary review of the literature on divergence of tastes between critics and consumers. They also empirically investigate the issue for a sample of French movies and find that French critics diverge relatively more from public opinion than previous studies have found. Nagle and Riedl (2014) develop a model for divergence of opinion in user generated cinema reviews to discern whether current reviews influence future reviews. They argue that analyzing opposing “opinion poles” may be more fruitful than only observing simple dispersion such as standard deviation of review scores. They empirically test the model on a sample of 300,000 on-line reviews and find that only high levels of disagreement have any effect on future reviews but that such high levels will lead to a higher number of future reviews. The authors do not however investigate how these reviews will affect box office demand. Finally Holbrook (1999) estimates a model that differentiates between popular appeal and appeal to professional critics and finds that their opinions differ in 14 out of 19 estimated characteristics parameters.

A similar problem occurs when financial analysts give diverging recommendations for capital market investments, a phenomenon that has been studied Barron et al. (1998) and Lang and Lundholm (1996) among others. A related issue is that of professional critics being inconsistent and possibly being guided by factors other than their actual quality assessments such as pre-conceived notions about the good, temporary changes to moods et cetera. The issue of consistency among critics has been studied intensely by Hodgson (2008) who studies the judgments by critics in wine competitions. He generally finds that the ability to consistently give the same grade to the same good is lacking, but this is naturally primarily concerning blind tasting, a situation not common for cultural goods. Philosopher Sören Halldén (see e.g., Halldén (1993) and Anderberg (1993)) studies the group behavior among professional critics, a group he provocatively dubs the “swamp”. He argues that there exists only a very small number of leaders in this group and that most subsequent reviews are derivatives of these original critiques.

The issue of time and dynamics is essential in understanding how reviews affect consumers. It is also an area that is notoriously difficult to systematically address. Trivially we assume that consumers are in fact only affected by reviews to which they are exposed. As soon as we go beyond this however, things quickly become complicated. Reviews tend to address goods that are new to the market. This implies that many news outlets and other publishers will, more or less, simultaneously supply the market for information with reviews of the same product or service. The

Download English Version:

<https://daneshyari.com/en/article/1028724>

Download Persian Version:

<https://daneshyari.com/article/1028724>

[Daneshyari.com](https://daneshyari.com)