Unveiling the "Hidden Value":
A Model for the Economic Evaluation of Film Libraries

Ubaldo Macchitella
PhD student in Business administration and management
Bocconi University, Milan, Italy

Bernardino Provera
PhD candidate at Venice International University, Italy

Pietro Ietto
Director of Strategic Development at Cinecittà Holding, Rome, Italy

Francesco Giustino
MBA from SDA Bocconi School of Management, Milan, Italy

Ubaldo Macchitella is a PhD student in Business administration and management at Bocconi University. He collaborates with the Institute of Organization and Information systems at Bocconi University and is a teaching assistant at SDA Bocconi School of Management.

Bernardino Provera is a PhD candidate at Venice International University. He collaborates with the Institute of Organization and Information Systems, Bocconi University. He is a Research Associate of the Advanced Institute of Management Research, London.

Pietro Ietto holds a degree in Business Administration at Rome University "La Sapienza" and a MBA from SDA Bocconi School of Management. He worked for several years as Sales and Development Director in a consumer goods retail company and, subsequently, as a consultant in the entertainment industry. At present, he is Director of Strategic Development at Cinecittà Holding.

Francesco Giustino graduated in Economics and Management at Università degli Studi di Napoli "Federico II". He holds a MBA from SDA Bocconi School of Management. After several years in Booz Allen Hamilton management consulting in the Telecom and Media practice, he is currently developing an amusement park project for Cinecittà World S.p.A.

Abstract
The assessment of the economic value traditionally posited a challenge for researchers and practitioners. Traditional financial techniques encounter several obstacles in the form of artistic considerations, technological obsolescence, and demand unpredictability. The evaluation of film libraries presents additional challenges, as evaluators face a portfolio of heterogeneous assets which differ in terms of availability of commercial rights, individual potential for future exploitation, suitability for distribution across media channels. By considering empirical evidence from a research project, this paper presents a discussion of the main issues associated with the assessment of the value of film libraries. The paper illustrates an evaluation model which, by focusing evidence on artistic parameters as wells as on traditional financial indicators, may help evaluators unveil the value "hidden" in film libraries.

Keywords
Film Industry, Film Libraries, Economic Evaluation, Public Funding

Introduction

Most studies on the film industry have focused on the development of organizational structures and capabilities (Robins, 1993; Mezias and Mezias, 2000; Jones, 2001; Lampel and Shamsie, 2003), or on the determinants of commercial success (Soda, Usai and Zaheer, 2004; De Vany and Walls, 1999; D'Astous and Colbert, 2002; Verdaasdonk, 2005; Delmestri, Montanari and Usai, *forth-coming*). Moreover, literature on the film industry abounds with contributions on how to assess the financial value of a movie. A first approach is cost-based, suggesting that the economic value of an asset is equal to the investments made by the company to acquire or produce it. This model is widely accepted as it is straightforward to apply and it is consonant with established accounting principles. A second approach to determining the value of a movie refers to discounted cash flow analysis, which provides an actualization of the expected cash flow generated by every single movie. Although theoretically accurate, this method is often difficult to apply, as it requires simplifications and estimates. A third model is often referred to as "market approach", by which the value of a movie is inferred from past evaluations of similar transactions.

On the contrary, little or no contributions have addressed the issue of evaluating film libraries, or sets of movies sold as a whole, in a bundle, rather than individually. Evaluation of film libraries typically occurs when an organization (e.g. producer, distributor, TV company), or one of its branches, is acquired by another firm. To the best of our knowledge, only Vogel (2004) explicitly addressed the issue of evaluating film-asset catalogues. Nevertheless, his purpose is to present an introductory overview of the topic, rather than practical guidelines on how to assess the value of a library. Moreover, evaluation techniques generally encompass objective, economic parameters only, while artistic, qualitative features are not taken into account. Therefore, most approaches underestimate the prospective potential of movies that have under-performed in the traditional theatrical network.

The aim of this research is to propose a model for the economic evaluation of film libraries. According to our view, the effectiveness and value of our approach lies in its ability to bridge both the qualitative (artistic) and quantitative (financial) aspects regarding each movie. This is achieved by integrating objective measures and subjective parameters. The new approach, introduced with our study, is that the value of a library results not only from the sum of the values of past commercial performance, but also from the identification of a "hidden value", triggered by creative editorial strategies and innovative bundling activities.

This paper is grounded upon evidence from a research project carried out on behalf of Cinecittà Holding, a major Italian institution in the film industry. Cinecittà Holding required our research group to evaluate its movie library, which consisted of 540 Italian films produced over the last ten years with support from the Government.

The paper unfolds as follows. First, we present a theoretical approach by which we define the concept of hidden value, related to the typical evaluation techniques. Second, we introduce the evaluation model, directly moving from a practical case, explaining the role of Cinecittà Holding and the nature of governmental support to the Italian movie industry, thereby illustrating the characteristics of the Cinecittà library. Finally, we illustrate our model and discuss its qualities and potential, as well as its limitations.

The (Hidden) Value of a Film Library

The literature on the economic assessment of film libraries is controversial. There is widespread agreement, though, that the process requires as much art as science (Vogel, 2004). Traditionally, three approaches have been used to estimate the value of a film: a) the cost-based approach; b) the economic value approach; c) the market approach.

In the cost-based approach, the value of a film is determined as a function of the financial resources invested in its production and distribution. This method is widely used because of its overall simplicity and compliance with accounting rules. Alternatively, the value of a movie can be calculated by hypothesizing the cost of re-producing the film at present costs. However, this technique may be criticized as each movie is, by definition, an original outcome of a creative process. As a consequence, the sheer idea of re-producing it appears utterly unfeasible.

On the contrary, the economic-value approach holds that the value of a library depends on the estimated cash flow that this asset can generate in the future. Alternatively, it would be possible to employ the "loss cost" criterion, which results from the actualization of the losses incurred if the asset became unavailable for future utilization. Albeit theoretically correct, this technique is procedurally complex, as it is extremely difficult to predict precise estimates of future revenues and costs (Vogel, 2004). Significant fluctuations may be provoked by variation of inflation rates, as well as by technological breakthroughs and shifts in consumer tastes.

Finally, the principle underlying the market approach (also called empirical approach) is that the value of an intangible asset is directly related with the market price of an asset with the same characteristics. By correcting this price by the application of contextual parameters, it is possible to determine the economic value of the asset. This method assumes the market for a particular product to be fairly large, in order to signal a statistically-significant and observable price. Unfortunately, though, library transfers are rather infrequent events, which can be subject to a variety of contingent events (Vogel, 2004).

In conclusion, film-asset evaluation is an extremely complex process subject to a consistent deal of approximation, and "as with assessments of beauty, value is often only a function of the beholder's imagination" (Vogel, 2004: 75).

From the above-reported considerations, it follows that the value of a library may be defined as a linear combination of the values of every single movie. Our work, together with the related theoretical investigation, aim at defining a new concept for the evaluation of a film library, which is what we call the "hidden value".

Our theoretical framework relies on the idea that the value of a library is not only a sum of the values of the single movies that are part of it. A library, when considered as a whole, can express a different value, thanks to the emergence of this hidden value. The first effect of unveiling the hidden value is the generation of an extra value that substantially affects the evaluation of the library. We stress that this extra value should not necessarily be positive. Criteria for the individuation and quantification of this hidden value are discusses in the next sections.

In addition to the limitations discussed above, other elements related with the nature of the movie industry should be taken into account. For example, one aspect is the effect of technological advances on the commercial value of a film. The introduction of digital technologies has increased the economic potential of a film by adding additional features to the

same product (like, for instance, extra footage in DVDs). As a consequence, the lifecycle of each movie is significantly extended. On the other hand, the introduction of digital technologies potentially undermines the value of film library by facilitating piracy. A second element that should be taken into account is the completeness of the collection. Similarly to what happens with numismatics or stamp-collecting, the ownership of a complete series of films (for instance, all movies by a particular director) can add extra value to the library. It could be possible, for example, to implement bundling strategies, allowing a joint increase in the value of both old movies, the lifecycle of which is almost expired, and of new films. Another aspect that should be considered when estimating the value of a film library is the completeness of the associated property rights. It often occurs that movies within the same library present significant differences in terms of commercial potential. Some films could only partially be exploited, as property rights for particular channels (home-video, pay-TV, etc.) or particular markets (domestic vs. foreign, etc.) may be owned by third parties. As stated by Clark (2005: 14), "these days, most films do not recoup their costs at cinemas. Instead, they rely on video and TV sales". Nonetheless, potential revenues are to be carefully evaluated against distribution costs, which have consistently increased over the last decade (Clark, 2995).

The correct evaluation of film libraries, though, is of crucial importance in market transactions that involve the merger or acquisitions of movie companies, or of organizational departments. The overall value of a film company essentially depends upon the value of its library. Table 1 provides information on a number of film-asset transfers that occurred in the last decades.

The considerations discussed above urged us to design a peculiar evaluation model for the Cinecittà Holding library, which we discuss in the following paragraphs.

Table 1:
Selected Library Transfers, 1985-2003
Adapted from Vogel (2004)

Year	Assets Transferred	Seller	Buyer	Approximate Price
1985	4.600 features, 800 cartoons, shorts, Metrocolor Lab, studio property	MGM/UA Entertainment	Turner Broadcasting	$1.5 billion
1985	950 features, distribution system, other rights to MGM library	Turner Broadcasting	United Artists	$480 million
1989	2.400 features, 20.000 TV episodes, distribution system, 800 screens other rights	Columbia Pictures Entertainment and Coca-Cola	Sony	$4.8 billion
1990	3.100 features, 14.000 TV episodes	MCA	Matsushita	$6.1 billion
1993	200 features	New Line	Turner Broadcasting	$500 million
1994	900 features, 4.000 TV episodes, network, TV stations, publishing	Paramount	Viacom	$9.6 billion
1995	3.200 features, 14.000 TV episodes	Matsushita	Seagram	$5.7 billion
1996	1.500 features, 4100 TV episodes	Credit/ Lyonnais	K.Kerkorian/ Seven Network	$1.3 billion
1997	2.000 features	Orion/ Samuel Goldwyn	MGM	$573 million
2003	7.000 features	Artisan	Lions Gate	$210 million

Empirical Study

The Context: Cinecittà Holding

This paper unfolded while carrying out a research project for Cinecittà Holding, the main Italian film institution and one of the key players in the Italian film industry. Cinecittà Holding, publicly owned through the Italian Ministry of Culture and the Arts, is the parent company of a group that operates in all aspects of the film industry. Cinecittà Holding is active in promoting Italian cinema, both directly and through the affiliate Audiovisual Industry Promotion. Public intervention in the Italian film industry also occurs through a chain of multiplex theatres, through support in the production and distribution of movies, through the active management of the film library owned by the Italian government and, more recently, through the launch of the first private equity fund operating in the Italian movie industry. As part of its activities, and primarily with the intention of determining whether it would be appropriate to launch an enhancement of the Government-owned film library, Cinecittà requested our research group to evaluate its movie library, which consisted of 540 Italian films produced over the last ten years. This library progressively formed as a consequence of public aid policies to the film industry, which granted Italian producers additional funds to produce culturally-significant movies. This aid occurred in the form of a loan guaranteed by the rights of the movies. Whenever a producer failed to return these funds, property rights associated with the movie would be transferred back to the Department of Culture and the Arts. Although this library quickly grew to 540 movies, Cinecittà Holding – as recently stated by a new law – decided to dispose of this endowment.

In order to do understand the feasibility of any commercial transaction, an overall evaluation of the library's value was to be assessed. Such an evaluation, though, had to overcome several obstacles and complexities. For example, many films had been produced up to ten years before, and their economic performance had already proved to be greatly insufficient. Moreover, Cinecittà Holding is a public institution lacking direct experience in distributing and commercializing products on the market. A further complication was that Cinecittà acquired these movies more as a consequence of their inability to repay funds, than as an output of a deliberate commercial strategy.

Therefore, these complications urged us to pair traditional evaluation criteria with innovative parameters that could grasp the cultural aspect of the movie value.

The Italian System of Public Funding for the Film Industry

In the last decades, the Italian movie industry experienced fluctuating levels of commercial success and critical acclaim. Nonetheless, national production has managed to uphold a consistent share of overall revenues. Approximately 100 new films have been produced and distributed every year. Almost 75% of novel productions benefited from public financial support. In many cases, film production benefited from government funding through various forms of aid, in accordance with a legislative framework that underwent a radical change in January 2004, the effects of which will only be seen as of 2005.

Specifically, government funding involved:

- ► The production of debut works and of films of national/cultural interest;
- ► The distribution of these in publicly-owned movie theatres;
- ► The participation to national and international film festivals;
- ► The restoration of culturally relevant movies.

Over the years, though, the issue of public funding for the Italian film industry has witnessed a variety of attempts to prove its efficacy and transparency, which culminated in the recent legislation governing the film industry which establishes new criteria for granting funds for film production.

The former system of public funding for the film industry generated a remarkable number of films that, during their commercial lifetimes, did not meet the expectations of moviegoers. Most films, albeit intended as high-quality productions, failed to secure a thorough distribution across multiplexes. As a consequence, most films proved unable to repay the funds received from governmental authorities. The selection criteria applied by governmental agencies to assign public aid have often been criticised for being too loose. The first reason can be traced to a long-standing tradition of providing unconditional support to artistic and cultural endeavours. Ever since the Renaissance, there has been a consolidation of the idea that 'art' represents the highest and purest representation of human intellect and creativity (Hesmondhalgh, 2002). This tradition tends to regard cultural artefacts as the outcome of "an autonomous realm of existence dedicated to the pursuit of particular values – 'art', 'beauty', 'authenticity' and 'truth' – which are the very antithesis of those assumed to hold sway in the banal world of the economy – the rational pursuit of profit, unbounded 'instrumentalism' and so on" (Du Gay, 1997: 1). According to this view, the presumed noble values of art and culture should be granted a stand-alone status which should ensure their independence from any economic imperative. The second reason for a loose financing system can be attributed to the willingness to protect the national film industry from international competition. Hartley (2005: 13) describes this approach a "*provincial promotionalism*". Similar systems apply to other European countries like Germany, France, England. In Italy, the system finances a great amount of movies, in the hope that some would eventually rise to critical acclaim and commercial success. Finally, the weak criteria for eligibility may simply be traced to a poor management of public funds, coupled with a generalised lack of involvement and control.

The existence of this library, the formation of which makes it unique in the Italian film industry, made it necessary to find a method of appraisal that could, on the one hand, take into account the income produced by the film during its past commercial lifetime and that would, on the other hand, remain linked to traditional evaluation criteria and techniques.

This thrust of our research was supported by both commercial and cultural motivations. The commercial goal is intrinsic to any appraisal process. The potential to revitalize long-forgotten products may lead to new revenue flows which could be used to support new productions.

The cultural aspect, on the other hand, is unique to this particular library, and is linked to the original conditions which led to the distribution of funds to support the productions. The attempt to provide culturally-relevant films with "a second chance" motivated the search for a new valuation model that could bring out the hidden value of this particular library.

The Method

In order to devise a financially reliable evaluation model that could also be employed by practitioners, we engaged in a preliminary series of interviews with industry analysts and experts. These included the programming director of cable TV film-only channel, the managing director of a TV and film production organization, the business development director and marketing director of a major distribution company, the research director of a leading production company, a lawyer specialized in the field of intellectual rights, three managing directors of three distribution companies.

Subsequently, we presented a panel of three judges with an initial version of our model, requiring them to test its viability on an 18% sample of movies from Cinecittà library. The judges included a leading lawyer in intellectual property law, with a four decades experience in the Italian movie industry, a former managing director of an export company, currently a media and publishing consultant, a financial manager of a distribution company with a long-standing experience in managing film libraries.

The Evaluation Model

The key assumption underlying our model is the non-exclusivity of the subjective element in the evaluation of a film. In other words, we believe that the subjective element is, by definition, constrained within the personal sphere of the observer conducting the evaluation and, as such, cannot be replicated if not through an analytical study of those elements which characterize the film and which can be expressed more appropriately in objective terms.
To that end, the definition of our evaluation model is organized into various stages, as described below:

► Stage I
  – Definition of the qualitative and quantitative parameters
  – Definition of the valuation intervals
► Stage II
  – Creation of the positioning matrix
  – "Population" of the matrix
  – Bundling activities: results, quality, and themes
► Stage III
  – Construction of the rights availability grid
  – Analysis of the potential distribution channels
  – Determination of the coefficients of market penetration and their development over time
► Stage IV
  – Financial model used to determine pricing policies

Definition of the Qualitative and Quantitative Parameters

The most complex and articulated stage is that related with the identification of the relevant categories and intervals. The appraisal model has been created via the integration of both qualitative and quantitative parameters. With reference to qualitative inputs, we have considered each "distinguishing" characteristics of the work, in order to generate an assessment criterion linked with precise artistic prerequisites. In particular, our analysis focused on the following categories and/or awards associated with each movie:

– Director
– Cast
– Leading actors/actresses
– Supporting actors/actresses
– Soundtrack
– Participation in film festivals and awards received[1]
– Critical reviews[2]

A similar assessment was developed for other - more objective - characteristics of each film. In particular, we identified a set of quantitative categories that represent the historical performance of the film itself. Useful terms of comparison are represented by the overall amount received by a film, by its box-office revenues, and by the value of the residual exposure to the State as an indicator of financial sustainability. As such, we have focused in particular on:

– Overall funding received
– Box-office revenues[3]
– Residual exposure = Funding – Repayment

Definition of the Evaluation Intervals

Once the qualitative and quantitative parameters have been identified, the model determines the range of values for each of these indicators, in order to provide a weighted figure.

Then, the values expressed by the individual categories are normalized in order to make them mutually homogeneous, as well as to graphically locate the films in "the positioning matrix". Each category is assigned a coefficient that determines its weight within the overall analysis.

Value ranges and the weight attributed to each single category were determined after interviewing a panel of experts belonging to the Italian and international film industry. Particularly, for the Review 1 and review 2 values, we followed two Italian major publications and we represented them in a homogeneous and, therefore, comparable form.

The conversion tables for the values and their relative weights are as follows (Table 2 and 3):

Table 2:
Qualitative Indicators

Value Range for Movie Evaluation							
Min							*Max*
Director	1	2	3				
Cast	1	2	3				
Soundtrack	1	2					
Festival & Awards	0	0,5	1	2			
Review 1	0	1	1,5	2	2,5	3	3,5	4
Review 2	1	1,5	2	2,5	3	3,5	4	5

Table 3:
Category Weights

Weighted Categories for Movie Evaluation		
	Category Weight %	Total Weight %
Director	42%	42%
Cast	35%	
Actor 1	40%	14%
Actor 2	30%	10,5%
Actor 3	20%	7%
Actor 4	10%	3,5%
Soundtrack	6%	6%
Festival & Awards	13%	13%
Review	4%	
Review 1	50%	2%
Review 2	50%	2%
Total	**100%**	**100%**

The Positioning Matrix

The model, then, proceeds in defining a "positioning matrix", which provides a graphical representation of the films in the library. This is a three-dimensional matrix comprising the following variables:

- Artistic value: the y-axis represents the data that describes qualitative components of each film. Each value is normalized and weighted through a particular coefficient;
- Box-office revenues: this dimension is shown along the x-axis. All box office data are exclusively related to theatre revenues and, therefore, do not represent total revenues for all potential distribution channels.
- Amount of residual exposure: this dimension is represented in the matrix by the size of the "bubble" for each film. The size of the circle is directly proportional to the amount of financial exposure.

Populating the Matrix

Once the structure of the matrix had been defined, we started to position the movies of our library.

The data gathered in the previous phases provided a numerical representation of the position of each individual film on the matrix. Table 4 provides a graphical illustration.

Table 4:
The Positioning Matrix
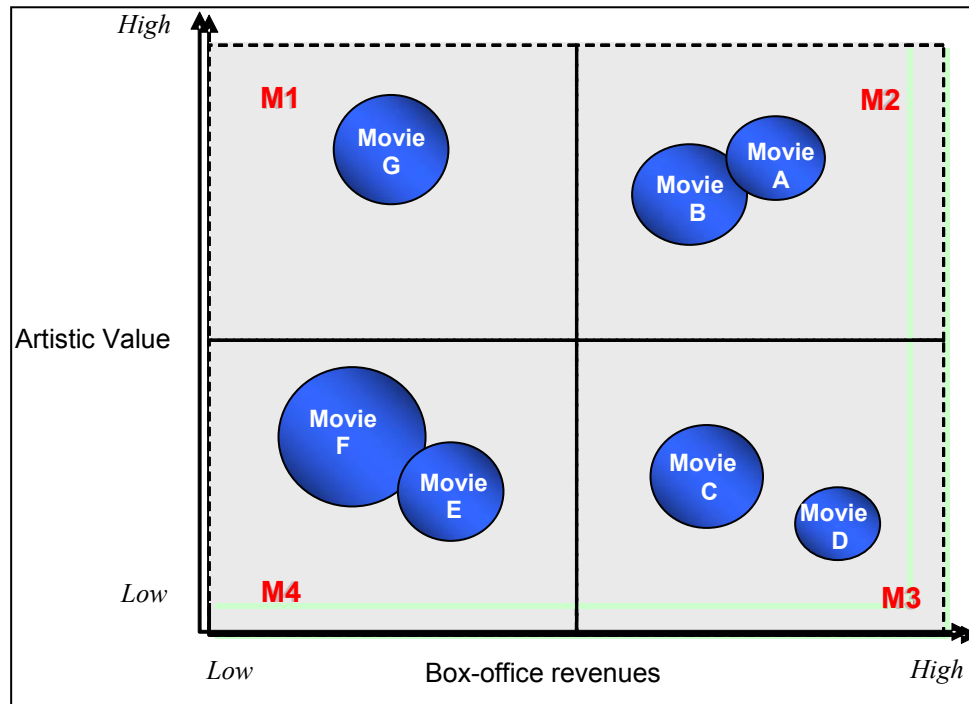
Each film in the library is represented by a "bubble". Its position on the matrix indicates how each film is positioned in terms of box-office revenues (x-axis), artistic value (y-axis), and residual exposure (size of the "bubble"). Similarly to a traditional product portfolio matrix, this matrix provides an effective means of assessing the value of the films within the library based on their revenues, financial standing, and artistic value. This assessment serves as the foundation structuring and optimizing the commercial proposal (i.e. bundling, etc.).

Bundling Activities and the Unveiling of "Hidden Value"

Once the films had been positioned in the matrix, we turned our attention to defining appropriate commercial strategies to enhance the value of the library. The companies that own film libraries usually follow a "bundling" sales strategy, in which the offer is represented by a package containing one film of high commercial value and a number of films of lesser value. Therefore, companies are able to move a great number of films from their inventory that would otherwise not be taken advantage of. Most film-libraries deals adopt a "train-like" strategy where the locomotive (the high-value film) is able to pull along a certain number of cars (the other films bundled into the deal). The matrix allows to devise package deals in which each "M2" or "M3" film is bundled with a number of films in categories "M1" or "M4", thereby adopting a "box-office driven" strategy.

In our case, though, we proposed a different approach, considering that the library was composed of films characterised by little box-office success (in the movie theatres). In our case, the positioning matrix is essentially populated by films belonging to categories M1 and M4. Therefore, it is not possible to apply a box-office driven strategy. Consequently, we needed to identify less traditional mechanisms of value enhancement which would, at the same time,

provide further opportunity for revenue generation. In other words, we needed to find, highlight, and support what we defined as the "hidden value" within these films.

We achieved these results by implementing a bundling strategy based upon different genres (by theme, director, actor, etc.), taking advantage of the great number of films which could be identified with a given genre. Albeit the individual film may not be of great commercial value on its own, together with other movies in the library, and organized in accordance with a precise bundling scheme (e.g. "the debut works of Italian directors in the 70s"), the entire "collection" acquires significant value. This is particularly true if considering, for instance, the current trend of television networks to offer theme-based series of films in their programming. A few examples may be represented by:

- *Genre* bundles: "Italian comedy in the 70s", "Neo-Realism", etc.
- *Debut works* bundles: "the debut works of the best Italian directors", etc.
- *"Lost"* bundles: "the films that never made it to the theatres", etc.

Defining the Rights-Availability Grid

A precise definition of the types of economic rights is an essential factor in any initiative of value enhancement. In the model proposed, this determination was made by considering the main rights associated with the use of each film. Factors like technological progress and the lengthening and broadening of the value chain (for example, the distinction between free TV and pay TV, as well as the new channels made available by broadcasting technologies such as broadband, GPRS, UMTS, etc.), may put forward opportunities to expand the pool of exploitable rights. The main types of significant economic rights on films are shown in the following diagram (Table 5):

Table 5:
Economic Rights
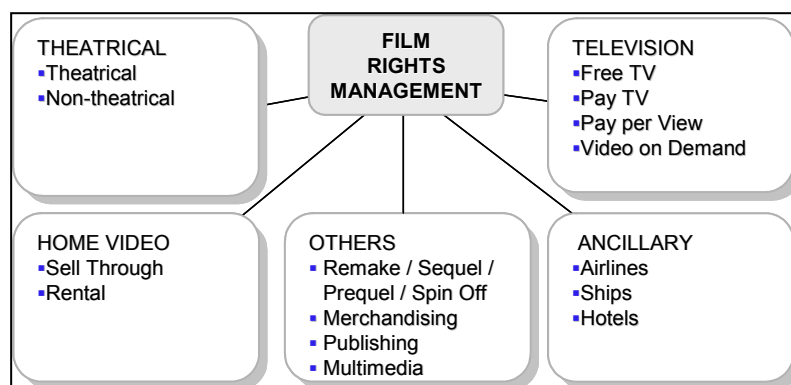
The list of rights alone shows how complex it is to track and manage all relevant rights and how important it is to establish an effective system of rights tracking and management, given that it is an unavoidable condition to dispose of the film, be it for commercial purposes or for cultural and promotional aims.

In defining the model for library management and value enhancement as proposed in this project, it was therefore necessary to set up a "Rights Availability Grid" (Table 6) for the films in the library, and to populate it with data gathered by analyzing the main sources of documentation.

Table 6:
Rights Availability Grid of the Film

| Title | Theatrical Rights | | Television Rights | | | | | | | | | Audiovisual Rights | | | | Ancillary Rights | | | | | Other Rights | | | | | Abroad |
| | | | Free TV | | | Pay TV | | | | | | | | | | | | | | | | | | | | |
	Theatrical	Public Video	Terrestrial Free Tv	Cable Free Tv	Satellite Free Tv	Terrestrial Pay Tv	Cable Pay Tv	Satellite Pay Tv	Pay per View	Demand View	Near Demand View	Home Video Rental	Home Video SellThru	Home Video edicola	Ship	Airline	Hotel	Interactive multimedia	Merchand.	Publishing	Remake	Sequel	Prequel	Spin-off	Format	All Rights
1 Movie A	Available	Available	Available	Available	Available	Available	Available	Available	Not Available	Not Available	Not Available	Not Available	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from
2 Movie B	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Available from	Available from	Available from	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
3 Movie C	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Not Available	Available	Available	Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Available from	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
4	Available	Available	Available	Available from	Not Available	Available from	Available from	Available from	Available	Available from	Available	Available from	Available from	Available from	Available from	Available	Available from	Available from	Available from	Available from	Available from	Not Available	Not Available	Available from	Available from	Available from
5	Available	Available	Available	Available from	Not Available	Not Available	Not Available	Available from	Not Available	Available from	Available	Available from	Available from	Available	Available	Available	Available from	Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Available from	Available from
6	Available	Available	Available	Available from	Not Available	Not Available	Not Available	Available from	Not Available	Available from	Available from	Available from	Not Available	Available from	Not Available	Available from	Available from	Available from	Not Available	Available from	Available from	Not Available	Not Available	Not Available	Available from	Available from
7	Not Available	Not Available	Not Available	Available from	Available	Available	Available	Available	Available	Available from	Available from	Available	Available	Available	Available from	Available	Available from	Available	Available	Available from	Available from	Available from	Available from	Available from	Available from	Not Available
8	Not Available	Not Available	Not Available	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Not Available	Available from	Available from	Available	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Not Available	Available from	Available from	Not Available
9	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Not Available	Available from	Not Available	Not Available	Available from	Available from	Available from	Available from	Not Available	Available from
10 Movie Z	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Available	Available	Available	Available	Available	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from	Available from

Legend:
- Available (green)
- Available From … (yellow)
- Not Available (red)

Analysis of the Potential Distribution Channels

After positioning all of the films in the library and after identifying one or more commercial bundling strategies, we identified the potential distribution channels through which the films could be marketed. By "potential" channel we mean a distribution channel in which the product offerings are compatible with the type of products contained within Cinecittà library. For example, while a pay TV channel for kids is clearly to be considered an "existing" channel, it may not be considered a "potential" channel if the product to be offered is not compatible with the offering of the channel itself, i.e. films for kids. For each of these, we formulated hypotheses of penetration in relation to the total target market (Table 7):

Table 7:
Distribution Channels

Analysis of Sales channels	Distribution channel	Existing	Potential		
	Free TV	10	7	Hypothesis of market penetration for each single channel	Simulation Of Market penetration → High / Medium / Low
	Pay TV	30	13		
	Home video	10	10		
	VOD	…………	…………		
	Internet, UMTS	…………	…………		
	Abroad	…………	…………		
	…….	…………	…………		

The Financial Model Used to Determine Pricing Policies

Upon conclusion of the commercial and positioning analyses, it was necessary to prepare a financial model which, both for its characteristics and for its structure, could be used in two ways. On the one hand, starting with the cost structure, it would make it possible to set sales prices that would result in breaking even (bottom-up). On the other, after simulating the earnings flows generated by sales, it would make it possible to determine the net profit on operations, through an analysis of costs and margins (top-down).

Conclusions

Our model contributes to the understanding of the economic evaluation of film libraries which, according to Vogel (2004: 68-69), is "of prime concern to investors who, over the years, have staked billions of dollars on actual and rumored studio takeovers".

Moreover, our model could provide insights for the financial evaluation of catalogues in other cultural industries as, for instance, music, publishing, and auctions. In the music industry, for example, approximately 50% of the overall turnover of a major is guaranteed by its past repertoire (Barfe, 2004: 339).

The availability of new media has increased the demand for content (Hesmondhalgh, 2002). As a consequence, the value of individual movies is potentially subject to revitalisation, as new opportunities become available (Vogel, 2004). Many potential channels are still in the initial stage of their life-cycles (e.g. internet streaming, Umts telephony, etc.). Therefore, it is yet unclear how these channels will evolve, making it difficult to predict their overall weight in the

model. Without reliable forecasts, evaluation of these channels has been prudential, but more precise studies could surely refine the commercial evaluation of individual movies and film libraries.

Finally, this paper results from a research project commissioned by Cinecittà Holding, a public institution, in an attempt to foster the economic exploitation of culturally significant works. Consequently, this paper may provide empirical grounds for a broader discussion of the role of government intervention in financing and supporting artistic and cultural endeavours.

Nonetheless, some questions remain unanswered, and should be tackled through further research. Measures for the artistic value of each movie could be refined. For example, different estimates of relative weights attributed to artistic parameters could be discussed, in the direction of more objective measurements. This would significantly improve the overall effectiveness of the model. In addition to that, further discussion might entail distribution channels included in our model. Many potential channels are still in the initial stage of their life-cycles (e.g. internet streaming, Umts telephony, etc.). Therefore, it is yet unclear how these channels will evolve, making it difficult to predict their overall weight in the model. Without reliable forecasts, evaluation of these channels has been prudential, but more precise studies could surely refine the commercial evaluation of individual movies and film libraries.

Acknowledgements

Notes

[1] This measure includes the participation, the nominations and the awards received in national and international festivals.

[2] This measure consists of an average value of the score assigned by the two leading Italian critical handbooks.

[3] This measure was based on Cinetel data. Cinetel is a system for the collection of the box office receipts operated in collaboration with cinemas dispersed across Italy. The values provided by Cinetel should be read considering a slight statistical error due to the fact that not all Italian cinemas are included in the system

References

Barfe, L. 2004. "*Where have All the Good Times Gone? The Rise and Fall of the Record Industry*". London: Atlantic Books.

Clark, T. 2005. "Why a Monster Hit did not Make Giant Profits". *Financial Times*, 15/02/2005.

d'Astous, A. and F. Colbert. 2002. "Moviegoers' Consultation of Critical Reviews: Psychological Antecedents and Consequences". *International Journal of Arts Management*, 5.

Delmestri G., F. Montanari and A. Usai, (forth coming). "Reputation and Strength of Ties in Predicting Commercial Success and Artistic Merit of Independents in the Italian Feature Film Industry". *Journal of Management Studies*

De Vany, A. and W.D. Walls. 1999. "Uncertainty in the Movie Industry: Does Star Power Reduce the Terror of the Box Office?". *Journal of Cultural Economics*, 4, 285-318.

Du Gay, P. 1997. *Production of Culture/Cultures of Production*. London: Sage.

Hesmondhalgh, D. 2002. "The Cultural Industries". London: Sage. 376-397.

Jones, C. 2001. "Co-evolution of Entrepreneurial Careers, Institutional Rules and Competitive Dynamics in the American Film, 1895-1920". *Organization Studies*, 22, 911-944.

Hartley, J. (Ed.) (2005). *Creative Industries*. Oxford: Blackwell.

Lampel, J. and J. Shamsie. 2003. "Capabilities in Motion: New Organizational Forms and the Reshaping of the Hollywood Movie Industry". *Journal of Management Studies*, 40, 2189-2210.

Mezias, J. and S. Mezias. 2000. "Resource Partitioning, the Founding of Specialist Firms, and Innovation: the American Feature Film Industry, 1912-1929". *Organization Science*, 11, 306-322.

Robins, J. 1993. "Organization as Strategy: Restructuring Production in the Film Industry". *Strategic Management Journal*, 14, 103-118.

Soda G., A. Usai and A. Zaheer , 2004. "Network Memory: the Influence of Past and Current Networks on Performance". *Academy of Management Journal*, Vol. 47, no 6, 2004, p. 893-906

Verdaasdonk, D. "Moviegoing Frequency among Dutch Consumers: Interaction between Audiences and Market Factors". *International Journal of Arts Management*, 7.

Vogel, H.L. 2004. *Entertainment Industry Economics. A Guide for Financial Analysis*. Cambridge: Cambridge University Press.