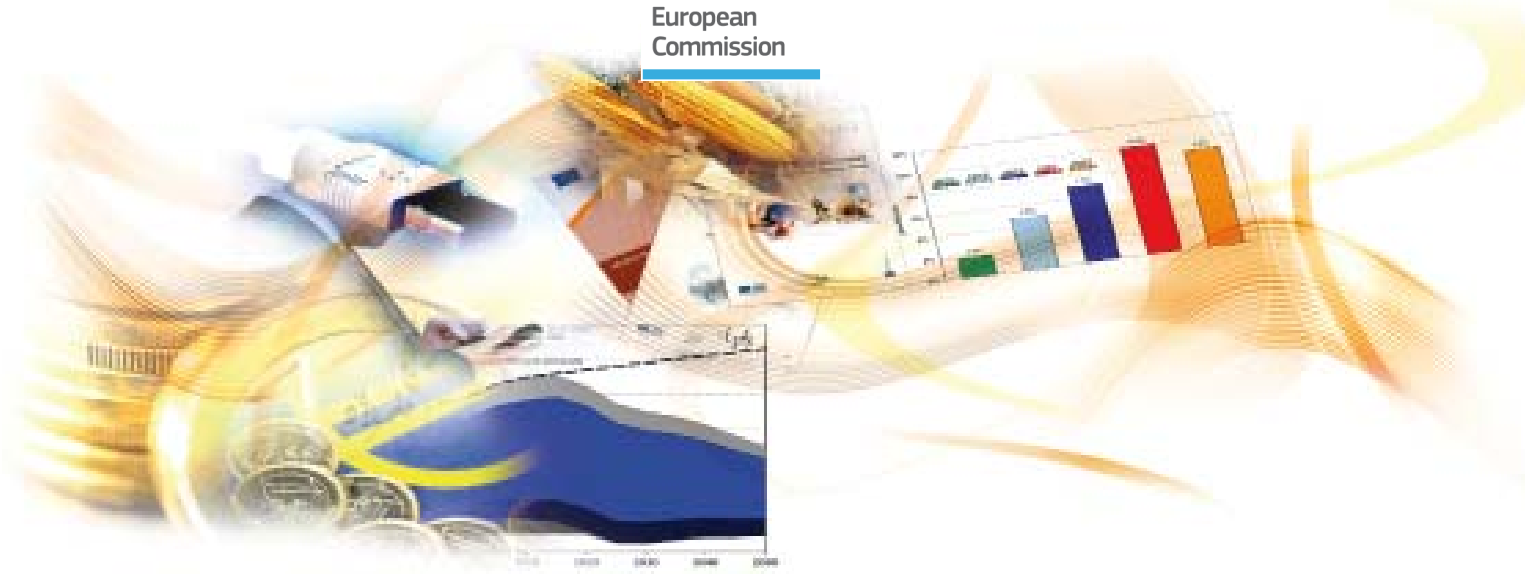
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J R C T E C H N I C A L R E P O R T S

Statistical, Ecosystems and Competitiveness Analysis of the Media and Content Industries:

The Film Sector

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Preface

Media and Content Industries (MCI) carry out an array of heterogeneous economic activities, which encompass publishing (including music), sound, motion picture and video/TV production, programming, distribution and broadcasting industries, as well as diverse information services.

The common thread in these activities is that they are all conducted by establishments primarily engaged in the creation and dissemination of information and cultural products. Also, the last decade witnessed a progressive intertwining of these activities amongst themselves and with the ICT sector, which increasingly provides the means for disseminating MCI products. At the same time, there was rapid change in the way these establishments worked and their business models (production and distribution processes, key players, organisation, etc.). Last, but not least, there was a substantial increase in the overall weight of MCI in the EU economy.

While understanding and mastering the descriptive quantitative tools that we have at hand is important, it is even more essential to grasp the current dynamics in the various industries in the Media and Content sector, possibly in relation with those in the ICT sector, in order to adapt our metrics and analysis to the current and emerging transformations of these sectors.

Therefore in 2009, IPTS launched a research project on the "Statistical, ecosystems and competitiveness analysis of the Media and Content Industries". This research initially included the preparation of a statistical report, a historical report and three subsector case studies, each supported by a dataset and technical annex. In 2010, IPTS decided to complement the initial case studies (cinema, music and newspaper) with two additional subsectors (book publishing and broadcasting) in order to provide a comprehensive view of the sector. In 2010, IPTS had already released a case study of the video games industry,[1] a fast growing segment of the sector.

This set of studies has two objectives:

1. To offer a quantitative statistical approach to the Media and Content Industries, including their extension or blurring boundaries due to: offline and online activities; innovative activities deriving from recently developed technological applications (i.e. P2P, WEB 20, social computing or other related current or emerging trends and technologies); specific sub-industries, companies or products that would not readily fit existing taxonomies.

   The above dynamics were reflected in a wide-ranging revision of both taxonomies and classifications. Indeed, the definition itself of the MCI sector stems from a long standing process of standards revision guided by the OECD. This led to the profiling of the digital economy, and the conceptual

[1] The report starts by introducing the technologies, their characteristics, market diffusion and barriers to take up, and their potential economic impact, before moving to an analysis of their contribution to the competitiveness of the European ICT industry. It concludes by suggesting policy options. De Prato, G., Feijóo, C., Nepelski, D., Bogdanowicz, M., Simon, J.P (2010) "*Born digital/ Grown digital. Assessing the future competitiveness of the EU video games software industry*", JRC Scientific and Technical Report, 24555 EN. Available online at http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=3759

identification of the MCI and ICT sectors as the two components of the Information Economy domain (OECD 2007, 2009). Similarly, the recently completed revisions of international classifications of economic activities (UNSD 2006, Eurostat 2008) led to the creation of a specific section (the highest rank in classifications) for Information and Communication activities, which includes both MCI and ICT services.

This represented a significant departure from tradition, in that it brought together industries, previously seen as belonging to very diverse sectors of the economy, in an attempt to better reflect current reality. During the last decade, the industrial environment related to activities such as information archiving, processing or transmission, content creation and exchange, etc. has undergone a series of changes, which make it less and less advisable to analyse the sector, or any of its industries or companies, as a autonomous and separate entity that would simply integrate new technologies for the purposes of straightforward modernisation or expansion. Borders have blurred, roles have changed, and business models have adapted: the ecosystems have evolved radically.

2. To offer an industrial and economic analysis of the Media and Content Industries, and their dynamics. The case studies investigate the past and current ecosystems of these industries, looking beyond value chains or major actors to those aspects that are relevant to the understanding of the transformations themselves: emerging challengers, past and new threats and ways of responding, new business models, major investments, major failures or successes and their causes, technological changes affecting the industry, radical innovations if any, etc.

The analysis in the cinema, music and newspaper case studies follows the framework sketched out by IBBT-SMIT and TNO (2011) in collaboration with IPTS. They consider the interplay between:

- Technological change and innovation, especially ICT and digitisation, as a major driver of industrial and economic change;
- Market developments;
- Industrial structural change, including analyses of concentration and consolidation, integration, diversification and new entries;
- The competitive position of European industry players in a European and global context;
- Impact of digitisation in different parts of the value network (production, aggregation, distribution, consumption of content), new business models, new positions in the value chain, piracy and the role of users;
- The role of policy, i.e. not a full analysis of policy impact on the subsectors, but the main policy issues and trends as important contextual factors.

In the video games, TV and book publishing industry case studies, the framework presents a slightly different pattern, but aims to achieve similar objectives through its analysis.

The video games report documented a series of core insights into the video games industry that allow us to understand the market, its industrial structure including the main actors and activities, the aspects that determine the major tensions and power

relations among actors, and also the potential disruptions.

The TV case study follows the same track but explores the relationships between these changes and new TV formats. It adopts a "product" approach to the analysis of the industry, giving special consideration to how European television series, game shows and sports are being produced, distributed and viewed/consumed in the new media ecosystem.

Similarly, the book publishing report considers the redistribution of the components of the book "chain" and the shifting role of various industry players with the development of e-books.

The reports are based on a review and synthesis of the available literature and (official and unofficial) data of the MCI sector, desk research, and several workshops.[2] The results were reviewed by experts and at dedicated workshops.

The reports aim to offer a reliable set of data and analysis, and also to contribute significantly to the debate about the economic health and development conditions that will support the future competitiveness of the European Media and Content Industries.

Contract title: “Statistical, ecosystems and competitiveness analysis of the Media and Content industries"”

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[2] First MCI workshop, IPTS Sevilla, 30-31 May, 2011: “The economics of Media and content industry (MCI). Approaches, case study, economic effect of the digital transition”. Second MCI workshop, IPTS Sevilla, 27-28 October, 2011: validation workshop. All the presentations at the two MCI IPTS workshops are available at: http://is.jrc.ec.europa.eu/pages/ISG/documents/

EXECUTIVE SUMMARY

REPORT OVERVIEW

This report aims to offer an in-depth analysis of the major economic developments of the film industry. It focuses on analysing the transformations in the industry induced by digitisation (i.e. digital content creation, distribution and use and its impacts on value chains and business models), the competitive position of the European industry in relation to these transformations, related opportunities and threats, and policy implications.

This report analyses feature films, looking at their production and distribution through and exhibition across different channels. It integrates data from this project's statistical report and includes a database of 10 EU and 10 non-EU companies, plus two company case studies (Netflix and Universciné).

The report is part of a larger study, which aims to offer a reliable set of data and analysis on the economic health and development conditions that will support the future competitiveness of the European Media and Content Industries (MCIs).

The report is structured as follows. Following an introduction (Chapter 1), Chapter 2 introduces the sector and its main economic, cultural, technological and regulatory features. Chapter 3 analyses the value network of the European film industry in a global perspective, identifying specific strengths and weaknesses across different parts of the value network (production, distribution and exhibition). Chapter 4 analyses how the film industry and its value network is transforming as a result of the ongoing digitalisation process. Chapter 5 concludes the report by weighing the strengths and opportunities of the European film industry against the weaknesses and threats.

THE FILM SECTOR – STATE OF PLAY AND VALUE NETWORK

The film sector is one of the core cultural industries, which means that it creates both economic and cultural value, and this in turn has influenced policymaking in the field. The film industry has a number of economic characteristics, some of which it shares with other media and content industries: (1) it is a prototype industry, with high fixed production costs and relatively low reproduction costs; (2) quality and costs are not well reflected in price; (3) it is a hit-driven industry with uncertain demand; (4) films are semi-public goods, where consumption does not destroy value and where it is difficult to exclude audience from consumption; (5) a number of strategies for control have emerged including (a) portfolio approaches, (b) formatting strategies (stars, sequels etc.), (c) versioning (release windows), (d) concentration and integration (in particular through control over distribution) and (e) copyright protection.

The industry contains a multitude of players across its value networks, ranging from creative talent, production companies, distributors, exhibitors, finance players, sales agents, broadcasters, telcos and cable companies, home video 'rentailers', and a plethora of Internet companies ranging from individual creative entrepreneurs, via SMEs, independents, national powerhouses to the Hollywood studios and their affiliates.

The European film landscape is characterised by the strong presence of Hollywood players. These 'majors' (Paramount Pictures, Sony Pictures, Twentieth Century Fox,

Universal, Walt Disney and Warner Bros), though they only produce around 150 films per year, account for more than 90% of the US market and over 50% of a number of other world markets, including Europe. With control over distribution (including marketing), these majors can commit significant resources to production and marketing, build audience awareness using superior marketing resources and skills, reduce and spread risks over several films, and invest profits in new projects. In establishing this dominance, the majors have raised significant barriers to entry for other smaller companies, including European ones.

Although hampered by the dominance of the majors, the European audiovisual sector is large and quite vibrant, and is made up of about 75,000 companies (using a broader definition that also includes TV programmes), employing almost 400,000 people with revenues of some 60 billion euros. A number of top European multimedia groups have motion picture departments, often linked with broadcasters' activities (e.g. StudioCanal). Other European groups that are active in several areas of the film value network include Pathé, Constantin Film and Kinepolis. However, the bulk of the European film community consists of nationally-organised companies, many of which are relatively small and focused on one segment of the value network (production or distribution, for instance).

The European film sector is characterised by a long tradition of policy support**,** which has aimed to enhance the global competitiveness of European players and films. Over the years, an increasingly complex support framework has been created across Europe, in which more culturally-inspired, selective funds coexist with industrially-oriented tax incentives. Some two billion Euros are pumped into audiovisual support each year, mostly through national support schemes and funds, and usually targeted at production activities.

European-level film policy activities started to gain real importance in the 1980s, through (1) the Council of Europe's Eureka programme (now abolished) and the Eurimages fund, supporting European co-productions and (2) the European Union's MEDIA programmes, aimed at all types of film-related industrial activities except for production. Economic integration and the set-up of a common market have been shaping related EU activities, which include (beside the MEDIA programmes) the establishment of harmonisation frameworks (the Television Without Frontiers (TWF), Audiovisual Media Services (AVMS) and copyright directives) competition policy and state aid regulation.

From the start, cinema has had an important technological component. Technological inventions have interplayed with and given rise to business innovations, enabling new ways of creative expression, for the market to expand and the industry to flourish. A number of periods of technological change have affected the film sector more or less radically since its establishment, namely: the introduction of sound (1920s-1930s), colour (1930s-1960s), the television screen (1950s-1960s), widescreen and 3D experiments (1950s) and the introduction of home video systems (1970s-1980s).

Recurring elements in these transitions must be kept in mind when analysing the industry's current digital transformation: (1) transitions have taken place over long periods of time; (2) important adoption drivers have included the transition costs, the availability of technological standards, the audience response and availability of content; (3) they have provided opportunities for smaller, independent and new

players to enter the industry; (4) they have been systematically met by an initial reluctance among all the dominant incumbent players, including the European ones; (5) Hollywood majors, rather than European players, have been able to strengthen their competitive position through each transition.

The feature film value network consists of four major 'streams' of value adding activities: (1) a production (or negative) stream; (2) a distribution and marketing stream (or P&A), (3) an exhibition stream and (4) an auxiliary stream: this last has not been the focus of this report (though it should not to be underplayed). Clearly, the strong position of the Hollywood majors affects the whole value network.

The production process or 'negative' stream – i.e. everything that happens before the resulting film 'negative' is made – encompasses a variety of activities that can be categorised as being part of pre-production, actual production or post-production. Even in the pre-production stage, the European film sector already has two weaknesses. The first concerns the development process, to which fewer resources are devoted in Europe. Despite this, a much larger ratio of film concepts make it to production in Europe than in the US. This suggests that European films are much less mature than the US ones, and this puts Europe at an early disadvantage. The second issue concerns financing, problematic in Europe because of: (1) the absence of private investors, (2) the project-by-project character of film production, and (3) scattered rights. These factors affect the rest of the value network in what appears to be a vicious circle.

At the same time, many talented players (not least, directors) continue to make a large number of European films each year. The European filmmaking community puts out a high and rising number of films, many of which are co-produced. While this continued vitality at the creative level can be considered a strength, it lays bare the disconnection between the film community and the realities in the market. From the start, it is clear that many of the films produced will never reach their audience.

In general, as compared to the US, Europe has a volatile production sector, lacking critical mass, long-term perspectives, and distribution and marketing skills. It is mainly characterized by small production companies, which are unable to invest as much (per film and in total) in film production as their US counterparts. In order to fill this gap, the European production community has become largely dependent on public support.

Still, investment in European films is growing, which somewhat counterbalances the still-present under-financing weakness. However, this rising total investment appears to be used in making even *more* movies instead of following a more selective approach.

The production process runs from the very first stages of moviemaking up to the creation of the answer print. Once this has been done, a movie is put into the market. This means it is physically delivered to the various exploitation channels (distribution) and also that it is marketed. Though the distribution landscape in Europe is dominated by the major distributors (distribution arms of the Hollywood studios), it also includes a number of smaller independent European players, which are generally territorially fragmented. Although the large majority of European films find a way to distribution (at least in one market), they suffer from not being backed by the marketing machine of the majors, and hence have much fewer chances of succeeding commercially. This is another major weakness of the European film

industry, which is to some extent partially compensated by a strong film festival tradition.

The exhibition cycle is based on a system of time holdbacks – the release windows. Traditionally, this has meant that theatrical exhibition (domestic followed by the international release) comes first, followed by video/DVD rental; video/DVD sales; Pay-per-view; Pay TV and, at the very end, free television.

In the theatrical market, Europe has a large and diverse exhibitor sector, though this is starting to consolidate, with large multiplex cinemas putting the small (e.g. art house) theatres in a difficult position and favouring US blockbuster content. Clearly, US movies dominate the European cinema market with a 60-70% market share, followed by national films. The market share for European films outside Europe is marginal, typically around 3-7% depending on the region. Also problematic from a European-level perspective is the weak position of non-national European films in the fragmented European market, where (non-US) films do not cross borders easily. Less than 30% of the audience for European films comes from outside the national market, with large differences between countries.

The second major release window – the home-video market - has been a source of growth for the film sector since the 1980s. First VHS and then DVD have expanded this market substantially, making it today the largest of the windows in terms of revenues. Over the past decade, growth has been fuelled by DVD retail sales. Recently however, the market shows clear signs of decline, particularly in the US. This may be because it has been substituted by online (partly illegal) consumption.

The limited data we could gather do not point to a stronger position of European films in this market, compared to the theatrical one. In fact, market shares of US (Hollywood) films appear to be higher than for theatrical market.

Finally, **TV** is also an important market for films. There are different sub-outlets in the television market for movies: 1) pay-per-view (PPV), 2) premium and pay TV and 3) free television, each with a distinct time window typically following after the home video market. Just like in the other exhibition markets we discussed, however, American films dominate screen time in the European television market.

IMPACT OF DIGITISATION

For about three decades, digital technologies have been introduced successively to separate parts of the film value network, but it is only now that they are starting to impact the entire industry.

At the beginning of the digital evolutions in the film sector, the technological innovations introduced did not have a disruptive character. The first digital steps (in the 1980s and 1990s) were visible in the production stages of filmmaking, affecting both sound and image. In theatres, digital sound was starting to affect the audience experience. At home, the Digital Versatile Disc (DVD) replaced the home video cassette. These early developments were characterised by clear benefits and an absence of disruptive effects on the value network organisation.

In the new millennium, the digital physical movie carrier continued to evolve, with the launch of Blu-ray high-definition discs as the main milestone. More importantly, the digitisation of the traditional film value chain affected age-old distribution business practices and ways of working more fundamentally. Gradually, more

disruptive effects (in terms of changing cost structures and value relationships) could be seen for theatrical exhibition, but even more importantly for home video following the rise of the Internet.

There are three recurring benefits of digitalisation: 1) increased cost efficiency, 2) flexibility and 3) enhanced quality. The objections and problems largely have to do with a (perceived) loss of control.

At the production stage, digitisation offers benefits in terms of cost-efficiency, flexibility and quality improvements, which may help European producers to become more attuned with the market and the audience. Increased flexibility, cost-savings and networking provide opportunities for a more networked international production, and for the supply of specialised tasks. This may lower the importance of being geographically close to the Hollywood majors, and thus benefit European players. But it may also imply increased cost-based competition from other countries in specific activities (e.g. special effects or post-production facilities). In addition, alternative financing and talent sourcing mechanisms may emerge and the Internet may strengthen the relationship between producers and the audience.

While the magnitude of these benefits is difficult to assess, there are also a number of challenges that must be overcome. In order to fully exploit the advantages of digitalisation, it is necessary to make the link between the digital (post-) production process and the subsequent (distribution) through Digital Source Masters (DSMs). For a long time, however, European industry players have lacked a strategy for making the transition and have trailed behind the US players. During a transition period, this implies extra costs and at the moment the business logic for who should bear these costs (producers or distributors) is unclear. Finally, the digitisation of production back catalogues and archives constitutes a challenge, both in Europe and elsewhere.

Concerning distribution, working digital leads first and foremost to substantial cost savings. Working with digital prints lowers duplication and transportation costs, and provides more flexibility to adjust supply to an uncertain demand. Digital makes content customisation (subtitles, dubbing) easier and less costly, which could prove to be an advantage for European films crossing borders. Yet the cost savings may also reinforce economies of scale and the blockbuster strategies of the majors.

As regards marketing, digitisation also works both as an opportunity and a challenge for the European film sector. One the one hand, online and viral marketing strategies offer a cost-efficient way of targeting the audience, which is particularly useful for European films, as they rely more on word-of-mouth than mass marketing strategies. In a world of abundance, it may become even more important to carry substantial marketing and branding power, two areas in which the European film sector lags far behind Hollywood.

The most profound impacts of digitisation concern exhibition. First, the release window system comes under increasing pressure (regarding both exclusivity and timing) from piracy and from legal online alternatives. This may offer some opportunities for smaller titles to benefit from, for example, a combined marketing "buzz".

Digitisation is changing the theatrical exhibition landscape. Digital cinema provides benefits in terms of consistent projection quality, programming flexibility (including

alternative content) and the cost savings associated with digital distribution. However, theatre owners are confronted with high initial investments, while most of the benefits accrue to the distributors. Nevertheless, three main drivers have pushed the roll-out of digital cinema, particularly in the last five years (somewhat earlier in the US than elsewhere): (1) the DCI standard; (2) the development of a number of financing solutions to solve the distributor-exhibitor quandary, most prominently the Virtual Print Fee (VPF); (3) the revival of 3D movies. Digital cinema may also offer an opportunity for theatres to broaden and diversify their activities, and possibly exhibit more European films. However, there is a risk that small exhibitors will not make the transition.

In the home video market, the transition to digital DVDs is already more or less complete. DVDs have expanded the market and also offer easier and less costly adaptation (e.g. dubbing and sub-titling) of content, which in theory would benefit the circulation of any film, including European ones. However, language, culture, localised business practices and scattered rights have continued to form barriers for European content to circulate across borders. In recent years, the DVD market has declined (both in the US and in Europe). The new high-definition format Blu-ray has grown rapidly but at low levels, and therefore has not been able to compensate for the DVD decline (although there are signs of recovery). This decline of the physical sales in the home-video video market is a clear threat and challenge for the sector as whole.

Digital TV (not the focus of this report) offers further possibilities for movie consumption, through the use of terrestrial, satellite, Cable, IPTV and also mobile technologies. The transition to digital is in full swing in Europe, although it progresses at difference paces in different countries.

Piracy, i.e. the illegal duplication and consumption of movies, is not new to digital technologies, although they have made it much easier and less costly. Initially, the issue was somewhat put aside because of the rapid growth of the legal (DVD) market. However, when a dematerialisation (read Internet) caught on in the illegal circuit, digital piracy became a real (at least perceived) problem for the industry since it enlarged both the potential piracy supply community and the audience for pirated copies. The potential economic impact of piracy is still under debate, sometimes with doom and gloom, and exaggerations on both sides. What is clear, however, is that piracy poses a challenge, primarily for the home video market, both in terms of direct economic loss and in a more indirect way, as current “democratised” piracy menaces the basic premises of copyright. It creates a consumer who increasingly expects content free of charge in a 'sharing economy'.

Online movie consumption, sometimes labelled Video on Demand – VoD – includes two main distinguishing features: (1) it is online and hence dematerialised, which in turn has implications for the cost and speed of delivery, and (2) it involves time and place shifting, i.e. the consumer can decide when and where to watch the film.

Although on-demand delivery of movies has been around since the 1990s, it has only very recently started to take off and the film industry and other actors are experimenting with various business models and modalities - for example:

- delivery on a server/client basis or peer-to-peer.
- different platforms: including: 1) the Internet; 2) IPTV, digital cable, satellite or digital terrestrial television (DTT); 3) stand-alone devices such as game

consoles; 4) mobile receivers (e.g. via DVB-H) or even 5) cinema theatres (digital cinema on demand or DCD, see above).
- downloading or streaming.
- free (ad-based), pay-per-unit or subscription models.

Due to its immaturity, the VoD landscape is poorly documented in Europe. However, a number of observations can be made and some trends are emerging. First, there is a large and rising number of (different) players providing an increasing number of services. In Europe, these offers have mainly been developed by TV broadcasters, telecom and cable operators, but content aggregators and content owners are also active in this new market. In addition, device manufacturers (e.g. Apple, Microsoft, Sony) are playing an important role. These actors are trying out different business models, with subscription and download-to-rent being the most popular so far. The market, although not accurately captured by statistics, is still rather small, possibly only in the range of €200 million in Europe, but growing rapidly. Being a growth market it constitutes an opportunity for the sector and for European firms. However, while many European firms have entered the market, a number of US Internet companies have already started to carve out what may turn out to be dominant positions in the delivery of online films.

Concerning European content, long-tail economics of online movies may form an opportunity for European films and more diverse content in general. Still, there are several economic and license-related barriers which limit supply, and cultural language and consumer taste-related issues which limit demand. Possibly, as the size of catalogues increases and better tools are developed for consumers to search for, discover and select films, long-tail economics may kick-in. So far, however, according to data at hand, the online market is no more diverse than its off-line counterparts, in terms of both supply and demand.

IMPLICATIONS

When we weigh the strengths and weaknesses of the European film sector against the digital opportunities and challenges of today, we get a more realistic view of the extent to which changes to the sector could manifest themselves in the near future and – most importantly – whether these changes would entail an increased European competitiveness in global markets.

Table: Summary SWOT

Strength	Weakness	Opportunity	Threat
Production			
Large diversified production output Creative strength (in particular directors)	Lack of attention for and selection during development Lack of private financing coupled Dependency on public funding Low investment levels Volatile production landscape – lack of long-term orientation	Strengthening of interaction and ties between sector and audience Flexibility and cost savings emphasize the network-like character of production New forms of sourcing talent and funding	DSM: Lack of long-term vision and unclear division of digital (mastering) costs between producers and distributors Digitisation of production back catalogues and archives problematic Lowering market barriers may be to the detriment of Europe's competitiveness in a global market
Distribution / marketing			
Large share European films finds its way into (theatrical) distribution Film markets and festivals	European distribution is concentrated with US majors and their affiliates (Territory-based) fragmentation Insufficient marketing	Content customisation becomes easier (subtitles, dubbing) Cost savings and flexibility could benefit the (trans-national) distribution of European films Online and viral marketing strategies offer a cost-efficient way of targeting the audience	Reinforcement of blockbuster strategies to the detriment of smaller films and their release strategies In a world of abundance, it may become more difficult to draw (marketing) attention
Exhibition / consumption			
Large and relatively mature market for films Varied theatrical exhibitor landscape	European films are not exported (Smaller-scale exhibitors are under pressure in a concentrating multiplex-oriented market High market shares for US films in all markets (theatrical, home-video, TV) European films do not travel within Europe	Digitisation brings flexibility and differentiation options for theatrical exhibitor, including potential for increased screening of European films The shortening of release windows could offer opportunities for smaller titles VoD market offers potential for growth The long tail model offers possibilities for European film offers in a dematerialised context	Slow digital roll-out putting smaller exhibitors at risk Licensing problems make it difficult to exploit cinema's back catalogue Decline of physical home entertainment market Piracy trend leads to consumer expectations to receive content for free VoD market trends point towards dominance of US groups and weak position for (transnational) European film supply and consumption Multi-territory licensing not taken up

On the basis of the SWOT analysis above, we can conclude that many digital opportunities form a good fit with the European film sector, in the sense that a number of them could enable sector players to overcome their competitive weaknesses while most are particularly suited to the sector's strengths in terms of diversity and creativity. Overall, the increasingly network-like structure of the global film landscape offers renewed opportunities for the large range of smaller European film companies to increase their cross-border reach by following 'networkisation' strategies. This type of cooperation at the European level could offset some of the disadvantages associated with the lack of consolidation in the European film sector.

At the same time, vigilance is necessary as the digital threats (including the slow adoption of certain digital possibilities and the lack of a "digital mindset") could turn out to have the opposite effect. In the end, the sector's fragmented nature could be reinforced, granting more power to the old and new global dominant players to fill the content pipes.

This means that sector and policy action will be crucial in order to tilt the balance in the right direction. In this regard, we identify four major action areas on the basis of the SWOT confrontation, each with their own specific action points. The main challenges relate to:

1) The preservation of diverse offers in various channels, which necessitates (sector and policy) action in terms of d-cinema, VoD and piracy;

2) The fostering of networking and exchange between European film companies, for which specific exchange and social networking tools could be envisaged as an alternative to consolidation;

3) The development of market financing opportunities for European film companies that make it viable for them to engage in multi-territory activities;

4) Ensuring a connection between supply and demand by working on audience literacy and the availability of subtitled films in the various commercialisation markets.

On all fronts, European policymakers have been active in recent years. The Council of Europe and the EU institutions have both responded to digital challenges according to their remits. The Council of Europe, in line with its culturally-oriented, intergovernmental approach, has acted mostly as a forum for discussion and debate on the digital future of European film. It has also set up the Eurimages fund to provide specific support mechanisms to foster digital roll-out in cinemas.

The EU meanwhile continues to focus on the need to overcome the fragmentation of its (now-digital) audiovisual markets. Like the Council of Europe, it has been active as a stimulator of debate and interaction on a number of issues such as media literacy and audiovisual heritage and has furthermore updated its existing audiovisual policy instruments, such as the adoption of the Audiovisual Media Services Directive (2007). Content online and the associated debates with regard to multi-territory licensing have been at the forefront of – often conflictive – debates, with work on concrete policy action still in progress. The most concrete support has been undertaken in the framework of the MEDIA 2007 programme, where specific funds for VoD/DCD and pilot projects were set up. Recently, a modest digital cinema scheme was also adopted.

Nevertheless, the idea of a common European market for audiovisual services continues to be perceived as a threat by a substantial group of stakeholders, including film professionals. Yet as geographic and sector boundaries come down in a digital context, the European institutions consider they are the logical partners for the development of a digital policy approach – even if policy mechanisms do not leave much room for intervention.

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1. INTRODUCTION

1.1. Research objectives

The aim of the study, of which this report is one part, is to offer a reliable set of data and analysis in order to contribute significantly to the understanding and debate about the economic health and development conditions that would support the future competitiveness of the European Media and content industries MCIs.

The objective of this report in particular is to offer an in-depth analysis of the film industry, including its major economic developments. Emphasis is placed on analysing transformations of the industry as induced by digitisation (i.e. digital content creation, distribution, consumption and their impact on value chains and business models), the competitive position of the European industry in relation to these transformations, related opportunities and threats, and policy implications.

The object of analysis is feature films (see further Section 2.1 for a definition), encompassing their production as well as distribution through and exhibition across different channels, but excluding auxiliary streams of revenue (e.g. merchandising) and supply of technology (e.g. cameras). The analysis integrates data from the statistical report of this project; and includes a database of 10 EU and 10 non-EU companies plus two company case studies (Netflix and Universciné).

1.2. Method

The analysis follows and adapts the preliminary framework sketched out by IBBT-SMIT and TNO (2011) in collaboration with IPTS. This means that it will consider the interplay between:

- Technological change and innovation, especially ICT and digitisation, as a major driver of industrial and economic change;
- Market developments;
- Industrial structural change, including analyses of concentration and consolidation, integration, diversification and new entries;
- The competitive position of European industry players in a European and global context;
- Impact of digitisation in different parts of the value network (production, delivery/distribution, consumption of content), new business models, new positions in the value chain, platformisation, disintegration and re-integration of content, piracy and the role of users;
- The role of policy (i.e. not a full analysis of policy impact on the subsectors, but the main policy issues and trends as important contextual factors).

This report is based on a review and synthesis of the available literature and reports and available (official and unofficial) data on the film industry. It also draws on internal expertise about the industry, as acquired through several years of studies (in particular De Vinck, 2011; and also De Vinck & Pauwels, 2011; De Vinck & Walravens, 2011).

1.3. Outline of the report

The remaining parts of this report are structured as follows. Chapter 2 explores the specific background and evolution of the European film industries in order to sketch the canvas against which digital transitions are taking place. It defines and delineates the film industry (Section 2.1), addresses the cultural and economic nature of the

film sector (Section 2.2) and outlines the basic industry structure, including the position of Hollywood players in the European film landscape (Section2.3). Subsequently, we consider the role of (European-level) audiovisual policymaking (Section 2.4). Lastly, we offer a brief overview of the lessons we can draw from earlier introductions of technological innovations (Section 2.5).

Chapter 3 analyses the European film industry and its value network. Section 3.1 introduces the concept of the value network. The subsequent sections offer a more in-depth analysis of its different elements, i.e. production (Section 3.2), distribution (Section 3.3) and (theatrical and non-theatrical) exhibition (Section 3.4). Throughout the chapter, we will identify "analogue" strengths and weaknesses of the EU film industry.

Chapter 4 constitutes the core of the report. Following a similar structure as the preceding chapter, it analyses how the film industry and its value network are transforming as a result of the on-going digitalisation process. Section 4.1 overviews how different elements of the value network have become digitised over time. The rest of the chapter mirrors Chapter 3. Hence it analyses how digitisation affects the production process (Section 4.2), distribution (4.3) and exhibition/consumption (4.4). In analogy with the identification of strengths and weaknesses in Chapter 3, this chapter identifies digital opportunities and challenges throughout and these are summarized in Section 4.5.

Chapter 5 confronts the strengths and weaknesses of the European film industry with the opportunities and challenges posed by digitisation, in order to generate a number of areas that require policy attention.

2. THE FILM INDUSTRY: INTRODUCTION AND EVOLUTION

In this chapter, we explore the specific background and evolution of the European film industries in order to sketch the canvas against which digital transitions are taking place. This means first of all that we define and delineate the film industry (Section 2.1). Then we address the particular cultural and economic nature of the film sector (Section 2.2). Next, Section 2.3 outlines the industry structure. We analyse the position of European film industries in the global film marketplace, including the particular relation between European cinema and Hollywood. Subsequently, we consider the role of policymaking (Section 2.4). Lastly, we offer a short overview of the lessons we can draw from earlier introductions of technological innovations and describe the gradual introduction of digital technology in the film sector (Section 2.5).

2.1. Delineation of the film sector

Focus on feature films

The film sector (or industry) is defined in this report as encompassing those companies involved in value-adding activities (e.g. in the production, distribution, marketing and exhibition) with regard to **feature films**. These are typically defined as films with a runtime of more than one hour and produced for theatrical release (see e.g. EAO 2010, p. 8).

This means that we do not focus on music videos, commercial advertisements, adult films, or user generated AV content published e.g. on YouTube. TV entertainment programming (including 'stock programming' such as filmed drama, comedies and documentaries) is not accounted for unless it consists of feature films that are originally intended for a theatrical release (i.e. no "made-for-TV" films). Nor do we focus on supporting technical activities such as the manufacturing of production equipment, exhibition facilities or consumer electronics. However, when relevant these supporting and complementary sectors are discussed. We do recognize that, increasingly, the boundaries between the different types of content and their exhibition are blurring (e.g. when feature films are not (or very briefly) theatrically released, when user-generated content is programmed as "alternative content" on a cinema screen etc.). Our point of departure nevertheless lies clearly in the traditional film sector as it has developed in a pre-digital context.

Lack of official statistics

Note that most official statistics fail to capture the film sector as we define it, since neither the sub-sector categories nor the data collection provides statistics with sufficient precision. In Table 2-1, which includes the relevant ISIC classes, motion pictures are combined with television programmes under ISIC rev 4. For ISIC rev 3.1, the problem lies in a lack of distinction between production and distribution activities. Although this is regrettable, it must be emphasised that an alternative definition of the sector (for instance by addressing the audiovisual sector as a whole, including television programming) would fail to provide a meaningful entryway to discuss the specific challenges facing the film sector as distinct from the television industries.

Table 2–1: ISIC rev 4 and ISIC rev 3.1 for film-related sub-sectors

ISIC Rev 3.1.	Category	ISIC Rev 4	Category
9211	Motion picture and video production and distribution	5911	Motion picture, video and television programme production activities
		5912	Motion picture, video and television programme post-production activities
		5913	Motion picture, video and television programme distribution activities
9212	Motion picture projection	5914	Motion picture projection activities

Source: Based on TNO (2011)

In addition, it should be noted that the official statistical approach to the MCI sector fails to include the increasing interconnectedness and convergence with the ICT (telecom, computer and software) industries and fails to grasp e.g. the involvement of firms active in online Video on Demand in the current operationalisation of the MCI sector (TNO, 2011). In response to this lack of official data, we have largely resorted to semi-official sources, such as European Audiovisual Observatory (EAO) data, alongside non-official sources such as Price Waterhouse Coopers and Screen Digest.

2.2. The cultural and economic characteristics of the film sector

The film sector is usually classified as one of the core **cultural industries** alongside television and radio, video games, music, books and press[3] (KEA European Affairs, 2006). Basically, these industries emerge at the crossroads of symbolic creativity and economic market activities (Hesmondhalgh, 2007). It is generally recognised that the film sector has an industrial *and* a cultural component, which in turn has consequences for the way it functions and the manner in which policymakers address it. Most importantly, the film sector as a cultural industry creates both **economic and cultural value**.

Film sector, a cultural industry

The generation of economic value, on the one hand, is visible across the different components of the value chain or network (cf. Section 3.1), but also spills over to other parts of the economy generating 'economic dynamism' on a local, national or even international level in terms of job creation, tourism and trade. The notion of culture, on the other hand, refers clearly to the production and circulation of 'texts' (in this case, films) that have a certain social meaning. In other words, films have a primarily communicative (as opposed to functional) goal. The essential distinguishing factor is not that the cultural industries possess subjective meaning or value, but that this symbolic meaning is comparatively high to their utilitarian (functional) value. The symbolic meaning of films relates to their cultural value, which can refer to aesthetic, social, historical and other types of value. Like with economic value, cultural value occurs both at the individual level and at the more encompassing level, referring to society as a whole (Hesmondhalgh, 2007; Moons, 2007; Scott, 2005; Throsby, 2001).

[3] The notion of the 'cultural industries' has been defined in different ways over the years, with especially the 1990s bringing further conceptual discussions and the rise of alternative and/or related notions such as 'creative industries', 'experience industries', 'content industries' or, more generally, the 'cultural economy' or 'creative economy). This conceptual complexification goes hand in hand with parallel transformations in the cultural sphere (see e.g. Segers & Huijgh, 2006). We basically adhere with KEA's classification of these cultural industries. For an overview of their definition of the cultural and creative sector, see KEA's study "The Economy of Culture in Europe" (KEA European Affairs, 2006).

Economic vs. culture tension

The observation that cultural industries such as the film sector are important both in terms of cultural *and* economic value is the source of a significant tension between creativity and commerce.

This tension is reinforced by the particular market logic of the film industry and industry responses to that. The economic and cultural characteristics of the film sector help explain both the position of European film sector players in a global marketplace and the establishment of adapted policies in this area.

Prototype industry

First of all, the film sector is a **prototype industry**, with **high fixed production costs** and relatively **low reproduction costs**, meaning that the costs of reaching one extra viewer are marginally small.

Release windows and price discrimination

Moreover, there is a weak relation between the quality of a movie and the price a consumer pays for it. Competition between sector players is in other words to large extent **not grounded in price**, in the sense that a cinema visits will typically be priced roughly at the same level regardless of production costs or demand. The main means for price discrimination is instead the release cycle where subsequent windows are priced lower (per viewing) than earlier ones (Table 2-2). In addition discounts are sometimes applied to off-peak time exhibitions and for youth, students and seniors.

Table 2–2: Release timing and pricing of theatrical features (2002-2005)

Window (media)	Window (time after release)	Price per Transaction	Price per Viewing
Theatres	0	$5.81	$5.81
Video sales	4-5 months	$14.77	$3.69
Video rentals	4-5 months	$2.84	$1.13
Home PPV/VOD	1-1,5 months after video	$3.50-$4.00	$1.50
Subscription pay TV	1 year	$7.64/mo	$0.76
Basic cable TV	2-3 years	$34.52/mo	$0.46
Broadcast TV	2-3 years	$0	$0.00

Source: Adapted from a presentation by D. Waterman to the The Economics of Media and Content Industry workshop, IPTS, Sevilla, Spain, May 30-31, 2011, referring to Waterman (2005) and SNL Kagan (2006)

Hit-driven and risky industry

This disconnection between production costs and pricing levels contributes to the **hit-driven** character of the film sector. Films need to achieve critical mass to be profitable. Moreover, once you are winning, you are winning big, which is also known as the 'blockbuster syndrome'. The hit industry characteristics of the film sector combine with the **difficulty of predicting of demand** to make it a risky and 'casino-like' business. Indeed, the (cultural) value of a film for individuals is difficult to measure, let alone to predict. The big hits thus have to make enormous profits to offset the high number of misses inherent from the uncertain demand structure (Hesmondhalgh, 2007; Miège, 1989).

Films are semi-public goods

Next to this risk management, the film sector has also been focused on achieving control over the access points to the cultural goods and services it puts out. Films, like other cultural products, encompass some of the characteristics of public goods, i.e. they are **semi-public goods**. The act of consumption does not destroy the value of a film for subsequent consumption – hence they do not compete. In addition, it is

difficult to exclude audience members from the act of consumption (Hesmondhalgh, 2007; Pauwels, 1995; Vogel, 2007).

Hollywood's major studios have been most successful in applying **strategies of control** in order to manage this risk-ridden environment and the public-good characteristics of the film sector. Firstly, the **portfolio approach** spreads risk across a wider array of films. Secondly, a number of **formatting strategies** have helped these players to place 'safer bets' in the movie casino. These include the star system, the use of genres and the serial trend (film sequels). Movies are branded through the set-up of synergies, which have moved the 'film franchise' centre stage (Flichy, 1980; Grainge, 2008; Hesmondhalgh, 2007).

Various strategies of control perfected by Hollywood: 1) portfolio 2) formatting

In terms of marketing and distribution, thirdly, the film sector has perfected the notion of **versioning**, which differentiates film offers in terms of quality, means of access, bundle of products, pricing, time and usage characteristics. Movies are in other words marketed differently across a variety of technical and cultural versions (KEA & MINES, 2010). The release window system that we will discuss in Section 3.4.1 is one of the concrete manifestations of this concept in the film sector.

3) versioning

Fourthly, concentration and integration trends further reinforce these responses and exploit economies of scope and scale. Larger firms and monopolistic tendencies are rewarded by the spreading out of fixed costs across larger markets. Market extension through international strategies is a particularly interesting tactic for the film sector (Neuman, 1991; Flichy, 1980,). Related to this, control over distribution has proven to be at the origin of film market power concentration in Hollywood. Their dominant position rests on the elaborate international distribution networks through which their films circulate. Marketing strategies are crucial to draw audience attention to these films (Flichy, 1980; Hesmondhalgh, 2007; Scott, 2005).

4) concentration and integration; control over distribution

More generally, one of the crucial ways in which sector players have achieved a form of control is through the elaboration of **copyright protection** systems. In this regard a precarious balance has to be found between the interests of the authors, their publishers and of the users with regard to the terms of access to cultural content such as films (Hesmondhalgh, 2007; Mitchell, 2005).

Copyright

2.3. Companies active across the European film industry

The Film industry is characterised by a multitude of players across different segments of the value chain (See further Chapter 3). Key types of players include the following (partly overlapping) categories:

A multitude of players

- Creative talent (screenwriters, directors, actors and actresses etc.) and their business representation (agents, managers);
- Business entrepreneurs and company players (producers, distributors, sales agents, exhibitors);
- Finance players (financiers and investors, including banks, subsidy players, but also broadcasters and distributors);
- Theatrical (exhibitors) and non-theatrical delivery players (broadcasters, telecom players, home video retailers and renters, internet content service providers).

In addition, each category comprises different types of companies, including:

- Individual creative entrepreneurs;

- Small or medium-sized companies, often nationally anchored and not integrated;
- National large companies, sometimes vertically or horizontally integrated;
- National powerhouses that are also leading international players (e.g. The Weinstein Company, Lions Gate, Summit Entertainment, Studio Canal; Pathé);
- Hollywood studios and their affiliates.

Strong Hollywood presence

The European film landscape is first of all characterised by a strong presence of Hollywood players. The exact composition of the group of 'majors' has evolved over time, including successive merger and acquisition waves. These have been the corollary of the various multi-market opportunities arising as a result of the expansion of the film value network (cf. chapters 3 and 4). At the same time, the 'globalisation' phenomenon has led to a surge of international movie financing structures. During the 1980s and 1990s, European and Japanese media companies became increasingly involved in Hollywood, often by purchasing shares in American independents.

In particular, what is known as the classic studio system started to collapse after WWII, with a "New Hollywood" order slowly establishing itself instead, especially after the 1970s. Crucially, today's system combines a more decentralised production (and risk) structure with a reinforced concentration of (distribution and revenue) power in the Hollywood majors' hands. In the place of the classic studio system thus emerged a reconfigured version based on a hit industry model, the consolidation of industry structures and a new generation of film studio executives (Anderson, 1994; Maltby, 2003).

The essence remains that a number of key studios continue to dominate mainstream film. Today's MPAA[4] members are Paramount Pictures, Sony Pictures, Twentieth Century Fox, Universal, Walt Disney and Warner Bros. The companies are further described in Annex A. These are vertically integrated firms with activities spanning production and distribution. Although only producing around 150 films per year, they account for a roughly 90% market share of the US market and usually above 50% in other markets. With control over distribution (including marketing), the majors can commit significant resources to production and marketing, build audience awareness using superior marketing resources and skills, reduce and spread risks over several films, and invest profits in new projects. Coupled to this, being pre-dominantly US companies, they can take advantage of a large home market. In establishing this dominance, the majors have raised significant barriers to entry for other smaller companies, including European ones (see e.g. Doyle 2002; Silver, 2007).

It is clear that these majors are controlling the most important stakes of the global and European audiovisual business. In the top-10 of global media groups (ranked according to audiovisual turnover[5]), seven companies have a specific motion picture subsidiary: these are the six ‘majors’ and the French Canal+ Group, whose Studio Canal is the leading European film and audiovisual production company (Table 2-3).

[4] The Motion Picture Association of America is the advocacy organisation of the major American film companies.

[5] This audiovisual turnover obviously includes more than just the motion picture activities of these groups. The number 1 media conglomerate does not necessarily have the highest movie turnover.

Table 2–3: Ranking by audiovisual turnover of the 10 leading media groups worldwide (US $ mn, 2009)

Rank	Companies	Country	Activities	Movie subsidiary	Turnover
1	***Sony***	***JP***	***PROD, DIS, VG, REC***	***Sony Pictures, Columbia***	***30.245***
2	***Walt Disney***	***US***	***PROD, DIS, TV, VID, REC***	***Walt Disney Studios***	***25.482***
3	***Time Warner***	***US***	***PROD, DIS, TV, VID***	***Warner Bros.***	***22.769***
4	***News Corp.***	***US***	***PROD, DIS, TV, VID***	***20th Century Fox***	***22.699***
5	DirecTV Group.	US	TV	-	21.565
6	Vivendi	FR	PROD, DIS, TV, VG	Canal + Group (Studio Canal) (and 20% stake in NBC)	17.133
7	Nintendo	JP	VG	-	15.474
8	***NBC Universal***	***US***	***TV, PROD, DIS***	***Universal Studios***	***15.436***
9	***Viacom***	***US***	***TV, PROD, DIS***	***Paramount Pictures***	***13.619***
10	CBS Corp.	US	TV, RAD	-	10.684

Note: PROD = production; DIS = distribution; TV = television broadcasting; VID = video; REC = (music) records; VG = Video Games; RAD = Radio, ***The Hollywood majors are in bold italics***

Source: EAO (2010)

Looking more closely at the top 40 of *film* companies active in Europe, the US majors clearly control important stakes. Many of the top film companies operating in Europe are in fact subsidiaries of North American groups (Table 2-4). Moreover, those that achieve substantial international presence often do so by focusing on mainstream, usually Hollywood, films. This is true for instance for many of the top exhibitors in Europe.

Table 2–4: Top 40 of film companies in Europe ranked by operating revenues in € thousand (2009)

Ra	Company	Activities	Coun	Revenues
1	**Walt Disney International Ltd**	**DISCIN + DIST + RIGHTS + VID**	**GB**	**n.a.**
2	Groupe Pathé	EXH + DISCIN + VID + RIGHTS +	FR	769
3	Odeon and UCI Cinemas Group	EXH	GB	721
5	Europalaces	EXH	FR	545
4	Egmont Nordisk Film	DISCIN + VID + VG	SE	387
6	**Warner Bros. Entertainment**	**DISCIN**	**ES**	**n.a.**
7	Groupe Canal+ (turnover film	PROD + DISCIN + RIGHTS + VID	FR	n.a.
8	UGC	EXH + DISCIN + VID + RIGHTS +	FR	n.a.
9	RAI Cinema	PRODCIN + RIGHTS	IT	378
10	**Warner Bros. Entertainment**	**DISCIN**	**DE**	**376**
11	**Universal Pictures International**	***VID + DIST***	**NL**	***n.a.***
12	Cineworld Group PLC	EXH	GB	336
13	VUE Entertainment Investment	EXH	GB	295
14	Embassy Eagle Holdings	PRODCIN - DISCIN	NL	n.a.
15	**Twentieth Century-Fox Home**	**VID**	**GB**	**n.a.**
16	**Warner Bros. Entertainment UK**	**DISCIN**	**GB**	**306**
17	EuropaCorp	PRODCIN	FR	274
18	**Universal Pictures Productions**	**RIGHTS + DISCIN (+ PRODCIN)**	**GB**	**259**
19	Constantin Film AG	PRODCIN + DISCIN + RIGHTS	DE	n.a.
20	Bavaria Film GmbH	PRODCIN + PRODTV	DE	n.a.
21	Kinepolis Group	EXH + DISCIN + PRODCIN	BE	231
22	**The Walt Disney Company**	**DISCIN**	**ES**	**n.a.**
23	Cinema City international N.V.	EXH	NL	212
24	CinemaxX AG	EXH	DE	207
25	Medusa Film S.P.A.	PRODCIN, DISCIN	IT	207
26	Ingenious Film Partners Z LLP	PRODCIN + DISCIN	GB	n.a.
27	**United International Pictures**	**DISCIN**	**NL**	**194**
28	Metropolitan Film Export	DISCIN	FR	181
29	**Paramount Home**	**VID**	**GB**	**171**
30	Filmauro	PRODCIN, PRODTV	IT	169
31	**Buena Vista Home**	**VID**	**FR**	**n.a.**
32	Groupe TF1 (est.)	VID + DISCIN	FR	161
33	**WarnerBros. Entertainment**	**PRODCIN, DISCIN**	**IT**	**n.a.**
34	The Entertainment Group of	DISCIN + VID	GB	n.a.
35	SF Bio	EXH	SE	132
36	Gaumont	PRODCIN + DISCIN + RIGHTS	FR	124
37	CGR Cinemas	EXH	FR	n.a.
38	Société nouvelle de distribution	DISCIN	FR	n.a.
39	Sony Pictures Television	DISCIN	FR	n.a.
40	**Universal Pictures Video France**	**VID**	**FR**	**n.a.**

Note: **US affiliates are in bold**, while red indicates a non-European (non-US) parent company

DISCIN = Cinema distribution; RIGHTS = Trade in AV rights; EXH = Cinema exhibition; PRODCIN = Cinema production; DIST = (television) distribution; PRODTV = (television) production, VID = Video.

Source: EAO (2010)

Top European multimedia-groups combine with large number of small and nationally organised firms

Up until today, the allure of the Hollywood studios remains unmatched by the larger European firms. A number of top European multimedia groups have motion picture departments, often linked with broadcasters' activities. The already mentioned French Canal+ Group (with StudioCanal) is the most prominent one in terms of audiovisual turnover and is often heralded as a 'best practice' (cf. Jaafar & Hopewell, 2010). Other European groups that are active in several areas of the film value network include Pathé, Constantin Film and Kinepolis. However, the bulk of the European film community that exists alongside the Hollywood subsidiaries consists of nationally organised companies, many of which are relatively small and focused on one segment of the value network (production or distribution for instance).

Strikingly however, a complete and up to date view of the total number of companies active in the European film sector is missing. According to Eurostat there were 40,100 firms active in 'motion picture and video' in the year 2000 (Eurostat, 2003, p. 24). This compares with 75,000 firms, counted in the new film industry related class (J591: motion picture, video *and television*) in 2008. The number of persons employed throughout the European motion picture, video and television industries in that same year stood at 372,500 (Table 2-5). These figures can be cautiously compared with unofficial stats from the MPAA in the US, which reports more than 95,000 businesses employing 296,000 persons in the US in the "core business of producing, marketing, manufacturing and distributing motion pictures and television shows" in 2008 (MPAA 2011). It is difficult to get a detailed overview of the number of companies and employees active in the different subsectors of the film industry, e.g. in production, distribution or exhibition. The European Audiovisual Observatory has not published these data systematically in recent editions of their Yearbook. It appears to be especially difficult to gather insights into the number of production companies and employees, as their existence is more volatile and in constant evolution. A recent study by Peacefulfish on the role of banks in the audiovisual industry showed how only a minority of independent European production companies have a regular production rhythm (i.e. producing at least one film per year) (Baujard, Lauriac, Robert, & Cadio, 2009). This points to a lack of sustainable (production) structures underpinning the European film sector.

A diverse landscape dominated by Hollywood majors

While the scale and diversity of the European film landscape can be considered a strength; the limited presence of large, integrated groups that can compete with the Hollywood majors thus forms a clear weakness of the European industry. In Chapter 3, we will discuss the main players involved in the various specific film-related activities in more detail.

Table 2–5: Basic economic statistics for European motion picture, video and television industries (2008)

Country	# of enterprises	Turnover	Value added	Persons employed
Belgium	1.965	1.503,2	472,6	6.777
Bulgaria	397	87,4	23,1	1.630
Czech Republic	2.226	472,7	116,3	3.630
Denmark	1.398	1.028,1	338,4	6.677
Germany)	6.000	6.328,4	2.767,5	51.156
Estonia	170	33,0	17,6	1.097
Ireland	854	449,9	166,1	4.229
Spain	7.254	5.813,0	2.008,9	39.573
France	12.603	11.776,7	5.769,7	:
Italy	6.386	5.658,1	2.003,5	35.560
Cyprus	82	26,5	12,3	277
Latvia	161	37,3	13,1	743
Lithuania	97	40,9	11,1	756
Luxembourg	140	129,4	31,7	504
Hungary	3.347	647,3	70,5	6.220
Netherlands	1.287	:	:	18.023
Austria	1.503	600,1	200,4	5.271
Poland	5.489	1.096,4	279,7	12.364
Portugal	1.885	670,6	158,0	5.442
Romania	1.894	327,6	171,5	8.211
Slovenia	387	135,0	42,2	886
Slovakia	193	100,9	34,9	1.204
Finland	913	450,6	153,1	3.353
Sweden	4.941	2.251,6	538,4	9.588
United Kingdom	12.419	16.727,3	2.093,2	107.193
Norway	*2.175*	*760,5*	*239,3*	*3.626*
Croatia	*535*	*:*	*:*	*:*
EU-27	75.737	60.000	:	372.500

Note: Greece and Malta missing in data table. ':' means missing, unreliable or confidential data.
Source: Eurostat (2011)

2.4. European policy and regulatory developments

Confronted with the particular cultural and economic characteristics of the film sector (Section 2.2) and the reality of a dominant Hollywood presence in the European film market (Section 2.3), the European film landscape has been characterised by a tradition of policymaking activities aimed at improving the global competitiveness of European players and films.

Attempts to counter Hollywood's dominant position came to the fore already in the 1920s, when several European countries installed quota mechanisms.[6] The post World War II era witnessed the establishment of a more offensive approach centring on different types of financial support. Over the years, an increasingly complex support framework has been created across Europe, in which more culturally

[6] The German government was the first to introduce quota on film imports in 1921, a move which was followed by other European countries such as Britain and France (Sedgwick & Pokorny, 2005).

inspired, selective funds coexist with industrially oriented tax incentives. Such public support is legitimised on several grounds, including historical, political, economic and social arguments. Today, most film funds in Europe emphasize their cultural character (Think Tank on European Film and Film Policy, 2007).

A long tradition of European public support:
- cultural
- production oriented

The most recent publication by the European Audiovisual Observatory on audiovisual funding in Europe estimates that, in 2009, the total amount of audiovisual support spent across 249 European local, regional, national and supranational funding bodies,[7] ran up to almost 2.1 billion euro (EAO, 2011; see also (Table 2-6).

The level of audiovisual spend however varies between countries, with the "Big Five" (France, Great Britain, Germany, Italy and Spain) accounting for 37% of total 2009 spending (EAO, 2011).

While EAO could not perform a detailed analysis on all funds, the EAO data indicate that the bulk of (sub-) national and supranational audiovisual support goes towards the creation of works, which received more than 69% of the funding in 2009. Within this category, 62% of the 2009 spend went to the production of feature films and 3% to short films. Television works accounted for 28% of support funding[8] (EAO, 2011: 50-60).

Table 2–6: Overview of national and subnational audiovisual support funds in 35 European countries

Country	No of funds analysed	Total spend (EUR thousand)	Spend per capita (EUR)
Albania	1	1.23	0.39
Austria	18	65.49	7.84
Bosnia and Herzegovina	2	1.27	0.33
Belgium	4	50.57	4.70
Bulgaria	1	6.03	0.79
Switzerland	8	34.32	4.46
Cyprus	1	1.40	1.76
Czech Republic	2	15.63	1.49
Germany	21	303.06	3.70
Denmark	3	40.70	7.38
Estonia	3	5.09	3.80
Spain	13	123,667	2.70
Finland	3	25,848	4.85
France	48	581,206	9.03
Great Britain	16	127,827	*2.08*
Greece	1	7,315	0.65
Croatia	2	4,433	1.00
Hungary	3	18,102	1.80

[7] Overall, the European Audiovisual Observatory identified 280 funds active in 2009, but data could not be collected for all of them. The study moreover excludes tax incentives for production, intervention of publicly funded bank or credit institutions and television intervention via regulation, license fee collection/redistribution or other means (EAO, 2011).

[8] The analysis of the funding for the creation of works was based on 198 funds in 32 European countries plus 12 funds at supranational and other levels. The MEDIA 2007 Programme project development support for multi-genre project slates was excluded (EAO, 2011, p. 60).

Country	No of funds analysed	Total spend (EUR thousand)	Spend per capita (EUR)
Ireland	3	29,941	6.73
Iceland	1	3,912	12.25
Italy	17	145,653	*2.43*
Lithuania	2	2,609	0.78
Luxembourg	1	5,503	11.15
Latvia	2	3,042	1.35
The Former Yugoslav Republic of Macedonia	2	2,103	1.03
The Netherlands	4	64,014	3.88
Norway	13	54,879	*11.43*
Poland	9	32,278	0.85
Portugal	2	9,474	0.89
Romania	1	755	*0.04*
Russia	1	74,526	*0.53*
Sweden	20	56,455	*6.10*
Slovenia	1	5,448	2.68
Slovakia	2	4,298	0.79
Turkey	1	11,228	0.16
TOTAL	**232**	**1,919,303**	**2.60**

Source: EAO, (2011, pp. 39-42).

Note: The table covers 232 national and sub-national funds analysed in 35 European countries.

Data for Austria, Switzerland, Germany and Spain did not include all sub-national funds.

Data for RU include the federal level only.

SE data are incomplete for some sub-national funds. For 2008, the data include some overheads.

Data in italics are estimated or include partial estimations.

While the traditional European audiovisual support approach is geared towards the production of (mostly) feature films, a comparison between 2009 and 2002 data shows a gradual reduction in the importance of production support. Promotion, training, company development and film culture have become more important elements of the overall support mix (Table 2-7).

Table 2–7: Audiovisual support allocation in Europe (2002 and 2009; all funds) (%)

All funds	2002	2009	2009/2002 increase
Creation	77.1 %	73.9%	65%
Distribution	10.4%	9.4%	55%
Exhibition	9.9%	6.9%	20%
Promotion	1.4%	4.0%	379%
Training	0.8%	2.0%	322%
Company Development	0.2%	0.7%	414%
Film Culture/R& D	0.1%	3.1%	4657%
Total	**100%**	**100%**	**72%**

Notes: 2002 data are from a EAO 2002 survey..

Figures for 2009 were adjusted by EAO to ensure coherence with data from 2002.

Source: EAO (2011, pp. 55-56)

Supranational audiovisual support accounts for a relatively low share of the overall European support levels (144 million Euro were spent by supranational funds in 2009 – EAO, 2011: 36). Yet while audiovisual policy-making is traditionally a competence of national policy-makers, the role of the European Union (EU) and the Council of Europe (CoE) has been reinforced over the years. Cultural issues were completely absent from the Treaty of Rome, which established the European Economic Community in 1957.[9] In contrast, the Council of Europe had a cultural remit from the start. Yet in the long run, the CoE retained a 'softer' policy-making signature, while the EU, despite reluctance by the member states and the sector itself, is today the most prominent European-level film policymaking actor (Barbato, 2008).

While both institutions took measures in the audiovisual area from the 1950s on and cautiously increased their cultural policy-making activities in the 1960s and 1970s, the real surge in European-level film policy activities happened in the 1980s. It is then that a pragmatic approach puts the idea of European-level film support on the policy agenda. From the early 1980s on, privatisation and liberalisation swept the European audiovisual sector, as exemplified by the abolishment of the public service broadcasting monopoly throughout Europe. Competition on TV markets had become fiercer, leading to increased demand for content. Hollywood was fully exploiting the new home entertainment markets, whereas European, in particular non-national, films faced plummeting audience shares, and the issue reappeared more acutely on the policymaking agenda (Herold, 2010; Pauwels, 1995; Sarikakis, 2007). Intensifying in the 1990s, the notions of an economic and cultural defence against Hollywood and the necessity of embracing new technological (r)evolutions proved to be fertile ground for the set-up of a number of concrete film policy instruments within a EU and CoE framework (see Barbato, 2008; Beurier, 2004; Herold, 2010; Littoz-Monnet, 2007).

Increasing European-level AV policymaking since the 1980s

The Council of Europe turned out to be a haven for projects that were deemed too cultural or too threatening for the member states' competencies. Most importantly, it served as a safety net for the set up of a co-production support fund, which had received insufficient member state support when it was put forward as a EU project in 1984 (Beurier, 2004; Herold, 2010). Thus two audiovisual support instruments were established outside the EU system and thus on an intergovernmental basis. One is the since-abolished Audiovisual Eureka programme.[10] The second one is the

Council of Europe as a cultural inter-governmental organisation:

Eurimages

[9] Neither the Treaty of Rome nor its successor, the Single European Act (1987), contained more than two minor cultural references, one regarding 'non-discrimination' and another about the possible exception to the free movement of goods for 'national treasures with artistic, historical or archaeological value'. The Maastricht Treaty of 1993 would offer a pragmatic - if unstable - escape route from the tensions between the EU and its member states regarding cultural competencies. Crucial is the 'culture article' (now article 167 TFEU (European Union, 2010)). While it legitimises EU-level intervention in the cultural sector, the Treaty clearly confirms that the EU - following the idea of subsidiarity - has no more than a complementary role alongside the continuing primordial competence of member states in this area (Littoz-Monnet, 2007 ; Sarikakis, 2007).

[10] Audiovisual Eureka's main aim was to foster cooperation and exchanges in the European audiovisual sector. It was based on the flexible set-up of networks around specific projects targeted at all aspects of the audiovisual value network and involving partners from minimum two European countries. It played an important role in the creation of the European Audiovisual Observatory (Beurier, 2004; Littoz-Monnet, 2007).

Eurimages fund, established in 1989 under the aegis of the Council of Europe (Theiler, 1999). The Eurimages fund was established under the form of a Council of Europe Partial Agreement.[11] Twelve member states joined Eurimages as it became operational on January 1st, 1989. Currently it has 35 member countries, with the United Kingdom as a noticeable absentee[12] (BIPE Conseil, 1997; Eurimages, 2011a). The Council of Europes' intergovernmental character has translated into a predominantly stimulating role in audiovisual matters. Next to the Eurimages set-up, it has initiated the establishment of the European Audiovisual Observatory, which collects data and information on the European audiovisual landscape (Amiel, 2007). Overall, the Council's main function has been to stimulate cultural debates and issue recommmendations in areas of audioviusal cooperation, cross-frontier television exchange, copyright and heritage. The most important regulatory text in terms of European film is the European Convention on Cinematographic Co-production (Dubet, 2000; Morawetz, 2008). This Convention (signed in 1992 and currently ratified by 42 signatories) is in force since 1994 and has largely replaced bilateral co-production treaties between European countries (Cabannes, 2006; Council of Europe Steering Committee for Culture, 2010; Morawetz, 2008). The Convention's role is to reduce obstacles for European film production cooperation through the adoption of common rules for co-productions between at least three different parties. The Convention has established a definition of "European works" based on a list of criteria and a points system. This entails associated benefits in terms of e.g. access to national funds (Cabannes, 2006). The implementation of its provisions remains up to the member states (Council of Europe Steering Committee for Culture, 2010).

Box 2-1: Eurimages: facts and figures

Eurimages: key facts and figures

Established in 1989 under the form of a Council of Europe Partial Agreement, which made it possible for member states to adhere by choice.

Secretariat is based in Strasbourg, France.

Thirty-five member countries: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, FYROM, Turkey.

Support schemes: co-production, distribution (from 1990 on), cinema (exhibition) (from 1992 on), digitisation (from 2007 on). A seperate budget heading goes to specific Eurimages promotion activities.

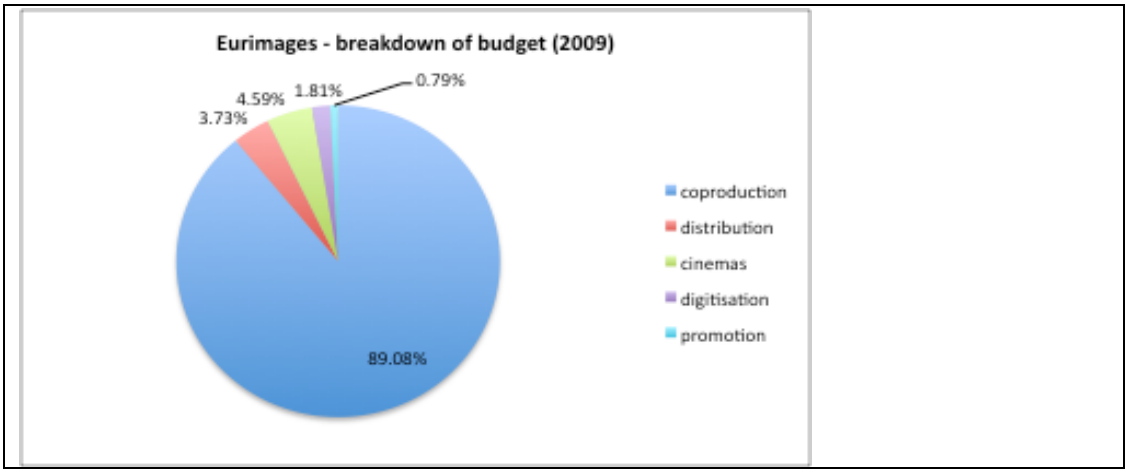
Total budget 2009: €23,195,800 (10% spent on operating costs).

Main objectives:

- To take advantage of new technological developments and meet related economic and cultural challenges;
- To promote Europe's cultural identity.

[11] Partial Agreements are a particular form of organisation within the CoE that give member states the freedom to participate or not. Partial Agreements have their own budget and working methods which are set up by the members of the particular agreements themselves.

[12] It briefly joined the Fund between 1993 and 1997, but withdrew for 'budgetary reasons'.



Source: Based on De Vinck (2011), Eurimages (2011a) and Eurimages (2003)

The EU: supranational but focused on industrial policies: - MEDIA

Relegated to the EU sphere was the idea of an industrial-economic approach. In terms of film support this meant that its role entails dealing with 'everything except (co-) production'. The initial MEDIA programme (set up as a pilot project in 1986, officialised in a first programme in 1990) has been succeeded by three subsequent MEDIA Programmes, the latest of which is the MEDIA 2007 programme. From 2014 on, MEDIA will be integrated with other cultural support schemes under a "Creative Europe" banner (cf. European Commission, 2011c). A crucial idea shaping the activities of the European Union in this area is that of economic integration and the set-up of a common market.[13] In order to realise this, the EU's film policy framework has, next to the MEDIA scheme and other support funds,[14] been focused on the establishment of harmonisation frameworks and on competition policy regulation.

Box 2-2: MEDIA: facts and figures

Following a number of pilot projects (1986), officially established in 1990. Three subsequent MEDIA cycles followed, the latest of which is the current MEDIA 2007.

The Education, Audiovisual and Culture Executive Agency (EACEA), based in Brussels, takes care of day-to-day operations since 2006.

Member states: EU27 plus Croatia, Iceland, Liechtenstein, Norway and Switzerland.

Support activities are clustered around five action lines: 1) Training; 2) Development; 3) Distribution; 4) Promotion and 5) Horizontal Actions/Pilot Projects.

Main objectives:

- To increase the sector's competitiveness;

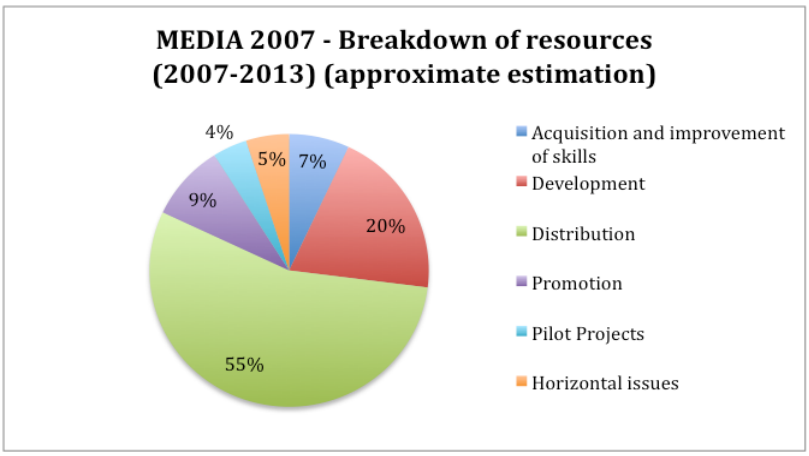
[13] Whereas the concept of the EU *internal market* builds upon the 'four fundamental freedoms' (of goods, persons, services and capital), the idea of a *common market* is broader and includes other types of regulation such as competition policy (Herold, 2010).

[14] The EU has also offered support to related cultural (audiovisual) activities through its regional policy activities and through specific culture and content industry support funds (Barbato, 2008). MEDIA remains however the main EU-level support programme directly targeted at the audiovisual (film) sector.

- To improve the transnational circulation and consumption of audiovisual programmes;
- To respect and promote European film diversity and heritage.

Additionally, MEDIA Mundus, adopted in October 2009, has a €15 million budget for projects between European and third country professionals.

Budget MEDIA 2007: €754,950,000



Sources: Eurédval & Media Consulting Group (2010) and De Vinck (2011)

The development of a framework: TWF, AVMS

In terms of harmonisation frameworks, the main audiovisual EU instrument has been the Television Without Frontiers (TWF) Directive (1989, updated in 1997) and its successor, the Audiovisual Media Services Directive (AVMS) (2007). Their quota provisions, aimed at the promotion of European works,[15] have been most important for the film industry and can be seen as complementary to the MEDIA programme support (McGongale, 2008). Yet, from the start, the notion of 'quota' has been the subject of fierce debates between the member states. The resulting compromise wording of the relevant articles has in turn been criticised for its vagueness, the permissive definitions and the lack of monitoring and follow-up (cf. Wheeler, 2004; Wheeler, 2007; McGonagle, 2008). Aside from a vague recital in the latest AVMS Directive (Recital 70), the specific promotion of non-national European content has not been addressed by these Directives either (European Parliament and Council of the European Union, 2010).

Copyright harmonisation initiatives

Its other harmonising efforts show that the EU has difficulties in truly fostering a common market approach in this sector. A number of Copyright Directives[16] were for instance adopted as the various national authors' rights systems were prone to conflict with each other and

[15] The current Article 16 requires European broadcasters to reserve a majority of their transmission time for European works, whereas Article 17 asks to reserve a minimum of 10% of transmission time or of the programming budget for European independent productions (both excluding news, advertising, games, teletext, sports events and teleshopping) (European Parliament & Council of the European Union, 2010).

[16] The first generation of Directives followed on the Green Paper on Copyright and the Challenge of Technology (1988) and its follow-up (1990). They focused on the harmonisation of specific issues: computer software (1991), rental and lending rights (1992), cable and satellite (1993), the term of protection (1993), databases (1996) and resale rights (2001) (Montagnani & Borghi, 2008; Barbato, 2008). In a second phase, a number of Directives took on a more horizontal approach and dealt specifically with the digital environment (cf. Chapter 5) (Montagnani & Borghi, 2008).

with the common market rules (Barbato, 2008). The EU's approach of adopting harmonising measures instead of introducing a unitary EU copyright system has however not been able to fully resolve the territorial organisation and sales of (audiovisual) rights. Whereas computer programmes and databases have been the subject of significant harmonisation at EU level, the overall copyright situation remains one of relatively limited harmonisation (Montagnani & Borghi, 2008).

Competition policy and state aid regulation to foster the common market

The EU can be said to have been more prominently involved in the abolishment of national boundaries in the film marketplace through its competition policy regulation. The European Commission has received a large regulatory mandate in this field and is only subject to review by the Court of Justice. This is an area that has been particularly affected by the tensions between the EU's aim of creating a single audiovisual market, the recognition of the film sector's cultural character and the delegation of these aspects, under the banner of subsidiarity, to the national level. The economic dimension of the film industries renders the EU competition rules applicable, but the specific character of the cultural industries has nevertheless led to a specific approach to the film sector (Herold, 2008).

Next to the application of anti-trust provisions and merger regulation to the film sector,[17] the influence of the Commission has been especially felt in the area of state aid regulation. While most of the film support measures established at the national level are considered state aid in the meaning of Art. 107 (1) of the TFEU and are thus prohibited, a few possible 'exit strategies' have been found in order to authorise the existence of these schemes. In particular Article 107 (3) (d) offers the possibility to approve state aid specifically targeted at the promotion of culture or heritage conservation. Commission guidelines have been developed in order to specify and objectify the analysis of national state aid mechanisms and are enshrined in the Cinema Communication (European Union, 2010; Herold, 2010). This Cinema Communication,[18] published in 2001, was an attempt to provide greater legal certainty by putting forward a number of set evaluation criteria until June 2004. It was not able to resolve all tensions between the Commission, the member states and the sector professionals, however. All four criteria[19] have come under attack, but the most thorny issue remains the territorialisation one. Attempts by the Commission to strengthen the territorialisation provisions have up until now been blocked by the member states and the sector's opposition. A 2008 study ordered by the Commission proved inconclusive on the cultural and economic impact of those provisions (Barbato, 2008; Craufurd Smith, 2008; Cambridge Econometrics, 2008; Herold, 2008).

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17 In terms of anti-trust, the Commission has for instance investigated the joint selling of copyright by Paramount, MGM and Universal through the UIP company, whereas the cinema sector is clearly affected by a number of media-related mergers and acquisitions that the Commission has dealt with under the Merger Regulations (e.g. the Vivendi/Canal+/Seagram merger of 2000) (Herold, 2008).

18 Next to dealing with state aid, the Cinema Communication also addressed question of cinematographic rights, heritage, electronic cinema, taxation, film rating and other problems affecting the circulation of films (European Commission, 2001).

19 These state that 1) guarantees have to be provided that the aided productions have a cultural character; 2) producers must be free to spend at least 20% of the movie's budget in a different member state ("territorialisation"); 3) the aid cannot exceed 50% of the film's total budget (there are exceptions for difficult or low budget films); 4) aid supplements for specific activities (such as post-production) are prohibited (Amiel, 2007; Barbato, 2008).

In the meantime, a number of other challenges have come to the fore as well, including 1) the set-up of national support targeted at other areas of production; 2) the increased involvement of regional authorities in film support; 3) the mechanisms set up by member states in order to attract foreign movie investments. All of these issues will be dealt with in the near future after a final prolongation[20] of the current rules was approved and will run out in December 2012 (European Commission, 2009c).

State aid regulation is but one of the areas in which the EU policy framework will have to take into account the transformations in the film sector ecosystem due to the digital evolutions. Both the EU and the Council of Europe have for instance installed specific support schemes in the existing film support frameworks of respectively MEDIA and Eurimages.

Digital opportunities prominently present in European-level policy discourse

The challenges associated with digital technologies have clearly pervaded the European-level policy discourse. As the 1990s progressed, the notion of the Information Society became key for European policymakers who used it to frame ideas of market liberalisation and convergence between previously distinct (telecommunications and media) industries. Specifically for film, the European Commission 1994 Green Paper on "Strategy options to strengthen the European programme industry in the context of the audiovisual policy of the European Union" put forward an enormous faith in the ability to stimulate the European audiovisual sector and to increase its economic viability over a period of ten years (McGonagle, 2008). In the EU context, the aim of increasing the audiovisual sector's competitiveness has been inscribed in its general economic agenda. The Lisbon Agenda (2000) and its i2010 strategy (2005) included specific attention for the creative industries (cf. Commission of the European Communities, 2005; European Commission, 2005). Post-2010, a similar discourse is framed through the Europe 2020 growth strategy and its Digital Agenda, which aims to *" contribute significantly to the EU's economic growth and spread the benefits of the digital era to all sections of society"* (European Commission, 2010c – see also European Commission, 2010a). The most recent relevant policy documents include the 2010 Green Paper on "Unlocking the potential of creative and cultural industries" (European Commission, 2010d) and the 2011 Green Paper on the online distribution of audiovisual works in the European Union (European Commission, 2011). In addition, the notion of "cultural diversity" has come to stand centre stage both at the EU and the Council of Europe level. The cultural elements that complement the technological-industrial film policy mix build upon a more solid basis following the adoption of the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions in 2005 (cf. Craufurd Smith, 2007).

The Council of Europe and the EU institutions each respond to the digital challenges within the limits of their remits. In line with its culturally oriented, intergovernmental approach, the Council of Europe has been mostly active as a forum for discussion and debate on the digital future of European film. Specific areas of attention include audiovisual heritage and media literacy and a 2009 Recommendation focused on national film policies against the background of digitisation and globalisation (cf. Committee of Ministers, 2009). The EU meanwhile continues to focus on the need to overcome the fragmentation of its

[20] Earlier prolongations took place in 2004 and 2007.

(now-digital) audiovisual markets. Just as the Council of Europe, it has been active as a stimulator of debate and interaction on a number of issues such as media literacy and audiovisual heritage.[21]

Specific activities in terms of "Content online" have formed a particular focus of policy attention but show the limits of the EU's role in these matters. A 2006 European Charter for the Development and the Take-up of Film online in 2006 formed a first concrete step in the Commission's actions in this area. The Charter promotes 'Commendable practices' in view of 1) improving the online availability of film services; 2) copyright education; 3) cooperating against piracy (European Commission, 2006a). However, the Commission later voiced its disappointment with the lack of ambition stakeholders showed in the aftermath of this 'soft law' instrument (Kenny, 2008a; Screen Daily, 2008b). This Film Charter nevertheless formed the starting point of a broader "content online" examination. A Communication on Creative Content Online in the Single Market was eventually published in January 2008 following a public consultation (European Commission, 2006b; Commission of the European Communities, 2008). After that a lengthy period followed of further discussions, several public consultations and Commission reflection documents,[22] which illustrates how difficult the realisation of an online single market for films (or other content) continues to be in practice.[23]

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21 The EU has up until now mostly adopted a stimulating role through a number of studies (e.g. on national media literacy trends and relevant assessment criteria – European Commission, 2010b) and policy documents (e.g. the 2007 Communication on a European approach to media literacy in the digital environment, Commission of the European Communities, 2007) on these subjects, while bringing experts and stakeholders together in workshops and experts groups. A number of more concrete initiatives have arisen out of its activities through other EU policies, including the ICT-PSP Support Programme and its European Film Gateway project, as well as a number of research projects funded under the Framework Programme. One of the most prominent initiatives is Europeana, a "European Digital Library" launched in 2008 and comprising digital images, text, videos and sound recordings. Mid-2010, the library included more than 90.000 videos (on a total of 6 million items), mostly documentaries, TV broadcasts and newsreels (Commission of the European Communities, 2010). See also the study on books (De Prato and Simon, forthcoming).

22 The 'Content Online Platform', a framework for European-level discussion, was set up in order to tackle the issues mentioned in the 2008 Communication (Commission of the European Communities, 2008b; European Commission, 2009a) and submitted its final report in May 2009. It foresaw a Second Commission Communication on Creative Content in September/October 2009 (European Commission, 2009a). Instead, a third public consultation was held following the publication of a Reflection Paper in October 2009 and another consultation was organised following the publication of the Green Paper on the online distribution of audiovisual works (cf. supra).

23 Next to the piracy issue, one of the most contentious issues on the content online policy agenda is that of cross-border rights clearance. The licensing of audiovisual works ought to be less complex than that of music, given that collecting societies are less involved, but still the issue has been the subject of debates in the last couple of years. Up until now there has not been a concrete policy outcome. The Commission, in particular, has put forward a system whereby a secondary 'multi-territorial' license[23] would be installed in order to promote the availability of audiovisual works in an online context (Nikoltchev, 2008; Peacefulfish & Media Consulting Group, 2008). The objective being to increase exposure for NNE films on VoD platforms, an Austrian German-language film that got distribution deals for Germany, Austria and Switzerland would for example make available a second licence for the distribution of the film on VoD platforms outside these countries (KEA & MINES, 2010). However, multi-territory licensing is said to provide a 'one-size-fits-all' model not appropriate for the European diverse landscape (cf. Kenny, 2008b). The main underlying issue that explains the industry's reluctance and hostility towards this proposal is

This adds further emphasis to the aim of this study to get a clearer overview of the manner in which digital opportunities and threats relate to traditional sector strengths and weaknesses. Before setting out on such a value network-based SWOT analysis, we address, in the next section, some lessons that can be drawn from similar periods of innovation in the past.

2.5. Major innovations in the film sector: lessons from the past

Various periods of transition in film history: sound; TV; widescreen; 3D; home video.

Cinema has from the start had an important technological component - without a number of crucial technological breakthroughs it would not have been possible. In this sense, technological inventions have, amidst a complex interplay of factors and actors, given rise to business innovations. When we take on a historical perspective, we can distinguish a number of prominent periods of technological change that have affected the film sector more or less radically since its establishment. These include the introduction of sound film (1920s-1930s), colour film (1930s-1960s), the television screen (1950s-1960s), widescreen and 3D experiments (1950s) and the introduction of home video systems (1970s-1980s).

There are a number of recurring elements in those transitions, even if the exact modalities and speed of each transition have varied. First of all, all of the innovations mentioned above were adopted over relatively long periods of time and built upon previous technological and other evolutions in the sector. Important drivers of technological adoption include the transition costs, the availability of technological standards, the audience response and availability of content. External factors such as the economic climate may also foster or slow down the innovative process (De Vinck, 2011).

Four recurrent themes:

1) Evolution not revolution

Second, periods of technological transition usually bring about opportunities for smaller or independent sector players to achieve a more competitive position in the film value network. For instance, the coming of sound enabled two challengers (Warner Bros. and Fox) to establish themselves through their involvement with the Vitaphone and Movietone sound systems. AT&T's subsidiary Western Electric played an important role in the development of these, especially Vitaphone. Different systems were however developed with the Radio Corporation of America (RCA) and General Electric in particular involved both in the development of the Photophone sound system and the simultaneous set-up of Radio Keith Orpheum (RKO) as a new power player (Enticknap, 2005; Gomery, 1985; Gomery, 2005a; Wyver, 1989). Another example is the introduction of TV, where independent producers and smaller studios envisioned TV as an open, new exhibition market, which would allow them to escape from the studios' (economic) dominance (Anderson, 1994). The expansion of video and cable markets from the end of the 1970s on also led to a renewed interest in independent production. While the major studios were concentrating on a limited number of titles for the theatrical market, video and other ancillary markets were filled with large quantities of content, often independently produced. Their enthusiasm stimulated the rise of the rental business as well as spurring on their more reluctant competitors, the majors (Wasser, 2001).

2) Opportunities for smaller players

but…

that of pre-sales and minimum guarantees which traditionally contribute to the financing of European film. An unresolved question in this regard has to do with the potential role new 'online' providers could or should play in the financing of audiovisual works (Peacefulfish & Media Consulting Group, 2008).

3) reluctance amongst established sector players;

Related to this, there has been a systematic reluctance of incumbent players vis-à-vis disruptive changes that potentially affect their existing business models and relationships. When sound came to the fore, the biggest Hollywood firms had a lot to loose and were quite satisfied to maintain the status quo. Their reluctance could be traced to a number of factors: (1) the industry system was profitable and stable, (2) the costs of introducing sound were high, (3) a possible incompatibility was expected between different sound systems, (4) longer production schedules could be an unwanted side-effect, (5) there was doubt as to whether the audience would accept the changes, (6) sound was believed to possibly hamper American dominance of foreign markets (Wyver, 1989). A similar ambivalent attitude was visible with the introduction of television after the Second World War (Anderson, 1994; Belton, 2005; Bordwell, 2008; Gomery, 2005b ; Maltby, 2003). At the time the VCR was introduced, the major studios went as far as to launch an attack against home taping. In 1976, Universal Studios and Disney took the lead in a court battle waged against Betamax. In the end, the final US Supreme Court decision in 1984 went against the Studios' concerns (and forms an important example of the need for courts to find a balance between different objectives when reformulating copyright for new technologies), but it was a very close call (Meza, 2007; Wasser, 2001). This recurrent defensive stance of the dominant players, most of all the Hollywood studios, is important to keep in mind in view of the response to current digital challenges.

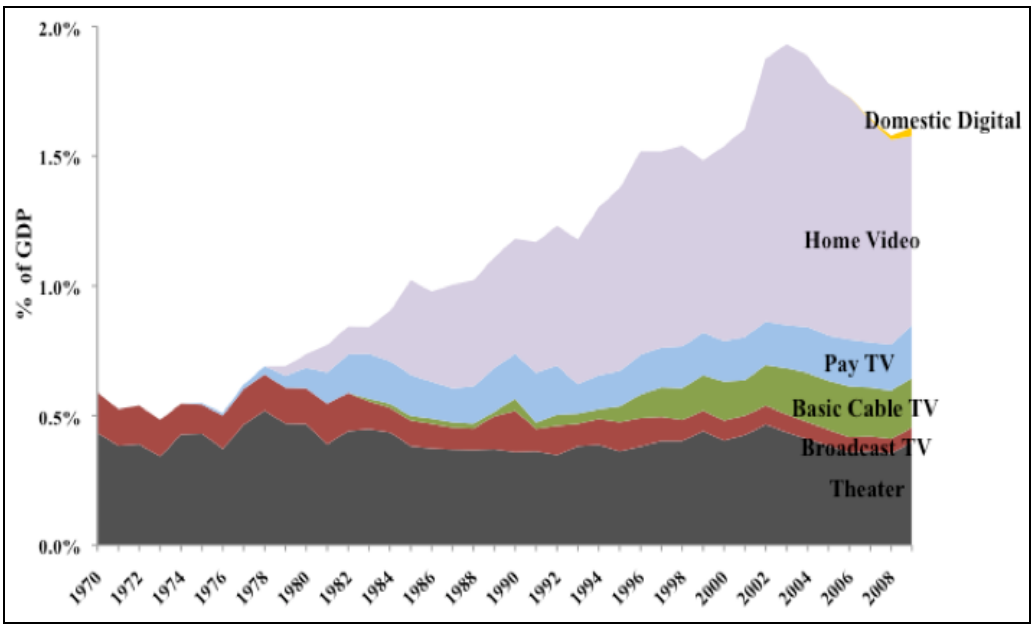
4) Hollywood has always come out on top

Yet – perhaps even more importantly – the European players have not been more at the forefront either. For instance, they reacted much slower than even the Hollywood players to the advent of television. By the mid-1960s, the market of film library sales was only starting to open up in Europe. Adding to the difficulties, European producers had often pre-sold their film rights in order to finance the production, which meant they did not dispose of film libraries that they could readily exploit on television. It took until the 1970s before European movie companies did begin to see television as a potential ally in a radically changed marketplace (Puttnam, 1997).

Following from this, European players have not been able to leverage the various technological changes in the past in order to strengthen their competitive position. Instead, despite often being slow to react, Hollywood has successfully reconfigured and reinforced its position in the film value network. The introduction of sound was the first and most prominent technological innovation that was expected to bring about a decline of Hollywood's power over global film markets as a result of now emerging language barriers. In reality, Hollywood solidified its position as a dominant global movie power (Gomery, 2005a; Thompson, 1985). In the decades post World War II, Hollywood players successfully managed to reconfigure themselves amidst an ever-expanding value network. First television, then home video established themselves as important secondary markets for the film sector and essential components of the continued viability of the Hollywood studios (cf. Anderson, 1994; Gomery, 2005b; Wasser, 2001). Figure 2-1 shows how the US players have been able to expand and reconfigure their revenue streams by adding on the different commercialisation channels available for their films – up until circa 2004, when digitisation was beginning to fully affect the value network. The New Hollywood strategy (cf. supra) centres on the maximisation of revenue in successive 'windows', starting with the theatrical release and followed by a string of 'ancillary'

markets. These non-theatrical markets have become more and more important in terms of revenue and have strengthened their global market position. The majors' additional income raked in through these channels has gone hand in hand with an increase of the production and marketing budgets for the theatrical releases of their films. The end result is that independents, which cannot supply big theatrical movies or fund expensive advertising campaigns, have become ever more excluded (cf. Wasser, 2001).

Figure 2–1: U.S. Movie Distributor Domestic Revenues as % of GDP, 1970-2009



Note: Not including merchandising

Source: Adapted from Waterman (2011).

All of the above elements are important to take into account when addressing the potential for change digitisation offers in terms of the European film sector's competitiveness.

2.6. Summary and conclusions

The film sector is one of the core cultural industries, which means that it creates economic as well as cultural value, and this has in turn influenced policymaking in the field. There are a number of economic characteristics of the film industry, some of which it shares with other media and content industries: (1) it is a prototype industry, with high fixed production costs and relatively low reproduction costs; (2) quality and costs are not well reflected in price; (3) it is a hit driven industry with uncertain demand; (4) films are semi-public goods, where consumption does not destroy value for others and where it is difficult to exclude audience from consumption; (5) a number of strategies for control have emerged including (a) portfolio approaches, (b) formatting strategies (stars, sequels etc.), (c) versioning (release windows), (d) concentration and integration (in particular through control over distribution) and (e) copyright protection.

The industry encompasses a multitude of players across its value networks, including creative talent, production companies, distributors, exhibitors, finance players, sales agents, broadcasters, telcos and cable companies, home video 'rentailers', and a multitude of Internet companies ranging from individual creative entrepreneurs, via SMEs, independents, national powerhouses to the Hollywood studios and their affiliates.

The European film landscape is characterised by a strong presence of Hollywood players, the so-called 'majors' (Paramount Pictures, Sony Pictures, Twentieth Century Fox, Universal, Walt Disney and Warner Bros). With control over distribution (including marketing), the majors can commit significant resources to production and marketing, build audience awareness using superior marketing resources and skills, reduce and spread risks over several films, and invest profits in new projects. In establishing this dominance, the majors have raised significant barriers to entry for other smaller companies, including European ones.

The European film sector has, since WWII, been characterised by a tradition of policy support aimed at enhancing the global competitiveness of European players and films. Over the years, an increasingly complex support framework has been created across Europe, in which more culturally inspired, selective funds coexist with industrially oriented tax incentives. At least 2 billion Euros (cf. infra - 7 billion Euros invested in feature films in total in Europe) are pumped into audiovisual support each year, mostly through national support schemes and funds, and usually targeted to (film) production activities.

European-level film policy activities started to gain real importance in the 1980s, through (1) the Council of Europe's Eureka programme (now abolished) and the Eurimages fund, supporting European co-productions and (2) the European Union's MEDIA programmes, aimed at all types of film-related industrial activities except for production. Economic integration and the set-up of a common market have been shaping the activities of the EU that includes (MEDIA aside) the establishment of harmonisation frameworks (such as the TWF and AWMS and copyright directives), competition policy and state aid regulation.

Cinema has from the start had an important technological component. Technological inventions have interplayed with and given rise to business innovations, enabling new ways of creative expression, for the market to expand and industry to flourish. There are a number of periods of technological change that have affected the film sector more or less radically since its establishment, including the introduction of sound film (1920s-1930s), colour film (1930s-1960s), the television screen (1950s-1960s), widescreen and 3D experiments (1950s) and the introduction of home video systems (1970s-1980s).

There are number of recurring elements in those transitions that are important to keep in mind when analysing the current digital transformation of the industry: (1) transitions took place over long periods of time; (2) important drivers of adoption include the transition costs, the availability of technological standards, the audience response and availability of content; (3) they provided opportunities for smaller, independent and new players to enter the industry; (4) the were systematically met by an initial reluctance among dominant incumbent players as well as European ones; (5) Hollywood majors, rather than European players, were able to strengthen their competitive position through each transition.

3. VALUE NETWORK OF THE FILM INDUSTRY

This chapter analyses the European film industry and its traditional (analogue) value network. Section 3.1 introduces the value network. The subsequent sections offer a more in-depth analysis of the different steps of the traditional value chain, i.e. production (Section 3.2.), distribution (Section 3.3) and (theatrical and non-theatrical) exhibition and consumption (Section 3.4.). Throughout the chapter, we will identify "analogue" strengths and weaknesses of the EU film industry, which are summed up in Section 3.5.

3.1. Introducing the value network

This section outlines the value chain/network of the film industry. Value chains are descriptive models of the economic process of value accumulation in a given firm or industry, starting from the lowest value input proceeding to the highest value output (Vickery & Hawkins, 2008). In view of convergence and digitisation trends, the notion of a value network has come to the foreground as well. While the term 'chain' carries with it the connotation of a linear structure, often within a single firm, a sector's value network (or system) encompasses the value chains of individual firms making up that sector (cf. Porter, 1990) and appears suited for the decentralised relationships that have developed in the film sector.

Four streams in value network:

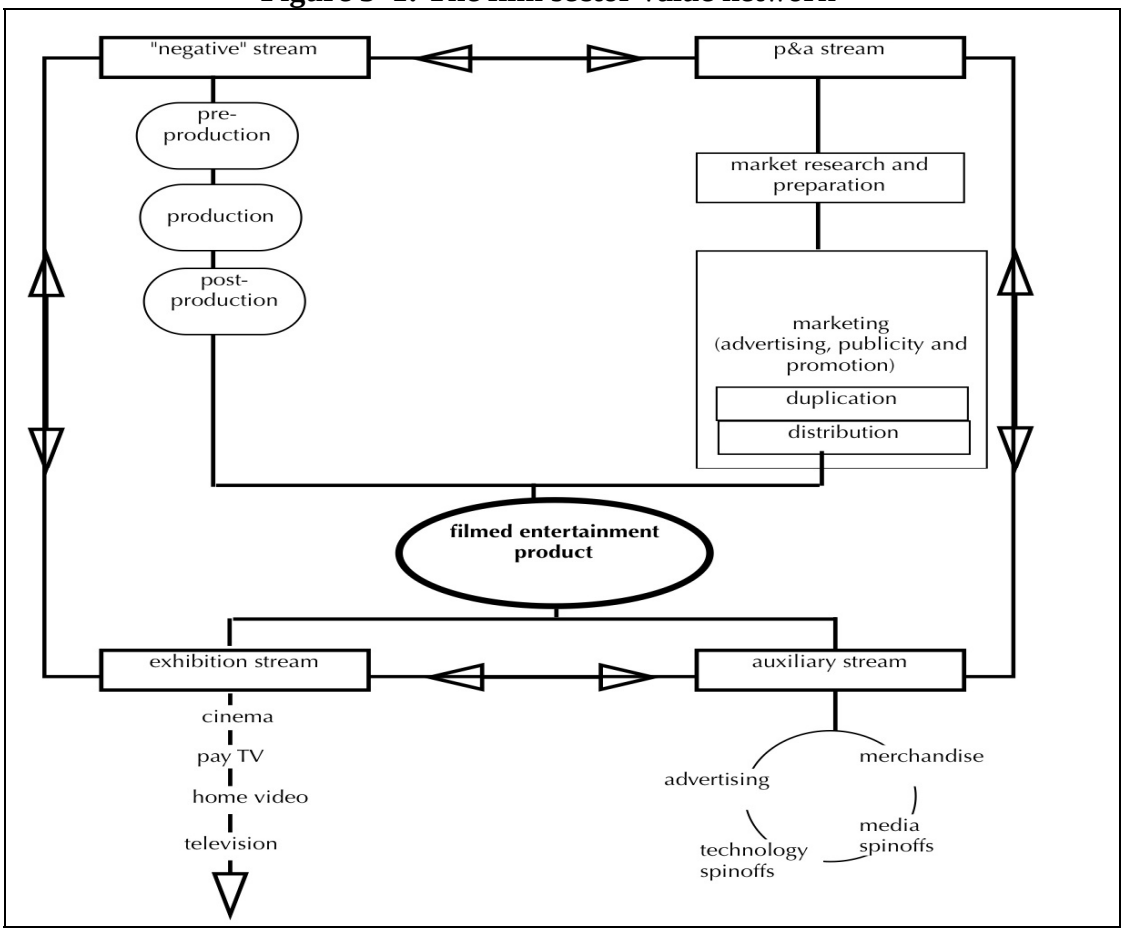
The movie business encompasses a range of activities that cumulatively and in a mutually reinforcing way create value. A variety of firms and persons take up roles along the different stages of this network. Drawing on Vickery and Hawkins' expanded value chain model (Figure 3-1), we identify four streams through which value is added starting from a certain intellectual property. The first levels of value accumulation occur by investments in the negative and print and advertising (P&A) streams, which respectively add to the production and distribution/marketing of a movie. Next, value is added via exhibition in various forms. Auxiliary value is added as well and accumulates from derived products and services such as merchandising.[24]

(1) Negative stream – production

The "negative" stre**am** accumulates value through the production of a film. It is normally considered to consist of three stages: (1) pre-production, (2) production and (3) post-production. The pre-production stage encompasses various elements such as acquisition, finance, development and assembling the cast and crew. It includes creative (script writing, casting etc.), financial (budgeting, business planning etc.), legal (rights clearance, negotiations etc.) and commercial issues. The production stage includes production design and organisation as well as the actual shooting of the film, while post-production includes activities such as processing of negatives, adding of special effects, editing up the 'final cut' as well as sound and music production and editing.

[24] This and the subsequent paragraphs draw on Vickery & Hawkins (2008, pp. 63-68) unless stated otherwise.

Figure 3–1: The film sector value network



Note: Not all links and feedback loops are shown.

Source: Adapted from Vickery & Hawkins (2008, p. 63)

2) P&A stream– Distribution and marketing

The P&A (print and advertising) stream adds value in the distribution and marketing of films. It includes early market research and preparation, and marketing throughout the lifetime of film as well as distribution of the film. The exhibition stream adds further value as the film is made available to consumers through theatrical exhibition, Pay-TV, home video purchase or rental, subscribed or free television and/or online distribution.

3) Exhibition stream

(4) Auxiliary stream

The auxiliary stream adds value as various goods and services are derived from film or from associated assets. This includes advertising, e.g. in the form or commercials or product placement. Merchandising includes the commercialization soundtrack CDs, toys, games, clothing and memorabilia. Media-spinoffs include the use of the content for other purposes than the film itself, including books, comics, theatrical shows, games; while technology-spin-offs include the use of film (production) technology for other purposes than the film it was developed for.

Over the years, the importance of these 'cross-over' markets has risen. Merchandising is nowadays at the same time a form of financing, a revenue stream and a marketing mechanism. While Wyatt noted that films have been merchandised since at least *'Snow White and the Seven Dwarfs'* in 1937, these markets have become particularly attuned to the blockbuster phenomenon (Wyatt, 1994).

Value adds on at each stage, but risk runs highest at the beginning, when intellectual property is converted into a movie. The motion picture itself is not the end point, but

the core intermediate product to which yet further levels of value can be added. While value is added at each stage of the negative and P&A stream, sometimes in parallel, the structure of the exhibition and auxiliary streams is less straightforward. As we will address in more detail later on, the occurrence and sequencing of various exhibition outlets is subject to change depending on different variables. Auxiliary revenue streams are related to the movie but occur mostly independent from the exhibition stream. Sub-activities within this stream are not necessarily related to each other either (Vickery & Hawkins, 2008).

The main focus of this study lies on production (negative), distribution and marketing (P&A) and the different exhibition streams, with auxiliary revenue only touched upon sporadically.[25]

3.2. The production process

The production process or 'negative' stream – i.e. everything that happens before the resulting film 'negative' is made – encompasses a variety of activities that can be categorised as being part of pre-production, actual production or post-production.

The pre-production phase of a film involves everything that occurs before the actual shooting of a film starts. It can take up quite a long time – often up to 12 or 18 months but sometimes even several years. As noted earlier, pre-production encompasses various elements: acquisition of rights, finance, development and assembling the cast and crew. It includes creative (scriptwriting, casting etc.), financial (budgeting, business planning etc.), legal (rights clearance, negotiations etc.) and commercial issues. The latter refers to marketing research and preparation as both streams may occur in parallel (Dally, et al., 2002; Vogel, 2007). In essence, it involves the evolution of a project from a non-producible to a producible state (Pollack, 2006).

Lack of focus and selection in initial stages in Europe

Already at the earliest stages of the process, an important difference between the European and American working methods becomes apparent. Indeed, in Hollywood, the development process consists of a lot of streamlining and elimination, whereas in contrast, Europe films are much more likely to make it to the production stage. In the US, the developed/completed films ratio stands at about 5/1 to 15/1, whereas in Europe it is only 3/1 to 5/1 (BIPE, 2002 ; Ulin, 2010).

The US (major) companies also invest much more in this early phase of filmmaking: development costs amount to 8-10% or even up to 15% (depending on the source) of an American film's budget, whereas European investment is around 1 to 3% (Dally, et al., 2002, pp. 52-53; Ulin, 2010, p. 57). While some European producers have become large enough to self-finance 'development' and others can associate with larger communication groups or broadcasters, many smaller ones don't have access to specific development financing. For them, financing development is very risky as it is an irrecoverable expenditure in case the movie dos not end up in production

[25] This is not to say that for instance merchandising revenues could not be substantial. While, to our knowledge, (European) film merchandising revenues are not captured by statistics, not even unofficial ones, According to Doyle (2002, referring to Sanghera (2000)), global retail sales of licensed merchandise reached $112 billion in 1998 of which around $29 million were "entertainment/character" property types, including film and TV brand licensing. Dally et al. say that minimum 6 to 7% of wholesale merchandise revenues from a major toy manufacturing licence return to the movie studio (Dally, et al., 2002).

(BIPE, 2002). Furthermore, producers often rely on national production support with at times up to 60% of their budget dependent on it (cf. IMCA, 2002). As a result, they are driven to go into production as soon as possible – so they can access their producers' fee. To top this off, the small companies that form the bulk of the European production landscape can usually not carry production and development activities simultaneously. This means that they have to start all over again after a film has gone into production (BIPE, 2002) instead of simultaneously running different projects. In sum, in Europe there is little investment in early development of movies and a weak selection rate as compared to the US. Everything else equal, this means that a larger share of less mature ideas will make it to the production stage.

Table 3–1: 25 top independent film production companies in Europe

Rank	Company	Country	2005	2006	2007	2008	2009
1	Constantin Film AG [1] [2]	Germany	216,9	265,0	227,0	251,3	258,8
2	Pathé Production	France	118,4	145,3	90,4	218,0	n.a.
3	EuropaCorp [1]	France	199,9	166,8	205,4	207,3	n.a.
4	Ingenious Film Partners	UK	n.a.	170,9	255,1	191,1	n.a.
5	Filmauro (cons.) [1] [2] [3]	Italy	96,8	90,9	122,0	159,0	169,4
6	Gaumont [1] [2] [4]	France	100,2	131,1	72,9	105,1	93,7
7	Nordisk Film AS [2]	Norway	89,2	79,6	98,7	n.a.	n.a.
8	AB Svensk Filmindustri [1]	Sweden	87,5	81,7	93,1	78,9	80,9
9	Nordisk Film A/S [2]	Denmark	109,6	109,8	115,9	30,9	80,6
10	Cattleya [2]	Italy	51,3	35,6	57,5	63,0	75
11	Odeon Film AG [2]	Germany	41,2	33,4	80,7	89,8	68,2
12	Ingenious Films Partners LLP [5]	UK	3,8	185,3	97,9	55,3	n.a.
13	La Petite Reine	France	4,0	41,8	56,8	50,8	n.a.
14	UGC YM [6]	France	10,7	23,8	24,7	35,8	47,2
15	Legende Films	France	_	6,3	10,6	25,4	42,3
16	Pan Européenne [7]	France	19,1	37,3	12	20,9	41,7
17	Fidelité Films	France	31,9	62,2	51,5	39,5	n.a.
18	Italian International Film [1] [2]	Italy	31,1	29,3	34,6	29,1	36,4
19	MK2 S.A. [1] [2]	France	31,1	30,5	37,7	36,3	n.a.
20	Senator Entertainment AG [1] [2]	Germany	17,7	37,3	66,0	53,2	36,1
21	Melampo Cinematografica	Italy	17,1	17,3	28,1	36,0	n.a.
22	Les productions du Trésor	France	14,3	19,5	18,6	34,0	n.a.
23	Galatée Films [2]	France	11,0	13,5	38,5	54,6	33,3
24	Fandango	Italy	31,3	32,8	40,2	32,1	n.a.
25	Pulsar Productions	France	8,9	2,2	14,3	33,6	29,6

Notes: n.a. = No information available. [1] Includes distribution activities. [2] Includes TV production. [3] 2007 over 18 months. [4] Film activities, not including exhibition. [5] Subsidiary of Ingenious Media Ltd. [6] Subsidiary of UGC Images. [7] Includes both Pan Européenne and Pan Européenne Production.

Source: EAO (2010)

More generally, the European production company industry is volatile and subject to yearly changes. Operating revenues collected by the European Audiovisual Observatory are quite different from one year to another (Table 3-1). The European

production sector seems to be composed mostly of (very) small production companies. Several studies and authors have noted that many European production companies lack a regular production rythm, producing less than one film per year (cf. Baujard, Lauriac, Robert & Cadio 2009; Downey, 1999). Next to the existence of broadcasters' film subsidiaries (e.g. StudioCanal, RAI Cinema, Bavaria Film, Medusa Film), the European Audiovisual Observatory makes a yearly list of the top independent producers in Europe. This top-50 includes mostly companies from the Big Five countries (EuropaCorp, Constantin Film, Gaumont, Filmauro, Pathé, Odeon and so on), as well as a couple of larger Scandinavian producers (Nordisk film and AB Svensk Filmindustri). Yet generally, the output per company ratio seems to be too low on average to warrant a healthy and sustainable industry (Downey, 1999). As a consequence, a weakness of the European film sector is that it is not sufficiently structured or anchored in long-term perspectives but has a volatile character. Moreover, a recurring perception is that a number of European film producers lack sufficient business skills in terms of financing, distributing and marketing their movies (cf. Baujard et al., 2009).

European film production budgets[26] are much lower than US ones, in particular when compared with Hollywood film budgets (Figure 3-2). This points to another weakness for the European film sector, as it gives European players a handicap compared to their American counterparts. For movies produced by majors and their affiliates, the average movie production costs have soared since WWII (the cost of the average 1940 movie was $0.4 million; $0.9 million by 1946; $3.1 million in 1975; $16.8 in 1985; $36.4 in 1995 (Maltby, 2003, p. 169) and more than $70 million in 2007).[27] This escalation of average production costs clearly reflects the 'blockbuster' phenomenon. While Hollywood uses these ever-rising budgets to make its films stand out in the risky marketplace for movies, these budgets at the same time carry an enormous risk in case the movie flops.

Table 3–2: Average film budget by region (2008)

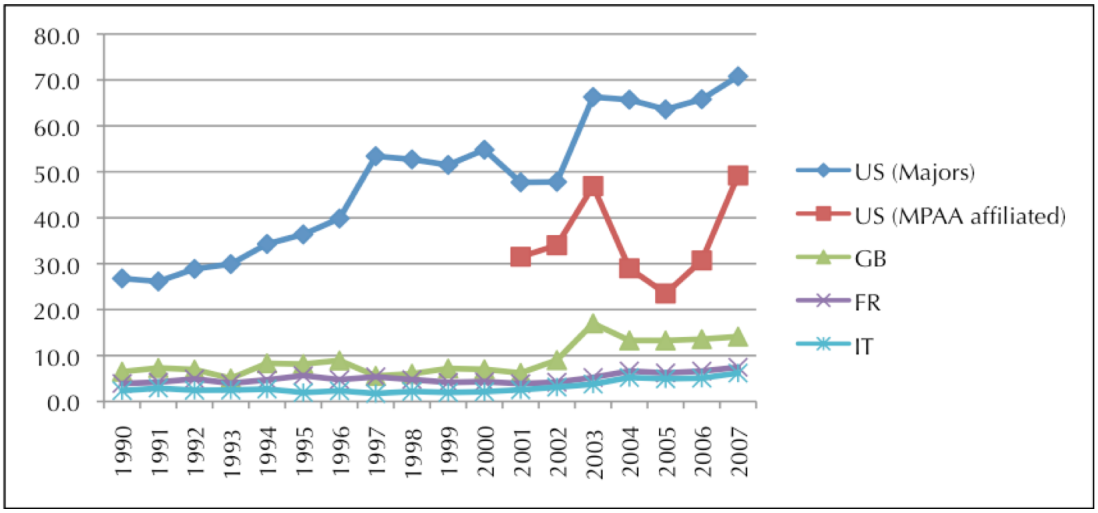
Region	($M)
North America	22.96
Western Europe	6.13
All Europe	4.73
Far East	4.29
South America	2.86
C/E Europe	0.67
Asia	0.44

Screen Digest (2009d, p. 211)

Figure 3–2: Average (negative) cost of production of feature films in the US, UK, France, Italy (1990-2007) (million US $)

[26] A movie's budget consists of numerous expense items and is not easy to control. In terms of production, the expenditures made are referred to as the *negative costs* (or *production costs)* of making a movie (Dally, et al., 2002; Vogel, 2007). These include so-called *above-the-line costs* - the costs of a film's creative elements (including the cast and screenplay) - and *below-the-line costs*, i.e. the costs of crews and other elements in production and post-production (Vogel, 2007). Next to the negative costs, there are distribution and marketing expenses (*print and advertising (P&A)*), which we discuss later on.

[27] Numbers not adjusted for inflation.



Source: European Audiovisual Observatory (2002, 2008)

While European budgets have also increased over the years,[28] their relative importance vis-à-vis Hollywood remains negligible. There is also an important gap between the biggest countries (the UK, France, Italy) and the remainder of the EU Member States. In fact, a majority of European countries had average production budgets below €2 million (in 2007) (Baujard, et al., 2009, p. 30).

In other words, European filmmaking seems not fit to adopt a big-budget driven blockbuster strategy. Yet even if total and per-film production budgets are significantly lower than those of their American counterparts, this does not mean that European films would by definition not be able to achieve commercial and/or critical success – it could even enable these films to recoup their money faster.[29] More problematic is the fact that European producers do not have the same access to market financing as the bigger integrated (especially US) players do.

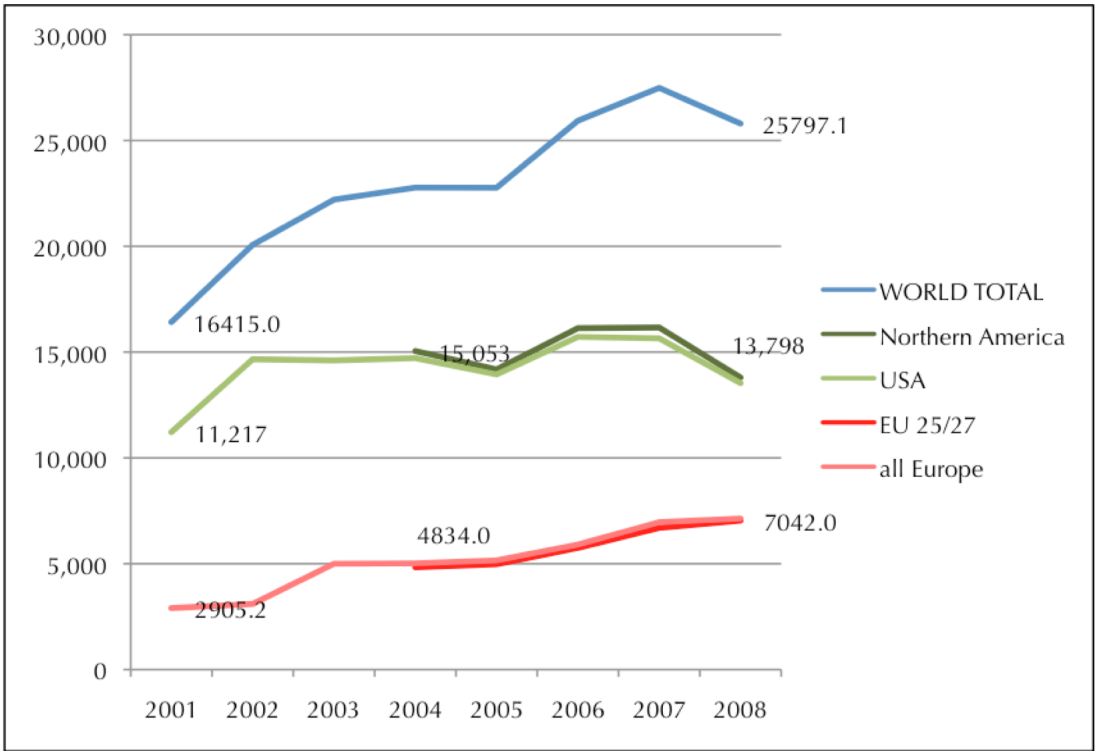
Low levels of investment in production

At the aggregate (national/regional) level, US total film production investment levels soar high above the overall investments that are poured into movie production in other countries and regions (Figure 3-3). The bulk of these investments come from the major studios. While US total production investments have remained fairly constant, however, the European overall film production investments have risen remarkably in the past ten years (even if we would take inflation into account). Europe is clearly a growth market, which seems to counterbalance the still-present under-financing weakness. Eastern European countries however represent but a fraction of these investments. There seems to be a problem with the efficient canalisation of these funds into individual film budgets, moreover: rising total investments appear to be used to invest in making ever *more* movies instead of following a more selective approach.

Figure 3–3: Film production investment worldwide, in Europe and the US ($ million, 2001-2008)

[28] Jäckel refers to an average investment per film of 2.05 US $M in 1988 and 4.26 US $M in 1998 (Jäckel, 2003b, p. 42).

[29] The recent success of “The King's Speech” is indicative in this regard, given its production cost of $13 million, which, even if not necessarily ‘low-budget’, is not comparable to that of the average US (major) film (Dawtrey, 2011).



Source: Screen Digest (2006b, p. 208, 2009d, pp. 210-211)

Financing problematic because of:

1) absence of private investors,

2) project-by project character and

3) scattering of rights

Taking a closer look at film financing, it appears to be problematic for European film producers in three ways:

1) There is an absence of private investors;
2) European production financing has a project-by-project character;
3) Rights and licenses become scattered through the complex financing puzzle.

There are numerous ways in which a movie can be financed. Vogel distinguishes between three types of funding: 1) industry sources, 2) lenders and 3) investors (Vogel, 2007). Industry sources can finance the making of a movie in a number of ways as described in Table 3-3.

The role of bank loans in the European film industry is limited, since banks are averse to the risks involved in film financing. Investors may also come from outside the industry. In the US, this usually means making use of private investment deals, whereas European filmmakers are more confined to public investors, i.e. the various subsidy schemes (cf. Baujard et al., 2009).

Table 3–3: Types of Funding

Type of funding	Explanation
Industry sources	
Production/finance/distribution agreement (PFD)	A film company – usually a Hollywood studio – hires a production company for a specific movie
Output deal	Longer-term, multiple-picture deal, e.g. when a producer strikes a deal with a large distribution company for a period of time or a number of projects
Joint venture between a major studio, a producer and overseas distributors:	A producer and overseas distributors finance a production which subsequently makes use of a studio's power to push a major domestic release and to cover distribution in certain other territories
Co-financing, split-hemisphere deals and co-productions:	Each party contributes part of the production costs, takes care of distribution in its respective territories and is in return entitled to a part of the distribution fees. The producers involved thus share costs and risk. If each partner genuinely participates in the production process, one speaks of a co-production deal.
Pre-buys (pre-sale) and/or equity investments from distributors (or sales agents) and broadcasters:	A distributor licenses the rights to the movie (prior to completion of principal photography) for a certain territory and/or market. Where a pre-sale can consist of a flat fee paid regardless of the movie's success, a minimum guarantee (MG) is a more common system. Especially the independent sector has profited from this pre-sales system across territories and markets. In Europe, television pre-sales have in particular become a common financing tool.
Negative pickup deal:	Similar to a pre-sale, but more commonly used in a US context, this means that a picture is picked up for distribution by a studio that pays an amount for the delivery of the negative. This reduces the risk factor for a studio, while a producer can use it to attract production financing elsewhere.
Transfer of derivative rights:	Licensing and merchandising deals have become more and more important, most of all in a Hollywood context.
Lenders	
Contract-discount bank loans or interim financing:	A bank can provide cash flow for the production of the film, as a form of advance on financing that will come through after principal photography starts or even after delivery of the film.
Gap financing:	The bank covers the part of the production that is not covered yet by distribution contracts or other financing. This gap amount is secured by the value of unsold rights, i.e. territories in which a movie is not yet presold (in view of a possible future sale to these areas). Mostly used in the US.
Working capital / corporate finance:	A bank can also grant a loan in order to provide a production, distribution or sales company with working capital. In practice, because of the difficulties and risk associated with it, the majority of European production companies are not deemed eligible for this
Investors	
Common-stock offerings and combination deals:	Common-stock offerings occur when a producer sells a small percentage of public equity. In a combination deal, common stock is sold in combination with other securities
Private equity and hedge funds:	In recent years, special arrangements were made with major studios and substantial independents whereby private equity and hedge fund investors put money into portfolios of films (to spread the risk). Given the large sums involved, these schemes are mostly suited for the major studios.
Investors making use of tax incentive schemes:	Investors in movies receive a tax benefit. This system boosted the US independent sector in the 1970s and many US states nowadays offer tax incentives of various kinds. This type of financing has also risen to prominence in Europe, where banks have set up specialised schemes based on the various tax credits available.
(Inter)national subsidy programmes:	Various types of public (production) funding have been established at the regional, national and supranational level. See Section: 2.4.

Source: Synthesized from Dally et al., 2002; Kravit, 2006; Vogel, 2007; Downey, 1999; Grainge, 2008; Alberstat, 2004; Aft, 2006; Baujard, et al., 2009.

For independent productions, combining a variation of financing options in a multiparty arrangement is the norm. In Europe, financing is mostly based on a combination of 1) government direct or indirect funding, 2) co-production deals and 3) minimum guarantee deals from distributors and broadcasters. The need to license most of the intellectual property rights upfront (to secure funding) reinforces the project-by-project character of a large part of the (European) production business, in turn limiting their structural strength. (Alberstat, 2004; Baujard, et al., 2009).

While the overall amount of public spending on film represents about one quarter of the total film production investments done yearly, up to 60% of the budget of an individual European film can come from public sources. A 2002 study noted that the average share of public support varies between countries. It generally stands lower in Central and Eastern European countries, with producers there turning to co-producer agreements and pre-sales (IMCA, 2002). Tax incentives, used to promote private investments in film are becoming an increasingly prominent financing arrangement that enables independents to access private money. The oft-noted lack of financial transparency in the cinema sector and its high-risk levels nevertheless continue to discourage potential private investors (Baujard et al., 2009).

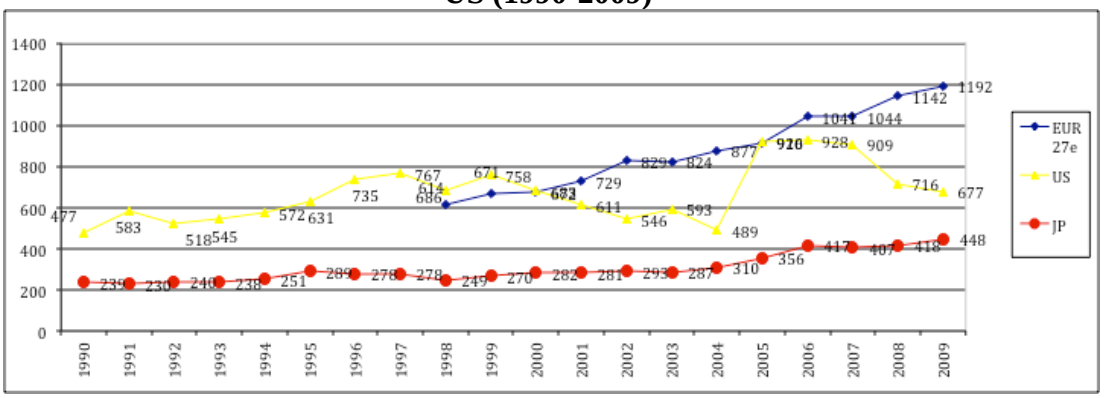
The absence of private investors is clearly an important weakness for Europe. An over-reliance on public funding can have detrimental effects on the connection between a filmmaker and his audience. This can be termed the *production support paradox.* While the subsidies make it possible to increase production, they create at the same time a dependency on this subsidy system. As a result it becomes less imperative for a producer to consider the market and audience in order to survive.

The need to gather financing from a large number of sources, often using manifold 'minimum guarantee'[30] deals in return for territorial distribution rights, also puts a burden on the pan-European character of a typical European movie career - as rights are scattered across a large number of partners. The producer as such loses an important amount of control over the exploitation life of the movie. Even if US majors are setting up increasingly complex financing structures, control and rights usually remain much more centrally managed (at least for the large domestic market). In this way, its financing and business model continues to be quite different from the (European *and* American) independent one.

In terms of the number of films, Europe and Asia are the world's most productive regions. In 2008, total feature film production stood at 5,134. The European share of this amounted to almost 30% (the EU27 share was 23.18%) but Asia, with its production of 1,919 feature films (of which 1,325 in India) took more than 37% of the world production market. US production output comes in third, equalling a more modest 10% of worldwide production (Screen Digest, 2009d, pp. 206-207).

[30] This means that a buyer *guarantees* a certain amount of revenue and carries the risk for this (if the movie rakes in sufficient revenue, the distributor recoups his money). The MG is paid upon delivery of the movie. The agreement can be used to secure bank loans or other additional financing (Dally et al., 2002).

Figure 3–4: Number of feature films produced yearly in EU27, Japan and the US (1990-2009)



Note: Data collection methodology has been revised over the years, making the time line only partly comparable. In particular the EU27 data before 2002 are not fully comparable to those post-2002. For instance, documentaries used to be excluded from production figures if national sources provided separate data for them (but are not any more). US figures were revised from 2005 on. Japan figures relate to *released* films.

Source: EAO (2010)

The European Audiovisual Observatory estimates that the EU27 production output[31] for 2009 consisted of 1,192 films, of which 299 documentaries and 893 fiction films (EAO 2010). Within Europe, France (182) and Germany (194)[32] produce the most films followed by Spain (155) and Italy (135), with the UK (76) trailing quite far behind. While European film production remains nationally based, the idea of transnational cooperation is visible in co-production activities between countries. Recent data from 2009 from the EAO show that that 332 (majority) European co-productions were released in 2009, which makes this type of production cooperation a substantial segment of the European production and distribution landscape. On top of that, around 100 co-productions with non-European countries were released in the same year (EAO 2010).

In the last 10-15 years, production levels within Europe have been on the rise. This comes at the back of a period of decline that was especially visible in the 1980s and early 1990s. This relatively large number of films produced yearly could possibly be considered as a strength for the European film sector (See also Figure 3-4), but not necessarily so.

First of all, the rising production levels may be evaluated differently according to the specific national industry characteristics. On the one hand, rising production levels may, for a country like Poland e.g., signify a growing, stronger industry. In a mature market like France, on the other hand, it may point towards a situation of over-production.

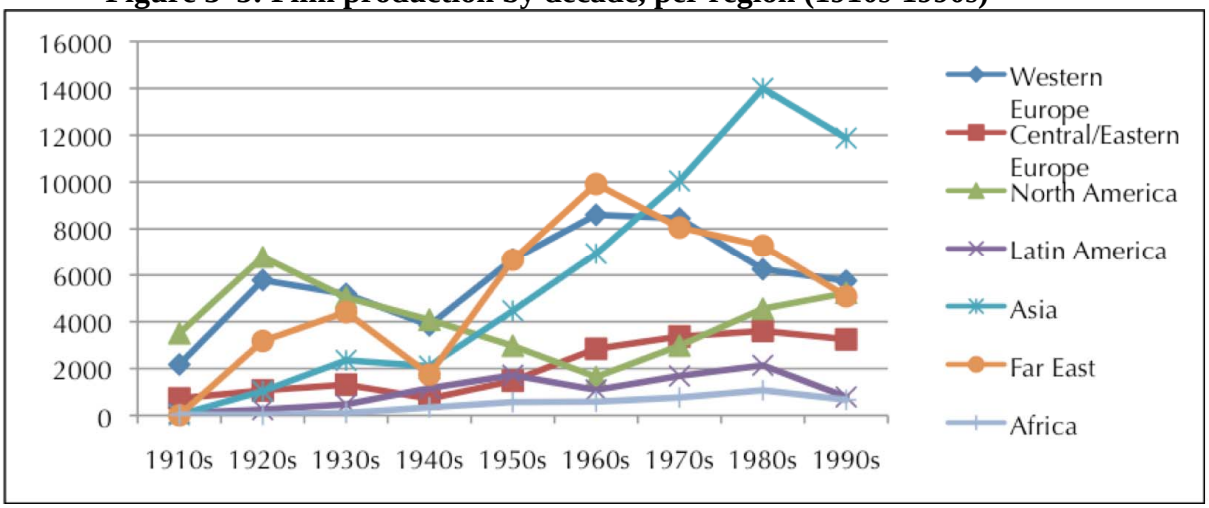
Ultimately, this clutter of films also has to find the way to its audience. With European production seemingly rising to ever-higher levels, it appears to have grown out of tune with the market and is not as efficient as could be envisaged.

[31] Note that it is often difficult to compare the various data, for instance because of varying definitions of "produced films": these could be films going into production or completing production, for instance.

[32] In 2009, for the first time in recent history Germany overtook France as the country with the highest production output.

Other regions do not follow the same evolutions (cf. Figure 3-4), while the market share divisions remain roughly the same (cf. infra and Gubbins, 2011). This will be confirmed when we address the rest of the value network.

Figure 3–5: Film production by decade, per region (1910s-1990s)



Note: Figures for the 1990s are on the basis of extrapolation.

Source: Screen Digest (1995, p. 133).

Strong director tradition

On a final note regarding film production, we should mention that the European film industries have generated (and continue to do so) a large number of directors (or *auteurs*) with internationally recognised talent. In Europe, directors often wield the most power in the filmmaking process (Finney, 2010). In a sense, they can be considered as constituting a European variant of the "star system".

3.3. Film distribution and marketing

The production process runs from the very first stages of moviemaking up until the creation of the answer print. Once this is done, a movie is put into the market. This means it is physically delivered to the various exploitation channels (distribution) but also that it is marketed. A number of key players are active in the distribution and marketing phase. Dally et al. (2002) distinguish between the situation where a distributor acts as the liaison between producer and exhibitors and a multi-role process that involves a sales agent who acts as an intermediary between producers and local distributors. The agent is appointed by the producer to sell a film in more than one territory. In Europe, relatively few sales agents are active[33] (the European Commission estimated their number at circa 50 in 2003 (Commission of the European Communities, 2003, p. 9)). Across the European film landscape, distributors for the time being continue to form the most crucial link between the production and consumption side (Dally, et al., 2002).

European distribution dominated by majors

Looking at the distribution landscape in Europe, a distinction can, firstly, be made between the major distributors and the independent ones. Major distributors are the distribution arms of the Hollywood studios. Distributing their own films as well as a series of independent productions, they are active in Europe (and elsewhere) through local subsidiaries, through collective entities (e.g. the United International Pictures

[33] Examples include The Match Factory (DE) and Wild Bunch (FR).

structure that was set up by Paramount and Universal) or through cooperation with local distributors[34] (Dally, et al., 2002). Some of the European distributors are mid-sized or even larger, vertically integrated and combining production, distribution and exhibition activity in various ways (e.g. Pathé Distribution, UGC, Kinepolis Film Distribution). Different aspects of distribution (theatrical, home entertainment, licensing and rights trading, international sales) are also regularly combined in one company. A number of other European players are connected to television broadcasters (e.g. Medusa in Italy) (European Audiovisual Observatory, 2008; Lange & Newman-Baudais, 2007,). Yet many of the European distributors are of the small and independent type (Screen Digest, 2006c). This is not necessarily always a weakness, when for instance some smaller films are better off being distributed by a small company that can target its audience well, than to be lost in a big company division. Where the European sector finds its weakness, however, lays in the relative position of these players in the marketplace, in particular their localised character.

[34] Sometimes they form joint ventures, although this practice is diminishing. The Spanish-US joint venture Warner-Sogefilms e.g. was set up in 1998 but split in 2005 (Lange & Newman-Baudais, 2007, p. 15).

Table 3–4: 40 leading film distribution companies in Europe (2005-2009)

Rank	Company	Country	2005	2006	2007	2008	2009
1	Warner Bros. Ent. France [1]	France	413,9	438,5	375,0	365,3	340,5
2	Warner Bros. Ent. GmbH	Germany	405,7	321,7	337,5	338,8	335,5
3	Pathé Distribution (AMLF)	France	180,4	134,2	125,9	310,2	n.a.
4	Warner Bros. Ent. UK Ltd [2]	UK	999,6	658,1	654,0	267,2	306
5	The Walt Disney Company Iberia S.L.	Spain	202,6	232,7	228,9	220,5	n.a.
6	Medusa Film S.P.A.	Italy	110,9	142,8	167,6	190,2	207
7	United International Pictures	Neth.	770,3	623,0	205,9	268,5	193,9
8	Metropolitan Filmexport	France	190,4	174,5	153,6	175,0	181
9	Entertainment Film Distributors Ltd	UK	153,5	137,8	125,3	116,5	n.a.
10	Société nouvelle de distribution	France	56,2	92,1	93,3	114,3	n.a.
11	Sony Pictures TV Distr. (France)	France	140,5	133,2	135,3	112,0	n.a.
12	Columbia Pictures Corporation Ltd	UK	123,1	191,2	68,9	96,1	107,6
13	Universal Pictures International Ltd	UK	12,0	20,8	101,4	100,0	88,1
14	Warner Bros. Entertainment España	Spain	73,5	99,0	117,5	87,3	n.a.
15	Universal Pictures Int. Germany	Germany	95,7	73,7	87,3	n.a.	n.a.
16	Warner Bros. Entertainment Italia [3]	Italy	98,8	84,8	104,6	85,8	n.a.
17	Nordisk Film Distribution A/S	Denmark	n.a.	n.a.	n.a.	88,7	83,9
18	Walt Disney Studios MP. Germany	Germany	71,5	86,9	62,2	82,1	n.a.
19	AB Svensk Filmindustri	Sweden	87,5	81,7	93,1	78,9	80,9
20	Nordisk Film (Distribution) AS	Norway	89,2	79,6	98,7	53,7	79,6
21	Warner Bros. Ent. Nederland B.V.	Neth.	94,5	75,8	n.a.	n.a.	n.a.
22	Nordisk Film Distribution AB	Sweden	52,0	43,2	77,4	75,3	n.a.
23	Odeon A.E.	Greece	62,0	66,0	73,3	75,0	n.a.
24	01 Distribution	Italy	93,7	90,6	99,9	101,2	73,8
25	Kinowelt (cons.)	Germany	n.a.	112,9	84,1	72,0	n.a.
26	Universal Pictures Int. Spain S.L.	Spain	59,7	45,8	50,5	63,8	n.a.
27	Zon Lusomundo Audiovisuais	PT	53,7	53,9	61,9	65,5	63,6
28	20th Century-Fox Film Company Ltd	UK	101,8	79,5	93,0	77,2	62,5
29	Hispano Foxfilm SAE	Spain	55,4	63,4	76,4	58,5	57,6
30	Eagle Pictures S.P.A.	Italy	89,9	80,4	76,3	61,2	55,6
31	Buena Vista International France	France	39,1	64,6	49,9	51,6	n.a.
32	Sony Pictures Releasing GmbH	Germany		2,7	51,4	n.a.	n.a.
33	Alliance Films (UK) Limited	UK	62,2	71,1	65,5	46,9	50,7
34	Scanbox Entertainment Group A/S	Denmark	52,2	75,8	n.a.	60,4	50,3
35	The Walt Disney Company APS	Denmark	47,7	48,9	53,8	54,6	49,9
36	Audio-Visual Enterprise [4]	Greece	59,2	53,8	53,2	47,7	46,1
37	Sogeda	Spain	88,4	73,6	64,3	45,4	n.a.
38	Universal Pictures Int. Italy	Italy	42,7	37,1	41,9	51,6	44,4
39	SF Norge	Norway	51,6	48,6	58,0	41,5	43,2
40	Manga Films	Spain	45,8	46,6	43,1	n.a.	n.a.

Notes: Unconsolidated operating revenues (EUR million) Revenue from activities other than theatrical distribution (such as production, video, trade in rights, exhibition, pay-TV....) may be included in the operating revenue for some companies. [1]= 2006 over 13 months. [2]= 2005 over 13 months. [3]= 2005 over 18 months. [4] = Incl. Prooptiki for 2005

Source: Adapted from EAO (2010)

In fact, it is in the distribution sector that the impact of Hollywood's power players is felt the most. Despite quite a large number of active European distributors of different sizes, this sector is highly concentrated, with most of the revenues returning to US major affiliated distributors. Twenty-one of the forty main distribution companies and nineteen of the top-30 video publishing/distribution companies in Europe are subsidiaries of North American groups (EAO, 2010). The European Audiovisual Observatory estimates that, in the five largest EU markets, they rake in about 65% of the revenues. European companies capture the remaining 35%, but many in this group distribute US movies as well. In general (major- and non-major-controlled distributors both included), the market share of the top-10 distributors in a country in terms of admissions often is around 90% (European Audiovisual Observatory, 2009b; Lange & Newman-Baudais, 2007, pp. 11-12).

This concentration in terms of market shares is a weakness for European film. Independent European distributors remain a fragmented group, with often-insignificant individual market presence. Not only are many of Europe's distributors of the small and independent type, they are usually nationally based. This points to another weakness, i.e. the *territory-based* fragmentation of the independent distribution market. For all its merits in getting a production financed, the subdivision of rights into licenses per territory and technological outlet, as practiced by European independents, adds to the fragmentation of the market and can have negative consequences for the marketing of a movie, since the rights holders adopt a limited (to their technology or their geographical area) perspective in their promotional activities (Hoskins, et al., 1998).

European distributors are (territorially) fragmented

The pan-European distribution weaknesses have been recognised for a long time and several attempts to remedy it have been undertaken in the past. Today again, some are trying to build pan-European distribution networks, following in the footsteps of the discontinued Polygram experience and a long history of acknowledgements that this is one of the main challenges facing the industry.[35] Yet it remains a challenge, as is exemplified by Stewart Till's Icon initiative (Kay, 2009) - its multi-territory distribution strategy was abandoned in March 2011 (Dawtrey, 2011b). Others are trying to consolidate distribution activities with other value network areas, such as exhibition (e.g. Curzon Artificial Eye which combines on-demand, distribution and theatrical exhibition activities).

Just as in production, we observe a positive evolution in recent years. Some distributors are already active at the pan-regional level, for instance in the Nordic region or the Benelux (Dally, et al., 2002). First steps are also made to establish acquisition consortiums for the common acquiring, launching and marketing of films by a number of distributors. Most prominent in this regard is Indie Circle, launched in 2003 by A-Film (NL) *(which has since left the consortium)*, Cinéart (BE), Frenetic Films (CH), Haut et Court (FR) and Lucky Red (IT) (Lange & Newman-Baudais, 2007; MacNab, 2008). Due to fragmentation problems, such initiatives are however not (yet) widespread. Perhaps most significantly in terms of recent

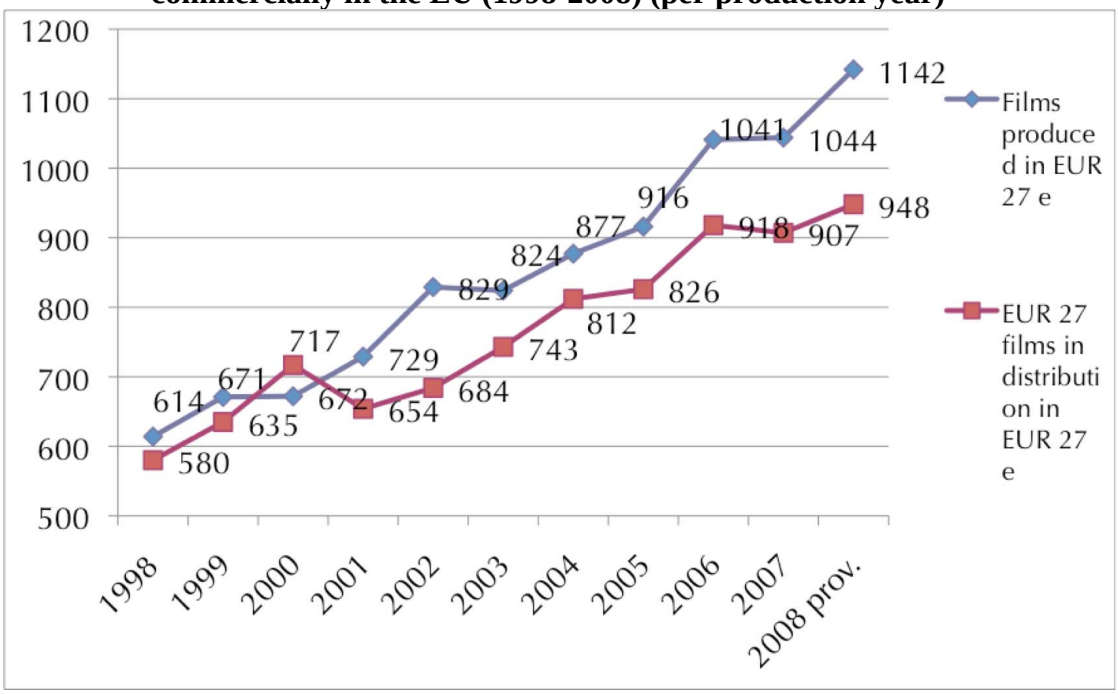
Most of the European film output finds its way to distribution: but not cross borders

[35] In 1994, for instance, the Think-tank on European audiovisual policy already quoted a 1968 symposium during which Jean-Claude Batz said: "It is recommended (…) that priority in State intervention go to the fostering of the development of a multinational network of film distribution, which should and could be the cornerstone of a European film industry" (Vasconcelos et al., 1994, p. 27).

initiatives is the set-up of the Europa Distribution association, which on a more informal level regroups independent European distributors and aims to profit from network advantages. In May 2011, the European International Distributors or sales agents followed suit by setting up the Europa International association (Europa International, 2011).

Turning to the films these players distribute, we can tell from Figure 3-6 that the majority of European films produced finds a commercial distribution outlet. However, the data we accessed crucially count all European films that are released in at least one European country. In other words, this does not entail that there is a diverse pan-European film landscape. It is quite possible that most of the nationally produced European films get a release in their home country only. Our analysis of the exhibition market will help shed light on this.

Figure 3–6: Comparison between the number of films produced and released commercially in the EU (1998-2008) (per production year)



Source: European Audiovisual Observatory (2009b, 2010)

Marketing – substantial share of total costs

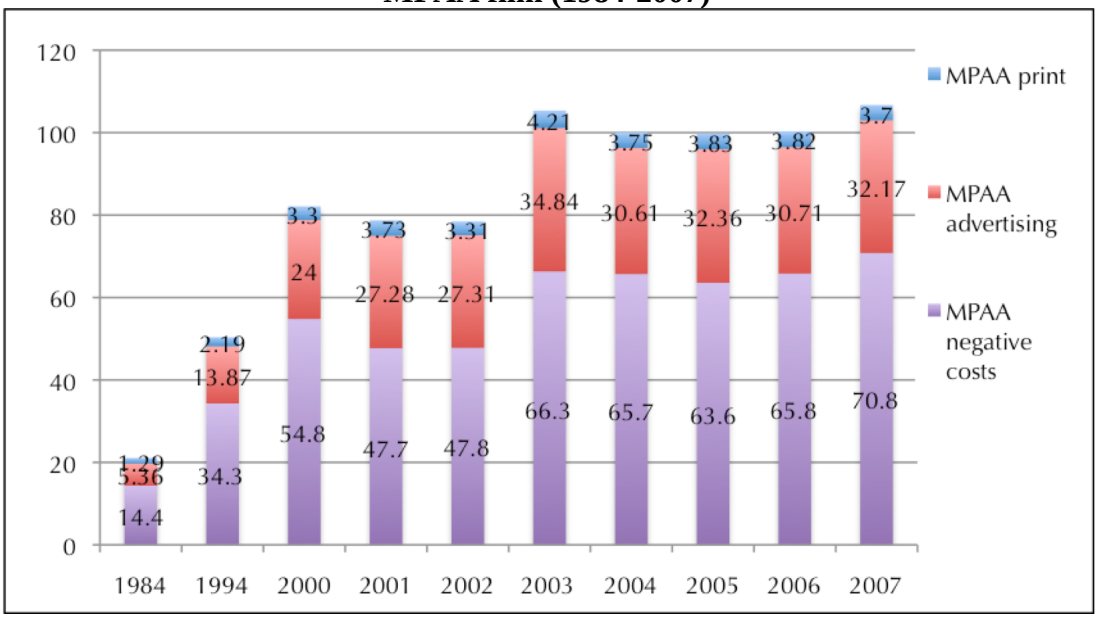
Given the large amount of films produced yearly, it is becoming more and more crucial to stand out amongst the crowd. As a result, marketing expenses have risen enormously over the past decades. Typically, the 'print and advertising' (P&A) expenses of a movie encompass print expenditure (subtitling or dubbing and print costs[36]), advertising costs, publicity expenditure (e.g. the set-up of press 'junkets') and promotional costs (merchandising and tie-ins, for instance). The P&A costs are typically paid for by the distributor, as agreed upon with the producer and usually

[36] According to a study by Media Consulting Group and Peacefulfish, the average costs of subtitling and dubbing a 90-minute movie within Europe (31 countries) are respectively €2,700 and €31,300 (Media Consulting Group & Peacefulfish, 2007, p. 38). The cost of a 35mm (release) print is approximately €1,500 (Inglis, 2008, p. 14).

bound contractually by minimum and maximum spending limits (Dally, et al., 2002).

Independent, European titles typically have to work with much lower marketing budgets than the Hollywood) blockbusters. MPAA data (Figure 3-7) give an overview of the print and advertising costs associated with the release of a typical movie by the majors. From these data, it becomes clear that an ever-growing share of the P&A costs consists of marketing spend. Advertising costs often are up to 10 times higher than print costs, the latter having remained quite steady over the years. In Europe, promotional costs for independent films (local, European or other ones) also outweigh print costs, but to a significantly lesser extent. Screen Digest noted for instance how prints usually take up to 40% of the P&A budget in France. Across other markets as well, estimated advertising and promotion costs usually account for around 50-60 per cent of total costs (Screen Digest, 2006c, pp. 262-263). Marketing budgets in Hollywood are also much higher than those in Europe when compared with total film budgets. Hollywood marketing costs now account for one third of overall production and distribution budgets. Even if marketing investments have risen in Europe as well, the average marketing budget for an independent and/or European film is still significantly lower than that of their Hollywood counterparts (Dally, et al., 2002). In France, for example, a 26-print release can be accompanied by a promotion spend of €120,000, a 100-print indie with one of €400-500,000, but a blockbuster release will include €2 million in promotion and a much higher number of prints (Screen Digest, 2006c, pp. 262-263).

Figure 3–7: Total production and P&A costs (in US$ million) for the average MPAA film (1984-2007)



Note: The MPAA members are Paramount Pictures, Sony pictures Entertainment, 20th Century Fox Film Corporation, NBC Universal, Walt Disney Studios Motion Pictures and Warner Bros. Entertainment inc. MGM Data is not collected - historical figures have been adjusted to reflect this omission. (Motion Picture Association of America (MPAA), 2008, p. 7).

Source: Motion Picture Association of America (MPAA) (2008, pp. 7, 15, 2005, pp. 17-20)

Hit-and-run character film distribution

Marketing's most important impact is on the opening weekend (after that, a film of "poor quality" will quickly demise because of bad word of mouth, all marketing efforts not-withstanding). Whether a cinema programs a certain film in its second

week of release is mostly dependent on the opening week's results. In other words: the increasing pressures on opening weekend performance and equally rising marketing budgets mutually reinforce the hit-and-run character of (mainstream) movie distribution today.

Not surprisingly, the lack of substantial promotion budgets is an important weakness for European distributors, as it becomes very difficult for them to make a film stand out amidst the glut of movies targeting the cinemas.

Given their weak marketing budgets, (relatively inexpensive) promotion that can be gathered from success in film festivals and markets[37] is particularly important for the independent sector in Europe (and beyond). The first regular festivals were launched around WWII, with the Cannes Festival playing an important role in the advent of the nouvelle vague movement. Over the years, film festivals and markets have come increasingly to the foreground with new ones launched continuously (Montal, 2006). They have been described by Morawetz as 'temporary clusters' (Morawetz, 2008, p. 52). They can be seen as central sites in a global 'network' that is at the same time complementary and antagonist to the Hollywood system (De Valck, 2007) and they enable an independent movie to stand out in an alternative way. This alternative promotion channel formed by a film festival and market network across Europe can be seen as a strength contributing to the balancing of the European film landscape's diversity. Nevertheless, the festival landscape cannot provide a fully-fledged alternative to the regular commercialisation platforms.

Festivals as an alternative promotion channel

3.4. Film commercialisation: theatrical and other exhibition streams

This section starts off with a discussion of the release windows system (Section 3.4.1), followed by a successive overview of the different commercial outlets for film. In terms of legitimate commercial platforms for film, we will address the theatrical market in Section 3.4.2 and the non-theatrical consumption in 3.4.3 and 3.4.4.

3.4.1. The release windows system

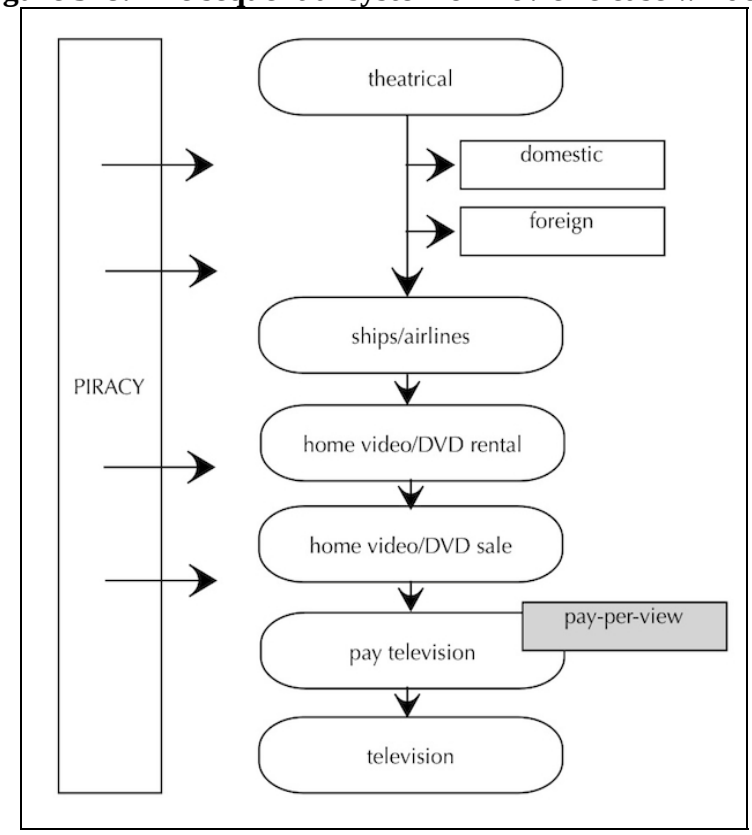
From the film industries' early days on, the principle behind the exhibition cycle has been based on a system of time holdbacks. The optimal sequencing of motion pictures along these is called windowing or sequencing (Figure 3-8). It involves selling the same product in different markets for a different price. Generally, the sequence follows the order of the most marginal revenue generated to the movie owner in the least amount of time. Traditionally, this has meant that theatrical exhibition (domestic followed by the international release) comes first, followed by video/DVD rental; video/DVD sales; Pay-per-view; Pay TV and, at the very end, free television. Between theatrical and home video releases, films are made available to hotels and airlines. In general, the time lags are agreed upon by industry consensus and via contracts. In Europe, only France and Portugal have more explicit legislation fixing the windowing structure, while Germany and Austria have set up regulation for government-supported films. Even if concrete windows vary according to individual countries' practice, the structure for a long time mostly

Release windows system – norm in the industry for many years

[37] A film festival differs from a market in the sense that is more open in character: it is organised around screenings and prizes, with an audience composed of distribution executives, journalists and the wider (paying) public. Key film festivals are those of Cannes, Sundance, Berlin and Venice (Dally, et al., 2002; Montal, 2006).

followed a 6-9-12-24 schedule: home video release approximately 6 months after the theatrical release, pay-per-view another 3 months after that, pay television at circa 12 months and free television about two years after the initial theatrical release, although this schedule has gradually become compressed.[38]

Figure 3–8: The sequential system of movie release windows



Note: some sources put the home video market after the pay television market.
Source: De Vinck (2011)

3.4.2. The theatrical marketplace for films in Europe

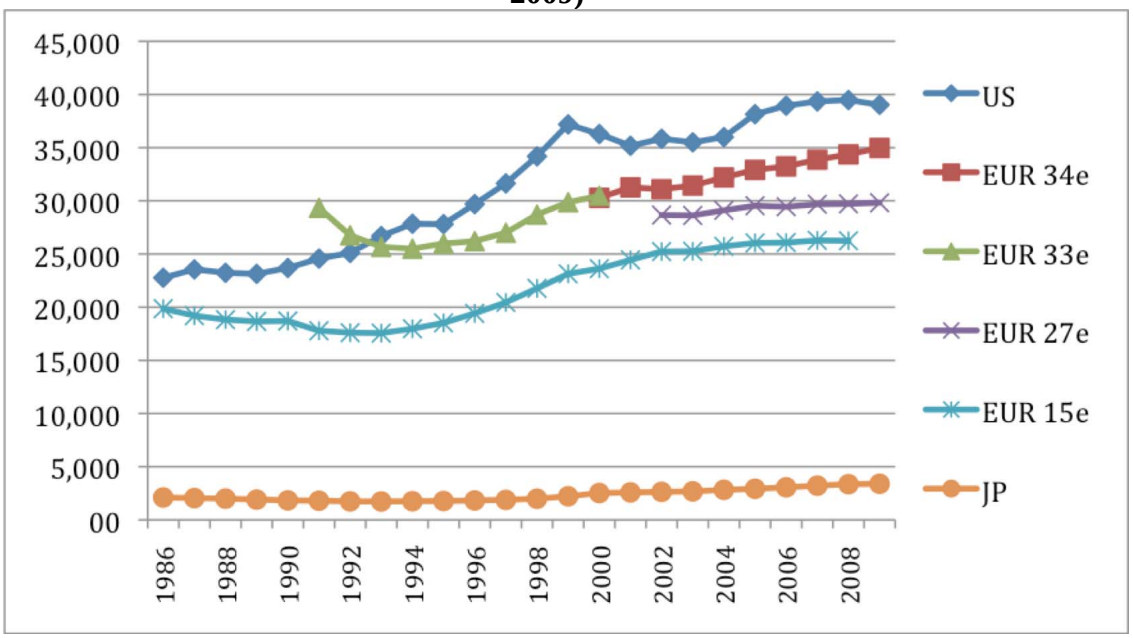
Throughout its existence, the movie theatre has been in constant evolution and transformation. With the grand movie palaces of Hollywood's golden age reconfigured into multi-screen, often dilapidated, theatres, the modern multiplex rose from the 1970s on as cinema's response to the rise of non-theatrical (in particular home video) movie consumption.

Large and diverse exhibitor sector in Europe although the US theatrical market is more expansive

Today (2011), the exhibition landscape in Europe (and even more so, in the US) is dominated by these multiplexes, sometimes operating in circuits. Nevertheless, the continued presence of a significant number of smaller exhibitors alongside these and the general stability of the number of cinema seats (not shown here) and screens point to a relatively strong and diverse European exhibitor sector (Figure 3-9). Nevertheless, in terms of number of screens per inhabitant, Europe appears to have less of a theatrical tradition than the US (Table 3-5).

[38] See e.g. Currah (2007); Kern (2009); Maltby (2003), Dally, et al., (2002), Blume, (2006) Vogel (2007); Drake (2008); Eliashberg et al. (2006) and Kuhr (2008).

Figure 3–9: Number of cinema screens in Europe, the US and Japan (1986-2009)



Note: Revised data from 2003, making the earlier data not fully comparable. EUR 34 is the EU 27 plus Switzerland, Iceland, FYR Macedonia, Croatia, Norway, Russia and Turkey.

Sources: European Audiovisual Observatory (2002, 2007a, 2008, 2009b, 2010)

Table 3–5: Inhabitants per screen in Europe, US and Japan (2009)

Country/Region	Inhabitants per screen
EU 27	16,701
USA	7,800
Japan	37,581

Source: EAO 2010

The exhibitors' market in Europe clearly is characterised by consolidation. A number of large circuits operate at a national and often transnational level (Kinepolis, UGC etc.). Screen Digest, in a study of 12 European countries,[39] calculated that, in five of these 12 countries, the top 5 cinema circuits owned 50% or more of the screens (Netherlands, UK, Belgium, Portugal and Austria) (Screen Digest, 2008a, pp. 102-103). In addition, admissions are more concentrated in these types of cinemas (Table 3-6).

These concentration tendencies put smaller-scale exhibitors in a weaker position and as such can be regarded as a weakness of the sector in general, not only in Europe.

[39] Austria, Belgium, Denmark, France, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, Switzerland and the UK.

Table 3–6: Major European cinema circuits

Name	Owner	Main territory	Territories	Sites	Screens	Admissions (mn)	Revenues (EUR mn)
Odeon, UCI	Terra Firma	UK	7	204	1,850	75	574 (2008)
Europalaces	Pathé & Gaumont	FR	4	92	910	61	545
CineStar	Amalgamated Holdings (1)	DE	1 (4)	62 (141)	464 (1119)	n.a.	197,5 (439)
Cineworld	Various	UK	2	77	790	49	376
Vue Entertainment	Private (2)	UK	4	70	679	>38	295
UGC	UGC	FR	4	48	582	>40	384 (2008)
CinemaxX	Dr. Kloiber GmBH	DE	2	34	303	19	207
Kinepolis	Kinehold	BE	5	23	317	22	231

Notes: (1) Amalgamated holdings has a strong presence also in e.g., Australia and New Zeeland: Figures given here are for Germany (with the total brackets) (2) Including one site in Taiwan.

Source: Screen Digest (2008a, p. 112) and EAO (2010)

Trends towards consolidation and multiplexes

Moreover, the percentage of multiplexes (8 or more screens) is significant, even if much lower than in the US[40] (the UK has the highest percentage, of 64% and the average across 28 European countries lies around 30%). The rise of the multiplex has coincided with a decreasing number of smaller-scale cinemas and distinctions between for instance a commercial multiplex and a so-called arthouse[41] cinema have also been blurring (Downey, 1999). Multiplexes (much to the dismay of the art house exhibitor) nowadays often offer art house titles as well - an example is the Cinémanie programme of the Kinepolis Group in Belgium.

Smaller cinemas at risk

[40] In the US, multiplex (8-15 screens) and megaplex (more than 16 screens) theatres in 2009 accounted for three quarters of all US screens (up from 34% in 2004) (Motion Picture Association of America (MPAA), 2008, p. 7; 2009, p. 13, 2005, pp. 23-26).

[41] In general, defining the art house cinema is difficult, and moreover a distinction can usually been made between subsidised theatres and commercial art houses (cf. (Media Salles, 2008). Logically, an art house cinema programmes "art films" but once more this is hardly definable. In our view we can define it as generally being a smaller-scale cinema, which programmes independent, foreign or otherwise non-mainstream content.

Table 3–7: Density of screens and concentration of admissions in multiplexes[42] (8 or more screens) in European countries (EUR28) (2007)

Country	Screen density (in %)	Concentration of admissions (in %)
AT	42.11	61.08
BE	60.58	n.c.
BG	39.53	72.89
CH	18.55	27.61
CZ	18.71	n.c.
DE	26.66	44.20
DK	18.78	n.c.
EE	16.42	61.47
ES	63.04	78.84
FI	16.14	48.81
FR	33.94	54.37
GB	64.34	n.c.
GR e[43]	27.04	46.20
HU	31.00	53.60
IE	47.36	n.c.
IT (1)	29.98	44.91
LT	24.36	43.21
LU	38.46	n.c.
LV	30.43	76.20
MT	41.46	n.c.
NO	15.19	25.05
NL	20.00	36.80
PL	42.86	63.51
PT	36.81	49.75
RO	17.95	55.23
SE	16.59	n.c.
SI	35.19	80.98
SK	7.97	38.16
Average	**31.48**	**53.14**

Source: European Audiovisual Observatory (2009b)

In terms of the appeal of cinemas as a film venue, theatrical admissions have become more stable since the early 1990s after a long downturn that started soon after the Second World War (Forest, 2001). In the early 2000s, total European cinema admissions nevertheless seem to have witnessed a slightly downward trend - in large part due to falling attendance numbers in Western Europe (Figure 3-10).[44] Gross box office revenues (Figure 3-11) increased nevertheless because of

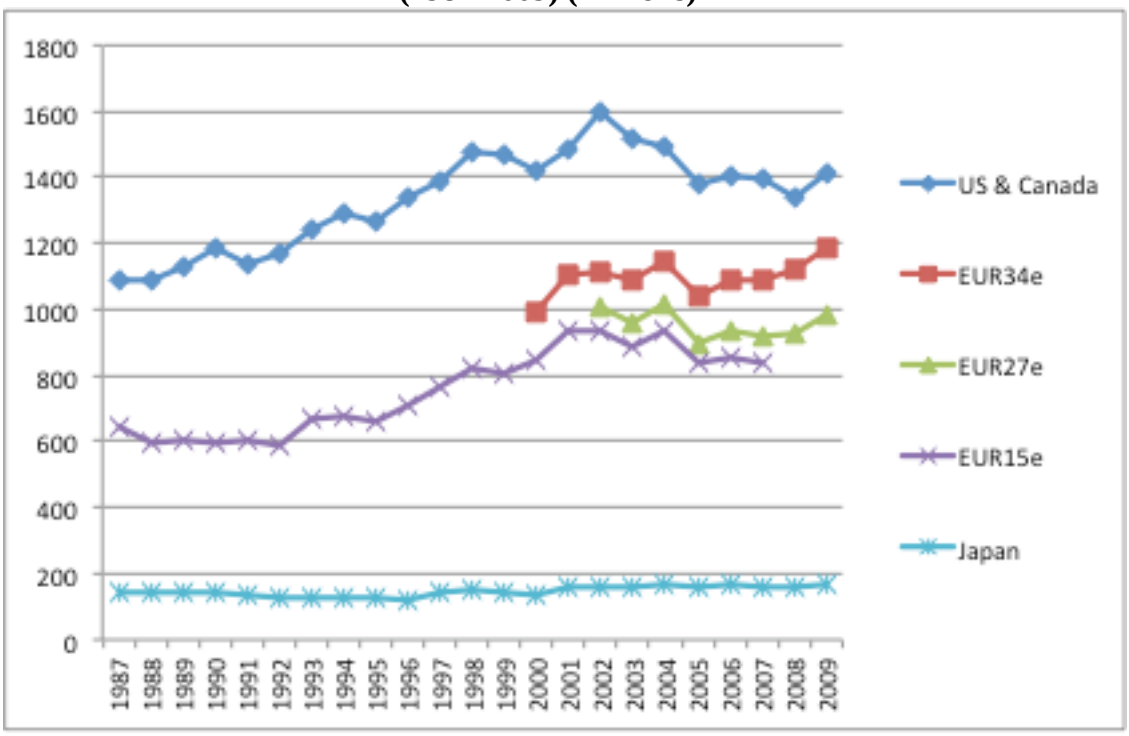
[42] Expressed as a percentage of the overall number of screens and admissions.

[43] 'e' stands for an 'estimation'.

[44] It is difficult to compare movie attendance and box office numbers in the short term, as one film can make or break the year (e.g. the French hit movie ‘Bienvenue chez les Ch'tis’ contributed to a substantive rise in admissions for the first half of 2008) (European Audiovisual Observatory, 2008).

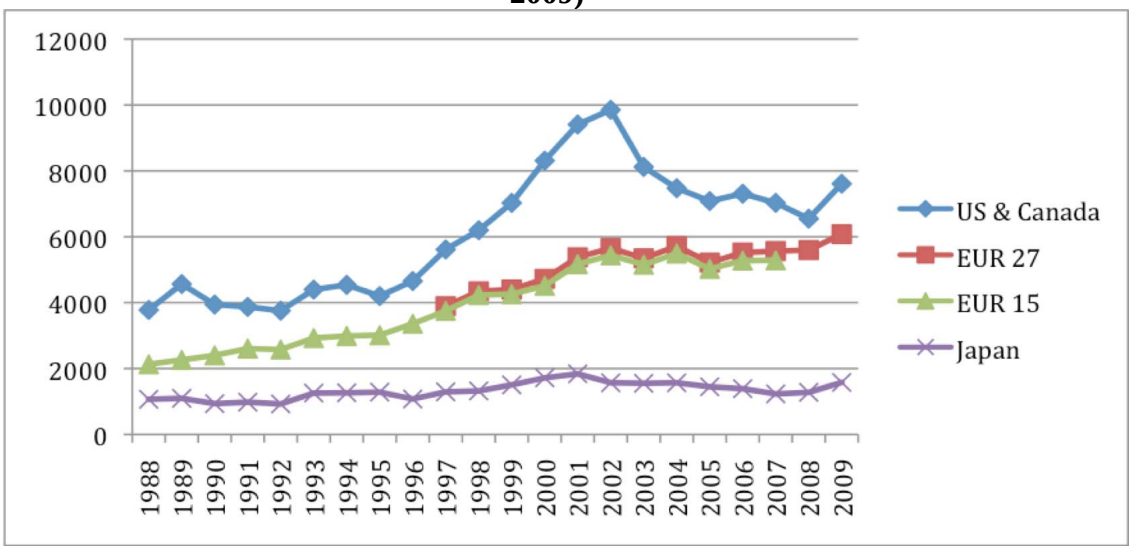
augmented ticket prices (European Audiovisual Observatory, 2008). More recently (2008 and 2009), admissions have taken a positive turn again but it is too early to assess the long-term implications of this.

Figure 3–10: Yearly total admissions in Europe, North America and Japan (1987-2009) (millions)



Source: (European Audiovisual Observatory, 2002, 2007, 2008, 2009a, 2009b, 2010)

Figure 3–11: Gross box office in Europe, the US and Japan (in € million) (1988-2009)

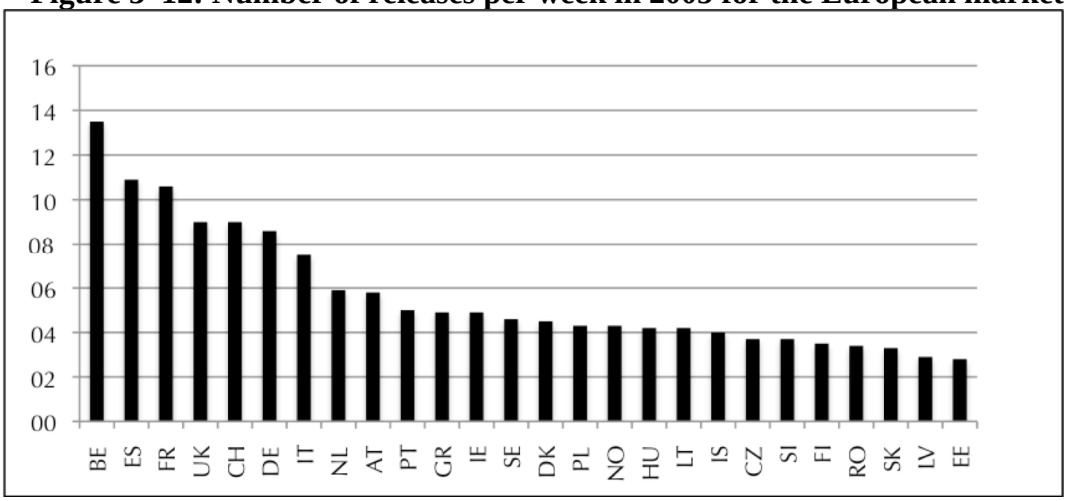


Source: (European Audiovisual Observatory, 2002, 2007, 2008, 2009b, 2010)

In any case, the theatrical marketplace in Europe remains highly competitive, as the multiplex trend coincides with a fierce battle for screen space between the many films available. Screen Digest (Figure 3-12) calculated that the total number of films

released per week across Europe[45] had risen by an average of almost 40 per cent between 1995 and 2005: on average, in 2005 as many as 5.7 new titles were released in a European country each week (Screen Digest, 2006c, p. 263). An above-average number of new releases per week is apparent in Western European countries (this seems to be particularly true for in the large and/or multilingual territories). Today's movies open in as many theatres as possible and may only run for a short time depending on how quickly demand is saturated. As we already noted, opening weekends are seen as determinant of the rest of the movie's theatrical life.

Figure 3–12: Number of releases per week in 2005 for the European market



Source: Screen Digest (2006c, p. 263)

Rapidly rotating screens favour the US blockbuster model

Such release patterns are to the disadvantage of 'smaller-scale' films, which European films often are (especially outside their home market) (cf. Lange & Newman-Baudais, 2007). In this hit-and-run environment, a European film – with its relatively low marketing budgets, small-scale character and usually heavy reliance on word-of-mouth – hardly starts at pole position. In general, non-mainstream titles do not get the 'screen space' they need to build their audiences.

US movies dominate in Europe…

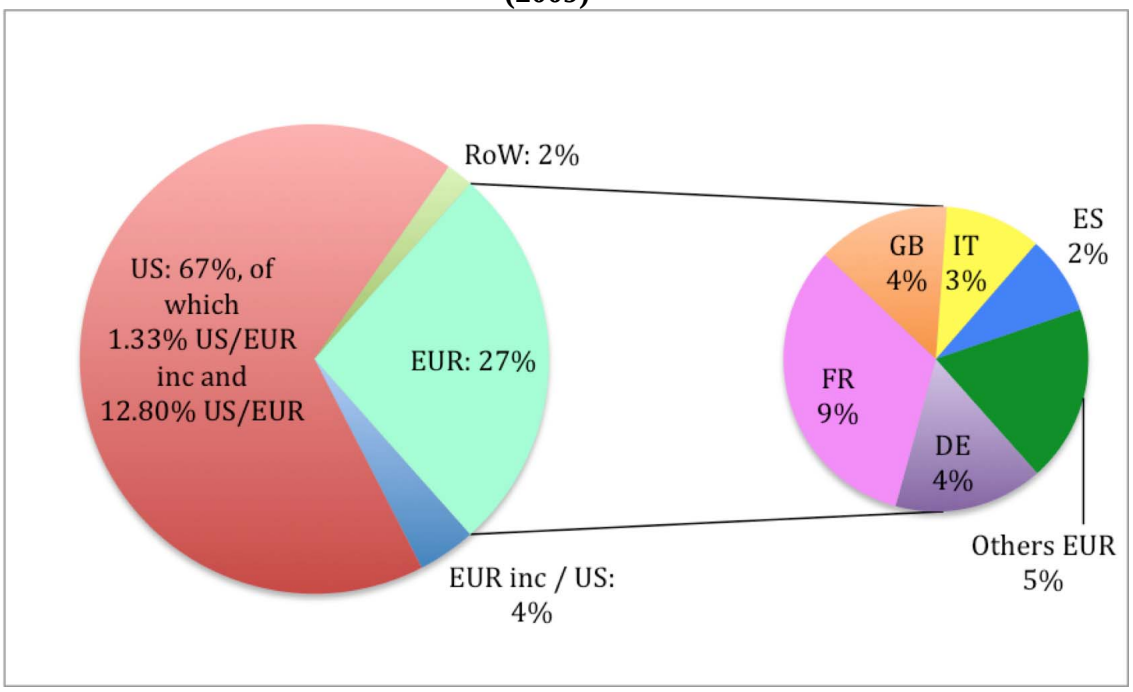
The continuation of these trends (concentration, multiplexes, etc) is especially problematic in view of the observation that the theatrical audience has for a long time favoured Hollywood films. When we take a closer look at the consumption patterns of the European theatrical movie audience (Figure 3-13, Figure 3-14) it becomes immediately clear that the American distribution power translates into a prominent share of the theatrical market. In 2009, US films achieved a (provisional) market share of 67% of all admissions in the EU27 market.[46] Admissions for European films (most of which for films from the big 5 countries) count for approximately one third of the market. This majority position of US films, to the

[45] 23 EU countries plus Norway, Iceland and Switzerland.

[46] This figure includes so called US/EUR and US/EUR inc collaborations. The European Audiovisual Observatory uses "US/EUR inc" to refer to films that are made on US initiative by a US company, with reduced creative input from a European (usually UK) company. They are considered as inward investment films. US/EUR is used for films with European co-financing but who do not qualify as "inward investment films" in the UK. EUR inc/US films have a higher level of UK or European character (e.g. in cast and crew) and/or creative control. Examples include the Harry Potter or James Bond series.

detriment of European productions (and most of all world cinema, for that matter) must be perceived as a major weakness for the European sector.

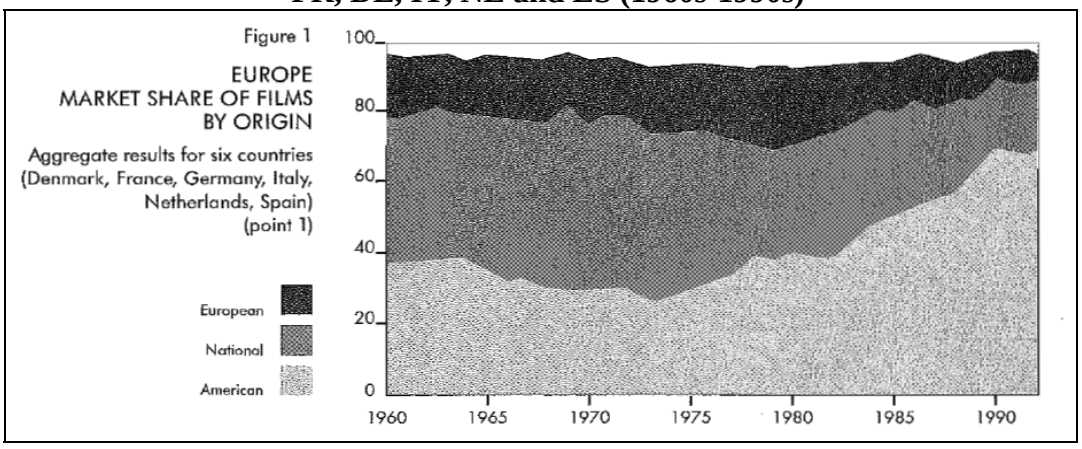
Figure 3–13: Admissions in the EU27 market according to the origin of films (2009)



See footnote for an explanation of the difference between US/EUR, US/EUR inc and EUR inc/US.
Source: (EAO, 2010)

Nevertheless, Figure 3-14 indicates that since the 1990s there has been a stabilisation of American versus European market shares. Moreover, the situation differs from country to country, whereby an increasingly number of European countries witnessed significant and growing national film successes in recent years (e.g. in France, Germany, Poland, Belgium – cf. data in (European Audiovisual Observatory, 2007, 2008, 2009a; EAO 2010)).

Figure 3–14: Market share of European, American and national films in DK, FR, DE, IT, NL and ES (1960s-1990s)



Source: Vasconcelos & et al. (1994, p. 81)

If we turn to the global audience for European films, we are confronted with another, perhaps more problematic weakness. US films combine a large audience in the home market with an often even larger audience abroad, but European films' audience consists for a large part of domestic viewers. This points to a crucial **weakness**: European films do not travel well and find their audience mainly in the domestic theatrical market. Except for Japan and Argentina, the market share of European films in a selection of third countries is never more than 3% (Table 3-8). US films achieve much higher market shares in all of the selected markets, especially those in the Latin-American region. Only India has an atypical industry structure, but the weakness of US films there does not entail a better market position for European films. The US studios are also actively pursuing new partnerships and other industry relationships with third countries such as India.[47] Especially now that a number of the 'world cinema' industries are becoming more visible – in the same audience segment European films are targeting – this could in the future have negative effects on the European sector.

…and elsewhere

Table 3–8: Market share of European and US films in major third countries (2006)

European films do not travel well outside their (national) home market…

Country	European films	US films
Mexico	3%	81%
Argentina	5.5%	82%
Brazil	3%	86%
South Korea	3%	47%
India	2%	10-12%
Japan	5-9%	50%
US	3.3%	94.5%

Source: Commission of the European Communities (2009a, p. 14).

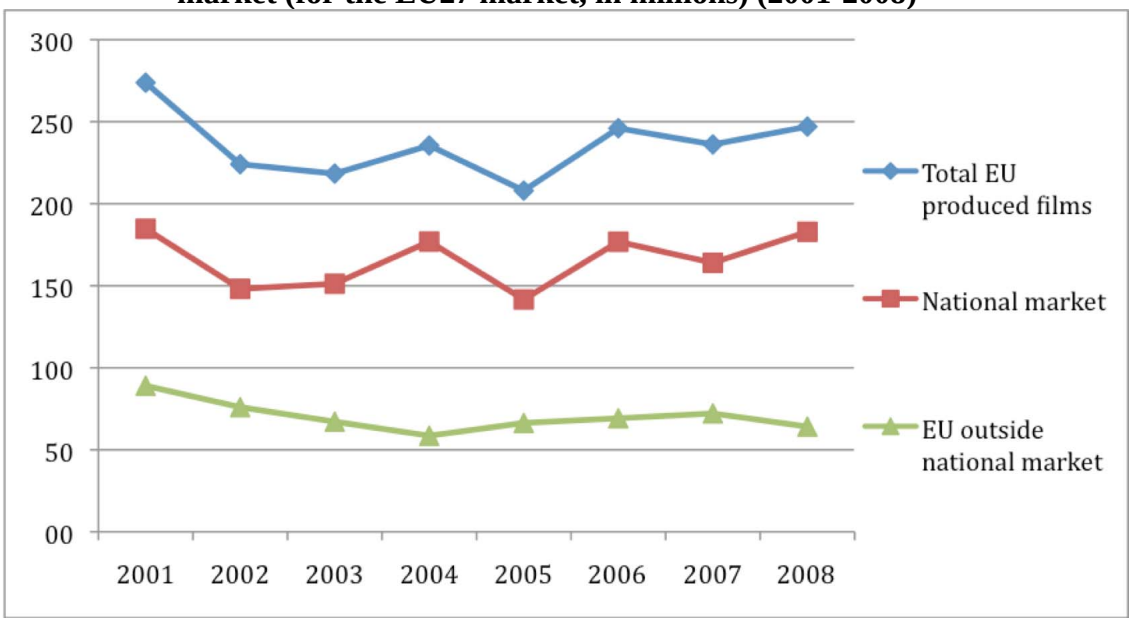
Even more problematic from a European-level perspective is the position of non-national European (NNE) films within the European market. Europe is a very fragmented market, where films do not cross borders easily (Dally, et al., 2002; Downey, 1999). Only a small part of the audience for European films comes from outside the national market (Figure 3-15). A number of exceptions aside, such as the success of the FR/UK/CZ co-production 'La Vie en Rose' or the German 'The Lives of Others' (which achieved international box-office revenues of 60 million US$ outside North America) (Gubbins & Kenny, 2008), the common European movie culture is essentially an American one. In terms of the individual European countries, those countries that share an official language with one of the big production countries are attracting more non-national European films, whereas the market share of NNE films is the lowest in these big countries (KEA & MINES, 2010, pp. 86-87). A 2008 study for the European Audiovisual Observatory (Kanzler, 2008) showed that the circulation and audience reach of European co-productions, while not good, were considerably better than for 'purely' national films,[48] which points towards the need to stimulate such cooperation.

….not even in Europe

[47] Dreamworks for instance has partnered up with Indian group Reliance (Jaafar, 2009).

[48] While the co-productions included in its sample (N=1024) were on average released in 4.6

Figure 3–15: European admissions gathered domestically and outside the home market (for the EU27 market, in millions) (2001-2008)



Source: European Audiovisual Observatory (2008, 2009b), EAO (2010).

countries (out of a possible total of 20), entirely national films (N=4319) were released in only 2 markets (average) (Kanzler, 2008, p. 15). If co-productions do not circulate widely, 'purely national' films hardly circulate at all. The Observatory noted a median of not more than 51,785 admissions for the co-productions included in its analysis. These low admission levels are put into perspective when compared with the data for purely national films. For such films, the median is in fact no more than 19,137, i.e. less than half as successful compared to co-productions (Kanzler, 2008, p. 19).

Table 3–9: Market share of admissions in the EU27 and US market according to nationality (1996-2008)

Country	Year	TOTAL EUR (incl. Inc)	EUR (excl. EUR inc)	DE	ES	FR	GB	IT	EUR inc/US	Other EUR	US (incl. US/EUR + US/EUR inc)	US/EUR inc	US/EUR	US	RoW	TOTAL
EU27	1997	32.0%	29.0%						3.0%		66.3%				1.73%	100.0%
	1998	21.3%	20.5%						0.8%		77.6%				1.05%	100.0%
	1999	29.9%	27.6%						2.2%		68.5%				1.69%	100.0%
	2000	23.0%	19.4%						3.6%		73.7%				3.37%	100.0%
	2001	37.3%	30.6%						6.7%		59.3%				3.41%	100.0%
	2002	34.2%	24.7%	2.50%	2.72%	10.04%	3.80%	2.62%	9.43%	3.05%	64.08%				1.75%	100.0%
	2003	28.3%	25.3%	3.25%	2.74%	8.39%	4.90%	2.64%	3.01%	3.42%	69.38%				2.27%	100.0%
	2004	30.4%	24.6%	4.26%	2.36%	8.61%	4.52%	2.20%	5.78%	2.68%	67.33%	5.27%	8.06%	54.00%	2.27%	100.0%
	2005	37.1%	24.6%	3.22%	2.28%	9.19%	3.87%	2.92%	12.54%	3.12%	60.21%	8.34%	6.01%	45.85%	2.65%	100.0%
	2006	33.4%	27.9%	4.78%	2.81%	10.57%	2.83%	2.98%	5.49%	3.95%	63.43%	7.76%	6.96%	48.70%	3.18%	100.0%
	2007	34.2%	27.8%	3.77%	2.08%	8.35%	6.10%	3.75%	6.32%	4.57%	63.25%	6.12%	5.68%	51.45%	1.83%	99.2%
	2008 prov	34.3%	27.8%	3.46%	1.62%	11.93%	2.29%	3.58%	6.51%	4.90%	63.87%	9.44%	7.38%	47.04%	1.85%	100.0%
US	1996		2.71%	0.02%	n.c.	0.25%	1.67%	0.43%	n.c.	0.34%	95.71%				1.58%	97.29%
	1997		5.84%	0.04%	0.01%	1.15%	4.45%	0.00%	n.c.	0.19%	92.35%				1.81%	94.16%
	1998		3.10%	0.09%	0.03%	0.05%	2.56%	0.16%	n.c.	0.21%	95.89%				1.01%	96.90%
	1999	6.60%	4.43%	0.20%	0.05%	0.37%	2.84%	0.91%	2.17%	0.06%	91.33%				2.07%	100.00%
	2000	4.29%	1.91%	0.20%	0.11%	0.28%	1.19%	0.00%	2.38%	0.13%	93.68%				2.04%	100.01%
	2001	10.34%	5.14%	0.65%	1.19%	0.95%	2.20%	0.10%	5.20%	0.05%	86.90%				2.77%	100.01%
	2002	8.12%	2.39%	0.52%	0.03%	0.70%	0.87%	0.03%	5.73%	0.24%	90.52%				1.37%	100.01%
	2003	4.89%	3.69%	0.15%	0.10%	0.69%	2.62%	0.01%	1.20%	0.12%	93.81%				1.30%	100.00%
	2004	6.69%	2.58%	0.06%	0.20%	0.40%	1.75%	0.02%	4.11%	0.15%	91.34%				1.97%	100.00%
	2005	11.48%	2.95%	0.10%	0.12%	1.79%	0.84%	0.00%	8.53%	0.10%	86.11%				2.40%	99.99%
	2006	6.25%	2.56%	0.16%	0.05%	0.32%	1.96%	0.00%	3.69%	0.07%	90.09%				3.80%	100.14%
	2007	8.79%	4.14%	0.21%	0.46%	0.80%	2.26%	0.00%	4.65%	0.41%	90.20%				1.01%	100.00%
	2008	7.22%	2.82%	0.05%	0.09%	1.02%	1.44%	0.00%	4.40%	0.22%	91.45%				1.32%	99.99%

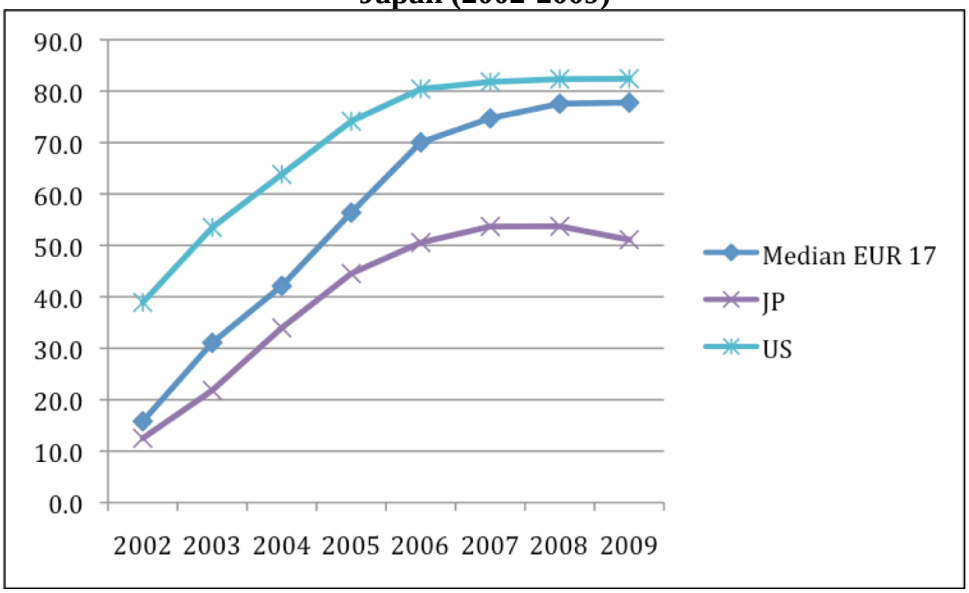
Source: European Audiovisual Observatory (2002, 2004, 2005, 2006, 2007, 2008, 2009).

3.4.3. The home-video market

The home video business comprises two parts: the rental and the sell-through (retail) business. Originating with the rise of the VHS cassette, it is currently dominated by the Digital Versatile Disc (DVD), which is one of the first outcomes of digitisation in the film sector (cf. Chapter 4). Since it is rather meaningless to analyse the current home-video market without taking DVD into consideration, we will do so here, although formally it is already to a very large extent digital.

Figure 3-16 charts the percentage of TV households that possess a DVD player and shows the very rapid uptake of the DVD. In just a few years, the DVD pervaded European households and the VHS market became virtually extinct. Europe[49] is an important market for home video entertainment. In 2008, it represented 35% of worldwide DVD households (Screen Digest, 2008c, p. 337). Consumer spending on (DVD) video content in Europe (22 countries) amounted to €8.9 billion in 2007 (compared to €11.4 billion in the US) (EAO, 2010).

Figure 3–16: DVD penetration (in % of TV households) in EUR17, the US and Japan (2002-2009)



Note: EUR 17 refers to these 17 countries: AT, BE, CZ, DE, DK, ES, FI, FR, UK, GR, HU, IE, IT, NL, PL, PT, SE. (Austria, Belgium, Czech republic, Germany, Denmark, ,Spain, Finland, France, UK, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal and Sweden

Source: European Audiovisual Observatory (2010)

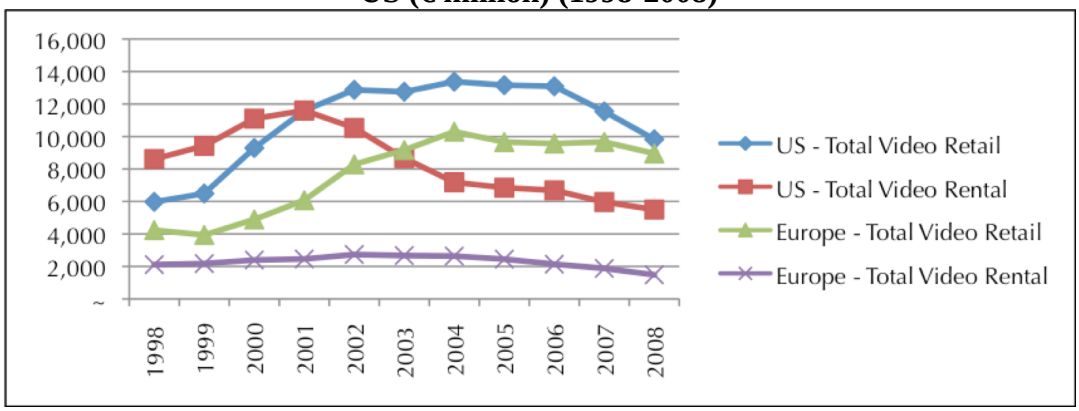
Home video market has been a source of growth for the film industry since the 80s, driven by DVD, but shows recent signs of decline

Worldwide home video spending has become a very important market for film entertainment and it was expanded by the introduction of DVD. In particular the DVD sales (retail) market has driven this expansion. Nevertheless, after a ten-year period of consecutive growth, the first signs of stabilisation and decline of the now mature DVD market became visible in recent years (Figure 3-17 and Figure 3-18). At a fixed 2009 exchange rate, for instance, European consumer spending on the home video market fell by 9.3% in 2009, the fifth consecutive year of decline. The

[49] In Screen Digest's definitions, Europe includes 22 countries: 17 Western European ones (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the UK) 5 Central and Eastern European countries (Croatia, Czech Republic, Hungary, Poland and Russia) (Screen Digest, 2009a, p. 237).

number of DVD rental transactions across Europe in 2009 fell by 11% to a total of 405 million transactions – its fourth successive year of decline. DVD sales as well have dropped in many countries although the results there seem to be more variable. The downward trend is more pronounced in the US, where DVD sale turnover dropped from close to 11 billion to little more than €7 billion between 2006 and 2009 (EAO, 2010). The DVD rental market in the US has also been dropping but in a less pronounced manner - something that could be due to the rise of the 'rental kiosk'[50] and of new (Internet-based) services such as Netflix which we will return to in Section 4 (EAO 2010, European Audiovisual Observatory, 2009a, p. 8; Screen Digest, 2009c).

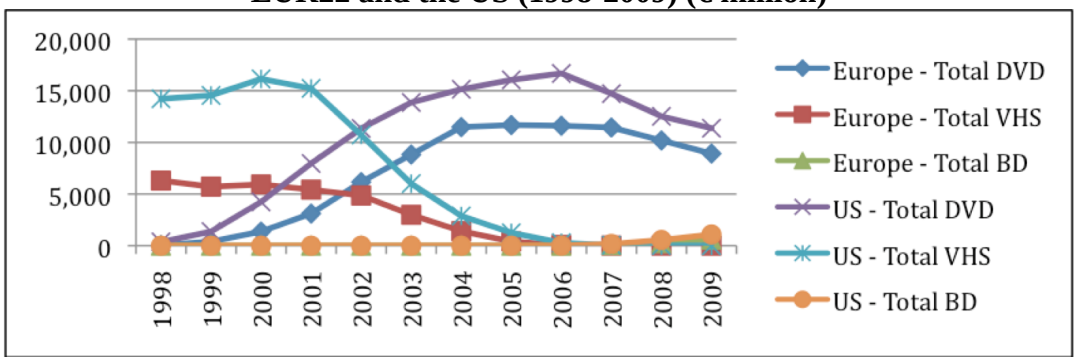
Figure 3–17: Total video market retail and rental turnover in EUR22and the US (€ million) (1998-2008)



Note: Europe including the Screen Digest EUR 22 countries.

Source: European Audiovisual Observatory (2009b).

Figure 3–18: Total turnover from the VHS, DVD and Blu-ray market in EUR22 and the US (1998-2009) (€ million)



Note: Europe including the Screen Digest EUR 22 countries.

Source: European Audiovisual Observatory (2009b; 2010).

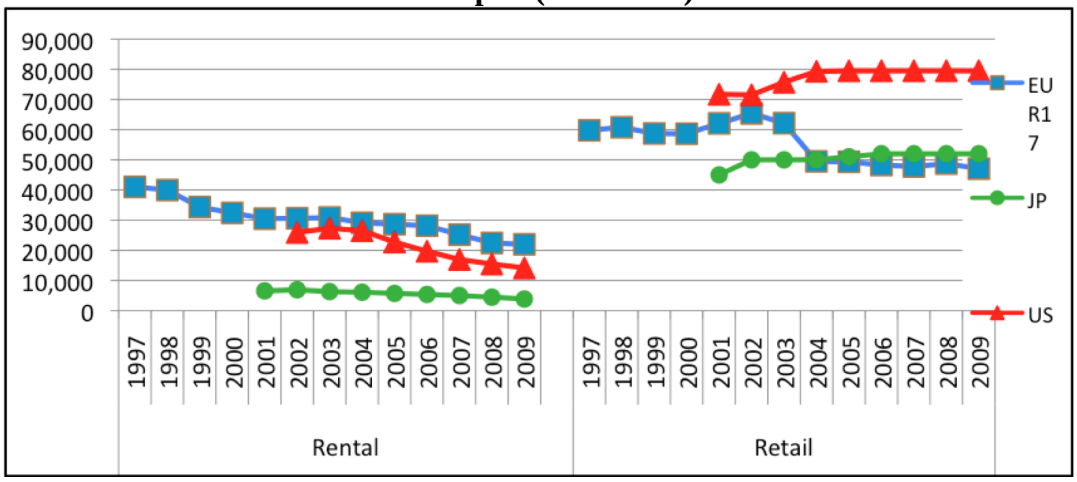
From rental to retail

A second trend is that, following the advent of DVD, the market has evolved from being largely rental-dominated to being driven by retail sales. In 1992, less than 25% of worldwide consumer spending on video was retail, and, growing to 87% by 2007. The number of rental outlets is much lower than that of retailers and, most crucially, is on the decline (Figure 3-19). This trend of buying rather than renting home

[50] A success story led by the company Redbox (www.redbox.com).

entertainment is strong in the US but even more apparent in the European territories (Figure 3-17; Screen Digest, 2008b, 2008c, pp. 334-335).

Figure 3–19: Number of video rental and retail outlets in EU17 (cf. supra), US and Japan (1997-2009)



Make note: EU 17 includes Austria, Belgium, Switzerland, Germainy, Denmark, Spain, Finland, France, UK, Greece, Croatia, Hungary, Ireland, Iceland, Italy, Netherlands, Norway, Poland, Portugal, Russia and Sweden.

Source: European Audiovisual Observatory (2002, 2008, 2009b) EAO (2010).

The home video market in theory provides a great opportunity for European films to reach an audience it cannot attain in the quickly rotating theatrical market. A 2006 Screen Digest article notes that, across the Big 5 territories, respondents on average watch nearly 6 DVDs per month. In general, moreover, the more frequent cinemagoers are also the most avid DVD viewers (Screen Digest, 2006a).

Home video market dominated by US films

Most importantly, given the larger 'shelf space' of a video store versus a cinema theatre, one could hypothesize that the supply of titles in video outlets as well as the consumption habits of the viewer would reflect this and show greater diversity.[51] It is difficult to find data about the success of European film on the home video market, but the indications we can gather are not very promising. Studying the European market, it can for instance be noted how independent films (US and European) in general rely more on revenue from theatrical exploitation than the US blockbusters, for which TV and home video revenues form a crucial add-on revenue stream (Screen Digest, 2006c, p. 263). Given that US blockbuster films dominate the theatrical revenues as well, this observation suggests a relatively weak position of independents in the home entertainment market. Indeed, Dally et al. note that the American majors account for 75 to 80% of the European home video market (Dally, et al., 2002, pp. 39, 432). The other way around, a 2007 Screen Digest analysis of US retail DVD releases shows that, in the first nine months of 2007, a total of 8478 DVD titles were released in the US. Amongst these were not more than 910 *foreign language* feature films (Screen Digest, 2007). Specifically for France, the 'video barometer' of the CNC offers a yearly overview of the market share, in terms of geographic origin, of the home video turnover (sales). Here as well, we see that the market share for French films stood at 21.5% (as compared to 36.8% of theatrical

[51] It is also sometimes believed that art house and other niche films generally have a more important shelf life in the long run (Downey, 1999).

admissions compared to a 63.2% for American films (which hold 49.7% of theatrical admissions) (CNC, 2009; European Audiovisual Observatory, 2010, p. 22). Hence, instead of providing for a more diverse consumption pattern, the home-video market appears to re-enforce the dominance of the US majors.

3.4.4. The television market

If the home video market is the one with the highest revenue levels, television is an important market for films as well. In 2008, the average number of minutes watched daily by a television viewer in the broad Europe (30 countries, including Turkey and Russia) ranged between 141 minutes (German-speaking Switzerland) and 260 (Hungary), with an average of 200 minutes (more than 3 hours) across the 30 countries (European Audiovisual Observatory, 2009b).

TV is also an important outlet for feature films…

There are different sub-outlets in the television market for movies: 1) pay-per-view (PPV), 2) premium and pay TV and 3) free television, each with a distinct time window typically following after the home video market. Pay-per-view services allow consumers to order films on demand via cable or satellite. Nowadays such services are increasingly offered digitally, which is why we will discuss them in the next chapter.

Pay television services offer movies as part of a subscription offer to a cable or satellite service. In the US, HBO and Showtime are well-known premium channels, while Prime (BE), BSkyB (UK) and Canal Plus (FR) are European examples. After the pay television window closes, films move to 'free' cable and other television networks. In the US, a specific syndicated television window occurs even later on (Currah, 2007).

In every case, the rights holder grants a TV license for the different television windows in return for a fixed price, a variable one (e.g. per purchase or subscriber) or a combination of both (Dally, et al., 2002). A producer or studio can also engage in made-for-television movies – which is however not our prime concern in this report. From a producer/distributor perspective the television markets are particularly appealing since the television station is responsible for the costs of marketing and distribution, while the distributor covers these costs for the theatrical and home video release (Currah, 2007, p. 79).

Fiction forms an important programme category of European television channels and feature films are no exception to that – in 2009, more than 200,000 programme hours were filled with it (considering 137 channels in 15 countries – EAO, 2010). Just like in the other exhibition markets we discussed, however, American films dominate screen time in the European television market. This is another weakness we identify for European players across the value network. In 2009, they made up around 59% of all the time dedicated to feature film on these channels (in terms of programme hours) (Table 3–Table 3-9). That said, the share of European films is not negligible: the share of European films in the total of broadcasted hours of feature films amounted to more than 39%. Within this share, national films and especially co-productions accounted for the largest part (EAO, 2010), which further emphasises the value of supporting pan-European production cooperation.

…where US films have dominate, just as for the other markets.

However, as a 2000 study by the European Audiovisual Observatory indicated that non-national European films are rarely given prime-time viewing slots (European Audiovisual Observatory, 2000), it seems questionable that this situation translates in a diverse consumption of films on European television screens.

Table 3–10: Origin of feature films broadcast by TV channels in 15 European countries (2009)

Origin			Europe (15)	Percentage
European origin	DE	Number	587	
		Hours	980	0,5%
	ES	Number	367	
		Hours	621	0,3%
	FR	Number	2623	
		Hours	4480	2,3%
	GB	Number	2915	
		Hours	5147	2,7%
	IT	Number	895	
		Hours	1645	0,8%
	National	Number	10619	
		Hours	18019	9,3%
	Other EUR	Number	2802	
		Hours	4650	2,4%
Co-productions	European	Number	6752	
		Hours	11987	6,2%
	Mixed	Number	14981	
		Hours	28826	14,9%
	Non-European	Number	4261	
		Hours	7763	4,0%
Non European Origin	US	Number	61378	
		Hours	113960	58,8%
	CA	Number	882	
		Hours	1472	0,8%
	AU+NZ	Number	511	
		Hours	896	0,5%
	JP	Number	482	
		Hours	795	0,4%
	Other (+ Not dentified)	Number	1881	
		Hours	3525	1,8%
Total (in hours)		Total EUR (including national)	76353	39,4%
		Not EUR	117402	60,6%
		Total	193755	100,0%

Source: European Audiovisual Observatory (2010) based on a sample of (public, private, pay TV and thematic) channels from 15 countries (AT, BE, CH, DE, DK, ES, FI, FR, GB, IE, IT, LU, NL, NO, SE).

3.5. Summary and conclusions

This chapter has analysed the feature film industry value network, which consists of four major 'streams' of value adding activities: (1) a production (or negative) stream; (2) a distribution and marketing stream (or P&A), (3) an exhibition stream

and (4) an auxiliary stream, the latter not being the focus of this report. Clearly, as already identified in the previous chapter, the strong position of the Hollywood majors affects the whole value network.

The production process or 'negative' stream – i.e. everything that happens before the resulting film 'negative' is made – encompasses a variety of activities that can be categorised as being part of pre-production, actual production or post-production. Already in the pre-production stage the European film sector begins this movie game with two weaknesses. The first one concerns the development process, on which fewer resources are spent in Europe. In spite of that a much larger ratio of film concepts make it to production in Europe than in the US. This suggests that the films that make it to production are much less mature than the US ones, and this puts Europe at an early disadvantage. The second issue concerns financing, which is problematic in Europe because of: (1) the absence of private investors, (2) its project-by project character, and (3) the scattering of rights. This affects the rest of the value network in what appears to be a vicious circle.

At the same time, many talented players (not the least directors) continue to make a large number of European films each year. While this continued vitality at the creative level could be considered a strength, it ought to be combined with a strong connection to distribution and marketing in order to optimize the audience reach for these films. This is where a disconnection between the film community and market realities becomes apparent: it is questionable from the start whether this enormous number of produced films will be able to achieve successful theatrical careers.

In general, as compared to the US, Europe has a volatile production sector, lacking critical mass, long-term perspectives, distribution and marketing skills. It is characterized by mainly small production companies, which are investing much less (per film and in total) in film production than their counterparts and which are generally dependent on public support. Still, Europe investments in European films are growing, which somewhat counterbalances the still-present under-financing weakness. There seems to be a problem with the efficient canalisation of funds into individual film budgets, moreover: rising total investments appear to be used to invest in making ever *more* movies instead of following a more selective approach.

The production process runs from the very first stages of moviemaking up until the creation of the answer print. Once this is done, a movie is put into the market. This means it is physically delivered to the various exploitation channels (distribution) but also that it is marketed. The distribution landscape in Europe, is dominated by the major distributors (distribution arms of the Hollywood studios) but includes also a number of smaller independent European ones, which are generally territorially fragmented. Although the large majority of European films finds its way to distribution (at least in one market), they suffer from not being backed by the marketing machine of the majors, and hence fare a much worse chance of succeeding commercially. This is another major weakness of the European film industry, which is to a lesser extent compensated by a strong film festival tradition.

The principle behind the exhibition cycle has been based on a system of time holdbacks – the release windows following the order of the most marginal revenue generated to the movie owner in the least amount of time. Traditionally, this has meant that theatrical exhibition (domestic followed by the international release)

comes first, followed by video/DVD rental; video/DVD sales; Pay-per-view; Pay TV and, at the very end, free television.

In the theatrical market, Europe is characterized by a large and diverse exhibitor sector in Europe, although not as developed as in the US. There is a trend towards consolidation and large multiplex cinemas, putting the small (e.g. art house) theatres in a difficult position and favouring US blockbuster content. Clearly US movies dominate the European cinema market with a 60-70% market share, followed by national films. The market share for European films outside Europe is marginal, typically around 3-7% depending on region. Perhaps even more problematic from a European-level perspective is the weak position of non-national European films in the fragmented European market, where (non-US) films do not cross borders easily. Less than 30% of the audience for European films comes from outside the national market, with large differences between countries.

The second major release window – the home-video market - has been a source of growth for the film sector since the 1980s. First VHS and then DVD have expanded the film market substantially and made home video the largest of the windows in terms of revenues. Recently however, the market shows clear signs of decline, in particular in the US. This may be the result of substitution for online (partly illegal) consumption, which will be further discussed in the next chapter.

While data on these markets is not widely available, the limited data we could gather does not point towards a stronger position of European films in this market, compared to the theatrical one. In fact, market shares of US (major's) films appear to be higher than for theatrical market.

Finally, TV is an important market for films as well. There are different sub-outlets in the television market for movies: 1) pay-per-view (PPV), 2) premium and pay TV and 3) free television, each with a distinct time window typically following after the home video market. Just like in the other exhibition markets we discussed, however, American films dominate (prime) time in the European television market.

With traditional movie markets clearly suffering from a 'missing link' between the mass of European films produced and the (cross-border) audience, the main question we take with us to the next chapter is whether this remains an issue in a digital context.

Even if one the weaknesses of the SWOT approach is that it is not always obvious whether to classify a factor as a strength or weakness, Table 3-11 offers a nuanced overview of the summary of the debates in this chapter by outlining the strengths and weaknesses across the value network.

Table 3–11: Strengths and weaknesses of the European film sector in different stages in the value network

Part of Value network	Strength	Weakness
Whole Value network	Large number of companies and employees, including a large independent community	Lack of integrated majors (who dominate the industry)
Production	Large diversified production output Strong creative (in particular cinema tradition	Lack of attention for and selection during development Lack of private financing coupled Dependency on public funding Low investment levels Volatile production landscape – lack of long-term orientation
Distribution / marketing	Large share European films finds its way into (theatrical) distribution Film markets and festivals	European distribution is concentrated with US majors and their affiliates (Territory-based) fragmentation Insufficient marketing
Exhibition / consumption	Large and relatively mature market for films Varied theatrical exhibitor landscape	European films are not exported (Smaller-scale exhibitors are under pressure in a concentrating multiplex-oriented market High market shares for US films in all markets (theatrical, home-video, TV) European films do not travel within Europe

We will return to these strengths and weaknesses in Chapter 5 by confronting them with the digital opportunities and challenges and policy responses.

4. TRANSITION TO DIGITAL AND ONLINE

This chapter analyses the impact digitisation has on the European film value network. It builds upon the historical, conceptual and business insights from the earlier parts in order to distinguish digital opportunities and threats that may affect the future nature of the pan-European film landscape. Section 4.1 overviews how different steps in the value chain have become digitised over time. The remaining parts of the chapter mirror the ones of Chapter 3. Hence it analyses how digitalisation affects the production process (Section 4.2), distribution (4.3) and exhibition/consumption (4.4). Analogously to how strengths and weaknesses are identified in Chapter 3, this chapter identifies opportunities and challenges throughout. These opportunities and challenges are summarized in Section 4.5.

4.1. Overview of digitisation in the film industry

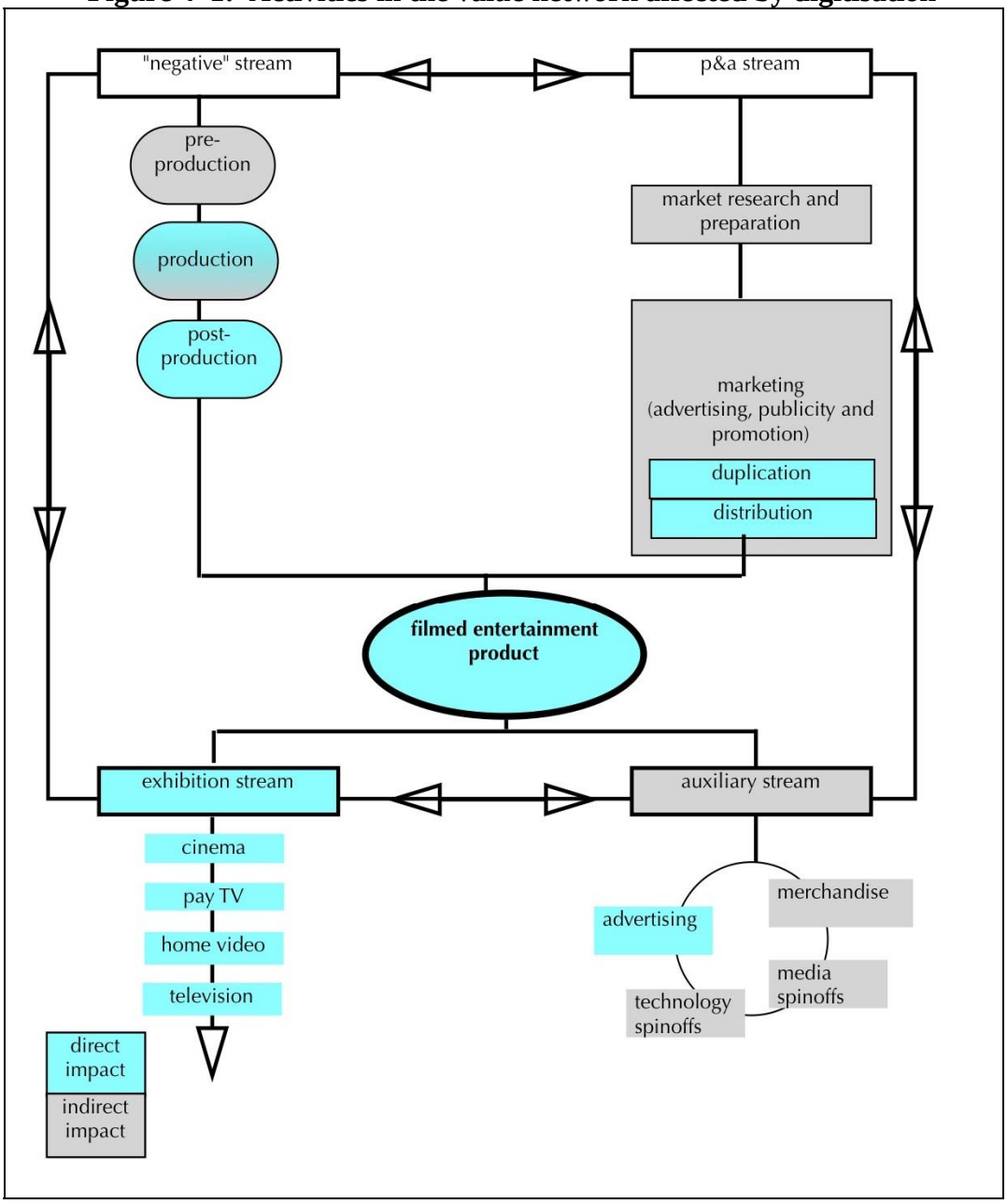
Digitisation affects most of the film industry value chain

Digitisation affects all elements of the film value *network*. It impacts the film sector at its core and further complicates the network structure of the film sector. Figure 4-1 illustrates in what areas digitisation has a direct and/or indirect impact. Digital technological developments are introduced in areas of production and post-production, but also directly affect the duplication, distribution and commercialisation of film copies. Next to the concrete use of digital technologies in various film activities, the evolution towards a digital and online environment has more indirect impacts on the film value network. Marketing and financing for instance are not directly making use of digital technology, but are nevertheless affected due to changing working relationships and revenue generation in a digital environment. The end result is that practically all areas of the film landscape are affected.

Perhaps needless to say, digital technology in itself is not an independent influencing factor in this equation. Rather, the digitisation of the film landscape is the story of interaction between various elements including technological innovations, socio-cultural sector characteristics, economic-industrial business considerations and the political-regulatory framework. Moreover, the digital transformation itself consists of several parallel evolutions. It is only when the digital cinema workflow will have gone fully digital (including the digital distribution and projection) that the effects on the European film landscape will truly materialise (Finney, 2010).

In this sense, it is also important to note from the outset that not all of the digital evolutions have similar disruptive effects on the value network. The development of online and on-demand delivery of films has been especially and extensively transformative. Whereas DVD for instance digitises existing value relationships, the advent of dematerialised film delivery and consumption puts these relationships into turmoil while building new ones. Given the important analogue weaknesses of the European film sector in these areas of distribution and consumption, the disruptive impact of the digital evolutions in precisely these areas makes it particularly important to understand the direction of these transformations.

Figure 4–1: Activities in the value network affected by digitisation



Source: Adapted from Vickery and Hawkins (2008).

4.1.1. Early developments in the 1980s and 1990s

Internet is the latest in series of digital technologies to the film sector since the early 1980s

The first digital steps were taken in the 1980s and 1990s. At the beginning of the digital evolutions in the film sector, the technological innovations being introduced did not yet have a disruptive character.

Firstly, digitisation affected **production**, beginning with **sound**. During the 1980s, when the compact disc (introduced in 1983 and suitable for digital audio playback) started to take off, the idea of using digital sound in the film industries came to the foreground. By the mid-1980s, studio and location sound were recorded digitally in most of the developed world (Enticknap, 2005). The Digital Audio Tape (DAT) format, for instance, launched by Sony in 1987, was used frequently in the early to

mid-1990s for film and TV production, while post-production sound mixing and editing activities remained mostly analogue until the latter half of the 1990s.

It was when the convergence between computer technology and other, analogue (audio) technologies gained full speed, that digitisation began to fully affect the complete production process. The rising processing power, the increasing hard disc capacities and the emergence of the recordable compact disc were important factors in this regard. Stand-alone hard-disc based audio recorders would become extensively used for recording and post-production purposes, especially post-2000 (Enticknap, 2005).

Steps were also taken in terms of digital imaging, introduced in the area of special effects through computer-generated imagery (CGI). Starting in the 1980s, innovators had begun to experiment with digital visual effects and computer animation, initially being more labour-intensive and more expensive than traditional analogue methods. The digital visual effects industry would nevertheless grow rapidly over the 1980s and 1990s. 'Jurassic Park' (1993) proved a turning point for the take-off of computerised effects, whereas Pixar's 'Toy Story' (1995) was a digital animation milestone (Cook & Wang, 2005; Enticknap, 2005; Kirsner, 2008; Scott, 2005).

Another aspect of movie (post-) production that started to take the digital route before the year 2000 was editing. Digital editing has its origins in the 1980s, but it took until the late 1990s before the Avid company's editing technology reached the milestone of being used by about half of the Hollywood feature film output. The usage numbers climbed up to near saturation while other systems, such as Final Cut Pro, came to the fore (Kirsner, 2008).

A final element of digital production is that of cinematography using digital cameras. Yet not all professionals were willing to trade in the storytelling possibilities of celluloid,[52] which delayed its widespread adoption. Nevertheless, as technological possibilities increased, a range of high-end digital cameras were developed (e.g. by Sony) and put to use in large budget productions such as the Star Wars prequels (released from 1999 on). At the other end of the scale stood consumer market devices such as the Mini-DV format (1995) which were put to use by beginning filmmakers. Gradually and especially in recent years, the bridge between both ends has been covered by high-resolution, low-price cameras such as the "RED" camera[53] (Finney, 2010).

Secondly, next to the important digital steps taken in the production area, the first area in which digital in these early stages was also affecting the consumer experience in the movie theatre was that of sound. Digital sound systems were first introduced in cinema theatres in the early 1990s (1991-1993).[54] Making extremely powerful and detailed soundtracks possible, with very little distortion at high volume, they allowed for an 'immersive' theatre experience. The introduction of

[52] A digitally captured image had a "flat" look, whereas focus and other variables offered by film were part of the creative tools filmmakers loved to use (Finney, 2010).

[53] Finney offers a case study of how RED Digital Cinema Company worked on the development of a digital camera that approximates the look and feel of 35 mm (Finney, 2010).

[54] Three similar systems incorporating digital sound for cinema playback were introduced. The three systems were Dolby Digital, the Digital Theater Systems (DTS) method (commercialised by Universal) and Sony's "Dynamic Digital Sound" system. Especially the first gained an important market share, with DTS as its main competitor (Bomsel & Le Blanc, 2002; Enticknap, 2005).

surround sound, e.g. through the Dolby-THX[55] collaboration 'Dolby Digital Surround-EX' (1998) further enhanced the theatrical sound experience (Bomsel & Le Blanc, 2002; Maltby, 2033).

In terms of the consumer experience, home video was the next major area, after sound, to go digital. Different forms of disc-based video systems had been developed from the 1960s on (e.g. the Laserdisc) but the first real competition for the established VHS system came after the compact disc (CD) had invaded the music industry. First digital home video disc systems included the Philips CD-i format[56] (commercialised in 1991 and discontinued in 1996), but only when the Digital Versatile Disc or Digital Video Disc (DVD) was marketed in the mid-1990s did the home video business witness a crucial digital transformation (McDonald, 2007).

The technological standard that enabled digital video to transcend from (semi-) professional use into the mass consumer market was MPEG-2, which is used for the DVD.[57] With the success of the VHS in mind, Hollywood majors were eager to transform this market in a digital way. After some initial worries about another 'format' war, the industry came together around the DVD standard in 1995. The first pre-recorded Hollywood films on DVD were sold in Japan and the US at the end of 1996 and the beginning of 1997, respectively. Despite this, anxieties in terms of piracy impacted the content that was released on DVD. Some studios were not releasing at all, whereas others only put out old catalogue titles that could not affect the theatrical release of a recent movie. This is not surprising. While the DVD in itself is not disruptive to the value relationships of the home video market, the rise of the illegal film market after the introduction of the DVD would turn out to have sown the seeds of a more fundamental 'piracy revolution' in later years.

As already analysed in Section 3.4.3, all in all, however, market transition happened quickly, with the DVD effectively superseding the VHS system. By the end of 2004, Western Europe had a DVD player penetration of more than 50%. The DVD launch led the way for further revenue increases for the (Hollywood) movie industry, in particular thanks to the retail market. Moreover, the low costs (US $5 per disc for manufacturing, sales and marketing) resulted in high associated profit margins for the major distributors and retailers (Belton, 2005; Enticknap, 2005; Gillespie, 2007; Klinger, 2006; Maltby, 2003; McDonald, 2007; Ulin, 2010).

4.1.2. Post-2000s – delivery going digital

In the second phase of digitisation, roughly starting at the beginning of the new millennium, a number of technological innovations surfaced that have a more profound impact on the delivery of films to the audience. Most importantly, the digitisation of the traditional film value chain now more fundamentally started to

[55] George Lucas' label of digital sound quality.

[56] See (McDonald, 2007) for a history of its development.

[57] The Motion Picture Experts' Coding Group (MPEG) is a committee of computer scientists, set up under the umbrella of the International Standards Organisation (ISO) in 1988 in order to establish encoding and decoding standards for digital video. These standards were to be applied in various applications on the consumer and industrial level - from videogame displays to cinema projection screens (Enticknap, 2005, p. 211). It produced five standards (MPEG-1, -2, -3, -4 and -7), with MPEG-2 (1994) becoming the standard for both digital terrestrial television and, most importantly for the movie industry, the Digital Versatile Disc (DVD) (Enticknap, 2005).

affect age-old distribution business practices and ways of working. Gradually, *disruptive* effects (in terms of changing cost structures and value relationships) of working with 'digital film formats' came to the fore, even touching upon the 35 mm public projection of films. Moreover, digitisation transforms existing 'secondary' film outlets such as television while non-physical film consumption crosses new frontiers following the rise of the Internet.

Firstly, digital cinema introduced the projection of films without using the well-known reels (35 mm prints) but through the use of digital files and high-resolution digital projectors. While the first demonstration of a digital projector occurred in 1992, digital cinema came increasingly to the foreground from 1999 on, the year Star Wars Episode 1 was digitally released in four US cinemas (Acland, 2008; Bomsel & Le Blanc, 2002; Department for Culture, 2002). The transition to digital cinema started to gain speed in the second half of the 2000s, especially after the release of the DCI standards in 2005. Initially, the transition happened slower in Europe than in the US, but the recent "boom" in 3D movies has spurred the uptake of digital cinema across the world (See further Section 4.4.3).

Secondly, whereas digitisation was introduced in the television sector through post-production technologies, the notion of 'digital television' took off during the 1990s when the signal itself began to be distributed in a digital way. The advantages of digital television are the larger number of channels that can be distributed in better (sound and image) quality at lesser costs. It thus builds upon a trend of channel growth that has gradually expanded the initial scope of terrestrial-based television broadcasts. Digital television includes standard definition (SD) and high-definition (HD) resolution quality (Chantepie & Le Diberder, 2005; Vickery & Hawkins, 2008).

The switchover to digital television started in recent years, with the US switching off analogue television signals in 2009 and the EU putting forward a 2012 target date (Ulin, 2010). A number of different access technologies can be distinguished (digital cable, terrestrial, satellite and IPTV). The precise offer and adoption levels for each technology vary throughout Europe.

Thirdly, as high-definition television (HDTV) resurfaced (following analogue introduction failures) in a digital context in the 1990s, the need for a next-generation video storage medium became apparent as well. As such, the Blu-ray has come to the fore as a new standard, although its commercial impact is still unclear. Given the success of the DVD, it was only logical that the studios hoped to redirect this now maturing market towards its high-definition variant. This would offer a continuation of its established business models, including its partnerships and cost structure. However, format wars between Sony's Blu-ray disc and Toshiba's HD-DVD, both of which were developed from 2002 on, led to consumer confusion and, ultimately, a slow-down of market adoption. By 2005, the six majors were equally split between support for Blu-ray (Fox, Disney, Sony) and HD-DVD (Warner, Paramount, Universal). A key moment occurred when Sony launched the PlayStation 3 in November 2006, which could play both DVDs and Blu-ray discs (which were also readable from Sony VAIO computer disc drives). In turn, Microsoft backed HD-DVD, which was integrated in the Xbox 360. As such, the attitude of main players from the gaming sector has obviously become an important factor in the future evolution of the film industry. Early 2008, the scales suddenly turned when Warner came out in favour of Blu-ray while Wal-Mart decided no longer to stock HD-DVD.

Sony then quickly emerged as the winner, but in the meantime the damage was done in terms of audience confusion (cf. Currah, 2007; McDonald, 2007; Spark, 2009; Screen Daily, 2008a; Ulin, 2010).

Finally, the Internet's ability to transport converted multimedia files across the world with ease and at increasing speed, has been crucial in its development as a new movie "commercialisation channel" centred on Internet-based distribution. In first instance the Internet formed an outlet for movies through online 'rentailers' and retailers offering DVDs (and Blu-ray discs), such as Amazon (launched in 1994) and Netflix (1997). Termed "hybrid retailer" by Anderson (2006), they combined the economics of physical mail order and the Internet for the delivery of films on a rental or sale basis. Around the year 2000, the first steps were taken in terms of purely digital (non-physical) distribution of movies via the Internet.[58] Yet the development of multiple legal alternatives for viewing video-based content on the web only really took off almost a decade later, when technological possibilities coincided with other factors including legal and economic ones. Just as for digital television services, the take up of broadband has formed an important technological factor in this regard and steers the take-up of online movie distribution. In 2010, more than 60% of EU27 households had Internet broadband access at home, up from 30% in 2006.[59] Rather than building upon existing technologies, which is what the DVD did for home video; the Internet-related aspects of digitising the film value network have an important disruptive character. At the same time, as we will show further below, the Internet also affects other parts of the value network.

Digitisation improves quality and flexibility, lowers cost; but raises issues of control

Now that we have given a short historical overview of the introduction of digital technology across the film value network, it is necessary to take a closer look at the economic impact of 'going digital' across the European film value network. We will see that the three recurring benefits of digitisation are 1) increased cost-efficiency, 2) flexibility and 3) enhanced quality. Conversely, the objections and problems that are raised with regard to the introduction of digital technologies and business models largely have to do with a (perceived) loss of control, which can be identified in various forms. In the following chapter, we will assess the opportunities, threats and the changing power structures as they affect filmmaking in general and the European sector in particular. We have specific attention for the current take-up of digital technologies by European players as we are interested by the interplay of digital opportunities and threats with the more traditional strengths and weaknesses of the sector.

4.2. Digital impact on production

This section analyses the digital impact on production from three angles. Firstly, we look at how digital technologies affect the production and post-production process and working relationships (4.2.1). Secondly, we take a closer look at the impact this has on cost structure and production financing (4.2.2). Thirdly, we focus on the digitisation of the content itself, i.e. the films and film catalogues (4.2.3).

[58] The US-based Sight Sound Technologies was the first to sell a digital copy of a movie via the Internet (1999) and the first to produce a film specifically targeted at Internet distribution ("Quantum Project", in 2000) (Currah, 2007).

[59] See e.g. the Digital Agenda Scoreboard.

4.2.1. The digital production workflow

Digitising production is important for the film value network, given the necessary availability of digital content to be shown through digital channels - and vice versa. At the production stage, digitisation offers benefits[60] in terms of cost efficiency, flexibility and quality that may help European producers to become increasingly transnationally organized and, at the same time, more attuned with the market and the audience. This could ultimately foster its competitiveness from a pan-European perspective. Entry barriers are lowering in this area of the film sector and alternative financing mechanisms may emerge that could be useful in the low- to middle tier budget tiers. Networking trends meanwhile may offer incentives to explore pan-European approaches further or to strengthen international ties beyond European borders.

Digital tools, mostly on the Internet, can be used to foster the creation of networks between film professionals. In this way, digitisation has a direct and long-term impact. It facilitates bringing a number of people together, whether it is with the goal of making a movie or bringing it to the audience – or a combination of both. More generally, all areas of production may benefit from flexible working processes and information exchange making them less linear and may enlarge the production 'network'. For instance, while all aspects of post-production used to be carried out sequentially, digital technologies enable a non-linear process, which is faster and easier to manage (Department for Culture, 2002; Eliashberg, et al., 2006; Ulin, 2010).

Increased flexibility, and cost-savings and networking provide opportunities for a more networked international production, and for supply of specialised tasks

This (post-) production flexibility makes it easier for geographically dispersed locations to build ties to work together. For European film professionals, collaborations with each other and non-European players become more manageable. As such, the flexibility and cost-savings of production tasks and the labour network around it form an opportunity for European filmmakers. They make further international consolidation possible, with separate production tasks being performed in different locations (Eliashberg, et al., 2006). The digitisation of film production facilitates the set-up and management of more complex production structures, scattered across locations and companies. In concrete terms co-productions could become easier to manage. European players could also take on a more important role as supplier for major studios' productions (in terms of locations, studios, post-production facilities and so on). Indicative is the fact that the Hollywood majors have become more and more interested lately in forming partnerships across the globe, something that also enables the Europeans to complement their own production activities.

Digitisation strengthens ties with the audience

Moreover, the digitisation of film production activities and the involvement of specialised companies in other (digital or 'digitised') industries have fostered the creation of new links between the motion picture industries and related entertainment sectors. One of these is the games industry, which has established important links with the movie industry.

[60] Even if some have raised disadvantages (e.g. the need of more frequent upgrading of digital recording and editing equipment), the general view towards digitalising production has been a positive one (Eliashberg, et al., 2006).

In addition, as digitisation is associated with the creation of digital communities around a certain topic, the potential of strengthening the direct relationships with the audience (something that comes back when we discuss Internet marketing) could be considered an opportunity for the film sector. Whereas 'crowdsourcing' points towards the mobilisation of a large crowd of website visitors for information or other types of input, 'crowdfunding' is a specific term for the multipoint-to-multipoint collection of financing. This brings us to the next section.

4.2.2. Market barriers, film financing and cost structure in a digital context

Production market barriers are lowered following increased cost-efficiencies

As we just noted, a film's potential audience can be included in the production process from the financing stages on. Indeed, a number of such 'crowdfunding' initiatives have seen the light in recent years in various cultural industries, including the film sector. Examples are wreckamovie.com for collaborative filmmaking, while crowdfunding initiatives include websites such as Indiegogo (US) or Cinecrowd (NL) (Braet & Spek, 2010; Cox, 2011; KEA & MINES, 2010). The potential effect of such models remains uncertain for the time being but could provide opportunities for smaller film industry entities.

More generally, cost efficiencies are lowering production-related market barriers, with new players entering the field as a result. One advantage of filming digital is that it is cheaper than 35 mm filming, whereas previewing, deleting and reshooting digitally makes the process more cost-efficient and flexible (Fischer, 2004). The range of digital cameras available goes from consumer-end cameras up to professional high-end devices with the RED cameras (cf. supra) in between. Consumer-end editing programmes have evolved strongly and offer increased possibilities for filmmakers on a budget to do their film editing at home. As digital equipment becomes cheaper and more advanced, barriers to market entry are lowered to the extent that amateur or User-Generated Content (UGC) producers come to the foreground. Mash-ups form a particular form of 'production' as they combine own with third-party content in a way that blurs the boundaries between professional and non-professional content - with all the copyright issues it may ensue (Department for Culture, 2002; Doyle, 2002; Eliashberg, et al., 2006; Finney, 2010; Ulin, 2010).[61]

Blockbuster costs continue to rise with new digital opportunities.

Nevertheless, it is difficult to get a clear view on the decrease or increase of digital production costs. While production and post-production efficiencies decrease costs, other budget elements may increase, for instance when extensive digital special effects are called upon (Vickery & Hawkins, 2008). The crucial consequence of digitising production therefore relates to the better match between budget, cost structure, movie quality and intended audience. As the fixed costs (for film stock or 35 mm camera rentals) previously associated with film production are lowered, those films at the lower end of the budget scale find it easier to attain certain production standards. Yet the most dazzling blockbusters can be expected to continue their upward production budget trend.[62]

[61] A recent initiative is Amazon Studios, launched by online retailer Amazon in a first-look deal with Warner Bros., which will work on the basis of user-generated development and production in order to create feature films fit for theatrical release (Fernandez, 2010).

[62] The production costs for Avatar (2009), for example, James Cameron's highly successful 3D endeavour, are said to have been around $280 million (Keegan, 2009).

Moreover, these trends could just as well form a threat instead of an opportunity**.** As more competitors enter the already over-saturated markets, lower-cost suppliers (and by extension, lower cost countries) might reduce the attractiveness of European firms as production partners. In this regard, the Asian and Latin-American film communities offer competition on Europe's own turf. The impact of professionalising film communities across the world could have a more profound influence on Europe's competitiveness in a globalised context.

Increased competition from low-cost countries

Linked to this, the financing modalities of film production are reconfiguring as the characteristics of film commercialisation are changing themselves. In the short term, digital reconfigurations of the value network put question marks next to the financing prospects of the sector, for instance in terms of the financing relationships with European broadcasters. This issue will be further dealt with in subsequent sections.

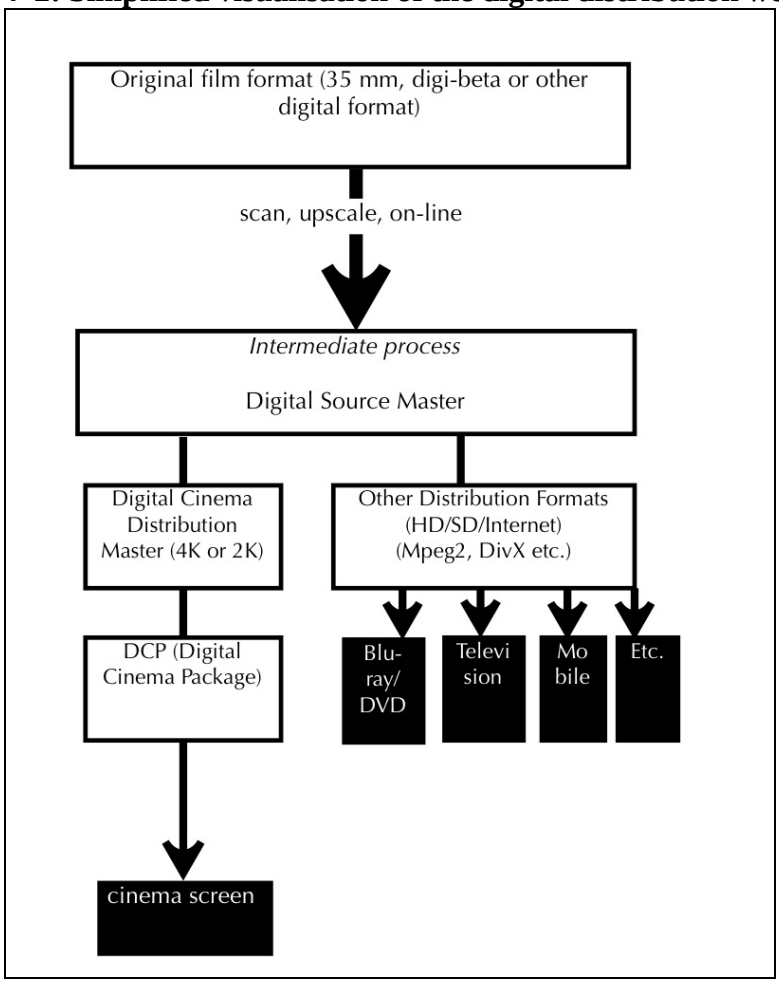
4.2.3. Digital masters and digital catalogues: making content available

Digitisation also implies the digitisation of the product itself, i.e. the films. For current films, in order to fully exploit the advantages of digitalisation, it is necessary to make the link between the digital (post-) production process and the subsequent (distribution) stages, which is realised through the creation of a Digital Source Master (DSM) at the end of the Digital Intermediate (DI) process (cf. Figure 4-2). This DSM is a sort of “one step” digital source that can be used to derive distribution masters (such as the Digital Cinema Distribution Master (DCDM) for Digital Cinema) for all outlets (cinema, DVD, Internet) (Department for Culture, 2002; Overbergh, 2009).

If the digitisation of certain post-production activities in general happened relatively smoothly, the uptake of digital technologies throughout the production process has occurred less quickly in Europe than in the US. The creation of digital masters was for a long time not a habit for film producers. This lack of a long-term digital vision in terms of making content available has formed a clear challenge for the whole film value network, as the availability of digital content and the digitisation of theatrical exhibition mutually reinforce each other (see also Section 4.3).

DSMs are needed, but European industry lacked strategy for making the transition

Figure 4–2: Simplified visualisation of the digital distribution workflow



Source: De Vinck (2011).

Unclear business model (cost sharing) for digital mastering (producers and distributors)

The costs associated with creating such a digital master render it problematic to have a long transition period in which producers and distributors have to provide both 35 mm and digital formats. Prices quoted vary widely and may run up to several tens of thousands of euros. Influencing factors are the filming format, the post-production process and the availability of digital intermediates (Eurimages, 2011b; Overbergh, 2009). As a number of producers did not take steps in view of the creation of digital masters at all, the distributors – especially in the early transition years – were obliged to take care of producing the master themselves. The analogue workflow logic however dictates that it is the producer or sales agent that takes care of the digital master. The resulting uncertainty between producers and distributors in terms of cost structure forms a challenge for both, not the least in the (European) independent sector, where producers and distributors are usually not integrated in the same company structure.

A sufficient digital catalogue of European films also makes it necessary for the not-so-recent films (the vast back catalogue of analogue filmmaking) to be digitised. Digitising archives is important in two regards: (1) in view of preserving access to audiovisual archives; and (2) in view of the potential exploitation of these archives via new distribution outlets. The 35 mm standard was advantageous for film archives because of its high quality combined with a good longevity – in the correct

climatic (temperature, humidity) circumstances, that is (Overbergh, 2009). Yet in digitising these film catalogues, a number of obstacles can be distinguished with regards to e.g. orphan works,[63] the need for sustainable (long-term) technological solutions and costs.[64] Together they point towards a challenge for the film sector in terms of a sustainable exploitation of the back catalogue.[65]

Digitisation of production back catalogues and archives is problematic

4.3. Distribution and marketing

This section discusses digital distribution from three angles. First of all, one of the most crucial effects of going digital has to do with the cost-savings in duplication and distribution of film copies. This is especially crucial in view of the future outlook for the theatrical market. Second, digitisation not only affects distribution in terms of movie delivery, but also brings about a whole new context for marketing films. In the third part of this section, we will look at how both evolutions affect the role and function of the distributor.

4.3.1. Digital impact on distribution (duplication, adaptation, transport)

On the actual distribution side, working digitally first and foremost leads to substantial cost savings. Digitisation allows content to be more easily customised (in other words: to create different quality *versions* of it, cf. supra). In a European context, being able to easily add subtitles or dubbing to a film is an important advantage, as European linguistic diversity is one of the constituting elements of the traditionally fragmented nature of the European film markets. In a digitised context, adding subtitles can be done at the push of a button, by adding a digital file to the general film file. Digital technology moreover allows for the creation of “multilingual” content versions or of versions containing both dubbing and subtitling (Media Consulting Group & Peacefulfish, 2007). Evidently, the translation costs themselves remain and thus continue to play a role in the decision process to add a certain language version. Nevertheless, in a situation where the circulation of European films across borders is a prominent weakness, this facilitation of "transnational content" forms a distinctive opportunity of the digital European film landscape.

Digital makes content customisation (subtitles, dubbing) easier and less costly

Moreover, the theatrical 'digital print' that replaces 35 mm reels and is distributed to the theatre via satellite, the web or on a hard disk is much less expensive (to produce and to distribute) than analogue movie prints (Bomsel & Le Blanc, 2002; Doyle, 2002; Eliashberg, et al., 2006; Overbergh, 2009). While the cost of a 35 mm print is approximate € 1500, the cost for a digital copy (=DCP) of the same film ranges between €150 and €350. Added to this are the costs of the security "keys" used to unlock the digital copy on its assigned digital projector (i.e. the KDM, of which the price ranges between 16 and 20 euro) and an additional cost for the hard drives used

63 An orphan work is a copyrighted work for which the copyright owner cannot be contacted. The European Commission has had this issue on the policy agenda for a number of years now and recently (May 2011) put forward a proposal for a Directive on the matter (cf. European Commission, 2011b).

64 In November 2006, the cost of preserving and enabling access to Europe's film heritage was estimated at €25 billion (Davis, 2008).

65 A detailed analysis of film archiving issues would lead us too far, but one interesting source we can refer to with regards to this issue is the Academy's "The Digital dilemma. Strategic issues in archiving and accessing digital motion picture materials" (The Science and Technology Council, 2007).

to store the digital files[66] (Inglis, 2008, p. 14; Mabillot, 2011, p. 23). Hence, going digital leads to substantial cost savings for movie distributors, especially the Hollywood majors who distribute their films in a large number of copies (the wide release strategy). Transportation costs also go down substantially as heavy reels are replaced by hard drives (and, eventually, satellite). Overall, estimates project yearly cost savings of around 1 billion dollars for the American market alone (cf. Bomsel & Le Blanc, 2002, p. 17).

Digital lowers duplication and transportation costs…

In an analogue era, the vicious circle surrounding European film included a lack of incentives for distributing European movies on a large scale (in particular non-domestic ones).[67] In a digital age, however, a distributor might be more tempted to invest in 'difficult' movies - a group that includes most non-national European films. These cost-savings go hand in hand with increased flexibility. Distributors are now provided with a better tool-set to deal with the unexpected and risky "career" of films. Breakout hits can now be accommodated better as it is easy and relatively cheap to make additional DCPs. These **cost reductions and flexibility** improvements could clearly **benefit (trans-national) distribution** of European films, thus constituting a big **opportunity** for the European film industries, which has fed some of the more utopian visions on their digital future.

…facilitates the trans-national distribution of European films

In reality, digital distribution has not yet reached its full potential, due to a number of barriers. Firstly, in order to be able to fully exploit these cost-savings, a Distribution Master created from a DSM is imperative as well as a clear division of digital costs between the distributor and the producer (as analysed earlier) (Overbergh, 2009). Secondly, for the moment the costs of releasing digitally still vary widely, depending on e.g. the country and even the laboratory, which creates uncertainty for distributors. Moreover, the transition period brings with it double costs, as both 35 mm copies and digital prints have to be developed. Thirdly, the cost savings vary according to the distributors' profile (e.g. its size and whether staggered release patterns are used). Especially the larger distribution companies can fully exploit these new incentives to achieve massive economies of scale. As a result, in a digital context, gains for the major studios may become even bigger compared to those of independent distributors.

…but may reinforce blockbuster strategies

In such a situation, everything else equal, the major studios could dominate the cinema screens even more by putting out ever-larger volumes of digital prints. This could lead to a reinforcement of their 'hit and run' release strategies, and render the build-up of word of mouth more difficult. As a result, the window of opportunity for smaller, 'difficult' or 'niche' films may evaporate. This is evidently an important **threat** for European producers and distributors and makes it all the more imperative to sustain the existence of smaller (art house) exhibition venues.

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66 In other words, once the delivery of digital prints is completely dematerialised (e.g. using satellite transmission), the costs of distribution will drop even more. The European (French) company Smartjog is an example of a firm targeting this digital delivery market (see www.smartjog.com). According to Mabillot, the cost of sending one film via Smartjog is up to 80 or 100 euro (Mabillot, 2011).

67 Analogue prints being very expensive, and the risk factor for European film success being extremely high, it was not in the advantage of distributors of investing much money in wide-scale releases for European films.

4.3.2. Digital impact on marketing

Digitisation also brings about changes for the marketing aspects of distribution, which again offer both an **opportunity** and a **challenge** for the European film sector. On the one hand, the Internet and its social networking possibilities make it easier to target an audience. 'Word-of-mouse communities' (Eliashberger et al., 2006,) open up a new range of marketing possibilities by creating more emphasis on peer-to-peer information exchanges and recommendations ("viral" marketing). "The Blair Witch Project"[68] is the classic example in this regard (Department for Culture, 2002; Eliashberg, et al., 2006; Sparrow, 2007). Social networks and micro blogging applications à la Facebook, Twitter and MySpace form important tools in the creation of online communities and sustaining relationships between content producers, distributors and consumers (KEA & MINES, 2010; Vickery & Hawkins, 2008). Specialised sites (e.g. Rotten Tomatoes or Metacritic) aggregate users' and/or critics' opinions into a single scorecard. Add to this recommendation tools in the trend of 'if you liked this, you may also like that' and the result is a potent mix of broad marketing via leading websites and specific niche activities that offer a plethora of possibilities for movie marketers (Ulin, 2010). Specifically for the nationally fragmented European distribution sector, the same networking possibilities that we discussed for production moreover come to the fore again. This is not a big change from the analogue period - the fact that distributors are sharing a poster layout for instance is nothing new. Yet next to digital marketing itself, it becomes easier to exchange marketing tools, content and ideas in a digital context.

Online and viral marketing strategies offer a cost-efficient way of targeting the audience

On the one hand, all of this makes it more feasible to promote and position a film without a big marketing spend, which is a positive evolution for European players. On the other hand, the digital world brings with it an even larger avalanche of information and entertainment choices. Audiences still need to find the way to European content and marketing impact remains at least as uncertain as in the pre-Internet age (Department for Culture, 2002; Eliashberg, et al., 2006; Mohr, 2006; Ulin, 2010; Waxman, 2006). In the end, the majors' strength also relies on their brand names and vertically and horizontally integrated industry structure. Creating a similar 'European' brand name is far from evident for European films in general, European film distributors specifically. As a consequence, now that competition for a place in the spotlight gets ever more intense, the typical European (non-national) film might get even less room and possibilities to prove itself in the movie theatre. This is in other words a clear threat.

But in a world of abundance, it may become even more important to carry marketing power

Of course, these are issues that most of all affect the traditional theatrical exhibition value network. One of the main questions that arise in a digital context have to do with the alternative streams of film delivery that come to the foreground, which could lead to a more elaborate non-theatrical value network (cf. infra).

4.3.3. Future Scenarios for the distributor

The role of the distributor is changing amidst two opposing trends, i.e. 1) the simplification of its tasks due to increased distribution cost-efficiency and 2) the complexification of its tasks in a multi-channel entertainment environment of infinite choice. In a digitising context, we can distinguish three non-exclusive possible scenarios in terms of the traditional (European) distributor: 1) its

[68] In 1999, this low-budget indie horror movie raked in $140 million following months of publicity and Internet hype surrounding it (Mohr, 2006).

disappearance, as alternative intermediaries (such as sharing platforms e.g. Dailymotion) coming to the fore, 2) the complexification of its role and 3) its consolidation in terms of industry structure. We briefly elaborate on these three scenarios.

Firstly, the fact that distribution becomes more efficient puts a question mark next to the relationships of distributors with both producers and exhibitors. Indeed some independent filmmakers have embraced the idea that they could directly deal with (e.g. theatre) exhibitors or even the audience. The position of distributor could thus altogether disappear, some have argued (Eliashberg, et al., 2006; Zhu, 2001). However, bypassing these players seems difficult, as this would for instance multiply negotiations with exhibitors and other movie outlets and make them more complex (also for the latter parties). For beginning filmmakers or those operating outside the existing marketplace, however, these can be interesting opportunities (Screen Daily, 2008c).

More plausible, secondly, is a complexification of the distributor's role. As some of the middlemen between the producers and the consumers disappear, the sector is at the same time confronted with new forms of 're-intermediation', as new roles are fulfilled by old or new players (Bustamante, 2004). The digitisation of the distribution process thus brings along new tasks for the distributor, such as the management of the 'keys' (KDM) for a theatrical release. Moreover, the multitude of distribution channels makes his role ever more 'complex'. The result may be that the distributor's job becomes much more centred on marketing efforts, which requires both a local approach and global vision. The distributor on the one hand continues his important role in terms of localising efforts by targeting its audience and setting up location-based campaigns. On the other hand a globalisation trend is visible, amongst other things through the sharing of (mastering) costs, the exchange of information and the idea of multi-territory rights acquisition (cf. infra). As the distributor will have to insert more effort into gearing production output and delivery channels to each other, both the major distributors and the smaller local players appear to be advantaged for different reasons. What the former have in terms of scale and scope; the latter can compensate by perfecting their localised marketing skills.

A third potential scenario for digital distribution refers to a consolidation of the market. This consolidation can take shape between the various distribution outlets, as specialised distribution arms (e.g. the video publishers and theatrical distributors) could find themselves working more closely together in a digital context. A distributor's strategy may shift from being window-oriented to a content-oriented approach. Instead of working alongside each other on separate window-related strategies (first the theatrical push, then the DVD release e.g.), distribution divisions would focus on the elaboration of more complex and film-specific release strategies across the different distribution windows, potentially simultaneously (cf. infra on the shortening of release windows). Next to this aspect, pan-European distribution consolidation is becoming more feasible for some. This recurrent idea has in recent years resurfaced as a number of initiatives were set up – be it with uncertain results for the time being (cf. supra). In the same sense we can imagine the role of the sales agent to potentially change as well. Some may take up a number of tasks from the distributor, while others may take on a coordinating role in a pan-European context, forming the central node of a distribution network.

4.4. Digital impact on exhibition / consumption

Digitisation has affected the access points to the consumer in two ways. Firstly, a new range of devices and technologies has expanded the existing base, including new 'screens' such as the computer and the mobile phone. Secondly, the convergence between all of these devices is the logical companion of a general convergence between the telecommunications, computer technology and content industries. Screens and devices reserved for a certain type of content are now combining all previous functions while adding new ones - the Smartphone is the ultimate example of a screen that combines information processing, telephone, text, video and music functions. Audiovisual products of all types become central nodes in a network of interrelated and digitised exhibition and auxiliary streams (Chantepie & Le Diberder, 2005; Vickery & Hawkins, 2008).

As the value network becomes more complex, the central role of the audience becomes ever more apparent and, following from this, the need to gather better insights into the changing nature of audience patterns today.

In terms of the prospects of going digital, we saw that digital files are easier to transport, cost are lowered and subtitling has become more feasible. The risks associated with working on non-national European films go down. Translating this to the exhibition stage, one expects the digitisation of the different commercialisation streams to be quite disruptive. In particular, it could provide opportunities for European films and sector players, especially in terms of cross-border circulation and thus, ultimately, the realisation of a European single audiovisual market. How feasible this is, will be one of the themes analysed in this section.

In the following pages, we will start with a closer look at the evolution of the release windows structure as a general organising principle of a film's career (4.4.1) and the important influence of piracy on this and the film sector in general (4.4.2). Next, we discuss the prospects of European cinema in the digitised theatrical market (4.4.3) and the non-theatrical home video market (4.4.4). The transition in the television market will be dealt with by Sanz and Simon (forthcoming) in their report on this sector. We will end with an extensive look at the prospects of a single market in an online environment, in particular in terms of Video on Demand (4.4.5 and 4.4.6).

4.4.1. The release windows system under digital pressure

In Section 3.4.1 we introduced the release window system as the industry's way of organising and maximizing revenues. We also noted how these time lags have been questioned more recently as the pressures for fast recoupment have risen. Digitisation raises doubts as to whether such a system could or should survive in a context where audience expectations are increasingly in contradiction with its rigid structure.

The release window structure is in particular questioned on three fronts (Figure 4-3). First of all, the illegal alternative (piracy) puts pressure on the legal release structure.[69] Copyright enables movie rights holders to structure the different windows in the release schedule, charging different prices for access to a movie in different windows. Yet precisely this profit-maximizing window system (cf.

[69] Cf. Acland (2008), who defines piracy as the unsanctioned acceleration of a movie's life cycle, i.e. "cultural speeding".

Waterman, 2005) enhances the attractiveness of pirated films. Pirated DVDs, for instance, fill a gap in the market by responding to audience demand to view theatrical films at home before their official DVD release (Currah, 2007). Nowadays, pirated copies of a film are sometimes already available on the Internet *before* the film has been released theatrically and definitely once it has been screened in theatres (Department for Culture, 2002). As a result, copyright issues are currently at the core of digital fears (See further Section 4.4.2).

As a consequence of both this situation and the rise of digital flexibility, the traditional release windows system is confronted with two other pressures: (1) where to insert 'on demand' channels in the traditional framework (the 'video on demand' issue) and (2) which level of exclusivity to retain for the theatrical channel vis-à-vis non-theatrical channels (in particular the home video and on demand markets).

The first issue refers to the difficult insertion of digital delivery channels in the existing framework. The proponents of traditional 'windows' notably fear that disturbing the system, whereby their channels (and their exclusivity) are diminished, may 'cannibalise' their revenues (KEA, 2008; Nikoltchev, 2008). In particular, Video on Demand (cf. Section 4.4.6) is likely to affect (1) (pay) television and (2) the home video (rental) market. Already it seems like the VoD window is moving to a day-and-date position with the DVD release. Moreover, windows that used to close after a certain time may now be open in perpetuity, which raises its own set of problems. For instance, pay television often pushes for the VoD window to close after a certain period in order to retain its exclusive window (KEA & MINES, 2010).

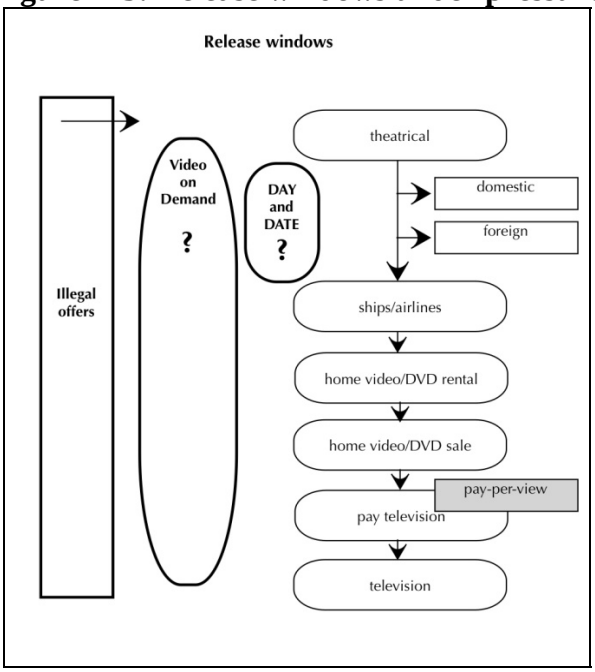
The day-and-date issue, second, concerns the time gap before a theatrical film is distributed in ancillary channels. In general, DVD, VoD and pay-TV windows are moving up in the window system but have difficulties finding a balance, especially with the theatrical window – which is threatened by a lack of exclusivity (Eliashberg et al., 2006; KEA & MINES, 2010). In the US, for instance, the National Association of Theatre Owners (NATO) have noted an average video release window of 4 months and 8 days in 2009, down from 5 months and 18 days in 1999 (Corcoran, 2009). Significantly, even the French legislators have shortened the mandatory theatrical-to-video window to four months (coming down from six) (Screen Digest, 2009b).

On the one hand, the DVD market, Pay Per View and (potentially) Video On Demand are capable of achieving higher revenues over less time compared to theatrical income (Doyle, 2002; Eliashberg, et al., 2006). The relatively long waiting period before the subsequent releases in other channels also possibly reduces the impact of the initial marketing campaign (Lehmann & Weinberg, 2000). By the time the movie becomes available in the home video (and/or VoD) window, the audience might have largely forgotten about it, given the intense stream of new products flooding the market.

On the other hand, a crucial question is to what extent the different markets exist in substitution or complementarily (Eliashberg et al., 2006). The theatrical window is important in terms of maintenance and extension of the distribution pipeline (e.g. because it generates ‘success-breeds-success effects’ (Wolff, 2008). Moreover, the initial theatrical performance continues to determine the prices that will be paid for the film in secondary markets (Vogel, 2007).

Given this complexity, the traditional 'fixed' windows do not seem to be the most future-proof way of dealing with the expanding film value network.

Figure 4–3: Release windows under pressure



Source. De Vinck (2011).

Shortening of release windows could offer opportunities for smaller titles to benefit from a combined marketing "buzz"

Instead, while exclusivity remains a possibility, the multitude of channels and information available in a digitised society could shift the focus towards the differences in experience each format offers rather than their different (and exclusive) content offer. The value of maintaining an exclusive theatrical window may also be linked to the type of movie. A system of exclusivity seems most suited to a blockbuster model. The experience of watching a film riddled with action and special effects (possibly in 3D) is suited to the promotion of an exclusive cinema window in a quick blizzard-like way - thus reinforcing the cinema as an event-oriented venue. In contrast, the release of a smaller European art house film probably loses out on quick theatrical run, followed by a four month gap, after which the consumer is expected to find its way to the DVD or on demand version, the release of which is drowned out in the avalanche of movie releases and blockbuster marketing noise. The triple threat posed by an oversaturated theatrical market, the importance of opening weekends and the specialised character of (non-national) European film content, could turn the rising importance of non-theatrical distribution channels and the establishment of new ways of delivering a film to its audience into a positive thing for European film industries.[70] Online platforms are

[70] Of course, this necessitates a difficult change in approaching a film's release. Yet confronted with a lack of screen space, the shortening of release windows could enable European films to find larger audiences via a non-theatrical avenue. While the typical Hollywood blockbuster remains prime theatrical material, the simultaneous screening of (non-national) European films in a theatrical and non-theatrical manner could mutually reinforce the strength of both. Art house theatres could in such circumstances continue to add value to the theatrical experience of

offering possibilities as an alternative to or reinforcement of their (often limited) theatrical clout. In other words, the digital evolutions offer opportunities to engage the audience in (flexible) ways that were not possible before. Yet the modalities and potential of new delivery strategies are not clear and form an area where continued research and understanding are necessary.

This is especially true given that, as the idea of versioning strategies lies at the core of a film company's strategy, the "loss" of the exclusivity argument has engendered fears in large parts of the sector. Existing film companies often focus on finding a fit between digital changes and existing value network and audience relationships in ways that are reminiscent of conservative approaches towards innovations in the past. Exhibitors have recently for instance grown concerned by the fact that even the bigger distributors and films are also experimenting with the value of "theatrical VoD premieres", (e.g. the recent announcement of Hollywood studios' "Home Premier" initiative, a premium VoD offer priced at around $30, which was badly received by the US exhibitors' association NATO (Stewart, 2011)). In contrast, new players that come from an "open" Internet background often take a different attitude towards release windows and other barriers to consumption but are themselves still looking for viable business models.

4.4.2. Digital Piracy

Piracy: old phenomenon that gained in importance with DVD

Illegal copying of films has existed from the very early days of cinema, but came especially to the foreground when home entertainment devices were introduced in the 1970s. Precisely those features that were attacked by the film studios at the time (i.e. the 'time shifting' functions) proved to be the main selling point of home video for the average consumer.

Online augmented piracy to levels which makes it a threat to the industry

If the studios were already concerned by the rise of piracy through video cassettes, they became really alarmed when digital technology entered the scene via the DVD since high-quality illegal copies could now be made more easily and at low cost. For a while, the costs of a CD/DVD recorder and the blank discs that went with it were too high to make consumer uptake viable but that changed quickly. Piracy thus became an even more important problem for the film industries (Enticknap, 2005). Yet it was when a dematerialisation caught on in the illegal circuit that digital piracy became a real (at least perceived) problem for the industry. The development of Internet and broadband[71] have been important triggers of the further rise in online piracy, as they exponentially enlarged both the potential piracy community (seeders) and audience for pirated copies (leechers). These issues first emerged with regard to music circulation online and turned into a full-fledged battle when the peer-to-peer based Napster proved extremely popular after its launch (in 1999) and the lawsuit brought against it (in 2000) (Gillespie, 2007). Especially through peer-to-peer (P2P) programmes, the 'piracy' phenomenon has been exacerbated (Currah, 2003).

watching such a non-mainstream film by e.g. organising events around it (such as a Q&A with the director) or, more generally, by emphasising the theatrical experience as such. Typically, these films can only benefit from a simultaneous marketing buzz. However, the potential of bypassing the cinema theatre cannot be assessed at this stage yet. For the moment, it rather hampers the possibilities of a film in other release channels, as established players (theatres, home video distributors) hesitate to take a chance on the film (or sometimes even outright boycott it) out of cannibalisation fears (Ulin, 2010).

71 It is difficult to statistically link broadband growth and piracy uptake, but a number of studies do indicate this relationship. For an overview, see (KEA & MINES, 2010, p. 132).

Moreover, while a digital pirated copy can find its origin in the camcording of a movie in a cinema, a full digitisation of the production-to-exhibition chain (including d-cinema) offers a further threat for the industry, as it makes it possible for digital content to be accessed illegally before or during the theatrical release. This is why the digital cinema standardisation bodies have paid so much the attention to security "keys" (cf. infra) (Vickery & Hawkins, 2008).

The observation that many regular audience members today illegally download (even if they do not necessarily upload) films and other creative content has moved the debate on piracy to a whole new level, including a discursive argument about the underlying idea of copyright as such. In general, the rhetoric on both sides paints the situation as a true 'battle' between good and evil. As such, the industry often portrays piracy as a whole as evil, with pirates potentially tied to terrorist activities (cf. a 2009 report by the RAND corporation - Treverton et al., 2009) and see also (Gillespie, 2007)). American and European trade associations have in this respect found themselves to be partners in a common battle against piracy and in favour of a consolidation of existing copyright legislation. Their opponents argue that the evilness comes from the greedy entertainment moguls not interested in creativity.[72] Piracy is in the latter case promoted as a defendable act of resistance towards the greed of 'the Man' - an evolution which has prompted the industry to begin to renounce the term 'pirates' as it allegedly entails a romanticised view associated with the Disney film 'Pirates of the Caribbean', particularly Johnny Depp's portrayal of the pirate 'Jack Sparrow' (Fithian, 2006).

The 'economic impact of piracy' discussion is clouded by un-nuanced arguments

Overall, both sides disagree with each other on three issues, namely: 1) the size of the damage done to rights holders by illegal downloading; 2) the potential positive effects of illegal consumption on legal sales[73] and 3) a broader debate on the impact of piracy on the economy and society as a whole (Schermer & Wubben, 2011).

A large number of studies and reports have been published in recent years in order to quantify these types of impact. The March 2010 Tera Consultants report "Building a digital economy" for instance dealt specifically with the negative impact of digital piracy (including file-sharing via p2p networks) in the "big five" European markets. It estimated the income and job losses for the creative industries in the EU at very high levels: a total of 9.9 billion euro and 186.400 jobs across all creative industries for the year 2008. For the audiovisual industry (film, music and TV), it estimated the EU27 revenue loses at €5.3 billion (2008) and 135,000 direct and indirect job losses. Its most conservative estimations for 2015 counted a staggering income loss of around 32 billion euro, corresponding with 610,000 jobs (TERA Consultants, 2010, pp. 8-9).

It is crucial to bring a number of nuances to these debates and the studies that are being published. Measuring any of the three elements of the debate is particularly difficult. It is for instance difficult to demonstrate causality relationships between the constitutive elements. The variety of studies performed on the effects and impact of the illegal content offer have led to different, sometimes conflicting conclusions.

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[72] The comment section on the specialised Torrentfreak website usually offers a nice overview (www.torrentfreak.com).

[73] For instance, illegal downloading allows consumers to get to know certain items, potentially leading them to buy more legal content (the "sampling effect") (Schermer & Wubben, 2011).

Moreover, their results are prone to misinterpretation or appropriation by one or the other stakeholder (Schermer & Wubben, 2011).

Schermer & Wubben, who have gathered and compared a large number of similar studies[74] on the subject, have shown that most of this research can be criticised on the basis of methodological problems or contradictions. The different available studies have also put forward different quantitative "substitution ratios" (i.e. loss of legal sales due to illegal consumption). On top of that, piracy has different impacts according to the cultural industry concerned (the effect on the music industry is not the same as that on the film sector) (Schermer & Wubben, 2011). All in all, however, most of the literature does point towards a certain amount of direct economic loss, even if the various specific studies may be methodologically or otherwise flawed (Schermer & Wubben, 2011).

Yet the most profound threat posed by piracy may be of a more indirect nature. Indeed, the rise of “democratised” piracy menaces the basic premises of copyright as a system, creating a consumer who increasingly expects content free of charge as a commodity in a 'sharing economy', in which trade is no longer based on (direct) monetary gains (cf. KEA & MINES 2010).

Piracy is a direct but most crucially an indirect threat to the industry

The responses that have been developed so far however form a second area where there is a clear need for a nuanced vision. The industry has up until now responded in a very defensive manner by focusing on 'educational' campaigns, technological protection, lawsuits and legislative lobbying. Court cases against file sharing websites form one of the tactics in the response to piracy,[75] and rights holders have protected the control over their works via 'digital rights management' (DRM) systems. These approaches have in turn been met with controversy because of their possible impact on free competition (e.g. in terms of interoperability) and consumer rights (Peacefulfish & Media Consulting Group, 2008). Next to those calling for a downright abolition of copyright regulations, some more nuanced, hybrid models have come to the fore as an alternative for the protection of authors' rights. The most prominent is the Creative Commons (cc) licence.

Most recently, a number of countries have been pondering new legislation in order to address the issue, by constructing variations on a contested 'three strikes, you're out' theme (the graduated response). Concerns with regard to proportionality, implementation and legal issues are making this a contentious approach in Europe (Meyer & Van Audenhove, 2010). Moreover, the role of ISPs in these debates is unclear. Whether they should disclose personal data of their copyright-infringing clients remains a source of conflict and ambiguity.

In order to counterbalance current defensive and repression-based approaches, the need to develop an offensive strategy seems key. In this regard, the set-up of legal alternatives is crucial, taking into account a complete rethinking of pricing

[74] For the film sector, their Annex 11.2 (p. 122) is particularly relevant as it gives an overview of the main findings of relevant piracy studies (Schermer & Wubben, 2011).

[75] Anxious to avoid the fate of the music industry, the movie studios set out to address the issue head-on. In the US, the Metro-Goldwin-Mayer Studios vs. Grokster case forms a seminal step in this regard, as it led to the shutdown (by the Supreme Court) of the Grokster p2p site in 2005 (Ulin, 2010).

mechanisms, release strategies and business models in general. We will discuss a number of these potential responses in the next sections.

4.4.3. Digital cinema: a potential driver of both diversity and uniformity

We saw earlier (Section 4.1.2) how digital cinema projectors came increasingly to the fore around the Millennium shift. Still it is only recently that the transition to "d-cinema" got in full swing. Yet digital cinema entails benefits in terms of consistent projection quality[76] and programming flexibility (including alternative content[77]) for exhibitors and offers cost-savings for distributors. As noted, digital prints are significantly cheaper than 35 mm prints, thus stimulating the programming flexibility for distributors and exhibitors. The fact that print costs go down could in turn allow for instance for "second run" theatres to get their hands on films earlier in the release run and might also create some theatrical distribution possibilities for European films, as a digital release would entail less risk for distributors. The flexibility that this brings with it allows for both the multiplex and the art house segment to emphasise and diversify the value of the theatrical experience for a consumer that has an increasing number of channels through which to access films.[78] The key challenge is to turn the cinema into more than just a venue in which to watch a film and to differentiate it from the 'staying at home' experience. All of this was already possible in an analogue environment, but - especially in a mid-term future, when dematerialised delivery of films to a cinema becomes possible – it becomes easier to manage (De Vinck, 2011; Ulin, 2010).

Digitisation brings flexibility and differentiation options to theatres, possibly including increased programming of European films

Despite these opportunities, the conversion has proved problematic, mostly because theatre owners are confronted with high initial investments in order to make the conversion to d-cinema.[79] In 2011, the average cost (including warranties) for a digital projector and server run around €65.000 per screen. In addition, the exhibitor may opt for additional equipment, including e.g. 3D equipment (between €10.000 and €30.000 per screen), a Theatre Management System[80] (TMS) (circa €2000) and/or a scaler[81] (€3500). Next to that, the exhibitor may find himself faced with additional installation costs. In case the projection room is too small, for instance, the additional costs of upgrading the general infrastructure to a digital environment can run up to several thousands of euro. Maintenance costs are also higher than in an analogue environment, even if the exhibitor may benefit from cost-savings in terms of personnel (esp. larger multiplexes will probably need fewer projectionists).

…but its installation requires large investments from exhibitors

76 Contrary to a 35 mm context, there is no degrading or scratching of prints.

77 Such as opera and other live broadcasts, television series premieres, gaming competitions or sports events.

78 We have seen similar strategies in the past: the first 3D boom occurred as cinemas were struggling with the competition from the television screen, whereas multiplexes provided an answer to the rise of home video.

79 The exact cost of installing digital equipment is specific for each movie theatre and thus difficult to ascertain. This analysis is based on conversations with the main third parties and independent experts, done in the framework of a digital cinema research report for the Flemish Culture Department - (De Vinck & Walravens, 2011). The general range of these numbers is confirmed in a recent article by the specialised French website Manice (Manice, 2011).

80 In a cinema with more than one screen, a Theatre Management System is used to "manage" and monitor the different individual servers, upload the digital film copies and so on.

81 A scaler is used to project formats other than DCI on the screen.

Moreover, the longevity of digital projectors is expected to be significantly lower, with the exhibitor facing subsequent rounds of 'digitisation' in the next decades.[82]

In sum, while the exhibitor may gain from digitisation in a more indirect and long-term way, the immediate (financial) benefits are captured by the distributor (De Vinck & Walravens, 2011; Department for Culture, 2002; Eliashberg, et al., 2006,). Furthermore, 35 mm was a robust and qualitative standard, which further reduced incentives to change, especially as the standards for digital cinema took a number of years to become more or less set. The sometimes-precarious financial situation of some exhibitors at the start of the roll-out made them even more reluctant (or incapable of) carrying the necessary investments, while the economic crisis of the late 2000s also slowed down the transition.

…while short-term D-cinema benefits are captured by the distributor

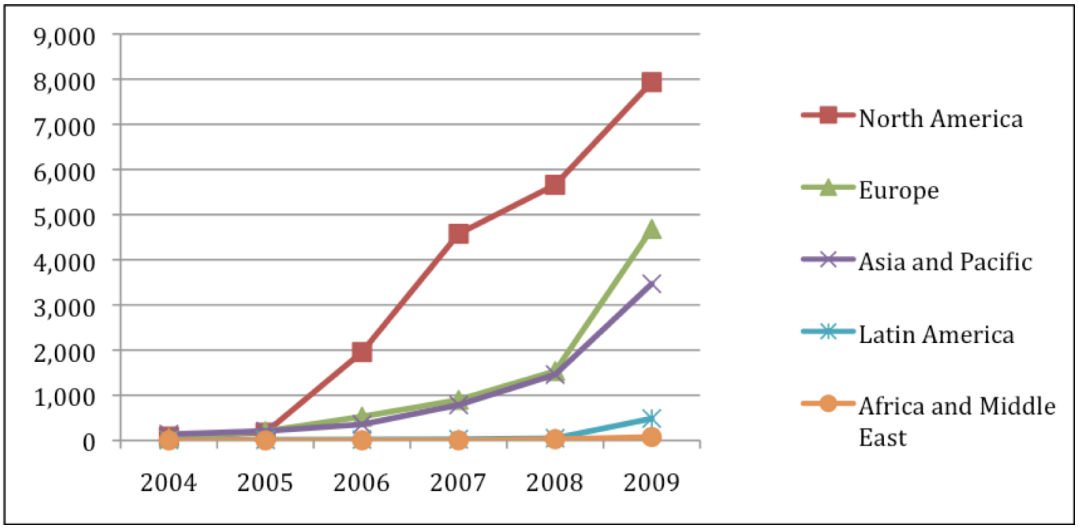
Three main drivers of digital cinema have nevertheless pushed its roll-out, in particular in the last five years, somewhat earlier in the US than elsewhere (Figure 4-4). First of all, the work done by a consortium of seven Hollywood players (the six majors plus MGM) who set up the Digital Cinemas Initiatives (DCI) in 2002 has been instrumental in setting the d-cinema standards (Acland, 2008; Department for Culture, 2002; Eliashberg, Elberse, & Leenders, 2006; Inglis, 2008). The goal of the DCI collective was to guarantee quality standards while making sure that the universality of technical cinema standards (and thus the compatibility of cinema projectors around the world) would continue in a digital environment. For d-cinema, the set of quality norms that were established cover three areas: 1) file formats and exchange (e.g. for image, audio and subtitle data); 2) packaging (related to the storage of d-cinema content before exhibition) and 3) transportation (including security mechanisms) (Overbergh, 2009; Vickery & Hawkins, 2008). The result: a first set of DCI specifications (version 1.0, published in July 2005), which was followed by errata and updates (version 1.2 was published in March 2008). Amongst the technical choices made: 1) a minimum resolution quality of 2K (4K is also possible) and 2) the choice for Jpeg2000 encoding. Following this important step in terms of standardisation, the transition to digital cinema started to gain speed and expectations were that the roll-out would be concluded relatively quickly. Yet in particular in Europe, some felt that a resolution quality of less-than-2K would suffice; whereas the MPEG encoding format was deemed more suitable as well, especially given its lower prices (Digital Cinema Initiatives LLC, 2008; Overbergh, 2009, p. 16; Ulin, 2010). This issue continues to slow down both the adoption of market-driven d-cinema implementation solutions by exhibitors and policy support initiatives in this area. Major Hollywood distributors and large independent European ones however clearly advocate adherence to one single standard - the DCI one.

Still transition to D-cinema progresses rapidly, driven by:

1. The DCI standard

Figure 4–4: Digital screens by region (2004-2009)

[82] The life expectancy of 35 mm projectors is on average 30 years, whereas that of digital projectors is estimated at circa 10 years (Overbergh, 2009, p. 5).



Source: European Audiovisual Observatory (2010).

2. New financing solutions: Third party integrators and virtual print fees

Second, financing solutions were developed in order to solve the distributor-exhibitor quandary. The most prominent has been the Virtual Print Fee (VPF) model that was conceptualised in the USA. The basic premise of this model is that the distributor compensates the exhibitor a substantial part of the d-cinema investment costs by paying him a fee (the VPF) each time a digital print is booked in the cinema. A number of third party integrators[83] have taken up to managing these transactions and - more generally - the installation of digital projectors. The principle of a VPF recompensation system is also possible outside of a third party integrator deal. However, only the larger exhibitors have the bargaining power necessary in order to manage the complex individual negotiations with distributors (including the Hollywood majors) this entails. At the same time, the VPF deals as proposed by the third parties do not work for all cinemas. Problems have arisen on two accounts in particular. Firstly, in order to be a candidate for a commercial VPF deal, a cinema has to programme a certain number of premier films per screen per year (this is called the "turn rate"). For smaller cinema theatres that acquire movies in 2nd run, this is problematic. Secondly, the integrators have focused on closing contracts with the Hollywood major distributors but this raises questions in terms of the applicability of the contract provisions for independent distributors. They often work with different release strategies (staggered versus wide releases) that make it necessary to develop adapted VPF calculation models. As long as these are not fully in place, exhibitors programming a lot of independent films (art houses in particular) are uncertain about the applicability of the VPF model to their cinemas. Moreover, third parties focus their attention on the Western-European countries (De Vinck &

[83] There are a number of these third parties active in Europe. The main three are XDC (Belgium), Arts Alliance Media (UK) and Ymagis (FR). Recently, Sony has entered the market as well. The VPF deals offered by these integrators may vary on a number of points:
1) The integrator may pre-finance the equipment completely or in part; he may help the exhibitor to negotiate a bank loan; he may offer the exhibitor a financing model on the basis of his deals with manufacturers or he may not contribute to the financing of the hardware at all;
2) Depending on 1), the exhibitor becomes the immediate owner of the equipment or only after a given period (usually ten years);
3) The integrator may offer additional services, such as technical assistance, the transportation and digitisation of content and so on (De Vinck, 2011).

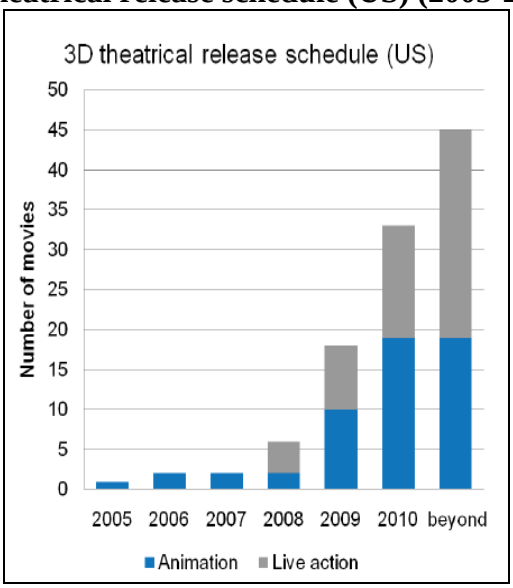
Walravens, 2011; Hancock, 2010; Overbergh, 2009) and the Eastern-European countries have had particular difficulties in terms of completing the roll-out (Figure 4-6).

The result is that the VPF model has only been partially transferable to a European context. It is however imperative for (independent and/or art house) exhibitors as well as the distributors working with them that the transition is completed as soon as possible. While the cinemas miss out on the digital potential for adapted programming and other associated benefits, distributors are suffering from a long and costly transition period in which analogue and digital formats coexist.

3. 3D movies

Third, while the quality enhancement of digital cinema is not sufficiently visible to the consumer in order to raise ticket prices, digitisation has brought along a revival of the 3D experience. As 3D offers a very visibly different cinema experience, it is associated with higher ticket prices and acts as a driver for the digitisation of cinemas.[84] In recent years, a number of high-profile producers and directors[85] have led the 3D 'push' causing it to become the main driver of cinema digitisation (Overbergh, 2009). Figure 4-5 shows the rapid increase in (US) theatrical 3D releases from 2008 on. Although the 3D phenomenon may slow-down (Garrahan, 2010), or even disappear or - more likely - will be used more selectively, i.e. for a number of specific titles or genres (such as horror), the 3D hype will have performed its role as an "accelerator" of the transition to digital projection.

Figure 4–5: 3D theatrical release schedule (US) (2005-2010 and beyond)



Source: (Gunnarsson, 2010).

Gradually, as more exhibitors are taking the jump, the roll-out becomes an increasingly large threat for the continuing existence of those cinemas that find it difficult to take the digital step. Especially small exhibitors may start to have difficulties to get access to 35 mm copies of films while at the same time have

84 The 2009 European Audiovisual Observatory Yearbook noted how case studies showed that 3D screenings raked in two to four times higher revenues than 2D screenings (European Audiovisual Observatory, 2009).

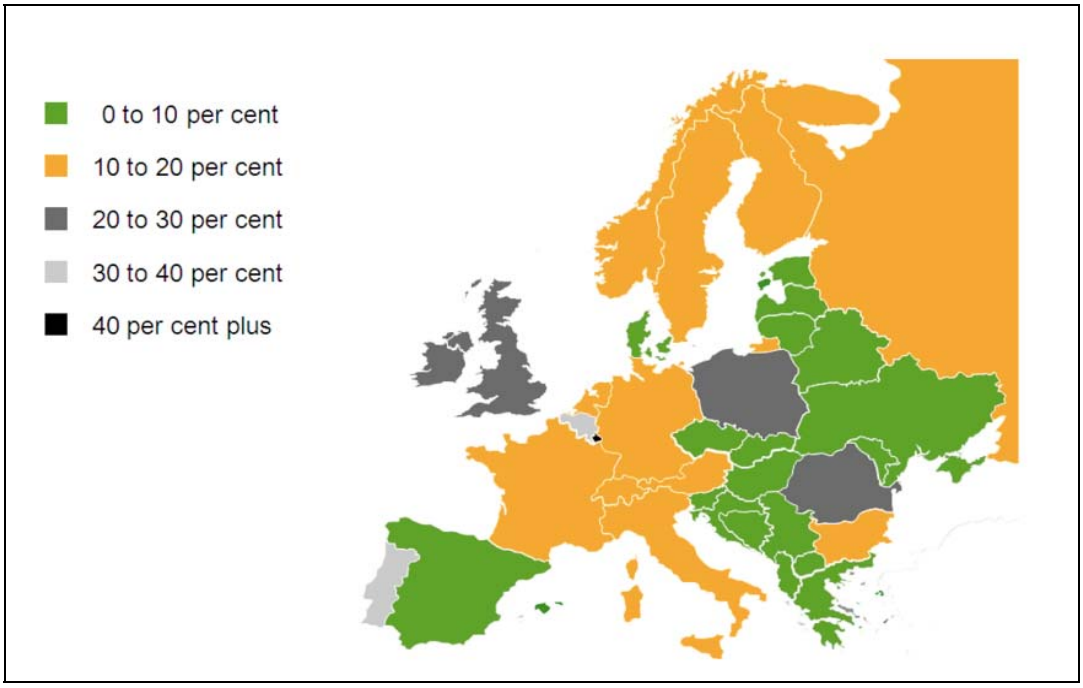
85 James Cameron's 'Avatar' has been the high point of a long campaign led by among others Jeffrey Katzenberg (Dreamworks).

Small exhibitors at risk in the transition

difficulties in making the transition. As a result, there has been a widespread belief in Europe that some form of public support is necessary to make the digital transition. In 2010, David Hancock estimated that the European "digital shortfall" (i.e. the conversion costs not covered by commercial VPF deals) amounted to 465.6 million euro (out of a total conversion cost estimated at 2,123 million Euro) for circa 5000 screens that were identified to fall outside of market conversion models (Reich, 2010; Screen Digest, 2010).

On top of the risk that some of the exhibitors will not be able to make the transition, thus reducing the diversity of the European film theatrical marketplace, vigilance and follow-up may also be needed in terms of the realisation of the benefits outlined at the beginning of this section. The acceptance of more flexible (and diverse) programming schedules for instance also depends on the evolution of distributors' strategies and the relationships between distributors and exhibitors. For now, distributors often hang on to classic release schedules. Moreover, the VPF payments paradoxically offset at least part of the digital cost savings and help to perpetuate existing power balances and relationships in a digital context. Most importantly, the digital cost savings further enhance the economies of scale a major distributor gets from following a wide release strategy. Digitising theatrical distribution thus at once brings about increased flexibility and reinforces the "hit and run" release strategies followed by Hollywood players. This adds to the threat for small exhibitors and risks making the theatrical offer more uniform rather than more diverse. The “3D phenomenon” is a clear example of the studios’ refocusing on blockbuster films and associated release strategies. In this scenario, the theatrical market would become ever more hit-oriented. The main outlet for smaller-scale films, such as most of the non-national European ones, would then be in the non-theatrical marketplace.

Figure 4–6: Digital screen penetration of total screen base in Europe



Source: Screen Digest May 2010 webinar – Hancock (2010).

4.4.4. The digital expansion and decline of the home video market

Digital DVD transition already fully completed

In the early 2000s, DVD[86] rapidly overtook VHS in the home video market (as described in 3.4.3). By the end of 2009, the number of TV households equipped with a DVD player stood at around 179 million households (78.5% of households) (EAO, 2010).

As for DVD's follow-up format, 2009 data of the European Audiovisual Observatory[87] point towards an infancy market for Blu-ray disc players in Europe. Even if growth in absolute numbers has been large (from only 62,000 at the end of 2007 up to 3.129 million), only 1.5% (median) of all European households had a Blu-ray player. Compared to the introduction of DVD, the sale of stand-alone Blu-ray players is progressing much slower. However, as these discs can also be played on the PlayStation 3, total estimates for the number of European Blu-ray equipped households stood at 14,6 million (EAO, 2010; Gunnarsson, 2010).

86 Note: not all content rented or retailed on DVD is feature film. According to EAO data, in 2007 about 63% of retail transactions were related to feature films (19% were TV-programming, 8% Children's content, 4% music and 5% other content) (EAO 2010).

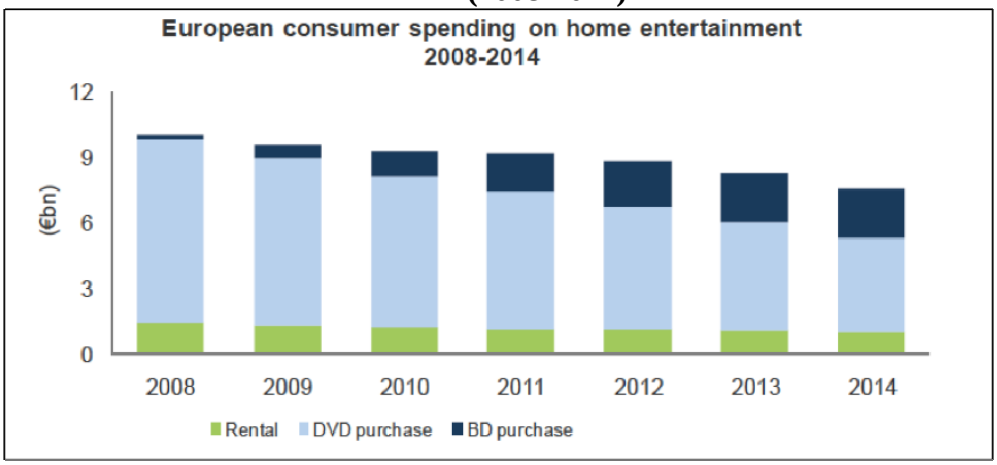
87 For this market, the EAO uses data provided by Screen Digest and the International Video Federation, spanning 22 European countries.

Figure 4–7: Penetration, prices and turnover of DVD and Blu-ray (2002-2009)

		2002	2003	2004	2005	2006	2007	2008	2009
Penetration	**(% of TV households)**								
DVD	EUR 22	15,9	31,1	44,4	57,6	70,3	75,0	78,3	78,5
	JP	12,5	21,8	34,0	44,5	50,6	53,7	53,7	51,1
	US	38,9	53,5	63,8	74,1	80,4	81,8	82,3	82,4
Blu-ray	EUR 22					0,0	0,1	0,8	3,1
	JP					0,0	0,1	1,5	4,2
	US					0,1	0,5	3,1	8,1
Prices	**Rental (Euro)**								
DVD	EUR 22	3,5	3,3	3,3	3,2	3,3	3,3	3,1	3,0
	JP	3,2	2,9	2,8	2,8	2,5	2,3	2,4	2,8
	US	3,3	2,8	2,7	2,6	2,6	2,4	2,1	2,0
Blu-ray	EUR 22					~	3,8	3,0	3,0
	JP					~	~	2,4	2,8
	US					2,21	2,7	2,4	2,1
	Retail (Euro)								
DVD	EUR 22	21,5	18,0	16,1	14,1	13,3	12,6	11,3	10,2
	JP	32,3	27,4	26,5	25,6	24,0	23,6	26,1	29,5
	US	18,2	14,3	12,0	11,6	11,4	10,4	9,5	9,5
Blu-ray	EUR 22					27,6	28,9	24,9	20,8
	JP					32,2	29,1	36,7	46,8
	US					22,6	23,3	19,1	17,9
Turnover	**(mn Euro)**								
DVD	EUR 22	6.158	8.824	11.487	11.683	11.617	11.446	10.192	8.918
	JP	2.373	3.062	3.853	4.743	4.794	4.579	4.717	4.915
	US	11.355	13.866	15.148	16.057	16.682	14.726	12.524	11.376
Blu-ray	EUR 22					0,1	62,5	262	597
	JP					1,3	14,3	65	251
	US					8,4	164	552	1.081

Source: EAO (2010).
Note: "Europe" refers to median values for 22 European countries: AT, BE, CH, CZ, DE, DK, ES, FI, FR, UK, GR, HR, HU, IE, IS, IT, NL, NO, PL, PT, RU, SE.

Figure 4–8: European consumer spending on physical home video formats (2008-2014)



Source: figure from (Gunnarsson, 2010).

Given the backwards compatibility (BD players can also play DVDs), even consumers in possession of Blu-ray disc hardware continue to spread their purchases between DVD and BD formats (Gunnarsson, 2010). In terms of disc turnover, 6% of the total home entertainment volume came from Blu-ray (9% in the US), with the (declining) market still dominated by DVD sales and rental (cf. also Figure 4-8) (European Audiovisual Observatory, 2009b). However, with the number of available titles further increasing (some 1000 were available at the end of 2008 (European Audiovisual Observatory, 2009b)) and the price levels dropping (between 2007 and 2009 there was a price drop of 15%, from 29 euro to 21 euro for a Blu-ray sale in Europe; in the US prices dropped from 23 to 18 euro) (European Audiovisual Observatory, 2010), there is margin for improvement. Evidently, the further take-up of HD television sets (a prerequisite for benefitting from Blu-ray's high-definition format) will play a role in further household penetration levels as well. Blu-ray is moreover the physical carrier that will enable the consumer to watch 3D films on a 3D television screen (Gunnarsson, 2010). Hence, we could expect Blu-ray to increasingly substitute for and eventually take over the DVD market, but at a slower rate than when DVD substituted for VHS.

Decline of physical home entertainment market – a threat to the movie sector

Blu-ray is growing rapidly but remains at low levels

Nevertheless, it seems unlikely that the uptake of Blu-ray will be able to fully compensate for the declining DVD market in the future, and the big question mark is if the online market, i.e. digital sales and rentals but especially (TV) VoD, can compensate (see below). It could perhaps be said that the drop in DVD prices, the collapse of this market and the rise of piracy are all elements of the same vicious circle that affects the perceived value of such home entertainment products in the eye of the average consumer (and exemplified by the phenomenon of DVD “give-away” strategies). In any case, the decline of the physical home entertainment market poses a clear threat for the film sector in general as it is not clear "where the money will come from".

…and does not compensate for DVD decline

Specifically for the European context, the DVD and subsequently Blu-ray has a particular advantage that potentially favours pan-European distribution: it can carry multiple language tracks and subtitle streams which makes it possible to serve multiple countries with one DVD disc and makes it easier and less costly to reach wider audiences. At the same time European distribution fragmentation and the limited number of international sales agents form an important obstacle. A 2007 study showed that the DVDs issued in Europe by the Hollywood majors on average include 6 dubbed versions and 10 subtitled versions (i.e. they can serve the whole European market using three DVDs). In contrast, independent publishers in Europe put only 1 to 3 languages on a DVD (average). The issue of rights fragmentation is a main obstacle here (distributors only include language versions suited for the countries for which they hold the rights), something that is less problematic for the majors as they often control all the rights via their local subsidiaries (Media Consulting Group & Peacefulfish, 2007). Thus, language barriers and localised business practices and scattered rights continue to form a barrier for the European circulation of DVDs and Blu-ray discs.

… DVD content customisation less costly

… but language barriers, localised business practices and scattered rights continue to form a barrier for European content

4.4.5. Video on Demand

Digital television has been a driving force behind the emergence of new Video on Demand offers, but in the digital era, pay-per-view movie offers are moving beyond television into new online frontiers. In the following pages we will look at the evolution of the Video On Demand market, the business models that are developed

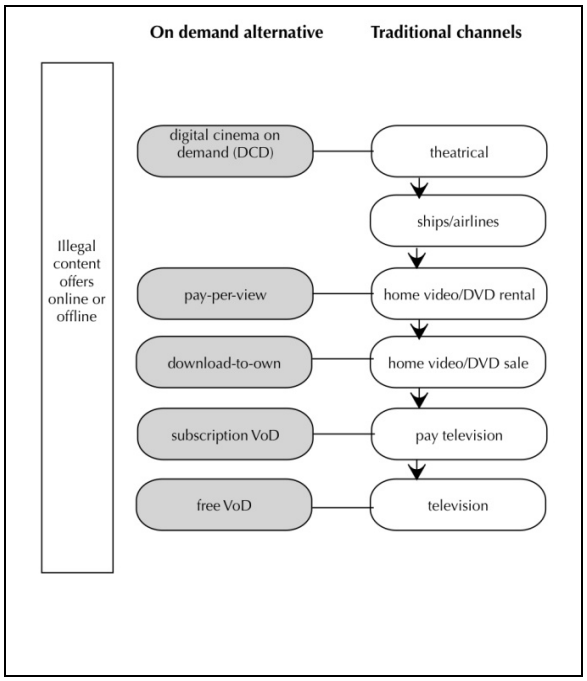
and the current offer in Europe (4.4.5.1). In the next section, we will also discuss the potential for European films in this on-demand offer.

4.4.5.1. Online movies: the final frontier?

Digitised "online" video on demand emerged in the second half of the 1990s and has benefited from technological advances in broadband and other delivery areas (KEA & MINES, 2010). There are two main features, which distinguish online video-on-demand from other channels.[88] Firstly, it is online and hence dematerialised, which in turn has implications for the cost and speed of delivery (hence distinguishing it from e.g. DVD). Secondly, it involves time and place shifting, i.e. the consumer can decide when and where to watch the film (hence distinguishing it from linear TV-broadcasting). Increasingly, the idea that viewers want to watch their content irrespective of where they are is gaining in importance as well, e.g. with the development of specific devices[89] to watch acquired content on either a TV, computer or mobile phone screen at any time (KEA & MINES, 2010).

On demand potential can be distinguished across the traditional windowing structure (Figure 4–9), including the theatrical one, but we will mainly consider the non-theatrical varieties in this section.

Figure 4–9: On-demand alternatives for the traditional delivery channels



VoD – online, de-materialized time and place shifting

Source: De Vinck (2011).

[88] The EU's Audiovisual Media Services (AVMS) Directive delineates on demand audiovisual media services (Art. 1 (a) (g)) as a form of non-linear distribution:

> "'(O)n-demand audiovisual media service' (i.e. a non-linear audiovisual media service) means an audiovisual media service provided by a media service provider for the viewing of programmes at the moment chosen by the user and at his individual request on the basis of a catalogue of programmes selected by the media service provider."
>
> European Parliament & Council of the European Union (2010, p. 12)

[89] One example is the "Slingbox", see www.slingbox.com.

Although on demand delivery of video is not new (e.g. cable or satellite based VoD), it has only very recently started to take off. Its characteristics are thus still being developed at the time of writing, as the film industry and other actors are experimenting with various business models and modalities.

Many modalities and business models:

The various VoD services can differentiate in at least five ways. Firstly, VoD can be delivered on a server/client basis or peer-to-peer.[90] Second, an on demand service can be delivered via different platforms, including: 1) the Internet; 2) IPTV, digital cable, satellite or digital terrestrial television (DTT); 3) stand-alone devices such as game consoles; 4) mobile receivers (e.g. via DVB-H) or even 5) cinema theatres (digital cinema on demand or DCD). In this regard, the uptake of digital equipment plays an important enabling role. A third aspect comprises that on demand films can be offered through downloading or streaming. Besides film rental, VoD services may also offer movies on a permanent basis (download-to-own[91] or, when the files can be burned on DVD, download-to-burn). Fourth, there are differences with regards to the payment model. From the point of view of the consumer, a 'free'[92] model (possibly compensated by indirect advertising income) exists alongside pay-per-unit and subscription-based models. Fifth, further differences centre on user possibilities, including the time period during which a title is available for the user (generally 24 or 48 hours in a rental model), the number of times a download can be viewed during that time period and/or the transferability of the movie file to different screening devices (cf. Vickery & Hawkins, 2008).

1) **client / server vs. P2P**
2) **many different platforms**
3) **Down-loading vs. streaming**
4) **payment models**

The search for lucrative business models has been going on for a number of years now. In line with past experience, major sector players reacted reluctantly in the early years of VoD – even if Hollywood seemed to recognise the importance of this new digital avenue. While early initiatives were set up around the year 2000,[93] it took the introduction of video-capable iPods and the sale of video downloads through the Apple Store to further spur the market from 2006 on. As a number of other big Internet companies announced their own video download services (e.g. Netflix, Amazon Unbox and Google Video), 2006 can be considered the tipping point in the establishment of the online movie market (Ulin, 2010).

Despite technical drawbacks (mainly broadband-related), piracy fears and a more general reluctance to meddle with existing business models and frameworks, the recent years have seen an upsurge of VoD channels. The drop in DVD sales (cf. supra) has been one of the conducive factors in the exploration of on demand business models (KEA & MINES, 2010).

VoD landscape in Europe – poorly documented

Clearly this is an emergent market, where business models are not yet fully established. It is difficult to obtain a complete overview the European VoD market

90 Peer-to-peer content is offered through a decentralised structure. While it is often used synonymous with illegal downloading sites, it can be used for legal VoD services as well (e.g. Sky uses it) (Kern European Affairs (KEA), 2008).

91 Permanent downloads are also known as Electronic Sell Through (EST) (Ulin, 2010, p. 300).

92 This refers to free (advertising-based) legal offerings.

93 Early Hollywood-driven initiatives were e.g. Movielink (set up in 2001 by a consortium of Sony, Universal, MGM, Paramount and Warner), which offered movies to download for a period of 30 days, during which they could be watched once over a 24-hour period. Around that time, the Hollywood majors also started to offer licenses to other VoD players such as CinemaNow (set up in 1999; first Hollywood deals signed in 2002) (McDonald, 2007; Ulin, 2010).

since data are relatively sparse, and not always comparable and transparent.[94] Nevertheless we can distil a number of trends and observations.

Large and rising number of players and services

First of all, a large and rising number of players and services are active in the European VoD market. KEA & MINES (2010) noted (on the basis of IFTA and NPA data) that the total number of VoD service providers in the EU rose from 132 in 2006 to 188 in 2009[95] (KEA & MINES, 2010, p. 73). The number of service providers varies greatly between countries, a variety that can be linked to elements such as the population level, the income per capita and/or the adoption of digital technologies (digital television, broadband penetration, etc.) in a given country. Northern and Western European countries are generally more advanced compared to Central and Eastern European countries (KEA & MINES, 2010, pp. 72-73). The number of VoD services itself is also quite large. Counting the number of VoD services for stock programmes (fiction, documentaries, animation, feature films, archive content etc.), catch-up TV services and those services that offer sports programmes on demand,[96] the Observatory counted 696 different VoD services in December 2008 (across 36 countries) (EAO & NPA Conseil, 2009). Regardless of different counting methods used in the various reports, the number of VoD services clearly follows the trend of an overall increase over the last couple of years (KEA & MINES, 2010).

In Europe, VoD is provided over many platforms …

Second, as mentioned, VoD can be offered according to a **large variety of modalities** with regards to e.g. the **delivery platform, the service providers, the delivery and payment models**. Even if the exact numbers differ between studies, the majority of the VoD services are active on the Internet, followed by IPTV services and those that are offered via digital cable, satellite and/or antenna. The number of Internet-based services moreover grows at the fastest pace (KEA & MINES, 2010; NPA Conseil, 2008b; Peacefulfish & Media Consulting Group, 2008). The distinctions between the delivery platforms are fluid, however, with e.g. Internet services striking distribution deals with cable or other television companies. With regard to the service providers themselves, the market is about equally divided

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94 A number of recent studies have tried to discuss the European VoD market, using different definitions and methodologies. See for instance the overview of methodological problems given by the Observatory in its most recent VoD study (EAO & NPA Conseil, 2009).) The trends and observations distilled here draw on many sources, in particular: 1) the study on multi-territory licensing KEA and MINES Paris Tech Cerna did in 2010 for the European Commission (KEA & MINES, 2010), 2) Peacefulfish and Media Consulting Group's 2008 report on the role of SMEs and European audiovisual works in the context of the fast changing and converging home entertainment sector (Peacefulfish & Media Consulting Group, 2008) and 3) the two most recent of a series of extensive VoD overviews by the European Audiovisual Observatory (NPA Conseil, 2008b; EAO & NPA Conseil, 2009).

95 Exemplary of the difficulties in comparing the different studies, the European Audiovisual Observatory counted 366 European on demand service providers (across the 36 Observatory member countries) at the end of 2008. (EAO & NPA Conseil, 2009, p. 118). KEA explains how the differences can be linked among other things to the fact that (1) the EAO includes more kinds of services such as pure catch-up TV services and sports on demand services and (2) EAO covers a larger territory (KEA & MINES, 2010).

96 The offer of VoD services is often centred on movies, even if catch-up television (not within the scope of our study) is increasingly important (NPA Conseil, 2008b; Peacefulfish & Media Consulting Group, 2008). The catalogues on offer differ according to the type of service providers: whereas pure VoD players are more likely to focus on archive content and feature films, broadcasters recycle their rights to offer catch-up TV (KEA & MINES, 2010).

… mainly by TV broadcasters telecom and cable operators, and also content aggregators and others …

between 1) TV broadcasters, 2) distributors (such as telecom operators) and 3) content aggregators and others (such as content producers themselves) (NPA Conseil, 2008b). Major telecom and cable companies are very focused on the expansion of VoD offers. The maturity of the market can be linked to the nature of the players active in it: emerging markets are generally dominated by infrastructure companies (cable, satellite, telecommunications); intermediate markets often have important broadcaster offers whereas 'pure' VoD offers can be found in the most developed markets (KEA & MINES, 2010).

… trying out different business models, subscription and download-to-rent being most popular.

In terms of delivery and payment models, a number of options are being tested. In 2008, streaming and temporary download-to-rent were most popular in Europe. Download-to-own were - according to analysts - not (yet) sufficiently competitively priced compared to the DVD sales market. Subscription-based and/or advertising-based models were sparse at the time, but in particular for Free VoD (FoD) models the expectations ran high (NPA Conseil, 2008b; Peacefulfish & Media Consulting Group, 2008).

Ease of use and pricing appear to be key drivers of legal VoD uptake. Service providers have to take into account the position of VoD vis-à-vis the other channels in the commercialisation stream. Acquiring illegal versions for free has never been so easy and thus puts further downward pressures on the prices consumers are willing to pay. The pricing models chosen by VoD providers will have an impact on the way the content owner is remunerated. The division of revenues between service and content providers has yet to become clearer as well. Concrete licensing models are usually veiled in secrecy (cf. KEA & MINES, 2010; Kern, 2009).

Following from this, a factor that could spur the uptake of Internet-based services is the (admittedly for a long time proclaimed) convergence of the Internet and the television set, also known as "living room convergence". This allows for place shifting, where consumers can choose not only when but also where to watch video content. Apple TV formed an early example of this, while gaming devices (Xbox, Playstation 3) have become important drivers of Internet-based on demand services offered via the television screen. It is projected that 9% of West-European households will have access to a 'home hub' or multimedia network by 2012 which will enable them to watch Internet videos on their television set (Bain & Company, 2007; Ulin, 2010). The recent KEA study notes that TV and game console manufacturers as well as other players are aggressively pursuing this market (described as "over-the-top TV") and in this way add to the expectation that a fundamental shift in the value of VoD is becoming visible (KEA & MINES, 2010). This demonstrates the interplay between hardware and software in shaping audience demand, with tablets such as the iPad the latest in this series of hardware evolutions that will continue to shape the ways in which audiences access films in an increasingly converged environment.

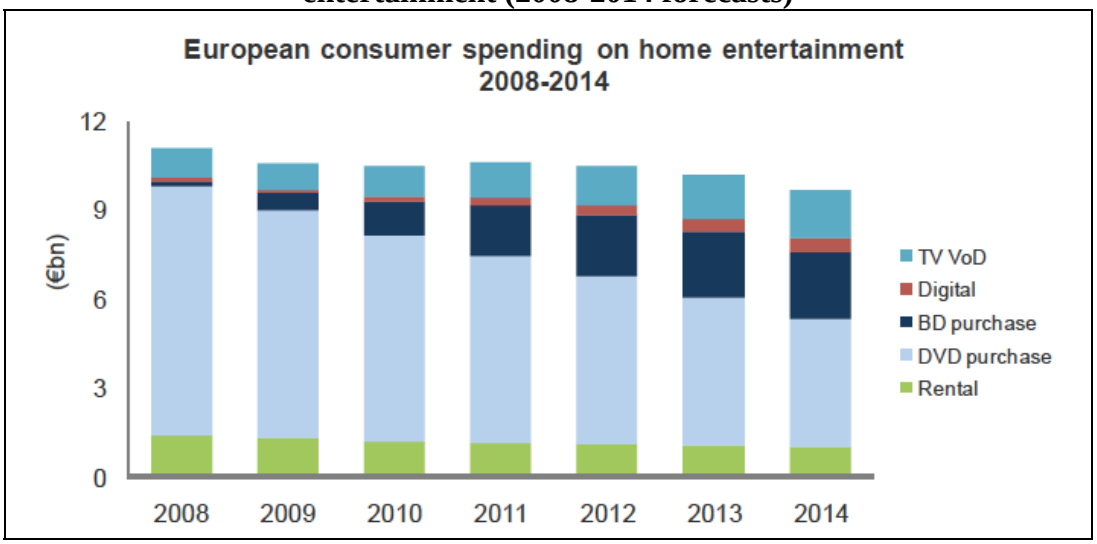
A third characteristic of the European VoD market is however that, for the time being, a plethora of players divide a small revenue pie amongst each other. The exact size of this pie is difficult to assess due to scattered availability of data. Research by Peacefulfish & Media Consulting Group (2008) showed that the average market share of the European VoD market (in an area of 31 countries, including the EU members and Norway, Switzerland, Iceland and Lichtenstein)

within the 'home entertainment' segment[97] stood at less than 1%. Paying for online media content is in other words still in its infancy. The most popular device to consume audiovisual content remains - at least for the time being - the television screen, in particular traditional 'linear' broadcasting. In other words: the European VoD market is not yet economically viable (KEA & MINES, 2010; KEA, 2008; Peacefulfish & Media Consulting Group, 2008).

Rapid growth at low levels.

Nevertheless, fourthly, a number of market analyses put forward strong growth numbers for the European area. Screen Digest data show an increase of (television-based) VoD turnover in the EU of 250% between 2006 and 2008 (when it stood at €644 million, SVoD, rental and EST combined). It is expected to rise up to around 2.2 billion euro by 2013 (cf. also Figure 4-10) (KEA & MINES, 2010, p. 78).

Figure 4–10: Total European consumer spending on physical and online home entertainment (2008-2014 forecasts)



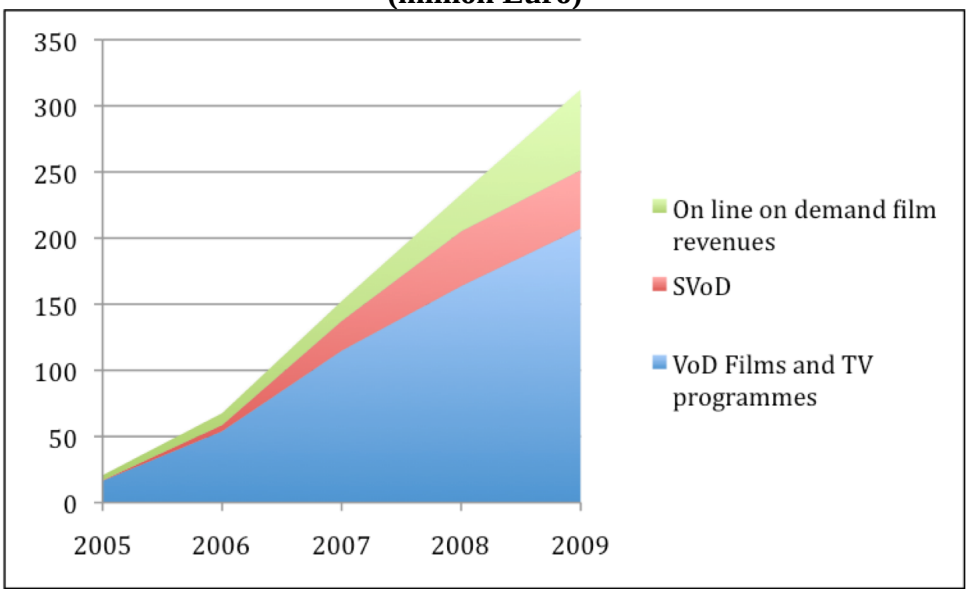
Note: Digital movies contain both rental and retail; while TV VoD comprises movies but also TV shows and sports. Therefore the actual size of the movie market is somewhat lower.

Source: Gunnarsson (2010).

Taking a closer look at the most recent figures given by the European Audiovisual Observatory (on the basis of Screen Digest data) confirm this growth and the dominance of TV-based VoD revenue. Figure 4-11 shows the evolution of consumer spending on film-relevant VoD categories between 2005 and 2009, including online on demand film revenues as well as subscription VoD, and VoD revenues of TV distribution platforms. For the latter two categories, a part of the revenues are derived from other programming categories than feature film. If one assumes this share to be about 2/3 (in line with the DVD market, cf. supra footnote 30), then total VoD revenues for feature films in the EU can be estimated at €150 million in 2009.

97 'Home entertainment' refers to content consumed at home including mobile entertainment (Peacefulfish & Media Consulting Group, 2008).

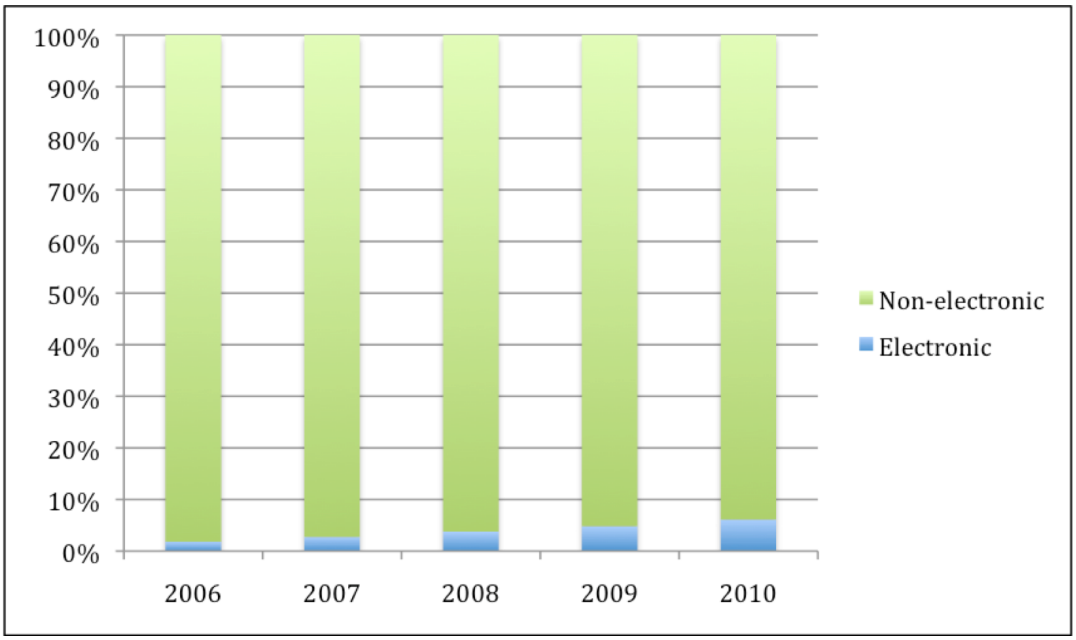
Figure 4–11: Consumer spending on relevant VoD categories in Europe (million Euro)



Source: EAO (2010).

All in all - varying methodologies aside - the European growth numbers are in line with the trends identified in the global market for online films. PWC data for the period from 2006 and 2009 show that digital spending on filmed entertainment (through online rental and digital downloads) has been on the rise, even if the share of total spending was still only estimated at circa 5% in 2010 (Figure 4-12). While both Europe and the US markets for online film show growth, the rate at which this type of revenue is rising lies much higher in the US. Yet we should note that these figures are likely to grossly overestimate US online film revenues, since DVD online rental revenues (and thus Netflix' DVD rental activities (Box 4–1)) are included. Within the electronic category, online film rental services are rapidly declining, giving way to streaming services (PWC 2011). Important to note is that PWC data on filmed entertainment do not include the distribution of films via TV-based VoD services. This shows once again the difficulties in getting clear insights in the revenue streams in the on demand market, due to the convergence between the different screening devices.

Figure 4–12: Global consumer spending on filmed entertainment: share of the electronic market



Notes: Filmed entertainment market consists of consumer spending at the box office for theatrical motion pictures, plus spending on rentals of videos at video stores and other retail outlets (the in-store rental market), purchase of physical home video products (the sell-through market) and cinema advertising.

Electronic distribution included download or streaming services whereby films and TV shows are accessed via a broadband or wireless Internet connection and can be viewed on a PC, a TV, a tablet, or any other devices as well as online film rental subscription services, such as those in which physical DVDs are delivered via overnight mail.

Source: PWC (2011).

Box 4-1: Netflix

Netflix was established by Reed Hastings in 1997 as an online solution for the problem of late fees when renting movies. The Netflix web site launched in April 1998 and was initially focused on the delivery by mail of DVDs on a rental basis. Since then, Netflix has moved towards the online world of Video on Demand**.**

As of December 31, 2010, Netflix counted 20 million subscribers (Netflix, 2011, p. 1), making it *"(...) the world's leading Internet subscription service for enjoying TV shows and movies"* (Netflix, 2011, p. 22).

Increasingly, the focus of Netflix has shifted from DVD-by-mail delivery to Internet streaming of video content. Its revenue model is subscription-based, with streams offered commercial-free. In 2010, the majority of Netflix subscribers viewed audiovisual content via streaming rather than through DVD-via-mail.

Through several partnerships, Netflix' offer can be streamed not only on the computer screen, but also on a variety of Internet-connected devices such as Blu-ray players and TVs, digital video players, game consoles and mobile devices.

Originally based in the US, Netflix is clearly following a global strategy. In September 2010, Netflix began its international operations in Canada, with a further international expansion planned in 2011-2012.

For sources and further information, see Annex B: Case study Netflix

In any case, the expected importance of this VoD market (together with the decline of the DVD market and rise of piracy) helps to explain the intense activity in the VoD field. Even if the take-up of VoD is still limited and its eventual benefits and structure uncertain, it is an important influencing factor, increasingly affecting existing business practices in terms of release windows, marketing and licensing (KEA & MINES, 2010). The sector also wants to win back territory from the illegal film market and avoid the fate of the music industry. The presence of European players and the involvement of European rights holders could thus form a distinct opportunity for the sector in view of the mid- to longer-term future. In the next section, we take a closer look at the prospects for VoD in terms of the realisation of a European single market for film.

An opportunity for Europe?

4.4.5.2. VoD in Europe: towards a single market for film?

The competitive prospects of VoD in Europe can be approached from two sides: 1) the presence and position of European firms and rights holders in this market and 2) the presence of European (non-national) films on these VoD channels.

In terms of the first, the potential role the sector's SMEs can carve out online is a key issue. European rights holders themselves have set up a number of VoD offers, examples of which include the French Universciné (Box 4-2), the Spanish Filmotech portal and the Danish FIDD/Movieurope (KEA & MINES, 2010).

Box 4-2: Universciné

"Le Meilleur du Cinéma" is a French collective that was set up in 2001 by twelve independent producers and distributors. Today it comprises around fifty partners. As such it represents circa 40% of the French annual film production output.

In 2006, its VoD platform "Universciné" was set up with support by the CNC and a web site was launched in April 2007. Universciné has been developed through a combination of private means and public support. Initially, the support came from the Société des Producteurs de Cinéma et de Télévision (Procirep) and from CNC. Since 2007, Universciné receives support of the EU MEDIA programme. Today, Universciné is not only available through an Internet platform, but also via deals with IPTV offers.

Universciné positions itself in a more cinephile audience segment, with a lot of attention given to the editorial context of the film offer.

Universciné has been active at the European level but not by expanding its own offer across border. Instead, it has set up partnerships with similar initiatives in other countries. First steps were made when Universciné Belgium was established. Each entity with which Universciné collaborates retains its independence and has a distinct content offer - even if the Universciné label is sometimes shared.

In 2010, Universciné France and Belgium officially formed a cooperation network, together with Filmin (Spain), Volta (Ireland), Good!Movies (Germany), Bord Cadre Films[98] (Switzerland) and Blind Spot Pictures (Finland): the European Federation of Independent Cinema Video on Demand Platforms (EuroVoD). EuroVoD's goal is to create a collaborative management structure between VoD platforms, production and distribution companies that are specialised in independent cinema across

[98] Which is moreover preparing the launch of "Universciné Switzerland" (EuroVoD, 2010).

Europe. The partners involved will pool resources and knowledge in order to promote VoD, arthouse films and foster the transnational circulation of films in Europe. A common film catalogue should become available to all its partner territories. For the time being, only the EuroVoD "collection" has been cleared and consists of 13 European film titles that are available on all the participating platforms.

For sources and further information see Annex C case study Universciné

However, the sector's reliance on presales, especially from television, makes it perhaps more difficult for rights holders (in comparison with their US counterparts) to realise digital initiatives. The traditional financiers of European film production (distributors and broadcasters) are hesitant given the small financial gains that can be reaped - for the time being - through this new channel. This in turn affects the production companies, as they are dependent on the traditional players to finance their audiovisual works. As digital distribution platforms are currently not getting involved in the financing of content production, many rights holders are not yet willing to fully explore the new distribution possibilities as it may hamper their presales in traditional markets (KEA & MINES, 2010).

…but a number of barriers persist

Moreover, with new players entering the VoD market, it is questionable how much margin for manoeuvre will remain for smaller European (rights holder) initiatives. It is expected that a number of pan-European media groups will take the lead, together with the American majors who are fully capable of exploiting the pan-European possibilities of the market (which should not be seen as synonymous with a uniform pan-European distribution campaign, for that matter). A number of Internet companies (Google, Apple, Microsoft etc.) are currently entering into large-scale content agreements with the US majors (KEA & MINES, 2010). Small and middle-sized companies (independent distributors, producers, or content aggregators) would then be convicted to niche markets (Peacefulfish & Media Consulting Group, 2008).

Among the new entrants to the VoD market are the so-called 'video sharing' websites, such as YouTube (Google) or DailyMotion. YouTube for instance has launched the 'The Screening Room' project in 2008 and is getting increasingly involved in online distribution for professional filmmakers. Recent deals with MGM, Sony and Lionsgate should enhance their free (advertising-based) offer of films (Kern, 2009; Zeitchik, 2009). That YouTube moreover closed a deal with the (indie oriented) Sundance Film Festival in terms of its movie rental service is perhaps even more significant for the European market (KEA & MINES, 2010).

From a European viewpoint, the dominance of two US-based VoD offerings forms a particular concern. With Apple's iTunes and Microsoft's Xbox Live Marketplace already dominating the US market (according to 2009 Screen Digest data taken up in the 2010 KEA study, iTunes has a 52% market share of VoD rentals and Microsoft's Xbox accounts for 31%) and a roll-out across Western Europe expected to strengthen their position, the Europeans are trailing the US. Other strong US-based players such as Netflix (cf. Box 4-2) also have a European expansion on their immediate horizon (Bloomfield, 2007; Jaroslavskaja, 2009; KEA & MINES, 2010; Wallenstein, 2011). Both equipment manufacturers and infrastructure providers (telecom and cable operators) often use content services in order to increase the uptake of their distribution systems or end-devices (KEA & MINES, 2010). In doing

so, they may undercut the market by offering movies at a loss, which they are able to do because their 'core business' lies elsewhere: the devices and software (cf. Jaroslavskaja, 2009).

On the basis of these elements, the trends visible in the VoD marketplace may turn the opportunity we outlined earlier into a threat. The explosion in VoD channels may then be accompanied by the dominance of a few big (mostly US) players. This raises doubts as to the ultimate diversity of VoD channels on offer.

This US player dominance brings us to the second aspect of European VoD competitiveness. When discussing the possibilities that European films will travel more and reach a wider audience in a digital distribution context, the long tail theory[99] has been often evoked and centres on the cultural possibilities offered by a digital world of abundance in terms of the availability and consumption of diverse content. Following from this, some have argued that the long tail will enable the European film industries to overcome a number of their traditional weaknesses in international distribution. Audience reach and interaction can be optimised and VoD reaches a larger, more international public over a longer time frame, i.e. the audience expands. For European (non-national) films this long tail model could form an opportunity to enlarge its audience.

Given that similar discourses arose when the home video market was established, the actual realisation of this potential remains to be seen. Working digitally has diminished but has not eradicated all (storage, sub-tiling, dubbing and other) costs. The perpetuation of rights licensing and other business practices for the time being continue to segment most of the European VoD offer along national or regional territorial borders. Even 'global' digital distributors (e.g. Apple) often filter their offer depending on the location of the consumer. As was the case for the DVD market, the possibility to offer films on demand with multiple subtitling options remains underexplored (KEA, 2008; Media Consulting Group & Peacefulfish, 2007).

So far, no indications of supply of more diverse (European) content online

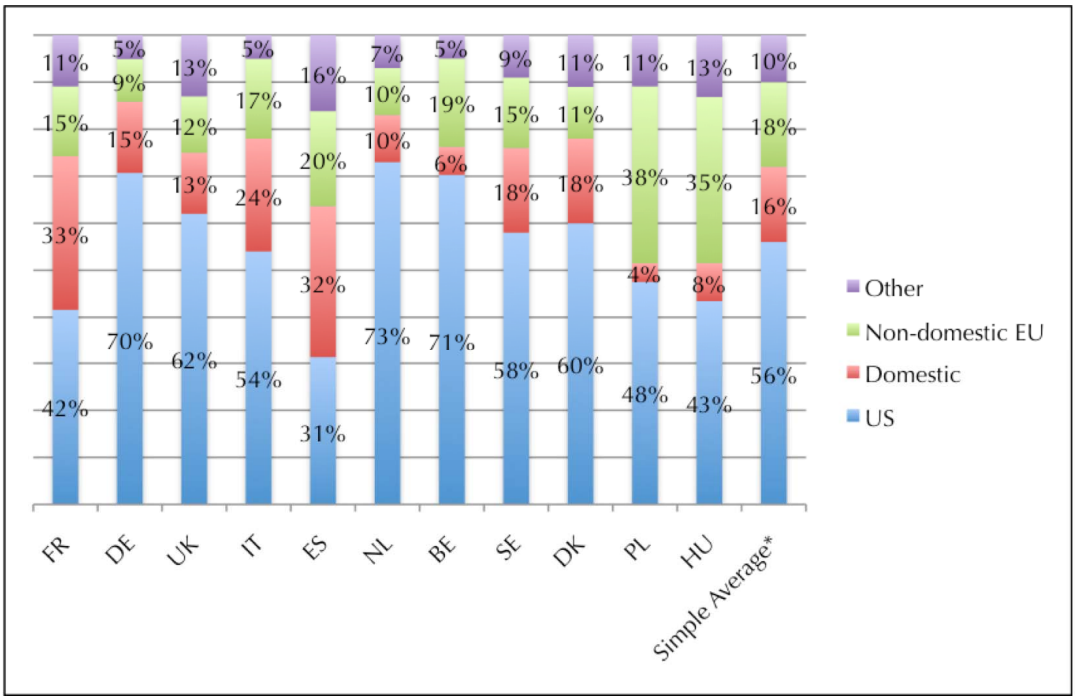
In view of these obstacles, it comes as no surprise that the circulation of (non-national) European films has not increased in a digital environment so far. First of all, from a supply side perspective, the presence of non-national European films appears to be no greater than before the advent of VoD. While the number of films offered via VoD is on the rise (Kern, 2009; NPA Conseil, 2008b), American films (essentially Hollywood movies) form the bulk of the offering (Peacefulfish & Media Consulting Group, 2008). A study by NPA Conseil showed that, across its sample, 56% of the films were American, versus 16% national, 18% non-national European

[99] The much-hyped (and criticised) "theory of the long tail" centres on three ideas: 1) that the 'tail' of available variety (e.g. of films) is longer than expected; 2) that this tail is now coming within (economic) reach and 3) that the aggregation of niches can sum up to a market of significant size. It claims that 'niche' and catalogue content become much more attractive for an aggregator in terms of the total revenue created through them. As a result, the aggregator will be induced to include this smaller-scale content in his offer. Moreover, as small audiences can be accumulated over time and place in the global marketplace, the market for such 'less-commercial' offers becomes larger (hence more cost-efficient) (Anderson, 2006). Two quotes are illustrative in this respect:
"Bottom line: a Long Tail is just culture unfiltered by economic scarcity" (Anderson, 2006, p. 53)
"*If the twentieth-century entertainment history was about hits, the twenty-first will be equally about niches."* (his emphasis, Anderson, 2006, p. 16)).

and 10% non-European. Specifically for animation films the balance tilts more towards European productions - US animations formed on average 38% of the ones offered via VoD.

The dominance of US films on VoD offers varies from country to country - there was only a 31% US market share in Spain,[100] but 71% and even 73% American movies in respectively the Belgian and Dutch VoD market (Figure 4-13). (NPA Conseil, 2008a, pp. 13, 16). While the large shares of non-national European films on Hungarian or Polish VoD platforms may be seen as promising example, a comparison of French CNC data showed that the availability of non-national European films is quite similar across the theatrical, home video and VoD markets (Figure 4-14). KEA et al. conclude that, in general, VoD services have for the time being not yet structurally fostered the availability of European films (KEA & MINES, 2010).

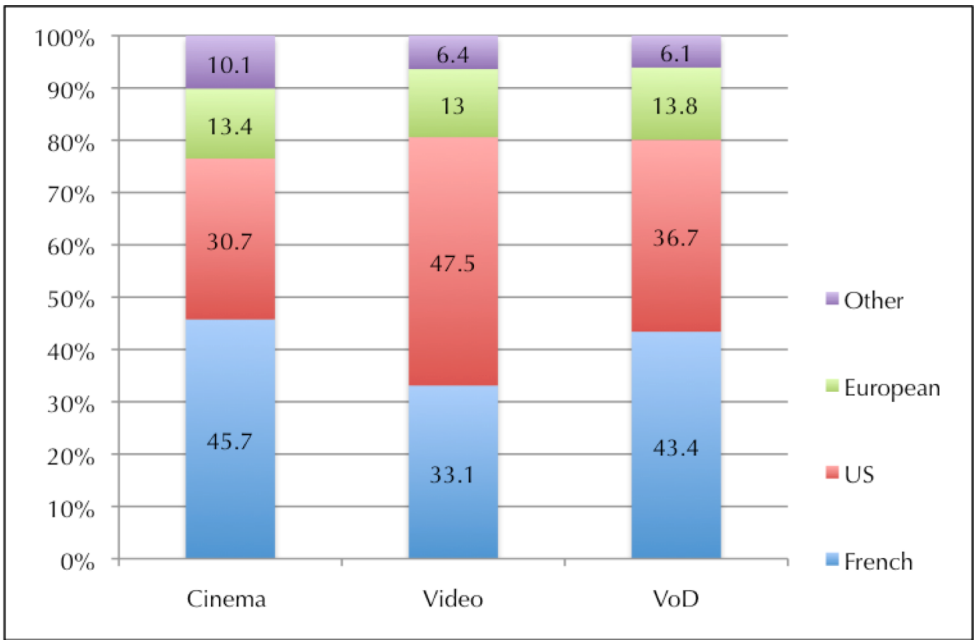
Figure 4–13: Origin of films available on a sample of VoD services (2008)



Source: based on NPA Conseil, (2008a, p. 13).

[100] A situation that could be partly explained by the existence of the Spanish producer-led VoD platform Filmotech.

Figure 4–14: Origin of films available in different markets in France,



Source: KEA & MINES (2010, p. 92) based on CNC data.

Note: The cinema data are for the year 2007, whereas for video they are for 2008. VoD data are for June 2009.

Cultural, economic and licensing problems persist

In the future, as much larger catalogues become available on a pan-European or global level, this could be a more logical avenue for non-national European catalogues. Such services could enable European content to reach limited audiences over a larger space and time frame, which would in turn lead to greater visibility within interested communities. In order to make such larger-scale VoD offers possible, overcoming the territorial fragmentation of rights and companies remains crucial. Given that VoD operators are faced with high transaction costs and the need for scale; whereas rights holders' small scale often keeps them from retaining their rights and/or clearing the license for them, KEA & MINES (2010) have argued that rights holders could use collective strategies to benefit from increased bargaining power and reduced transaction costs. Next to rights holders' own VoD initiatives (Filmotech, Universciné and others), a number of specialised "digital content aggregators" or sales representators are coming to the fore, both in the US (e.g. Cinetic's "Filmbuff") and Europe (e.g. Content Republic) (KEA & MINES, 2010). In any case, one can expect that cross-border initiatives will continue to focus first on countries with a cultural and/or linguistic proximity, much as is the case in an analogue environment.

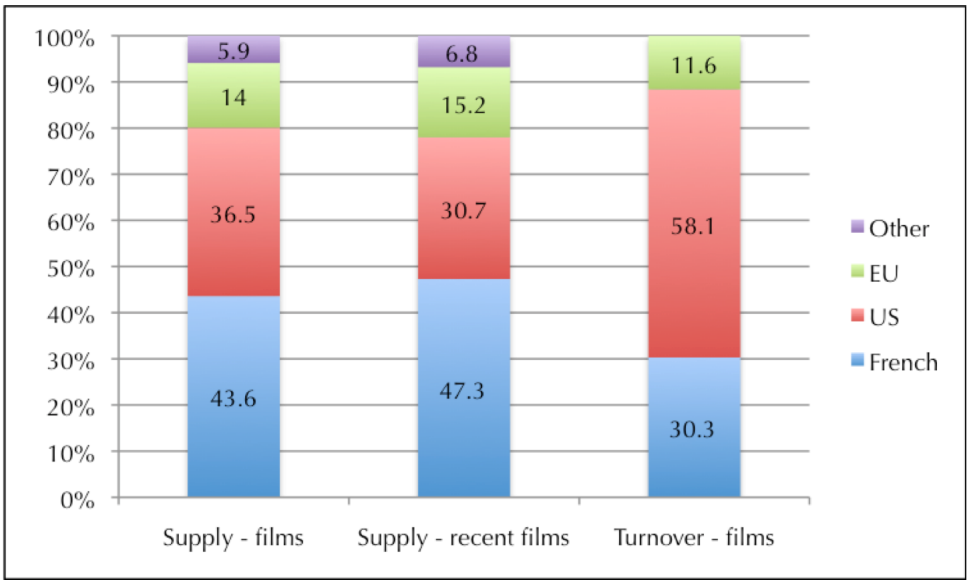
Yet even if the supply on VoD offers would become more diverse, the demand-side perspective brings us to a second obstacle for the realisation of increased non-national European film circulation on VoD services. The demand-side aspects of the long tail theory predict that as people get access to a quasi-unlimited selection of (e.g. movie) titles, their taste will become less mainstream (Anderson, 2006). Yet crucially, customers still have to be given the tools to find their way to niche content. Social media, personalised recommendation and search technologies all have an impact on how the audience discovers and selects audiovisual works and

should form a particular focus of attention for European sector and policy players. Specialised search engines may play a role here[101] (KEA & MINES, 2010). This need for a demand-oriented approach is not to be underestimated in the context of increasing the competitiveness of the European film sector. Especially for non-mainstream film (including the majority of non-national works), Europe has to get better insights in both the ways in which existing demand may be serviced more effectively, as well as the ways in which new demand streams may be generated. The latter should as such focus on increasing the diversity of film consumption across Europe.

Demand of online film is not more diverse than off-line (so far)

For the time being, the limited available data on VoD consumption namely point out that the market share of US films consumed on VoD platforms may be even higher than the share of American titles supplied through these VoD offers (KEA & MINES, 2010). Again looking at the French situation as an example, Figure 4-15 compares the market shares of films consumed (in terms of turnover) with their share in the supply of French VoD platforms. This graph shows how American films achieve a higher market share with a smaller share of titles. Figure 4-16 compares consumption patterns between VoD, home video and the theatrical market and confirms that the more diverse consumption environment occurs at the theatrical level. Thus, from the data presented here, we find no evidence of a more diverse (European) demand for online movies than for traditional windows.

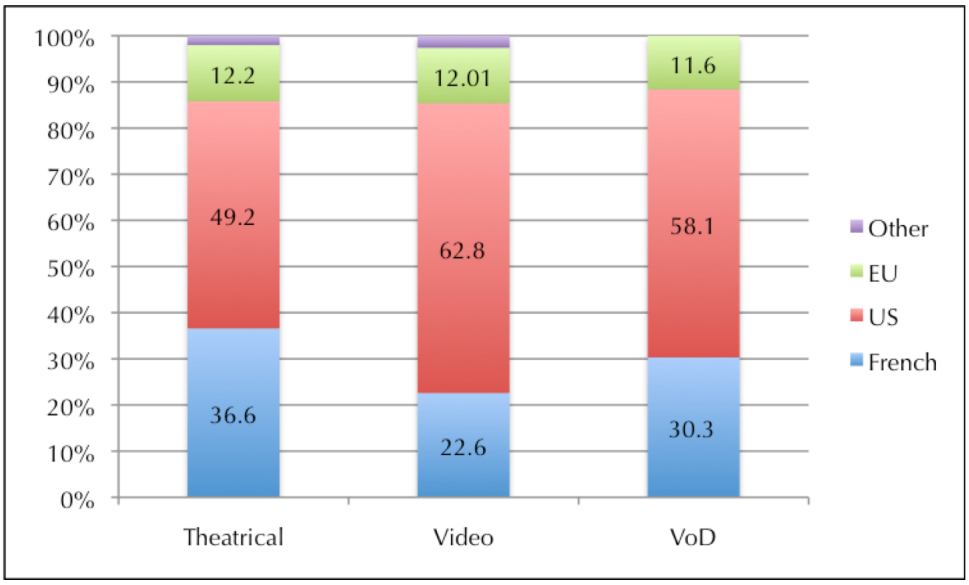
Figure 4–15: Supply and turnover of films on VoD by origin (France 2008)



Source: KEA & MINES (2010, p. 93) based on 2008 CNC data.

[101] E.g. the UK-based FindAnyFilm initiative (www.findanyfilm.co.uk), supported by the UK Film Council, offers information on where to find "any film", differentiating between the various versions (DVD, VoD, television broadcast, theatre). By October 2009, just 10 months after its launch, it had already reached 3.7 million users (KEA & MINES, 2010, p. 42).

Figure 4–16: Comparison of (consumption) market shares for films in theatrical, video and VoD (France, 2008)



Source: KEA & MINES (2010, p. 94) based on 2008 CNC data.

Lastly, if the long tail would bring about an expanded audience reach and consumption for European films, this does not entail that the European rights holders will become more competitive in terms of the revenue they are generating. Anderson himself acknowledges that the products in the long tail usually do not generate significantly more revenue. Instead, coupled with the democratisation of production tools, fragmentation may be reinforced, including a large amount of not financially sustainable entities. As such, the economic benefits of the long tail will most likely be reaped by successful content aggregators such as Netflix (cf. supra), who combine both hits and content in their offer. After all, from a consumer's perspective, the 'one-stop shop' is most attractive (Anderson, 2006).

4.5. Summary and conclusions

This chapter has investigated digitisation effects on the film sector value network. Clearly, while digital technologies have been introduced to separate parts of the film value network at different periods in time and following divergent paths, all these individual digital evolutions are now impacting the industry in its entirety in a disruptive way.

At first, the digital technological innovations that were introduced did not yet have a disruptive character. The first digital steps (in the 1980s and 1990s) were visible in the production stages of filmmaking, affecting both sound and image. In theatres, digital sound was starting to affect the audience experience. At home, the Digital Versatile Disc (DVD) replaced the home video cassette. These early developments were characterised by clear benefits and an absence of disruptive effects to the value network organisation – even if piracy at that time already emerged as a (perceived) threat to existing business models and value relationships.

In the new millennium, the digital physical movie carrier continued to evolve, with the launch of Blu-ray high-definition discs as the main milestone. More importantly, the digitisation of the traditional film value chain now more fundamentally affected

age-old distribution business practices and ways of working. Gradually, disruptive effects (in terms of changing cost structures and value relationships) of working with 'digital film formats' came to the fore and even touch upon the 35 mm public projection of films - the core of this century-old cultural industry. Moreover, and perhaps even more profoundly, digitisation is transforming existing non-theatrical film outlets such as home video and television while non-physical film consumption also crosses new frontiers following the rise of the Internet.

There are three recurring benefits of digitalisation: 1) increased cost-efficiency, 2) flexibility and 3) enhanced (or more consistent) quality. Conversely, the objections and problems that are raised with regard to the introduction of digital technologies and business models largely have to do with a (perceived) loss of control, which can be identified in various forms.

At the production stage, digitisation offers benefits in terms of cost efficiency, flexibility and quality that may help European producers to become more attuned with the market and the audience. There are particular opportunities in terms of establishing a more networked international production environment. This may lower the importance of being geographically close to the Hollywood ‘cluster’, and benefit European players. Networking trends meanwhile may offer incentives to explore pan-European approaches further or to strengthen international ties beyond European borders. Yet these trends may also imply a new source of competition for European players in the form of companies hailing from "cheaper" regions.

The Internet allows for new forms of sourcing talent and finance (crowdsourcing and crowdfunding) and could strengthen the relationship with the audience. This combined with reduced production costs and new distribution channels may lower barriers to entry in production. At the same time, some digital techniques (CGI, animation etc.) may further increase the cost of producing blockbusters. Further challenges have to do with making European content available digitally. This has to do, on the one hand, with the creation of Digital Source Masters (DSMs). In this respect, the European industry has for a long time lacked a long-term perspective and suffers from unclear cost structure divisions between producers and distributors. On the other hand, the digitisation of production back catalogues and archives constitutes a challenge, both in Europe and elsewhere.

Concerning distribution, working digital first and foremost leads to substantial cost savings. Working digital lowers duplication and transportation costs, while it provides more flexibility to adjust supply to an uncertain demand. Content customisation (subtitles, dubbing) becomes easier to manage and less costly, which could prove to be to the advantage of European films crossing borders. At the same time, the cost savings will be to the advantage of the Hollywood majors in particular, which will enable it to reinforce its economies of scale and blockbuster strategies, thus putting further pressure on the movie market.

Also for marketing, digitisation could turn out to be both an opportunity and a challenge for the European film sector. One the one hand, online and viral marketing strategies offer a cost-efficient way of targeting the audience. This is particularly useful for European films, which rely more on word-of-mouth than on mass marketing strategies. On the other hand, in a world of abundance, "branding" and other big-scale marketing pushes may become even more important to be able to stand out. In that respect, the European film sector lags Hollywood by far.

The most profound impact of digitisation concerns exhibition, and it does so in a number of ways. First, the release window system comes under increasing pressure (regarding both exclusivity and timing) from piracy as well as from the need to insert legal online alternatives into the existing structure. A less rigid system dependent on the type of film may offer a better fit between offer and demand in the long run. The shortening of the current windows may in this way offer some opportunities for smaller titles to benefit from e.g. a combined marketing "buzz". Piracy puts further pressure on the release windows. Digital piracy has become a real (at least perceived) problem for the industry since it enlarged both the potential piracy supply community and audience for pirated copies. The potential economic impact of piracy is still debated, sometimes in a doom or gloom fashion, with exaggerations on both sides. What is clear however, is that - aside from direct economic losses - it poses a more profound indirect menace to the basic premises of copyright as it has brought to the fore a consumer who increasingly expects content anywhere, anytime, anyplace…for free.

Digitisation is also affecting each individual window, including the theatrical exhibition landscape. Digital cinema provides benefits in terms of consistent projection quality, programming flexibility (including alternative content) and the cost-savings associated with digital distribution. However, theatre owners are confronted with high initial investments in order to make the conversion to d-cinema, while most of the benefits accrue to the distributors. Three main drivers of digital cinema have nevertheless pushed its roll-out, in particular in the last five years, somewhat earlier in the US than elsewhere: (1) the DCI standard; (2) the development of VPF solutions by third parties; (3) the revival of 3D movies. Still, small exhibitors are at risk of not surviving the transition. This would severely hamper the digital possibilities for theatres to broaden and diversify their activities, possibly also exhibiting more (non-national) European films.

In the home video market the transition to digital DVDs is already completed. The introduction of DVDs has expanded the market in a substantial way. DVDs also offer opportunities in terms of easier and less costly adaptation (e.g. dubbing and sub-titling) of content, which in theory could benefit the pan-European circulation of local films. Language, culture, localised business practices and scattered rights however have continued to form barriers for European content to cross borders. In recent years the DVD market has declined (both in the US and in Europe). The new high-definition format Blu-ray is growing but at low levels, so this growth has not compensated for the DVD decline (although there are signs of recovery in e.g. PWC data). A decline of the physical home video market is a clear threat and challenge for the sector as whole.

Digital TV, while not the immediate focus of this report, offers further possibilities for movie consumption through the rise of digital terrestrial, satellite, cable, IPTV and even mobile technologies. These transitions are well underway across Europe, although the progress moves at varying paces in the different countries.

Online movie consumption, lastly, includes two main features, which distinguish it from other channels. Firstly, it is online and hence dematerialised, which in turn has implications for the cost and speed of delivery. Secondly, it involves time and place shifting, i.e. the consumer can decide when and where to watch the film. Although on demand delivery of movies has been around since the 1990s, it has only very recently started to take off, and its characteristics are still being developed at the

time of writing, as the film industry and other actors are experimenting with various business models and modalities. Due to its immaturity, the VoD landscape, also in Europe, is poorly documented. Still a number of observations and trends have distilled. First, there is a large and rising number of (different) players providing an increasing number of services. In Europe, these offers are developed mostly by TV broadcasters, telecom and cable operators, but also by content aggregators and rights holders. In addition, device manufacturers (e.g. Apple, Microsoft, Sony) are playing an important role in the development of different business models, with subscription and download-to-rent being most popular so far.

The market, although not accurately captured by statistics, is still rather small in Europe, but growing rapidly. Being a growth market it constitutes an opportunity for the sector and for European firms. Yet while many European firms have entered the market, a number of US Internet companies have already started to carve out what may turn out to be dominant positions in the delivery of online films. Concerning European content, the long-tail economics of online movies may, according to its proponents, form an opportunity for European films and a diverse content offer in general. Still, we have distinguished a number of economic and licensing-related barriers that are limiting supply, while cultural, language- and consumer taste-related issues continue to hamper demand. Possibly, as catalogues increase in size and tools are developed that help consumers to search for, discover and select films, the long-tail economics may kick-in. So far however, the data at hand suggest that the online market is no more diverse in supply or in demand than its off-line counterparts.

Table 4-1 below summarises the observations from this chapter as opportunities and challenges of the European film sector (recognising that it is not always obvious whether to classify a factor as an opportunity, challenge or indeed, as in the original SWOT, a threat).

Table 4–1: Digital opportunities and challenges of the European film sector in different stages in the value network

Value network	Opportunity	Challenge
Production	Strengthening of interaction and ties between sector and audience Flexibility and cost-savings emphasize the network-like character of production New forms of sourcing talent and funding	DSM: Lack of long-term vision and unclear division of digital (mastering) costs between producers and distributors Digitisation of production back catalogues and archives problematic Lowering market barriers may be to the detriment of Europe's competitiveness in a global market
Distribution / marketing	Content customisation becomes easier (subtitles, dubbing) Cost-savings and flexibility could benefit the (trans-national) distribution of European films Online and viral marketing strategies offer a cost-efficient way of targeting the audience	Reinforcement of blockbuster strategies to the detriment of smaller films and their release strategies In a world of abundance, it may become more difficult to draw (marketing) attention
Exhibition / consumption	Digitisation brings flexibility and differentiation options for theatrical exhibitor, including potential for increased screening of European films The shortening of release windows could offer opportunities for smaller titles VoD market offers potential for growth The long tail model offers possibilities for European film offers in a dematerialised context	Slow digital roll-out putting smaller exhibitors at risk Licensing problems make it difficult to exploit cinema's back catalogue Decline of physical home entertainment market Piracy trend leads to consumer expectations to receive content for free VoD market trends point towards dominance of US groups and weak position for (transnational) European film supply and consumption Multi-territory licensing not taken up

We return to these opportunities and challenges in the next chapter, where we will confront them with the traditional sector strengths and weaknesses as well as European-level policy responses.

5. COMPETITIVENESS OF THE EUROPEAN FILM SECTOR: DIGITAL PROSPECTS (SWOT)

In this last chapter, we wrap up the main insights and link them to European policymaking. This means that we confront the analogue strengths and weaknesses of the European film sector as we identified them in chapter 3 with the digital opportunities and challenges that manifest themselves across the European film value network (Chapter 4). We also return briefly to the European policymaking level and address the way it has incorporated digital changes in its main regulatory framework. In this way, we link back to the discussion of the EU and Council of Europe policy developments in Section 2.4.

By weighing the strengths and weaknesses of the European film sector against the today's digital opportunities and challenges, we get a more realistic view of the extent in which changes to the sector could manifest in the near future and – most importantly – whether these changes would entail increased competitiveness of the sector.

Table 5–1: Summary SWOT

	Strength	Weakness	Opportunity	Challenge
Prod.	Large diversified production output Creative strength (in particular directors)	Lack of attention for and selection during development Lack of private financing coupled Dependency on public funding Low investment levels Volatile production landscape – lack of long-term orientation	Strengthening of interaction and ties between sector and audience Flexibility and cost-savings emphasize the network-like character of production New forms of sourcing talent and funding	DSM: Lack of long-term vision and unclear division of digital (mastering) costs between producers and distributors Digitisation of production back catalogues and archives problematic Lowering market barriers may be to the detriment of Europe's competitiveness in a global market
Distr/ market.	Large share European films finds its way into (theatrical) distribution Film markets and festivals	European distribution is concentrated with US majors and their affiliates (Territory-based) fragmentation Insufficient marketing	Content customisation becomes easier (subtitles, dubbing) Cost-savings and flexibility could benefit the (trans-national) distribution of European films Online and viral marketing strategies offer a cost-efficient way of targeting the audience	Reinforcement of blockbuster strategies to the detriment of smaller films and their release strategies In a world of abundance, it may become more difficult to draw (marketing) attention
Exh. / cons.	Large and relatively mature market for films Varied theatrical exhibitor landscape	European films are not exported (Smaller-scale exhibitors are under pressure in a concentrating multiplex-oriented market High market shares for US films in all markets (theatrical, home-video, TV) European films do not travel within Europe	Digitisation brings flexibility and differentiation options for theatrical exhibitor, including potential for increased screening of European films The shortening of release windows could offer opportunities for smaller titles VoD market offers potential for growth The long tail model offers possibilities for European film offers in a dematerialised context	Slow digital roll-out putting smaller exhibitors at risk Licensing problems make it difficult to exploit cinema's back catalogue Decline of physical home entertainment market Piracy trend leads to consumer expectations to receive content for free VoD market trends point towards dominance of US groups and weak position for (transnational) European film supply and consumption Multi-territory licensing not taken up

Better match between supply and demand needed from the production level on

In terms of production, firstly, it is clear that a diverse and creative offer in Europe is hampered by structural imbalances in the market that prevent many of the small industry structures to be viable and sufficiently market-oriented in the long term. Going digital brings about cost efficiencies and promotes decentralised working relationships that could offer opportunities for a pan-European (co-)production network to materialise. Moreover, as the audience comes increasingly centre stage within the film value network, a better connection between supply and demand could be envisaged from the earliest stages of film production. However, for this to materialise, a number of challenges should be overcome. Their lack of market strength does not make it evident for production companies to adopt the necessary long-term digital vision and could negatively affect the availability of recent and non-recent film content in suitable digital formats. The match between supply and demand can only be made when the sector's weaknesses in the other areas of the value network are turned around, starting with distribution.

Distribution both biggest weakness and area with largest digital opportunities

It is in distribution, secondly, that both the sector's biggest weaknesses and the most crucial digital opportunities can be situated. While a large share of the ever-growing European production output continues to be released on our screens, it is clear that territory-based fragmentation and a lack of marketing power limit the reach of these films, especially across borders. Film markets and festivals offer a much-valued alternative promotion channel but cannot compete with the huge power behind some of the more consolidated major film companies. Cost-savings associated with digital distribution and the ease in which digital files can be reproduced and customised according to local preferences (language in particular) could turn this situation around and permit European films to reach small audiences across a pan-European market. Thanks to viral and other targeted marketing campaigns, small audiences in every European country could thus be accumulated into a significant total customer base.

Crucial question relates to viability of a European film 'long tail'

However, as the market becomes more and more competitive, many European voices risk to be drowned out in a world of digital abundance. Digital cost savings could in fact benefit the majors and their international strategies of scale. Therefore, the crucial question in terms of the exhibition and consumption of films, thirdly, is whether the long tail of European films can materialise in a theatrical and/or non-theatrical digital context. Despite a mature and varied theatrical landscape, a historical perspective shows namely that European films suffer from a lack of screen space and audience attention outside the national markets. For the moment, the common European film market remains Hollywood-oriented. As digital cinema threatens to wipe out at least some of the smaller cinemas devoted to European cinema (the arthouses), there is a significant risk that this situation might further deteriorate. Yet perhaps the future of a pan-European film market lies in the non-theatrical sphere, where VoD offers sufficient shelf space to carry a number of riskier titles. However, the pan-European potential of these offerings is severely hampered from the start due to a lack of multi-territory licensing habits. Overall, the on demand market is still in its early stages and the sector as a whole continues to look for ways to generate revenue with this type of film exploitation in order to offset declining home entertainment revenues and the competition of illegal content offers. Moreover, there is need for more in-depth insights into audience patterns and how to improve the match between consumer demand and European film output.

Taken together, we can conclude that many of the digital opportunities form a good fit with the European film sector, in the sense that a number of them could enable sector players to overcome their competitive weaknesses while most are particularly suited to the sector's strengths in terms of diversity and creativity. Overall, the increasingly network-like structure of the global film landscape offers renewed opportunities for the large variety of smaller European film companies to increase their cross-border reach of activities by following networkisation strategies. This type of cooperation at the European level could offset some of the disadvantages associated with the lack of consolidation in the European film sector.

At the same time, vigilance is necessary as the digital threats (including the slow adoption of certain digital possibilities and the lack of a "digital mindset") could turn out to have the opposite effect. In the end, the sector's fragmented nature could be reinforced with old and new global dominant players filling the content pipes with even more power than before.

This means that sector and policy action will be crucial in order to tilt the balance in the right direction. In this regard, we identify four major action areas on the basis of the SWOT confrontation, outlined in Table 5-2. Each comes with its own specific action points.

Areas of attention include:

Firstly, the strengths of the European film diversity should be protected in a digital environment that stands under increasing competitive pressures from within and outside the industry. The preservation of small-scale (art house) digital cinemas is crucial, as is the development of viable and attractive VoD offers that offer an alternative to piracy.

1) protecting diversity of supply (in cinemas and on VoD)

Secondly, the diversity of the European film offer should be brought to the next level, by using digital opportunities to make companies and their offerings more dynamic and in tune with the audience. Networking and exchange opportunities should be fostered through the support for relevant online (social networking) tools, for instance.

2) increase networking and exchange

A third area of attention has to do with the risk that current weaknesses will not disappear but will become more apparent in a digital environment. Ensuring that European film players continue to have access to financing is crucial. Moreover, a larger part of their financing should come from the market. That current business practices stand in the way of multi-territory licensing is understandable, but clearly hampers the long-term development of a true common European film market.

3) ensure access to market financing and viability multi-territory licensing

Fourthly, it becomes increasingly unsustainable to focus industry and policy-making efforts on the supply side of the film sector. The digital opportunities offer renewed incentive to put more emphasis on demand development. Making sure European films are available on digital platforms is not sufficient. Both theatrical and non-theatrical exhibition could profit from intensified audience relationships. Film literacy is an important area for attention. From a pan-European perspective, renewed attention for subtitling is a crucial first step to make sure that European audiences get access to a diverse pan-European film offer.

4) demand development is crucial

Table 5–2: SWOT confrontation and main action areas

SWOT	Strengths	Weaknesses
Opportunities	Europe already has a diversified and large output of films, a vibrant festival tradition and a varied exhibitor landscape. Networkisation and flexibilisation trends should be taken on to strengthen links between the various smaller individual entities and the audience. The set-up of exchange and social networking tools could foster the development of a pan-European VoD offer and a more dynamic theatrical (art house) environment.	Transnational opportunities will only materialise when a number of weaknesses are overcome. Language fragmentation could be addressed by increased efforts in support of subtitling. Most importantly, the disconnection between European film supply and demand hampers the development of digital opportunities. Demand development (through e.g. film education programmes but also adapted search tools) should make it easier for consumers to find their way to (non-national) European films.
Challenges/ Threats	Increased competition of alternative leisure proposals, including illegal ones (piracy). Imperative that attractive legal alternatives are developed and that European films are featured in the various emerging new power players. Sustaining a vibrant and diverse exhibitor landscape will necessitate the smooth and rapid digital roll-out (with the help of public support).	Difficulties in market financing could increase in a digital future where revenue generation models in this sector have not crystallised yet. Existing licensing practices stand in the way of the development of a multi-territory European 'single market for film'.

Taking into account the various policy initiatives we discussed in 2.4, it is clear that these challenges have already been recognised and addressed to some extent by the European institutions. While support schemes have focused on the areas of digital cinema and VoD, the European Commission has been particularly active in terms of achieving a multi-territory online content market while both CoE and EU are increasingly aware of the importance of heritage conservation and media education. However, the content online issue shows how these initiatives often take a long time to develop and in general are hampered by a "soft" focus due to the limits of European-level competencies in many of the relevant policy areas.

But CoE and especially EU hampered by a lack of European "leeway" in order to realise single market objectives

Most of all, the idea of a common EU market for audiovisual services continues to be perceived as a threat by a substantial group of stakeholders, including film professionals. It is because of such controversies that audiovisual services for instance were left out of the so-called Bolkestein Directive, which aimed to create a single market for services (Herold, 2010). Yet as geographic and sector boundaries come down in a digital context, the European institutions find themselves to be the logical partner for the development of a digital policy approach – even if ingrained policy mechanisms put a brake on their action radius. The costs of sticking to a national approach are outlined by the Commission in a reflection document on creative content in a digital single market:

> "Since the Internet by definition allows access to content and services irrespective of geographic location, and since global competition for attractive creative content is fierce, responses to most of these challenges will have to be joint European ones, instead of being the result of separate or even contradictory national initiatives. Otherwise, not only

does Europe risk losing out in global competitiveness, but also seeing the cultural base of the European project weakened."

European Commission (2009b, p. 3)

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Annex A: Overview of the Hollywood Majors

The table below gives an overview of the current 'majors', their background, structure and timeline (continued on next pages).

Table A–1: Key data for the Major Studios

STUDIO	PARENT COMPANY	COUNTRY	OPERATING MOVIE UNITS	TIMELINE
PARAMOUNT PICTURES CORPORATION	VIACOM	US	MTV Films (1995) Nickelodeon Movies (1996) Paramount Pictures (1912) Paramount Famous Productions (1978) (straight-to-home) Paramount Vantage (2006) (Paramount Classics) (1998) (Specialty labels) Paramount Pictures International (international division)	1912: Famous Players Film Company founded by Adolph Zuckor 1913: set up Paramount Pictures (distribution) 1916: merger Jesse L. Lasky Company with Famous Players => Paramount Pictures 1966: acquisition by Gulf+Western Industries 1994: Viacom buys Paramount 1994: Viacom buys Blockbuster 1999: Viacom buys CBS 2005: Viacom buys DreamWorks 2005: Viacom and CBS spin off in two distinct public companies 2008: Dreamworks splits from Paramount to form a standalone company with support of Reliance (India) ; specialty labels our brought under the general Paramount fold
SONY PICTURES ENTERTAINMENT	SONY CORPORATION	JAPAN	Columbia Tristar Motion Picture Group: - Columbia Pictures (1924) - Sony Pictures Classics (specialty) - Screen Gems (specialty) - TriStar Pictures (2004) (genre films) MGM (incl. United Artists Films)	1967: UA sold to Transamerica Inc. 1982: Coca-Cola buys Columbia Pictures 1989: Sony buys Columbia-TriStar from Coca-Cola 2004-5: MGM acquired by Sony. MGM owned by an investor consortium comprised of Providence Equity Partners, TPG, Sony Corporation of America, Comcast Corporation, DLJ Merchant Banking Partners and Quadrangle Group. 2010-2011: MGM up for sale, but revived from bankruptcy following a restructuring. Currently functioning as an independent studio.
TWENTIETH CENTURY FOX FILMED CORPORATION	NEWS CORPORATION	US (reincorporated, used to be Australian)	20th Century Fox International (international) FOX Searchlight Pictures (1994) (specialty) 20th Century Fox (1904)	1904: William Fox establishes Fox Film Corporation 1935: FOX FILM CORPORATION merges with Twentieth Century Pictures => Twentieth Century Fox Film Corporation 1985: acquired by News Corporation 2006: Marketing joint venture with Walden Media (FOX Walden)

UNIVERSAL CITY STUDIOS	(COMCAST-) NBC UNIVERSAL	US (/FR)	Universal Pictures (incl. Illumination Entertainment) Focus Features (specialty) Universal Studios Home Entertainment (home video)	1909: Carl Laemmle founds Independent Moving Picture Company of America (IMP) 1912: IMP merges with 5 other companies => Universal Film Manufacturing Company 1951: Universal acquired by Decca Records 1962: MCA buys Decca Records incl. Universal Pictures 1991: Matsuhita Electric Industrial co. purchases MCA/Universal 1995: Seagram buys 80% share in MCA => renamed Universal Studios 2000: Vivendi, Canal + and Seagram create Vivendi Universal 2004: General Electric buys Vivendi Universal
WALT DISNEY STUDIOS MOTION PICTURES	THE WALT DISNEY COMPANY	US	Walt Disney Pictures: - Walt Disney Animation Studios - Pixar Animation Studios - Disney Toon Studios Touchstone Pictures (1984) Hollywood Pictures Miramax Films (specialty division) Walt Disney Motion Pictures International Walt Disney Studios Home Entertainment	1923: Walt and Roy Disney form Walt Disney Studio 1993: Disney acquires Miramax Films 1996: Disney acquisition of Capital Cities/ABC 2006: Disney acquires Pixar Animation 2009: Disney acquires Marvel Entertainment 2009-2010: Disney downsizes Miramax, then shuts down production completely. Miramax is sold to Filmyard Holdings in December.
WARNER BROS. PICTURES GROUP	TIME WARNER	US	Warner Bros. Pictures Warner Bros. Pictures International	1923: Warner Bros. Studios set up by brothers Warner 1928: acquisition of First National Pictures 1967: Warner sold to Seven Arts productions (CAN) 1969: Acquired by Kinney National Services => Warner Communications 1989: Warner Communications buys Lorimar Telepictures 1990: Warner Communications merger with Time Inc. => Time Warner 1995: Time Warner buys Turner Broadcasting System, incl. New Line Cinema and Castle Rock 2001: AOL-Time Warner merger 2009: AOL separation from Time Warner

Source: De Vinck (2011) based on company websites and Abrams (2010),Graser & McNary (2010), Hesmondhalgh (2007, pp. 161-162) McNary (2010a, 2010b), Schatz, (2008, p. 26); and Wyatt (1994, pp. 69-71).

Annex B: Case study Netflix

Company history

Netflix was established by Reed Hastings in 1997 as an online solution for the problem of late fees when renting movies. The Netflix web site launched in April 1998 and was initially focused on the delivery by mail of DVDs on a rental basis. For a flat monthly fee, customers could rent all the DVDs they wanted (three at a time) without ever having to pay late fees. The DVDs were sent via pre-paid mailing envelopes. Once films were returned, the films next in line in the consumers' personalised "rental queue" list were sent to them (Ireland (R. D.), Hoskisson (R. E.) & Hitt (M.A.), 2006, p. 12; Netflix, 2011, p. 5). Since then, Netflix has moved towards the online world of Video on Demand (Lowry, 2010).

Netflix is a public company since 2002 and made its first profits one year after that (Lowry, 2010).

Current position of Netflix

As of December 31, 2010, Netflix counted 20 million subscribers (Netflix, 2011, p. 1), making it *"(...) the world's leading Internet subscription service for enjoying TV shows and movies"* (Netflix, 2011, p. 22).

The company employed 2,180 full-time and 2,149 part-time or temporary employees at the end of 2010 (Netflix, 2011, p. 2). Table B-2 gives an overview of key economic data for the company between 2002 and 2010.

Table B–1: Key data for Netflix, 2002-2010

Year	Subscribers (thousands)	Employees (full-time)	Employees (part-time/temp)	Revenues ($) (thousands)	Operating income ($) (thousands)
2010	20,010	2,180	2,149	2,162,625	283,641
2009	12,268	1,883	2,197	1,670,269	191,939
2008	9,390	1,644	1,626	1,364,661	121,506
2007	7,479	1,542	1,128	1,205,340	91,773
2006	6,316	1,300	646	996,660	65,218
2005	4,179	985	445	682,213	2,622
2004	2,610	940	253	500,611	19,354
2003	1,487	567	224	270,410	4,472
2002	857	381	114	152,806	-11,672

Sources: Netflix annual reports for 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003, 2002.

Business and revenue models

Netflix relies on a number of partners for three main areas of activity. Firstly, it has deals with studios and other content providers, from which it acquires content through a variety of revenue deals. Typically, Netflix enters into multi-year, fixed-

fee licenses. In December 2010, Netflix's contractual commitments in this area ran up to more than $1.2 billion (Netflix, 2011, p. 6).

Secondly, it uses services of third-party cloud computing providers (Amazon Web Services in particular) and content delivery networks (Level 3 Communications) in order to stream this content to the consumer. For its DVD mailing service, it relies on a US-wide network of shipping centres.

Thirdly, it gets advertising space and other marketing services from a variety of partners (cf. infra) (Netflix, 2011, p. 2). The latter includes the provision of free trial subscriptions (Netflix, 2011, p. 25).

To the consumer, Netflix offers two main services. First of all, its US-based customers can order DVDs and Blu-rays, which are delivered to their homes on a rental basis. Secondly, they offer subscriptions to watch TV shows and movies over the Internet. The latter are delivered to a variety of devices including television, computer and mobile devices (Netflix, 2011, p. 1).

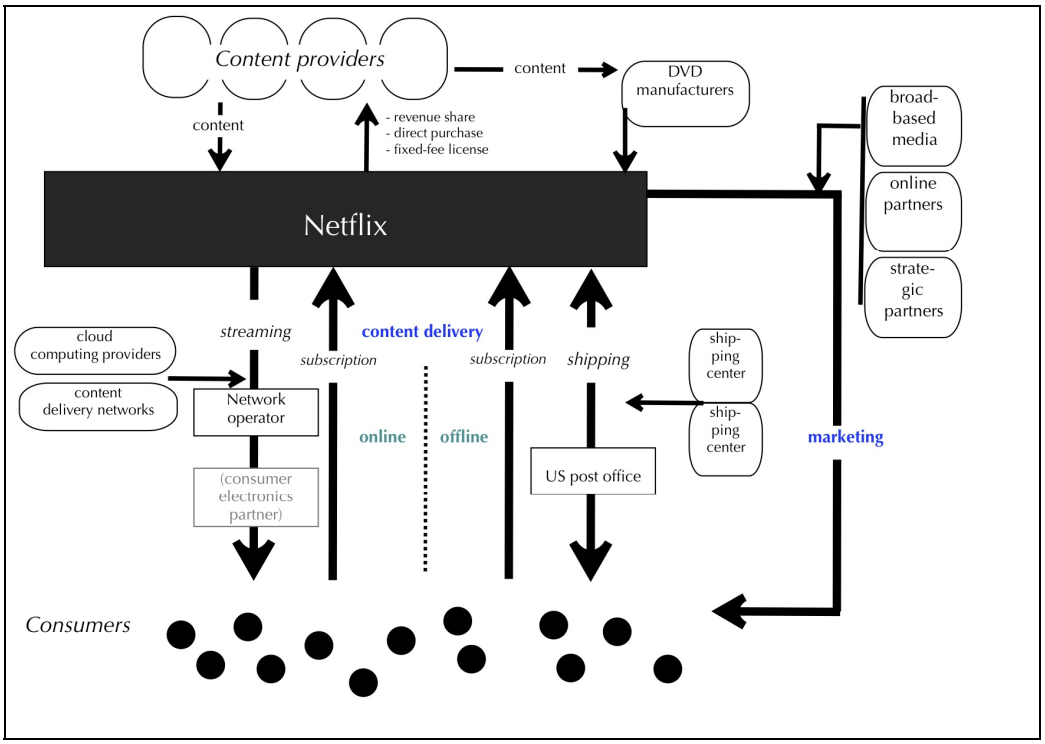
Increasingly, the focus of Netflix has shifted from DVD-by-mail delivery to Internet streaming of video content. Its revenue model is subscription-based, with streams offered commercial-free (Netflix, 2011, p. 1). In 2010, the majority of Netflix subscribers viewed audiovisual content via streaming rather than through DVD-via-mail (Netflix, 2011, p. 22).

Through several partnerships, Netflix' offer can be streamed not only on the computer screen, but also on a variety of Internet-connected devices such as Blu-ray players and TVs, digital video players, game consoles and mobile devices (Netflix, 2011, p. 7).

In terms of payment plans, Netflix offers a variety of subscriptions that involve a different number of DVD rentals per month. In the fourth quarter of 2010, Netflix introduced an unlimited streaming plan without DVDs at $7.99 per month. At the end of 2010, about 85% of all subscribers had opted for either that plan or for the 1 or 2 DVD-out unlimited plan. Customers pay a surcharge for high definition Blu-ray discs (Netflix, 2011, pp. 23-24). When Netflix announced a price increase in 2011, this provoked a storm of outrage amongst consumers in the US.

Next to content delivery, Netflix-consumer relationships also involve the marketing of the Netflix service, for which it uses online advertising, media (television, radio) and other strategic partnerships (Netflix, 2011, p. 2).

Figure B–1: Netflix' value relationships



Strategic challenges

Originally based in the US, Netflix is clearly following a **global strategy**. In September 2010, Netflix began its international operations in Canada. It aims for a further international expansion in the second half of 2011 (Netflix, 2011, p. 2). Taking their offer international is essential for Netflix to continue their subscriber growth, but at the same time forms an important challenge. It involves numerous, often territory-specific licensing agreements and a confrontation with a new set of competitors, including the UK's Lovefilm (which is in the hands of Amazon) or European cable and satellite companies (e.g. BSkyB, Canal Plus) (Wallenstein, 2011).

The market for entertainment video is very competitive and subject to change. VoD content offers, technologies, user interfaces and business models are still in evolution. Netflix is but one of the many players hoping to meet content distributor and consumer needs and expectations (Netflix, 2011, pp. 4-5). Netflix has identified the following types of companies as their **main competitors** (Netflix, 2011, p. 2):

- Multichannel video programming distributors (MVPDs) with free TV Everywhere and VoD content. This group includes cable, satellite and telecom providers including Time Warner, Comcast, Directv, AT&T.
- Internet movie and TV content providers, including Apple (iTunes), Amazon, Hulu and Google (YouTube).
- DVD rental outlets and kiosk services, e.g. Blockbuster and Redbox.
- Entertainment video retailers (Best Buy, Wal-Mart, Amazon).

Several of Netflix' competing companies paradoxically form its partners as well. Most prominently, Netflix competes with Amazon for the VoD and retail consumer market, but relies on Amazon Web Services for cloud computing services (Netflix, 2011, p. 10).

Moreover, Netflix' position is also tied to the evolution of its various partnerships, for instance with consumer electronics companies (Netflix, 2011, p. 7).

Like its competitors, Netflix is dependent on the willingness of content distributors to **license** films and other audiovisual programmes to it. Internet delivery necessitates a separate license, the details of which cannot be separated from the overall film value network. As such, some content distributors may e.g. grant exclusive licenses to a certain (type of) provider, which could negatively affect the availability of content on other platforms (Netflix, 2011, pp. 6-7). In early 2011, this issue became more acute for Netflix, as its 3-year licensing contracts were up for renewal. As the market for streaming online video has become much more established and competitive in those three years, content providers are reconsidering the nature of these deals. This is especially the case as Netflix competes with cable and telecom players who have often paid much more for the pay-TV rights of the same content (Epstein, 2011). Significantly, more than 250 films from Sony Pictures were suddenly pulled from Netflix in June 2011 because of contract clauses in the agreement between pay cable network Starz and Sony. The renegotiation of terms between Starz and the Hollywood studio will have clear consequences for Starz' deal with Netflix, with both today increasingly competing with each other for prime access to recent movie and television content (Fritz & Flint, 2011).

More generally, its future evolution is dependent on the way **release windows** take shape in the near future, including the delays between DVD sale and DVD rental (Netflix currently has several agreements with content providers in this regard), but also those between the various non-theatrical windows (Netflix, 2011, pp. 8-9).

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Annex C: Case study Le Meilleur du Cinéma - Unversciné

Company history

"Le Meilleur du Cinéma" is a French collective that was set up in 2001 by twelve independent producers and distributors. Today it comprises around fifty partners. As such it represents circa 40% of the French annual film production output. Originally established in order to strengthen independent producers in VoD negotiations by following a collective approach, it evolved towards a specific VoD service in 2003. In that year, it started distributing French language films to the French expat community with support from the French Ministry of Foreign Affairs. In 2006, the VoD platform "Universciné" was set up with support by the CNC and a web site was launched in April 2007. Since 2007, Universciné has received support of the EU MEDIA programme as well (De Vinck, 2009). In 2008, Universciné Belgium was launched, which exists as a completely separate entity set up by a different set of (Belgian) producers and distributors. Yet Universciné France's technological solutions and other knowhow has been instrumental in launching this initiaitve. Universciné France has further developed such European ties by setting up an increasing number of partnerships with other VoD platforms (since 2010 through the EuroVoD collective). Usually, these European partners make use of the technology developed at Universciné France.[102] Le Meilleur du Cinéma also redistributes MEDIA funding towards these European partners.[103]

Current position of Universciné

Universciné positions itself in a cinephile audience segment, with a lot of attention given to the editorial context of the film offer. This is realised through the publication of interviews, reviews, film articles and so on. It aims to be a place for "meeting and exchange" (cf. website).

Universciné currently offers more than 1500 films in France. The Universciné film collection was at first targeted at the French market, but has become increasingly European-oriented, partly under impulse of the MEDIA programming criteria.

In 2008, Universciné France reached 50,000 visitors monthly, 7 to 8,000 of which were returning consumers. Each month, its client base grew with 500 (Peacefulfish & Media Consulting Group, 2008, p. 196). Today (2011), the website reaches 80,000 visitors each month, with around 35,000 persons registered. Yet its web-based service represents only a fraction (5 to 7%) of the rental transactions, which mostly take place through IPTS offers with various partners such as Free. Overall, Universciné France accounts for 60,000 rental transactions monthly across a variety of channels.

[102] Within the EuroVoD network, only two partners make use of different technology: Filmin (ES) and Good! movies (DE).

[103] Only Filmin (ES) submits a separate VoD funding application to MEDIA.

Business and revenue models

Universciné has been developed through a combination of private means and public support. Initially, the support came from the Société des Producteurs de Cinéma et de Télévision (Procirep) and from CNC. The latter gave Universciné €90.000 for the online publication of 100 films. Since 2007, Universciné has received support from the MEDIA programme of the European Commission (Peacefulfish & Media Consulting Group, 2008, pp; 195-196, 198). Over the years, Universciné has received a total of €3.8 million euro in EU subsidies (cf. Table C-1).

Table C–1: Overview of MEDIA support for Universciné under the VoD/DCD support strand (2007-2010) (in €) (MEDIA, 2007, 2008, 2009, 2010)

Year	2007	2008	2009	2010	Total
MEDIA contribution	900,000	900,000	1,000,000	1,000,000	3,800,000
Total Universciné budget	2,477,800	2,705,608	2,306,057	2,268,127	9,757,592

The producers and distributors that are part of Le Meilleur du Cinéma give Universciné a mandate of (at least) 1 year per film, but for some (bigger) titles, the VoD rights may be not available (Peacefulfish & Media Consulting Group, 2008, p. 196). The contracts between Le Meilleur du Cinéma and its stakeholders can take on one of two forms:

1) Le Meilleur du Cinéma gets exclusive distribution rights for VoD platforms, including Universciné;
2) A VoD non-exclusive license that gives Le Meilleur du Cinéma the right to include the film in its Universciné VoD offer (Peacefulfish & Media Consulting Group, 2008, p. 196).

The content owners receive a non-specified share of the income, calculated on the basis of the number of downloads per film (Peacefulfish & Media Consulting Group, 2008, p. 196).

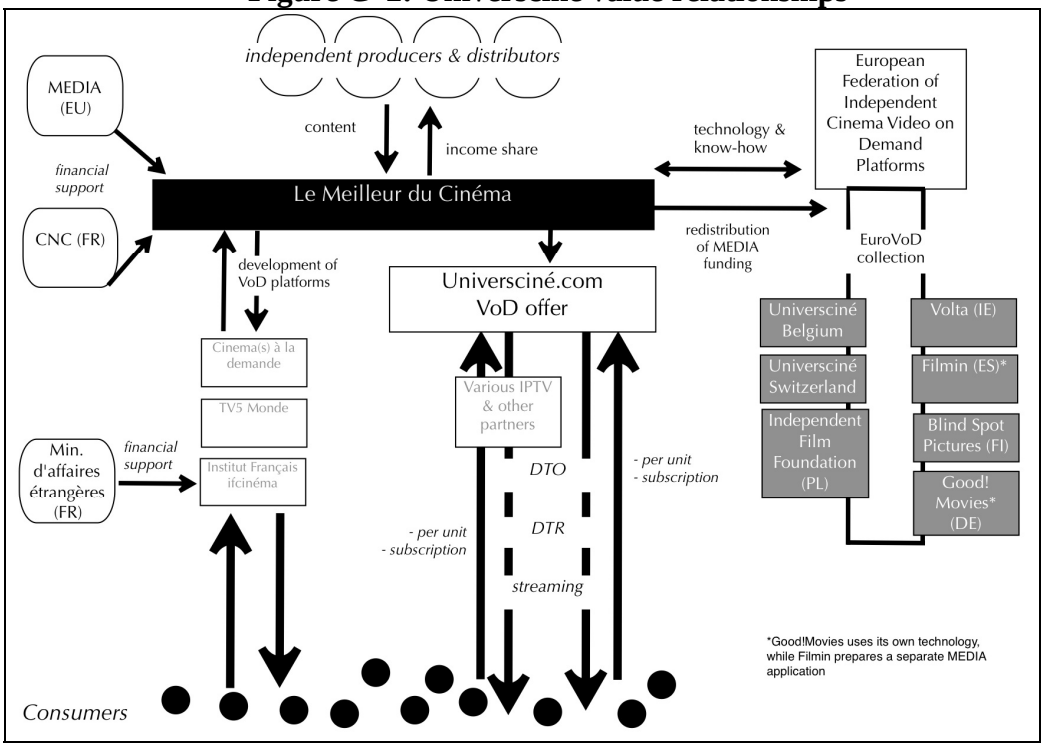
Universciné is not only available through an Internet platform, but also via deals with IPTV offers (De Vinck, 2009). These include Neuf Telecom, Free and Alice in France. Its offer is also visible in France via the Virginmega website and as a 'collection Universciné' within Arte's VoD offer. Universciné also has a deal with the public channel TV5 Monde. More recently, first steps have been taken in order to supply Universciné via internet-enabled televisions (for the time being Universciné is available on this type of TV sets manufactured by Samsung and LG).

For the delivery of its films, Universciné makes use of streaming, Download-To-Own (DTO) and Download-To-Rent. Streaming is predominant within an IPTV context, whereas DTR dominates the web-based rentals. Each rental is available for 30 days and will remain watchable for 48 hours once it has been activated (Peacefulfish & Media Consulting Group, 2008, p. 197). The Universciné France website offers both per unit pricing and subscription models. The price for a film varies between €0.99 and €4.99 (for France). A CinéPass offers access to more films, with the following pricing options available:

1) CinéPass for 5 films (Cinévasion) at €19.9;

2) CinéPass for 8 films (Cinéphile) at €29.99;
3) CinéPass for 14 films (Cinévore) at €49.99;
4) CinéPass for 20 films (Cinémaniaque) at €69.99.

Figure C–2: Universciné value relationships



Strategic challenges

Crucially, even if Universciné functions increasingly internationally, each country organisation functions as a separate entity with its own acquisition strategy and local licensing deals. Both the licensing and the international expansion of the consortium thus form a strategic challenge for Universciné.

In terms of its pan-European reach, first steps were made when Universciné Belgium was established. More recently, in 2010, Universciné France and Belgium partnered up with Filmin (Spain), Volta (Ireland), Good!Movies (Germany), Bord Cadre Films[104] (Switzerland) and Blind Spot Pictures (Finland) to create the European Federation of Independent Cinema Video on Demand Platforms (EuroVoD). EuroVoD's goal is to create a collaborative management structure between VoD platforms, production and distribution companies that are specialised in independent cinema across Europe. The partners involved will pool resources and knowledge in order to promote VoD, art house films and foster the transnational circulation of films in Europe. Ultimately, a common film catalogue should become available to all its partner territories. Content convergence will probably not be attainable for the full catalogue of titles (given rights issues) but will be increased gradually. Currently, a specific EuroVoD "collection" has been cleared and consists of 13 European film titles that are available on all the participating platforms (EuroVoD,

[104] Which is moreover preparing the launch of "Universciné Switzerland" (EuroVoD, 2010).

2010). Next to this joint acquisition initiative, the catalogues of the different platforms are similar in orientation - as a result a much larger share of titles is already present on several platforms in practice (at least 30% of titles). Nevertheless, rights clearance, including the clearance of musical rights with collective societies, form a clear challenge in terms of making a large content catalogue available.

Another challenge has to do with the emergence of new competitors, including large (US-based) players. iTunes is already available on the French market, with Netflix potentially entering the European VoD landscape in the near future. While Universciné deems that its distinct market segment approach may offer opportunities in terms of collaboration with these bigger players (much like they do with existing French IPTV players), the attitude and approach of these new offers will be a crucial determinant of the further expansion of Universciné. Linked to this, the limited harmonisation between the different regulatory frameworks across the EU member states could render Universciné in a disadvantageous position vis-à-vis certain of these new competitors, if some of them would not be subject to the same regulation (e.g. in terms of content or applicable taxes). This could be the case if these entities are based in other European countries that lack the same type and level of regulation. Further harmonisation of the regulatory framework is thus a challenge to be tackled at the European policy level in order to foster a competitive and equal pan-European market.

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Abstract
This report offers an in-depth analysis of the major economic developments of the film industry. The object of analysis is feature films, encompassing their production as well as distribution through and exhibition across different channels. It reviews the economic characteristics of the film industry, some of which it shares with other media and content industries. The report includes a database of 10 EU and 10 non-EU companies plus two company case studies (Netflix and Universciné). The report is divided into four major parts. Following an introduction (Chapter 1), Chapter 2 introduces the sector and its main economic, cultural, technological and regulatory features. Chapter 3 analyses the value network of the European film industry in a global perspective, identifying specific strengths and weaknesses across different parts of the value network (production, distribution and exhibition). Chapter 4 analyses how the film industry and its value network are being transformed as a result of the ongoing digitalisation process. Chapter 5 concludes the report by confronting the strengths and weaknesses of the European film industry and the opportunities and challenges posed by digitalisation.
The study is based on a review and synthesis of the available literature and reports and on official (Eurostat) and unofficial (trade organisations and consultancies) data on the cinema industry.

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