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Cinema Distribution and Exhibition in Austria – An Analysis of the Economics of Market Failure and Imperfect Competition

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The present article explores cinema economics in Austria from a supply-side media economics perspective. The main objective is to provide theoretical and empirical analysis for current changes in the economics of film distribution and exhibition in Austria. Theoretical challenge is to discuss the paradigms of market failure and imperfect competition for the cinema distribution and exhibition industry. Further, empirical evidence of market failure and imperfect competition will be assessed against theoretical assumptions and discussed with regard to effects on competition in the Austrian market. We argue that economic forces of market failure and imperfect competition cause economic inefficiencies. These forces also cause welfare losses in terms of reduced image diversity and plurality of outlets, and, consequently, a reduction in the diversity of views, which will endanger diversity and a pluralistic cultural supply.

The six key words that reflect the project main ideas are:

- 1) *Cinema economics*
- 2) *Market failures*
- 3) *Imperfect competition*
- 4) *Industrial Organization*
- 5) *Austria*
- 6) *Concentration*

1 Introduction

Since Chamberlin (1929) and Robinson (1933) developed their theories of monopolistic and imperfect competition, the terms ‘imperfect competition’ and ‘market failure’ constitute reference standards for industry analysis and evaluation within economics.

While neoclassical welfare economics states that market competition is Pareto-efficient and competitive market processes will ensure that individual preferences, as expressed through the market, will be met at least resource costs to society, imperfect competition explains economic forces that tend to ensure (a) *productive* (i.e., by not wasting scarce resources in the production process), (b) *allocative* (i.e., by producing the combination of goods and services consumers actually want), and (c) *distributive* (i.e., by getting the goods and services produced to consumers that actually want and need them) efficiency and thus perfect competition is constrained. Ultimately, these forces may result in economic efficiency not being provided by the market at all (i.e., ‘market failure’).

Economists have identified a gallery of causes for imperfect competition and market failure: the abuse of market power (i.e., when actors exert significant influence over prices and outcome), public goods, externalities, asymmetric information, to name but the most significant. Media economists conclude that the media market may also produce, allocate and distribute products and services inefficiently (Doyle 2002a, Heinrich 1999, Kiefer 2001). Product and cost characteristics of media goods (e.g., low to moderate elasticity of consumer demand; public good characteristics, high fixed-copy costs; high production, distribution and marketing costs) as well as operational (e.g., limited product and price strategies; high dependence on consumer revenue; cyclical financial performance) and market constraints (e.g., high entry barriers, low level of direct competition) may give rise to market imperfections where efficiency results may no longer hold (see, Picard 2002). Significantly, dominant firms may raise market entry barriers or try to control successive value stages under their single roofs through means of ownership concentration and vertical integration.¹ In this present work, we focus on features of market failure and imperfect competition in the cinema (or movie picture) industry sectors of film distribution and exhibition.

We know that the cinema industry is divided mainly into three sectors: production, distribution, and exhibition. The production sector includes all those agents who produce movies. Once the product is made, producers use distributors to introduce the movie in the theatrical market. Finally, exhibitors are agents that run theatres and place movies on their screens to attract audiences to generate box office revenue. The distributor is thus the product ‘ennobler’, packager, finance provider, and marketing specialist. He markets a motion picture, placing it in theaters, advertising and promoting it. Dally *et al.* (2002, 405) argue that “film distributors have tremendous power” and see their economic clout along the value chain the in “the ability to influence script changes, casting decisions, final edits, and marketing strategies; [and] in addition, distributors often are intimately involved in the financing of the film”. On the other hand, the exhibitor is the interface to the audience and mediator to the advertising industry. First and foremost, he sells films and ancillary products to cinema viewers. Theatrical distribution and exhibition have evolved into a multifaceted business, with many different sizes and types of firms participating in some or all parts of value creation, amplification and exploitation.²

We choose Austria as case study to argue that (a) economic forces of market failure and imperfect competition cause economic inefficiencies, and (b) these forces cause welfare losses in terms of reduced image diversity and plurality of outlets, and, consequently, a reduction in the diversity of views. Further, we assume these market forces may also have negative effects on competition as smaller, independent film rental businesses and movie theatres may have to leave the market. This process of consolidation leaves only the strongest or most specific in the market.

In this context, Swiss industry consultant *Prognos* (1997, 12) has put this market trend towards conditions of oligopoly for Austria as follows: “In general dominating actors in both countries reduce length of time feature plays in theatres or territories to the disadvantage of films with smaller budgets and raise the number of copies at the same time. Thus, economic factors of market behaviour of dominant operators prevent it or make it difficult for competing firms to enter the market and compete with existing suppliers without any economic leverage from a big player”. Does the market for film distribution and exhibition tend towards a monopoly and crowd-out smaller, independent actors? For example, even though the Austrian film is basking in successes of international film festivals, there is still some pessimism in the industry as to whether a free play of market forces and thus cinema economics will account for viable and sustainable market conditions. Substantial indicators which nourish this scepticism are not only the declining number of theatres, but rather the fact that the films played in the remaining Austrian cinemas are dominated by U.S. theatre chains exploiting their repertoires. Although the Austrian film is currently on the up, it must still fear for being provided too little presentation and publishing opportunities (Krill 2002, Ungerboeck 2002).

2 Research Framework, organization and objectives

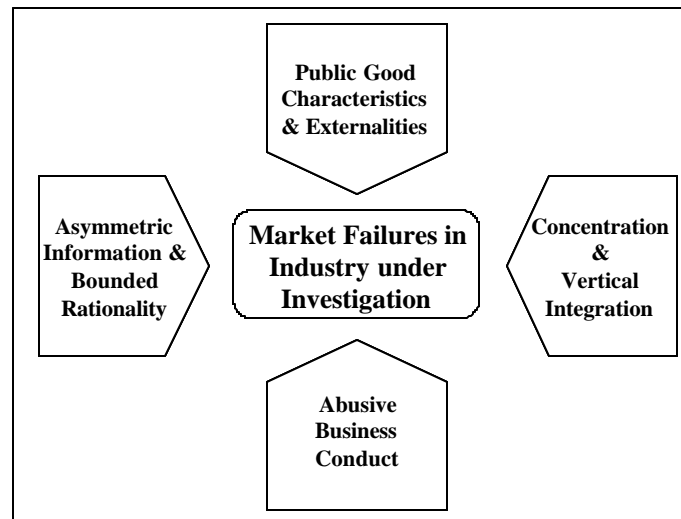
Following this chapter on the present research framework, organization and objectives, we will offer theoretical explanations for market failures and imperfect competition for the cinema industry from two disciplines and theoretical angles: *Media Economics* and *Industrial Organization* theory. Together, they will inform on discussions surrounding the neoclassical paradigm of market failure in the media industry and its applicability on cinema economics. The objective is to systematize research issues on the subject within media economics and to apply them to the cinema industry (Chapter 3). The Industry Economics approach will offer additional arguments with regard to the economics of imperfect competition in the cinema market. This is to build microeconomic foundations for media industry analysis and add theoretical substance and institutional body to the concepts of media economics (Chapter 4). We will then map out specific empirics of the Austrian cinema market with regard to issues of concentration in the multiplex market segment and vertical integration. This is to find empirical evidence for the theoretical assumptions established in the previous chapters. This will also broaden discussions of media concentration and its effects on competition and diversity (Chapter 5). Finally, research findings will be drawn for conclusion and new trajectories opened for future research (Chapter 6).

The theory of market failure consists of a litany of features in which conditions for competitive equilibrium may be failed. Noll (1989, 1255) emphasizes three perspectives on the market failure rationale: a positive theory of conditions under which a market produces an inefficient outcome, a normative theory that government ought to undertake actions to improve the efficiency of poorly functioning markets, and finally a positive theory that government will apply measures and

instruments to ameliorate failures through regulation. In this paper, we follow Noll's first perspective and depict four causes for market failure within media economics research:

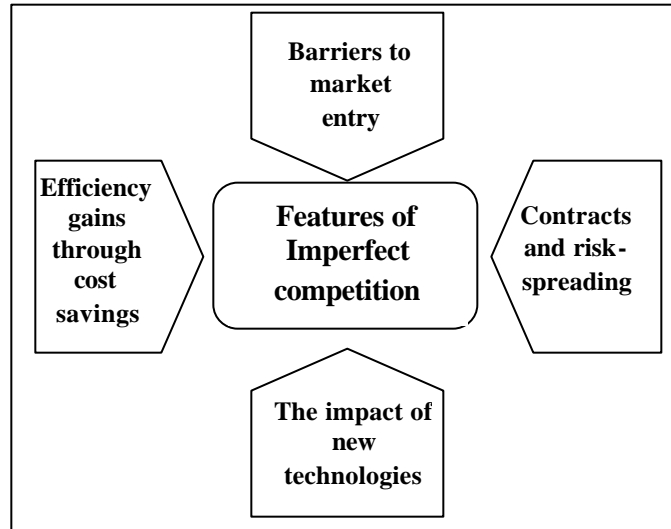
- (1) Public goods and externalities,
- (2) Concentration of ownership and vertical integration,
- (3) Abusive business conduct, and
- (4) Asymmetric information and bounded rationality.

Figure 1: Market Failures in the Cinema Industry



In the next section, we broaden our discussion on cinema market failures by referring to the following three core dimensions for market imperfections within Industrial Organization (IO) theory (see, Figure 2):³

- (1) Efficiency gains through cost savings,
- (2) Barriers to market entry,
- (3) Contracts and risk-spreading, and
- (4) The impact of new technologies

Figure 2: Features of Imperfect Competition in the Cinema Industry

Core element within the Industrial Organization theory is the Structure-Conduct-Performance-paradigm (commonly abbreviated as SCP-paradigm). In this model, market structure ([S], i.e., the number of buyers and sellers in the market, their degree of product differentiation, the cost structure, the degree of vertical integration with suppliers, and so on) determines conduct ([C], which consists of price, research and development, investment, advertising), and conduct yields market performance ([P], i.e., efficiency, ratio of price to marginal cost, product variety, innovation rate, profits and distribution) and thus the nature of competition in the industry as a whole.⁴ Together with other basic impact variables such as technology and elasticity of demand, they may help to explain interdependences between market structure, conduct and performance variables.⁵ By the 1970s and 1980s, a new paradigm within IO theory emerged: it recognized strategic aspects of competition and contributed to, and benefited from, developments in game theory, theories of firm behavior, empirics, strategy, and antitrust law (see, Tirole 1988).

Applications of IO theory on cinema economics are rare and only of eclectic nature. While Litman (1998) is said to have introduced the SCP-paradigm to cinema industry analysis (Litman 1998), a new generation of economists applies new IO theory to cinema issues from a gallery of different angles (e.g., Kenney and Klein 2000, Hanssen 2002, Filson 2003, Gil 2004).⁶ IO deals with markets and firms with imperfect competition, ranging from short-term market disruptions under perfect competition scenarios to long-run disequilibria under monopolistic competition, oligopoly and monopoly. Generally, competitive advantages arise from the constant effort to improve the firms' performance and upgrade products and services (Picard 2002, 44-46). While market power and cooperation in some areas suggest oligopoly, "life-and-death" competition and product differentiation are associated with the theory of monopolistic competition. Picard (1989, 33) suggests monopolistic competition as most appropriate descriptive approach for competitive constraints on cinema industry level. Following Picard, (2002, 44) competitiveness is thus a term to indicate the degree to which a firm or industry can survive, sustain itself, and remain a viable economic contributor. It also involves the degree to which a firm or national industry can respond to market opportunities or threats". As for cinema industry analysis under IO theory, market

structure and ownership pattern as well as the firms' strategic behavior are critical for analysis and evaluation of possible market outcomes. Overall, market imperfections play a structural role within explanations of IO theory.

Methodologically, we have carried out qualitative research by reviewing and synthesizing relevant technical literature, research documents and other related research material. Some empirical research was undertaken by means of non-standardised face-to-face interviews with selected industry experts and cinema practitioners in the field (see, *References*). Moreover, some field research was done with regard to collecting data for the Austrian cinema market.⁷

3 Market failures in the cinema industry

There are good reasons to believe in market failures in the cinema industry. The following theoretical concepts are regarded as most relevant within the media economics literature (Doyle 2002a, 64-66, Heinrich 1999, 24-49, Kiefer 2001, 80-82). We consider four features as seminal: (1) *Public goods and externalities*, (2) *Concentration of ownership and vertical integration*, (3) *Abusive business conduct*, and (4) *Information deficits and bounded rationality*.

Ad (1) Public goods and externalities

A substantial reason for market failure is the existence of public goods which are commonly defined as not being provided for by markets because of their non-excludability (which leads to 'free-rider' problems), and non-rivalry in consumption. These features refer to the difficulty of excluding those who do not pay and to the fact that there are zero marginal costs involved in supplying the service to one additional viewer (Adams 1993, Doyle 2002a, 64-66).⁸

Cinema exhibitions may be defined as marketable public goods: non-rivalry in consumption is not given *per se* as there may be capacity and access restrictions (Kiefer 2001, 149). And, cinema exhibitions remain marketable by the fact that consumers may be excluded if they do not pay for theatre entry. It applies the exclusion principle by the ticket price. However, once entry is effected, cinema film consumption is non-rivalrous among viewers. Further, if cinema is seen as linking pin for offering cultural works of film production to the public, it achieves qualities of cultural goods in as far as it symbolically refers to values and ideas and thereby constructs or obstructs the creation of public spheres. These goods exhibit features that are regarded as socially desirable (i.e., merit goods) or undesirable (i.e., demerit goods) irrespective of consumers' revealed preferences.

Externalities or external effects are another important source of market failure. These are defined as external effects (usually costs) imposed on third parties that occur when the private and internal costs to a firm of engaging in a certain activity are out of line with its costs to society at large (Doyle 2002a, 162). The misalignment between private and social costs constitutes a market failure because it may encourage or allow too many resources to be devoted to providing media content that causes negative externalities (*ibid.*).

Cinema films may convey positive external effects such as image diversity, plurality of opinion and thus a pluralistic cultural supply. This is said to strengthen cultural variety and, consequently, the public sphere of modern societies. Cinema films may thus be merit goods. Consumption of merit goods is thought to generate positive externalities where the social benefit from consumption exceeds the private benefit.⁹ That film produces cultural surplus value and not simply merchandise is beyond dispute. The problem lies in who is defining what is good for society and what not (Never 2002, 10-11). This problem of goal-setting, that is the determination of how good is good enough, is a primary issue. Public policy faces the problem of striking the right balance between paternalism and reliance on responsible individual judgement.

Ad (2) Concentration of ownership and vertical integration

Media economists are concerned about issues associated with concentration of ownership and the impact on its assumed obverse, competition (Doyle 2002b, Picard 2002). Competition is generally regarded as an essential means of fostering economic efficiency and of averting abusive behaviour of dominant firms. However, media markets are prone to economic concentration for a broad variety of reasons. This is because market concentration is a complex phenomenon. There is (a) *economic* (i.e., concentration as growth through take-overs, fusions or alliances is necessary under the premise of global competition; economic survival or sustainability is best guaranteed by concentration) and (b) *societal causes* (i.e., the growth of firms guarantees economic and thus societal wealth). There are different types (i.e., horizontal, vertical, diagonal and conglomerate concentration), and multi-dimensional effects of concentration (i.e., on the level of the individual, the firm, the industry, the product; on the level of politics and the economy; on the level of society as a whole). More pragmatically, concentration is also defined as a situation where the top firms in an industry collectively control the vast majority of industry sales or assets in the same product or geographic market (i.e., horizontal concentration). As for the cinema industry, the degree of horizontal concentration is commonly measured by reference to the number of screens controlled by the three most important operators in a country as a percentage of the total number of screens. Vertical concentration occurs when one distributor owns the exhibitor. In this segment, the degree of the distributor's involvement in exhibition (i.e., the level of concentration) is dependent on direct ownership through subsidiaries or majority share (i.e., direct vertical concentration) or the exertion of market power via means of alignments in the form of programming agreements (i.e., indirect vertical concentration; MEDIA Salles 1994). Naturally, causes for concentration of ownership in the cinema industry are pluralistic too. Economists have developed an array of theories to address the questions why firms vertically integrate: (a) *technical* (i.e., the degree to which a firm produces as much as it can from a given combination of inputs) and (b) *agency efficiency* (i.e., the exchange of goods and services in the vertical chain is organized cost-efficiently to minimize the coordination, agency, and transaction costs) are among the most crucial (Besanko *et al.* 2004, 148).

The structural issue that has most impact on the industry is the dominance of the distribution networks or vertical integration by firms linked to U.S. *Majors*. As clarified by Dally *et al.* (2002, 406), "... these companies produce, finance, and distribute their own films, but they also finance and distribute pictures initiated by so-called *independent* filmmakers who either work directly for them or have projects 'picked up' after progress toward completion has already been made".¹⁰ Following Dally *et al.* (2002, 407), the *Majors* use the following combination of formulas: "(a) *Stand-alone subsidiaries*, (b) *Joint ventures with local players*, (c) *Joint-venture* with another

U.S. Major partner, (d) *Sub-distribution agreements* with large local players, (e) *Presence* via a subsidiary in a neighbouring market”. It is known that there are other than organizational reasons for the supremacy of Hollywood cinema worldwide. Miller *et al.* (2001, 146) identify these in “superior production values, cartel conduct, cultural imperialism manufacturing the transfer of taste rather than technology or investment, and American sign-value as the epicentre of transcendental modernity – fixing social and individual problems via love, sex and commodities”. The market power of the Hollywood-*Majors* in feature film markets is also well attributed by the argot of scholars of the political economy of the media. For example, Hoskins *et al.* (1997, 61-2) see “a degree of concentration in the feature film distribution industry and (...) an economies-of-scale barrier to the entry of new competitors” and make a point for the crucial question “whether this structure has remained workably competitive; whether film distribution remains a contestable market”.

Filson (2003) looks into the economics of movie distribution from an empirical IO theory perspective. Within this framework, distributors and exhibitors are strategically interacting. Starting from an incentive to avoid “head-to-head” competition because of high-risk and film performance uncertainties, the players apply strategic choices for achieving equilibrium contract terms. Filson finds that vertical integration leads to more turnover in distributor inventories, more hits being shown in the theatre, a greater tendency to delay the releasing new hits, and longer runs for hits. Welfare comparisons show that integration is privately profitable for the firms and may improve social welfare even though it reduces industry profits. This is because consumer surplus can be higher under vertical integration. Chipty (2001) shows for the U.S. cable television industry that vertically integrated cable systems operators tend to exclude rival program services, which reduces the welfare of consumers located in the areas where these operators are in a monopoly position.¹¹

Ad (3) Abusive business conduct

Structural issues have also changed the relationship of film rental businesses and theatre houses. Industry observers increasingly criticize that dominant market operators apply unethical and illegal market strategies to distort competition in their favour (Pintzke *et al.* 1998). Block booking represents a traditional rental business strategy, with which major distributors employ the practice of forcing exhibitors to buy a potential hit only if they commit to class-B movies. Vogel (1998, 80) described this business practice of bundling of rights as follows: “The distributor will thus only accept a theatre’s bid on desirable films contingent on the theatre’s commitment that it will also run the distributor’s less popular pictures”. Theoretically, this particular business practice aims at cost reductions to be evenly split among distributor and exhibitor. Kelly and Klein (1983) call this bundling an avoidance strategy of pre-contract ‘oversearching’ and post-contract opportunism (Kenney and Klein 2000). For Hanssen (2000), this practice is beneficial for exhibitors. Pintzke and Koch (1998, 102) identify a rise in restrictive business practices in Germany. Particularly strategies of reducing film exhibitions cycles and flooding the market with an ever increasing number of film copies have led to an increase in the average film rental load which way heavy on the profitability of cinemas. “Theatres rent promising films with over 300 copies for more than 53% of box office receipts. The film rents sink with increasing run-times. However, by reducing the run-times only few films are exploited beyond minimum play-time and would not thereby benefit from lower theatrical distribution fees”.

Accelerated exploitation of films for faster amortization of expenses is accompanied by further malign business practices: exclusive opening and selective distribution. Exclusive opening is a common type of release strategy whereby a film is opened in a single theatre in a region, giving the distributor the option to hold the film for a long exclusive run or move it into additional theatres based on the film's performance. Smaller independent theatres complain to suffer from selective distribution agreements to a point where they are illegally deprived of films they would wish to bid for or have bid but were not delivered. Vogel (1998, 80) sums up the dynamics of these abusive practices as follows: "Large production budgets, high interest rates, and the need to spend substantial sums on marketing provide strong incentives for distributors to release pictures as broadly and as soon as possible (while also, incidentally, reducing the exhibitor's risk) (...) Whereas in theory, movie releases from all studios can be expected to play in different houses depending only on the previously mentioned factors, in reality, some theatres, mostly in major cities, more often than not end up consistently showing the products of one particular distributor. Industry jargon denotes this as theatre 'tracks' or 'circuits'. Tracks can evolve from long-standing personal relationships (...) that are reflected in negotiated rather than bid licences, or they may indicate de facto product-splitting or block-booking practices".

Market control is further strengthened by revenue-maximization strategies of feature film content which begin their marketing life in domestic theatres, and then go on to maximize revenue streams in the ancillary markets, such as global distribution in theatrical and subsidiary markets to pay cable, pay-per-view, commercial TV and home video (Vogel 1998, 76; Gomery 1998, 275; Doyle 2002a, 84-87). Following Vogel (1988, 75), "... sequential distribution patterns are determined by the principle of the second-best alternative. That is, films are normally first distributed to the market that generates the highest marginal revenue over the least amount of time. They then 'cascade' in order of marginal-revenue contribution down to markets that return the lowest revenues per unit of time. This has historically meant theatrical release, followed by licence to pay-cable program distributors, home video, television networks, and finally local television syndicators. Yet because the amounts of capital invested in features have become so large, and the pressures for faster recoupment so great, there appears to be a gradual trend toward earlier opening of all windows". Vogel (1998, 76) concludes that "sequencing is always a marketing decision that attempts to maximize income, and it is generally sensible for profit-maximizing distributors to price-discriminate in different markets or "windows" by selling the same product at different prices to different buyers. It should not be surprising to thus find that, as new distribution technologies take hold and as older ones fade in relative importance, shifts in sequencing strategies will occur. Such windowing is also a way in which the public-good characteristics of movies used as television programmes can be fully exploited".

Ad (4) Information deficits and bounded rationality

Cinema markets are characterized by either the buyers (i.e., the cinema-visitor) or the sellers (i.e., the exhibitors) having considerably more information about the product than does the group on the other side of the transaction. Such asymmetrically distributed information may result in opportunism on the basis of bounded rationality and tactical behavior (Akerlof 1970). Applications for the cinema industry vary and range from discussions on information deficits with regard to film value and quality to phenomena of bounded rationality in decision-making processes of cinema attendance. These failures illustrate deviations from the neoclassical economic model of the homo-economicus based on assumptions of perfect rationality, self-

interest, and profit-maximization. Visitors consume films without knowing their value in advance and select second-best options which may satisfy their actual needs immediately. Simon (1955) calls these visitors ‘satisficers’. Further, cinema-visitors may decide for subscriptions to specifically preferred cinemas and their programs in ways that deviate from assumptions of perfect rational behavior. Brennan and Buchanan (1993) capture moments of decision-making based on meta-preferences such as religious or political beliefs or moral values. Cinema-visitors may thus reveal individual preference settings which evoke factual behavior to contradict their preferences announced.

4 Imperfect competition in the cinema market

Most companies in the cinema industry compete in imperfectly competitive markets. These are characterised by structural determinants such as barriers to entry may take the form of pervasive economies of scale and scope, control over strategic resources and patents, absolute cost barriers, and various predatory practices designed to keep competitors out of the industry (see, Litman 1988). Theory suggests that, under imperfect competition, prices are higher and output lower than under perfect competition. This is held to lead to inefficiency and a pareto-suboptimal equilibrium and will cause net economic welfare losses (Varian 1999). We depict four seminal dimensions for market imperfections: (1) *Efficiency gains through cost savings*, (2) *Barriers to market entry*, (3) *Contracts and risk-spreading*, and (4) *The impact of new technologies*.

Ad (1) Efficiency gains through cost savings

The analysis of increases in efficiency through economies of scale and scope is a important issue addressed by IO theory. Very roughly, these cost savings cause the average cost of producing a commodity to fall as output of the commodity rises. This generally results from technological factors which ensure optimal size of production is large. With high fixed-costs in plant and machinery, the larger the production, the lower the costs per unit of the fixed inputs. Kalaitzandonakes *et al.* (1996) identifies the following sources of economies of scale: “(a) *Indivisibilities in inputs*: When inputs are lumpy in nature or non-rival in consumption they are, at least in part, independent of scale and their costs can be spread over a larger level of output resulting in lower unit costs. Such inputs include capital, R&D and advertising; (b) *Specialization in inputs*: When the scale of the plant or the firm increases, opportunities for specialization for both the labor force and the capital equipment become available resulting in increased efficiencies; (c) *Lower input costs*: Input costs may be lowered due to volume discounts, lower transaction costs, reduced inventories and other similar cost efficiencies resulting from large scale of operations; (d) *Advanced techniques and organizations*: Expanded scale of operations may make possible more efficient methods of production and distribution (e.g., automation) and allow improved organization of resources resulting in efficiency gains; and (e) *Learning*: Efficiencies may result from increased scale due to rapid learning. Such economies are more readily available in production and distribution processes involving high degrees of tacit knowledge”.

The cinema distribution sector faces multiple cost characteristics (Dally 2002). The main cost items are (a) *Print*: Subtitling and dubbing, accessing or buying an internegative (i.e., the color negative made from the color positive) from which to make the required number of prints, production of feature and trailer prints, shipping costs and duty payable on prints; (b) *Advertising*: Designing and printing posters for display in cinemas and on billboards; costs for trailers,

advertising space in newspapers, magazines, spots on radio, TV and within cinemas, outdoor advertising; (c) *Publicity*: Stills and transparencies for distribution to media, Electronic press kits for TV and radio, pre-release press screenings, special stills of stars; (d) *Promotional*: merchandizing, tie-ins, advance screenings, and (e) *Royalties, taxes and dues*: Residuals, income tax and trade association dues.

Theoretically, as the scale of output increases, marketing and distributing of cinema products (i.e., film copies) in increasingly diverse and geographically dispersed markets becomes necessary. Such operations tend to involve larger transportation costs. Economies of distribution and marketing may result from dense distribution networks where average costs of distribution and marketing may fall as density increases. By contrast, coordination costs over large distances (e.g. costs of gathering information and accessing potential customers) per unit of output may also increase leading to diseconomies of scale in distribution. Depending on firm size and financial clout of the distributor, wide and simultaneous releases are considered a costly procedure. On the other hand, industry economies of scale may be reaped if the industry lessens the burdens of costly inputs, for example by sharing technology or managerial expertise.

Economies of scope are cost savings gained by joint activities in manufacturing, distribution and marketing among separate products. These cost savings allow greater market power associated with increased size might create new opportunities for the enlarged media firm to raise prices or otherwise abuse its dominant market position. Market concentration is considered a result of this process which, in turn, can lead to behavior and practices that may run contrary to the public interest. The benefits caused by economies of scope can be seen in the company's newly-acquired ability for cross-promotional marketing and bulk advertising buys. For example, movie theatres services, such as their web performance can be advertised heavily on the integrated distributors' internet service.

Ad (2) Barriers to market entry

Bain (1956) defines barriers to entry as factors that make it possible for established firms in an industry to enjoy supra-normal profits without attracting new entry. Without entry barriers there can be no long-run market power (see, Schmalensee 1988). Following Besanko *et al.* (2004), Bain emphasises three entry conditions: (a) *Blockaded entry*: Structural barriers such as natural cost or marketing advantages are so high that the incumbent need do nothing to deter entry, (b) *Accommodated entry*: if structural barriers are low, and either (ba) entry-detering strategies will be ineffective, or (bb) the cost to the incumbent of trying to deter entry exceeds the benefits it would gain from keeping the entrant out; and (c) *Deterred entry*: if (ca) the incumbent can keep the entrant out and choose an entry-detering strategy, and (cb) employing the entry-detering strategy boosts the incumbent's profits. Structural entry barriers consist of control of essential resources, economies of scale and scope, and marketing advantages of incumbency (see, Besanko *et al.* 2004, 301-2). Additionally, new IO theory has identified strategic behaviors working as entry barriers such as exclusive dealing and long-term contracts with retailers (Tirole 1988, 185).

As for the movie industry, the most obvious barrier for independents to entry is the high cost of acquisition. Larger studios owe their survival to ample resources, which afford them the ability to weather box office disasters. Small studios would not necessarily be able to survive box office failures. Major studios also have an advantage in their ability to maintain distribution networks across the country and in foreign markets. This ensures that their films get to theatres and

television screens. Further, barriers to entry exist in huge marketing expenditures in opening a film in several theaters simultaneously, particularly on a national or world-wide basis. Importantly, intellectual property rights create apparently strong barriers to entry.

Ad (3) Contracts and risk-spreading

Distributors and exhibitors face risk-sharing conflicts impacting decisions on what movie to show on which screen over which duration. Following Gil (2004, 5), the distributor may have interest in showing the movie longer because that affects performance of the movie in ancillary markets such as DVD and home video. The distributor can choose optimal run-time in the theatre that it owns. The independent exhibitor may have other sources of revenue, such as concession sales and advertisement and may, in contrast to the chain distributor, be more interested in concession sales than box office receipts.

Theoretically, organizational form (i.e., vertical structures of integrated and non-integrated theatre houses) and contractual arrangements between distributors and exhibitors are the cornerstones for deciding what movies to play and what to cut, that is to optimally allocate screen space owned by different houses across movies and time. In IO theory, *ex post* trade inefficiency gives the parties incentives to contract *ex ante* to avoid or limit this inefficiency (Tirole 1988, 23). Reasons for contracting between distributor and exhibitor are situated within revenue-sharing arrangements between the players.

Hahn and Schierse (2004) look at this problem from the distributor's point of view. First and foremost, as licensee the distributor is prime taker of the price risk. Due to the uncertainty of the film's theatre performance, there is no guarantee that the license sum paid in advance will amortize at the box offices. If a film does not find a cinema audience, it will thus be the distributor hit hardest. Selling rights to TV channels is no licence guarantee either even if rights were pricey. This is because the TV channels may have to safe money and would not be able to afford the rights. Further, the distributor carries the risk of terms of film delivery. He is dependent on the producer to deliver in time. Similarly, he carries the quality risk if he buys the film 'blind' prior to completion, only relying on a good script or simple treatment. Moreover, the distributor carries the credit risk to deliver theatres with copies and advertising materials before the exhibitor may achieve any turnover at the box office. Building costs for new houses or high rents may cause exhibitors to stop paying their film rentals. Although the distributor may find a perfect release date, he also carries the risk of competing movies which were released earlier and became unexpectedly strong at the box office. Finally, film success is dependent on exogenous factors such as the overall economic trend or weather conditions. In times of a recession, for example, audiences may not attend the cinema. This will have obvious negative effects on possible value flows to the exhibitor and up-stream distributor.

Overall, revenue sharing is based on agreements between the players. Generally, this is because the relationship between gross receipts and costs of film production within cinema distribution may be completely dissolved when films flop. As the business is typically risky, the production, distribution and exhibition sectors have agreed on revenue-sharing practices. Dally *et al.* (2002, 412) explain the business practices as follows: "Within a so-called "net profit deal" agreement, in which the distributor charges a fixed or graduated percentage of rentals (on average 30% in the U.S. domestic theatrical market) as a distribution fee and then advances the funds for other

distribution costs, including those for prints, trailers, and national advertising. The distributor commonly recovers these expenses before making any payments to the producer and would normally, before arriving at a definition of 'net profit', prioritize recoupment by taking distribution fees and expenses first, then interest on negative costs, then negative costs, and finally deferrals and various participations. Although this net deal predominates, there is also a so-called "gross deal" wherein the distributor (usually of low-budgeted independently made and independently distributed films), is not separately reimbursed for distribution expenses, but instead retains a distribution fee (e.g., 50-70%) that is considerably higher than normal. Distribution expenses are then recouped out of this higher fee, while the producer receives the remaining unencumbered portion of gross rentals".

Ad (4) The impact of new technologies

The arrival of multiplex cinemas in Europe was the catalyst for a return to cinemas for audiences across the continent. European growth rates in box office admissions and multiplex screens indicate that the market has turned again into a lucrative creative industry sector (Lange 2002). New state-of-the-art technologies for film delivery and exhibition are challenging traditional cinema systems. Further, consumer electronics such as DVDs, Video-on-Demand (VOD), or Digital Video Recorders (DVRs) have transformed consumption and usage patterns for audiovisual content and thus have increased competition for audience attention in the cinema industry at many levels.

Market players must be aware of the underlying changes affecting their industry as a whole: Illegal copying of pre-released films on the Internet or on DVDs, growing internationalization of the entire cinema industry, rental and exhibition concentration, and intensified competition for visitors as they change their consumer patterns for more convenience and prefer to watch box-office hits as early and comfortable as possible. The advent of digital technologies has offered new business opportunities but also poses problems (see, Credit Suisse and First Boston 2002). Digital and electronic cinemas have emerged on the scene and envelop a wide range of new technologies and systems, from capture, through production, transmission, storage and display. Altogether, these technology-driven changes suggest that the traditional cinema industry is currently undergoing structural overhaul and developing fundamental new characteristics.

Digital technologies will play a major role in meeting challenges of market failures. They are potential drivers for a fundamental market overhaul. Digitization in delivery and exhibition may lead to processes of simultaneous dis-intermediation (i.e., eradication of actors) and re-intermediation of film value chain players and elements. However, digital technologies will certainly not come as remedy to market failures in the analogue world. On the positive side, they may diversify the market structure by providing new audio-visual offers, intensify competition for audiences, and bring new high-quality cinema products to market. Further, digital projections will give theatre the ability to show live content. Additional revenue streams are opened through new forms of advertising (Credit Suisse and First Boston 2002). On the downside, digital technologies may establish new markets beset by similar features of failure as in traditional markets: public goods and externalities, concentration and vertical integration, abusive business conduct, and information asymmetries and bound rationality of consumers. Further, network externalities may come as new source of market failure (Liebowitz and Margolis 1995). As for

early 2004, D-cinema economics is not compelling owing to the cost of capital required to deploy digital cinema.

5 The Case of Austria: Empirical Evidence

Generally, Austria's media ecology is best described as a small-country market with big-neighbor characteristics such as dependence from a big-neighbor (i.e., Germany), scarce resources, small market size, vulnerability, and corporatist market structures (Trappel, Martischnig & Luger 1991). Hence, the Austrian cinema industry is potentially vulnerable to foreign intrusion in the market.

Cinema supply: a brief overview

Austria's cinema market has undergone a rapid and profound transformation since the beginning of the 1990s: Austria has now more screens and cinema seats than at any other time in history. Most evident is the rise in multi-screen cinemas. In 1996, there were only four cinemas with eight screens or more (i.e., 'multiplex cinemas'), in 2001 already 22 (*Fachverband* 2001). Multiplex cinemas accommodated 48,933 seats (of 106,722 in total) in 2001. This amounted to 45.86% of seats. In 1996, it was only 13.15%. The average number of screens per cinema establishment was 2.8 in 2001 (MEDIA Salles 2003). This is above EU-average (Dollt 2002).

Table 1: Allocation of cinemas in Austria 2001 (by number of screens)

Number of screens per cinema	No. of cinemas	Total No. of screens	Total No. of seats
1 screen	103	103	19,871
2 screens	33	66	9,394
3-5 screens	38	130	18,425
6-7 screens	9	55	9,815
8 and more screens	22	141	31,368
Total	205	579	106,722

Source: Austrian Association of cinemas 2001

The Austrian national cinema park may be defined by number of screens and seats per establishment. There are five categories to be differentiated in this way:

- (1) One-screen cinemas: traditional cinemas with up to 500 seats,
- (2) One-screen non-traditional cinemas with up to 500 seats (e.g., open-air cinemas, IMAX-theatres),
- (3) Multi-screen cinemas: traditional centres with two to four screens and up to 1,000 seats,
- (4) Miniplexes: new cinema centres with four to seven screens and up to 1,000 seats, and
- (5) Multiplexes: new cinema centres with eight or more screens and at least 1,000 seats.

Further, Austrian cinemas significantly differ in terms of (a) *ownership* (e.g., cinemas belonging to a chain or *Majors* or *Mini-Majors*, cinemas owned by independent producers, *Independents*), (b) *geographic distribution* (e.g., capital cities, i.e., big towns with a population greater than 250,000; medium-sized towns with a population greater than 100,000 to 250,000; small-sized towns), (c) *technical equipment and convenience factors* (e.g., comfortable seating, improvements in sound quality, foyers, car parking, proximity to public transport), (d) *programme direction* (e.g., mass-attractive blockbusters, niche-programming of art-house cinemas), (e) *programming collaborations* (i.e., cinemas owned by a circuit, cinemas affiliated to a circuit, cinemas sharing programming arrangements, independently-programmed cinemas; MEDIA Salles 1994), and (f) *targeted audiences* (e.g., mass market, 'cinephiles').

As for performance, Austrian cinema operators showed 236 first-runs to 16,298 million visitors in 534 cinemas in 2000. Only 12 films could attract more than 300,000 viewers, and thus one-third of all cinema-goers. Half of all films exhibited in Austria reach barely more than 5,000 viewers. Cinema attendance reached its peak in 2001 with 18.985 million viewers (OeFI 2002). However, these performance figures have to be read with care: box office receipts show U.S. blockbuster films (defined by attracting at least 300,000 visitors in Austria) being most attractive to movie-goers in the recent past (see, Table 2). Market power is thus firmly built on box office success of Hollywood movies. The Austrian Film Institute (OeFI 2002) identifies an increasing polarisation in as far as fewer U.S. dominated films capture bigger market shares in terms of box office sales. There is no foreseeable end for this development.

Today, the Austrian cinema industry is a complex creative industry which is characterised by the following main market developments affecting the distribution and exhibition sectors:

- (1) A steady increase in the number of screens and seats (by population area) induced by multiplex cinema operators,
- (2) A spread of multiplex cinemas in urban areas developing a market segment which goes from strength-to-strength (but has also experienced some moments of crisis),
- (3) Changes in ownership structure and increases in the degrees of distribution and exhibition concentration,
- (4) A modernization of the cinema stock by high investments in new locations and customer-attractive improvements in new technology and comfort levels,
- (5) An economically shaky state for independent, self-programming exhibitors with less than three screens, and
- (6) Changing consumer patterns in favour of more convenience and additional services.

In the following, we will focus on market developments in the multiplex segment and investigate effects on competition. We will then offer further empirics on concentration in the distribution and exhibition segments in the Austrian cinema market.

Multiplexes: issues of concentration and effects on competition

In Austria, the new cinema age began in autumn 1994 when the first multiplex, *UCI Cinema World*, was opened in an urban entertainment centre south of Vienna. The growth in multiplex cinemas was catching on in Austria in 1999 when numerous other multiplexes were introduced,

driven by liberal business location policies and foreign investments of international chain operators (Ungerboeck 1999 and 2002).

Looking at the number of multiplex cinemas per capita, Vienna experienced a veritable multiplex boom. Ungerboeck (2002, 89) describes this boom correspondingly as follows: “Four multiplex cinemas with approximately 11,000 seats were opened from October to December 1999 within 4 kilometres of distance: the *Cineplexx Palace* on the Danube bank, the *UCI Cinema World* in the recreation area of the *Prater*, as well as two centres near the shopping centres *Donauzentrum* (UCI) and *Shopping City Nord (Hollywood Megaplex)*. These openings were followed by others in 2000 and 2001, with the *UCI Cinema World* in the *Millenniums-City* being Austria’s biggest multiplex with 3,524 seats in 21 screens. However, the cinema multiplex boom has also hit medium-sized cities in the countryside. There, so-called “miniplexes” with four to seven screens but similar state-of-the-art features such as stadium seating, generous leg room, Dolby digital sound and so-called “cuddle seats” (pairs of seats with no arm rest between them) could develop high-growth rates in seats and screens in locations where also additional services in dining, culture, entertainment and shopping are offered.

As previously mentioned, non-European entertainment companies play a strong part in ownership and management of the Austrian multiplex scene. Interestingly, however, financially strong operators from abroad have already withdrawn from the Viennese multiplex market: *Warner Bros. International Theaters* stepped back from a joint-venture with the Australian giant *Village Roadshow International*. So did the US multiplex-experts of *AMC Entertainment* from the multiplex project at the *Millenniums Tower* in Vienna. However, there is still *United Cinemas International* and the German cinema giant *Kieft & Kieft Filmtheater*, capitalizing on current growth rates in this segment. Austrian ownership is manifest through the family business of Hueber, who purchased the *Hollywood Megaplex* near Linz in 1995 (with 12 screens and 2,660 seats) and opened an identical multiplex in St. Poelten in 1997 (8 screens; 1,670 seats). Hueber also upgraded the art-house cinema *Metropol* in Innsbruck into an eight-screener. He later expanded to Vienna to buy up 80% of the US-Australian *Hoyts* group and renamed it into *KIMA Cinema Vienna*. The rise in multiplexes is further reflected in the following statistics: the share of traditional one-screen-cinemas fell from 37.53% of all national screens in 1996 to 18.05% in 2002. According to statistical data, Austria had 21 multiplexes in March 2002, offering 216 screens and more than 47.000 seats, thus doubling seats between 1996 and 2002.

Recent market tendencies show strong diversification and growth impulses induced by multiplexes (increases in sales, new investments) but also crowding-out effects on traditional houses with mass-market programming. This is mainly due to ‘overscreening’ (i.e., excess supply of capacities) in urban areas leading to low capacity utilization rates to force players out of the market. The Viennese situation best exemplifies this crowding-out effect which led to closures of traditional cinemas: in March 2002 the programme cinema chain of the private cinema operator *City Cinemas Lichtspieltheater* had to announce bankruptcy and had to close ten traditional Viennese cinemas. This came as a warning that two other *Viennale*-festival arthouse theatres were under threat of closure too: the old downtown cinemas *Metro* and *Gartenbau*. Both were later saved by a private receiving company and local government subsidies. Industry observers call the art-house cinema crisis a drastic one, yet by no means surprising (Stiglbauer 1999). However, the fact that the multiplex boom is impacting on closures of traditional houses may also be shown with the example of the *Apollo* cinema operated by *Constantin*, which converted the cinema into a 12-screen-multiplex in 1997. The rebuilding was followed by the closure of one near-by

traditional house. Other surrounding competitors were forced to reschedule or screen English-language original versions (Ungerboeck 1999, 5).

Conclusively, the underlying causes for Austrian cinemas to close are multi-faceted and range from attractive, new-style multiplexes to add momentum to a structural overhaul of the industry, to missing programme profiles of traditional houses not capable of adapting to necessary market changes, to false visitor concepts, and liquidity problems to force undercapitalised players out of the market. Moreover, public policy long refused to provide the necessary financial syringe for weak actors to survive. Nonetheless, overscreening and a lack of visitors have even brought bad news for multiplexes: one of the biggest cinema operators of Europe, the UCI *Cinema World*, closed its location in Vienna in March 2002; cause: underutilization. *Constantin*, however, lately expanded and took over the film palace of the German *CineStar*-group to open as multiplex called *Cineplexx Wienerberg*.

However, miniplex and multiplex cinemas have best adapted to changing market conditions. They also succeed in entering neighbouring market segments once covered by their traditional opponents and increased market share by poaching customers from traditional houses with mass-attractive blockbusters. Further, they have entered the domains of art-house cinemas by acquiring licences for opening nights of arts-related films shown in their centres. Smaller-scaled cinemas in the art-house and traditional cinema market segments may only survive with offering an arts-oriented complementary programming to address more affluent urban viewers. On the other hand, they may move into the market segment of ‘miniplexes’ and reshape into so-called ‘art-house-centres’ by offering ancillary services such as bar and music entertainment. Other advantages are found in providing programmes in original versions, supported by a clear market profile and brand identity. Further critical success factors are first-class location and festival programming.

Traditional cinemas in suburban areas may succeed with culturally valuable niche-programming. Theoretically, multi-screen cinemas are economically more viable than single-screen ones since they can switch unsuccessful films from multi-screens to more appropriate capacities (i.e., single-screens) in their houses and may thus still recoup licensing costs over longer periods of provision. In this context, MEDIA Salles (1994, ch. 1.4) draws attention to this strategy of multi-screening which made “risk spreading over several screens and possibility of varying screen size over a film’s run (possible) to improve profitability in a declining market (...) The motives for this strategy were not only management of risk and better roll-out of products, but also for commercial reasons: the strategy sought to improve the quality of service offered to customers”. Most difficult is the economic situation of traditional family-run cinemas in the outskirts of large cities. Returns from revenues of ancillary services (refreshments, bar services) will barely reduce their risk of failure. Only costly government subsidies may extend their life expectancy.

Further empirics on concentration in distribution and exhibition

The Austrian cinema industry is characterised by relatively high market concentration. Competition in film economics is characterised by high degrees of horizontal and vertical concentration. As shown above, Austria is a good example for concentration as a small number of firms account for a high proportion of cinema attendance and thus sales. In the cinema exhibition segment, *Constantin Film Holding GmbH* dominates the market and owns 16 cinemas in the whole of Austria, while additionally programming traditionally aligned cinemas and multiplexes

via its subsidiaries *Cineplexx* and *Cineinvest Kinoerrichtungs- und Betriebsgesellschaft GmbH* throughout the whole of Austria. Competition for cinema-goers is tougher in the capital of Vienna, where it operates seven smaller-sized traditional cinemas too. However, these may be cross-subsidized by the successful multiplexes in times of economic need. Industry observers claim that *Constantin* not only programmes its own 120 screens which account for 36% of cinema attendance in 2001, but another 70 cinemas in the rest of Austria which take on their programmes. This results in dominating 190 screen of altogether 580 (Waldbrunner 2002). To top this, *Constantin* is market leader in the hard-fought multiplex market segment. Under its label name *Cineplexx*, *Constantin* accounts for a market share of 36%. Its toughest competitors *Hueber* amounts to 27%, with UCI coming third with 21% (RMC 2000, Ungerboeck 2002). Obviously, vertical concentration, that is the extent to which successive stages in distribution and exhibition are placed under the control of a single firm, is in place in Austria. While big players achieve value chain control over product and geographic market, less powerful cinemas fight with natural market entry barriers such as high cinema operating costs. The following example is to illustrate the difficult business situation of small cinemas: with an assumed average 20,000 visitors yearly and an average ticket price of six Euros, a single-screen programme realizes yearly gross receipts of Euro 120,000. First, VAT (10%) and amusement tax (0-15%, depending on film awards received) have to be handed over to the tax office.¹² Before net profits – respectively losses – are made, distribution fees and costs in advertising, checking, collections, conversion, residuals, prints and advertising will be deducted. Distribution fees amount to 50% for opening films and will slide-down to 23% depending on the run-time. In total, Euro 56,000 net profit must cover the theatre's fixed costs. Small-scale cinemas find it almost impossible to break-even as distribution fees way heavy on their economics (Wegenstein 2002).

Similarly, film distribution in Austria is controlled by the U.S. *Major* such as UIP *Filmverleih*, *Centfox* (20th Century Fox), *Columbia TriStar* (Sony), *Buena Vista international* (Disney), *Time Warner* and Austria's biggest distributor *Constantin*, measured on the basis of yearly first-runs. Additionally, there are the independent distributors *Einhorn-Film* in Bludenz (occasionally renting blockbusters such as *Scary Movie*), the *Cinematograph Filmverleih* in Innsbruck (engages with films from Latin America, Africa and Asia), the sporadically active *Top-Film* and *Commerzfilm*, as well as *Filmladen*, *Polyfilm-Verleih* and *Stadtkino-Filmverleih* in Vienna. While *Filmladen* and *Polyfilm* tend towards becoming medium-sized firms, all other independent small distributors face modest economic perspectives. To achieve access to viewers, some independents are linked with programme cinemas so as to build audience awareness for independent productions. Most top-films are regularly distributed by the subsidiaries of the U.S. *Majors* as well as *Constantin*. Together they gain 90% of all rental turnover in Austria. The U.S. *Majors* use their international distribution networks to disseminate their films onwards to exhibition outlets. They exhibit where possible in their own cinemas. *Constantin*, however, acquires the rights for Austria from partners in Germany to feed its own theatres. Its dominant market position stretching across distribution and exhibition in diverse market segments ensure high returns at the box offices. The independents either acquire film rights at film markets or depend on the German rental business market, since rights are usually collectively sold for both Germany and Austria.

Pre-eminently, vertically integrated U.S.-subsidiaries apply aggressive business strategies. They flood theatres with an ever increasing number of copies, shorten the run-times of films to accelerate exploitation and assure distribution in as many outlets as possible. For example, if 142 copies are distributed to 554 available screens, as was the case with *Harry Potter and the Philosopher's Stone* (distributed by Warner Bros.), 20% of the Austrian exhibition market is already covered. Similarly, *Constantin* starts films distributed in almost one hundred copies

synchronously all over Austria, driven by respective strategies. Whether small-sized, independent second-run cinemas will receive an attractive film at all is occasionally at the big distributor's mercy. This must be considered as precarious in terms of competition law. Competition for content is not as fierce in the independent sector, but yet verifiable by the fact that first releases or director's cuts are attractive materials. For example, the *Stadtkino-Filmverleih* holds premiere rights access to the new *Kaurismäki* films, which some regard as a true box-office winner. As for the issue of origination of Austrian films, U.S. blockbusters clearly dominate. The yearly market share of foreign US-films rises continuously. European films account for approximately 20-30%, that of Austrian films for a meagre 3% (Ungerboeck 1999).

Overall, film distribution has become an increasingly dependent on international film trade. Mostly internationally distributed films attracted more than 600,000 visitors within 12 months to receive so-called "Super Golden Tickets". Furthermore, with the exception of the one-off hit *Hinterholz 8*, all other box office hits were of foreign origin and distributed via the *Majors*.

Table 2: 'Super Golden Tickets' in Austria since 1998

Year	film	distributor
1998	<i>Hinterholz 8</i>	<i>Filmladen</i>
1999	<i>Star Wars: Episode 1</i>	<i>Centfox</i>
1999	<i>Astrerix & Obelix</i>	<i>Constantin</i>
2000	<i>Tarzan</i>	<i>Buena Vista</i>
2000	<i>American Pie</i>	<i>Constantin</i>
2000	<i>MI-2</i>	<i>U.I.P.</i>
2001	<i>Was Frauen wollen</i>	<i>Buena Vista</i>
2001	<i>Der Schuh des Manitu</i>	<i>Constantin</i>
2002	<i>Harry Potter – Stein der Weisen</i>	<i>Warner Bros.</i>
2002	<i>Der Herr der Ringe</i>	<i>Warner Bros.</i>
2002	<i>Ice Age</i>	<i>Centfox</i>
2002	<i>Harry Potter 2</i>	<i>Warner Bros.</i>
2003	<i>Der Herr der Ringe 2</i>	<i>Warner Bros.</i>
2003	<i>Fluch der Karibik</i>	<i>Buena Vista</i>
2003	<i>Findet Nemo</i>	<i>Buena Vista</i>

Source: Austrian Association of Cinema Operators 2003-4

As mentioned above, the kind of relationship between distributor and exhibitor determines opportunities for exploitation. Traditionally, this relationship has to be regarded as difficult as allocation of returns has become brisker. Austria has also experienced unfair business practices in terms of selective distribution. For example, *City Cinemas* as mini-competitor to *Constantin* was detained from the box-office hit *Der Schuh des Manitu* which *Constantin* reserved for its own outlets. In fact, *Constantin* refused contractual delivery of copies of attractive top-films to a big multiplex competitor in the region of Linz because it claimed that the partner did not play out older films delivered over the contracted period. It then refused delivery of new releases and was fined for a breach of Austrian competition law. Measured in terms of sales, this obviously strengthened the market power of *Constantin*.

6 Conclusions and extensions

Cinema markets are not like any other industrial markets. They are characterized by product, market and competition specifics which deviate from the model of perfect competition. Our research reveals important theoretical explanations for market failure and imperfect competition in traditional cinema markets. Theoretically, these distortions to a free play of market forces have various causes and effects. In effect, resources are allocated inefficiently and consumers are not catered to their tastes and preferences.

Our literature review has identified four central features of market failure: public goods and externalities, concentration of ownership and vertical integration, abusive business conduct and asymmetric information. Additionally, we have analysed four economic market forces leading to imperfect competition: efficiency gains through cost savings, barriers to market entry, contracts and risk-spreading, and the impact of new technologies. We have proposed that because of these forces cinema markets may fail to operate efficiently or according to the preferences of individuals. In this work, we have shown that some but not all of these forces are applicable to cause failure in the cinema industry. For example, whether the availability of economies of scale in distribution and marketing achieved through dense distribution networks will offset costs for copying and film transportation is a mooted point. Secondly, our findings of empirical research on the relations between concentration of ownership and competition draw attention to factors other than the 'destructive' forces mentioned above: competitiveness is thus represented by the degree firms use organizational advantages such as product differentiation, strategic location, higher quality products and services, and managerial competence to generate competitive advantage and wealth. These factors qualify our propositions.

The Austrian cinema industry has undergone considerable changes over the last years. Not surprisingly, the main driving force for change in the national supply structure is the appearance and strong commitment of multiplex cinemas, notably in urban conglomerations. This development has been accompanied by closures of traditional theatre houses in the city centres which have been driven out of the market. In Austria, there are now fewer cinemas with more screens and seats. This growth in exhibition is largely attributable to developments in the multiplex segment of the industry. Foreign companies have had a high stake in multiplex development, although some re-nationalisation of ownership has taken place. Even if the multiplex boom is now somewhat levelling out, it has certainly introduced a new type of cinema, the urban entertainment centre, which no longer predominantly attracts visitors with the films shown, but with ancillary offers for a range of supplementary leisure activities. The rise of multiplex cinemas has put traditional single-screen and premiere cinemas under pressure. They have become dependent on promising mass-oriented blockbusters, i.e., from those lenders who distribute such films. This pressure is intensified by changing viewing behavior patterns. Cinema-visitors today demand comfort, audio-visual quality, proximity, and urban entertainment offers. There are still complementary offers: niche-cinemas which attract attention with complementary programming are accepted by up-market customers and will potentially remain in the market in the long run. One-screener, however, showing second-runs are a heavily endangered species. Overall, these market structure developments may lead to a sustaining loss in medium-sized offers, just to widen the gap between art-house cinemas and niche-outlets in the city centers and multiplexes in the outskirts even more. Corporate players which operate under imperfect market conditions may well apply abusive business practices to further strengthen their market positions.

This is the case in Austria where practices of over-screening, exclusive openings and selective distribution have led to market distortions. Price discrimination is another case in point. Third-degree price discrimination is where a producer can identify different types of customers and offer different contracts to each group based on their willingness to pay. Movie theatres offer one price to adults, and a discounted price to students or seniors. Although Davis (2003) finds no statistically significant relationship between geographic distribution of cinemas in the U.S. exhibition market and the admission prices they are able to charge, price differentiation of dominant actors theoretically adds further market power to them.

Pre-eminently, vertically integrated U.S. subsidiaries apply aggressive business strategies. They flood the exhibition market with an ever increasing number of copies, shorten the run-times of films to accelerate the exploitation and assure distribution in as many outlets selected as possible. But while economic efficiency and profitability have become institutionalized business objectives, possible negative impacts on image diversity, plurality of outlets, content wealth and thus consumer welfare have to be taken into account. In this context, non-economic criteria for potential market problems are necessary: democratic ideals, socially desirable goals such as preserving cultural values purported by film content in need of cinema outlets, and issues of social cohesion enabled by cinemas as public spheres have to be taken into account.

To our knowledge, no empirical models have yet considered potential impacts of digitization on market failures in the cinema industry. Thus, we suggest intensified research into potential to correct failures in the analogue cinema market and ignite competition at the levels of infrastructures, services and applications. New research is necessary to analyse expected economies of integration (Picard 2002) and network externalities for the cinema industry that allow more efficient introduction of new digital products and the packaging, distribution, and reception of services in cost-efficient manner (e.g., for the DVD market in the U.S., Inceoglu and Park 2003). Further, although this would pose a considerable data challenge, cross-country comparisons would open fruitful avenues for future research. To conclude, we argue that government policies should be applied to help economic opportunity and prosperity of Austrian cinema economics in the distribution and exhibition segment of the market. Regulation should correct market imperfections with a view to safeguard content pluralism and diversity, and thus consumer welfare. Policies to raise the percentage of non-mainstream offers reach from introducing a quota system designed to strengthen the indigenous film-making industry to trim independent distributors to adopt strategies which are suitable for multiplex outlets.

Notes

1. Surprisingly, media economics has barely addressed issues of market failure thoroughly. Basic insights are given by Owen, Beebe and Manning (1974), Picard (1989), Owen and Wildman (1992), Heinrich (1999), Kiefer (2001), and Doyle (2002a). Characteristically, Picard (2002, 44) has waived both 'market failure' and 'imperfect competition' and prefers to discuss competitive advantages.
2. For an institutional description of the movie industry see, Vogel (1998) and Caves (2000).
3. For an introduction to Industrial Organization theory see, Scherer and Ross (1990), Schmalensee 1988, Schmalensee and Willig (1989), and Tirole (1988).
4. Mason (1939) is considered to have formalized the SCP approach whereas Bain (1951) was the first to apply the SCP paradigm to large empirical samples.

5. The relations between these variables is not deterministic. For example, market behavior under conditions of perfect competition may not lead to efficient performance whereas, in turn, good performance results are not necessarily originated from perfect competition.
6. For critical assessments of the IO-approach for media industry analysis see Wirth and Bloch (1995) and Young (2000).
7. The statistical situation with regard to empirical cinema figures on industry structure and performance in Austria are fragmentary. This is due to various competence splits in data acquisition authorities and the application of diverse methods henceforth.
8. Fruitful models of externalities are of recent origin. Pigou (1920) described externalities and argued that they could be treated via taxes and subsidies. Coase (1960) gave prominent attention to the role of private negotiation as a means of achieving efficiency in situations involving externalities. The ‘free-rider’ problem originated from work of Olson (1971).
9. The category of ‘merit goods’ was first developed by Musgrave (1959).
10. Perry (1989) has defined vertical integration from an IO theory standpoint as a “firm ... if it encompasses two-single-output production processes in which either (1) the *entire* output of the “upstream” process is employed as *part or all* of the quantity of one intermediate input into the “downstream” process, or (2) the *entire* quantity of one intermediate input into the “downstream” process is obtained from part or all of the output of the “upstream” process (Perry 1989, 185).
11. For the broad discussion on institutional structures and program choice in TV markets see, Steiner (1952), Owen, Beebe and Manning (1974), Spence and Owen (1977), Wildman and Owen (1985).
12. Surprisingly, films that received an A-grade are exempt from amusement tax. This accounts for almost all box-office hits.

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