

**INSTITUTIONS, INSTITUTIONAL CHANGE, STRATEGIC ASSETS
AND COMPETITIVE ADVANTAGE
OF AMERICAN AND FRENCH FILM INDUSTRIES (1895-1998)***

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ABSTRACT

This paper uses neo-institutional economics (I.E.) to examine why French film production firms have lost their competitive advantage to their American competitors from 1895 to 1998. I.E. posits that major institutional changes result in changes in firms' strategic assets and strategies as well as in strategic industry factors. This causal path represents a bold shift in perspective from Industrial Organization, which considers the institutional environment as exogenous and largely beyond the reach of strategy. The same holds for the Resource-Based View. Several propositions stemming from neo-institutional economics are examined with a qualitative historical methodology. Robust evidence is provided to confirm the importance of neo-institutional explanations of strategic and industry changes over the whole period under study. However, institutions and institutional change have not been the sole drivers of industry and firms evolutions: chance (technologies and wars) and cognitive models of industry players also played their part, albeit complementary.

Nous utilisons l'économie néo-institutionnelle (I.E.) afin d'expliquer la perte de l'avantage concurrentiel des firmes de production cinématographique françaises au profit des firmes américaines entre 1895 et 1998. Selon ce courant, d'importants changements institutionnels entraînent des modifications des actifs stratégiques des firmes, de leurs stratégies et des facteurs stratégiques de l'industrie. Ce raisonnement représente un audacieux renversement de perspective par rapport à l'organisation industrielle et la théorie de la ressource, pour lesquelles l'environnement institutionnel est exogène et largement étranger au champ de la stratégie. Nous appliquons une méthodologie qualitative et historique à un ensemble de propositions issues de l'I.E. Nous confirmons ainsi l'importance des explications néo-institutionnelles des changements stratégiques et industriels tout au long de la période étudiée. Cependant, les institutions et les changements institutionnels ne sont pas les vecteurs uniques des évolutions des firmes et des industries: le hasard (guerres et évolutions technologiques) et les modèles cognitifs des acteurs du secteur doivent également être pris en compte.

Key Words : Neo-institutional economics, film industry, competitive advantage, France, USA.

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In 1898, more than a century before the first draft of this paper was written, the “picture” of the movie industry looked substantially different from a century later. The major film studios were French, by several orders of magnitude larger than their North-American counterparts, and exports of movies were mainly flowing from France to the USA. How could the competitive advantage of the French filmmakers have been lost to such a large extent?

Several bodies of theory could be used to answer that question. Economic structure (Bain, 1951, 1954, Porter, 1980, 1990, Schmalensee, 1985) would look at industry conditions in both countries. The strategy, structure, performance approach (Chandler, 1962, 1990) would focus on the relationship between these variables. The resource-based view of the firm (Penrose, 1959, Wernerfelt, 1984, Rumelt, 1991, Barney, 1991, 1997, Teece, Pisano and Shuen, 1997) would rely upon assets and capabilities internal to the firm. Multipoint competition (Karnani and Wernerfelt, 1985, Chen, 1996, Baum and Korn, 1999) would analyze strategic competitive moves between rivals. All the above theories focus one way or another on firms and their industry. The institutional environment is considered as exogenous and largely beyond the reach of strategy.

Empirical work using theories mentioned above is likely to rely on cross section data. However, the impact of institutional change cannot be examined with cross section data alone. Time series measuring institutional and strategic variables are hardly available, more so in the film industry. This paper makes an exploratory attempt to explain the loss of French and gain of American competitive advantage in the film industry using neo-institutional economics. Strategic and resource-based considerations will be examined to find how firm strategies and resources reacted to institutional changes and influenced them.

The most frequent perspective of strategy research focuses on the levels of the industry, the firm or the transaction and considers the institutional environment as a “given” exogenous variable. This paper reverses this perspective to a large extent. The kind of questions raised by institutional economics are: why have institutions changed in both countries, have these changes led both countries to a set of similar or highly different institutions, what was the role of firms in those institutional changes, how have the above changes affected relative competitive advantage?

The macro branch of neo-institutionalism (North, 1981, 1990, 1991, 1994) looks at the history of institutions and their impact on the economic performance of countries through time. We use it to analyze the history of the institutions pertaining to the film industries of the USA and France between 1895 and 1998. As institutions form the incentive structure or the rules of the game for firms we expect institutional change to have influenced the relative positioning of French and American competitors in the film industry.

The micro branch of neo-institutionalism (Williamson, 1975, 1985, 1991a, 1996, 1997) looks at the use made by firms of three types of governance structures: markets, hybrids and hierarchy to support economic transactions. As economic agents are supposed to be purposely rational, we expect that they make the right choice of governance structure to economize on transaction costs (Williamson, 1991b), even though their executives may have never heard of the theory and its prescriptions. Therefore governance structures are not expected to play an important role in the change of competitive positioning under inquiry. However, modifications of governance may follow institutional changes. If the latter take diverging courses, important differences in governance choice may be revealed.

This paper starts with a review of neo-institutional economics to derive a set of propositions. A brief methodological discussion follows. Propositions are then examined during the various historical periods between 1895 and 1998. A discussion of the research questions is offered at the end.

NEO-INSTITUTIONAL ECONOMICS: A SET OF PROPOSITIONS

The relationship between institutional change (IC) and firm strategies and assets is set in the first three propositions; IC and changes in Strategic Industry Factors (SIF, Amit and Schoemaker, 1993) in proposition four. Propositions five and six concern I.E. and changes in governance structures.

Institutional Change, Strategies and Assets

Coase (1937) noted that institutions were created by human beings to decrease the uncertainties of transactions between economic agents. A large part of these uncertainties are due to opportunistic human behavior (Williamson, 1975, 1985). Without institutions, transactions could have never begun and markets as well as firms may have never existed.

Creations of and changes in institutions are the main instruments of policy makers: *“In the real world, to influence economic policy, we set up or abolish an agency, amend the law, change the personnel and so on: We work through institutions. The choice in economic policy is a choice of institutions. And what matters is the effect that a modification in these institutions will actually make in the real world”* (Coase, 1984). North (1981, 1990, 1991, 1994) focused on the role of informal and formal institutions that enabled the countries which constructed them to start a course of economic development, while those which didn't lagged behind. In Western economies, formal institutions are the rules of the game decided by the political sphere. Institutions form the incentive structure for the strategies of firms. Entrepreneurs and their firms play the game under existing rules and eventually lobby to change them. Economic or social efficiency is not built in the design: *“Institutions are not necessarily or even usually created to be socially efficient; rather they, or at least the formal rules, are created to serve the interests of those with the bargaining power to create new rules... It is exceptional to find economic markets that approximate the conditions necessary for efficiency. It is impossible to find political markets that do... It is the polity that defines and enforces property rights...”* (North, 1994, 360-361).

Firms, interest groups, social and educational organizations also impact institutional change. Williamson (1997) added that informal institutions such as culture, norms and values take roughly a century to change while formal institutions can take only twenty years to be modified. Inside the firm, strategic or structural change requires much less time.

The above theory has successfully explained why the USA and Western Europe developed while a large number of countries in Africa, Latin America and Asia did not. It can also be used in the same fashion to explain the considerable decrease of per capita income in Russia - almost by half between 1990 and 1998 – and the opposite results in China.

The branch of institutional economics developed by North is largely concerned with macroeconomic issues. It focuses its analysis on the evolution and change of the institutions of nations to explain their level of performance over time.

When institutions change, so does the incentive structure for firms. Changes in assets should also follow institutional changes with some kind of lag. As their strategies are based on a bundle of idiosyncratic assets (Teece, Pisano & Shuen, 1992, 1997):

Proposition 1: Firms are expected to develop strategies and assets related to institutional incentives.

At the industry level, different kinds of change in the institutions of the environment are necessary to increase welfare, whether neo-classical or neo-institutional theories are used. The case of telecommunications provides an illustration. Deregulation is expected to increase competition and investment, naturally lower prices and boost innovation in the neo-classical rationale. Levy and Spiller (1994) have shown for telecommunications that deregulation produced the welfare impact expected from neo-classical theory in some cases but not in others. The difference lies in the existence and efficiency of institutions. When laws protecting private foreign investment are stable and credible, courts are independent from government and not corrupted, expected investment and welfare results occur. When the country's institutional endowment does not fit its regulatory system, neo-classical expectations are illusory. Neo-institutional theory stipulates the institutional conditions necessary for the efficiency of neo-classical prescriptions.

Using the comparative example of nuclear energy policy in France and in the USA, Delmas, Ghertman & Heiman (1997) have shown that US anti-nuclear activists were able to use a court litigation strategy that considerably increased the costs of transactions between utility firms and the regulatory agencies issuing license permits. In France, where anti-nuclear activists feelings were as strong as in the USA, courts would not accept similar litigation procedures. As nuclear production is done by a state-owned firm, administrative rather than private commercial law applies. As administrative courts are not independent from government, they did not accept to open the case. Transaction and production costs of nuclear energy end up being much lower in France than in the USA.

When legal institutions are closed to environmental groups, welfare effects are improved in the nuclear energy industry, while courts need to be open in telecommunications where such groups are not active. Institutional endowments matter in function of the nature of the game and its players. Firms are the most prevalent but other stakeholders have to be taken into account to understand the efficiency of the institutional endowment. When stakeholders other than firms are important players in the industry, their role upon institutional change and fit between institutional endowment and regulation policy is expected to be noticeable with a variable magnitude according to the industry.

Proposition 2: Firms are expected to create the kinds of strategies and assets enabling them to mitigate or take advantage of the role of other stakeholders in the industry.

Institutions are created and changed by the polity (North, 1990, 1994). As American and French institution builders each have a different set of political constituencies and objectives, proposition 3 follows:

Proposition 3: If institutional environments differ significantly, strategies and assets developed by firms belonging to the same industry in different countries should follow different paths and differ amongst countries as well as from one period to the next.

Institutional Change and Strategic Industry Factors

The first set of propositions above is based upon the adaptation of strategies and assets of firms to institutional changes. As institutions form the incentive structure for firms, industry structure is the result of their actions: strategies and assets developments. This causal path is a reversion of the one existing in industrial organization (Porter, 1980) where firms adapt their strategies to industry structure. Proposition 4 follows:

Proposition 4: If institutional environment differ significantly amongst countries, industry strategic factors are expected to also differ between countries.

Proposition 4 has important industry implications. Institutional change can lead firms to develop widely different strategies and assets. If they turn into differences in kind, so will industry factors. If industry factors differ in their nature, the industry of origin can be separated into two different industries.

Institutional Change and Governance

Williamson also deals with the institutions of the environment (1975, 1997). He adds a more micro-analytical focus by using other kinds of institutions, the institutions of the economy, also called governance structures: market, hybrid and hierarchy (1985). In the neo-institutional paradigm, friction always exist, whatever the economy, in the form of management costs and of transaction costs between economic agents. In such a context, the manager has to choose between the three institutions of the economy previously defined. Williamson advocates a “transaction costs minimizing” perspective to make a discrete choice between governance structures used to support transactions (Williamson, 1991a). Especially in conditions of high asset specificity, management

costs can be minimized by the internalization of contractual and market transactions. Hierarchy substitutes internal transactions for transactions achieved with external partners.

The most frequent use of this economizing rationale concerns vertical integration and choice of foreign governance structures for multinationals (Masten, 1996, Quelin & Coeurderoy, 1997 for a review). Institutions of the environment act as shift parameters to influence the relative importance of the attributes of transactions (Williamson, 1991a). For instance, when anti-trust interpretation shifted from preventing market power attempts by firms to understanding the need to protect asset specific investments, firms were able to change from traditional market contracting to franchising agreements with their clients (Williamson, 1968, 1985, p. 401).

Proposition 5: When features of the institutional environment change, governance structures used to support transactions are expected to shift from one discrete form to another with some kind of lag.

Also, changes and differences in institutions of the environment should impact the governance structures of firms, not only over time, but also from one institutional environment to another. As the institutions of the environment are by definition mostly country-specific, we argue here that the relevant industry boundaries would be delineated along national borders:

Proposition 6: If institutions of the environment differ significantly, institutions of the economy are also expected to differ between countries.

METHODOLOGY

The period 1895 to 1998 will be divided into several parts. The criteria used to determine change from one period to the next is a major institutional change. Such changes need not be the same in both institutional environments under inquiry: France and the USA. Periods can therefore be dissimilar in both countries. However, wars were usually preceded and followed by major institutional changes. France was engaged in both world war one and two before the USA but both countries ended at the same time. The great depression is another turning point for both countries, so is the advent of television. Both triggered institutional changes. These similarities give a common structure to the sub-period: 1895 to 1914, 1914 to 1927, 1927 to 1939, 1939 to 1945, 1945 to 1960 and 1960 to 1998.

This paper examines propositions rather than tests hypotheses. Hypotheses are measurable relationships between variables that can be tested with quantitative data using a variety of statistical models (Ghertman, Obadia, Arregle, 1997). Propositions posit relations between concepts that cannot readily be quantified. They can be examined for their robustness using a mix of qualitative historical data and some time series data. Competitive advantage can be defined as ratio of exports to imports (Porter, 1990). When the ratio is above one, the country under examination has an advantage in the industry under study, when the ratio is lower than one, it has a disadvantage. Such a measure has been criticized by Dunning (1977) who uses a more elaborate measure of industry competitive advantage incorporating inward and outward foreign direct investment. Dunning's argument is well to the point for industries where multinationals have a large amount of foreign direct investment. However this is not the case in the film industry where most of the production of films is done at home and exported. Even in the very first years of the film industry, foreign direct investments were small relative to flows of goods and services. When films are shot in foreign locations, most actors and members of production crew are paid at home. The crude ratio of competitive advantage used by Porter (1990) can therefore be a relevant measure in this paper. Such historical data is hard to obtain for early periods, it would be much worse for foreign direct investment.

AMERICAN AND FRENCH FILM INDUSTRIES: THE SIX PERIODS BETWEEN 1895 AND 1998

The history of the film industry in both countries has been reviewed by several industry specialists (Sadoul, 1949, Gomery, 1987, Bonnell, 1989, Barker, 1989, Farchy, 1992, Legrand et alii, 1992, Bidaud, 1994) as well as strategy scholars (Miller and Shamsie, 1996). We divide it into 6 periods punctuated by a major institutional change. We shall review the six propositions for each period.

1895-1914

The first period starts in 1895 and ends in 1914. The institutions of the environment at the time were not tailored to the American and French film industries. Both countries had democratic governments, independent courts for commercial disputes and patent protection. There were no tariffs particular to imports of films. Anti-trust legislation did not exist in France while the USA already had the Sherman Act in 1890 as a result of the combination movement in rail, oil and steel (Fainsod, Gordon and Palamountain, 1941). However the first implementation of US anti-trust did not concern movies as this industry was in its emergent phase.

It began in February 1895 when Louis and Auguste Lumière, two French brothers working as photographers, decided to patent their new invention, cinematography, and started selling it. The first commercial exhibition of a movie was soon to follow, in December 1895 in France and in June 1896 in the United States.

Gaumont and Pathé Frères, two French firms fully integrated upstream as well as downstream, were amongst the first to tap the new cinema market, and soon became the world industry leaders. In 1907, Pathé created the modern distribution system. The firm stopped selling its movies to stallholders, who accounted for 90% of the sales of the company, and started renting them, for a limited time, to selected subcontracted exclusive distributors. The latter would show them in theatres, and no longer, as was the case before, under tents. All over the world, major production companies soon adopted this strategy, which gave them much more control over distribution.

Pathé and Gaumont had several offices in Europe and in the USA. In the United States, there were seven local production companies: Kalem, Edison, Biograph, Vitagraph, Lublin, Selig and Essanay, all smaller than Pathé and Gaumont (Sadoul, 1949). Several small independent firms were in charge of distribution and exhibition of the movies they produced.

Strategic Industry Factors (SIF), defined as success factors of the industry (Amit and Schoemaker, 1993), were similar on both sides of the Atlantic. They were about implementing the new technology to produce movies and distribute them. The level of asset specificity between the various transactions in the film value chains was probably quite high as a number of firms, like Pathé, Gaumont and Edison for instance, integrated downstream into film production and distribution after having manufactured technical materials (cameras, projectors, negative films etc.). Firms belonging to the industry in both countries controlled all these assets.

In order to meet the audience's demand of at least one new film a week, the French and American leading studios had to be highly productive. In both countries, the main asset was the ownership of production studios, where all movies were shot. Artistic and technical talent were internalized, as labor contracts economized on the costs and uncertainties of frequent recontracting that existed with commercial contracts in the case of independent artists and subcontractors.

Out of the four kinds of assets required to succeed in the film industry: production, artistic and technical, distribution and supplies, the last one became the most critical. It set the technical

standards of the industry. Edison cameras and projectors as well as Eastman Kodak film were able to outperform supplies produced by the French Pathé and Gaumont (Sadoul, 1949).

In December 1898, the seven American production firms mentioned above and two French ones owning production subsidiaries in New York (Pathé and Meliès), created the Motion Pictures Patents Company (MPPC), also known as the “Edison Trust”. Through contractual agreements, they obtained a monopoly on Edison cameras and projectors and on Eastman-Kodak films. To gain access to such supplies other film producers, distributors, exhibitors and importers had to pay very high dues to the MPPC. For Eastman Kodak, accepting Pathé inside the trust was a good way to eliminate Charles Pathé’s threat of opening a negative film production subsidiary in the USA. The production unit opened by Meliès in New York was rather independent from its headquarters in Paris. Its production slate, based on special effects movies, was also different enough from those of the American producers for the company to be included in the trust.

Faced with the threat of losing the American audience to the MPPC, several smaller French, British and Italian producers gathered together in February 1909 to create the International Producing and Projecting Company (IPPC). However, instead of mounting a unified resistance to the Edison trust, most major European firms preferred to negotiate their admission to the latter. Indeed, the IPPC had been created more than 10 years after the MPPC. By that time, all the negotiations of the leading European firms with the latter were well advanced, or so they thought¹. The IPPC was sold in 1910 to Carl Laemmle, a New York independent distributor, only several months after the creation by the leaders of the MPPC of the General Film Company, another trust aimed at controlling the American distribution channels.

The failure of the IPPC triggered the creation of the American film industry as we currently know it. As industry leaders had set up the rules by installing their control on the industry, newcomers and existing smaller American firms (the “independents”) could either obey the private rules set by the members of the Edison Trust or break them. When they opted for the latter, they could lobby to create new institutions of the environment or turn to the existing ones. This was the path followed by William Fox, New York’s first independent distributor, in 1911, when he accused the MPPC of violating the Sherman Act. When lodging his claim, William Fox developed legal assets to dismantle the Edison Trust.

Most independents chose a third way: they created new private rules in Hollywood. Indeed, as European imports decreased and as they were refused access to the movies produced inside the

MPPC, independent distributors and exhibitors diversified into film production in order to keep supplying movies to their nickelodeons. They soon moved from New York, where they were constantly threatened and prosecuted by the Edison detectives. They went to Hollywood, where they started producing inexpensive movies, in natural settings and with whatever fraudulent material they could get, fleeing from one location to the other as soon as the Edison detectives found them.

Soon, their movies became more popular than those of the MPPC members. At the same time, the departure of Eastman-Kodak from the Edison Trust in 1911 was the last straw for the MPPC and General Film Company, which were already weakened by the decline in their audience and the antitrust prosecutions. As a consequence, the gravity center of the American film industry quickly shifted from New York to Hollywood. By the end of this first period of analysis, the American leading firms were no longer the members of the MPPC and General Film Company, but the new independent producers and distributors.

The period 1895-1914 shows largely similar characteristics on both sides of the Atlantic:

- similar, all purpose institutions of the environment.
- its own private institutions: in the USA, the “Edison Trust” designed to mitigate competitive uncertainties and create monopoly rents, and friendly arrangements in France between local competitors.
- similar SIF.

The only different characteristic concerns the sociology of entrepreneurs: friendly coziness in France amongst privileged elites and entrepreneurs, an inheritance from the kings, against tough competition in the USA from rent-seeking monopolists and new entrants.

Proposition 1 (“firms are expected to develop strategies and assets related to institutional incentives”) receives direct support. As institutional incentives protect private property, first mover firms develop technologies, integrate downstream and create a trust to engage in monopoly behavior that maximizes rents. Second mover firms not willing to obey the private rules of the trust create other private rules elsewhere or appeal to anti-trust law. French entrepreneurial coziness created barriers for new entrants.

Proposition 2 (“firms are expected to create strategies and assets enabling them to mitigate or take advantage of the role of other stakeholders in the industry”) is not illustrated as other stakeholders

are not identified. Proposition 3 (“different institutional environments lead to different strategies and assets”) also receives direct positive support. Friendly cozy arrangements in France between existing players does not create conflict while violent private trust implementation by the MPPC is an incentive for independents to innovate in movie content and move to Hollywood. Proposition 4 and propositions 5 and 6 concerning IE’s and governance structures do not receive either positive or negative support as they are similar in France and the USA.

1914-1927

The second period starts in 1914 and ends in the late twenties. World War I widened the gap between the French and American film industries, and even more than the failure of the IPPC, altered the balance of power in the film industry between both countries. French, German, British and Italian film productions, impeded by the war, became unable to supply the movie theatres with enough films to meet demand. Across the Atlantic, far from the battlefields, American independent producers’ and distributors’ production and exhibition capacity were not destroyed or even damaged. As most of the independent producers in Hollywood were immigrants themselves who had started working in the United States at the lowest pegs of the social scale, they knew the tastes of the popular cinema audience better than the middle and upper-class leaders of the MPPC and General Film Company, both still based in New York.

The independents quickly acquired the capacity to produce movies with a wide appeal, and started flooding both American and European movie theatres. This new American SIF was also a direct consequence of the war, which witnessed an important immigration to the USA of French and European artists already well known in their countries. They went on shooting movies in Hollywood that were meant both for European and local theatres.

During wars, IE’s change because government expenditure are directed towards the war effort, some businesses are requisitioned and part of elites, farmer, and labor are enrolled in the army. In his “diamond”, Porter (1990) includes wars under the heading of “chance”. Its influence on industries of countries with war on their territories and away from home are not identical but somewhat symmetrical. Some lose because their assets are destroyed, others gain because their assets are preserved and often reinforced because of immigration and exports.

The second period shows an increased appeal to the institutions of the environment to regulate the film industry in both countries. Indeed, neither in France nor in the USA were the institutions of the environment tailored to industry conditions during the first period. As a consequence, private

commercial rules regulated the relationships between competitors, and the rules that were established by large firms were created and used to their own advantage to obtain monopoly rents.

Neo-classical and neo-institutional economics agree that free enterprise can destroy competition if not controlled and regulated. Without proper anti-trust institutions, rivalry dwindles.

The institutions of the environments must then react to maintain welfare. In the USA, the Supreme Court applied the Sherman Act and ruled the dissolution of the MPPC in 1915. The General Film Company was soon to follow. Several decisions taken by the French Government appear as good illustrations of North's theory that those with the bargaining power to create new rules sometimes do so regardless of the economic and social implications (North, 1990). In 1920, French sales taxes on the film industry raised to a minimum of 37%, and in some cases to more than 50% (Sadoul, 1949). In 1923, the French Government rejected the French producers' request for a 25% theatrical exhibition quota of French film, after having reckoned that such a quota would translate into a loss of 4 to 5 million French Francs for the Public Treasury. The French Government's priority was obviously the reconstruction of the country as a whole, not only of its film industry, whatever cultural or economic implications this choice would have for the latter, and whatever competitive advantage the French film industry would lose to its American competitor. For the first time, the French IE turned against its film industry while American IE favored innovators.

Control of the distribution channels was crucial in both countries. It was owned by American distributors. They managed to flood the French distribution channels thanks to their large production capacity and to their ability to produce wide-appeal movies. In the USA, independent Hollywood producers increased their leverage on independent distributors and exhibitors by merging and restructuring. They improved their bargaining position as they became more vertically integrated. In 1914, Paramount Pictures Corporation was created through the merger of several smaller independent companies. It became the number one American distributor in 1915. In order to show its whole slate in movie theatres, and hence to increase their box-office revenues, the firm imposed private contracts with tied sales to exhibitors. "Block-booking" was required to obtain exclusivity on Paramount movies and to get the firm's potential blockbusters. It meant acceptance of packages, usually made of two feature films and one comedy of variable commercial potential every week. The "block-booking" practice was soon to be adopted by all major American distributors, both in the United States and overseas. It increased their control over European screens even more.

In France and in the USA, the institutions of the environment also increased their moral control on cinema. In 1916, the French Government created a commission in charge of the control and censorship of a film's contents, which became in 1920 a formal institution in its full right, controlled by both the Department of Public Education and Fine Arts and the Home Office. The Motion Pictures Producers and Distributors Association (MPPDA) was created in March 1922 in Hollywood as an industry association under the presidency of former Republican State Secretary William Hays. Just like the French Censorship Commission, the MPPDA imposed moral standards on American movies.

The audience started valuing the performance of specific actors to whom they remained faithful throughout their career. Most of these new stars were working in Hollywood, where the major production companies developed assets linked to their marketing. Labor contracts allowed the major film production companies to internalize these new "movie stars". They started contracting them, usually for a period of 7 years. They had "stables of artists" for whom they decided everything, from the parts they had to play to their private lives, sometimes fabricated in order to give the local and international audience the romance and mystery they were hoping for.

For this second period, most propositions receive positive illustration with the exception of proposition 2 for France. Proposition 1 (IE's influence over strategies and assets) receives direct positive illustration. In France, the war and film taxes thwart asset development in a growth industry, firms learn to abide by the state agencies' moral censure. In the USA the war brings a flow of talented immigrants and helps the export/import ratio while firms develop their own private moral code. Proposition 2 (strategies and assets related to other stakeholders) receives direct support in the USA: the puritan moral standards of society are incorporated with the help of a well known politician, William Hays. Not in France, however. Other stakeholders imposed a tax killer for the French industry and its firms were not able to develop assets to outweigh the government momentum nor indifference from other corporate associations.

Proposition 3 (significant differences in IE's lead to different strategies and assets) is not illustrated negatively. IE's, strategies and assets start to differ in both countries, especially concerning tax incentives, as a matter of degree but not of nature. The same holds for proposition 4 (IE's and SIF's). Industries are still the same but competitive advantage has moved significantly from Paris to Hollywood. It started during the first period with the failure of the IPPC but became "locked in" with the war and the French tax penalizing its own industry while the American competitor did not have to face such a hurdle. The war alone may have altered the relative competitive position of

firms of both countries. However, French institutions and institutional changes were amongst the best allies of American firms.

Propositions 5 and 6 (IE's influence over governance structures) receive positive support. Faced with anti-trust actions, firms reverted from complete vertical integration to quasi vertical integration through "block-booking" contracting, implemented with some lag in Europe.

1927-1939

The late twenties witness three major changes: technological, economic and institutional. Talking movies replaced silent ones. Silent films were probably one of the first global products, adapted to all kinds of audiences. German, Italian and French films could be seen worldwide at no other extra cost than shipment and insurance. With the event of voice coordinated with film, movies became local. They gained a nationality of origin easily noticeable with the language barrier. Exporting them included a new transaction cost: sub-titling, dubbing or making a completely new version with local actors, or with the same actors shooting every take as many times as there were local copies of the film.

It gave English speaking studios an advantage due to the size of their home market they did not have before. Hollywood studios were in a better position to take advantage of this technological discontinuity than their British competitors. Technological breakthroughs, along with wars are considered as "chance" by the Porter diamond (1990). Chance comes to Hollywood for the second time. However, in the resource-based perspective (Penrose, 1959, Wernerfelt, 1984, Barney, 1991, 1997, Amit and Schoemaker, 1993, Henderson and Cockburn, 1994), technological breakthroughs are considered endogenous to the firm, for they are generated internally and directly contribute to the firms' leverage of assets and choice of strategies.

Producers and exhibitors in both countries rushed to adapt their production materials and soundstages, as well as their theatres to the new technology. This adaptation soon became an SIF. In both countries, the decrease in audience size at the beginning of the third period fell to the low levels of the silent age of cinema. This decrease, as well as the rise in rental costs provoked by the increased production costs of the talkies, strongly penalized the exhibition sector, which had heavily invested in the modernization of theatres.

The second major change was the great depression of 1929. It started later in the French than the American economy. Not so in the film industry. French tax policy accelerated the demise of its film

studios. In less than a year, both Pathé's and Gaumont's ownership structures undertook major changes: Charles Pathé (in July 1929) and Léon Gaumont (in March 1930) sold their companies to consortia of industrial companies and banks and retired from the industry they pioneered.

In this period of crisis, control of the production, distribution and exhibition costs also became key strategic assets in the film industry. In France, Pathé and GFFA, the company created after the merger of Gaumont and Franco Films Aubert in 1930, couldn't control the costs associated with the shift to the new technology. They went bankrupt in 1934. Since the French Government controlled the National Bank of Credit, one of GFFA's main creditors, its direct intervention in the film industry prevented both companies from going out of business. American producers embarked upon programs of cost reductions and also changed their ownership. Hollywood independent film companies kept restructuring and internalizing backward and forward. In 1933, the 5 Majors (Warner Brothers, Twentieth Century Fox, Radio Keith Orpheum, Paramount Pictures and Loew's) had become fully-integrated companies, controlled from New York by major banks. The banks' important links to policy makers prevented these new trusts from being sued under the antitrust law until the 1949 Divorcement Act.

The third change was institutional. The weight of religious lobby groups on Congress also translated into a lot of electoral leverage. These groups and the MPPDA deemed that making the movies talk shouldn't allow them to say whatever they felt. As a consequence, the MPPDA moral control over the contents of films was increased through the adoption by Congress of the Hays Code in 1930. A formalized code of conduct, it included three general principles dealing with the morality of the Hollywood movies and 12 headings (crimes against the law, sex, vulgarity, obscenity, profanity, costume, dances, religion, locations, national feelings, titles, and repellent subjects) stating what could be or rather, what couldn't be done in an American film. For instance, "*excessive and lustful kissing, lustful embraces, suggestive postures and gestures are not to be shown*" (Hays Code, II.2.b., 1930), and "*the treatment of bedrooms must be governed by good taste and delicacy*" (Hays Code, IX, 1930). In 1934, the Episcopal Committee for Motion Pictures, the catholic lobby of Hollywood, created the National Legion of Decency to pursue the same aims of morality in American film production as the Hays Code (Bidaud, 1994). According to Barker (1989), this strict moral censorship imposed on American cinema resulted in the production of more commercial films and in a decrease in the production of films aimed at a selective and well-educated audience.

This strategy of uncertainty avoidance decreased the transaction costs of dealing with opportunistic behavior from censors. It led to the development of cognitive models and skills aimed at entertaining all audiences and hurting the feelings of none. This search for a common denominator helped create assets that developed into a major SIF in America and the world.

Proposition 1 (IE's impact upon strategies and assets) receives important direct support. The same holds for proposition 2 in America (other stakeholders' role on strategies and assets) especially as morality oriented stakeholders were strong enough to change the institutional environment of the film industry. Anti-trust action was delayed because of the strength of the relational assets of the new owners of American film studios with Congress. Again, not so in France. Censorship did not have the detailed puritan provisions of the Hays Code and the new owners of French production studios were not able to revert the French film tax.

Proposition 3 (significant differences in IE's lead to significant differences in strategies and assets) receives some positive support for the first time. The differences in IE's start to become significant: French tax plus differences in censorship. Differences in strategies and assets follow. The localization of films due to talking movies adds fuel to the significance of IE's and strategies and assets changes at the time.

Proposition 4 (IE's significant differences impact upon SIF's) also receives important direct support for the first time. The film industries in America and France have significant differences in their institutions, their market sizes, the kinds of movies made, the assets of their firms. Propositions 5 and 6 (IE's impact upon governance structure) do not receive positive or negative support as anti-trust does not change between 1927 and 1939 in either country regarding the film industry.

1939-1945

The fourth period we identify started in 1939 until 1945. Although transitional in the USA where it can be included into the previous period, it is particularly important in France, for it is characterized by a radical change of the French institutional environment of the film industry. Under the Vichy Government, the official government of France zealously collaborated with the nazi occupants. The French film industry became an element of propaganda, national cultural expansion, and a source of tax revenues. Vichy officials first created the Organization Committee for the Film Industryⁱⁱ (COIC) in 1940 to regulate the industry. Political propaganda was at the center of the COIC's set of goals: it was actually meant to increase their political control over the industry by taking economical, technical and social measures, managing the professional organizations, and

representing them in France and abroad. In 1941, the German Propaganda Officeⁱⁱⁱ imposed 6 ordinances on the French film industry. They ranged from the German censorship of all the movies programmed in the German occupied zone, which translated into an economical and ideological protectionism, to the professional exclusion of Jewish managers, technicians and artists from the whole sector. French firms' boards of directors and management were also changed to suit the German occupants. In 1942, the General Direction of the Cinema^{iv} was also created in order to increase Vichy's political and financial control over the industry.

In this context, one SIF was the collaboration with the Nazi occupants. Those filmmakers who collaborated with the Nazis were sued after the war, and had to quit making movies. Those who did not, like René Clair, fled to the USA, or like Marcel Carné, went on making movies in France, but managed to hire, under false identities, Jewish technicians and artists. A few movies shot in France during this period are seen as allegories denouncing the war and occupation, such as Marcel Carné's "Les Visiteurs du Soir". Other films include Nazi propaganda, or are in denial of the true historical context (Legrand et alii, 1992).

This period is the only one during which the IE of one of the film industries changed drastically from democratic to completely totalitarian. It is the most extreme change imaginable. No wonder that propositions 1 to 6 are supported: strategies, assets, film contents were turned around. Never were the SIF so different and the industries so far from one another.

1945-1960

Major institutional changes were necessary in France to get rid of the fascist institutions of the war and to develop assets previously destroyed. Six months after dismantling all Vichy professional organizations, the Parliament voted the creation of the National Center for the Cinema^v (CNC). This new institution was created to help the film industry recover.

Since 1948, the CNC had provided automatic as well as selective subsidies to producers to help them produce and distribute their movies. The former stem from a special tax on the sales of all movies in all distribution channels: cinema, television, video etc. in France. The latter are granted by specific committees according to the originality of the scripts proposed by their authors or producers. From the fifth period onwards, one of the French SIF has been the capability of its firms to obtain as much selective subsidy as is legally possible from the CNC to produce and distribute a movie nationally-made or internationally coproduced. French firms created and developed assets enabling them take advantage of this institutional help. From then on, the French institutional

environment has seen an important direct intervention of the French state in its control and subsidizing, which has been compared by Farchy (1992) to “*the putting on an IV of a critically ill patient that simply wouldn’t die*”.

Such a view assumes that French firms would like to compete with their American rivals and eventually regain part of their lost advantage in the same industry. We saw that such was not the case already in period three (1927-1939) as SIF’s began to significantly differ. The differences were accentuated during the fourth period (World War II) and somewhat locked in with the beginning of the fifth period. Institutions whose “raison d’être” were the distribution of subsidies and relational assets developed by firms to maximize subsidies and rely on them as much if not more than box office revenues seem to be permanent and mutually beneficial features of the French film industry. It is not ill, it has muted into another species because industries differ more or less permanently from 1945 onward. The phasing out of the CNC or subsidies is constantly evoked both by French professionals and their American counterparts, but has never been implemented, at the outset or afterwards, by French institutions builders.

In the USA two institutions changed: moral controls turned into a witch hunt against professionals who could be suspected of having communist sympathies or friends. Anti-trust was also finally implemented with the 1949 Divorcement Act.

In the United States, private entrepreneurs played the game according to the Hays code during and after World War II. With the help of the American Secretary of State, they secured their access to the French screens. The Blum-Byrnes agreements signed with France on May, 28th 1946 offered a monetary loan to the French State, provided the French market would open to American products. French negotiators nevertheless obtained that cinema be excluded from this free trade agreement, by imposing that French exhibitors devote four weeks per trimester to the showing of French films. Besides those screen quotas, which were further extended in 1947, French policy regarding American film imports has always been rather lenient, and protectionist measures progressively died out in the sixties (Farchy, 1999). Once again in France, those with the power to create new institutional rules did so regardless of their economic and social consequences on the French film industry.

The American Congress also increasingly intervened in the moral and political control of the industry. The Hays Code was revised and made more lenient in 1947. However, anti-Communist prosecutions initiated in Hollywood in 1947 by Senator John Parnell Thomas were continued from

1950 until 1957 by Senator McCarthy. Electoral leverage of the Republican Party, fear of communism and high electoral returns from red bashing allowed him to lead a witch-hunt in all the economic sectors, including the film industry. American institutions helped major studios eradicate the only truly independent union, the Conference of Studio Unions (CSU). Its leader was accused of being a communist. These institutional changes lowered the supply of directors and writers in the USA. Indeed, many blacklisted artists who weren't imprisoned fled to Europe, where they found a higher level of freedom of speech (Barker, 1989, Legrand et alii, 1992).

One of the differences between the French and American film industry at that time was that the former supported much less puritan constraints. French firms developed the assets they needed to lobby for the abrogation of censorship. Their lobbying against religious and political lobby groups was helped by many intellectuals and former resisters, such as philosopher Jean-Paul Sartre and Simone de Beauvoir, against the pro-fascist French government during World War II.

The Divorcement Act of 1949 put an end to the complete downstream internalization of the major studios. Under the antitrust law, they had to externalize their exhibition channels. Through the Divorcement Act, the American Congress imposed new forms of governance upon the American film industry. It decreased the concentration of the industry and allowed the entry of more players, including independent newcomers. However, they had to remain under the rules of McCarthyism. Hence, the strategy of producing risk-avoiding slates of films remained an American SIF during period five. Also, the disaggregation of the major studios led to the strengthening of talent agents and of the negotiating power of artists. They were no longer under long term contracts with large studios. The strategic asset they represent started being mobile across firms, which had to pay for them on a film by film basis. The studios also had to develop new strategic assets: the capability to negotiate with talent agents and artists for one-deal contracts.

Proposition 1 to 6 received direct positive support between 1945 and 1960. Proposition 1 (IE's impact upon strategies and assets) because IE's continued to diverge between France and America: CNC on one side and McCarthy and divorcement on the other, strategies and assets separated even more than before. Proposition 2 (other stakeholders roles over strategies and assets) has mixed support. Positive on one side because American studios used McCarthy to get rid of unions and also managed to postpone as much as possible the final Divorcement Act. Also, French studios turned happily to an environment of subsidies akin to the French business culture of the time. Negative because US studios could not stop either Divorcement nor the flight of talent to Europe.

Proposition 3 and 4 (IE's significant differences leads to different sets of strategies, assets and SIF's), already started in period three, reinforced in period four, seem locked-in during period five. Propositions 5 and 6 (IE's impact upon governance structures in time and between countries) receive their first important direct support. Between 1895 and 1998 it is the only time when anti-trust institutions, always lenient towards complete integration on both sides of the Atlantic, diverge strongly. The Divorcement Act of 1949 implemented anti-trust policy in the USA, firms divested from their channels and artists became independent. Not so for French studios as the French IE in general was never highly inclined to fight vertical integration, more so in the film industry.

Period 5 is the only one that saw American IE's providing negative incentives to its firms, more so than French ones. Why did French firms not take this opportunity to rebuild competitive position in the American film industry? As SIF were significantly different already, they did not have and probably could not develop the strategies and assets required. Their cognitive models (Reger and Huff, 1993, Calori, Johnson and Sarnin, 1994, Cohen and Levinthal, 1990, Porac and Thomas, 1990) did not address them to such issues. Their dominant logic (Prahalad and Hamel, 1989, 1990) directed their attention towards France, art and subsidies, not America, entertainment and competition.

1960-1998

The sixth and last period we identify started in 1960. It is marked by a radical redefinition of the core business of film production firms as distribution channels kept proliferating from the advent of television in the early sixties to videocassettes in the late seventies and cable television in the eighties. American studios with their entertainment oriented dominant logic were able to develop corresponding strategies and assets faster and to a much larger extent than French studios. The increasingly wider appeal of English, not only as a business language but as the language of reference for young people worldwide for products as different as Coke, McDonald's, blue jeans, cigarettes and the internet, also helped the foreign sales of English speaking films. They seem to be progressively filling the empty space for global products left by silent movies fifty years hence. French films market share in France fell from 48.9 % in 1955 to 37.5 % in 1996 (CNC data).

Both French and American institutions of the environment supported the firms in the film industry throughout their transformation into audiovisual and multimedia groups. The French subsidy system continued, and adapted to new demand conditions. In 1974 and 1990, it added new clauses regulating the broadcasting of feature films in terms of compulsory delays from the first theatre show to the first television run. Quotas of French and European films were also decided. A 1990

French decree also established the independence of feature film producers from television channels, cable operators and video editors. However, contrary to the majority of the E.U. countries, there are no distribution quotas concerning theatres. They are legally free to program whatever movie they choose. In the United States, McCarthyism fell into oblivion at the beginning of the sixties, and the Hays Code was revised for the second time in 1966, when it was replaced by the much more lenient Code of Self Regulation in order to give film directors more freedom of expression to compete against television. Informal institutions had changed: freedom of speech became important because of civil rights and anti-war movements.

The ownership structure of French and American film studios was also modified. In the seventies and eighties, all the majors American studios were sold first to American, and then to foreign conglomerates. Several Japanese conglomerates, such as Sony buying Columbia in 1986, could take over American major studios. It has been impossible for Italian entrepreneur Giancarlo Piretti to buy the French firm Pathé in 1989: the French Government firmly opposed this sale. Indeed, whereas American decision-makers believe that freedom of circulation on capital markets increases social welfare, French decision-makers stick to the royalist tradition that the right to exert an economic activity must be controlled by the State. This is particularly noteworthy in the art and publishing industries, for its players often believe that the control of resources can change the content of films, books, newspapers and magazines. As the Divorcement Act fell into oblivion during the presidency of Ronald Reagan in the eighties, several major studios have turned again to a form of downstream integration of movie theatres.

The interaction of several distinct national institutional environments led to the creation of a fully integrated coproduction system in Europe. Approximately 30 bilateral coproduction agreements have been signed by the French Ministry of Culture since 1947. France, as a founding member of the European support fund « Eurimages » created in 1988 by 12 countries of the Council of Europe, has adopted the multilateral European Coproduction Act of 1992. From 1988 to 1997, the percentage of French-European coproductions over total number of French films produced raised from 32% to 47%, with a peak at 56% in 1993, less than a year after the European Coproduction Act was first submitted (Tessier et alii, 1997 and unpublished data from the CNC). One of the French SIF's is the adaptability of its firms to the European subsidizing institutional environment.

No such subsidy system exists in the USA. However, in order to enhance their strategic factor market and to bypass the exhibition and broadcasting constraints on their productions imposed by the local and supranational European institutions of the environment, several American major

studios have adapted to them. They have recently re-opened European subsidiaries, all of them located in England. The films they produced there are considered European, and thus get access to European subsidies and are included into the European exhibition and television quotas of local films.

Proposition 1 (IE's impact upon strategies and assets) receives direct support: French and later American firms develop relational networks to tap European subsidies. Not so for proposition 2 (impact of other stakeholders) as none entered the scene during period six. Proposition 3 (different IE's lead to different strategies and assets) receives mixed support. Strategies and assets continue to differ significantly because of the path they were embarked upon since period 3 and "locked in" in period 5. However the European subsidizing environment, while it reinforced the behavior of French firms, attracted some American firms back to the London fog. Proposition 4 still holds: SIF's continue to diverge significantly as well as IE's between the two countries. Proposition 5 (impact of a shift in IE's on governance structure) receives direct support: American firms revert to downstream integration because of the practical oblivion of the 1949 Divorcement Act. So does proposition 6: as IE's converge on vertical integration, firms conduct downstream integration strategies in the two countries.

DISCUSSION AND CONCLUSIONS

Institutions and institutional change played a major role during each of the six periods between 1895 and 1998. For changes in relative competitive positions of French and American film studios, for the development of strategies and assets of firms, for the separation of one industry into two significantly different streams. However, institutional change was not the sole driver of strategic and industry changes: chance (technologies and wars) and cognitive models had their part. Table 1 gives a summary of sources of changes.

Insert Table 1 about here

The forces driving institutional changes were mainly political. In France, parliaments and governments voted laws and implemented decrees detrimental to French film studios: film taxes or fascist controls. Lobbying from firms was never strong or good enough to prevent such negative moves. Those who made such decisions had the power to do so and other stakes in mind than the future of the French film industry. The same held true in the USA for the Hays Code, the McCarthy red bashing and the Divorcement Act of 1949. Both histories add evidence to the theory developed

by North (1990, 1994) and reviewed in the first part of this paper: economic efficiency is not built in the design and change of institutions. Overall, however, public institutions provided positive incentives to the industry, especially in the USA.

A few sources of institutional change were private, particularly during the first period when first movers cornered the market to extract monopoly rents as long as they had the power to impose their private rule. Customer interest or industry development were not on their agenda. It took the trust avoidance strategy of second movers (Lieberman and Montgomery, 1988, 1998) to bring innovations and Hollywood to the industry. Anti-trust played its part but only later.

Differences in national corporate cultures towards competitive practices, violent in the USA, cozy in France, explains the strategies of rupture to Hollywood in one case and the oligopoly of Pathé, Gaumont and Méliès in the other.

The propositions on the influence of IE's of both countries on strategies and assets, SIF's and governance structures received strong direct support for both countries but not necessarily all the time nor in the same way for each country during each period.

Proposition 1 (IE's impact upon strategies and assets) receives direct support for both countries during each of the six period under inquiry. When the rules of the game change, firms develop new skills (assets) and strategies, with no exception.

Proposition 2 received mixed support. American studios had to face fewer and less detrimental impact of other stakeholders (puritans and McCarthyists) than the French (taxes, subsidies and fascists). American studios went along with puritans and embarked on the path to the entertainment industry. They used McCarthy to get rid of the only union which they didn't fully control. The French studios could never resist the negative tax pressure or fascist period.

Proposition 3 (significant differences in IE's result in significantly different strategies and assets) received stronger support as IE's became increasingly different with time: film taxes, fascist propaganda, local and European subsidies in France; anti-trust, moral censorship and red bashing in the USA. Strategies and assets diverged accordingly, starting with the second period and increasingly so afterwards until they turned into "locked in" significant differences during the fifth period.

Proposition 4 (significant differences in IE's result in significant differences in SIF's) gives the same results as proposition 3 as of construction. SIF's in this paper are the results of the development of strategies and assets by firms. The American industry transformed into an entertainment business for wide audiences, highly competitive, largely supplemented by other media (TV, video tapes, cable, etc.), strongly oriented towards world exports. The French industry turned into an art for elites and sometimes wide audiences, oriented towards subsidies and co-production alliances with European partners, much less supplemented by other media than American studios, exporting mainly to Europe: 58 % of French exports on average from 1987 to 1996, Asia and the Middle East: 14.1 % on average, and North America, including French-speaking Canada: 12.9 % on average (CNC, 1999).

Proposition 5 and 6 (IE's impact upon governance structures) also received positive support. The strongest one came during the fifth period (1945-1960) when the US IE seriously implemented anti-trust policy with the Divorcement Act of 1949: US firms divested from their exhibition channels. The French IE never acted against vertical integration and French firms could remain vertically integrated throughout the period.

The divergence of institutional environments with higher incentives of the American IE over the French one, starting with cozy business practices and continuing with killer taxes right after a war, fascist rule and automatic and ad hoc subsidies go a very long way to explain the shift in competitive positions between the film studios of both countries.

Other explanations are useful complements to those stemming out of neo-institutional economics. Chance is divided into exogenous technological change and wars in this paper, following Porter (1990). Better cameras, projectors and films by Edison and Eastman-Kodak during the first period, voice during the third and TV and other media during the fifth all contributed to tilt the competitive game favorably to American studios. Voice had major implications as it moved the industry away from its global content with silent movies to national characteristics and an advantage of home market size for US and British firms. However, technology is not only an exogenous variable, like institutions, leading firms to alter their strategies and assets. It is also an endogenous variable incorporated in the assets and strategies of firms, often giving first mover advantage (Lieberman and Montgomery, 1988, 1998) to those who initiated or first applied the technology. Wars also disfavored French studios considerably.

Cognitive models also help complement the explanations coming out of neo-institutional economics and chance. The pioneers of the industry, the Lumière brothers and Thomas Edison had frames of meaning (Carlson, 1994), especially puritan ethics for the latter, that drove their attention towards industry products rather than mass audiences. Eastman-Kodak apparently not. It explained why Edison stayed in the trust while Eastman did not and took the opportunity to sell more films to the independent companies. Frames of meaning, akin to cognitive models (Reger and Huff, 1993) or dominant logic (Prahalad and Hamel, 1989, 1990) also explain why French film studios did not take the opportunity of the McCarthy period to use American talent fleeing from the USA to engage in strategies using English speaking films for wide audiences.

REFERENCES

- AMIT, Raphael, SCHOEMAKER, Paul J. H., 1993. Strategic assets and organizational rent. Strategic Management Journal, 14 : 33-46.
- BAIN, J. S., 1951. Relation of profit rate to industry concentration: American manufacturing, 1936-1940. Quarterly Journal of Economics, 65 : 293-324.
- BAIN, J. S., 1954. Economies of scale, concentration, and the condition of entry in twenty manufacturing industries. American Economic Review, 44 : 15-39.
- BARKER, Drucilla K., 1989. Qualité et variété des films aux Etats-Unis et en Europe (1925-1950). In F. Rouet (Ed.), Economie et culture: 4^{ème} conférence internationale sur l'économie de la culture (Avignon, 12-14 mai 1986), Volume III, "Industries Culturelles" : 47-57. Paris : La Documentation Française.
- BARNEY, Jay B., 1991. Firm resources and sustained competitive advantage. Journal of Management, 17 (1) : 99-120.
- BARNEY, Jay B., 1997. Gaining and sustaining competitive advantage. Addison Wesley Publishing Company.
- BAUM, Joel A. C., KORN, Helaine J., 1999. Dynamics of dyadic competitive interaction. Strategic Management Journal, 20 (3) : 251-278.
- BIDAUD, Anne-Marie, 1994. Hollywood et le rêve américain: Cinéma et idéologie aux Etats-Unis. Masson, Langue et civilisation anglo-américaines.
- BONNELL, René, 1989. La vingt-cinquième image: Une économie de l'audiovisuel. Editions Gallimard - FEMIS.
- CALORI, R., JOHNSON, G., SARNIN, P., 1994. CEO's cognitive maps and the scope of organization, Strategic Management Journal, 15 : 437-457.
- CARLSON, B., 1994. Artifacts and frames of meaning: Thomas A. Edison, his managers, and the cultural construction of motion pictures, in W. E. BIJKER and J. LAW (Eds.), Shaping technology/Building society: Studies in socio-technical change, Cambridge (Mass.) : MIT Press.
- CHANDLER, Alfred D. , 1962. Strategy and structure: chapters in the history of the American industrial enterprise. Cambridge (Mass.) : The MIT Press.
- CHANDLER, Alfred D. , 1990. Scale and scope: The dynamics of industrial capitalism. Cambridge (Mass.) : The Bellknap Press of Harvard University Press.
- CHEN, M. J., 1996. Competitor analysis and interfirm rivalry: Toward a theoretical integration. Academy of Management Review, 21 : 100-134.
- CNC, 1999. CNC Info, 271 (February).

- COASE, Ronald H., 1937. The nature of the firm. Economica, 4 : 386-405.
- COASE, Ronald H., 1984. The new institutional economics. Journal of Institutional and Theoretical Economics, 140.
- COHEN, W., LEVINTHAL, D., 1990. Absorptive capacity: A new perspective on learning and innovation. Administrative Science Quarterly, 35 : 128-152.
- DELMAS, Magali, GHERTMAN, Michel, HEIMAN, Bruce, 1997. Institutional environment effects on transaction costs: A comparative analysis of the US and French nuclear power industries. In M. Ghertman & H. Thomas (Eds.), Strategy, structure and style : 283-299. John Wiley & Sons.
- DUNNING John H., 1977. Trade, location of economic activity and the MNE: A search for an eclectic approach. In Bertil Ohlin et al. (Eds.), The international allocation of economic activity, London: Holmes and Meier.
- FAINSOD, M., GORDON, L., PALAMOUNTAIN, J., 1941 (3rd ed. 1959). Government and the American economy. New York : W.W. Norton.
- FARCHY, Joëlle, 1992. Le cinéma déchaîné: Mutation d'une industrie. Paris : Presses du CNRS.
- FARCHY, Joëlle, 1999. La fin de l'exception culturelle? Paris: CNRS Editions.
- GHERTMAN, Michel, OBADIA, Jacques, ARREGLE, Jean-Luc, 1997. Statistical models for strategic management. Kluwer Academic Publishers.
- GOMERY, Douglas, 1987. L'âge d'or des studios. Cahiers du Cinéma.
- HENDERSON, Rebecca, COCKBURN, Iain, 1994. Measuring competence? Exploring firm effects in pharmaceutical research. Strategic Management Journal, 15 : 63-84.
- KARNANI, Aneel, WERNERFELT, Birger, 1985. Multiple point competition. Strategic Management Journal, 6 (1) : 87-96.
- LEGRAND, Jacques (ed.) et alii, 1992. Chronique du cinéma. Editions Chronique, JOL International Publishing.
- LEVY, Brian, SPILLER, Pablo, 1994. The institutional foundations of regulatory commitment. Journal of Law, Economics and Organization, 9 : 201-246.
- LIEBERMAN, Marvin B., MONTGOMERY, David B., 1988. First mover advantages. Strategic Management Journal, 9 (Special Issue, Summer) : 41-58.
- LIEBERMAN, Marvin B., MONTGOMERY, David B., 1998. First mover (dis)advantage: Retrospective and link with the resource-based view. Strategic Management Journal, 19 (12) : 1111-1126.
- MASTEN, S., 1996. Empirical research in transaction cost economics: Challenges, progress, direction. In G. Groenwegen (Ed.), Transaction cost economics and beyond. Kluwer Academic Publishers.

- MILLER, Danny, SHAMSIE, Jamal, 1996. The resource-based view of the firm in two environments: The Hollywood film studios from 1936 to 1965. Academy of Management Journal, 39 (3) : 519-543.
- NORTH, Douglass, 1981. Structure and change in economic history. New York : Norton.
- NORTH, Douglass, 1990. Institutions, institutional change, and economic performance. New York : Cambridge University Press.
- NORTH, Douglass, 1991. Institutions. Journal of Economic Perspectives, 5 : 97-112.
- NORTH, Douglass, 1994. Economic performance through time. American Economic Review, 84 : 359-368.
- PENROSE, Edith T., 1959. The theory of growth of the firm. New York : John Wiley.
- PORAC, J.F., THOMAS, H., 1990. Taxonomic mental models in competitor definition. Academy of Management Review, 15 : 214-227.
- PORTER, Michael E., 1980. Competitive strategy. New York : The Free Press.
- PORTER, Michael E., 1990. The competitive advantage of nations and their firms. New York : The Free Press.
- PRAHALAD, C. K., HAMEL, Gary, 1989. Strategic intent. Harvard Business Review, (May-June).
- PRAHALAD, C. K., HAMEL, Gary, 1990. The core competence of the corporation. Harvard Business Review, (May-June): 79-91.
- QUELIN, Bertrand, COEURDEROY, Régis, 1997. L'économie des coûts de transaction, un bilan des études empiriques sur l'intégration verticale. Revue d'Economie Politique, Bibliogr. N°2 (Mars-Avril) : 145-181.
- QUIGLEY, Martin, LORD, Daniel, 1930. The Hays Code of Conduct.
- REGER, R, HUFF, A., 1993. Strategic groups: A cognitive perspective. Strategic Management Journal, 14 : 103-124.
- RUMELT, Richard P., 1991. How much does industry matter? Strategic Management Journal, 12 : 167-185.
- SADOUL, George, 1949. Histoire du cinéma mondial. Flammarion.
- SCHMALENSEE, Richard, 1985. Do markets differ much? American Economic Review, 75, June : 341-351.
- TEECE, David J., PISANO, G., SHUEN, A., 1992. Dynamic capabilities and strategic management. Mimeo, Haas School of Business, University of California, Berkeley, CA.
- TEECE, David J., PISANO, Gary, SHUEN, Amy, 1997. Dynamic capabilities and strategic management. Strategic Management Journal, 18 (7) : 509-533.
- TESSIER, Marc (ed.) et alii, 1997. Les chiffres clés du CNC, édition 1997, Paris : CNC.

- WERNERFELT, Birger, 1984. A resource-based view of the firm. Strategic Management Journal, 5 : 171-180.
- WILLIAMSON, Oliver E., 1968. Economies as an antitrust defense: The welfare tradeoffs. American Economic Review, 58 (March) : 18-35.
- WILLIAMSON, Oliver E., 1975. Markets and hierarchies: Analysis and antitrust implications. New York : The Free Press.
- WILLIAMSON, Oliver E., 1985. The economic institutions of capitalism: Firms, markets, relational contracting. New York : The Free Press.
- WILLIAMSON, Oliver E., 1985, 1994 (trad.). Les institutions de l'économie. Paris : InterEditions.
- WILLIAMSON, Oliver E., 1991 a. Comparative economic organization: The analysis of discrete structural alternatives. Administrative Science Quarterly, 36 (June) : 269-296.
- WILLIAMSON, Oliver E., 1991 b. Strategizing, economizing, and economic organization. Strategic Management Journal, 12 (Special Issue, Winter) : 75-94.
- WILLIAMSON, Oliver E., 1996. Economic organization: The case for candor. Academy of Management Review, 21 (1) : 48-57.
- WILLIAMSON, Oliver E., 1997. Transaction cost economics: How it works, where it is headed. Working Paper, University of California, Berkeley.

TABLE 1**French and American Film Industries (1895-1998): Sources of Change**

Period	1895-1914	1914-1927	1927-1939	1939-1945	1945-1960	1960-1998
Institutional change	Fr: IPPC	Film tax	Film tax	Fascist propaganda	Local subsidies	European and local subsidies
	USA: Edison Trust Hollywood	End of Edison trust	Moral censorship		McCarthy Divorcement	End of Divorcement
Chance	Technology	War	Technology (voice)	War		Television and other media
Industries	Global		Local	Strong differences	Differences “locked in”	

ⁱ Indeed, although they negotiated for years, no other production firm than the 9 founders of the trust were ever admitted to it.

ⁱⁱ Comité d'Organisation de l'Industrie Cinématographique

ⁱⁱⁱ Propaganda Abteilung

^{iv} Direction Générale du Cinéma

^v Centre National de la Cinématographie