



Paper to be presented at the  
DRUID Society Conference 2014, CBS, Copenhagen, June 16-18

## **The Dark Side of Public Money? The Dual Effect of Public Sponsorship on Firm Performance**

**Julien Jourdan**  
Bocconi University  
Department of Management and Technology  
julien.jourdan@unibocconi.it

**Ilze Kivleniece**  
Imperial College London  
Innovation and Entrepreneurship Group  
ilze.kivleniece@imperial.ac.uk

### **Abstract**

We examine the effects of organizational sponsorship on firm performance by investigating the impact of subsidies as a public resource allocation mechanism in the context of French film industry. Existing research provides contradicting perspectives on the effect of public resource allocations on target organizations suggesting a positive effect on firm level outcomes, while also a potentially weakened competitive position and reduced performance. Drawing on economic theories on incentives and resource based perspective of the firm, we argue that these conflicting insights can be explained by untangling the initial resource buffering effect from a more gradual incentive and resource altering effect of public sponsorship on target firms. We propose a two-stage model that demonstrates how repeated, cumulative public resource allocations are associated with positive first-order effects, yet, a gradual detrimental change in a target firm's market-based resources and capabilities, leading to a curvilinear relationship between sponsorship and firm performance. We further argue and find this relationship being significantly attenuated by the horizontal scope of a firm, with both effects substantially more pronounced for generalist rather than specialist firms. Our work highlights the resource and incentive trade-offs associated with resource sponsorship by the state and other patrons, and carries important managerial and policy implications.

Submission to the DRUID Annual Conference  
Copenhagen, June 16-18, 2014

**THE DARK SIDE OF PUBLIC MONEY?  
THE DUAL EFFECT OF PUBLIC SPONSORSHIP ON FIRM PERFORMANCE**

February 28, 2014

## **THE DARK SIDE OF PUBLIC MONEY?**

### **THE DUAL EFFECT OF PUBLIC SPONSORSHIP ON FIRM PERFORMANCE**

#### **ABSTRACT**

We examine the effects of organizational sponsorship on firm performance by investigating the impact of subsidies as a public resource allocation mechanism in the context of French film industry. Existing research provides contradicting perspectives on the effect of public resource allocations on target organizations suggesting a positive effect on firm level outcomes, while also a potentially weakened competitive position and reduced performance. Drawing on economic theories on incentives and resource based perspective of the firm, we argue that these conflicting insights can be explained by untangling the initial resource buffering effect from a more gradual incentive and resource altering effect of public sponsorship on target firms. We propose a two-stage model that demonstrates how repeated, cumulative public resource allocations are associated with positive first-order effects, yet, a gradual detrimental change in a target firm's market-based resources and capabilities, leading to a curvilinear relationship between sponsorship and firm performance. We further argue and find this relationship being significantly attenuated by the horizontal scope of a firm, with both effects substantially more pronounced for generalist rather than specialist firms. Our work highlights the resource and incentive trade-offs associated with resource sponsorship by the state and other patrons, and carries important managerial and policy implications.

## INTRODUCTION

Organizational and strategy scholars increasingly highlight a need to understand the role and effects of public or national level support policies aimed at fostering firm emergence and competitiveness, not least, in the light of the recent surge in public resource allocations to private corporations (Klein, Mahoney, McGahan, & Pitelis, 2010; Lazzarini, 2013; Mahoney, McGahan, & Pitelis, 2009). In many countries, particularly so in Western Europe, a long tradition of public intervention has led governments to create dedicated organizations and complex policy instruments aimed at facilitating new entrepreneurial ventures, boosting existing firms and supporting survival of important local industries. Among the most common policy tools are different forms of public or organizational sponsorship manifesting through, for example, subsidy, tax-based relief and business incubation schemes (Amezcuca, Grimes, Bradley, & Wiklund, 2013). Yet, while public sponsorship is commonly assumed as beneficial for firms, by increasing the amount of resources available, we have limited understanding of how public resource allocation and various forms of public sponsorship may affect the performance and competitiveness of receiver firms (Klein et al., 2010; Mahoney et al., 2009). From a strategy scholar perspective, specifically, public sponsorship may affect key firm outcomes such as the rates of entrepreneurship, the development of organizational capabilities, and innovation, and raises a critical question on how it may impact sustained organizational performance (Amezcuca et al., 2013; Mahoney et al., 2009; Nohria & Gulati, 1996).

Existing literature in strategy and organization science remains rather contradictory as regards the influence of public sponsorship on firm competitiveness and performance. Generally, firm ties to public sector are found to increase the pool of available resources, dampen competition effects and increase firm founding and survival rates (Baum & Oliver, 1991; Dobbin

& Dowd, 1997; Russo, 2001). Access to public resources and public procurement, in particular, is likewise linked to opportunities for inter-organizational learning and development of new organizational capabilities, as well as lead to product and process-based innovation (see, for instance, Argyres, 1999; Aschhoff & Sofka, 2009; Baum & McGahan, 2009). Public sector funding is argued to carry a significant and potentially positive effect on firm performance largely through a resource buffering effect, alleviation of competitive pressures as well as mitigation of environmental uncertainty (Amezcuca et al., 2013; Rangan, Samii, & Van Wassenhove, 2006).

This unequivocally positive view on public sponsorship, however, is increasingly called into question, both from economic theory perspectives as nascent works in management. Far from providing a favourable evaluation, a long tradition of studies in economics emphasize potential welfare loss due to deadweight costs, substitution effects, incentive corruption and productive inefficiencies associated with certain forms of political actor involvement in resource allocation decisions, and, among these, sponsorship to corporate actors (Becker, 1983; Dixit, 1997; Shleifer, 1998; Shleifer & Vishny, 1994). Studies in management science, likewise, increasingly point to a more complex and contingency-based relationship underlying firm survival, performance and organizational sponsorship. Emphasizing the role of external environment and founding conditions, Amezcuca et al. (2013) demonstrate that organizational sponsorship may both increase or decrease firm survival rates, depending on the fit between the resource types with the geographic-based founding density. From the innovation literature perspective, scholars have likewise begun to recognize that additional resources may foster potentially adverse effects to firm innovation rates and creativity. Organizational slack, for example, is argued to foster experimentation yet also diminish discipline over innovative

projects, resulting in a curvilinear relationship between slack and innovation (Nohria & Gulati, 1996). The tension between the stimulating effect of public sponsorship to firm founding and innovation rates, and the “crowding-out” effect on private investment have also been highlighted by numerous studies on R&D subsidies (for an overview, see David, Hall, & Toole, 2000). In a different tradition, the literature on creativity has likewise emphasized that more creative solutions may stem from resource-constrained rather than resource munificent environments, putting hence the effectiveness of external resource injections to firms under a question (Ambile, 1996). Few if any studies, however, exist, to have empirically probed the impact of external resource allocations on firm performance (rather than survival or innovation rates).

In this study, we assume a firm performance perspective and argue that the apparently contradictory effects of public sponsorship on target firms can be elucidated by carefully disentangling the dual effect - the positive external effect related to resource buffering that public funding creates in the focal firm’s environment from more detrimental incentive-distortion and resource-altering effect internally within a focal firm. Drawing on economic theories on organizational incentives and the resource based perspective of a firm, we propose a two-stage model that demonstrates how repeated, cumulative public sponsorship is associated with positive first-order effects, yet, a gradual detrimental change in a target firm’s market-based resources and capabilities, leading to a curvilinear relationship between public sponsorship and firm performance. Building on the dual resource buffering and resource altering effects, we, furthermore, suggest that this curvilinear relationship is significantly attenuated by the horizontal scope of the firm, with the impact of sponsorship on firm performance being substantially more pronounced for generalist rather than specialist firms.

We test and find strong support for our hypotheses using empirical evidence from the population of film production enterprises, predominantly, small entrepreneurial firms in France. Our work highlights the resource and incentive trade-offs associated with resource allocations to firms, specifically in cultural industry settings, and carries important managerial and policy implications.

## **THEORETICAL BACKGROUND**

### **Public Sponsorship and Organizational Performance**

We draw on a nascent literature on organizational sponsorship—defined in broad terms as “attempts [by external organizations] to mediate the relationship between new organizations and their environments by creating a resource-munificent context” (Amezcuca et al., 2013: 1)—to study the performance impact of public sponsorship. Documented to be increasingly prevalent in many Western economies, particularly, at times of industry downturn and heights of governmental “protectionism” agendas, sponsorship has attracted increasing interest among management and strategy scholars. An analysis of studies related to public sponsorship of private organizations reveals conflicting accounts with, on the one hand, strategy scholars typically associating such sponsorship with a beneficial impact on target firm’s performance, while, on another, economics and innovation literature increasingly highlighting potential adverse effects associated with attempts to externally lessen the resource pressures on competitive organizations.

From a strategic management perspective, resource buffering is one of the main mechanisms explaining why external sponsorship positively affects performance. According to Amezcuca et al. (2013), buffering refers to the isolating effect that external resource allocations provide for receiver firm from their environmental threats and uncertainty (Amburgey, Kelly, & Barnett, 1993). The isolating effect, itself, stems from a number of sources. First, it is directly

related to the increased pool of resources at the disposal of target organization, available at no extra cost of acquisition. Second, and importantly – from improvement in relative competitive position of a receiver firm. If no public resource allocations are made to certain rival firms, the target firm stands to benefit by improvement in its relative resource endowments and competitiveness, reflected, in turn, in favourable firm level outcomes. Several studies on firm ties to public sector argue that firm engagements with institutional actors tend to dampen competition effects and increase firm founding and survival rates (Baum & Oliver, 1991; Dobbin & Dowd, 1997; Russo, 2001). Third, by alleviating resource constraints and competitive threats, public sponsorship effectively protects a firm from any adverse change in environment, reducing the overall level of uncertainty to which it may be exposed (Rangan et al., 2006). Last but not least, external resource allocation is also likely to be tied to more opportunities for inter-organizational learning and development of organizational capabilities, as well as lead to increased experimentation leading to increased product and process-based innovation (Argyres, 1999; Aschhoff & Sofka, 2009; Baum & McGahan, 2009).

Closely tied to buffering effect are the bridging (Amezcuca et al., 2013) and signalling effects stemming from public sponsorship. Thus, resource-dependent ties to prominent institutional actors may permit firms to establish new linkages or ties with other (private) organizational actors, pushing further the available resource frontiers (Baum & Oliver, 1991). From an institutional perspective, public sponsorship and ties to prominent actors may enhance organizational legitimacy and signal certain status or performance credentials to external evaluators of a firm (Podolny, 2001). Yet, far from unambiguous, the signalling effect of public sponsorship may likewise be tied to increased penalties or negative associations conveyed for receiver organizations, or even lead, in an extreme case, to de-legitimizing effects on underlying

organizations or practices, in particular beyond a certain threshold of public resource allocations passed. For example, during the recent financial crisis, a continued firm rescue by governments and public resource injections in industry was met with a increasing public outcry, manifesting in a range of actions, such as, for instance, the “Occupy Wall Street” movement (Tarrow, 2011).

The positive outlook on public sponsorship is questionable, when one examines the long line of critical reasoning in economics literature, devoted to the topic of public resource allocations to organizations. Scholars in both privatization and developmental economics literature emphasize significant societal welfare losses underlying public subsidy schemes in general (Shleifer, 1998; Shleifer & Vishny, 1994). Moreover, critical substitution effects, incentive corruption and productive inefficiencies are identified and associated with certain forms of political actor involvement in resource allocation decisions, and, among these, sponsorship to corporate actors (Becker, 1983; Dixit, 1997; Shleifer, 1998; Shleifer & Vishny, 1994). Similar arguments can be found in the innovation literature, emphasizing the de-stimulating, and “crowding-out” effects of public sponsorship reducing incentives for private investment (see David et al., 2000).

In the view of these contrasting perspectives, scholars have begun to increasingly call for a more critical, contingency-based perspective in assessing the benefits and costs associated with public sponsorship. Focusing on the role of external environment and competitive founding conditions, Amerzcua et al. (2013) argue that organizational sponsorship may both increase or decrease firm survival rates, depending on the fit between the resource type with the geographic-based founding density surrounding the target firms. Also, from an innovation literature perspective, scholars have recognized that additional resources may foster potentially adverse effects to firm innovation rates. Organizational slack, for example, is argued to foster

experimentation yet also diminish discipline over innovative projects, reflected in a curvilinear relationship between slack and innovation (Nohria & Gulati, 1996).

### **The Dual Effect of Public Sponsorship on Firm Performance**

Few of the studies to-date, however, manage to reconcile the conflicting arguments on public sponsorship on firm level outcomes. Moreover, few if any of the studies have been dedicated to examining empirically the impact of public sponsorship on firm performance specifically, rather than survival or innovation rates. In the remaining part of the paper, we aim to fill these gaps by carefully untangling various mechanisms underlying the relationship between public sponsorship and firm performance.

While the resource buffering mechanism stemming from increased munificence in firm resource environments is well documented in literature (Amezcuca et al., 2013; Baum & Oliver, 1991; Dobbin & Dowd, 1997; Rangan et al., 2006; Russo, 2001), we have little understanding of any rival or adverse effect sponsorship may carry on to target firm's resource and capability base, and, subsequently its performance. Combining economic arguments on incentives and an internal, resource-based perspective of a firm, we suggest that buffering goes along with a resource altering mechanism, resulting from an on adverse change in target firm incentives and a gradual shift or erosion of its market-based resources and capabilities as the cumulative amount of sponsorship increases.

It is well established in economic theory that where no private ownership rights are conferred or shared among involved individuals—as in the case of public organization (Perry & Rainey, 1988), the information and incentives of economic market are largely absent. This leads to considerably lower efficiency in both public organizations as well as in any organizations dependent on public resource allocations (Boardman & Vining, 1989; Williamson, 1999).

Because of lack of clear property rights, and absence of link between managerial actions and performance (i.e. returns), fundamentally weak incentives characterize public sector with respect to both cost reduction and quality innovation (Hart, Shleifer, & Vishny, 1997; Shleifer, 1998; Shleifer & Vishny, 1994). This incentive distortion results in inefficiencies in any form of state funded participation in economic activity (Dixit, 1997). We extend this insight by arguing that, as a spill-over effect, such incentive distortion or “transformation” is also likely to manifest in the sustained performance and development of market-based (such as innovation or technical) resources and capabilities of private actors engaged in sponsorship ties with public authorities. The effect of public sponsorship we, hence, identify is analogous to the effect of soft budget constraints identified in public or state-run enterprise settings (Kornai, Maskin, & Roland, 2003; Tan & Peng, 2003), whereby (full or partial) removal of financial constraints of enterprise distorts managerial incentives and behaviour by removing the link between performance and firm survival.

Such an effect stems, we argue, primarily from incentive and underlying resource alteration as the focal organization becomes geared towards securing public resource access rather than fulfilment of market-based objectives. This effect is, in turn, further exacerbated by the generally weak incentives of public actors for efficiency enforcement and monitoring of public sponsorship activities, and their political rather than economic accountability (Shleifer, 1998; Spiller, 1990). As a result, under recurring public sponsorship to a focal firm, the existing resource and capability base of the focal firm is expected to stagnate, leading to an eventual decline in market-based capabilities and weaker performance, reflected, for example, in lower innovation rates or quality of service provision.

Moreover, as access to nonmarket resources crowds out need to access market-based ones, firms are expected to trade-off development of market-based capabilities to increased political rent-seeking and nonmarket influence (Bonardi, 2008), at the detriment of long-term performance.

The recognition of such resource altering effect, operating, we argue, in parallel to initial resource buffering effect, albeit at a slower pace, firm performance is expected to be affected by both an initial boost due to resource munificence, as well as a decreased firm's competitiveness and performance over the long run due to the decline in private actor's market-based capabilities. As a result of these dual—(positive) resource buffering and (negative) resource altering effects—we expect a curvilinear inverse U-shape relationship between firm performance and public sponsorship.

Hypothesis 1: There is an inverse U-shape relationship between public sponsorship and firm performance, such that public sponsorship is associated with an initial rise in performance, followed by a decline in performance beyond a certain level of sponsorship.

### **The Differential Impact on Generalists versus Specialists**

Merging the insights from resource based perspective with literature on the horizontal scope of the firm, we also anticipate that the two key theoretical mechanisms we identify and the subsequent curvilinear relationship between sponsorship and firm performance are likely to be significantly moderated by the type of firm's horizontal scope or niche strategy. Our arguments build on the insights that a firm's choice of "across-niche" or generalist versus "within-niche" or specialist strategy is likely to be strongly related to the breadth and depth of its internal resource base (Barroso & Giarratana, 2013), and, as a result, affected differentially by both the buffering and altering effects we identify.

Management scholars, building on the well-established resource-partitioning literature (Carroll, 1985; Carroll & Swaminathan, 2000; Dobrev, Kim, & Hannan, 2001), have argued that firms typically fall in one of the two alternative types of horizontal strategy—with generalist firms operating in several product niches, and relying on broad resource base aimed at appealing to wide range of customer tastes—and specialists, in turn, operating in a single product niche, with focused and more narrow resource accumulations related to a more limited sphere of horizontal product strategy (Barroso & Giarratana, 2013). These two strategies, in turn, imply that both specialist and generalist firms operate with and accumulate different, “broad” versus “deep” resource and competence constellations, and face different outcomes in the case of new external resource injections.

Building on these insights we argue that both resource buffering and resource altering effects associated with public sponsorship are likely to be substantially more pronounced for generalist than specialist firms, leading to a much more pronounced inverse U-shaped relationship between subsidies and performance for a generalist than specialist firms.

In terms of resource buffering effect, we expect generalist firms to engage in a broader, more diffused extent of public resource applications, reducing, in the first stage, the uncertainty and more elevated risks associated with operations in a single niche market. Both generalists and specialists are likely to engage in higher degree of experimentation on the basis on externally obtained resources, however, specialists’ focus on a single niche is likely to leave them considerably more exposed to any adverse changes in their product niche market, and hence, lose out, comparatively on the potential performance benefits associated with a more “diversified” experimentation and resource application in multiple niches, as in the case of generalists. The

buffering effect for generalists is also going to be amplified by the boost of competitive position across the range of product markets they operate in.

We furthermore expect a certain threshold or reducing returns to scale in the extent to which more resources applied in a single product niche are able to generate higher returns. Generalists, on the basis of public resource allocations, will be able to distribute and obtain higher immediate returns in each niche before reaching the saturation point, where additional resource applications add little further gain in performance. Specialists, by contrast and by definition operating in single niche markets, are expected to face dwindling returns to scale in new resource applications substantially earlier and to a stronger extent.

In terms of resource altering effect, we also expect generalist firms to be affected comparatively more than specialist firms. If public sponsorship is associated with an eventual distortion in firm incentives, leading to an adverse change in firm market-based resource and capabilities, we argue that this resource altering effect is likely to be much more pronounced for firms that operate on the basis of “wide” resource base (as in the case of generalists) as opposed to “deep” resource base (as in the case for specialists). While in both cases a certain decay and loss of core resources and capabilities can be expected, specialist firms are likely to be much more resistant to this effect, having, hence, a less pronounced adverse effect on performance.

Hypothesis 2: The inverse U-shaped relationship between public sponsorship and firm performance is stronger for generalist rather than specialist firms.

## **METHODS**

### **Empirical setting**

Studying the relationship between public sponsorship and firm performance raises several empirical challenges. First, exhaustive industry data is required to observe firm-level

performance, if possible on a longitudinal basis, for various levels of public support (i.e., including firms not benefiting from support). Second, one needs to carefully tease out potential selection effects that may prevent direct interpretation of empirical findings. For instance, if public bodies systematically support projects with low economic performance—as in most common public sponsorship schemes—a negative correlation between public support and performance may not reveal much about the underlying causal relationship.

The French film production industry appears particularly well fitted to overcome these difficulties. Born at the end of the 19<sup>th</sup> century with the invention of the cinematograph by the Louis and Auguste Lumière, the industry witnessed a rapid surge in public intervention after WWII and the Blum-Byrnes Agreement that opened local screens to Hollywood movies. With the overt objective of protecting local producers from international competition, the French State implemented in 1959 an industry-wide system of public support. Financed by a sales tax, the main sponsorship scheme, known as *Soutien Financier Automatique à la Production (SFAP)*, allocates subsidies to firms involved in the production of local feature films, accounting for 6 to 12% of film financing in the period under study (Figure 1). One of the interesting features of this setting is that subsidies are calculated based upon a so-called ‘automatic’ formula that does not account for the economic prospect of the sponsored project. In other words, subsidies are not systematically allocated to poor performing projects, alleviating endogeneity concerns. Because subsidies are provided to all producers on an automatic basic, they do not carry any particular signal on beneficiary firms and do not involve any form of service (e.g., networking), making this setting appropriate to test the relationship between resource sponsorship and performance.

## Data

We longitudinally examine the population of firms acting as executive producers from 1998 to 2008. We use an original dataset compiled from different sources, including proprietary data provided by the industry regulator (CNC) and the exhaustive set of 17,707 production contracts in the industry extracted from the Public Register of Cinema and Audiovisual (RPCA). We rely on the professional database Cine Box Office for market data, compared with data from the trade publication *Le Film Français*. Our unit of analysis is the firm-year (1,386 observations, N=567).

**Dependent variable.** Consistent with prior studies of the film industry (e.g., Cattani et al. 2013), we examine the performance of firms in the theatrical market. Our measure of firm performance is the natural log of the box office admissions recorded by an executive producer firm during the focal year. Because box office numbers are skewed, a typical feature of cultural and entertainment markets (Caves, 2000), we construct the variable using the natural log of admissions. Since revenues in ancillary markets (video, television, foreign rights) are strongly related to theatrical revenues (Elberse, 2013), the variable can be interpreted as a measure of firm-level performance conditional on a given level of investment in production and promotion (see control variables below).

**Explanatory variables.** Sponsorship is the natural log of the cumulated amount received under the SFAP production subsidy scheme. Sponsorship subsidies are allocated based on a decreasing percentage of the box office revenues recorded by producer's past releases. Because they are available for any movie project launched within 5 years, we start accumulating subsidies in 1994 for each firm in the population. We add a quadratic term, sponsorship squared, to test a curvilinear relationship between sponsorship and performance. To measure capture the effect of market specialization, we examine the genres in which the firm is involved: niche width is a

count variable equal to the number of different genres the firm is associated with in the focal year (an alternative measure based upon an Herfindahl index of specialization into genres gives similar results). For ease of interpretation, the variable is resized so that niche width ranges from zero (specialist) to one (generalist).

**Control variables.** We account for a number of factors that may affect the relationship between sponsorship and firm-level performance. We control for experience as a proxy for accumulated capabilities. To avoid left-censoring issues, we account for the accumulated experience of producers in the decade before the period under study: the variable *experience* counts the number of movies a producer has been involved in starting in 1987 and up to the beginning of the focal year. Since social status might provide firms with advantages (Podolny, 2001), we include a cumulative count of past awards received by the firm at the Cannes film festival and the Césars, the French equivalent to the Oscars. Because we're interested in the net effect of sponsorship on performance, we account for the level of investments in production and distributions: *production spending* is the natural log of the amounts invested in production budgets—negative costs in the industry jargon, and *distribution effort* is the number of prints distributed to movie theatres on release, a common proxy for distribution effort in studies of the film industry (e.g., Cattani et al. 2013). We also consider whether the firm works with a major distributor which may contribute important resources to film releases and increase performance: *major* is a dummy variable equal to one if the firm has worked with one of the top five distributors in the market the preceding year, and zero otherwise. We also examine film characteristics that may affect performance. The *stars* variable measures the average number of cast members that were among the five highest grossing actors in the three preceding years. *Sequel* is a dummy variable equal to one if the movie is a sequel, and zero otherwise. *Césars* and *Cannes* counts the

number of awards received during the year. We finally include dummy variables to control for the 15 genres of the movies, and year dummy variables to account for any period-specific variation in performance.

Model specifications. To account for unobserved firm characteristics, we rely on fixed-effect panel regressions and estimate robust standard errors clustered at the firm level.

## RESULTS

Descriptive statistics and fixed-effect models of producers' performance are reported in Table 1 and Table 2, respectively. We present control variables in Model 1. Consistent with prior studies of the film industry, performance is positively related to production spending and distribution effort, as well Césars awards and Cannes awards. Firms in business with major distributors tend to have higher box office performance. While the finding that performance is negatively related to experience might be surprising at first sight, it appears consistent with our theory: widespread public sponsorship favouring the survival of low-performing firms, more experienced firms may on average control weaker resources and experience lower performance—what Barnett (1997) refers to as the 'weak survivor' hypothesis. Other control variables do not appear to have any significant relationship with performance.

We add sponsorship in Model 2 and sponsorship squared in Model 3. Results suggest that the quadratic specification (Model 3) has the best fit with the data, in line with the inverted-U shaped relationship predicted by Hypothesis 1: firm performance first increases with sponsorship, then reaches a tipping point beyond which it recedes.

We introduce the variable niche width in Model 4. The coefficient of the variable is positive and non significant, suggesting that specialist firm do not have a significant performance

advantage in the movie market. The coefficients for the sponsorship and sponsorship squared variables remain largely unchanged.

In Model 5, we interact the niche width variable with sponsorship and sponsorship squared. Both variables are highly significant, and in the expected direction: compared to specialist firms (niche width = 0), both the first order positive effect and the second order negative effect of sponsorship are greater for generalist firms (niche width = 1), supporting Hypothesis 2.

To facilitate the interpretation of the results, we plot the marginal effect of sponsorship on performance conditional on three values of niche width. Figure 2 confirms that the greater the niche width firms occupy (i.e., the more generalists they are), the more pronounced is the curvilinear relationship between sponsorship and performance. Another observation is that the inflexion point moves to the right when firms have a wider niche width: it takes less sponsorship for specialist firms to reach the point at which the marginal performance effect is optimal. At extreme values of sponsorship, we observe a net detrimental performance effect—suggesting that the resource altering effect of sponsorship then exceeds the benefits of buffering. Generalists appear to be more resilient to sponsorship, in that the level of sponsorship at which the marginal performance effect becomes negative is on average higher for generalists.

Overall, empirical results support the view that, all else being equal, sponsorship has a curvilinear inverted-U relationship with performance. The relationship is greater in magnitude when firms are generalists rather than specialists.

## **DISCUSSION AND CONCLUSIONS**

Our study aims at making a number of contributions. In the light of the existing literature identifying a rather ambiguous effect of public sponsorship on firm performance, we seek to delineate the boundary conditions under which public funding may or may not improve firm performance. By drawing simultaneously on resource based perspective and economics literature, we point to resource buffering and resource alteration as two distinct mechanisms associated with public sponsorship of firms, and illustrate the non-linear impact of these effects in combination. Using population data on the French film production industry, we find evidence that there is a threshold beyond which sponsorship becomes detrimental to performance. We argue that this inverted-U relationship arises from the hidden trade-off between the positive first-order effects of public sponsorship on firm performance, that buffers firms from external competition and reduces uncertainty, and more subtle, adverse second-order effects associated with economic incentive transformation and a potential decline in market-based capabilities.

By offering a theoretical account and empirical test of the curvilinear relationship between public sponsorship and firm performance, our study contributes to a recent line of work highlighting the “liability” aspects of organizational sponsorship and resulting distortions in firm selection processes. Mahoney et al. (2009) caution against the potential adverse effects and trade-offs associated with public-resource based ties. Amezcua et al.’s (2013) find evidence that sponsorship can be associated with lower survival chances when sponsorship activities do not meet the needs associated with environmental pressures. Our study responds to calls for a more nuanced theory of sponsorship (Amezcua et al., 2013) by shedding light on the dual effect of sponsorship on performance: while sponsorship has first order positive effects on firm performance, as prior theory predicts, we argue that firms’ competitive positions may eventually

suffer because of potential incentive and resource alterations. In doing so, we contribute to solve the puzzle raised by diverging views of sponsorship in the management and economic literatures.

Our study emphasizes an important contingency. Consistent with our theory, both positive and negative effects of sponsorship appear more pronounced for generalist firms: firms with wider resource and competence bases may benefit relatively more from buffering, but may also be more vulnerable to the resource alteration effect of sponsorship. The difference is not trivial: the estimated marginal effect of sponsorship on firm performance is much larger for generalist firms, up to five times higher (see Figure 2). Interestingly, these findings highlight a potential consequence of the horizontal scope of the firm that has been overlooked. Prior works on market specialization emphasize the advantage specialists firms have when developing the skills and capabilities needed to target a specific audience, and the identity benefits of being perceived as a specialist (Hsu et al., 2009). Our study contributes to the research on the more nuanced firm-level effects of market specialization and multi versus single-niche strategies (e.g., Ruef and Patterson, 2009).

Further research is needed to explore other factors that may moderate the relationship between sponsorship and performance. One dimension that carries important managerial and policy implications relates to establishing conditions under which the resource altering effect of sponsorship could be mitigated, or even avoided. Internal firm policies may, for instance, help preserve managerial incentives by raising targets when sponsorship is received. Public sponsors might also monitor more closely sponsorship schemes and make sure that structural and incentive designs accompany the allocations of resource to corporations.

Our study bears the limitations of any industry study: as a creative industry, the French film production industry is governed by particular economic principles (Caves, 2000) that may

affect how sponsorship relates to performance. Yet, there are little reasons to believe that buffering and resource altering mechanisms will not apply to other settings, such as, for instance, the sponsorship of scientific work or innovative activities. Another potential avenue for future research lies in the exploration of the effects of other forms of sponsorship, for instance by wealthy patrons, foundations, and other institutions (e.g., research councils). While one may expect that buffering and resource altering mechanisms will be present in various forms of sponsorship and in many settings, there are likely to be variations in the respective magnitude of each effect.

### **Conclusion**

In the present study, set in the empirical context of French film industry, we aim to shed new light on the effects of public sponsorship on firm performance. Existing literature provides conflicting accounts on the impact of external resource allocations on firm level outcomes. We propose a theoretical model that suggests an inverted-U relationship between sponsorship and firm performance, on the basis of resource buffering and resource altering as two parallel, yet, opposing effects. Moreover, we demonstrate that both positive and negative effects of sponsorship appear contingent upon the horizontal scope of the firm, with generalist firms facing a much more pronounced inverted-U relationship than specialist firms. As such, our study carries a number of important theoretical and managerial implications, not least, highlighting the hidden trade-offs and contingencies associated with external resource allocations to firms.

**TABLES**

Table 1. Descriptive statistics and pairwise correlations

	mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 firm performance	11.31	2.31														
2 sponsorship	8.68	6.30	0.36													
3 sponsorship sq.	115.0	91.22	0.42	0.98												
4 niche width	0.06	0.15	0.35	0.32	0.37											
5 sponsor. X niche width	0.85	2.14	0.36	0.37	0.42	0.97										
6 sponsor. sq. X niche width	12.32	32.49	0.36	0.36	0.43	0.95	0.99									
7 experience	7.49	11.85	0.30	0.51	0.58	0.42	0.48	0.51								
8 past awards	0.31	0.85	0.18	0.33	0.39	0.19	0.23	0.25	0.40							
9 production spending	15.24	1.13	0.73	0.42	0.48	0.49	0.49	0.49	0.41	0.22						
10 distribution effort	209.5	310.8	0.68	0.33	0.41	0.54	0.59	0.62	0.44	0.23	0.71					
11 major	0.92	0.98	0.59	0.36	0.43	0.64	0.67	0.69	0.42	0.28	0.62	0.73				
12 stars	0.05	0.21	0.20	0.10	0.12	0.05	0.06	0.06	0.10	0.05	0.24	0.25	0.13			
13 sequel	0.01	0.12	0.19	0.09	0.11	0.15	0.16	0.16	0.07	0.01	0.20	0.34	0.17	0.09		
14 Césars	0.04	0.27	0.18	0.07	0.09	0.06	0.07	0.07	0.04	0.02	0.12	0.13	0.14	0.01	-0.02	
15 Cannes	0.03	0.16	0.12	0.05	0.05	0.03	0.04	0.04	0.03	-0.12	0.04	0.05	0.06	-0.03	-0.02	0.17

Table 2. Fixed-effect regression of producer firm performance

VARIABLES	Model 1	Model 2	Model 3	Model 4	Model 5
experience	-0.060*** (0.014)	-0.066*** (0.015)	-0.043** (0.016)	-0.043** (0.016)	-0.029 (0.018)
past awards	-0.066 (0.137)	-0.059 (0.132)	0.049 (0.129)	0.053 (0.130)	0.040 (0.132)
production spending	0.982*** (0.088)	0.988*** (0.088)	0.956*** (0.091)	0.953*** (0.090)	0.902*** (0.090)
distribution effort	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)
major	0.366*** (0.096)	0.368*** (0.095)	0.354*** (0.099)	0.353*** (0.099)	0.392*** (0.103)
stars	-0.112 (0.175)	-0.094 (0.174)	-0.075 (0.168)	-0.078 (0.168)	-0.102 (0.167)
sequel	-0.095 (0.280)	-0.081 (0.290)	-0.050 (0.296)	-0.057 (0.295)	-0.058 (0.299)
Césars awards	0.459** (0.168)	0.451** (0.165)	0.485** (0.156)	0.493** (0.159)	0.483** (0.158)
Cannes awards	0.673** (0.241)	0.682** (0.236)	0.781*** (0.232)	0.781*** (0.232)	0.737** (0.232)
Genre dummies	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes
sponsorship		-0.029* (0.014)	0.221*** (0.054)	0.222*** (0.053)	0.200*** (0.054)
sponsorship sq.			-0.020*** (0.004)	-0.021*** (0.004)	-0.019*** (0.004)
niche width				0.232 (0.451)	0.206 (1.210)
sponsorship X niche width					0.596** (0.230)
sponsorship sq. X niche width					-0.041** (0.013)
Constant	-3.708** (1.298)	-3.683** (1.294)	-3.409** (1.314)	-3.337* (1.303)	-2.613* (1.312)
Observations	1,386	1,386	1,386	1,386	1,386
Number of firms	567	567	567	567	567
R-squared	0.461	0.465	0.484	0.484	0.490

Note— Robust standard errors clustered at the firm level in parentheses.  
 + p<0.10. \* p<0.05. \*\* p<0.01. \*\*\* p<0.001.

**FIGURES**

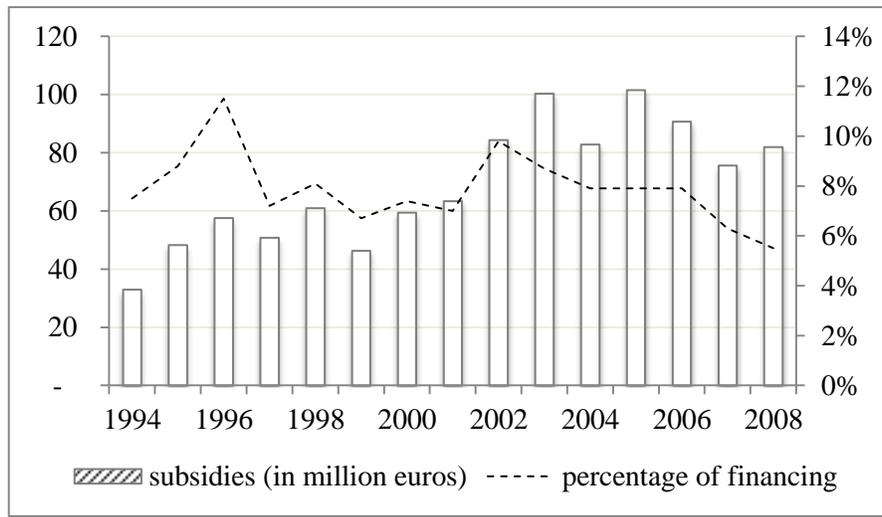


Figure 1. SFAP sponsorship allocated to film production companies, 1994–2008.

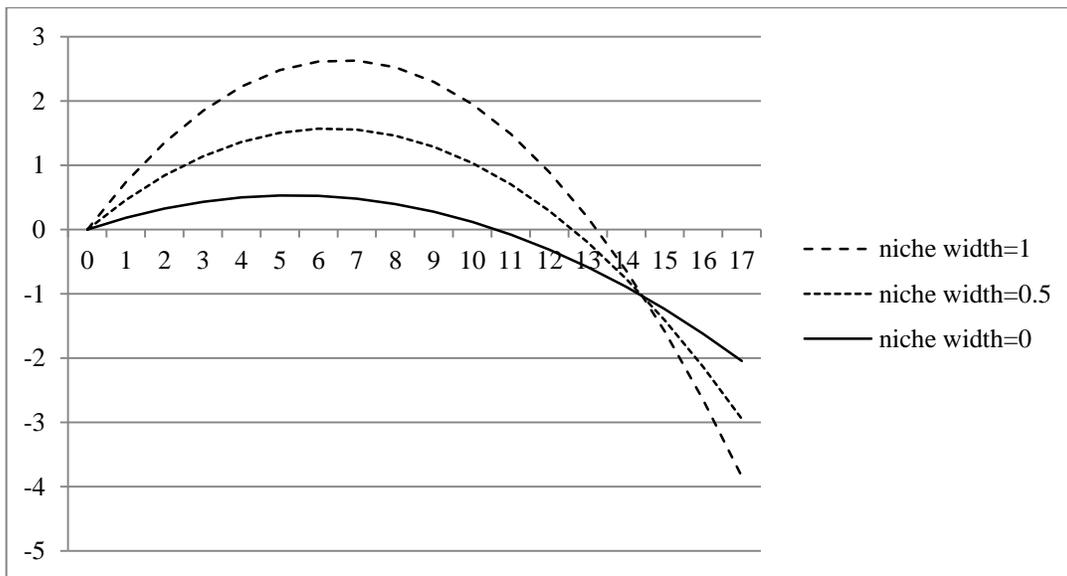


Figure 2. Marginal effect of sponsorship on firm performance conditional on three values of niche width

## REFERENCES

- Ambile, T. M. 1996. Creativity in context: Update to the social psychology of creativity: Westview Press.
- Amburgey, T. L., Kelly, D., & Barnett, W. P. 1993. Resetting the clock: the dynamics of organizational change and failure. **Administrative Science Quarterly**, 38: 51-73.
- Amezcuca, A., Grimes, M., Bradley, S., & Wiklund, J. 2013. Organizational Sponsorship and Founding Environments: A Contingency View on the Survival of Business Incubated Firms, 1994-2007. **Academy of Management Journal**.
- Argyres, N. S. 1999. The impact of information technology on coordination: Evidence from the B-2 "Stealth" bomber. **Organization Science**, 10(2): 162-180.
- Aschhoff, B., & Sofka, W. 2009. Innovation on demand--Can public procurement drive market success of innovations? **Research Policy**, 38(8): 1235-1247.
- Barroso, A., & Giarratana, M. S. 2013. Product proliferation strategies and firm performance: The moderating role of product space complexity. **Strategic Management Journal**.
- Baum, J. A., & McGahan, A. 2009. **Outsourcing war: The evolution of the private military industry after the Cold War**: Working paper, University of Toronto.
- Baum, J. A. C., & Oliver, C. 1991. Institutional linkages and organizational mortality. **Administrative Science Quarterly**, 36(2): 187-218.
- Becker, G. S. 1983. A theory of competition among pressure groups for political influence. **The Quarterly Journal of Economics**, 98(3): 371-400.

- Boardman, A. E., & Vining, A. R. 1989. Ownership and performance in competitive environments: A comparison of the performance of private, mixed, and state-owned enterprises. **Journal of Law and Economics**, 32(1): 1-33.
- Bonardi, J.-P. 2008. The internal limits to firms nonmarket activities. **European Management Review**, 5: 165-174.
- Carroll, G. R. 1985. Concentration and specialization: Dynamics of niche width in populations of organizations. **American journal of sociology**: 1262-1283.
- Carroll, G. R., & Swaminathan, A. 2000. Why the Microbrewery Movement? Organizational Dynamics of Resource Partitioning in the US Brewing Industry<sup>1</sup>. **American Journal of Sociology**, 106(3): 715-762.
- David, P. A., Hall, B. H., & Toole, A. A. 2000. Is public R&D a complement or substitute for private R&D? A review of the econometric evidence. **Research Policy**, 29(4-5): 497-529.
- Dixit, A. 1997. Power of incentives in private versus public organizations. **American Economic Review**, 87(2): 378.
- Dobbin, F., & Dowd, T. J. 1997. How policy shapes competition: Early railroad foundings in Massachusetts. **Administrative Science Quarterly**, 42(3): 501-529.
- Dobrev, S. D., Kim, T. Y., & Hannan, M. T. 2001. Dynamics of Niche Width and Resource Partitioning<sup>1</sup>. **American Journal of Sociology**, 106(5): 1299-1337.

- Elberse, A. 2013. **Blockbusters: Hit-making, Risk-taking, and the Big Business of Entertainment**: Macmillan.
- Hart, O., Shleifer, A., & Vishny, R. W. 1997. The proper scope of government: Theory and an application to prisons. **Quarterly Journal of Economics**, 112(4): 1127-1161.
- Klein, P. G., Mahoney, J. T., McGahan, A. M., & Pitelis, C. N. 2010. Toward a theory of public entrepreneurship. **European Management Review**, 7(1): 1-15.
- Kornai, J., Maskin, E., & Roland, G. 2003. Understanding the soft budget constraint. **Journal of Economic Literature**, 41(4): 1095-1136.
- Lazzarini, S. G. 2013. Strategizing by the government: Can industrial policy create firm-level competitive advantage? **Strategic Management Journal**.
- Mahoney, J. T., McGahan, A. M., & Pitelis, C. N. 2009. The interdependence of private and public interests. **Organization Science**, 20(6): 1034-1052.
- Nohria, N., & Gulati, R. 1996. Is slack good or bad for innovation? **Academy of Management Journal**, 39(5): 1245-1264.
- Perry, J. L., & Rainey, H. G. 1988. The public-private distinction in organization theory: A critique and research strategy. **Academy of Management Review**, 13(2): 182-201.
- Podolny, J. M. 2001. Networks as the pipes and prisms of the market. **American Journal of Sociology**, 107(1): 33-60.

- Rangan, S., Samii, R., & Van Wassenhove, L. N. 2006. Constructive partnerships: When alliances between private firms and public actors can enable creative strategies. **Academy of Management Review**, 31(3): 738-751.
- Russo, M. V. 2001. Institutions, exchange relations, and the emergence of new fields: Regulatory policies and independent power production in America, 1978-1992. **Administrative Science Quarterly**, 46(1): 57-86.
- Shleifer, A. 1998. State versus private ownership. **Journal of Economic Perspectives**, 12(4): 133-150.
- Shleifer, A., & Vishny, R. W. 1994. Politicians and firms. **Quarterly Journal of Economics**, 109(4): 995-1025.
- Spiller, P. T. 1990. Politicians, interest groups, and regulators: A multiple-principals agency theory of regulation, or "let them be bribed". **Journal of Law & Economics**, 33(1): 65-101.
- Tan, J., & Peng, M. W. 2003. Organizational slack and firm performance during economic transitions: Two studies from an emerging economy. **Strategic Management Journal**, 24: 1249-1263.
- Tarrow, S. 2011. Why Occupy Wall Street is not the tea party of the left. **Foreign Affairs**, 10.
- Williamson, O. E. 1999. Public and private bureaucracies: A transaction cost economics perspectives. **Journal of Law, Economics & Organization**, 15(1): 306-342.