



This is a repository copy of *A social influence view of the internationalization of cultural products*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/id/eprint/232074/>

Version: Published Version

---

**Article:**

Huang, X., Fan, D. and Soo, C. (2025) A social influence view of the internationalization of cultural products. *Journal of International Business Studies*. pp. 1-20. ISSN: 0047-2506

<https://doi.org/10.1057/s41267-025-00797-9>

---

**Reuse**

This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here:

<https://creativecommons.org/licenses/>

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>



# A social influence view of the internationalization of cultural products

Xinli Huang<sup>1</sup> · Di Fan<sup>2</sup> · Christine Soo<sup>3</sup>

Received: 31 January 2023 / Revised: 4 May 2025 / Accepted: 13 May 2025 / Published online: 7 August 2025  
© The Author(s) 2025

## Abstract

A thriving international cultural industry fuels the expansion of the global creative economy. Yet, what drives the international diffusion and performance of cultural products? This study adopts a social influence perspective to examine the international performance of film exports, addressing a critical gap in existing research that often isolates social influences without considering the impact of their (in)congruence. Given the subjective nature of cultural products and their vulnerability to multiple influences across global value chains, we theorize and empirically test the effects of congruence and incongruence between supply-side and demand-side social influences on films' international performance. Analyzing 1676 U.S. films released between 2009 and 2018, our findings reveal that congruence between supply-side and demand-side social influences significantly enhances a film's appeal, credibility, and international success. Moreover, this effect is amplified by two key moderators across global value chains, namely, upstream home-country adoption of social media promotion and downstream host-country press freedom. This study contributes to the understanding of the social influence view within global value chains by highlighting the importance of supply-demand congruence and the contextual factors that shape their effectiveness in driving the international performance of cultural products.

**Keywords** Cultural products · (In)congruence · International performance · Social influence · Global value chains · Polynomial regression with response surface analysis

## Introduction

The global creative economy has witnessed significant growth, with international trade in cultural products gaining increasing prominence in both market expansion and

academic discourse (Han et al., 2024; Wang et al., 2020). Central to this expansion are global value chains (GVCs), which coordinate interconnected networks of production studios, distribution firms, and promotional entities to facilitate the production and distribution of cultural products. These integrated GVCs significantly contribute to economic growth within cultural sectors. As an example, the global market value of cultural industries surged from approximately \$208 billion in 2002 to \$524 billion in 2020 (UNCTAD, 2022), underscoring their deep integration into global trade. The intangible nature of cultural products further amplifies their global diffusion by enabling seamless cross-border movement (UNCTAD & UNDP, 2010; Wang et al., 2020) and enhancing cultural exchange, mutual understanding between nations, and national soft power (Bakker, 2014; Moon & Song, 2015). An example is the U.S. film and television industry, whose global exports rose to \$22.6 billion in 2023 from \$17.3 billion in 2020, consistently achieving a positive trade balance and significantly contributing to the U.S. services trade surplus (MPA, 2025). Despite the growing strategic and economic importance of cultural industries in international markets (Gao et al., 2020; Kim & Jensen,

Accepted by Stephanie Wang, Guest Editor, 13 May 2025. This article has been with the authors for five revisions.

✉ Di Fan  
david.fan@rmit.edu.au  
  
Xinli Huang  
xinli.huang@sheffield.ac.uk  
  
Christine Soo  
christine.soo@uwa.edu.au

<sup>1</sup> Entrepreneurship, Strategy and International Business Group, Sheffield University Management School, The University of Sheffield, Sheffield, United Kingdom

<sup>2</sup> School of Management, RMIT University, Level 9, Building 80, 124 La Trobe St., Melbourne, VIC 3001, Australia

<sup>3</sup> Department of Management and Organizations, UWA Business School, The University of Western Australia, Perth, Australia



2014), research on the internationalization of cultural industries remains relatively limited. This gap is particularly striking given the critical role that international markets play in shaping profitability for major players such as Hollywood studios and sustaining national export economies.

A distinctive feature of cultural products in global markets is their symbolic, creative, and interpretative nature, making their international success contingent upon overcoming substantial liabilities of foreignness (Elberse & Eliashberg, 2003; Yao et al., 2024). Their subjective value relies heavily on artistic quality, critical appraisals, and symbolic resonance with diverse international audiences (Kim & Jensen, 2014). Within this context, social influences within the GVCs, such as star power and critical reviews, play a pivotal role in shaping the international performance of cultural industries. As an important approach to creating affiliation with consumers, social influence explores how individuals' beliefs, attitudes, and behaviors are shaped by social forces (Ibarra & Andrews, 1993; Kelman, 1958). By transmitting credible quality signals to international audiences, these social forces influence consumer perceptions, drive demand, and facilitate the broader acceptance of cultural products in global markets (Kim & Jensen, 2014).

The social influence view has been widely applied across disciplines, including marketing and consumer behavior (Burnkrant & Cousineau, 1975; Shukla, 2011), corporate governance (Fiss, 2006), corporate politics (Treadway et al., 2013), entrepreneurship (Rocha & van Praag, 2020), and international business (IB) (Cannizzaro, 2020). This theoretical lens highlights how social forces shape individual decisions and collective outcomes (Burnkrant & Cousineau, 1975). For instance, firms frequently leverage celebrities to enhance brand credibility and expand their customer base (Hennig-Thurau, Wiertz, & Feldhaus, 2015). Social influence extends beyond deliberate persuasion, subtly embedding norms and values that guide the public's decision-making (Cannizzaro, 2020; Marsden & Friedkin, 1993). Despite its extensive application, much of the literature explores singular forms of social influence, overlooking their interplay and sometimes conflicting effects on consumer behavior (cf. Zhao & Zhou, 2011). This gap is particularly evident in cultural industries, where subjective valuations drive consumer choices (Kim & Jensen, 2014; Wang et al., 2020). Consumers frequently navigate multiple, and often contradictory, social influences (Rice et al., 2012), yet the synergies and tensions between these forces remain underexplored.

In the film industry, social influences exist within both supply-side (e.g., star power) and demand-side (e.g., audience ratings, and critical reviews) of the GVC, yet prior research tends to examine them in isolation (Moon & Song, 2015; Wu et al., 2022). A more holistic approach is needed, one that accounts for the full spectrum of GVCs (Eliashberg et al., 2006). Films are evaluated at multiple

stages—from directors, producers, and actors shaping production on the supply side to reviewers, critics, and audiences influencing reception on the demand side. While it is well recognized that global product diffusion depends on both supply-side and demand-side dynamics (Cubitt, 2022; Elberse & Eliashberg, 2003), studies integrating these aspects in an international context remain scarce. This leads to our central research question: *How do different social influences along GVCs shape the international performance of creative cultural products?*

To address this research question, we analyze 1676 U.S. films released between 2009 and 2018. We focus on the congruence and incongruence between supply-side and demand-side social influences affecting a film's global performance. Furthermore, we explore key moderating factors across GVCs that shape these effects: upstream home-country adoption of social media promotion and downstream host-country press freedom. Methodologically, we employ polynomial regression and response surface analysis (e.g., Busembark et al., 2023; Edwards & Cable, 2009), which allows us to capture the nonlinear relationships between supply-side and demand-side social influences.

Our findings contribute to the IB literature in three ways. First, we contribute to research on the internationalization of cultural products by incorporating the GVC framework. Cultural products derive value through symbolic and experiential features shaped across interconnected stages of production, distribution, and consumption. By tracing the impact of key social influences across the GVC, we highlight how these networks collectively shape international performance. This GVC-based approach offers a more holistic understanding of the mechanisms driving global success in cultural industries (Kano et al., 2020; Wang, 2023). Second, we extend the social influence literature by examining the impact of (in)congruence between supply-side and demand-side social influences. While prior research has typically focused on these influences in isolation (Burnkrant & Cousineau, 1975; Shukla, 2011), our study demonstrates that their congruence significantly enhances international film performance. This finding deepens the theoretical understanding of how multiple social influences interact to shape audiences' perceptions in cross-border contexts (Eliashberg et al., 2006). The application of polynomial regression and response surface analysis offers a more sophisticated lens for analyzing complex social influence dynamics. Third, we identify boundary conditions that moderate the effectiveness of social influence congruence. Specifically, upstream adoption of social media promotion strengthens the visibility and impact of aligned signals, while downstream host-country press freedom facilitates the credibility and reception of those signals. These findings underscore the importance of both digital infrastructure and institutional openness in



enabling the successful international diffusion of cultural products.

## Theoretical development and hypotheses

### Social influence and cultural products

The social influence view emphasizes the processes through which social forces exert their influence on individual decisions and collective societal outcomes (Burnkrant & Cousineau, 1975). Commercial enterprises, for instance, often leverage celebrity influences as a conduit to bolster brand credibility and captivate a larger customer base (Hennig-Thurau et al., 2015). Importantly, social influence operates *ex ante*, shaping individuals' perceptions by instilling norms and values that serve as implicit background conditions, rather than relying solely on "deliberate or conscious attempts" by social actors to induce behavioral changes (Cannizzaro, 2020; Marsden & Friedkin, 1993: 128).

Building on extensive findings, scholars often describe the cultural product industry, particularly the film industry, as a fertile ground for studying the impact of social influence on shaping audience perceptions, consumption behaviors, and market dynamics. For instance, Eliashberg et al., (2006: 641) note that "...moviegoers appear heavily influenced by others' opinions and choices. 'Others' could refer to friends and acquaintances, critics, and other opinion leaders, as well as the market as a whole." Also, while studios strategically leverage reviews to optimize box office revenues (Basuroy, Chatterjee, & Ravid, 2003), word-of-mouth dynamics foster herd behavior, amplifying revenue outcomes (Liu, 2006). Similarly, online platforms play a pivotal role in shaping movie diffusion patterns (Lee et al., 2021). These studies underscore the critical role of social proof, illustrating how peer and herd effects emerge and strengthen during the diffusion of cultural products (Banerjee, 1992; Goldenberg et al., 2001). Social influence fosters perceptions of trustworthiness and credibility, thereby enhancing audience receptivity to cultural offerings (Liu, 2006; Shukla, 2011).

In the context of internationalizing cultural products, social influences play key roles in minimizing potential uncertainties and affecting consumption decisions. We suggest that various types of social influence embedded in GVCs mainly function through two underlying mechanisms, namely, enhancing the perceived credibility of a particular cultural product (Agrawal & Kamakura, 1995), and providing informational cues that trigger herd behavior (Banerjee, 1992). On the one hand, social influence helps mitigate the inherent uncertainties associated with introducing new cultural products. Cohen (1984: 2), in his pioneering work, argues that "uncertainty is represented, not as a numerical or passive comment on the credibility of beliefs, but as a

body of richly structured knowledge about uncertain situations; including, but not limited to, reasons for believing and disbelieving". In this sense, cultural products supported by trusted influentials, such as celebrities, reputable producers, or critics, can alleviate audiences' uncertainty-related anxiety and hesitation in purchasing decisions, especially those from a foreign market with different cultural backgrounds. On the other hand, social influence drives network externalities and peer effects, which are especially influential in the diffusion of cultural products. Audience behavior often follows visible trends, reinforcing herd effects that amplify reach and impact (Banerjee, 1992; Goldenberg et al., 2001). These peer-driven dynamics generate social proof, which increases visibility and encourages broader audience participation (Liu, 2006). In this way, social influence contributes not only to individual consumption choices but also to collective market momentum.

Although prior studies have generated valuable insights into the role of social influences in the consumption of cultural products, the application of the social influence view remains underdeveloped in IB studies. Three research gaps persist. First, the social influence literature heavily focuses on single-country or domestic contexts (e.g., Fiss, 2006; Rocha & van Praag, 2020), while ignoring the social influence effect in an international context (Cannizzaro, 2020). Yet, across the global diffusion of cultural products (e.g., films), they traverse various segments of GVCs from the supply side to the demand side. In such international contexts, the effectiveness of social influence can be contingent on its relevance to local audiences (Liu, 2006), the authenticity of influentials (Audrezet et al., 2020), and the overall context in which it is presented (Cannizzaro, 2020).

Second, prior studies tend to focus on a single source of social influence, such as film critics (Eliashberg & Shugan, 1997; Moon & Song, 2015), normative or informational interpersonal influences (Shukla, 2011), and home–host structural equivalence (Cannizzaro, 2020), while overlooking the interplay of multiple coexisting sources (Burnkrant & Cousineau, 1975; Shukla, 2011). Focusing exclusively on a single source of social influence oversimplifies the complexity of the global diffusion of cultural products since they may be subjected to multiple, sometimes even conflicting, sources of influence. In the film industry, for instance, perspectives from both producers and consumers shape public attitudes and behaviors. Scholars (e.g., Shukla, 2011), therefore, call for a more comprehensive approach in social influence research to consider different sources of influence rather than from a unilateral source.

Third, prior studies test only the effect of an individual or a particular group's social influence on outcomes (e.g., Fiss, 2006), but rarely consider the congruence or incongruence effect of different sources of influence together. For instance, many films do not feature high-profile producers,



directors, or actors, yet still gain a high market impact, or *vice versa*. For example, the film *The Grand Budapest Hotel* (2014), directed by Wes Anderson, who has a dedicated following but not mainstream fame, featured a large ensemble cast that included both established actors and lesser-known performers, and it received critical acclaim for its unique visual style and storytelling and enjoyed commercial success. Another Hollywood film, *Pacific Rim* (2013), directed by Guillermo del Toro, received polarized domestic reviews but became a massive hit in international markets, particularly in countries such as China. These examples underscore the need to examine how the congruence or incongruence of supply-side and demand-side social influences shape global market outcomes. Therefore, assessing the (in)congruence of multiple influentials presents a more realistic and nuanced understanding of social influence in global cultural markets.

### The (in)congruence of supply-side and demand-side social influences

The film industry operates within a GVC, where multiple sources of social influence are embedded across production, distribution, and consumption stages (Parker & Cox, 2013). These influentials span intra- and inter-organizational boundaries, and they generate signals that shape audience perceptions. On the supply side, esteemed directors, iconic stars, and influential producers provide credibility and visibility, forming the foundation of supply-side social influence (Uzzi & Spiro, 2005). For example, film studios strategically leverage celebrities as key signals of production quality. Celebrity, referring to an individual “whose name has attention-getting, interest-riveting and profit-generating value” (Rein, Kotler, & Stoller, 1987: 15) can enhance a film’s credibility and visibility. Given bounded rationality and time constraints, high-profile talent must be selective about their projects. Their involvement alone signals an implicit reflection of the film’s quality, since they are unlikely to associate with low-potential productions. This self-selection effect strengthens their influence and injects credibility into any film they choose to support (Uzzi & Spiro, 2005).

Concurrently, films’ performance is shaped by demand-side social influences, such as critics’ reviews, which are typically independent of film studios and act as external validators (Eliashberg & Shugan, 1997; Liu, 2006). Research highlights that critics’ reviews can significantly influence audience decisions, shaping box office performance (e.g., Basuroy et al., 2003; Liu, 2006). The relevance of demand-side social influence in the film industry is traced back to early contributions by Katz and Lazarsfeld (1955: 308), who noted that “both younger and older women seek out movie experts among the young, although primary influentials may often modify the final decision in the movie-going groups”.

Eliashberg and Shugan (1997) further underscore the power of critics’ reviews, observing that these opinion leaders can decisively impact audience attendance, which in turn affects a film’s box office success.

Because cultural products are experiential goods, which are evaluated largely through perception rather than objective criteria, they are particularly susceptible to multiple, often subjective influences from diverse channels (Wang et al., 2020; Yao et al., 2024). This increases the likelihood of incongruence between supply-side and demand-side social influences. Incongruence refers to scenarios where demand-side and supply-side social influences are misaligned, when one variable is high while the other is low. Incongruence, whether through incompatibility or outright conflict, can lead to confusion or mixed messaging about a film’s identity (Yao et al., 2024; Zhao & Zhou, 2011). For instance, a film may feature strong production credentials but receive poor reviews (“box office bombs”), or lack star power yet gain critical acclaim (“box office miracles”). Such misalignment can confuse audiences, undermine product identity, and erode trust, especially in international markets where cultural familiarity is limited. Given these challenges, the congruence of supply-side and demand-side social influences becomes a critical predictor of a film’s international performance. Social influence congruence, referring to scenarios when both supply-side and demand-side are either at high or low levels, creates consistent messaging that reduces information uncertainty. A strong alignment between supply-side and demand-side influences fosters a coherent social proof that enhances a film’s appeal in overseas markets. When supply-side signals of quality (e.g., star reputation) are supported by favorable demand-side feedback (e.g., strong reviews), they work synergistically to strengthen audience confidence and encourage engagement (e.g., Yao et al., 2024).

Furthermore, supply-side social influence is often used as a strategic marketing tool, where studios invest in star-studded casts or acclaimed directors to shape public perception and secure early visibility (Agrawal & Kamakura, 1995). When this is congruent with supply-side social influence, the film studio effectively communicates consistent messages, signaling that influential gatekeepers or market navigators are aligned synergistically. Researchers (e.g., Basuroy et al., 2003; Eliashberg & Shugan, 1997) emphasize the critical role of these gatekeepers in shaping audience perceptions. When aligned social influences resonate with target audiences, herd effects are activated, enhancing the film’s appeal in foreign markets. This is particularly impactful for international audiences unfamiliar with the cultural context of the film. The presence of unified and highly positive social influences reduces mixed signals and enhances consumer confidence, making it more likely that international audiences





will engage with the film. For these reasons, we propose the first hypothesis:

**Hypothesis 1:** The international performance of a film increases as the congruence between supply-side and demand-side social influence increases.

### Supply-side and demand-side social influence congruence at high versus low levels

We further propose that not all congruence is equally effective. Specifically, we argue that, when supply-side and demand-side social influences align, congruence at higher levels enhances a film's international performance more effectively than congruence at lower levels. In international markets, where cultural, linguistic, and informational barriers increase uncertainty (Kim & Jensen, 2014), consumer decisions rely heavily on credible and consistent social signals (Moon et al., 2010). Supply-side social influence, such as renowned directors, actors, or producers, conveys production quality and visibility (Agrawal & Kamakura, 1995; Uzzi & Spiro, 2005), while demand-side social influence, such as critical acclaim or audience reviews, offers authenticity and peer validation. When both influences are congruent at higher levels, their combined strength creates a powerful, mutually reinforcing signal that amplifies perceived quality and credibility. This synergy reduces information asymmetry and enhances social proof, increasing consumer confidence in unfamiliar markets (Connelly et al., 2011). Furthermore, high congruence amplifies herd externality effects, wherein strong acceptance in one market boosts awareness and adoption in others (Banerjee, 1992). The commercial success of *Crazy Rich Asians* and *Parasite* demonstrates how alignment between supply-side credibility and demand-side enthusiasm facilitates global adoption. Hennig-Thurau et al. (2015) further emphasize that cumulative and congruent social influence in the context of cultural products plays a critical role in accelerating market expansion.

In contrast, when social influences are congruent at the low level, they offer weak validation and fail to generate the momentum needed for widespread success. International audiences, often skeptical of internal signals such as promotions by directors or cast members (perceived as representatives of film studios with vested interests), are less likely to trust such influences when they lack reinforcement from external, independent sources (McCracken, 1989). When both sources of social influence are weak, the combined signal fails to inspire confidence among international audiences, reducing their likelihood of engaging with the cultural product. In highly competitive markets, this weak alignment lacks the synergistic effect of credibility and validity needed to generate momentum (Goldenberg et al., 2001). Consequently, films with weaker supply-side and demand-side

congruence often struggle to gain international traction, especially when compared to those benefiting from stronger, high-level congruence. Therefore, we propose:

**Hypothesis 2:** A film with high levels of social influence congruence on both the supply side and demand side achieves higher international performance than one with congruence at low levels.

### Moderating roles from upstream and downstream across GVCs

Embedded within GVCs, the impact of congruence between supply-side and demand-side social influences on a film's international performance is further shaped by two critical contextual factors: the upstream adoption of social media promotion in the home country and the downstream press freedom in the host country. These factors shape the effectiveness of social influence congruence by enhancing their visibility, credibility, and audience receptivity across international markets.

#### Upstream moderator: Home-country adoption of social media

In upstream GVCs, social media promotion serves as a powerful tool for both information dissemination and audience engagement, shaping how supply-side and demand-side social influences are transmitted, perceived, and amplified in global markets (Karahanna et al., 2018; Li et al., 2022). This is especially important for cultural products entering foreign markets, where audience unfamiliarity, cultural distance, and limited local exposure can inhibit consumer adoption (Gao et al., 2020; Kim & Jensen, 2014). Social media mitigates this by enhancing the visibility and credibility of congruent social influences. Aligned signals from both supply-side and demand-side sources are more likely to be noticed and trusted when distributed via social platforms that engage with the audience. These congruent cues function as social proof that validates a film's quality and appeal (Cohen, 1984). Platforms that support content sharing, interactivity, and user-generated content allow film studios to effectively showcase this alignment, fostering stronger audience trust and credibility (Karahanna et al., 2018). In addition, the viral and participatory nature of social media strengthens these effects. Engaging campaigns, influencer endorsements, and fan-driven content generate authentic and dynamic narratives that enhance the persuasive power of congruent social influences (Hennig-Thurau et al., 2015). In this environment, aligned social influences are more likely to be perceived as credible, which increases the likelihood of consumer uptake.

Moreover, social media amplifies herd behavior by facilitating the rapid spread of collective opinions, encouraging



users to follow observed patterns (Banerjee, 1992). In high social media promotion contexts, the visibility of consistent messaging between production credentials and positive audience reception becomes a salient reference point, activating collective consumer behavior and further driving international performance (Hennig-Thurau et al., 2015). Conversely, in contexts without the adoption of social media promotion, these mechanisms are weakened. Without sufficient amplification, even strongly aligned supply-side and demand-side social influences may go unnoticed. A lack of interactive engagement with the market reduces the perceived credibility of a film and limits the emergence of herd effects. As a result, the effectiveness of social influence congruence on international performance diminishes in such settings. Based on these arguments, we propose:

**Hypothesis 3:** Upstream home-country adoption of social media promotion strengthens the positive relationship between demand-side and supply-side social influence congruence and international film performance, such that the positive effect of social influence congruence on international performance is higher when social media promotion is adopted compared to when it is not adopted.

#### Downstream moderator: Host-country press freedom

In downstream GVCs, the effect of social influence congruence on the international performance of films is moderated by the institutional environment in host countries (Kim & Jensen, 2014; Moon & Song, 2015), particularly the level of press freedom. Press freedom determines how social influence congruence is interpreted and acted upon by foreign audiences (Berlinger et al., 2022; Chang et al., 2019). It reflects the degree to which information can flow smoothly and transparently and fosters trust and alignment between stakeholders (Chang et al., 2019; Jha & Sarangi, 2017).

In countries with high press freedom, the media operates independently of state or corporate control, allowing for the transparent and unbiased dissemination of supply-side and demand-side social influences. This transparency strengthens the perceived credibility of the product (Kim et al., 2019). Independent media reinforce the authenticity of congruent social influences and provide audiences with clear, trustworthy narratives about a film's quality, which increases their likelihood of uptake. On the other hand, low press freedom environments often compromise the credibility of media information through censorship, bias, or state control (Besley & Prat, 2006). This reduces the clarity and reliability of social influence signals. Audiences in such contexts may become skeptical of both promotional efforts and critical reviews, which weakens the perceived congruence of supply-side and demand-side social influence. As a result,

the effectiveness of congruence is diminished, reducing its impact on international performance.

Press freedom also contributes to facilitating herd behavior (Chang et al., 2019). In more open media environments, diverse viewpoints and audience reactions are widely accessible, which allows congruent social signals to reach a broader audience. When viewers observe consistent messaging from both producers and critics, they are more likely to engage in collective behavior, reinforcing social proof and boosting box office performance across markets (Chang et al., 2019). In contrast, restricted media environments limit this visibility, suppress the spread of congruent signals, and undermine the development of widespread audience consensus. This bottleneck in information flow reduces the herd effects that are essential to the successful international diffusion of cultural products. Therefore, we propose:

**Hypothesis 4:** Downstream host-country press freedom strengthens the positive relationship between demand-side and supply-side social influence congruence and international film performance, such that the positive effect of social influence congruence on international performance is higher in host countries with high press freedom compared to those with low press freedom.

## Research methods

### Research design

We tested our hypotheses using a dataset of U.S.-produced films released between 2009 and 2018, sourced from *The Numbers* database ([www.the-numbers.com](http://www.the-numbers.com)). The initial sample consisted of 2293 films. We eliminated films being exported but without international box office records, resulting in a sample of 1835 films. Films without critical evaluations on Rotten Tomatoes were excluded, narrowing down our final sample to 1676 films. To analyze country-level film export dynamics, each film was initially matched with 82 potential host countries, encompassing all major international markets. After integrating data from multiple sources, the final analysis included 61 countries.

We collected all film-level data from *The Numbers*, which provides detailed information on variables such as genre, lead actors, directors, producers, language, running time, and international box office revenue. Each film is linked to a unique IMDb ID, enabling us to cross-validate key variables such as international box office between *The Numbers* and *IMDb* to ensure data reliability. We also supplemented the dataset with critic review data from *Rotten Tomatoes*. Country-level variables were sourced from publicly available databases, including the *World Bank*, the *GLOBE Project*, the *World Values Survey*, and the *CIA Factbook*.



## Variables measurement

### Dependent variables

The dependent variable in this study is the commercial *performance* of films in host countries, measured by box office revenues, which captures actual foreign audience demand and serves as a key indicator of a film's international success. Following previous research (Kim & Jensen, 2014; Moon & Song, 2015), we use the natural logarithm of box office earnings in each host country to correct for skewness in the revenue distribution and improve the accuracy of the analysis.

### Independent variables

*Supply-side social influence* is quantified by the past performance of a film's directors, leading actors, and producers, as prior research has demonstrated that their historical achievements can significantly affect a film's commercial success (Elberse, 2007). An actor's influence is measured by the natural logarithm of the average cumulative box office earnings of films in which they held a leading role. Similarly, the influence of directors and producers is captured by the natural logarithm of the average cumulative box office earnings of films in which they were credited as directors or producers. Due to the strong correlation among these metrics (Cronbach's  $\alpha = 0.718$ ), we compute their mean to create a single measure representing supply-side social influence.

*Demand-side social influence* is measured by the Tomatometer rating from *Rotten Tomatoes*, which reflects the percentage of positive reviews from approved critics. *Rotten Tomatoes* aggregates reviews from critics worldwide, offering timely insights that shape audience viewing choices. Typically, critic reviews are published just before or on the release date, providing early signals of a film's potential success. We used the percentage of positive reviews as a measure of the demand-side social influence. To ensure comparability between supply-side and demand-side social influence, we standardized both metrics to a 1–6 Likert scale (based on each variable's mean and standard deviation) and subsequently scale-centered them (Edwards & Cable, 2009).

### Moderating variables

*Upstream Home-Country Social Media*. We assessed each film's use of social media promotion, as online platforms are crucial in amplifying both supply-side and demand-side social influences. To measure this, we checked whether a

film had an official Facebook and/or Twitter page. Films with any of these were coded as 1, while those without were coded as 0.

*Downstream Host-Country Press Freedom*. We measured press freedom using the World Press Freedom Index (Jha & Sarangi, 2017), which assesses media independence, pluralism, legal environment, and journalist safety, ranging from 0 (least freedom) to 100 (most freedom). To align with other variables, the adjusted scores were rescaled to a 0–10 range, and the variable was subsequently mean-centered to improve interpretability and avoid the potential multicollinearity caused by the interaction terms (Aiken & West, 1991).

### Control variables

Following previous studies, we controlled several variables at the film level and the host-country level.

**Film-level variables.** We controlled the originality of a film using a dummy variable, *Sequel*, indicating whether a film is a sequel (1 = sequel, 0 = non-sequel) (Moon et al., 2010). Film *genres* have been shown to influence export potential to international markets (Gong et al., 2011; Kim & Jensen, 2014; Moon & Song, 2015). To capture genre effects, we included five non-exclusive binary variables indicating whether a film is categorized as a comedy, action, drama, romance, or thriller. Industry analyses suggest that *MPAA ratings* significantly impact a film's revenue potential, as evidenced in prior film industry studies (Gong et al., 2011). For instance, films with an *R*-rating tend to face profitability challenges, with Ravid and Basuroy (2004) finding that *R*-rated films earn 12% less, on average, than films with other ratings. To control for this, we included a dummy variable (1 = *R* rating, 0 = non-*R* rating). *Distributors'* capability can influence a film's accessibility and visibility (Kim & Jensen, 2014). To control for distributors' influence on distribution reach, we numbered distributors into four tiers: major distributors were coded as 3, mini-major distributors as 2, top independent distributors as 1, and all other distributors as 0. To capture artistic recognition, we counted major *Award Nominations* (Best Film, Director, Actor/Actress, Screenplay) at Cannes, Berlin, and Venice film festivals, which occur prior to commercial release and thus provide an independent proxy for artistic acclaim. To account for delays in international release, we included the number of years between a film's domestic release and its export to each host country (*Lagged Years in Export*), as longer lags may reduce overseas viewership (Kim & Jensen, 2014). We also controlled for the film's initial launch strategy by including *Earliest Release Countries* that measures the number of countries in which the film was initially released. This variable captures the scope of the film's debut, as broader international releases may enhance global visibility and create





momentum that may impact its subsequent performance in individual markets.

**Country-level variables.** To control for the influence of host country characteristics, we included a set of distance measures between the U.S. and each host country. Given its relevance to cultural product exports (Kim & Jensen, 2014), we controlled for *Cultural Distance* using the Mahalanobis distance approach by Berry, Guillén and Zhou (2010), derived from the World Values Survey. To account for additional characteristics of the host countries, we controlled for Economic Distance and Geographic Distance following the approach of Berry et al. (2010). *Economic Distance* was measured by examining differences in key economic indicators (i.e., income levels, inflation rates, and trade volumes) between the U.S. and each host country. *Geographic Distance* was calculated by the natural logarithm of the great-circle distance between the capital cities of the U.S. and each host country. *Education Distance*, which shapes cultural resonance and accessibility, was measured using Dow and Karunaratna's (2006) indicators. It captures differences in literacy and educational attainment. We also included the logarithm of the *Population* size of each market country as a control variable. All country-level control variables are measured with a one-year lag prior to the film's export year. To account for unobservable factors that could impact market success across release years, we included fixed effects for the film release year in all models (cf. Kim & Jensen, 2014). For clarity and conciseness, we do not report the release year fixed effects in the tables presented.

## Statistical analysis

We employed the Heckman two-stage model to address potential sample selection bias (Kim & Jensen, 2014; Wu et al., 2022). In the first stage, a Probit model estimates the likelihood of a film being exported from country A to country B (i.e., the selection into international markets). This step includes only pre-export factors and produces an inverse Mills ratio, which is then included in the second stage to correct for selection bias (Heckman, 1979). The second stage uses OLS regression to estimate the international performance of exported films, based on 35,832 film–host country dyads.

The exclusion restrictions in the first stage included *Running Time* (measured as the natural logarithm of film duration in minutes), since consumers usually make their consumption decision based on the quality and content of a film, and the role of running time in influencing the international performance of films appears to be marginal (Wu et al., 2022). *Release Strategy* (i.e., the number of earliest release countries), on the other hand, is included only in the second stage, as it pertains directly to international performance.

To examine the effects of congruence and incongruence between supply-side and demand-side social influence, we used polynomial regression with response surface analysis. Originally developed in person–environment fit research (e.g., Edwards & Cable, 2009; Edwards & Parry, 1993), this method has gradually become a useful tool for examining congruence across various domains (Busenbark et al., 2023; Vogel et al., 2016). It enables a nuanced, three-dimensional analysis of how congruence versus incongruence between two variables (e.g., supply-side and demand-side social influences) impacts an outcome (e.g., the international performance of films). Compared with traditional interaction models, this approach allows for the simultaneous estimation of congruence and incongruence effects without arbitrarily splitting variables, and thus offers a more precise and theoretically grounded assessment (Busenbark et al., 2023; Edwards & Cable, 2009).

The specific equation for polynomial regression is denoted by the following equations for primary effects (Eq. 1) and for moderating effects (Eq. 2)<sup>1</sup>:

$$Z = \beta_1(x) + \beta_2(y) + \beta_3(x^2) + \beta_4(xy) + \beta_5(y^2) + \beta_n(c) \quad (1)$$

$$Z = \beta_1(x) + \beta_2(y) + \beta_3(x^2) + \beta_4(xy) + \beta_5(y^2) + \beta_6(m) + \beta_7(xm) + \beta_8(ym) + \beta_9(x^2m) + \beta_{10}(xym) + \beta_{11}(y^2m) + \beta_n(c) \quad (2)$$

In these equations,  $Z$  represents international film performance,  $x$  is supply-side social influence,  $y$  is demand-side social influence,  $m$  denotes moderators (i.e., home-country social media promotion or host-country press freedom), and  $c$  is a vector of control variables. Following prior work (Baer et al., 2021; Busenbark et al., 2023; Edwards & Parry, 1993), we interpret the polynomial regression results by calculating the slopes and curvatures along the congruence line ( $Y = X$ ) and incongruence line ( $Y = -X$ ), based on Eqs. (1) and (2). Specifically, the slope of the congruence line indicates how performance changes as both social influences move from low to high. In our context, a positive (negative) coefficient for the congruence line slope implies that international performance increases (decreases) as both types of social influences shift from low to high levels (Busenbark et al., 2023; Edwards & Cable, 2009). The slope of the incongruence line reflects performance outcomes when the two social influences diverge. A positive (negative) slope along the incongruence line indicates that a film's international performance increases (decreases) when the supply-side social influence is high while the demand-side social

<sup>1</sup> The study by Edwards and Cable (2009) provides a detailed illustration of the regression method.



influence is low (Busenbark et al., 2022; Edwards & Parry, 1993).

The curvature of the congruence and incongruence lines illustrates how a film's international performance changes as supply-side and demand-side social influences vary from a medium (zero) level and shift in the same or opposite directions (Edwards & Parry, 1993). A positive curvature along the congruence line indicates that performance increases as the two types of social influence rise or fall together at the same level, whereas a negative curvature suggests performance declines under such conditions. In contrast, a positive curvature along the incongruence line implies that performance improves when the film exhibits contrasting levels of supply-side and demand-side influence; a negative curvature indicates reduced performance under such conditions (Busenbark et al., 2023; Edwards & Parry, 1993).

Hypothesis 1 proposes that a film's international performance is higher when supply-side and demand-side social influences are congruent, compared to when they are incongruent. To test this, we examined the curvature of the incongruence line. A negative and statistically significant curvature would indicate an inverted U-shaped relationship, such that performance decreases as the two types of social influence diverge (i.e., when one is high and the other is low). This curvature was assessed by testing the linear combination  $\beta_3 - \beta_4 + \beta_5$ , following established procedures for evaluating surface features in polynomial regression models (Baer et al., 2021; Edwards & Parry, 1993).

Hypothesis 2 suggests that films with congruence at high levels of social influence can achieve better international performance than those with congruence at low levels. To test this, we examined the slope along the congruence line. A positive and significant slope, computed as  $\beta_1 + \beta_2$ , would indicate that performance improves as the two social influences increase together (Baer et al., 2021; Edwards & Parry, 1993).

Hypotheses 3 and 4 posit that home-country adoption of social media promotion and host-country press freedom strengthen the effect of social influence congruence on international performance. Following prior studies (e.g., Busenbark et al., 2023), we assessed whether the curvature of the incongruence line was more negative at high levels of the moderators.

## Results

### International performance of films

Table 1 reports the descriptive statistics and correlations for all variables in our study. The low correlation coefficients suggest that multicollinearity is unlikely to pose a problem. This is further confirmed by variance inflation factor (VIF)

values: the highest VIF among all independent, moderating, and control variables is well below the commonly accepted threshold of 10, indicating that multicollinearity is not a concern (Allison, 1999). Table 2 presents the results of the Heckman two-stage estimation (the results of the first-stage selection model are shown in Online Appendix A). Model 1 displays a controls-only model. Model 2 includes the full polynomial terms and moderators used to test Hypotheses 1 and 2. The positive coefficients of supply-side social influence and demand-side social influence illustrate the contributing effects of these social influences on the international performance of films.

Because the direct interpretation of polynomial regression coefficients can be challenging, we follow established procedures to evaluate the slopes and curvatures of the lines of congruence and incongruence (Busenbark et al., 2023). These derived values are presented in Table 3. To further aid interpretation, we visualize the results in Fig. 1, which is based on estimates from Model 2 and the calculated values in Table 3. In the Figure, the solid line labeled “ $Y = X$ ” represents the congruence line (running from front to back), while the dotted line labeled “ $Y = -X$ ” represents the incongruence line (running from left to right).

As shown in Fig. 1, the response surface curves downward along this incongruence line, and the corresponding curvature value reported in Table 3 is negative and statistically significant (curvature =  $-0.077$ ,  $p = 0.000$ ). This confirms that films perform better internationally when there is a congruence between demand-side and supply-side social influences, supporting Hypothesis 1. We further followed Meyer, Van Witteloostuijn, and Beugelsdijk's (2017) recommendation to incorporate the effect size discussions. To this point, our model estimates that when supply-side and demand-side social influence are both moderately high (i.e., one standard deviation above the mean) and congruent, the predicted international box office revenue is 15.27% higher than when the same level of influence is present but in opposing directions (i.e., one standard deviation above the mean versus one standard deviation below the mean).

To test Hypothesis 2, we examined the slope of the response surface along the congruence line (Wang et al., 2023). The slope is positive and statistically significant (slope =  $0.397$ ,  $p = 0.000$ ), as reported in Table 3, indicating that performance increases as both types of social influence rise together. Figure 1 further illustrates this effect: the rise in international performance is steeper in the back triangle (where both supply-side and demand-side influences are high) than in the front triangle (where both are low). In addition, the back-right corner of the plot shows the highest international performance, compared to the front-left corner, where performance is lowest. These results provide support for Hypothesis 2. To this point, our model estimates that when moving from a moderately low (i.e., one standard



**Table 1** Descriptive statistics and Pearson correlation coefficients

Variables	Mean	Std.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1 International performance	13.007	2.059	1.000																				
2 Supply-side social influence	0.514	0.767	0.252	1.000																			
3 Demand-side social influence	0.134	1.028	0.072	0.091	1.000																		
4 Social media promotion	0.692	0.462	0.110	0.131	0.080	1.000																	
5 Press freedom	0.360	1.461	−0.065	−0.032	0.031	−0.015	1.000																
6 Sequel	0.214	0.410	0.262	0.181	−0.053	0.030	−0.013	1.000															
7 MPAA rating	0.393	0.488	−0.224	−0.128	0.081	−0.026	0.019	−0.142	1.000														
8 Distributor	2.421	1.017	0.344	0.295	0.067	0.136	0.022	0.195	−0.229	1.000													
9 Award nomination	0.046	0.209	−0.096	−0.035	0.175	−0.006	0.020	−0.114	0.190	−0.111	1.000												
10 Lagged years in export	0.161	0.372	−0.144	−0.037	0.140	−0.023	−0.005	−0.167	0.122	−0.102	0.128	1.000											
11 Earliest release countries	1.973	2.819	0.127	0.090	0.016	0.034	−0.015	0.145	−0.082	0.107	−0.034	−0.095	1.000										
12 Genre: comedy	0.352	0.478	−0.001	−0.022	−0.021	−0.109	0.040	−0.010	−0.054	0.092	−0.045	−0.021	−0.017	1.000									
13 Genre: drama	0.618	0.486	−0.104	0.053	0.106	0.060	0.006	−0.179	−0.043	−0.094	0.131	0.168	−0.051	−0.338	1.000								
14 Genre: action	0.519	0.500	0.304	0.275	−0.037	0.100	−0.037	0.250	−0.259	0.230	−0.167	−0.184	0.068	−0.087	−0.214	1.000							
15 Genre: romance	0.106	0.308	−0.110	−0.110	−0.108	−0.045	0.041	−0.103	0.018	−0.096	0.027	0.030	−0.018	0.121	0.128	−0.341	1.000						
16 Genre: thriller	0.227	0.419	−0.072	−0.170	−0.091	−0.036	−0.023	0.019	0.274	−0.109	0.016	−0.078	−0.014	−0.355	−0.190	−0.145	−0.140	1.000					
17 Population (host countries)	16.815	1.471	0.423	−0.018	−0.007	−0.008	−0.530	−0.001	−0.013	−0.021	−0.004	0.039	−0.004	−0.028	0.008	0.014	−0.017	0.011	1.000				
18 Economic distance	10.024	9.492	−0.140	0.027	−0.024	0.017	−0.387	0.012	−0.012	0.000	−0.012	−0.028	0.012	−0.015	−0.005	0.017	−0.015	0.010	−0.085	1.000			
19 Geographic distance	9.048	0.373	−0.059	0.015	0.001	0.009	−0.075	0.016	−0.018	0.012	−0.009	−0.041	0.005	−0.007	−0.002	0.026	−0.009	−0.002	−0.029	0.271	1.000		
20 Cultural distance	12.839	7.038	−0.139	−0.035	−0.019	−0.035	0.049	−0.001	−0.015	0.022	−0.020	−0.013	−0.017	0.017	−0.023	0.028	0.004	0.007	−0.108	−0.162	−0.136	1.000	
21 Education distance	1.107	0.929	−0.128	−0.026	−0.036	−0.013	−0.468	0.004	−0.023	0.019	−0.036	−0.011	−0.004	−0.004	−0.019	0.026	−0.018	0.016	0.290	0.113	−0.057	0.256	1.000

N = 35,832



**Table 2** OLS regression models on international box office performance

	Model 1		Model 2		Model 3		Model 4		Model 5	
Population (Host countries)	0.667		0.728		0.728		0.729		0.729	
	(0.006)	[0.000]	(0.007)	[0.000]	(0.007)	[0.000]	(0.007)	[0.000]	(0.007)	[0.000]
Economic distance	− 0.014		− 0.008		− 0.008		− 0.008		− 0.008	
	(0.001)	[0.000]	(0.001)	[0.000]	(0.001)	[0.000]	(0.001)	[0.000]	(0.001)	[0.000]
Geographic distance	− 0.259		− 0.379		− 0.379		− 0.385		− 0.385	
	(0.023)	[0.000]	(0.023)	[0.000]	(0.023)	[0.000]	(0.023)	[0.000]	(0.023)	[0.000]
Cultural distance	− 0.019		− 0.022		− 0.022		− 0.022		− 0.022	
	(0.001)	[0.000]	(0.001)	[0.000]	(0.001)	[0.000]	(0.001)	[0.000]	(0.001)	[0.000]
Education distance	− 0.523		− 0.549		− 0.549		− 0.551		− 0.552	
	(0.011)	[0.000]	(0.012)	[0.000]	(0.012)	[0.000]	(0.012)	[0.000]	(0.012)	[0.000]
Genre: comedy	− 0.095		− 0.053		− 0.054		− 0.052		− 0.054	
	(0.020)	[0.000]	(0.020)	[0.009]	(0.020)	[0.008]	(0.020)	[0.009]	(0.020)	[0.008]
Genre: drama	− 0.116		− 0.192		− 0.194		− 0.192		− 0.195	
	(0.020)	[0.000]	(0.020)	[0.000]	(0.020)	[0.000]	(0.020)	[0.000]	(0.020)	[0.000]
Genre: action	0.447		0.527		0.529		0.530		0.533	
	(0.023)	[0.000]	(0.022)	[0.000]	(0.022)	[0.000]	(0.022)	[0.000]	(0.022)	[0.000]
Genre: romance	− 0.143		0.007		0.010		0.010		0.012	
	(0.028)	[0.000]	(0.028)	[0.788]	(0.028)	[0.717]	(0.028)	[0.726]	(0.028)	[0.654]
Genre: thriller	− 0.156		0.017		0.015		0.019		0.017	
	(0.023)	[0.000]	(0.023)	[0.475]	(0.024)	[0.525]	(0.023)	[0.425]	(0.023)	[0.465]
Sequel	0.557		0.622		0.624		0.626		0.628	
	(0.022)	[0.000]	(0.022)	[0.000]	(0.022)	[0.000]	(0.022)	[0.000]	(0.022)	[0.000]
MPAA rating	− 0.348		− 0.394		− 0.394		− 0.397		− 0.396	
	(0.018)	[0.000]	(0.018)	[0.000]	(0.018)	[0.000]	(0.018)	[0.000]	(0.018)	[0.000]
Distributor	0.391		0.423		0.425		0.427		0.430	
	(0.012)	[0.000]	(0.011)	[0.000]	(0.011)	[0.000]	(0.011)	[0.000]	(0.011)	[0.000]
Award nomination	− 0.104		− 0.161		− 0.157		− 0.163		− 0.159	
	(0.039)	[0.045]	(0.038)	[0.000]	(0.038)	[0.000]	(0.038)	[0.000]	(0.038)	[0.000]
Lagged years in export	− 0.996		− 0.596		− 0.594		− 0.582		− 0.579	
	(0.042)	[0.000]	(0.041)	[0.000]	(0.041)	[0.000]	(0.041)	[0.000]	(0.041)	[0.000]
Earliest release countries	0.042		0.039		0.039		0.040		0.039	
	(0.003)	[0.000]	(0.003)	[0.000]	(0.003)	[0.000]	(0.003)	[0.000]	(0.003)	[0.000]
Social media promotion			0.216		0.304		0.218		0.306	
			(0.018)	[0.000]	(0.030)	[0.000]	(0.018)	[0.000]	(0.030)	[0.000]
Press freedom			0.089		0.090		0.116		0.117	
			(0.008)	[0.000]	(0.008)	[0.000]	(0.011)	[0.000]	(0.011)	[0.000]
Supply-side social influence			0.316		0.309		0.319		0.311	
			(0.016)	[0.000]	(0.021)	[0.000]	(0.016)	[0.000]	(0.022)	[0.000]

Table 2 (continued)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Demand-side social influence			0.081		0.048		0.064		0.030	
			(0.009)	<i>[0.000]</i>	(0.014)	<i>[0.001]</i>	(0.009)	<i>[0.000]</i>	(0.014)	<i>[0.040]</i>
Supply-side social influence <sup>2</sup>			0.012		0.080		0.023		0.092	
			(0.010)	<i>[0.243]</i>	(0.017)	<i>[0.000]</i>	(0.011)	<i>[0.037]</i>	(0.017)	<i>[0.000]</i>
Supply-side social influence X Demand-side social influence			0.123		0.136		0.125		0.139	
			(0.009)	<i>[0.000]</i>	(0.016)	<i>[0.000]</i>	(0.010)	<i>[0.000]</i>	(0.016)	<i>[0.000]</i>
Demand-side social influence <sup>2</sup>			0.033		0.044		0.033		0.042	
			(0.008)	<i>[0.000]</i>	(0.014)	<i>[0.002]</i>	(0.008)	<i>[0.000]</i>	(0.014)	<i>[0.003]</i>
Supply-side social influence X Social media promotion					0.027				0.030	
					(0.024)	<i>[0.268]</i>			(0.024)	<i>[0.213]</i>
Demand-side social influence X Social media promotion					0.055				0.056	
					(0.018)	<i>[0.002]</i>			(0.018)	<i>[0.002]</i>
Supply-side social influence <sup>2</sup> X Social media promotion					− 0.103				− 0.106	
					(0.021)	<i>[0.000]</i>			(0.021)	<i>[0.000]</i>
Supply-side social influence X Demand-side social influence X Social media promotion					− 0.026				− 0.027	
					(0.020)	<i>[0.185]</i>			(0.020)	<i>[0.179]</i>
Demand-side social influence <sup>2</sup> X Social media promotion					− 0.020				− 0.018	
					(0.017)	<i>[0.241]</i>			(0.017)	<i>[0.277]</i>
Supply-side social influence X Press freedom							0.0003		0.001	
							(0.008)	<i>[0.967]</i>	(0.008)	<i>[0.948]</i>
Demand-side social influence X Press freedom							0.046		0.047	
							(0.006)	<i>[0.000]</i>	(0.006)	<i>[0.000]</i>
Supply-side social influence <sup>2</sup> X Press freedom							− 0.033		− 0.033	
							(0.007)	<i>[0.000]</i>	(0.007)	<i>[0.000]</i>
Supply-side social influence X Demand-side Social influence X Press freedom							− 0.0004		− 0.001	
							(0.006)	<i>[0.947]</i>	(0.006)	<i>[0.823]</i>
Demand-side social influence <sup>2</sup> X Press freedom							− 0.004		− 0.004	
							(0.005)	<i>[0.412]</i>	(0.005)	<i>[0.405]</i>
Inverse Mills ratio	− 0.586		− 0.086		− 0.084		− 0.071		− 0.067	
	(0.040)	<i>[0.000]</i>	(0.042)	<i>[0.040]</i>	(0.042)	<i>[0.047]</i>	(0.042)	<i>[0.090]</i>	(0.042)	<i>[0.108]</i>
Constant	5.055		4.392		4.324		4.405		4.338	
	(0.229)	<i>[0.000]</i>	(0.241)	<i>[0.000]</i>	(0.241)	<i>[0.000]</i>	(0.240)	<i>[0.000]</i>	(0.241)	<i>[0.000]</i>
Release year controls	Included		Included		Included		Included		Included	
N	35,832		35,832		35,832		35,832		35,832	
adj. R <sup>2</sup>	0.494		0.518		0.519		0.520		0.520	

Robust standard errors are in parentheses, and *p* values are in italics



**Table 3** Slopes and curvatures of the lines of congruence and incongruence in the main effect

	Main effects		
	Coefficient	S.E.	P value
Slope of the line of congruence	0.397	0.019	0.000
Curvature of the line of congruence	0.168	0.015	0.000
Slope of the line of incongruence	0.235	0.017	0.000
Curvature of the line of incongruence	−0.077	0.017	0.000

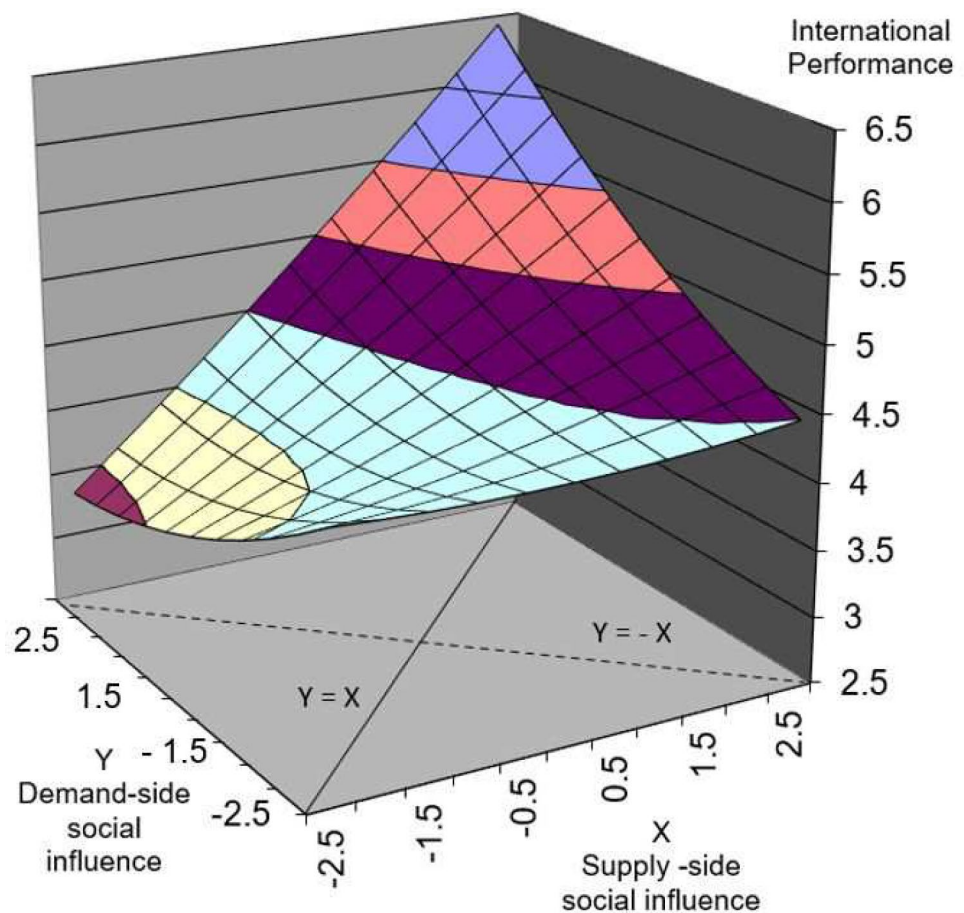
deviation below the mean) level of both supply-side and demand-side social influence to a moderately high (i.e., one standard deviation above the mean) and congruent level, the predicted international box office revenue increases by around 48.68%.

While our primary focus lies in the congruence between supply-side and demand-side social influences, our results also shed light on the implications of incongruent configurations, where one type of social influence is strong and the other is weak. The response surface analysis indicates a significantly negative curvature along the incongruence line (curvature =  $-0.077$ ,  $p = 0.000$ ), suggesting that performance declines as the divergence between supply-side and demand-side influences increases. Yet the positive slope

along the incongruence line (slope =  $0.235$ ,  $p = 0.000$ ) indicates that supply-side influence plays a more dominant role in shaping international performance.

The moderating effects proposed in Hypotheses 3 and 4 are presented in panel I and panel II of Table 4. To assess these effects, we examine the curvatures and slopes of the lines of congruence and incongruence under conditions of high and low moderator values—specifically, whether a film uses social media promotion (Hypothesis 3), and whether the press freedom in the host country is one standard deviation above or below the mean (Hypothesis 4). In line with research on polynomial regression with moderation (Busenbark et al., 2023; Vogel et al., 2016), we structure our model in accordance with Eq. (2), which modifies the polynomial Eq. (1) to include a moderator. We then calculate the relevant slopes and curvatures under each moderator condition.

As shown in panel I of Table 4, the curvature of the incongruence line is non-significant and close to zero for films without social media promotion (curvature =  $-0.013$ ,  $p = 0.642$ ), indicating minimal performance variation due to incongruence. In contrast, for films with social media promotion, the curvature is significantly negative (curvature =  $-0.109$ ,  $p = 0.000$ ), and the difference in curvature between the two groups is statistically significant (difference in coefficient =  $-0.097$ ,  $p = 0.000$ ). This supports Hypothesis

**Fig. 1** The direct effect of the (in)congruence between supply-side social influence and demand-side social influence on films' international performance

**Table 4** Slopes and curvatures of the lines of congruence and incongruence in the moderating effect

	(I) Moderator 1: Upstream Adoption of Social Media Promotion						(II) Moderator 2: Downstream Host-country Press Freedom									
	Coef- ficient (low)	S.E. (low)	P value (low)	Coef- ficient (high)	S.E. (high)	P value (high)	Differ- ence in coeffi- cient	P value	Coef- ficient (low)	S.E. (low)	P value (low)	Coef- ficient (high)	S.E. (high)	P value (high)	Differ- ence in coeffi- cient	P value
Slope of the line of congruence	0.357	0.026	0.000	0.439	0.023	0.000	0.082	0.000	0.332	0.023	0.000	0.467	0.024	0.000	0.136	0.000
Curvature of the line of congruence	0.259	0.025	0.000	0.111	0.192	0.565	−0.149	0.000	0.222	0.020	0.000	0.112	0.144	0.436	−0.110	0.000
Slope of the line of incongruence	0.262	0.026	0.000	0.233	0.021	0.000	−0.028	0.000	0.306	0.023	0.000	0.172	0.022	0.000	−0.134	0.000
Curvature of the line of incongruence	−0.013	0.028	0.642	−0.109	0.021	0.000	−0.097	0.000	−0.029	0.025	0.237	−0.136	0.023	0.000	−0.107	0.000

All of the coefficients and standard deviations for the lines and curvatures of the slopes of congruence and incongruence are derived from the equations proposed by Edwards and Parry (2009). In panel I and panel II, “low” denotes not adopting upstream home-country social media promotion and downstream host-country press freedom that is one standard deviation below its average value, while “high” signifies adopting upstream home-country adoption of social media promotion and downstream host-country press freedom that is one standard deviation above the average value.

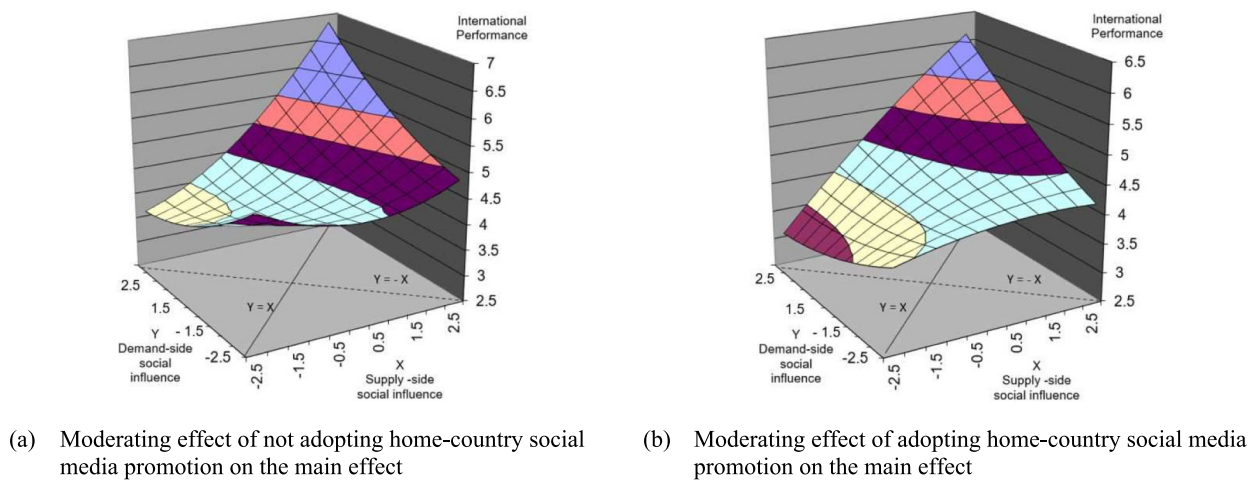
3, suggesting that congruence between supply-side and demand-side social influence matters more when films are promoted via social media. Also, the slope of the congruence line is steeper for films with social media promotion (slope = 0.439,  $p = 0.000$ ) than for those without (slope = 0.357,  $p = 0.000$ ), indicating that films using social media promotion experience a faster increase in international performance as social influence congruence rises. Figs. 2(a) and 2(b) illustrate the moderating effect of home-country social media promotion by showing the impact of social influence congruence when social media promotion is not adopted and when it is adopted.

As reported in panel II of Table 4, the curvature of the incongruence line is non-significant under low press freedom (curvature = -0.029,  $p = 0.237$ ), but significantly negative under high press freedom (curvature = -0.136,  $p = 0.000$ ). The difference in curvature across these conditions is also significant (difference in coefficient = -0.107,  $p = 0.000$ ), providing support for Hypothesis 4. Moreover, the slope of the congruence line is larger for high press freedom countries (slope = 0.467,  $p = 0.000$ ) than for low press freedom countries (slope = 0.332,  $p = 0.000$ ). This indicates that in more open media environments, films experience a sharper increase in international performance as social influence congruence moves from low to high levels. Figs. 3(a) and 3(b) present the moderating effect of host-country press freedom by comparing the impact of social influence congruence at low levels (one standard deviation below the mean) and high levels (one standard deviation above the mean) of press freedom.

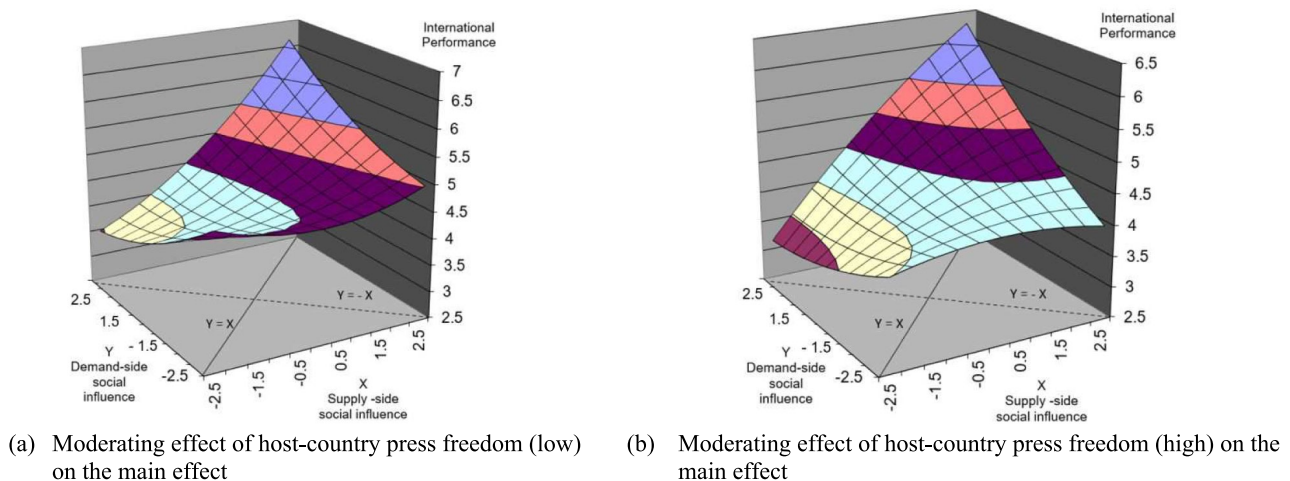
### Robustness checks

A set of robustness checks was conducted to secure the validity of the findings (see the results in Online Appendix B; all details are available upon request). First, we tested for outliers using Cook’s D, DFBETAS, and DFFITS, following the criteria set by Aguinis, Gottfredson, and Joo (2013). We applied Cook’s D, DFBETAS (standardized difference in beta, evaluating each case’s impact on specific regression coefficients), and DFFITS (standardized difference in fit, evaluating each case’s impact on all regression coefficients). None of these diagnostics identified influential cases warranting exclusion from the OLS regression. Second, we re-estimated all reported models using alternative measures of supply-side social influence. While several studies debate the best approach to quantify the influence of directors, actors, and producers, some suggest that using the maximum box office revenue of films previously directed, starred in, or produced by these individuals may better capture their impact (Gong et al., 2011). Accordingly, we substituted our primary measure with the maximum box office earnings of past films involving the focal film’s producers, directors,





**Fig. 2** The moderating effects of upstream home-country adoption of social media promotion



**Fig. 3** The moderating effects of downstream host-country press freedom

and lead actors to proxy the supply-side social influence. The empirical results in panel A of Appendix B are consistent with our main analyses. The negative curvature of the incongruence line ( $\beta = -0.072$ ,  $p = 0.000$ ) and the positive slope of the congruence line ( $\beta = 0.378$ ,  $p = 0.000$ ) support Hypotheses 1 and 2. The moderating effects of social media promotion and host-country press freedom also held. Third, a winsorized sample was used to further validate the findings, restricting the analysis to films released between 2010 and 2017. This subsample contained 1443 films, generating 30,896 film-country observations. Results (panel B in Appendix B) again confirmed the main effects: a significant negative incongruence slope ( $\beta = -0.123$ ,  $p$  value = 0.000) and a positive congruence slope ( $\beta = 0.371$ ,  $p$  value = 0.000), with robust moderating effects.

Fourth, we replaced the measurement of cultural distance with the Mahalanobis distance on GLOBE nine cultural dimensions (House et al., 2004). The results (panel C in Appendix B) are again aligned with our primary outcomes. Fifth, to further assess the reliability of our model, we introduced an additional exclusion restriction and a control variable. Since language differences can shape informal institutions and influence audience comprehension of cultural content, we included language distance, measured using the indicator developed by Dow and Karunaratna (2006), which captures linguistic similarity and mutual intelligibility. We also added production studio performance as an exclusion restriction in the first stage. This was measured by each studio's historical average cumulative box office earnings, which reflects its international exporting experience and can influence a film's likelihood of being selected for foreign



release (Wu et al., 2022). The results, reported in panel D of Appendix B, continued to support our hypotheses. Sixth, we re-estimated all models using host-country fixed effects. As shown in panel E of Appendix B, the findings remained consistent with our main analyses that use country-level control variables. Overall, these analyses support the findings of the main tests.

## Discussion

### Theoretical contributions

Motivated by the question of what drives the international diffusion and performance of cultural products, specifically why some succeed in overseas markets while others do not, this study draws on the social influence view to explain how supply-side and demand-side social influence shape audience perceptions and drive commercial success abroad. We make key contributions to the IB field by uncovering how multiple social forces along the GVCs of the film industry jointly influence internationalization performance.

First, our primary contribution lies in integrating the GVC perspective into the analysis of social influences. Cultural products, due to their symbolic and experiential nature, derive their value from multiple sources of influence that are embedded throughout the value chain. GVCs represent complex systems that govern the global production, distribution, and consumption of goods and services, where value is co-created and distributed across multiple nodes (Kano et al., 2020; Wang, 2023). While digital transformation has reshaped aspects of the film industry, such as content delivery and audience engagement, foundational processes such as production, distribution, and marketing remain deeply embedded in physical and networked value chains (Cubitt, 2022; Eliashberg et al., 2006). Understanding the internationalization of cultural products, therefore, requires adopting a GVC lens to capture the diverse and dynamic sources of social influence that operate along these chains. By bridging the GVC framework with the social influence perspective, we provide a holistic view of how interconnected supply-side and demand-side influences collectively shape a film's success in global markets. Our analysis identifies two critical types of social influences within GVCs and examines the moderating roles of upstream home-country social media adoption and downstream host-country press freedom. These findings indicate that social influences do not operate in isolation but interact dynamically across the GVC, shaping audience perceptions and commercial outcomes.

Second, our study sheds light on the social influence view by exploring the interplay between supply-side (production-related) and demand-side (audience-related) social influences, with a focus on the congruence between them.

Prior research has predominantly analyzed individual social influences in isolation (e.g., Fiss, 2006; Rocha & van Praag, 2020), thus overlooking the complexity of multiple co-existing social influences and their interactive effects. As highlighted in earlier studies (e.g., Parker & Cox, 2013), social influences rarely operate independently, particularly in the global cultural industries, where evaluations of cultural products are highly subjective and vary significantly in both *form* and *degree*. Our findings validate the critical role of these co-existing social influences in driving the international success of films. Specifically, congruence between supply-side and demand-side social influences significantly enhances a film's performance in foreign markets, as it creates a synergistic effect that bolsters reputation and appeal among audiences. This result aligns with prior research on the synergistic effects of product indicators (e.g., Zhao & Zhou, 2011).

Furthermore, our analysis reveals a nuanced finding in situations where supply-side and demand-side social influences are incongruent. Specifically, we find that supply-side social influences have a stronger impact on international performance than demand-side influences, when these signals conflict. This finding highlights a significant asymmetry in how different types of incongruence affect market outcomes. Such incongruence can create confusing information environments (Yao et al., 2024; Zhao & Zhou, 2011), sending mixed signals to international audiences who heavily rely on clear cues to evaluate unfamiliar cultural products. In uncertain or unfamiliar international contexts, consumers tend to trust institutionalized supply-side signals, which serve as reliable indicators of quality and legitimacy. Renowned production teams or high-profile talent provide credible heuristics that help audiences reduce uncertainty, even in the absence of strong demand-side support such as audience enthusiasm or critical acclaim. On the other hand, when demand-side influences are positive but supply-side influences are weak, strong audience or critical approval may reflect authenticity, but typically lacks the powerful promotional capabilities of established producers or famous cast members. As a result, demand-side signals alone often struggle to drive significant international success.

Methodologically, our application of polynomial regression with response surface analysis strengthens these contributions. Unlike traditional interaction analyses, this method captures the nuanced impacts of varying degrees of congruence and incongruence on international film performance. Drawing on foundational studies (Busenbark et al., 2023; Edwards & Parry, 1993), our use of polynomial regression enables deeper insights into the complex interactions of social influences and addresses the theoretical challenge of conflicting signals (Connelly et al., 2011). This methodological approach helps clarify the specific conditions under which social influences can most effectively communicate





quality and credibility, thereby enriching our understanding of social influence dynamics in global cultural markets.

Our third contribution lies in the boundary effects of social influence congruence on the international performance of cultural products. Our results emphasize the importance of effective information dissemination and favorable institutional conditions for receiving that information. From the upstream, home-country social media acts as a powerful tool to increase the visibility of aligned supply-side and demand-side social influences, thereby contributing to greater commercial success in overseas markets (Li et al., 2022). This finding contributes to the growing body of research on managing international product success (Li et al., 2022) by demonstrating that when social media platforms are utilized, achieving congruence between supply-side and demand-side social influences becomes essential for optimizing films' international performance. However, social media platforms also act as a double-edged sword. While they amplify the positive effects of social influence congruence, they also magnify the negative impact of social influence incongruence. This aligns with prior studies (Audrezet et al., 2020; Elberse, 2007), which emphasize the critical role of information visibility in shaping audience perceptions of products and organizations. From the downstream, our study highlights the role of host-country press freedom in enhancing the impact of social influence congruence. In media environments with high levels of press freedom, the transparent and independent flow of information allows aligned social influences to be more effectively communicated to the public (Berlinger et al., 2022). These findings emphasize that successful transmission of social influence congruence requires both efficient dissemination mechanisms (e.g., social media platforms) and institutional conditions conducive to information reception (e.g., high press freedom).

### Practical implications

Through the integration of the social influence view and the GVCs framework, our study provides actionable strategies for organizations seeking success in international cultural markets. Central to our findings is the role of social influence congruence in shaping international reception. Cultural organizations, particularly film studios, should recognize that supply-side efforts alone are not sufficient. These efforts need to be complemented by demand-side social influence. This can include engaging key reviewers and opinion leaders, aligning creative content with market preferences, and generating early, positive buzz. Digital platforms are also essential in this process. Authentic and interactive social media campaigns can strengthen demand-side influence and reinforce congruence with supply-side efforts. Since the impact of social influence congruence is especially

pronounced in countries with high press freedom, targeted alignment between production signals and audience-facing reviews is vital in such markets. Doing so can help cultural products stand out in competitive global environments and boost their international performance.

For policymakers, our findings highlight the importance of fostering a transparent and independent media ecosystem. Promoting press freedom and equitable access to media platforms can enhance the transmission and credibility of social influences, which benefits both cultural exporters and local audiences. Institutional support for open information exchange and creative sector development can increase the global competitiveness of cultural products and deepen international cultural engagement.

### Limitations and future research directions

This study has several limitations that offer opportunities for future research. First, cultural products are highly diverse, and our findings, which are based on U.S.-produced films, may not generalize to other types of cultural products or cultural products from developing economies. Future research should examine the internationalization of various cultural products across different cultural and institutional environments to build a more inclusive understanding of global cultural flows (Wang et al., 2020). Second, although we included key country-level variables, our analysis may not fully capture country-specific institutional factors, such as censorship or import restrictions. Future studies should explore how institutional environments mediate the impact of social influences on cultural product diffusion and performance. In addition, our reliance on secondary data limits insight into how audiences interpret social influence (in)congruence. Qualitative research (e.g., interviews or surveys) may offer a deeper understanding of audience-level cognitive responses. Also, distinguishing between domestic and international reviews within demand-side social influence may help uncover finer-grain geographic differences in social influence effectiveness. Third, our study focuses on theatrical film distribution, which may constrain the applicability of findings in today's streaming-driven environment. Streaming platforms, to some degree, alter both supply-side and demand dynamics. Future research may examine how social influences function in streaming contexts. Moreover, our measure of social media adoption, which is based on Facebook and Twitter presence, captures only a limited scope of digital engagement. Future studies can adopt more comprehensive measures, such as influencer marketing reach, virality, or engagement metrics across platforms such as Instagram or TikTok, to better reflect the evolving digital landscape.





## Conclusions

Social influences are central to cultural industries, where product quality is often subjective and difficult to assess. Drawing on the social influence perspective, this study examines how congruence and incongruence between supply-side and demand-side social influences affect the global commercial performance of films as cultural products. We also explore two key moderators within GVCs: upstream home-country social media adoption and downstream host-country press freedom. By extending the social influence view to the film industry's GVCs, our study reveals how different social influence dynamics along the value chain can shape international audience perceptions and contribute to a film's global success.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1057/s41267-025-00797-9>.

**Acknowledgements** We sincerely appreciate the guidance provided by Editors Stephanie Wang, Sjoerd Beugelsdijk, Rosalie Tung, and three anonymous reviewers. We also appreciate the insightful comments received during the JIBS PDW from Allan Bird and Alvaro Cuervo-Cazurra, and the revision stage from John R. Busenbark (University of Notre Dame), and Jiayan Ding (Tongji University). Di Fan gratefully acknowledges funding from the Natural Science Foundation of China (NSFC Grant 72372119).

**Funding** Open Access funding enabled and organized by CAUL and its Member Institutions.

**Data availability** The data supporting the findings of this study were obtained from multiple publicly accessible databases, including *IMDb*, *The-Numbers.com*, *Rotten Tomatoes*, *the World Bank*, *the GLOBE Project*, *the World Values Survey*, and *the CIA World Factbook*. Access to these data may be subject to certain restrictions, as they were used under specific terms of use or licensing agreements.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Agrawal, J., & Kamakura, W. A. (1995). The economic worth of celebrity endorsers: An event study analysis. *Journal of Marketing*, 59(3), 56–62.
- Aguinis, H., Gottfredson, R. K., & Joo, H. (2013). Best-practice recommendations for defining, identifying, and handling outliers. *Organizational Research Methods*, 16(2), 270–301.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. SAGE.
- Allison, P. D. (1999). *Multiple regression: A primer*. Pine Forge Press.
- Audrezet, A., de Kerviler, G., & Guidry Moulard, J. (2020). Authenticity under threat: When social media influencers need to go beyond self-presentation. *Journal of Business Research*, 117, 557–569.
- Baer, M. D., Frank, E. L., Matta, F. K., Luciano, M. M., & Wellman, N. (2021). Undertrusted, overtrusted, or just right? The fairness of (in) congruence between trust wanted and trust received. *Academy of Management Journal*, 64(1), 180–206.
- Bakker, G. (2014). Soft power: the media industries in Britain since 1870. *The Cambridge economic history of modern Britain* (pp. 416–447). Cambridge University Press.
- Banerjee, A. V. (1992). A simple model of herd behavior. *The Quarterly Journal of Economics*, 107(3), 797–817.
- Basuroy, S., Chatterjee, S., & Ravid, S. A. (2003). How critical are critical reviews? The box office effects of film critics, star power, and budgets. *Journal of Marketing*, 67(4), 103–117.
- Berlinger, E., Lilla Keresztúri, J., Lublóy, Á., & Vőneki Tamásné, Z. (2022). Press freedom and operational losses: The monitoring role of the media. *Journal of International Financial Markets, Institutions and Money*, 77, 101496.
- Berry, H., Guillén, M. F., & Zhou, N. (2010). An institutional approach to cross-national distance. *Journal of International Business Studies*, 41(9), 1460–1480.
- Besley, T., & Prat, A. (2006). Handcuffs for the grabbing hand? Media capture and government accountability. *American Economic Review*, 96(3), 720–736.
- Burnkrant, R. E., & Cousineau, A. (1975). Informational and normative social influence in buyer behavior. *Journal of Consumer Research*, 2(3), 206–215.
- Busenbark, J. R., Bundy, J., & Chin, M. K. (2023). Director departure following political ideology (in)congruence with an incoming CEO. *Strategic Management Journal*, 44(7), 1698–1732.
- Cannizzaro, A. P. (2020). Social influence and MNE strategic response to political risk: A global network approach. *Journal of International Business Studies*, 51(5), 829–850.
- Chang, K., Shim, H., & Yi, T. D. (2019). Corporate social responsibility, media freedom, and firm value. *Finance Research Letters*, 30, 1–7.
- Cohen, E. (1984). The sociology of tourism: approaches, issues, and findings. *Annual Review of Sociology*, 10(1), 373–392.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67.
- Cubitt, S. (2022). *Unsustainable cinema: Global supply chains. Ecocinema theory and practice*. (Vol. 2). London: Routledge.
- Dow, D., & Karunaratna, A. (2006). Developing a multidimensional instrument to measure psychic distance stimuli. *Journal of International Business Studies*, 37(5), 578–602.
- Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. *Journal of Applied Psychology*, 94(3), 654–677.
- Edwards, J. R., & Parry, M. E. (1993). On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Academy of Management Journal*, 36(6), 1577–1613.
- Elberse, A. (2007). The power of stars: Do star actors drive the success of movies? *Journal of Marketing*, 71(4), 102–120.
- Elberse, A., & Eliashberg, J. (2003). Demand and supply dynamics for sequentially released products in international markets: The case of motion pictures. *Marketing Science*, 22(3), 329–354.
- Eliashberg, J., Elberse, A., & Leenders, M. A. A. M. (2006). The motion picture industry: Critical issues in practice, current research, and new research directions. *Marketing Science*, 25(6), 638–661.



- Eliashberg, J., & Shugan, S. M. (1997). Film critics: Influencers or predictors? *Journal of Marketing*, 61(2), 68–78.
- Fiss, P. C. (2006). Social influence effects and managerial compensation evidence from Germany. *Strategic Management Journal*, 27(11), 1013–1031.
- Gao, W., Ji, L., Liu, Y., & Sun, Q. (2020). Branding cultural products in international markets: A study of Hollywood movies in China. *Journal of Marketing*, 84(3), 86–105.
- Goldenberg, J., Libai, B., & Muller, E. (2001). Talk of the network: A complex systems look at the underlying process of word-of-mouth. *Marketing Letters*, 12(3), 211–223.
- Gong, J. J., Young, S. M., & Van Der Stede, W. A. (2011). Real options in the motion picture industry: Evidence from film marketing and sequels. *Contemporary Accounting Research*, 28(5), 1438–1466.
- Han, J., Greve, H. R., & Shipilov, A. (2024). The liability of gender? Constraints and enablers of foreign market entry for female artists. *Journal of International Business Studies*. <https://doi.org/10.1057/s41267-023-00680-5>
- Heckman, J. J. (1979). Sample selection bias as a specification error. *Econometrica*, 47(1), 153–161.
- Hennig-Thurau, T., Wiertz, C., & Feldhaus, F. (2015). Does Twitter matter? The impact of microblogging word of mouth on consumers' adoption of new movies. *Journal of the Academy of Marketing Science*, 43(3), 375–394.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. SAGE.
- Ibarra, H., & Andrews, S. B. (1993). Power, social influence, and sense making: Effects of network centrality and proximity on employee perceptions. *Administrative Science Quarterly*, 38(2), 277–303.
- Jha, C. K., & Sarangi, S. (2017). Does social media reduce corruption? *Information Economics and Policy*, 39, 60–71.
- Kano, L., Tsang, E. W. K., & Yeung, H. W. C. (2020). Global value chains: A review of the multi-disciplinary literature. *Journal of International Business Studies*, 51(4), 577–622.
- Karahanna, E., Xu, S. X., Xu, Y., & Zhang, N. (2018). The needs–affordances–features perspective for the use of social media. *MIS Quarterly*, 42(3), 737–756.
- Katz, E., & Lazarsfeld, P. F. (1955). Part 2, chapter 13. *Personal influence*. The Free Press.
- Kelman, H. C. (1958). Compliance, identification, and internalization three processes of attitude change. *Journal of Conflict Resolution*, 2(1), 51–60.
- Kim, H., & Jensen, M. (2014). Audience heterogeneity and the effectiveness of market signals: How to overcome liabilities of foreignness in film exports? *Academy of Management Journal*, 57(5), 1360–1384.
- Kim, T., Barasz, K., & John, L. K. (2019). Why am I seeing this ad? The effect of ad transparency on ad effectiveness. *Journal of Consumer Research*, 45(5), 906–932.
- Lee, Y., Kim, S.-H., & Cha, K. C. (2021). Impact of online information on the diffusion of movies: Focusing on cultural differences. *Journal of Business Research*, 130, 603–609.
- Li, J., Pan, Y., Yang, Y., & Tse, C. H. (2022). Digital platform attention and international sales: An attention-based view. *Journal of International Business Studies*, 53(8), 1817–1835.
- Liu, Y. (2006). Word of mouth for movies: Its dynamics and impact on box office revenue. *Journal of Marketing*, 70(3), 74–89.
- Marsden, P. V., & Friedkin, N. E. (1993). Network studies of social influence. *Sociological Methods & Research*, 22(1), 127–151.
- McCracken, G. (1989). Who is the celebrity endorser? Cultural foundations of the endorsement process. *Journal of Consumer Research*, 16(3), 310–321.
- Meyer, K. E., Van Witteloostuijn, A., & Beugelsdijk, S. (2017). What's in a p? Reassessing best practices for conducting and reporting hypothesis-testing research. *Journal of International Business Studies*, 48(5), 535–551.
- Moon, S., Bergey, P. K., & Iacobucci, D. (2010). Dynamic effects among movie ratings, movie revenues, and viewer satisfaction. *Journal of Marketing*, 74(1), 108–121.
- Moon, S., & Song, R. (2015). The roles of cultural elements in international retailing of cultural products: An application to the motion picture industry. *Journal of Retailing*, 91(1), 154–170.
- Motion Picture Association (MPA). (2025). The American motion picture and television industry: Creating jobs, trading around the world. Available at <https://www.motionpictures.org/research-docs/>. Accessed March 15 2025.
- Parker, R., & Cox, S. (2013). Power relations and small and medium-sized enterprise strategies for capturing value in global production networks: Visual effects (VFX) service firms in the Hollywood film industry. *Regional Studies*, 47(7), 1095–1110.
- Ravid, S. A., & Basuroy, S. (2004). Managerial objectives, the R-rating puzzle, and the production of violent films. *The Journal of Business*, 77(S2), S155–S192.
- Rein, I., Kotler, P., & Stoller, M. (1987). *High visibility*. Dodd-Mead.
- Rice, D. H., Kelting, K., & Lutz, R. J. (2012). Multiple endorsers and multiple endorsements: The influence of message repetition, source congruence and involvement on brand attitudes. *Journal of Consumer Psychology*, 22(2), 249–259.
- Rocha, V., & van Praag, M. (2020). Mind the gap: The role of gender in entrepreneurial career choice and social influence by founders. *Strategic Management Journal*, 41(5), 841–866.
- Shukla, P. (2011). Impact of interpersonal influences, brand origin and brand image on luxury purchase intentions: Measuring interfunctional interactions and a cross-national comparison. *Journal of World Business*, 46(2), 242–252.
- Treadway, D. C., Breland, J. W., Williams, L. M., Cho, J., Yang, J., & Ferris, G. R. (2013). Social influence and interpersonal power in organizations: Roles of performance and political skill in two studies. *Journal of Management*, 39(6), 1529–1553.
- UNCTAD & UNDP. (2010). *Creative economy: A feasible development option* (pp. 1–392). UNCTAD/UNDP.
- UNCTAD. (2022). *Creative economy outlook 2022*.
- Uzzi, B., & Spiro, J. (2005). Collaboration and creativity: The small world problem. *American Journal of Sociology*, 111(2), 447–504.
- Vogel, R. M., Rodell, J. B., & Lynch, J. W. (2016). Engaged and productive misfits: How job crafting and leisure activity mitigate the negative effects of value incongruence. *Academy of Management Journal*, 59(5), 1561–1584.
- Wang, L., Zhang, C., & Narayanan, S. (2023). The bright side of trustless relationships: A dyadic investigation of the role of trust congruence on supplier knowledge acquisition across borders. *Journal of Operations Management*, 69(7), 1042–1077.
- Wang, S. L. (2023). Digital technology-enabled governance for sustainability in global value chains: a framework and future research agenda. *Journal of Industrial and Business Economics*, 50(1), 175–192.
- Wang, S. L., Gu, Q., Von Glinow, M. A., & Hirsch, P. (2020). Cultural industries in international business research: Progress and prospect. *Journal of International Business Studies*, 51(4), 665–692.
- Wu, C., Weinberg, C. B., Wang, Q., & Ho, J. Y. C. (2022). Administrative trade barrier: An empirical analysis of exporting Hollywood movies to China. *International Journal of Research in Marketing*, 39(4), 1253–1274.
- Yao, F. K., Xu, M., & Ao, J. (2024). Worldwide spread of the Weinstein scandal and the #MeToo movement: Cross-country diffusion of reputation loss in the film industry. *Journal of International Business Studies*. <https://doi.org/10.1057/s41267-024-00720-8>



Zhao, W., & Zhou, X. (2011). Status inconsistency and product valuation in the California wine market. *Organization Science*, 22(6), 1435–1448.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

**Xinli Huang** is Lecturer at the Sheffield University Management School, The University of Sheffield, Sheffield, United Kingdom. Her research interests include creative economies, international business strategies, and emerging market firms.

**Di Fan** is Professor of Management at the School of Management, RMIT University, Melbourne, Australia. His current research interests include international business strategies of emerging market firms and international human resource management.

**Christine Soo** is Associate Professor of Management at the UWA Business School, University of Western Australia, Perth, Australia. Her research focuses on organizational learning and innovation, dynamic capabilities, knowledge management, and strategic human resource management.

