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Entrepreneurial Orientation, Relational Embeddedness, and Internationalization Performance of Service MNEs: The Moderating Role of Simultaneous Production and Consumption

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Abstract

Existing studies on the relationship between entrepreneurial orientation (EO) and internationalization performance have yielded inconsistent findings. To address this issue, this study focuses on the contingent roles of institutional context and industry-specific characteristics. We also explore how EO enables service multinational enterprises (MNEs) in emerging markets to build deeply embedded relationships that help them navigate institutional voids and improve internationalization performance. Using a sample of Chinese service MNEs, this study finds that EO is positively associated with both relational embeddedness and internationalization performance. Relational embeddedness serves as an institutional bridge through which emerging-market service MNEs with strong EO can obtain resources and legitimacy in host countries, thereby improving internationalization performance. Moreover, simultaneous production and consumption significantly moderates both the relationship between EO and relational embeddedness and the moderated mediation effect of EO on internationalization performance through relational embeddedness. These findings provide a theoretical basis for understanding how service MNEs in emerging markets use internal EO and secure external resources through relational embeddedness to improve internationalization performance. We also provide recommendations for stakeholders of service MNEs in emerging markets to calibrate their entrepreneurial strategies in accordance with their service characteristics.

Keywords: internationalization performance; entrepreneurial orientation; relational embeddedness; simultaneous production and consumption

JEL: F23, L26, M16

1. Introduction

In emerging economies, emerging market multinational enterprises (EMNEs) face widespread challenges due to institutional voids (Hu et al., 2025; Li et al., 2025). Compared with multinationals from developed markets, they often operate under more severe resource constraints and greater environmental uncertainty (Li et al., 2017; Liu et al., 2024). For service multinational enterprises (MNEs), these challenges are compounded by the distinctive nature of services, particularly simultaneous production and consumption (SPC) (Cheng et al., 2023; Javalgi et al., 2003; Zhang et al., 2015). This implies that service delivery, customer interaction, and value creation often occur in real-time within the host market, increasing reliance on local customer knowledge, amplifying reputational risks, and complicating efforts to implement standardized offshore operations (Cheng et al., 2023; Zhang et al., 2022; Zhang et al., 2015). Consequently, the effective management of the risks associated with institutional voids is critical for the survival of service EMNEs.

Research suggests that EMNEs often face intense market competition during their home countries' economic development (Greve and Zhang, 2017; Liu et al., 2024),

compelling them to develop an organization-wide inclination toward proactivity, risk-taking, and innovation, conceptualized as “entrepreneurial orientation” (EO) (Covin and Wales, 2019). Traditionally, EO has captured a firm's strategic posture of innovating, undertaking risks, and proactively pursuing opportunities amid uncertainty (Cavusgil and Knight, 2015; Covin and Miller, 2014). However, in the context of institutional voids, EO transcends the generic strategic posture; it becomes a vital capability for firms to actively sense, engage in, and maneuver through gaps in formal market institutions (Bryan Jean et al., 2024; Kiss et al., 2012; Su et al., 2011; Teece et al., 1997). Embracing such an orientation is crucial for service EMNEs, whose value creation is especially sensitive to local contexts and real-time interactions. This enables them to leverage their resources skillfully to seize transient market opportunities (Cheng et al., 2023; Javalgi et al., 2003; Liu et al., 2024), directly mitigate the constraints imposed by institutional voids, and build sustainable competitive advantages in international markets.

Extensive research has examined the relationship between EO and performance (Donbesuur et al., 2020; Wales et al., 2020). However, the findings are mixed and inconclusive, with studies reporting positive, non-significant,



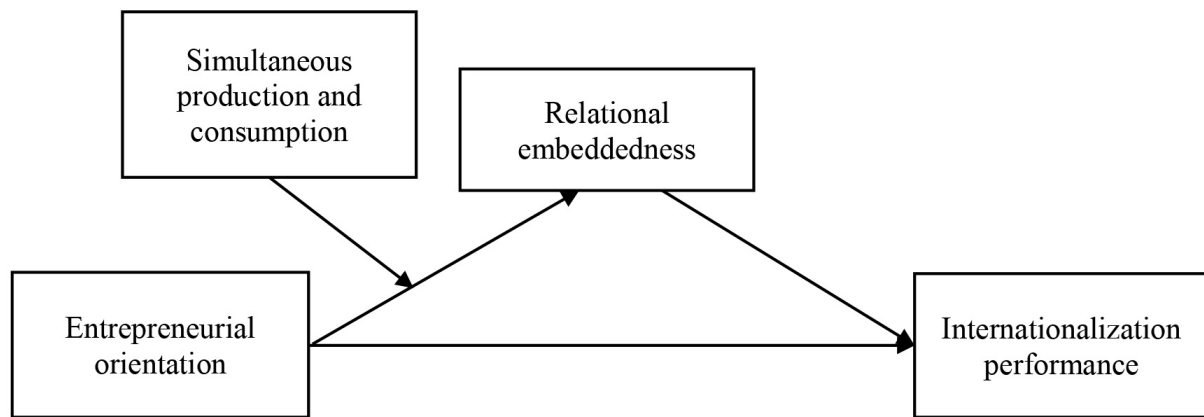


Fig. 1. Conceptual model.

or even negative effects (Calabrò et al., 2021; Cherbib, 2024; Liu et al., 2024; Morgan and Anokhin, 2023; Nave et al., 2024; Rauch et al., 2009; Saeed et al., 2014; Yu et al., 2019). Such inconsistencies indicate that EO is not a universally effective strategic resource and its value is highly contingent on contextual factors. Scholars further note that two critical contingencies—the institutional context and industry-specific characteristics—have rarely been examined (Rauch et al., 2009). Motivated by this gap, this study adopts a contextualized lens to address the following research question: How can service EMNEs leverage EO to mitigate institutional voids and improve their performance?

We propose “relational embeddedness” as a mediating mechanism in the EO-performance paradigm. To navigate institutional voids, EMNEs can leverage EO not only as an internal resource bundle but also as a proactive, void-filling capability. This capability, characterized by innovativeness, proactiveness, and risk-taking, inherently compels firms to look beyond their boundaries (Bryan Jean et al., 2024; Kiss et al., 2012; Su et al., 2011; Teece et al., 1997). It drives them to actively construct “institutional bridges” externally—specifically through cultivating relational embeddedness—to secure the complementary resources and legitimacy needed to operationalize their entrepreneurial endeavors in host markets. Furthermore, we focus on Chinese service MNEs and theorize that SPC moderates the relationship between EO and relational embeddedness, as well as the moderated mediation effect of EO on internationalization performance through relational embeddedness. As the largest emerging economy, China has undergone a significant socioeconomic transition and contends with pronounced institutional voids (Liu et al., 2024). This context is representative of many transitioning economies, such as those in Central and Eastern Europe (Hu et al., 2025; Liu et al., 2024). Service MNEs from Central and Eastern Europe, operating in post-socialist economies with evolving formal institutions and reliance on informal networks, face the analogous dynamics of navigating institutional voids while managing the inseparability of their

service offerings. Therefore, the insights derived from the Chinese context hold significant comparative value and relevance for understanding the EO-performance paradigm in other major transitional economies.

The contributions of this study are as follows. First, previous studies on the EO-performance relationship remain inconsistent. This study answers the call for more research on the contingency role of institutional contexts and industry-specific characteristics (Rauch et al., 2009) by introducing relational embeddedness as a mediating mechanism in the context of service EMNEs. Second, our research moves beyond reaffirming that EO fosters networks—a well-established relationship—to uncover critical yet overlooked boundary conditions (Donbesuur et al., 2020). We theorize and demonstrate that SPC significantly attenuates the strength of the EO-relational embeddedness link. Despite the growing economic dominance of the service sector globally, its distinct operational paradigm—particularly features such as SPC—remains under-researched in international business studies (Battisti et al., 2025; Cheng et al., 2023; Hadjikhani et al., 2019). SPC highlights the inseparability of service production from consumption (Baltacioglu et al., 2007; Klassen and Rohleder, 2001), which constrains where and how knowledge is acquired and heightens the need for external resource acquisition. By examining how SPC shapes the relationship between EO and relational embeddedness, as well as the moderated mediation effect (see Fig. 1), the purpose of this study is to clarify when and why EO-driven networking becomes less imperative, offering a more nuanced, industry-grounded explanation for contingencies in the EO performance paradigm.

2. Theory and Hypotheses Development

2.1 The Imperative of Institutional Context: Service EMNEs

EMNEs operate within institutional contexts often marked by significant institutional voids (Hu et al., 2025;

Liu et al., 2024). Such voids are not uniform and manifest in two interrelated forms: formal and informal institutional voids (Nave et al., 2024; North, 1991). Formal institutional voids are underdeveloped or poorly enforced rules and systems, including weak legal frameworks, inadequate property rights protection, immature financial markets, and regulatory instability (Liu et al., 2024). These deficiencies increase the market transaction costs and contractual hazards (Genin et al., 2021; Li et al., 2025). Informal institutional voids reflect the absence of shared business norms, reliable information intermediaries, and cross-cultural trust, which hinder knowledge transfers and increase the cost of establishing legitimacy with local stakeholders (Hu et al., 2025). In emerging economies, where formal institutions are often weak, informal institutions (e.g., guanxi) tend to play an amplified role as complementary governance mechanisms. Collectively, institutional voids heighten uncertainty and resource constraints, fundamentally shaping the strategic challenges faced by EMNEs during internationalization (Li et al., 2025; Meyer and Peng, 2016).

These institutional challenges for service MNEs are substantially amplified by the inherent characteristics of services, namely intangibility, heterogeneity, inseparability, and perishability (Chen et al., 2025; Parasuraman et al., 1985; Zeithaml et al., 2009). These characteristics mean that compared to physical goods, services tend to be intangible, cannot be stored, and are often co-produced with clients (Goerzen and Makino, 2007), making it challenging to standardize core businesses or shield them from the underdeveloped local institutional environment (Hu et al., 2025). As a result, service EMNEs must not only navigate institutional voids but also manage the heightened operational complexity and reputational exposure inherent in cross-border service delivery.

2.2 The Effect of Entrepreneurial Orientation on Internationalization Performance of Service EMNEs

In response to the compounded institutional and market complexities in emerging economies, EO enables service MNEs to adopt the strategic logic of actively engaging with institutional voids rather than being constrained by them (Morgan and Anokhin, 2023). EO is traditionally conceptualized as a strategic posture comprising three key dimensions: innovativeness, proactiveness, and risk-taking (Liu et al., 2024; Lumpkin and Dess, 1996; Wales et al., 2020). However, in the context of institutional voids, these dimensions collectively evolve beyond a generic strategic posture; they combine to form a higher-order and context-specific capability that allows firms to sense, navigate, and exploit opportunities within the gaps of the institutional framework. Firms with a strong EO emphasize experimentation, which can lead to novel products, services, or processes (Wiklund and Shepherd, 2005). They consistently scan and interact with the external environment to identify opportunities, strengthen competitiveness, and manage

risks (Morgan and Anokhin, 2023), thereby building competitive advantages in the international market.

Specifically, proactiveness reflects a forward-looking, opportunity-driven mindset, often demonstrated by introducing innovative offerings ahead of competitors in anticipation of future demand (Morgan and Anokhin, 2023; Rauch et al., 2009). Within institutional voids, proactiveness plays a heightened strategic role. It involves continuously scanning the institutional environment to identify gaps and uncertainties before they escalate into major obstacles. Proactive service EMNEs do not merely seek market opportunities; they preemptively build relationships and legitimacy to offset the liabilities of underdeveloped formal institutions (Cheng and Huizingh, 2014). Thus, they secure first-mover advantages in new markets and actively mitigate the legitimacy deficits arising from institutional voids, thereby enhancing their internationalization performance.

Innovativeness reflects a firm's commitment to creativity and experimentation, often through research and development (R&D) investments, to achieve technological leadership (Lumpkin and Dess, 1996; Rauch et al., 2009). In environments marked by institutional voids where standard service models may be ineffective, innovativeness drives firms to design tailored solutions that overcome local institutional deficiencies. For instance, service EMNEs may develop novel partnership structures, adaptable delivery mechanisms, or customer engagement processes that do not rely on formal intermediaries (Morgan and Anokhin, 2023; Zhang et al., 2022). Such context-embedded innovation helps bridge the service gaps created by voids, enhances local customer satisfaction, and ultimately strengthens internationalization performance.

Risk-taking refers to the willingness to undertake bold initiatives and commit substantial resources to uncertain environments, product markets, or geographical expansion (Rauch et al., 2009). For service EMNEs entering host countries with institutional voids, risk-taking involves strategic investments to build a local presence and trust amid heightened ambiguity and potential contractual hazards. This dimension allows firms to tolerate the uncertainties inherent in highly uncertain environments and dedicate scarce resources to cultivating relational capital with local clients and partners (Nave et al., 2024; Zhang et al., 2015). Such strategic risk-taking is essential for capturing emerging opportunities, establishing local credibility, and achieving sustainable performance in international markets. Therefore, we propose:

Hypothesis 1: Entrepreneurial orientation is positively associated with the internationalization performance of service EMNEs.

2.3 The Mediating Effect of Relational Embeddedness

Building on the direct effect of EO on internationalization performance, this section introduces an integrated theoretical framework to elucidate the contextualized mecha-

nisms. As mentioned above, institutional theory provides a foundational context by identifying the core challenges confronting service EMNEs. These challenges often stem from institutional voids, both formal and informal, which create significant constraints and uncertainties. Within this context, the resource-based view (RBV) positions EO not merely as a generic strategic posture, but as a critical dynamic capability that firms cultivate to proactively identify, navigate, and exploit opportunities to fill institutional voids (Bryan Jean et al., 2024; Kiss et al., 2012; Su et al., 2011; Teece et al., 1997). However, in the context of heightened dependency caused by institutional deficiencies, internal capabilities alone are often insufficient and must be complemented by external resources. To resolve this, resource dependence theory (RDT) proposes that building networks with external actors can help acquire the necessary resources and legitimacy (Hillman et al., 2009) to navigate institutional voids. Thus, relational embeddedness functions as a strategic bridge and institutional substitute to access essential resources, compensate for legitimacy deficits, and ultimately translate EO into sustainable internationalization performance. Thus, the following sections introduce relational embeddedness as the mediating mechanism through which an EO's void-filling capability achieves internationalization performance.

2.3.1 Relational Embeddedness and Internationalization Performance

Relational embeddedness describes the degree to which a firm is embedded in deep, reciprocal, and trust-based ties with key external actors, facilitating fine-grained information exchange, joint problem-solving, and shared norms of reciprocity (Mesquita and Lazzarini, 2008). Typically, this encompasses both horizontal ties with industry peers and vertical ties with supply chain partners (Han et al., 2024; Isaac et al., 2019). Horizontally, embedded relationships provide access to abundant local market information (Mesquita and Lazzarini, 2008). Vertically, they supply critical resources and complementary capabilities (Li et al., 2025; Mesquita and Lazzarini, 2008). In emerging markets characterized by institutional voids, we theorize that relational embeddedness serves not merely as a source of network advantage, but functions as an institutional bridge and strategic substitution mechanism for weak formal institutions.

Relational embeddedness is an informal governance mechanism that compensates for formal institutional voids. In emerging markets with weak legal systems and limited contract enforceability, cultivating deep reciprocal ties with local partners helps firms secure legitimacy and access essential resources (Hu et al., 2025; Morgan and Anokhin, 2023). For service MNEs in such contexts, service quality and delivery are often non-contractible and rely on real-time cooperative adaptation (Cheng et al., 2023). By fostering shared norms of trust and mutual dependence, rela-

tional embeddedness mitigates opportunistic behavior, reduces transaction costs, and ensures reliable service delivery and supply chain coordination (Yu et al., 2024), thereby enhancing internationalization performance.

Additionally, relational embeddedness also functions as a conduit for critical resources and legitimacy, helping to overcome informal institutional voids. Informal institutional voids, marked by a lack of shared social norms and localized market knowledge, can significantly hinder the internationalization of service EMNEs (Hu et al., 2025). Relational embeddedness helps mitigate these barriers by facilitating the transfer of tacit and context-specific knowledge regarding customer preferences, regulatory nuances, and informal business practices (Mesquita and Lazzarini, 2008; Yu et al., 2024). Furthermore, in service contexts, in which credibility and trust are central to value creation (Ordanini and Parasuraman, 2011; Vargo and Lusch, 2004), embedded ties with local actors provide social capital and enhance legitimacy. This helps reduce the liability of foreignness (Zhang et al., 2015) and supports the construction of sustainable competitive advantages in international markets. Therefore, we propose:

Hypothesis 2: Relational embeddedness is positively associated with internationalization performance of service EMNEs.

2.3.2 Entrepreneurial Orientation and Relational Embeddedness

In the context of institutional voids, EMNEs typically face intense resource constraints and heightened uncertainty (Hu et al., 2025; Liu et al., 2024). Entrepreneurial orientation, reconceptualized as a void-filling capability, provides an internal impetus for service EMNEs to proactively construct the external institutional bridges needed to operate in host markets. The EO dimensions directly motivate firms to invest in and cultivate deep relational embeddedness as a strategic solution to institutional gaps.

First, proactiveness motivates firms to build relational bridges to secure their legitimacy. Deficiencies in formal institutions (e.g., weak legal systems) or gaps in informal norms (e.g., unfamiliar business practices) inevitably generate operational friction and legitimacy deficits (Hu et al., 2025). Proactive firms initiate and nurture ties with key local actors such as potential clients, suppliers, and industry peers to reduce uncertainty and counter the transaction risks arising from institutional voids (Morgan and Anokhin, 2023). Embedding in local information networks further helps firms learn the host culture and informal "rules of the game" (Mesquita and Lazzarini, 2008). For service EMNEs, whose value creation depends on continuous interaction and trust, proactively building relational ties is not merely beneficial but a critical foundation for successful market entry.

Second, innovativeness drives service EMNEs to search for novel solutions to the resource scarcity induced

by institutional voids. Faced with compounded resource scarcity and knowledge gaps induced by institutional voids, EMNEs cannot rely solely on their internal resources and capabilities for innovation (Li et al., 2025; Liu et al., 2024). Innovativeness pushes firms to actively identify and secure critical resources from external partners (Morgan and Anokhin, 2023), and relational embeddedness offers this strategic pathway. By embedding themselves in local networks, EMNEs obtain access to tacit knowledge and gain opportunities for the joint development of service solutions by sharing the risks and costs of experimentation (Mesquita and Lazzarini, 2008). Consequently, they can convert external constraints into opportunities by leveraging acquired resources and cooperative learning to overcome institutional barriers and establish distinct competitive advantages.

Third, risk-taking provides a strategic resolve for service EMNEs to make the credible investments needed to cultivate deeply embedded relationships in host markets. Building such deeply embedded ties requires sharing proprietary information, undertaking relationship-specific investments, and bearing the risk of potential partner opportunism, all of which are particularly pronounced in institutionally weak settings (Hu et al., 2025; Yu et al., 2024). The risk-taking dimension of EO enables firms to accept these commitments and tolerate the accompanying uncertainty (Morgan and Anokhin, 2023). Thus, they can access privileged resources, secure cooperative advantages, and gain legitimacy in host markets. Therefore, we propose:

Hypothesis 3: Entrepreneurial orientation is positively associated with relational embeddedness of service EMNEs.

2.3.3 Entrepreneurial Orientation, Relational Embeddedness, and Internationalization Performance

As theorized, entrepreneurial orientation (EO) functions not merely as a strategic posture but also as a context-specific, void-filling capability for service EMNEs navigating institutional voids. This capability provides a critical internal impetus for firms to proactively address institutional constraints by seeking and securing essential external resources (Covin and Wales, 2019; Liu et al., 2024). However, the effective deployment of this void-filling capability often requires complementary external conduits to access localized knowledge, build trust, and gain market legitimacy, which are scarce in institutionally deficient environments (Cheng et al., 2023; Ordanini and Parasuraman, 2011). To fulfill these requirements, EO motivates service EMNEs to cultivate deeply embedded relationships with local actors.

Relational embeddedness can serve as an institutional bridge and operational mechanism that translates internal EO into effective external actions, ultimately enhancing the performance of service EMNEs. Specifically, in host

markets where legal frameworks are weak or erratically enforced, relational embeddedness functions as a critical bridge to informal governance. It serves as a functional substitute for formal contracts by establishing a self-enforcing order based on mutual trust, reciprocal norms, and the credible threat of reputational loss within a closed network (Mesquita and Lazzarini, 2008). This bridge reduces the necessity for complex, contingent contracting and continuous monitoring of transactions prohibitively costly or infeasible under institutional voids. Moreover, formal institutional voids create severe information asymmetries and fragment resource markets, thus isolating firms from important local market intelligence. Relational embeddedness serves as a direct informational and resource bridge, channeling fine-grained, tacit knowledge, such as unspoken customer preferences, bureaucratic nuances, and emergent market trends, which are absent from public sources (Dhanaraj et al., 2004; Uzzi, 1997). This conduit enables service EMNEs to decode the local context, customize offerings, and innovate appropriately. Furthermore, it provides privileged access to partners' complementary assets and capabilities, effectively bypassing underdeveloped intermediaries. By fulfilling this dual-channel function, relational embeddedness directly addresses core knowledge and resource gaps imposed by the institutional environment, transforming external constraints into accessible inputs for value creation and competitive adaptation. Overall, through such relational embeddedness, firms can access essential resources, obtain legitimacy, and compensate for institutional deficiencies, thereby enhancing their internationalization performance. Therefore, we propose:

Hypothesis 4: Relational embeddedness mediates the relationship between entrepreneurial orientation and the internationalization performance of service EMNEs.

2.4 The Moderating Effect of Simultaneous Production and Consumption

Although EO drives service EMNEs to establish institutional bridges through deeply embedded external ties to acquire resources and navigate institutional voids, the necessity of such bridging may depend on the firm's reliance on external resources during service delivery. This reliance is fundamentally shaped by SPC as a core service attribute (Cheng et al., 2023). The SPC is a fundamental structural characteristic of services, denoting the extent to which service production and client consumption are inseparable in terms of time and space (Baltacioglu et al., 2007; Carman and Langeard, 1980; Cheng et al., 2023; Klassen and Rohleder, 2001). As an inherent attribute of the service, SPC defines the client-firm interface. Although this structural characteristic often necessitates direct customer interaction, thereby experientially overlapping with customer participation, the two remain conceptually distinct. Customer participation typically refers to the level and design of client involvement that a firm strategically manages

within a given service process (Dong et al., 2015; Zhang et al., 2015). In contrast, SPC represents a pre-existing structural condition that shapes the possibility and nature of such interactions. This structural condition directly determines where and how market knowledge is acquired, fundamentally influencing a firm's strategic reliance on external networks for learning and legitimacy.

When the SPC is high, service production and consumption occur in real time, compelling direct interactions between the service provider and client. This structural proximity can facilitate market learning and legitimacy building, which diminishes a firm's reliance on external networks. On one hand, high SPC makes service MNEs engage in direct customer contact and receive immediate and contextualized feedback about demands (Cheng et al., 2023). For instance, in medical diagnosis, a physician interacts directly with the patient, performs examinations, and interprets symptoms in real time while adjusting inquiries based on instant responses. Such direct and frequent contact creates a continuous loop of tacit, context-specific knowledge acquisition, enabling the firm to function as its own market intelligence conduit and reducing the marginal value of external networks for customer insight.

On the other hand, a high SPC internalizes legitimacy. In an institutionally void environment, foreign firms typically rely on reputable local partners to signal credibility and gain acceptance. Services with high SPC provide firms with opportunities to prove their competence, reliability, and local norm compliance with clients and other stakeholders. Each service encounter is a microinteraction that builds trust and reputation. Over time, firms develop legitimacy through direct service delivery and depend less on endorsements from local partners. Thus, while relational embeddedness remains important for political access and regulatory compliance, its role as a legitimacy bridge is partially replaced by a firm's own service delivery.

Conversely, when the SPC is low, service production and consumption can be separated. For example, a software MNE may develop its products (e.g., enterprise resource planning or customer relationship management systems) at its headquarters, relying on local partners and distributors in the host country to install the software, adapt it to local regulations, and gather customer feedback. This separation between production and customer interaction serves as a direct link to evolving customer needs, interrupts immediate feedback channels, and creates a knowledge gap regarding local market conditions (Cheng et al., 2023; Kotabe et al., 2007). The resulting information asymmetry increases a firm's dependence on local partners such as distributors, agents, or local allies, who act as market proxies to provide legitimacy, facilitate delivery, and relay critical market intelligence. In this context, EO strongly motivates EMNEs to proactively build institutional bridges through relational embeddedness to secure the external resources and market intelligence required for internationalization.

Thus, we argue that SPC reduces the marginal strategic value of relational embeddedness as an EO-driven mechanism of market learning, whereas a low SPC enhances this specific strategic pathway. Therefore, we propose:

Hypothesis 5a: Simultaneous production and consumption moderates the relationship between entrepreneurial orientation and the relational embeddedness of service EMNEs, such that the positive relationship is attenuated when SPC is high.

Hypothesis 5b: Simultaneous production and consumption moderates the mediating role of relational embeddedness in the entrepreneurial orientation and internationalization performance of service EMNEs, such that the indirect effect is weaker when SPC is high.

3. Data and Methods

3.1 Data and Sample

To test our theoretical model, we collected data from multiple sources. Data were collected in Jiangsu Province, China. China is the largest emerging economy and is experiencing profound socioeconomic changes and substantial institutional voids (Liu et al., 2024). This context makes it typical of many other transitional economies. For decades, Jiangsu Province has consistently ranked among China's top three provinces in terms of gross domestic product (GDP), and its service sector contributes to over 50% of the provincial GDP, reflecting the growing importance of services in the national economy (Cheng et al., 2023; Zhang et al., 2022). Jiangsu offers an appropriate and representative context in which to examine service MNEs in China. We obtained the initial sample from an integrated database compiled and offered by the Jiangsu Provincial Commission of Foreign Economic Relations and Trade, which is responsible for managing the foreign economic affairs of multinationals in Jiangsu Province. Some criteria were used to screen for qualified companies (Zhang et al., 2015).

First, Chinese owners should possess full control, excluding foreign enterprises and joint ventures, to mitigate the complexity of cross-border management (Luo et al., 2002). Second, we excluded enterprises that only offered services to domestic customers, because we targeted enterprises serving foreign customers. After careful screening, 1786 enterprises distributed across nine cities in Jiangsu Province met our criteria. Considering the GDP weights of the nine cities, 500 enterprises were randomly chosen for further investigation with the help of government agencies. In total, 208 firms completed the survey. After excluding incomplete responses, the final sample comprised 167 firms across a range of service industries: computer and software services (53.29%), information services (28.74%), industrial engineering (7.78%), animation and film design (4.19%), logistics engineering (4.19%), telecommunications (0.6%), and R&D and testing (1.2%).

3.2 Measurement

3.2.1 Internationalization Performance

We collected both objective and subjective data on internationalization performance, but ultimately relied on perceptual measures for three main reasons. First, obtaining reliable financial data from firms in emerging economies is often difficult due to their reluctance to disclose sensitive information (Fiorito and LaForge, 1986; Hoskisson et al., 2000; Zhang et al., 2014). Despite our efforts, only 116 firms offered adequate financial responses. Second, non-standard financial reporting practices and weak regulatory enforcement in emerging economies raise concerns about data accuracy (Hoskisson et al., 2000). This issue is compounded for privately held firms whose financial statements are difficult to verify (Covin and Slevin, 1989). Third, prior research indicates that subjective measures correlate strongly with objective measures when the latter are accurate and accessible (Dess and Robinson, 1984), and a higher correlation implies greater reliability (Reus and Lamont, 2009). Hence, following Hult et al. (2008) and Zhang et al. (2015), we adopted a four-item perceptual scale to assess internationalization performance (Cronbach's $\alpha = 0.95$). For the subset of 116 firms that provided both types of data, the subjective measure correlated positively with the three-year average return on assets ($r = 0.19$, $p < 0.05$), offering further support for consistency between the two measurement approaches.

3.2.2 Entrepreneurial Orientation

EO reflects an enterprise's willingness to adopt new behaviors, predict possible forthcoming changes, take action, and invest in uncertain results (Lumpkin and Dess, 1996). Following Knight and Cavusgil (2004), we use a five-item scale to measure EO with a reliability coefficient of 0.86.

3.2.3 Relational Embeddedness

Relational embeddedness reflects the extent to which an enterprise shares information, mutual assistance, and the costs and benefits of joint efforts. Based on Mesquita and Lazzarini (2008), a six-item scale was constructed to measure relational embeddedness with a reliability coefficient of 0.93.

3.2.4 Simultaneous Production and Consumption

SPC captures the fundamental characteristics of services, referring to the degree to which service production and consumption occur concurrently and are inseparable (Carman and Langeard, 1980; Cheng et al., 2023; Murray and Schlacter, 1990). This inseparability implies direct customer involvement in the production process, which, in turn, influences how service firms interact with the market and manage external relationships (Cheng et al., 2023). Following Cheng et al. (2023), we use one item to measure SPC by asking the Chief Executive Officer (CEO) about

the degree of production and consumption inseparability. Although SPC may encompass distinct facets (e.g., temporal and spatial inseparability), we conceptualized and measured it as a holistic higher-order construct. This approach is justified because SPC represents an integrated characteristic of a service's delivery mode, which is typically perceived and evaluated as a whole by strategic decision-makers. Additionally, respondents may not naturally distinguish the sources of different dimensions of simultaneity. The specific measurement items for all constructs are detailed in Appendix Table A1.

3.2.5 Control Variables

We incorporated a set of control variables to account for the potential confounding factors. Firm age and size were measured as the natural logarithm of years since founding and the total number of employees, respectively. Larger and more established firms typically possess greater resources and experiential knowledge (Nelson and Winter, 1982), which can shape their internationalization activities. Expatriates (the proportion of personnel with overseas experience) were controlled because of their role in knowledge transfer and subsidiary coordination during international expansion (Dowling et al., 1998; Koveshnikov and Lehtonen, 2025; Riusala and Suutari, 2004). International age was captured as the number of years since initial internationalization (Zhang et al., 2022). The degree of internationalization was measured as the natural logarithm of the host-country count. We controlled for international age and degree of internationalization because both denote greater international experience. Such experience enhances a firm's capacity to assimilate incoming information and mitigate risks, thereby improving its internationalization performance (Li and Tallman, 2011). We also control for past performance (return on equity) because it affects resource availability and strategic responsiveness abroad (Ahuja et al., 2009; Nachum, 2003; Zhang et al., 2022). Human capital, measured as the percentage of employees with at least a bachelor's degree, was included because it enhances a firm's ability to internalize external knowledge and adapt to environmental change (Matsuo, 2000; Zhang et al., 2022). Finally, industry dummies are added to mitigate sector-specific heterogeneity.

4. Results

4.1 Confirmatory Factor Analysis

Prior to hypothesis testing, we conducted confirmatory factor analysis (CFA). First, a four-factor baseline model was established and examined, including EO, SPC, relational embeddedness, and internationalization performance. Item parceling was used to decrease the number of items per construct (Little et al., 2002). As suggested, the items with the highest and lowest factor loadings were parceled first, and this procedure was repeated until three indicators were generated for each construct (Yang et al.,

2010). Through CFA, the results indicate that the four-factor model matches the best, outperforming alternative models ($\chi^2 = 117.38$, $df = 40$, $p < 0.001$, $\chi^2/df = 2.94$, Normed Fit Index (NFI) = 0.92, Comparative Fit Index (CFI) = 0.94).

4.2 Common Method Variance

Several strategies have been adopted to mitigate common method variance (CMV). First, we conducted a pre-control survey. We administered the questionnaire with a time lag and, for each company, issued a set of questionnaires comprising three sub-questionnaires. Three executives—the CEO, Chief Financial Officer (CFO), and another—filled out the questionnaires separately to provide different information. Specifically, the CEO offered information on strategic issues and the company's upper echelons, the CFO answered questions about objective financial indicators and internationalization performance, and the third executive, represented by a marketing or operational senior, was invited to offer information about the company's operational issues. Second, the Harman one-factor method was adopted to analyze and detect CMV in our model (Chang et al., 2010; Fuller et al., 2016; Gaur et al., 2018). Generally, serious common method bias exists when the proportion of variance explained by the first factor exceeds 50% (Fuller et al., 2016; Podsakoff and Organ, 1986). By adopting this method, the analysis showed that the variance accounted for by the first factor was 29.61%, which indicated no serious CMV in our study (Chang et al., 2010; Livingstone et al., 1997). We further applied the marker variable method to assess CMV, using “whether the number of strokes in the firm's Chinese name is even” as the marker (Zhang et al., 2015). This variable exhibited low correlations with the key constructs (average $r = 0.07$, $p > 0.10$), indicating that common method bias was not a serious concern in this study.

4.3 Hypothesis Testing

Table 1 displays the results of the descriptive statistics and correlation analyses. The variance inflation factor (VIF) was estimated to be below 3 at 1.40, indicating that multicollinearity was not serious (O'Brien, 2007). Correlation analysis showed that EO was positively correlated with relational embeddedness ($r = 0.153$, $p < 0.05$) and internationalization performance ($r = 0.336$, $p < 0.001$), and that relational embeddedness was positively correlated with internationalization performance ($r = 0.344$, $p < 0.001$).

The results of the hypothesis testing are presented in Table 2. Hypothesis 1 proposes that EO is positively associated with internationalization performance. Model 4 is the baseline model, and only the control variables are incorporated into the empirical model and regressed on internationalization performance. Based on Model 4, Model 5 incorporates EO into the empirical model, and the results show a significantly positive relationship between EO and inter-

nationalization performance ($\beta = 0.396$, $p < 0.001$). Thus, Hypothesis 1 is supported.

Hypothesis 2 proposes that relational embeddedness is positively associated with internationalization performance. Model 6 in Table 2 shows that relational embeddedness has significant positive effect on internationalization performance ($\beta = 0.290$, $p < 0.001$). Hypothesis 3 proposed that EO is positively associated with relational embeddedness. Model 1 incorporates only the control variables. Model 2 in Table 2 adds EO into the empirical model, showing that it has significant positive effects on relational embeddedness ($\beta = 0.209$, $p < 0.05$). Hypothesis 4 proposes that relational embeddedness mediates the EO–performance relationship, which is supported by Model 6 in Table 2 ($\beta = 0.290$, $p < 0.001$). Hypothesis 5a proposed that SPC negatively moderates the relationship between EO and relational embeddedness. Model 3 in Table 2 shows that the interaction between EO and SPC has a significantly negative effect on relational embeddedness ($\beta = -0.162$, $p < 0.05$), supporting Hypothesis 5a. To further verify this interaction, a simple slope was plotted, as shown in Fig. 2. Hypothesis 5b proposes that SPC also moderates the mediating role of relational embeddedness in the EO–performance relationship. To examine the moderated mediation effect, the PROCESS macro was adopted, and 5000 bootstrapping samples were used to calculate the bias-corrected confidence interval (CI). As shown in Table 3, when SPC is low, EO's indirect effect on internationalization performance (effect = 0.102; 95% CI = [0.023, 0.208]) through relational embeddedness is significant. Conversely, when SPC is high, the indirect effect of EO on internationalization performance (effect = -0.036; 95% CI = [-0.145, 0.057]) through relational embeddedness is insignificant. Thus, Hypothesis 5b is supported.

Moreover, to address the potential endogeneity between EO and internationalization performance, we conducted an instrumental variable (IV) analysis (Abdallah et al., 2015; Avloniti et al., 2025). Following Yu et al. (2024) and Gu et al. (2023), we employed industry-averaged EO as an instrumental variable to mitigate potential endogeneity concerns. This industry-level EO influences managers' perceptions of what constitutes an appropriate strategic posture, thereby directly shaping a firm's adoption of EO (i.e., affecting firm-level EO). While industry-average EO could also indirectly affect firm performance by shaping the competitive landscape or creating mimetic pressure, we contend that these influences are primarily channeled through altering a firm's strategic choices (i.e., EO). We also acknowledge that the exclusion restriction is theoretically justified but cannot be empirically tested. Our adoption of this approach follows established practices in recent strategic management research addressing endogeneity (e.g., Yu et al., 2024; Gu et al., 2023). Empirically, the first-stage regression confirmed the instrument's appropriateness ($\beta = -3.898$, $p < 0.01$), and the second-stage results (Table 4)

Table 1. Summary of statistics and correlations.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
Firm age	1.897	0.565										
Firm size	4.229	1.136	0.357***									
International age	1.600	0.432	0.709***	0.310***								
Degree of internationalization	1.530	0.788	0.234**	0.248**	0.203**							
Expatriates	6.457	13.390	0.038	-0.179*	0.201**	-0.055						
Human capital	67.950	28.100	-0.062	-0.242**	-0.146+	-0.212**	0.281***					
Past performance	0.175	0.509	0.145+	0.100	0.096	0.067	0.006	0.156*				
EO	5.758	1.043	-0.000	0.135+	0.076	0.095	0.080	-0.033	0.093			
SPC	5.413	1.209	0.091	-0.110	0.101	0.054	-0.011	-0.037	0.133+	0.224**		
RE	5.278	1.212	0.060	0.082	-0.047	0.054	-0.147+	-0.053	-0.078	0.153*	0.227**	
IP	5.019	1.226	0.040	0.220**	-0.049	0.112	-0.136+	0.056	0.146+	0.336***	0.304***	0.344***

Note. ⁺ $p < 0.1$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$; EO, Entrepreneurial Orientation; SPC, Simultaneous Production and Consumption; RE, Relational Embeddedness; IP, Internationalization Performance; SD, Standard Deviation.

Table 2. Regression analysis results.

Variable	RE				IP	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
EO		0.209*	0.138		0.396***	0.335***
		(0.094)	(0.091)		(0.086)	(0.081)
RE						0.290***
						(0.081)
SPC			0.217*			
			(0.084)			
EO * SPC			-0.162*			
			(0.077)			
Firm age	0.295	0.346	0.231	0.119	0.215	0.114
	(0.247)	(0.246)	(0.240)	(0.246)	(0.231)	(0.223)
Firm size	0.057	0.026	0.080	0.241**	0.183*	0.176*
	(0.097)	(0.094)	(0.101)	(0.081)	(0.075)	(0.075)
International age	-0.388	-0.411	-0.362	-0.326	-0.370	-0.251
	(0.338)	(0.346)	(0.326)	(0.307)	(0.305)	(0.295)
Degree of internationalization	0.136	0.126	0.110	0.191	0.171	0.135
	(0.149)	(0.152)	(0.149)	(0.118)	(0.105)	(0.120)
Expatriates	-0.011	-0.013	-0.012	-0.010	-0.014*	-0.010
	(0.012)	(0.012)	(0.013)	(0.008)	(0.007)	(0.007)
Human capital	-0.000	-0.000	0.001	0.005	0.005	0.005
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)
Past performance	-0.194	-0.236	-0.299+	0.252*	0.172	0.241+
	(0.182)	(0.198)	(0.178)	(0.101)	(0.147)	(0.126)
Constant	5.101***	4.016***	5.104***	3.707***	1.656*	0.491
	(0.623)	(0.816)	(0.608)	(0.547)	(0.672)	(0.660)
Industry effect	Yes	Yes	Yes	Yes	Yes	Yes
N	167	167	167	167	167	167
R ²	0.077	0.106	0.170	0.121	0.154	0.229

Note: Standard errors are heteroscedasticity-robust; ⁺ $p < 0.1$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, and ^{***} $p < 0.001$. N, sample size.

show that EO remains positively related to both internationalization performance ($\beta = 0.390$, $p < 0.001$) and relational embeddedness ($\beta = 0.229$, $p < 0.05$). After account-

ing for endogeneity, the coefficients of EO ($\beta = 0.324$, $p < 0.001$) and relational embeddedness ($\beta = 0.291$, $p < 0.001$) on performance remain statistically significant. Overall,

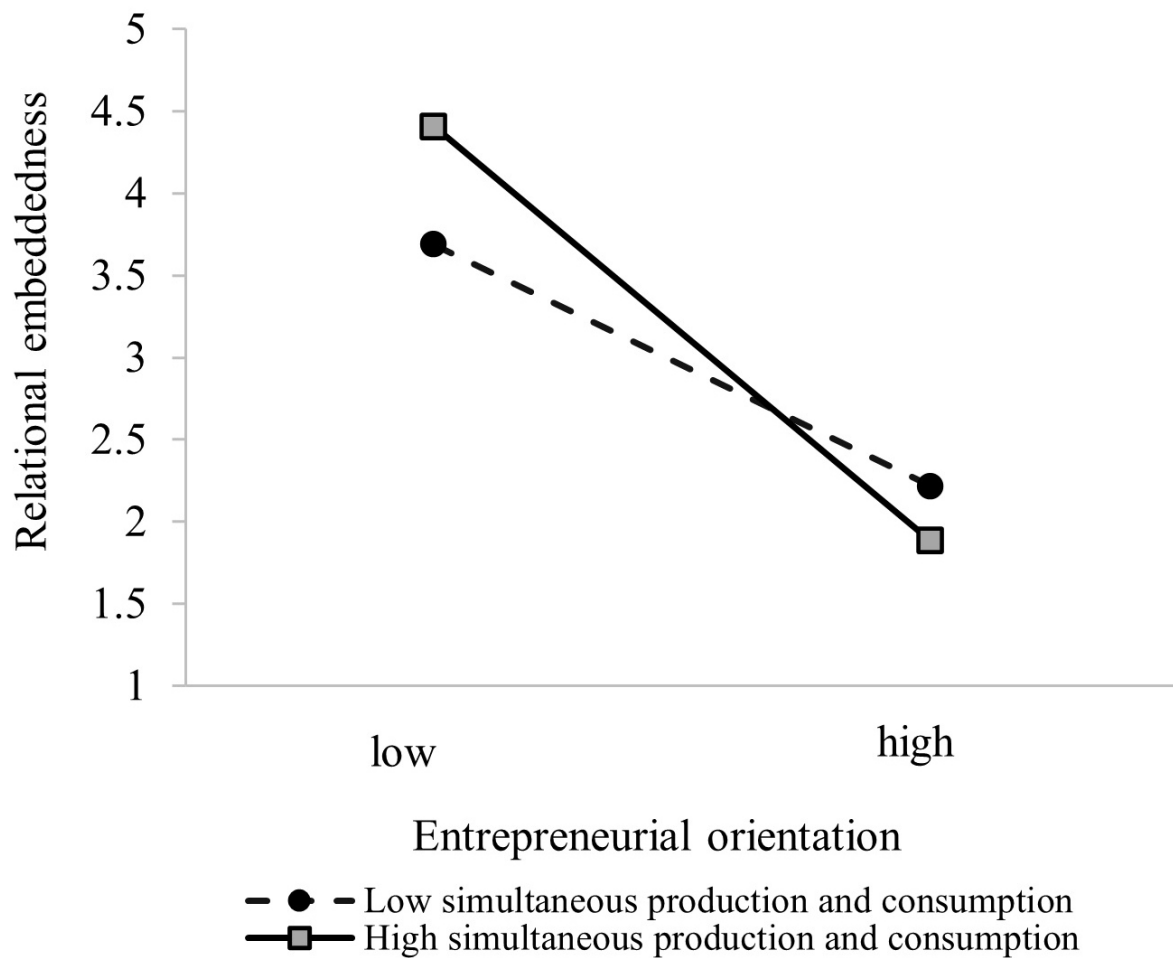


Fig. 2. The moderating effect of simultaneous production and consumption in the entrepreneurial orientation–relational embeddedness relationship.

Table 3. Bootstrap analysis for moderated mediation.

	IP			
	Effect	SE	LLCL	ULCL
Low SPC (–1 SD)	0.102	0.047	0.023	0.208
High SPC (+1 SD)	–0.036	0.050	–0.145	0.057
Difference between two groups	–0.046	0.026	–0.104	–0.002

Note: SE, Standard Error; LLCL, Lower Control Limit; ULCL, Upper Control Limit. The difference between two groups represents the index of moderated mediation, indicating the change in the indirect effect per one-unit increase in SPC.

these results align with the baseline ordinary least squares estimates, confirming the robustness of our findings.

To further assess the robustness, we performed a sensitivity analysis using Cook’s distance test to identify influential outliers. Observations with values exceeding $4/n$ were removed, and the model was re-estimated. The results demonstrated that EO’s relationship with relational embeddedness ($\beta = 0.245, p < 0.01$) and internationalization performance ($\beta = 0.421, p < 0.001$) remains positive. More-

over, the relationship between EO and internationalization performance is mediated by relational embeddedness ($\beta = 0.260, p < 0.001$), and the relationship between EO and relational embeddedness is still moderated by SPC ($\beta = -0.159, p < 0.05$). Overall, our results are robust.

5. Discussion and Conclusions

Focusing on the institutional context and industry-specific characteristics, this study advances the discussion of why and when EO enhances internationalization performance. By examining service EMNEs, we responded to the call to contextualize the inconsistent EO–performance relationship (Rauch et al., 2009). Our empirical analysis of 167 service EMNEs yields three key findings that resonate with and extend prior research. First, we confirmed a positive relationship between EO and internationalization performance. This result reaffirms that EO is a potent strategic resource, demonstrating its robust validity, particularly within the institutionally complex environments of emerging markets. Second, we found that EO positively drives relational embeddedness and that relational embeddedness,

Table 4. Results of instrumental variables.

Variable	RE		IP		
	Model 1	Model 2	Model 3	Model 4	Model 5
EO		0.229*		0.390***	0.324***
		(0.103)		(0.092)	(0.085)
RE					0.291***
					(0.081)
Firm age	0.295	0.318	0.119	0.222	0.130
	(0.247)	(0.248)	(0.246)	(0.235)	(0.227)
Firm size	0.057	0.043	0.241**	0.179*	0.167*
	(0.097)	(0.098)	(0.081)	(0.078)	(0.079)
International age	−0.388	−0.398	−0.326	−0.373	−0.257
	(0.338)	(0.350)	(0.307)	(0.310)	(0.298)
Degree of internationalization	0.136	0.132	0.191	0.170	0.131
	(0.149)	(0.152)	(0.118)	(0.105)	(0.121)
Expatriates	−0.011	−0.012	−0.010	−0.015*	−0.011
	(0.012)	(0.012)	(0.008)	(0.007)	(0.007)
Human capital	−0.000	−0.000	0.005	0.005	0.005
	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)
Past performance	−0.194	−0.213	0.252*	0.166	0.228 ⁺
	(0.182)	(0.197)	(0.101)	(0.148)	(0.127)
Instrument		−0.136		0.035	0.074
		(0.131)		(0.135)	(0.143)
Constant	5.101***	4.616***	3.707***	1.503 ⁺	0.158
	(0.623)	(0.740)	(0.547)	(0.765)	(0.864)
Industry effect	Yes	Yes	Yes	Yes	Yes
N	167	167	167	167	167
R ²	0.077	0.108	0.121	0.225	0.299

Note: Standard errors are heteroskedasticity-robust; ⁺ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, and

*** $p < 0.001$.

in turn, mediates the EO–performance relationship. This mediation clarifies a crucial contextual mechanism that, while often implied, has been less explicitly tested. While research in developed markets highlights networks as avenues for opportunity exploration, our results suggest that for service EMNEs facing institutional voids, relational embeddedness operates more fundamentally as an institutional bridge and substitution mechanism. It is not merely a strategic option, but a critical conduit for acquiring resources and legitimacy that the market fails to provide, thereby operationalizing the firm’s EO into internationalization performance. Third, we demonstrated that SPC negatively moderates both the EO-relational embeddedness link and its mediating effect. This boundary condition offers a novel explanation for the mixed findings of network-based EO studies, and this finding suggests that the strategic value of EO-driven networking is contingent on a firm’s structural proximity to customers. In high-SPC services, internalized learning reduces the reliance on external networks for market knowledge, thereby attenuating this pathway. This finding underscores the key difference between service and manufacturing contexts, where such inseparability

is absent, and highlights the need for industry-specific theorizing in international entrepreneurship research.

5.1 Theoretical Contributions

This study makes several theoretical contributions to the existing literature. First, we developed and validated an integrative framework that repositions relational embeddedness as a pivotal institutional adaptation mechanism for service EMNEs navigating pronounced institutional voids. While prior studies have noted the importance of networks for emerging market firms, our theorization offers a significant advancement by integrating institutional theory with resource-dependent logic. We moved beyond treating relational embeddedness as a generic networking outcome of EO. Instead, we conceptualized it as a strategically constructed “institutional bridge” that actively compensates for both formal and informal institutional deficiencies. This framework elucidates how the internal drive of a void-filling EO is operationally translated through deep external ties into the acquisition of critical resources, localized knowledge, and host-market legitimacy—the elements missing in the institutional environment. Thus, our primary

contribution lies in providing a coherent explanation of how service EMNEs strategically adapt to and overcome institutional constraints, thereby resolving a key puzzle in the contextualized EO–performance relationship.

Second, we introduced and validated a crucial industry-specific boundary condition in the EO–network relationship. Despite the growing dominance of services in the global economy, this sector’s distinctive attributes remain under-theorized (Battisti et al., 2025; Hadjikhani et al., 2019). The primary novelty of this study lies not in showing that EO fosters networks—a well-documented relationship—but in demonstrating when and why EO-driven relational embeddedness matters less. We theorized and empirically showed that the service characteristics of SPC significantly attenuate the EO-relational embeddedness link. This finding addresses a gap in recent EO-network research, which has extensively explored how EO builds ties, but seldom examined when this drive diminishes (Donbesuur et al., 2020; Wales et al., 2020). By identifying SPC as a key moderator, we shifted the conversation toward defining contextual conditions. We further clarified that the strategic necessity of EO-driven networking is contingent on the firm’s structural proximity to the customer; a high SPC internalizes market learning and reduces the marginal value of external networks for knowledge acquisition. This provides an industry-grounded explanation for contingencies in the EO performance paradigm, highlighting the fundamental difference between service and manufacturing contexts in international entrepreneurship.

However, our argument does not suggest that high SPC universally diminishes the value of relational embeddedness. In highly regulated industries (e.g., financial services and healthcare) or politically sensitive contexts, relational embeddedness may be critical for securing regulatory legitimacy, political access, or compliance-related resources. These functions cannot be directly substituted by customer interaction. Similarly, for building political ties or navigating complex bureaucratic environments, the value of embedded networks may persist irrespective of SPC level. Our findings demonstrate that high SPC attenuates the EO-driven motivation to build relational embeddedness, primarily when such embeddedness functions as a market knowledge acquisition mechanism. Thus, our contribution lies in specifying when and for what purpose SPC matters most; it primarily moderates the knowledge-seeking dimension of an EO-driven networking strategy.

5.2 Practical Implications

This study offers practical insights for managers of service EMNEs, especially those operating in contexts with pronounced institutional voids, such as the transition economies of China and Eastern Europe. First, our findings confirm that EO serves as an internal driver, prompting firms to build institutional bridges through local network embeddedness. Managers should, therefore, treat relational

embeddedness not merely as general networking but as a deliberate infrastructure to compensate for institutional deficiencies. For Chinese and Eastern European MNEs facing opaque regulations and legitimacy deficits, actively cultivating deep trust-based ties with local partners, industry associations, and knowledge institutions is critical for decoding local norms, gaining acceptance, and reducing political and legal uncertainty.

Second, the degree of SPC should inform the prioritization of relational strategies. In services with high SPC (e.g., consulting and medical diagnostics), where value is co-created in real-time with clients, managers can focus on refining direct customer interactions to capture market intelligence internally. By contrast, for services with low SPC (e.g., standardized software and logistics), where information gaps separate production from consumption, firms should emphasize securing and nurturing external partnerships. EO should be channeled into the development of deep cooperative relationships to acquire scarce resources. Moreover, managers should note that while a high SPC reduces dependence on external networks for market learning, relational embeddedness remains crucial for navigating regulatory environments or building political capital in institutionally complex markets.

5.3 Limitations and Future Directions

This study has some limitations. First, a subjective reporting bias may exist because of the use of a survey method to measure key constructs. With the advancement of information technology, digital tools may be adopted to measure constructs, and objective indicators may be used to replace construct measurements. For example, internationalization performance can be measured using objective indicators to reduce subjective bias. Second, the sample was geographically concentrated within a single Chinese province and relatively small, which may limit the generalizability of our findings to other regions and emerging economies. Future research could expand the sample size across diverse national contexts, such as the Eastern European transitional economy, to test the robustness of the theoretical model. Third, the cross-sectional design of this study restricted causal inferences. Future research could adopt a longitudinal case study or quasi-experimental design to examine the dynamic and causal relationships among constructs. Fourth, this study focused on service multinationals. Although an increasing number of manufacturing firms are gradually exhibiting service-oriented trends (Cheng et al., 2023), future research could extend our model to service-oriented manufacturing companies. Fifth, the SPC was measured using a single item. However, the SPC may encompass a multidimensional structure. For instance, it can be further disaggregated into temporal inseparability (e.g., the synchronicity of service provision and receipt) and spatial inseparability (e.g., physical co-location characteristics). Our holistic measurement approach may not

Table A1. Key construct and measurement.

Construct	Measurement	Respondents
Internationalization performance	Please indicate the extent to which your firm has effectively achieved the following economic goals in its internationalization:	CEO CFO
1 = “not satisfied at all” 7 = “completely satisfied”	Overseas market share Overseas sales growth Overseas profitability Overseas return on investment	
Entrepreneurial orientation	Please indicate the extent to which your firm has the following feature: Top management tends to see the world, instead of just China, as our firm’s marketplace The prevailing organizational culture at our firm is conducive to active exploration of new business opportunities abroad Management continuously communicates its mission to succeed in international markets to firm employees Management develops human and other resources for achieving our goals in international markets Our top management is experienced in international business	CEO Senior manager
1 = “not at all” 7 = “to an extreme extent”		
Simultaneous production and consumption	Please indicate the extent to which your firm has the following feature: In the process of providing service, supply and consumption occur simultaneously	CEO Senior manager
1 = “not at all” 7 = “to an extreme extent”		
Relational embeddedness	Please indicate the extent to which your firm has the following features: Share information with the enterprises in the same industry Assist each other with the enterprises in the same industry Promote fair sharing of cost savings and benefits arising out of joint efforts with the enterprises in the same industry Share information with upstream and downstream enterprises Assist each other with upstream and downstream enterprises Promote fair sharing of cost savings and benefits arising out of joint efforts with upstream and downstream enterprises	CEO Senior manager
1 = “not at all” 7 = “to an extreme extent”		

Note: CEO, Chief Executive Officer; CFO, Chief Financial Officer.

capture the subtle distinctions and unique mechanisms of these potential dimensions. Future research could employ systematic qualitative inquiries (e.g., in-depth comparative case studies across service industries coupled with managerial interviews) to explore and delineate the dimensions of SPC, and then examine the differential effects of its distinct dimensions on EO and relational embeddedness. Finally, due to sample constraints, we did not differentiate between service types. Future research should compare the distinct service categories to identify industry-specific pathways.

Availability of Data and Materials

The datasets analyzed for this study are not publicly available due to confidentiality protections and restrictions associated with the informed consent process, but may be available from the corresponding author upon reasonable request.

Author Contributions

LC conceptualized the research, designed the methodology, conducted the empirical analysis, and wrote the entire manuscript. The author has read and agreed to the published version of the manuscript. The author has participated sufficiently in the work and agreed to be accountable for all aspects of the work.

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Conflicts of Interest

The author declares no conflicts of interest.

Appendix

See Table A1.

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