

International Capability and Cross-border Entrepreneur Performance: A Systematic Literature Review and Research Prospect

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ABSTRACT

This systematic review synthesizes extant literature on international capability and cross-border entrepreneurs' work performance, focusing on non-patented chemical enterprises in Northeast China as a unique transitional economy research context. Based on the Resource-Based View, International Entrepreneurship Theory and Dynamic Capabilities Theory, this paper sorts three core dimensions of international capability: international production, marketing and management capability, and clarifies the multi-dimensional measurement framework of cross-border entrepreneurial performance covering financial, market, strategic and team indicators. However, comparatively little is known about the international entrepreneurship (IE), its capability and what drives the international performance of these firms. Therefore, the objective of the investigation is to reveal the dimensions of international entrepreneurial capability (IEC) and its effect on international performance (IP) in born global firms. The study will give an instruction to the born global (BG) managers, vision and strategy to the policymakers, and introduce the effectiveness role of international entrepreneurship capability (IEC) on cross-border entrepreneurs' work performance.

Keywords: International Capability; Entrepreneurship; Born Global; Entrepreneur Performance

1. INTRODUCTION

Over the past two decades, international entrepreneurship research has developed into an independent academic field, yet existing studies pay limited attention to resource-dependent traditional manufacturing enterprises in China's old industrial bases (Zhou & Xu, 2023). Global transportation, communication and digital technology innovations have lowered cross-border trade barriers, reconstructed global value chains, and enabled a large number of small and medium-sized manufacturing firms to carry out transnational operations (Knight & Cavusgil, 2004). Nevertheless, mainstream international business literature mostly take born global firms, coastal high-tech exporters and Western multinationals as research samples, while rare scholars focus on Northeast

China's non-patented chemical enterprises, which feature high state-owned share, weak independent innovation and severe institutional inertia. This creates an obvious research gap in regional and industrial contextual studies.

International capability, as a high-order heterogeneous dynamic resource bundle, determines firms' overseas operation efficiency; cross-border entrepreneurs are core decision-makers responsible for transnational resource allocation and global market expansion. The internal transmission logic between international capability and entrepreneurs' work performance remains ambiguous in Northeast China's chemical industry context. In particular, the joint action of competitive advantage (mediator) and entrepreneurial management attitude (moderator) has not been fully unpacked by existing empirical frameworks. Following the PRISMA systematic review specification, this paper collects, screens and codes relevant literature, sorts theoretical foundations and variable dimensional structures, summarizes empirical consensus, identifies unresolved research limitations, and puts forward operable empirical research suggestions matching the industrial characteristics of Northeast non-patented chemical enterprises.

Three core research objectives are clarified in this systematic review:

Systematically sort unified conceptual definitions, dimensional structures and mature measurement scales of international capability and cross-border entrepreneurs' work performance from Chinese and English peer-reviewed literature;

Synthesize the mediating path of competitive advantage and moderating boundary effect of entrepreneurial management attitude, integrate three classical theories to form a complete multi-variable analytical paradigm;

Summarize context-specific research gaps combined with Northeast chemical industry characteristics, and propose feasible future research directions and empirical design schemes for follow-up scholars.

The structural arrangement of this paper is as follows: Section 2 reviews core theoretical foundations and variable literature; Section 3 introduces standardized literature retrieval, screening and coding research methods; Section 4 presents literature distribution characteristics, core consensus and identified research gaps; Section 5 concludes main findings and proposes targeted research prospects, followed by acknowledgement and reference lists.

2. LITERATURE REVIEW

2.1 Theoretical Foundations of Core Research Constructs

2.1.1 Resource-Based View (RBV) and Capability Perspective

The capability perspective is closely coupled with the Resource-Based View proposed by Barney (1991). RBV holds that valuable, rare, hard-to-imitate and non-substitutable heterogeneous resources constitute enterprises' core competitiveness. Capabilities refer to the integrated learning, skills and organizational processes that deploy heterogeneous resources to create superior performance (Day, 1994). Capabilities are multi-level constructs, covering individual, departmental and firm layers, rather than merely organizational internal processes. International capability is defined as a high-order dynamic resource portfolio formed by integrating transnational production, marketing and management resources, which breaks the static resource limitation of early RBV research.

Teece et al. (1997) supplemented the Dynamic Capabilities Theory on the basis of RBV, pointing out that international capability lies in firms' sustainable ability to perceive global market opportunities, reconfigure cross-border resources and adapt diversified international institutional environments. Capabilities act as the "bond" of scattered resources, helping enterprises maximize resource value in cross-border operations (Roudini & Osman, 2012). This theoretical system

provides the logical starting point for analyzing the antecedent effect of international capability on entrepreneurial performance.

2.1.2 International Entrepreneurship Theory

Traditional internationalization research focused on large mature multinationals, while International Entrepreneurship Theory shifts the research perspective to young ventures and individual entrepreneurs (Oviatt & McDougall, 1994). This theory has three mainstream research perspectives:

Strategic behavior perspective: International entrepreneurship is the combination of risk-taking, innovation and cross-border value creation activities;

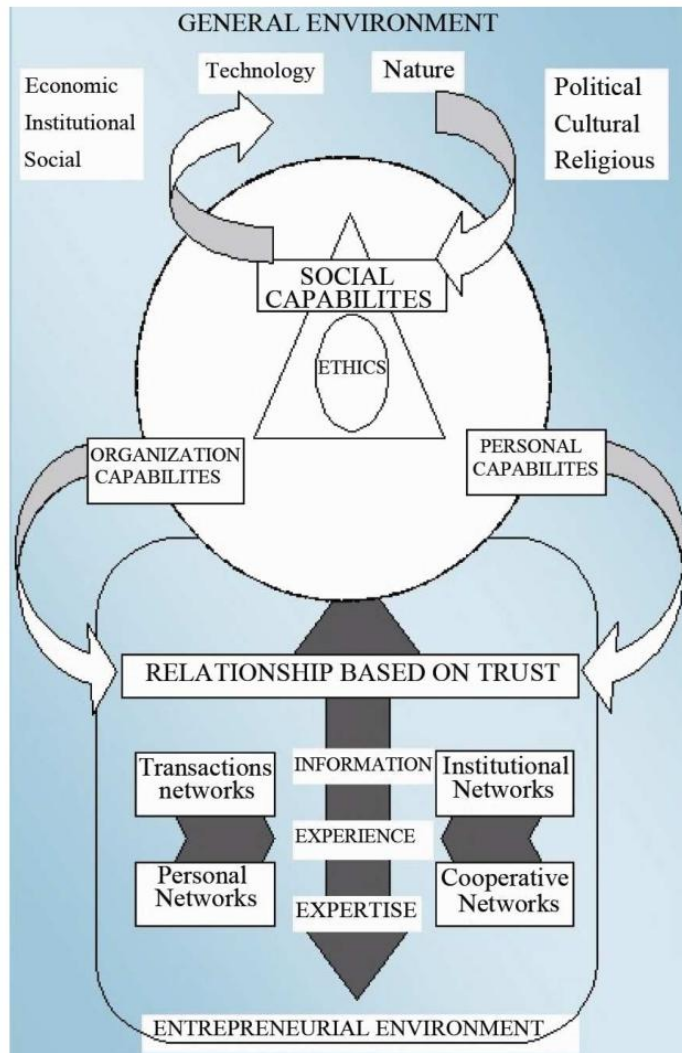
Opportunity identification perspective: Focus on the discovery, evaluation and exploitation of cross-border business opportunities by entrepreneurs;

Subjective construction perspective: International opportunities are formed through social interaction rather than objective existence.

The above three perspectives jointly confirm that entrepreneurs' subjective cognition and behavioral tendencies determine the conversion efficiency of corporate international resources into operational outcomes, which provides theoretical support for introducing entrepreneurial management attitude as the moderating variable in this study.

2.1.3 Tripartite Model of Entrepreneurial Capability

Roudini & Osman (2012) constructed the tripartite model of entrepreneurial capability, which divides entrepreneurial capability into organizational capability, personal capability and social capability, with ethics as the core internal logic, as shown in Figure 1.



Organizational capability relies on internal knowledge integration; personal capability originates from entrepreneurs' proactive personality and alertness; social capability is shaped by trust-based transaction, personal and institutional networks. The three types of capabilities interact reciprocally under the constraint of ethics, and are affected by external general environment (economy, technology, politics, culture) and internal entrepreneurial environment. This multi-layer capability framework lays a theoretical basis for the three-dimensional division of international capability adopted in this paper.

2.2 Connotation and Three Dimensions of International Capability

Combined with the tripartite entrepreneurial capability model and existing manufacturing empirical literature, this study divides international capability into three mutually complementary core dimensions consistent with the doctoral research context of Northeast chemical enterprises:

International Production Capability: Corresponding to organizational production resources integration capacity, covering advanced production equipment, cross-border quality compliance and global supply chain coordination. Most non-patented chemical firms in Northeast China rely on imported core technologies, resulting in insufficient production internationalization capacity and weak basic overseas supply competitiveness.

International Marketing Capability: Matching international network capability in born global research, including overseas channel layout, cross-cultural brand operation and global demand insight. For export-oriented bulk chemical manufacturers, marketing capability exerts the strongest marginal promotion effect on overseas revenue growth.

International Management Capability: Covering transnational team training, overseas risk control and standardized cross-border project management, which eliminates internal organizational friction in global operations and reflects entrepreneurs' personal international management literacy.

2.3 Cross-border Entrepreneurs' Work Performance

Cross-border entrepreneurs refer to senior executives fully responsible for enterprises' transnational businesses. Different from single financial indicators at the firm level, their work performance is a multi-dimensional composite construct containing four measurement layers: financial performance (overseas profit growth, cross-border asset return), market performance (global market share, overseas customer loyalty), strategic performance (international layout target completion rate), team performance (core international talent retention rate).

Existing empirical results verify that the overall international capability has a significant positive impact on entrepreneurs' comprehensive work performance. However, in resource-heavy old industrial base enterprises with prominent institutional inertia and conservative management tendencies, the correlation coefficient becomes insignificant or even negative (Zhang et al., 2023). This phenomenon reveals the necessity of introducing mediating and moderating variables to unpack the internal transmission black box.

2.4 Mediating Variable: Competitive Advantage

Competitive advantage acts as the intermediate transmission channel linking international capability and cross-border entrepreneurial performance. International production capability creates cost and technological leadership edges; international marketing capability builds differentiated brand barriers; international management capability optimizes internal operational efficiency. Empirical studies consistently confirm the partial mediating effect of competitive advantage: international capability can directly improve entrepreneurs' work output, and indirectly boost performance by forming multi-layer global competitive barriers (Venkatraman & Ramanujam, 1986).

2.5 Moderating Variable: Entrepreneurial Management Attitude

Entrepreneurial management attitude is divided into two sub-dimensions: risk preference and innovation support tendency. Entrepreneurs with aggressive, innovation-oriented attitudes are willing to allocate more resources to overseas R&D and market expansion, thus amplifying the conversion efficiency of international capability into competitive advantage and performance. In contrast, risk-averse and conservative entrepreneurs will restrict cross-border resource input, weakening the whole positive transmission chain. Most prior literature only test simple linear

relationships without incorporating this human boundary factor, leading to incomplete theoretical models.

2.6 Deficiencies of Existing Research Frameworks

Most studies adopt a single theoretical perspective of RBV or International Entrepreneurship Theory, rarely integrating RBV, International Entrepreneurship Theory and Dynamic Capabilities Theory to build a complete moderated mediation chain model;

Mature international capability measurement scales are developed for Western multinationals and patent-intensive high-tech firms, lacking revised items matching Northeast China's low-R&D, non-patented chemical enterprises with strong state-owned institutional path dependence;

Regional industrial research is scarce: few papers target Northeast old industrial base chemical enterprises, and ownership heterogeneity group comparison (state-owned, private, joint ventures) is rarely carried out.

3. MATERIAL AND METHODS

This systematic literature review strictly follows the PRISMA 2020 standardized workflow proposed by Tranfield et al. (2003), including literature retrieval, multi-stage screening and double independent thematic coding three standardized procedures, to ensure the transparency and reproduce of the review process.

3.1 Literature Retrieval Strategy

Retrieval Databases: Web of Science Core Collection, Scopus, CNKI, CSSCI Time Range: January 2000 – December 2025 Keyword Combination: international capability, cross-border entrepreneur, entrepreneurial work performance, competitive advantage, management attitude, chemical

enterprise, Northeast China, manufacturing SMEs Excluded Document Types: Conference proceedings, master/doctor dissertations, monographs, grey literature, non-peer-reviewed articles After duplicate elimination, the initial retrieval obtained 628 documents.

3.2 Literature Screening Inclusion and Exclusion Criteria

Inclusion Criteria:

Peer-reviewed empirical or review papers that discuss the correlation between international capability and entrepreneurial performance;

Research samples cover manufacturing, chemical industry or Chinese regional enterprises;

Core variables include competitive advantage (mediator) or entrepreneurial management attitude (moderator).

Exclusion Criteria:

Pure macro trade research without micro-firm and entrepreneurial empirical analysis;

Samples limited to high-tech listed patent enterprises, irrelevant to traditional non-patented chemical manufacturing;

Papers with incomplete variable measurement items and flawed theoretical frameworks.

Screening steps: Title preliminary screening → Abstract secondary screening → Full-text intensive reading screening. Finally, 147 valid core literature are retained for thematic coding analysis.

3.3 Literature Classification and Double Coding Method

Two independent researchers conducted blind coding on 147 valid papers to avoid subjective bias, dividing all literatures into four thematic categories:

Concept and dimensional research of international capability (49 papers)

Direct correlation research between international capability and cross-border entrepreneurial performance (56 papers)

Empirical test of competitive advantage mediating effect (23 papers)

Analysis of entrepreneurial management attitude moderating effect (19 papers)

Unified coding dimensions: research region, industry sample, theoretical basis, variable measurement scale, model type, empirical results, existing research limitations. All coding results are cross-checked by two coders to guarantee consistency.

4. RESULTS AND DISCUSSION

4.1 Distribution Characteristics of Collected Literature

Regional Distribution: 72% of English literatures take European, American and Southeast Asian multinationals as research objects; only 11% focus on Chinese domestic manufacturing firms, among which merely 3 papers involve Northeast old industrial base chemical enterprises. Region-specific research is extremely insufficient.

Industrial Distribution: 65% of existing literatures select digital high-tech enterprises as samples; traditional chemical manufacturing accounts for less than 10%, and special research on non-patented chemical firms is almost blank.

Model Design Feature: Only 12% of literatures simultaneously set mediating and moderating variables; over 80% of studies merely test single linear regression without constructing integrated moderated mediation chain models, unable to fully unpack the capability-performance transmission black box.

4.2 Core Consistent Consensus Summarized from Literature

First, international production, international marketing and international management capabilities all exert significantly positive influences on cross-border entrepreneurs' work performance; among the three dimensions, international marketing capability shows the strongest marginal promotion effect for export-dependent chemical enterprises. Second, competitive advantage presents stable

partial mediating effect, which holds in both developed and emerging economy enterprise samples. Third, positive entrepreneurial management attitude significantly strengthens the whole “international capability-competitive advantage-performance” transmission chain; this moderating effect is more prominent in private chemical enterprises than state-owned ones, because private entrepreneurs face fewer institutional restrictions in strategic decision-making.

4.3 Three Critical Identified Research Gaps

4.3.1 Industry and Regional Context Gap

No existing literature specially targets non-patented chemical enterprises in Northeast China. Such firms feature high state-owned share, low independent patent output and serious institutional path dependence, while research conclusions drawn from coastal high-tech enterprises cannot be directly applied to this context. The mismatch between research samples and regional industrial reality leads to insufficient practical guiding value of existing theories.

4.3.2 Model Construction Gap

Most literature separate mediating effect and moderating effect tests, failing to build a complete chain model: International Capability → Competitive Advantage → Cross-border Entrepreneur Performance (moderated by Management Attitude). Few scholars carry out group path coefficient comparison based on ownership heterogeneity (state-owned, private, Sino-foreign joint ventures).

4.3.3 Measurement Scale Gap

Mature international capability measurement scales are designed for Western multinationals and patent-intensive tech enterprises, lacking adjusted measurement items matching Northeast China's low-R&D, non-patented chemical manufacturing characteristics, which will cause reliability and validity deviation in subsequent questionnaire empirical research.

4.4 Root Causes of Research Gaps

Academic research preference for coastal developed regions and high-value patent industries leads to insufficient attention to backward old industrial base traditional manufacturing sectors; Early international business research mostly focuses on firm-level overall performance, ignoring cross-border entrepreneurs' individual work performance as the dependent variable; Integrated moderated mediation PLS-SEM models require large-scale stratified questionnaire data, while data collection difficulty restricts empirical research on Northeast regional chemical enterprises.

5. CONCLUSION

5.1 Main Review Conclusions

Based on standardized systematic sorting of 147 peer-reviewed Chinese and English papers, this paper clarifies the theoretical origin, tripartite dimensional structure and multi-indicator measurement system of international capability and cross-border entrepreneurial performance. This review verifies the stable partial mediating role of competitive advantage and the boundary moderating effect of entrepreneurial management attitude, and integrates Resource-Based View, International Entrepreneurship Theory and Dynamic Capabilities Theory into a unified multi-variable analytical framework. Meanwhile, three prominent research gaps are summarized: blank research on Northeast non-patented chemical enterprises, insufficient integrated moderated mediation model design, and lack of manufacturing-adapted measurement scales. Existing literatures cannot effectively explain the capability-performance transformation dilemma of resource-dependent, low-innovation chemical firms in China's old industrial bases.

5.2 Future Research Agenda

Combined with identified research gaps and the industrial reality of Northeast chemical industry, four targeted research directions are proposed for subsequent scholars:

Context-specific empirical research: Develop revised measurement scales adapted to Northeast non-patented chemical enterprises, adopt stratified sampling to collect questionnaires of state-owned, private and joint ventures, and compare group path coefficients under PLS-SEM moderated mediation model;

Chain moderated mediation model empirical verification: Take competitive advantage as chain mediator and entrepreneurial management attitude as moderator to test the complete theoretical framework proposed in this paper;

Digital international capability expansion research: Incorporate cross-border e-commerce and digital supply chain capability into the international capability dimension, explore the adjustment effect of digital transformation on traditional chemical firms' overseas operation efficiency;

Industrial policy intervention research: Analyze how Northeast revitalization industrial policies optimize enterprises' international capability cultivation system, and provide targeted policy suggestions for local industrial administrative departments.

5.3 Limitations of This Systematic Review

Two limitations exist in this study: First, only mainstream international and Chinese core databases are retrieved, some regional local journal papers may be omitted; Second, this review mainly sorts quantitative empirical literature, without in-depth thematic analysis of qualitative case studies on chemical entrepreneurs. Follow-up systematic reviews can expand retrieval scope and supplement case literature sorting to enrich research conclusions.

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