

An Impact of Market Competition and Educational Business Growth in China: Institutional Innovation Capacity as a Mediator

Chao Dai¹, Fuangfa Ampornstira² Salisa Hemmapan³

¹PhD Candidate, Faculty of Management, Shinawatra University

Email: auedubkk@gmail.com

^{2, 3}PhD, Faculty of Management, Shinawatra University

Email: fuangfa.a@siu.ac.th

Received April 02, 2024 Revise May 08, 2025 Accepted May, 15, 2025

Abstract

This study investigates the influence of market competition on educational business growth in China, with a particular focus on the mediating role of institutional innovation capacity. A quantitative research design was employed, using structured questionnaires distributed to 300 professionals in the education sector, including administrators, EdTech executives, and private school managers. The data were analyzed using descriptive statistics, correlation analysis, multiple regression, and bootstrapped mediation testing. Results reveal that market competition significantly and positively affects educational business growth. Moreover, institutional innovation capacity partially mediates this relationship, suggesting that competitive pressure alone does not guarantee success unless organizations possess the capacity to innovate and adapt. The findings underscore the importance of building internal innovation mechanisms to sustain growth in an increasingly dynamic and competitive educational landscape. Practical implications are provided for both institutional leaders and policymakers seeking to enhance the performance and resilience of educational enterprises in China.

Keywords: Educational business growth, market competition, institutional innovation capacity

Introduction

The Chinese education sector has evolved into a dynamic and competitive business field. The private and public sectors have rapidly expanded with increasing demand for quality and diverse educational services. Since the COVID-19 outbreak in 2020, the pandemic has significantly disrupted global education, particularly affecting student mobility, standardized testing, and school operations, thereby influencing decisions around studying abroad (Liu Zhuguang & Ji Qiaoli, 2021). In the aftermath, countries have had to adopt flexible and adaptive strategies to navigate the shifting international environment. Within the broader context of globalization, the international movement of students has become a critical issue in higher education.

China continues to experience strong demand for high-quality education, but supply remains insufficient (Liu Zhuguang & Ji Qiaoli, 2021). Due to historical and regional imbalances, access to elite institutions is limited. National statistics show that, among 2.9 million applicants for master's programs in China, only around 916,000 are admitted (Liu Zhuguang & Ji Qiaoli, 2021). In comparison, foreign universities offer more accessible admissions and a wider range of resources, becoming an essential alternative for Chinese students.

With a growing number of university graduates in China and limited job opportunities at home, along with friendlier policies from host countries, the study abroad trend has shifted



from a phase of rational selection to a more widespread movement, known as the "mass study abroad era" (Liu Hongxia & Fang Jiayu, 2011). Global university rankings, including Times Higher Education and QS, place emphasis on internationalization, which is closely linked to student mobility. As the top source of international students globally (UNESCO, 2020), China's outbound student population garners considerable attention. In recent years, Thailand has emerged as a preferred destination, owing to its close economic and political ties with China (Liu Jin & Zhang Luyao, 2018).

According to Thailand's Ministry of Higher Education, Science, Research, and Innovation, as of the first semester of 2022, 21,419 Chinese students were studying in Thailand—the largest group among students from over 190 countries (MHESI, 2022). Thailand is known for its reputable universities and simpler admission procedures compared to Western countries (You Huicai, 2006). Each Thai institution has its own academic strengths, offering Chinese students diverse academic choices (He Yan, 2020).

Since the launch of China's "Belt and Road" initiative in 2013, partner countries along the route have gained prominence as study destinations due to supportive policies and economic collaboration (Liu Jin & Zhang Luyao, 2018). Student flows to these countries have grown faster than to non-Belt and Road nations, signaling their rising influence in shaping global education trends. Among them, Southeast Asian countries, especially Thailand, stand out due to strong bilateral cooperation and regional advantages (He Yan, 2020).

At the same time, amid global economic uncertainties, joint educational programs in developing countries are becoming an attractive option for Chinese students (Li Qin, 2010). Thailand hosts 156 universities offering 769 international programs at various levels, often in partnership with leading universities in English-speaking countries (He Yan, 2020). These programs not only provide global education within Thailand but also open pathways to further study in third countries like the U.S. and Europe (Ye Yan, 2015). As such, these collaborative models offer cost savings and access to high-quality education, making them an efficient route to studying in developed nations via a third-country transition (Li Qin, 2010).

However, this growth is subject to various influencing factors ranging from policy shifts to technological innovation. This research aims to identify and statistically assess on the market competition, Institutional Innovation Capacity and Educational business growth factors.

Literature Reviews

Market Competition

Market competition plays a pivotal role in shaping the strategic direction and performance of educational businesses. In highly competitive environments, institutions are compelled to differentiate themselves through pricing strategies, program innovation, and service quality to attract and retain students (Porter, 2008). In China, the surge in private education providers—especially in urban areas—has intensified market competition, leading to a saturation of traditional services and an urgent need for diversification (Yu, 2020).

The presence of multiple players in the market, including online platforms, international schools, and vocational institutions, has fragmented demand and created pricing pressure. This competition can either stimulate performance through innovation or constrain it by reducing profit margins (Zhou & Li, 2019). For example, institutions that lack brand recognition or digital capability often struggle to compete, resulting in consolidation or exit from the market (Chen, 2021).

Furthermore, competition is no longer limited to domestic players. The rise of cross-border education and foreign partnerships has introduced new benchmarks for quality and



value, pressuring local institutions to elevate standards (Li, 2022). Therefore, market competition is both a **challenge and a catalyst**—pushing educational businesses toward innovation and efficiency to sustain growth.

Institutional Innovation Capacity

Institutional innovation capacity refers to an organization's ability to adapt to change, develop new processes, and implement novel educational solutions. In the context of educational businesses, this includes digital transformation, curriculum innovation, flexible delivery models, and partnerships (Teece, 2007).

In China, rapid technological advancement and evolving learner expectations have made innovation capacity a key survival factor. Institutions with high adaptability are better positioned to integrate EdTech platforms, shift to hybrid learning, and offer customized learning pathways (Wang & Liu, 2020). These capabilities enable them to respond more effectively to regulatory changes, market demands, and competitive pressures.

Research by Huang and Zhang (2021) indicates that educational institutions with strong internal innovation mechanisms—such as investment in R&D, staff training, and stakeholder collaboration—demonstrate greater resilience and long-term performance. Moreover, innovation capacity serves as a **mediator** that translates external stimuli (e.g., technology trends or government policy) into actionable growth strategies (Luo et al., 2022).

Thus, institutional innovation capacity not only enhances operational effectiveness but also determines how well an institution can capitalize on opportunities in a competitive, policy sensitive education market.

Educational business growth

Educational business growth refers to the expansion and performance enhancement of educational enterprises in terms of revenue, student enrollment, service offerings, geographical reach, and institutional reputation. It is influenced by both internal factors (such as innovation and leadership) and external drivers (such as government policy, market demand, and technological advancement).

According to Altbach and Knight (2007), educational businesses—especially in the context of globalization—are no longer limited to traditional public models; they now include private institutions, EdTech startups, and international academic partnerships. Growth in this sector is driven by rising global demand for quality education, international student mobility, and the digitalization of learning.

In China, the education sector has experienced rapid commercialization and diversification, especially after the expansion of private education in the 1990s (Liu & Wang, 2019). Growth has been fueled by a growing middle class willing to invest heavily in supplementary education, international schooling, and online learning platforms (Zhang, 2021). However, regulatory interventions—such as the 2021 "Double Reduction" policy that restricted private tutoring—have disrupted the market and forced a strategic shift toward more sustainable, compliant models (MoE, 2021).

Empirical studies suggest that factors like innovation capacity (Huang & Zhang, 2021), brand positioning, and responsiveness to policy changes are critical to sustained educational business growth. For example, Wang and Liu (2020) found that educational institutions that adopted digital platforms and agile curriculum development showed significantly higher growth rates than traditional institutions.

Moreover, the global COVID-19 pandemic accelerated the transformation of the sector, as digital delivery methods became essential. Businesses that could rapidly pivot to online or hybrid models not only survived but often expanded during this time (UNESCO, 2020).



Therefore, educational business growth is now closely tied to institutional adaptability, regulatory awareness, and technological capability.

In summary, the literature underscores that educational business growth is multifaceted—requiring alignment between internal innovation, market trends, and regulatory frameworks. In the context of China, where education is highly valued but tightly regulated, strategic agility is key to long-term expansion and competitiveness.

Conceptual Framework



Research Method

The population of this study includes professionals in the Chinese educational business sector, such as Private school administrators, EdTech company managers, Higher education institution executives and Policy analysts in the education sector.

A **stratified random sampling technique** was used to ensure representation across regions (Tier 1–3 cities), organization types (offline, online, hybrid), and ownership models (private, public-private). A sample size of **300 respondents** was determined based on statistical power guidelines for multiple regression analysis (Cohen, 1988).

Data was collected using a **structured questionnaire** designed with a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The questionnaire consisted of three sections: Market Competition, Institutional Innovation Capacity, and Educational Business Growth

Content validity was ensured through expert review by academics and professionals in education management. **Pilot testing** was conducted with 30 participants, and necessary adjustments were made. **Cronbach’s alpha coefficients** were used to assess internal consistency reliability for each construct, with all values exceeding the acceptable threshold of 0.70.

Results

Descriptive Statistics

A total of 300 valid responses were collected. Respondents were primarily administrators or executives from private educational institutions and EdTech firms across Tier 1 and Tier 2 cities in China.

Variable	Mean	SD	Cronbach’s α
Market Competition (MC)	3.84	0.66	0.81
Institutional Innovation Capacity (IIC)	3.91	0.72	0.85
Educational Business Growth (EBG)	3.78	0.69	0.83

Remarks: All scales showed good internal consistency ($\alpha > 0.80$).



Correlation Analysis

Variables	1 (MC)	2 (IIC)	3 (EBG)
1. Market Competition	1		
2. Innovation Capacity	.52**	1	
3. Business Growth	.46**	.61**	1

Note: $p < .01$

The results indicate significant positive correlations among all variables. Notably, Market Competition is positively correlated with both Institutional Innovation Capacity ($r = .52$) and Educational Business Growth ($r = .46$).

Regression and Mediation Analysis

To test the mediation effect, a three-step **Baron and Kenny (1986)** regression approach was applied, along with a **Bootstrapping test** using 5,000 resamples.

Step 1: Direct Effect of Market Competition on Business Growth

- $B = 0.41, t = 7.11, p < .001$

(Market competition positively predicts business growth.)

Step 2: Effect of Market Competition on Innovation Capacity

- $B = 0.54, t = 8.62, p < .001$

(Market competition significantly predicts institutional innovation capacity.)

Step 3: Innovation Capacity Predicting Business Growth (with MC included)

- $B (IIC) = 0.48, t = 7.55, p < .001$

- $B (MC) = 0.15, t = 2.52, p < .05$

(The effect of market competition on business growth drops but remains significant when innovation capacity is included.)

Mediation Test: Bootstrapping (5,000 samples)

- Indirect effect (MC → IIC → EBG): 0.26
- 95% CI: [0.18, 0.35] – does not include zero
(Confirms a significant partial mediation effect.)

Summary of Findings

- Market competition has a **significant direct** impact on educational business growth.
- It also significantly enhances **institutional innovation capacity**, which in turn positively affects business growth.
- **Institutional Innovation Capacity partially mediates** the relationship between market competition and business growth, suggesting that innovation serves as a critical mechanism through which competitive pressure translates into organizational success.

Discussions

This study aimed to investigate the impact of market competition on educational business growth in China and to explore the mediating role of institutional innovation capacity. The findings provide significant insights into how educational institutions respond to competitive pressures and how internal innovation capabilities influence their growth trajectory.

Market Competition and Educational Business Growth

The results confirm that **market competition has a significant positive effect** on educational business growth. This aligns with prior research (Porter, 2008; Yu, 2020) suggesting that in competitive markets, educational institutions are compelled to differentiate



through pricing, service innovation, and strategic expansion. In the context of China, where private and digital education providers have grown rapidly, competition has incentivized schools and companies to expand services, adopt digital tools, and enter new markets to maintain relevance and profitability.

However, the partial mediation effect found in this study indicates that market competition alone does not fully explain business growth. While competition creates pressure, not all institutions succeed equally under it—pointing to the role of internal organizational factors such as innovation capacity.

Role of Institutional Innovation Capacity as a Mediator

The study provides strong evidence that institutional innovation capacity significantly mediates the relationship between market competition and business growth. This means that institutions capable of innovating—by developing new programs, using technology effectively, and adapting to market demands—are more likely to convert competitive pressure into sustainable growth.

This finding supports the dynamic capabilities theory (Tece, 2007), which posits that organizations must continuously innovate to maintain competitive advantage. In education, innovation may take the form of digital transformation, flexible curriculum design, cross-border partnerships, or new revenue models such as online certification programs.

Moreover, innovation enables educational businesses to respond more effectively to external changes, including policy shifts like the "Double Reduction" reform, or emerging trends such as hybrid learning. Institutions with weak innovation capacity may find competition more damaging than motivating.

Implications for Practice

These findings suggest that educational business leaders should not only be aware of market competition but also proactively build innovation capabilities within their institutions. Strategic investment in staff development, digital infrastructure, and agile organizational structures can enhance adaptability and improve business outcomes.

For policymakers, the results highlight the importance of supporting institutional innovation—through funding schemes, regulatory flexibility, and industry-academic collaboration. Encouraging innovation not only drives growth but also strengthens the resilience and quality of educational services in a rapidly changing environment.

Conclusions

This study examined the effect of market competition on the growth of educational businesses in China, with a specific focus on the mediating role of institutional innovation capacity. The findings revealed that while market competition directly influences business growth, institutional innovation capacity plays a partial mediating role—highlighting its importance as a strategic asset. In increasingly competitive and policy-sensitive educational markets, innovation capacity enables institutions to convert external pressures into sustainable expansion and performance.

Recommendations

1. Strengthen Innovation Capacity

Institutions should invest in R&D, digital learning platforms, and staff upskilling to build long-term adaptability and competitive advantage.

2. Monitor Market Signals and Respond Quickly



Business leaders must continuously assess market conditions and competitors, and design flexible strategies that allow rapid adjustment.

3. Foster Government–Industry Collaboration

Government agencies can facilitate growth by supporting innovation grants, incubation programs, and cross-border collaborations for educational firms.

4. Expand Research into Other Factors

Future studies should include other mediators such as leadership quality, organizational culture, or funding access to better understand the growth dynamics of educational businesses.

References

- Altbach, P. G., & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of Studies in International Education*, 11(3–4), 290–305. <https://doi.org/10.1177/1028315307303542>
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Chen, Y. (2021). *Private education and consolidation trends in China's urban markets*. Beijing Education Review, 14(2), 87–102.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (4th ed.). Sage Publications.
- Huang, J., & Zhang, L. (2021). Innovation capacity and sustainability in China's educational institutions. *Journal of Educational Development*, 39(3), 145–160.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
- Liu, X., & Wang, Y. (2019). Development trends of private education enterprises in China: Policy, market, and capital perspectives. *Educational Economics and Policy*, 7(1), 65–82.
- Li, X. (2022). *Internationalization and competitive benchmarking in Chinese higher education*. Global Education Perspectives, 11(1), 51–66.
- Luo, M., He, Y., & Wang, Q. (2022). *Innovation as a mediating factor in educational performance: Evidence from Chinese higher education institutions*. Asia-Pacific Education Journal, 19(4), 233–248.
- Ministry of Education of the People's Republic of China (MoE). (2021). *Notice on further reducing the burden of homework and off-campus training for students in compulsory education*. [in Chinese].
- Porter, M. E. (2008). *The five competitive forces that shape strategy*. Harvard Business Review, 86(1), 78–93.
- Teece, D. J. (2007). *Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance*. Strategic Management Journal, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>



- UNESCO. (2020). *Education in a post-COVID world: Nine ideas for public action*. <https://unesdoc.unesco.org/ark:/48223/pf0000374802>
- Wang, J., & Liu, H. (2020). *Digital transformation and institutional responsiveness in Chinese education*. *China Information Systems Journal*, 27(1), 22–36.
- Yu, F. (2020). *The impact of market saturation on the competitiveness of private education in China*. *China Economic Education Journal*, 18(2), 102–118.
- Zhang, Y. (2021). Parental demand and commercial growth in China's private tutoring market. *Asia Pacific Journal of Education*, 41(4), 513–528. <https://doi.org/10.1080/02188791.2020.1824897>
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods* (9th ed.). South-Western Cengage Learning.