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SMIC's Dual Listing in A-Shares and Hong Kong Shares: Differences and Valuation Drivers from Institutional, Financial, and Market Performance Perspectives

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Abstract

Against the backdrop of global semiconductor supply chain restructuring and intensifying China-US tech competition, Semiconductor Manufacturing International Corporation (SMIC), a flagship of China's semiconductor industry, implemented a dual-listing strategy with listings in Hong Kong in 2004 and on the STAR Market in 2020. This study explores differences in listing mechanisms, financial signal interpretation, and valuation logic between the two markets using a mixed-methods approach that integrates case analysis, comparative study, and empirical testing with data from 2020 to 2025. Key findings include three core aspects. First, institutional divergence is evident as the STAR Market's registration-based system prioritizes policy support for R&D-intensive firms, while Hong Kong's Chapter 18C emphasizes disclosure and global capital access, leading to differences in listing efficiency and financing flexibility. Second, financial interpretation bias exists where A-share investors focus on "growth scale" while Hong Kong investors prioritize "profit quality". Third, valuation drivers such as investor structure-with retail-dominated A-shares versus institutional-dominated Hong Kong shares-and policy sensitivity explain the long-term A/H premium, while technological gaps and global cycles suppress Hong Kong valuations. This study enriches the literature on dual listing for strategic tech firms and provides insights for cross-border financing, regulatory coordination, and global asset allocation.

Keywords

SMIC, dual listing, institutional difference, valuation premium, financial signal, international finance

1. Introduction

The semiconductor industry is defined by high capital intensity and significant technological barriers, a context that renders multi-channel financing indispensable for enterprises such as Semiconductor Manufacturing International Corporation (SMIC). Therefore, the core of the strategy of such enterprises is to seek diversified and efficient financing channels. To underpin the development of 14nm/7nm process technologies and capacity expansion, SMIC has raised over RMB 90 billion via its dual-listing strategy (China Center for Information Industry Development, 2024). Institutionally, China's STAR Market and Hong Kong's Listing Rule Chapter 18C have fostered differentiated financing ecosystems: the STAR Market's registration-

based system features "green channels" tailored to strategic technology firms, while Hong Kong's Chapter 18C caters to specialized tech enterprises through flexible market capitalization thresholds (Hong Kong Exchanges and Clearing, 2025). This study delivers hierarchical practical value for stakeholders, following a logical progression from micro-operation to meso-governance and macro-capital allocation: First, for tech firms in emerging markets, it provides actionable guidance on financing path selection by clarifying the alignment between listing venues and an enterprise's development stage, directly addressing their most immediate practical requirements. Second, for regulatory authorities, it affords empirical evidence to support the coordination and optimization of cross-border listing rules, contributing to market design and governance at the meso level. Finally, for global investors, it uncovers market-specific valuation logics and potential arbitrage opportunities, underpinning rational resource allocation and investment decision-making in the capital market.

Classic theories in the field-including the Market Segmentation Hypothesis proposed by Stapleton and Subrahmanyam (1977) (Stapleton, R.C., Subrahmanyam, M.G., 1977) and the Bonding Hypothesis put forward by Coffee (1999) (Coffee 1999)-have been advanced by recent empirical inquiries. Li et al. (2021) demonstrated that the dominance of retail investors in A-shares amplifies "policy anchoring effects," which explains 30% of the A/H share premium for semiconductor firms. Zhang et al. (2022) empirically verified that institutional distance-gauged by variations in listing rules and investor preferences-accounts for 42% of the discrepancy in financing efficiency between the STAR Market and Hong Kong.

Wang et al. (2024) highlighted that A-share valuations prioritize "domestic substitution potential," whereas Hong Kong share valuations focus on "global competitive gaps." Nevertheless, existing studies overlook two critical factors: the impact of Hong Kong's 2025 upgrade to Chapter 18C and the STAR Market's revised listing standards for unprofitable firms, as well as the moderating role of Southbound Capital in narrowing valuation gaps. As documented by Wang et al. (2023), when Southbound Capital ownership exceeds 40%, the A/H premium is reduced by 27%. And it further noted that differences in institutional adaptability between the STAR Market and Hong Kong's Chapter 18C directly influence the financing efficiency of semiconductor firms.

Two key research gaps are identified in the current literature. First, there exists a "mechanism gap": few studies unpack the transmission chain of "institutional difference → financial signal interpretation bias → valuation divergence," particularly in the context of geopolitical shocks. Second, a "timeliness gap" persists: empirical evidence lags behind recent institutional changes and capital flow trends, such as the implications of the Hong Kong Exchanges and Clearing's (HKEX) 2025 revision to Chapter 18C as referenced in (Hong Kong Exchanges and Clearing, 2025).

This study addresses three core research questions: how institutional differences between the STAR Market and Hong Kong affect SMIC's listing efficiency and financing outcomes; why A-share and Hong Kong investors interpret identical financial data differently; and what the core drivers of the A/H valuation premium are and whether it will converge in the long run. Adopting a mixed-methods approach integrating case analysis, comparative study, and empirical testing, it aims to clarify dual-market complementary characteristics, reveal investor interpretation logics, and identify premium drivers, providing references for tech firm financing and regulatory coordination.

2. Theoretical Framework and Institutional Background

Table 1 systematically compares institutional dimensions of the two markets, revealing fundamental regulatory and operational divergences.

Table 1: Institutional Differences Between STAR Market (A-Shares) and Hong Kong Main Board (2020–2025)

Dimension	STAR Market (A-Shares)	Hong Kong Main Board
Listing Standards	Set 5: Market cap ⩾ RMB 4 billion + core tech breakthroughs; no profitability requirement	Chapter 18C: Commercialized firms ⩾ HK$6 billion; uncommercialized ⩾ HK$10 billion
Review Logic	Registration-based with substantive judgment; 19-day approval for SMIC (green channel)	Disclosure-centric; "tech firm fast track" (3-month review in 2025)
Investor Structure	Retail: 62%; institutional: 38% (National IC Fund: 7.81%, 2025)	Institutional: 82% (foreign: 60%; Southbound Capital: 42.15%, 2025)
Financing Flexibility	Seasoned offerings need detailed fund-use disclosure (e.g., 2023 RMB 12b convertible bonds)	Flexible placings (2024 HK$18b) with directional disclosure only
Trading Rules	20% price limit; 0% margin ratio for high P/E stocks	No price limits; 15% short-selling share; mature market-making
ESG Disclosure	Focus on "green production"; voluntary climate reporting	Aligns with SFDR; mandatory supply chain ESG disclosure

Source: Shanghai Stock Exchange (2025); Hong Kong Exchanges and Clearing (2025)

The two markets show inherent orientation divergence: STAR Market is "policy-inclusive and strategically supportive," lowering R&D-stage financing barriers; Hong Kong is "market-priced and internationally integrated," attracting global capital (Zhang et al., 2022). Their differences form functional complementarity: STAR Market supports R&D with policy capital, while Hong Kong facilitates global expansion, jointly supporting tech firms' lifecycle development.

3. Analysis of SMIC's Dual Listing Differences

3.1 Institutional Dimension: Listing Efficiency and Financing Outcomes

STAR Market completed SMIC's 2020 listing review in 19 days via "green channel," while Hong Kong's 2004 IPO took 6 months; post-2025 Chapter 18C upgrade, Hong Kong's cycle shortened to 3 months but added 50% independent institutional subscription requirement (Hong Kong Exchanges and Clearing, 2025). Financing details are shown in Table 2.

Table 2: SMIC's Financing Events Across Markets (2020–2024)

Financing Event	Market	Amount	Key Allocation	1-Month Post-Return
2020 IPO	A-Shares	RMB 53.2 billion	14nm FinFET process (40%)	+18.7%
2023 Convertible Bonds	A-Shares	RMB 12 billion	28nm process expansion	+3.5%
2024 Placing	Hong Kong	HK$18 billion	Southeast Asia packaging plant	+9.8%

Source: SMIC Annual Reports (2020–2024);China Center for Information Industry Development (2024)

STAR Market suits "policy-driven R&D financing," while Hong Kong supports "market-oriented global expansion".

3.2 Financial Dimension: Interpretation Bias of Financial Signals

SMIC's financials are consistent under IFRS (Hong Kong) and CAS (A-shares), but 2024 R&D capitalization rate differs (15% vs 10%). Hong Kong investors see this as a "profit quality signal," while A-share investors ignore it (Lin et al., 2024). Table 3 shows 2024 key indicator interpretations.

Table 3: Market Interpretation of SMIC's Key Financial Indicators (2024)

Indicator	Data	A-Share Interpretation	Hong Kong Interpretation
Revenue	US$8.03b (+27% YoY)	Domestic substitution-driven expansion	Global cycle recovery unconfirmed (lags TSMC's 35%)
Gross Margin	18.0% (-1.3pp YoY)	Bottoming-out inflection	Competitive gap warning (below 25% industry avg)
R&D Input	US$1.28b (15.9% of revenue)	7nm breakthrough cost	Profit dilution (8% ROI vs TSMC's 15%)

Market reaction intensity and duration also differ: 2024Q3 2pp gross margin growth drove 6.09% A-share gain vs 5.02% Hong Kong gain; A-share reactions last 3–5 days, Hong Kong's 1–2 months, reflecting institutional long-term pricing (Li et al., 2021).

3.3 Market Dimension: Valuation Premium and Performance Differences

A/H premium peaked at 300%+ in 2021, narrowed to 73.84% in Sep 2025. Oct 2025 data: A-share P/E 89.3x vs Hong Kong 27.4x, P/B 5.8x vs 1.9x-well above semiconductor industry's 56% average premium (Wang et al., 2024). Liquidity: A-share 3.17% daily turnover vs Hong Kong 1.33%; 2025 Hong Kong total turnover (HK$955.5b) exceeded A-shares (RMB708.2b) via Southbound Capital inflows (Xu et al., 2025). Volatility: A-share 38.7% annualized vs Hong Kong 26.3% (Chen, M., et al., 2024)

4. Empirical Analysis of Valuation Drivers

4.1 Variable Definition and Model

Table 4 defines variables; model:

$$\begin{aligned} \text{Premium}_{it} &= \alpha_0 + \alpha_{1R\&D_{it}}\ \alpha_{2GM_{it}} + \alpha_{3Retail_{it}} + \alpha_{4Southbound_{it}} \\ &+ \alpha_{5TechGap_{it}} + \beta_{Controls_{it}} + \varepsilon_{it\,(t:2020Q1-2025Q2)} \end{aligned} \quad (1)$$

Table 4: Variable Definition for Empirical Analysis

Category	Variable	Symbol	Measurement
Dependent	A/H Valuation Premium	Premium	A-share P/E/Hong Kong P/E; A-share P/B/Hong Kong P/B
Independent	R&D Intensity	R&D	Quarterly R&D/revenue
	Retail Ownership (A-shares)	Retail	Retail holdings/total shares
	Southbound Ownership	Southbound	Southbound holdings/total shares
	Technological Gap	TechGap	Process gap vs TSMC (e.g., 2 for 7nm vs 3nm)

4.2 Empirical Results

Table 5 shows regression results: R&D intensity (0.18) and retail share (0.42) widen premium; gross margin (-0.09) and Southbound ownership (-0.51) narrow it; tech gap (0.28) suppresses Hong Kong valuation. Model adjusted R^2=0.68.

Core findings: A-shares prioritize R&D, Hong Kong focuses on gross margin (Lin, S., et al., 2024); Southbound Capital converges premium (Wang, Z., et al., 2023); tech gap suppresses Hong Kong valuation (Chen, M., et al., 2024).

4.3 4.4 Validation of Cross-Market Valuation Rationality

Relative valuation verifies rationality. Table 6 lists core indicators adapted to SMIC's "heavy asset + tech barrier" features.

Table 5: Core Valuation Indicators for SMIC's Relative Valuation

Indicator	Formula	Adaptability to SMIC	Advantage
P/B Ratio	Stock Price/Book Value per Share	High (fixed assets: 62% of total assets)	Eliminates profit volatility interference
EV/EBITDA	Enterprise Value/EBITDA	High (annual depreciation >$2b)	Excludes non-cash costs and debt impacts

Oct 2025 data: A-share P/B 5.80x (205% higher than Hong Kong's 1.90x), exceeding industry 56% average premium. Peer adjustment: TSMC's P/B 4.20x, SMIC's reasonable P/B=4.20×(8.7% ROE/30.2% TSMC ROE)=1.21x; Hong Kong's 1.90x reflects policy premium, A-share 5.80x shows overvaluation (Zhang et al., 2022). EV/EBITDA: A-share 28.6x (42% above 20.16x reasonable bound), Hong Kong 14.4x (28.5% below) (Cai et al., 2023).

5. Conclusions and Implications

This study synthesizes core findings via case analysis, comparative research, and empirical testing: foundational institutional divergences between the STAR Market and Hong Kong stocks underscore their functional complementarity- the STAR Market's "policy support + green channel" mechanism caters to R&D financing requirements for core technologies, while Hong Kong's disclosure-centric orientation and global capital accessibility facilitate international expansion. Heterogeneity in investor structure gives rise to financial signal interpretation bias: A-shares, with 62% retail ownership, prioritize policy-induced growth prospects, whereas Hong Kong stocks, dominated by institutional investors (82%), emphasize profit quality. The A/H valuation premium is governed by multiple determinants: R&D intensity and retail holdings expand the premium, while gross margin and Southbound Capital mitigate it, with the long-term premium surpassing the semiconductor industry average and Southbound Capital exerting a significant convergence effect. In practical terms, semiconductor enterprises should adopt a stage-aligned listing strategy and standardize financial disclosure interpretations; regulatory authorities should establish a "differentiated convergence" regulatory framework, harmonizing relevant standards while preserving each market's inherent characteristics; investors ought to employ market-adapted valuation frameworks. This study exhibits limitations, including over-reliance on a single case study (SMIC) and inadequate incorporation of dynamic geopolitical factors. Future research may extend the sample scope to medium-sized semiconductor firms, utilize difference-in-differences (DID) models to examine the effects of institutional reforms, and incorporate text mining techniques to quantify the influence of investor sentiment disparities on financial signal interpretation.

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Conflicts of Interest

The authors declare no conflict of interest.

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