WEEK 7 · MODULE 4

# Stock Markets

## Financial Institutions and Markets · MF50004.01

Prof. Jiajun Jiang · School of Economics, Fudan University · 2 and 5 November 2026

# From repayment promises to ownership claims

**Last week**

Bond investors evaluated legal borrowers, repayment resources and expected support.

**This week**

Shareholders receive the residual cash flows and bear changes in the value of the business.

# Four questions for this week

| Session | Question | Time |
|---|---|---|
| 1 · Equity and valuation | What determines the return an investor earns? | 45 min |
| 2 · China’s listing institutions | How do entry, ownership and exit rules shape listed firms? | 45 min |
| 3 · Onshore and offshore markets | What changes when a Chinese company lists in another market? | 45 min |
| 4 · The performance question | Why have economic growth and investor returns diverged? | 45 min |

# Shareholders’ cash-flow rights and voting power

**Company cash generation**
Funds investment and financial obligations

→

**Shareholder value**
Cash distributions and the value of retained profits

| Common shares | Preferred shares |
| --- | --- |
| Usually voting rights; a residual claim | Priority over common shares; rights specified in the contract |
| Dividends depend on company decisions | Rank behind creditors |

Control over investment and distributions affects the value received by outside shareholders.

# New issuance raises capital; secondary trading changes owners

**Primary market**

Investor pays issuer for newly issued shares

→

**Company investment**

Proceeds finance assets, operations or acquisitions

**Secondary market**

Buyer pays an existing shareholder

→

**Market price and liquidity**

Trading conditions influence future financing

A rising market capitalisation can reflect new issuance as well as gains on existing shares.

# How shares reach investors and trade

| Function | Institutional role | Examples |
|---|---|---|
| Listing | Admit issuers and enforce continuing disclosure | Shanghai, Shenzhen, Hong Kong, NYSE, Nasdaq |
| Order matching | Match compatible buy and sell orders | Exchange order books and electronic trading systems |
| Market making | Quote buying and selling prices and hold inventory | Dealers operating on or away from exchanges |

The trading mechanism determines how investors obtain liquidity and what it costs.

*Mishkin, Ch. 13; SEC, exchange registration and market-participant guidance.*

# Order size affects the execution price

| Sell orders | Price | Shares offered |
|---|---|---|
| Best ask | 10.02 | 100 |
| Next ask | 10.05 | 300 |

| Buy instruction | What happens in this simplified book? |
|---|---|
| Market order for 200 shares | 100 at 10.02, then 100 at 10.05 |
| Limit order: buy 200 at no more than 10.02 | Up to 100 immediately; the rest may remain unfilled |

Hypothetical snapshot. Quotes and available quantities can change before execution.

Execution cost depends on quantity and available liquidity as well as the quoted spread.

*SEC investor guidance; hypothetical order book.*

# Total returns include price changes and dividends

$$R_{t+1} = \frac{P_{t+1} - P_t + D_{t+1}}{P_t}$$

| One-year example | Amount |
|---|---|
| Purchase price | 100 |
| Sale price | 105 |
| Dividend received | 3 |
| Total return | 8% = 5% price gain + 3% dividend yield |

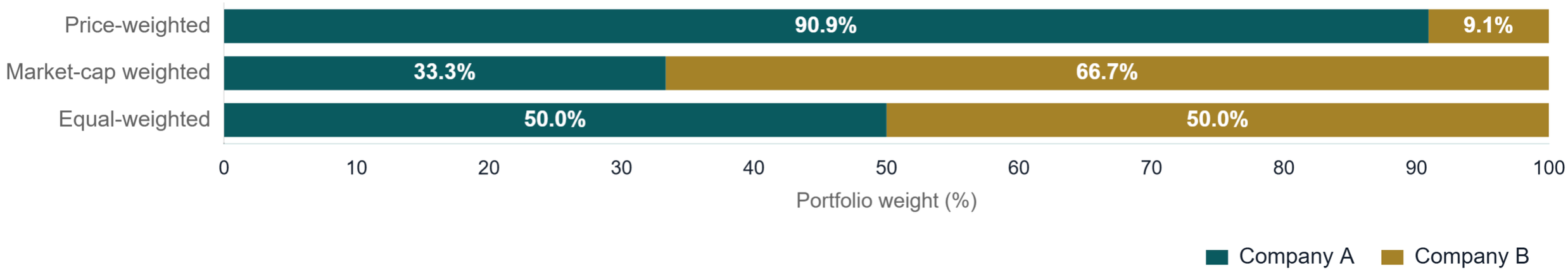
For international comparisons: also specify currency, inflation and dividend-tax treatment.

Including dividends is essential when comparing long-run investment performance.

*Mishkin, Ch. 13; S&P Dow Jones Indices methodology. Example is hypothetical.*

# Index weights determine which companies drive the result

| Company | Price | Shares | Market value |
|---|---|---|---|
| A | 100 | 1 million | 100 million |
| B | 10 | 20 million | 200 million |




Examples: Dow Jones Industrial Average uses price weights; S&P 500 uses float-adjusted market-value weights.

*S&P Dow Jones Indices methodology; hypothetical two-company illustration.*

# An ETF provides a tradable share in a portfolio

**Underlying portfolio**
Stocks selected by an index or investment strategy

→

**ETF shares**
Bought and sold on an exchange

| ETF | Conventional open-ended index fund |
| --- | --- |
| Trades throughout the day at a market price | Normally dealt at the calculated net asset value (NAV) |
| Investor pays the bid–ask spread and fees | Investor pays the fund's dealing charges and fees |

The ETF's index and trading arrangements determine the exposure and costs.

*SEC, Updated Investor Bulletin: Exchange-Traded Funds.*

# Dividend valuation discounts expected shareholder cash flows

$$P_0 = \frac{E_0[D_1 + P_1]}{1 + k_e}$$

$$P_0 = \sum_{t=1}^{\infty} \frac{E_0[D_t]}{(1 + k_e)^t}$$

**One period to a longer horizon**

The expected resale price reflects the dividends available to subsequent shareholders.

*Mishkin & Eakins, Ch. 13.*

# The Gordon model links value to growth and required return

$$P_0 = \frac{D_1}{k_e - g}, \qquad k_e > g$$

| Assumption | Worked example |
|---|---|
| Next-year dividend, $D_1$ | 2 per share |
| Required return, $k_e$ | 10% |
| Long-run dividend growth, g | 5% |
| Value | 2 ÷ (10% − 5%) = 40 |

A strong growth story can already be reflected in a high purchase price.

*Mishkin & Eakins, Ch. 13; hypothetical valuation.*

# P/E benchmarks reflect growth, risk and payout

$$\text{Forward P/E} = \frac{P_0}{E_0[EPS_1]} = \frac{\text{payout ratio}}{k_e - g}$$

Gordon illustration: 50% dividend payout; 10% required return

| Long-run dividend growth | 3% | 5% | 7% |
|---|---|---|---|
| Forward P/E | 7.1× | 10.0× | 16.7× |

> **Applying the multiple**
>
> Forecast EPS = 4; forward P/E = 10×; implied price = 40.

Trailing P/E uses reported earnings; forward P/E uses forecast earnings.

A higher multiple needs support from sustainable growth, lower risk or greater distributable earnings.

*Mishkin & Eakins, Ch. 13; hypothetical sensitivity analysis.*

# Would you buy the faster-growing company?

| Hypothetical firms in the same sector | Growth firm | Income firm |
|---|---|---|
| Market price | 60 | 40 |
| Next-year dividend | 2 | 3 |
| Long-run dividend-growth assumption | 6% | 3% |
| Required return assumed by your committee | 10% | 10% |

**DISCUSSION · 6 MINUTES**

**Your committee prefers the growth firm because its business expands faster. Would you support that choice? Identify one assumption that could reverse your recommendation.**

# Tesla: current earnings and an AI valuation narrative

$$P_t = EPS_t \times (P/E)_t$$

Latest reported earnings · prices at 30 October 2026

| Company | P/E | TTM profit US$bn |
|---|---|---|
| Tesla | ≈440× | 3.2 |
| Toyota | ≈9× | 27.6 |
| BYD | ≈17× | 4.7 |

TTM = trailing 12 months; profits cover each company's business as a whole.

## Tesla's reported business · Q3 2026

**73.3%**

AUTOMOTIVE SHARE OF REVENUE

US$20.56bn automotive / US$28.05bn total

## Musk's AI and robotics narrative

Autonomy · robotaxis · Optimus
Future markets, software income and margins

Translate the AI story into future customers, margins, investment needs and profits.

*Tesla Q3 2026 Form 10-Q; Stock Analysis, 30 October 2026. TTM ends: Tesla/BYD September; Toyota June.*

# Required earnings growth under a two-stage scenario

Common required return: 10% · observed P/E inputs from 30 October 2026

**Years 1–10**
Solve annual EPS growth; use the payout assumptions below

→

**Year 11 onward**
EPS growth 3%; dividend payout 70%

| Company | Trailing P/E | Assumed payout years 1–10 | Required annual EPS growth years 1–10 |
|---|---|---|---|
| Tesla | 440× | 0% | ≈60% |
| Toyota | 9× | 32% | ≈5% |
| BYD | 17× | 10% | ≈15% |

**The terminal valuation assumption**

Every firm reaches a 10.3× trailing P/E at year 10.

*Illustrative two-stage dividend model; historical payout inputs from Tesla, Toyota and BYD filings.*

SESSION 2 · 45 MINUTES

# Ownership, entry and exit in China’s stock market

The problems behind the reforms, what changed, and what remains

# China’s multi-level stock market

### Shanghai and Shenzhen Main Boards

Larger, established businesses

### STAR · Shanghai

Science and technology innovation

### ChiNext · Shenzhen

Innovative and growth businesses

### Beijing Stock Exchange

Innovative small and medium-sized enterprises

### NEEQ · national share-transfer venue

Base and Innovation tiers; quotation is distinct from exchange listing.

Board design shapes the businesses and investors admitted to each market.

*CSRC, IPO registration measures; SSE, SZSE and BSE market descriptions.*

# The split-share structure created conflicting incentives

| Owner | Trading position | Main financial incentives |
|---|---|---|
| Controlling state or corporate block | Could not trade freely on the exchange | Dividends, control and the value of the business |
| Public minority shareholders | Held the tradable float | Dividends and gains from selling at the market price |

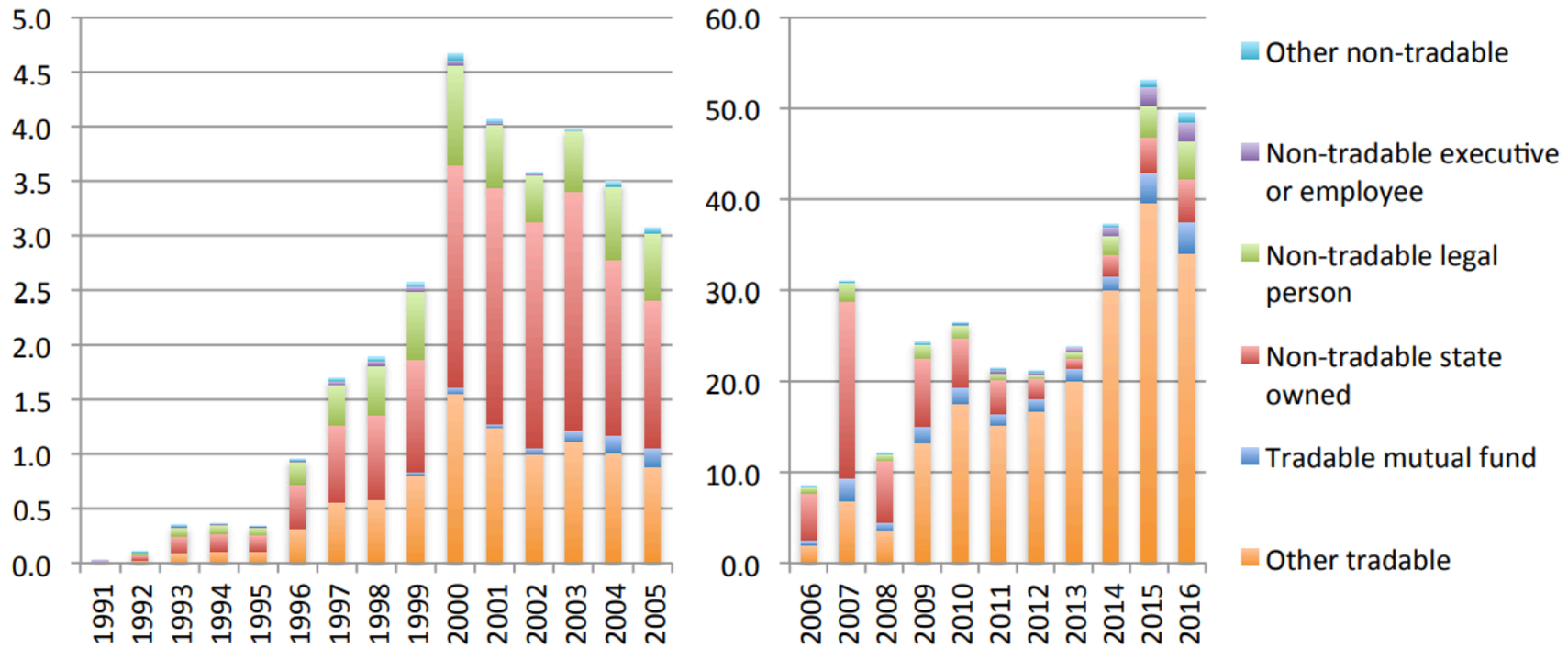
**Three frictions**

Concentrated control · limited sensitivity to the quoted price · uncertainty over future share supply

*Handbook of China's Financial System, Ch. 11; Carpenter & Whitelaw (2017).*

# The 2005 reform negotiated a route to wider tradability

Listed-equity value by trading category · 1991–2016 · RMB trillion




Compensation → separate approval by public holders → lockups → phased trading eligibility

*Original figure: Carpenter & Whitelaw (2017), Figure 1(b); CSRC reform rules (2005).*

# After reform: wider tradability and mixed efficiency gains

1,032 reforming firms · values three years before and three years after reform

| Measure | Observed change | What improved? |
|---|---|---|
| Real revenue: median firm-level change | SOEs +84%; non-SOEs +57% | Business scale expanded |
| Real revenue per employee: median change | +41% in both groups | Labour productivity rose |
| Firms lending to controllers (full sample) | 42.3% → 16.6% | Related-party lending became less common |
| Expenses / sales | About +3 percentage points in both groups | Cost control weakened on this measure |

Tradability expanded; concentrated control and enforcement remained important.

*Liao, Liu & Wang (2014), Tables 2–5. Descriptive reform-window changes; matched comparisons discussed in notes.*

# Approval-era entry combined screening, queues and pricing controls

The China Securities Regulatory Commission (CSRC) screened public offerings.

| Historical constraint | Intended role | Economic friction |
|---|---|---|
| Profitability and business review | Screen firms before they raise public money | Young, pre-profit businesses had few routes to entry |
| Queues and issuance pauses | Control admission and the pace of fundraising | Uncertain timing increased financing costs |
| Offer-price guidance in capped periods | Limit the price paid by IPO subscribers | A gap could open between the offer price and market demand |

> **Two consequences to trace**
>
> Scarce IPO allocations could generate large initial gains; scarce listing status could acquire shell value.

*Qian, Ritter & Shao (2024), institutional history and Tables 1–2.*

# Listing speed depends on the whole process

| Evidence | Start and end of the clock | Reported time |
|---|---|---|
| China: successful IPOs, 2014–17 | Initial filing → formal approval | Mean 489 calendar days |
| China: current review rule | Regulatory review and registration clock | Up to 3 months; specified exclusions |
| Hong Kong: 2025 applications | Acknowledgment → readiness for hearing | Median 92 business days |
| Hong Kong: same report | HKEX processing time | Median 32 business days |

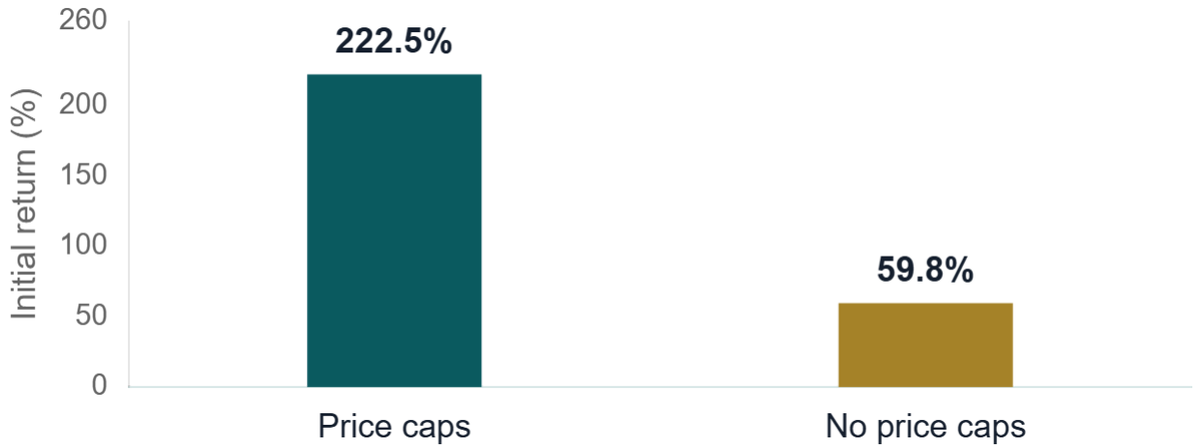
Preparation, issuer responses, underwriting and the market window also affect time to listing.

*Qian, Ritter & Shao (2024); SSE review rules; HKEX Listing Committee Report 2025; SEC filing guidance.*

# Large IPO gains could be followed by weak aftermarket returns

Historical offer-price policy episodes · Qian, Ritter & Shao (2024)

## Gain from the offer price




## Following three years




Initial gain (IPO underpricing): offer → first close without a binding daily limit. Later return: relative to matched seasoned stocks.

IPO allocation gains and long-run aftermarket performance answer different investment questions.

*Qian, Ritter & Shao (2024), Table 4. Means; three-year figures are cumulative benchmark-relative returns.*

# Scarce access gave weak listed firms an option value




**The alternative route**

Acquire control of a listed company → inject the unlisted business → use the existing listing.

**>US$500m**

AVERAGE ESTIMATED SHELL VALUE IN 2007–2020 TRANSACTIONS

The historical chart shows 19 reverse mergers in 2013, when there were no IPOs.

*Original chart: Lee, Qu & Shen (2017), VoxChina Figure 1. Shell estimate: Lee, Qu & Shen (2023).*

# Approval and registration distribute screening differently

| System | Admission review | Price and commercial judgement |
|---|---|---|
| China: former approval | Central regulatory review of issue conditions and business eligibility | Administrative screening and period-specific issuance/pricing controls |
| China: registration | Exchange review of eligibility, board fit and disclosure; CSRC registration | More market-based pricing, with regulatory positioning and review |
| United States | SEC disclosure review plus NYSE/Nasdaq listing standards | Issuer, underwriters and investors price the business |
| Hong Kong | HKEX eligibility and suitability review; SFC oversight | Market pricing within listing and sponsor requirements |

Registration relies more on investor choice, supported by disclosure, intermediaries and enforceable rules.

*CSRC, SEC, NYSE/Nasdaq, HKEX and SFC admission rules and guidance.*

# Registration changed pricing, disclosure and eligible business models

**2019**
Shanghai STAR · technology

**2020**
Shenzhen ChiNext · growth

**2021**
Beijing exchange · SMEs

**2023**
Main Boards; full rollout

| Reform channel | What changed |
|---|---|
| Review and responsibility | Exchange-led review; issuer and intermediary disclosure duties |
| Offer pricing | Earlier offer-price caps were removed; market-based inquiry and pricing gained more room |
| Eligibility | Additional routes for innovation firms, including selected unprofitable issuers |
| Continuing discipline | Disclosure enforcement, liability and exit must support investor choice |

2025–26: STAR and ChiNext further expanded routes for eligible innovative firms.

*CSRC and exchange registration rules (2019–2023); STAR and ChiNext updates (2025–2026).*

# Reform results: higher offer prices, persistent initial premiums

| Evidence | Observed result | Interpretation |
|---|---|---|
| 2019–20 pilot comparison | Offer P/E: STAR 67.4×; Shanghai Main 21.9× | Offer prices were less constrained |
| Same pilot comparison | Initial gain: STAR 160%; Main 171% | The difference was not statistically significant |
| Shell estimate 2007–18 →2019–20 | 28.7% → 13.0% of average listed-firm value | Relative shell value fell; the listing option remained |

**Current market outcome · January–September 2026**

123 IPOs; average first-day price gain about 273% (Choice data).

*Qian, Ritter & Shao (2024), Table 12; Lee, Qu & Shen (2023); Choice, 12 October 2026.*

# China strengthened exit rules and increased compulsory removals

| Stage | Change in the exit framework |
|---|---|
| Before the 2020 overhaul | Long suspension/resumption routes could prolong weak firms' listing status |
| 2020 reform | Broader triggers and shorter procedures; old suspension/resumption stages removed |
| 2024 reform, carried forward in 2026 rules | Stricter financial, fraud and compliance criteria; stronger accountability |

**104**

COMPULSORY EXITS SINCE THE 2020 REFORM, REPORTED JANUARY 2024: NEARLY 3× THE PRECEDING DECADE

Recent all-exit counts: 31 in 2025; 21 in January–September 2026.

*CSRC and exchange exit reforms (2020,2024,2026); CSRC January 2024 briefing; CAPCO2025/2026 reports.*

# China and the U.S. both need credible exit and investor remedies

| Dimension | China | NYSE / Nasdaq |
|---|---|---|
| Continued-listing standards | Trading, financial, disclosure and serious-violation criteria | Price, financial/distribution, reporting and governance standards |
| Procedure | Risk warnings and trigger-specific remediation or removal | Deficiency notices, cure plans/periods and review; exceptions apply |
| After removal | Delisted-share transfer arrangements; legal claims continue | Possible OTC trading; legal claims and reporting duties considered separately |
| Investor redress | Civil claims and representative litigation alongside regulatory action | Private securities litigation and public enforcement/recovery mechanisms |

*CSRC; SEC investor-recovery guidance; Nasdaq and NYSE continued-listing rules.*

# Two approaches to protecting investors

| | Approval-centred screening | Disclosure-led registration |
|---|---|---|
| Rationale | Regulator screens commercial eligibility for investors | Investors choose after verified disclosure |
| Potential benefit | Protection where retail expertise and private enforcement are limited | More financing choice and room for new business models |
| Main risk | Delay, lobbying, exclusion of good firms and reliance on official approval | Poorly informed choices, intermediary conflicts and losses before enforcement |
| Institutional requirement | Expert, accountable and consistent regulatory judgement | Reliable audits, capable intermediaries and effective legal remedies |

Paternalistic screening and market choice are competing rationales; real systems combine elements of both.

*Institutional comparison and synthesis of the evidence in this session.*

# Which IPO model fits an emerging market?

**Policy setting**

Many inexperienced retail investors; innovative firms need capital; regulatory and judicial resources are limited.

OPEN DISCUSSION · 6 MINUTES

**Would you lean toward approval-style business screening or disclosure-led registration? Defend your choice, identify a cost you accept, and explain what would make you change it.**

Consider investor capability, review quality, financing delays, reliable disclosure and enforceable rights.

SESSION 3 · 45 MINUTES

# Chinese equity across listing venues

Where Chinese companies list, why they go abroad, and what investors gain and risk

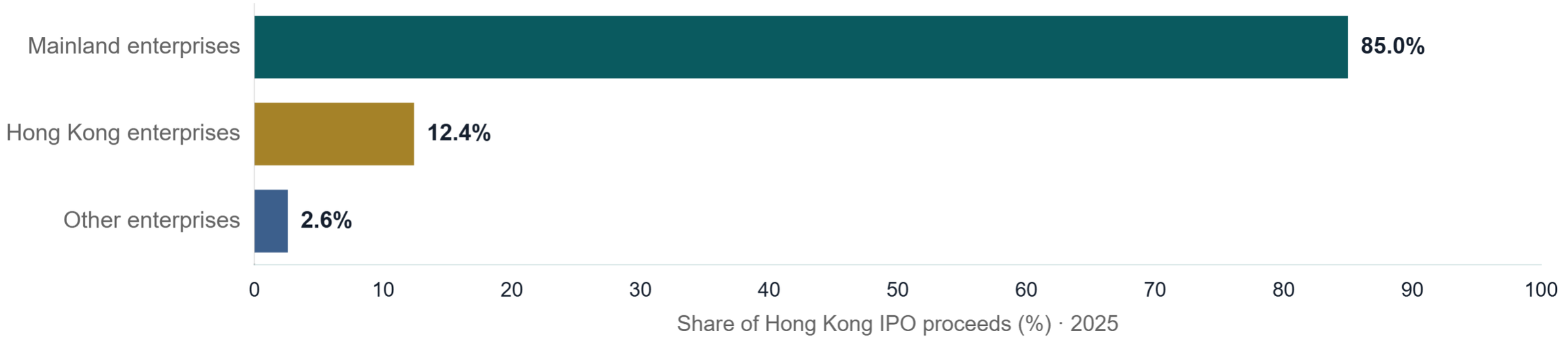
# Identify the issuer, the security and the trading venue

| Label | What it describes | Key distinction |
|---|---|---|
| A shares | Mainland-market RMB shares | Mainland listing route; special red-chip arrangements also exist |
| B shares | Mainland-listed foreign-currency shares | Shanghai USD / Shenzhen HKD quotation |
| H shares | Mainland-incorporated issuer listed in Hong Kong | Domicile and listing label, not a state-ownership label |
| Red chips / P chips | Offshore-incorporated China-related issuers | Conventionally state-controlled / privately controlled |
| ADR / ADS | Depositary instrument backed by issuer shares | Instrument wrapper; identify the underlying issuer |

*HKEX equity descriptions; SEC depositary-receipt guidance.*

# Hong Kong finances mainland businesses beyond H shares

Hong Kong IPO proceeds by enterprise category · calendar 2025



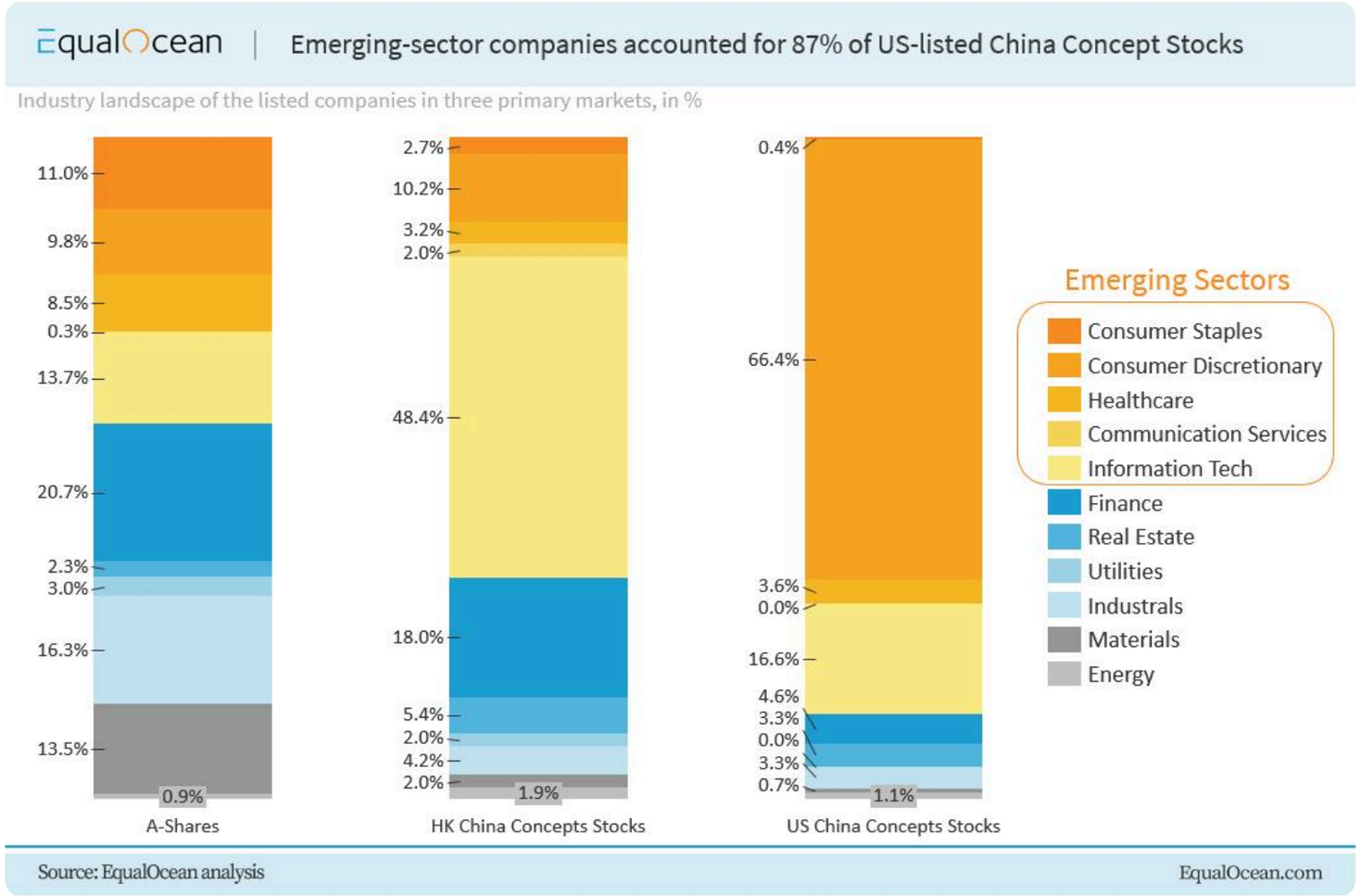

**119**
HONG KONG IPOS

**HK$286.9bn**
TOTAL IPO PROCEEDS

*HKEX Annual Report 2025; Hong Kong Financial Services and the Treasury Bureau.*

# Chinese companies differ across listing venues

Historical sector mix: A shares, Hong Kong-listed and U.S.-listed Chinese companies




*EqualOcean historical exhibit, reproduced in Lecture 9 (2024); observation date and weighting unspecified.*

# Why U.S. markets attracted Chinese technology firms

| Core attraction | Why it matters for a technology company |
| --- | --- |
| Specialist investors and liquid markets | Analysts, institutional demand and follow-on financing for growth businesses |
| Admission suited to growth companies | Alternative listing tests can accommodate firms investing ahead of profits |
| Founder control and international expansion | Eligible voting structures; listed equity for acquisitions and employee incentives |

*HKEX, Weighted Voting Rights Concept Paper (2014); Qian, Ritter & Shao (2024); current listing rules.*

# A depositary receipt represents shares through an intermediary

**Investor**
Buys an American Depositary Share (ADS)

→

**Depositary and custodian**
Hold the underlying ordinary shares

→

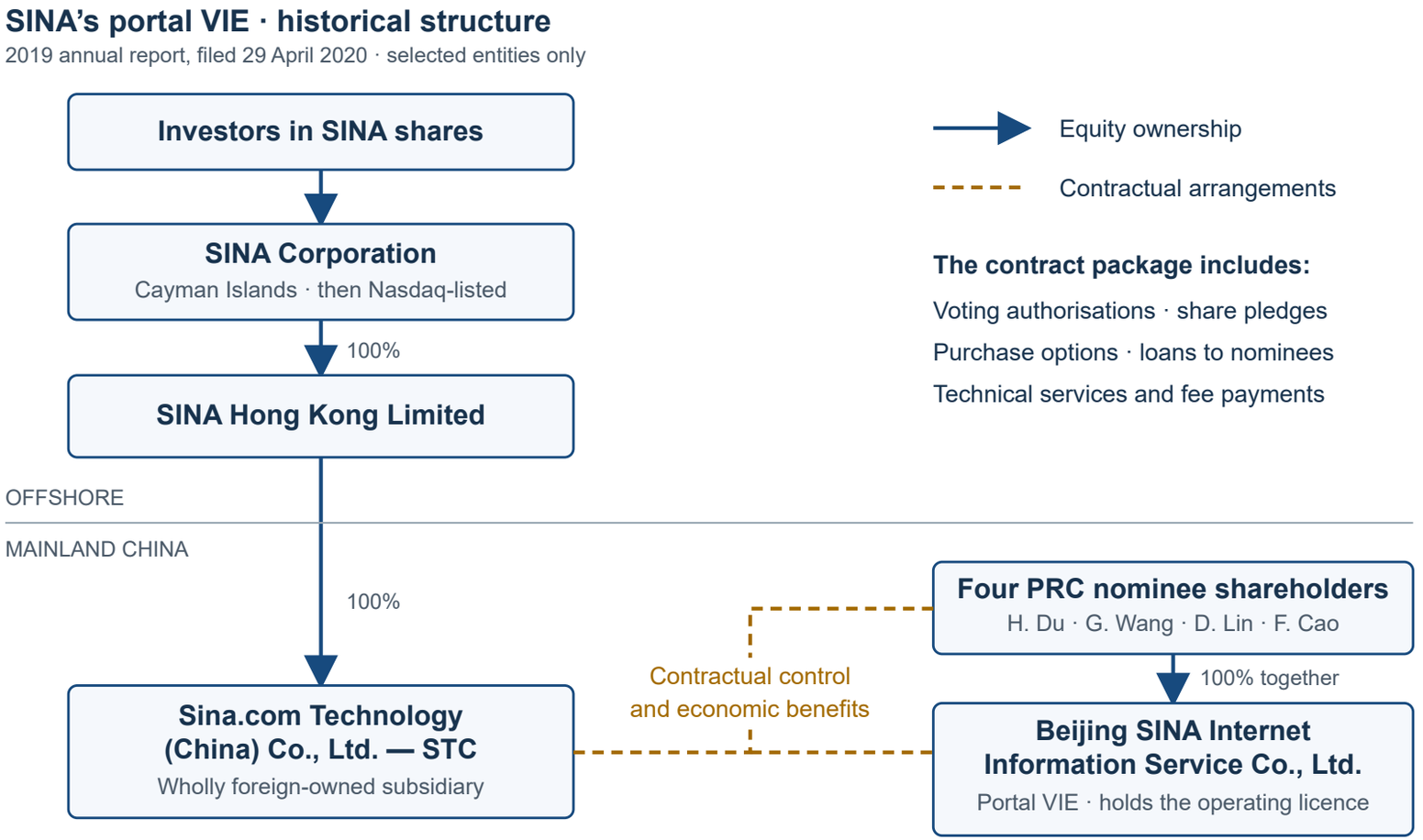
**Issuer**
The company whose shares back the ADS

**Check the deposit agreement**

Share ratio · dividend distribution · voting instructions · fees · conversion procedures

*SEC, American Depositary Receipts; issuer depositary agreements.*

# Sina: equity ownership offshore, contractual control onshore




The listed company's equity chain reaches STC; contracts connect STC to the licensed VIE.

Source: SINA 2019 Form 20-F, Item 4.C and Note 1. SINA was taken private in March 2021.

*SINA 2019 Form 20-F, Item 4.C and Note 1 (filed April 2020); historical portal branch.*

# HFCAA risk encouraged firms to build alternative listing routes

| Development | Implication for an overseas issuer |
|---|---|
| 2020 HFCAA; issuers identified in 2022 | Audit-access conflict threatened continued U.S. trading |
| NIO · Hong Kong listing, March 2022 | May 2022 HFCAA response highlighted the second venue and share fungibility |
| December 2022 access breakthrough | PCAOB vacated adverse China/Hong Kong determinations |
| Current framework | Two consecutive identified years can trigger a U.S. trading ban; no current at-risk issuers on SEC status page |

China’s overseas-listing filing regime has applied to direct and indirect listings since March 2023.

*SEC HFCAA status (checked 4 Nov 2026); PCAOB; NIO, 5 May 2022; CSRC (2023).*

# Alibaba illustrates an offshore issuer with two trading routes

| Date or security | What changed |
|---|---|
| 2014 · New York | ADS listing; each ADS now represents 8 ordinary shares |
| 2019 · Hong Kong | Ordinary shares listed; issuer remains incorporated in the Cayman Islands |
| 28 August 2024 | Hong Kong status converted to dual primary listing |
| 10 September 2024 | Hong Kong ordinary shares entered Stock Connect |

Alibaba’s ADSs and Hong Kong ordinary shares are convertible under the depositary arrangements.

The same issuer can offer convertible trading routes without being an A/H company.

*Alibaba, 2024 announcements, investor FAQ and FY2026 annual report.*

# Market opening expands access through specific channels

| | | |
|---|---|---|
| **Hong Kong / overseas investors**<br>Northbound through Shanghai and Shenzhen Connect | → | **Eligible mainland shares**<br>Selected A shares and ETFs; eligibility rules apply |
| **Eligible mainland investors**<br>Southbound through Shanghai and Shenzhen Connect | → | **Eligible Hong Kong shares**<br>Access to the Hong Kong trading line |

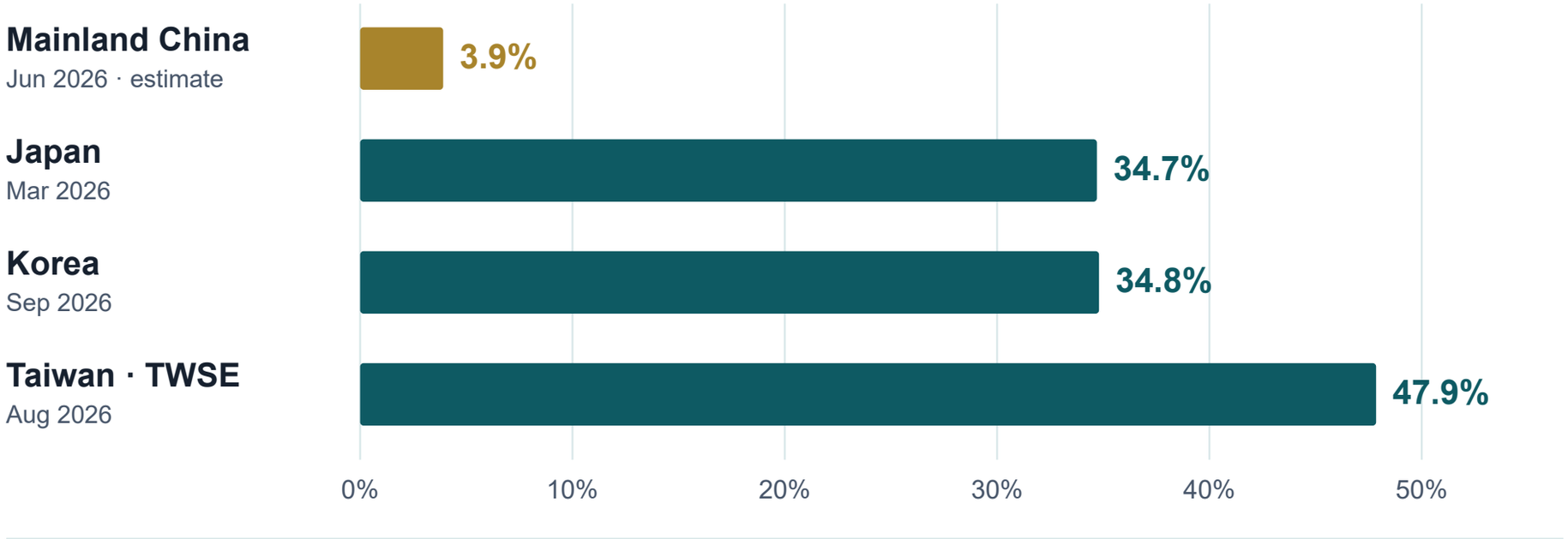
Other channels include qualified foreign institutional investment. Index inclusion can change demand without creating new legal rights.

*HKEX Stock Connect; SSE investor-suitability rules.*

# Foreign ownership remains low in mainland equities

## Foreign holdings as share of listed equity value

Selected markets · total market value basis · latest verified observations




China: overseas RMB equities ÷ domestic listed-share value (denominator includes B shares).
Japan: foreign nationality / incorporation classification. Taiwan: TWSE main market only.
Dates and statistical scopes differ; holdings are not trading shares or free-float weights.

Sources: PBoC / CAPCO; JPX; Korea FSS; Taiwan FSC. Verified 4 November 2026.

*PBoC / CAPCO; JPX; Korea FSS; Taiwan FSC. Dates and market coverage shown in chart.*

# A–H premiums show that access does not eliminate segmentation

Same company · two trading lines · prices compared in a common currency

| What we observe | Why the gap can persist |
|---|---|
| A and H prices can differ | Investor demand, liquidity and required returns differ |
| Connect broadens access | The shares remain generally nonconvertible |
| A cheaper H share may attract investors | Borrowing, funding and price-convergence risks remain |

Greater access can narrow price gaps without making the two markets identical.

*SFC Practice Note 25; HKEX market-access rules.*

# Which financing route fits this technology company?

| Company situation | Decision to make |
| --- | --- |
| Growing Chinese technology business; substantial R&D spending | Needs new equity to finance expansion |
| International sales are growing; founders value control | Weigh the investor base, governance and financing needs |
| Business may involve regulated activities | Establish eligibility and the operating structure before choosing a route |

**DISCUSSION · 6 MINUTES**

**Would you recommend a mainland, Hong Kong or U.S. listing? Identify the strongest benefit, the main risk, and one company fact that would change your choice.**

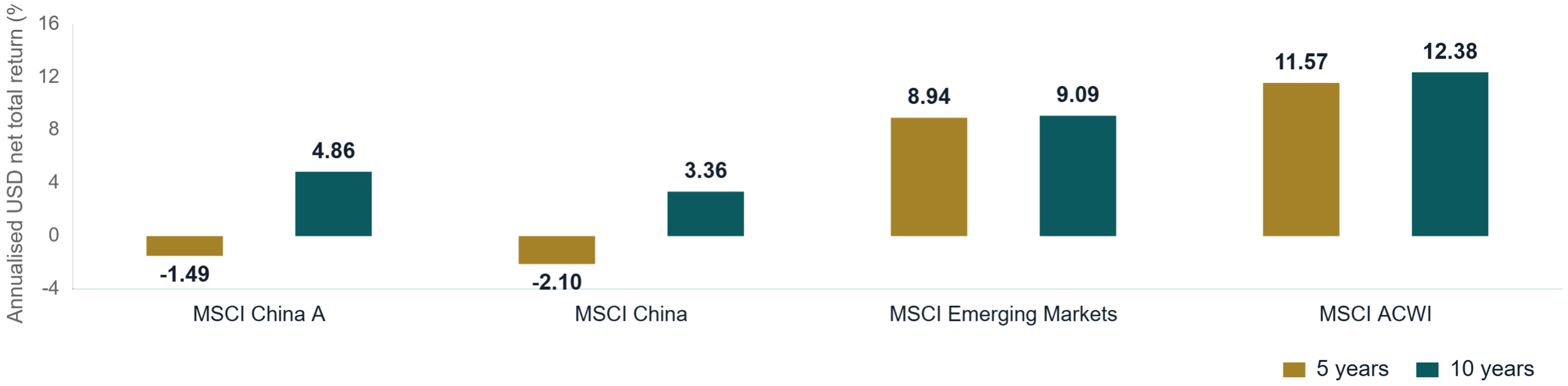
SESSION 4 · 45 MINUTES

# Why has growth translated poorly into shareholder returns?

Return evidence, listed-company selection, cash flows, valuation and market information

# Recent long-horizon returns also show a gap

Annualised USD net total returns · periods ending 30 September 2026 · % per year

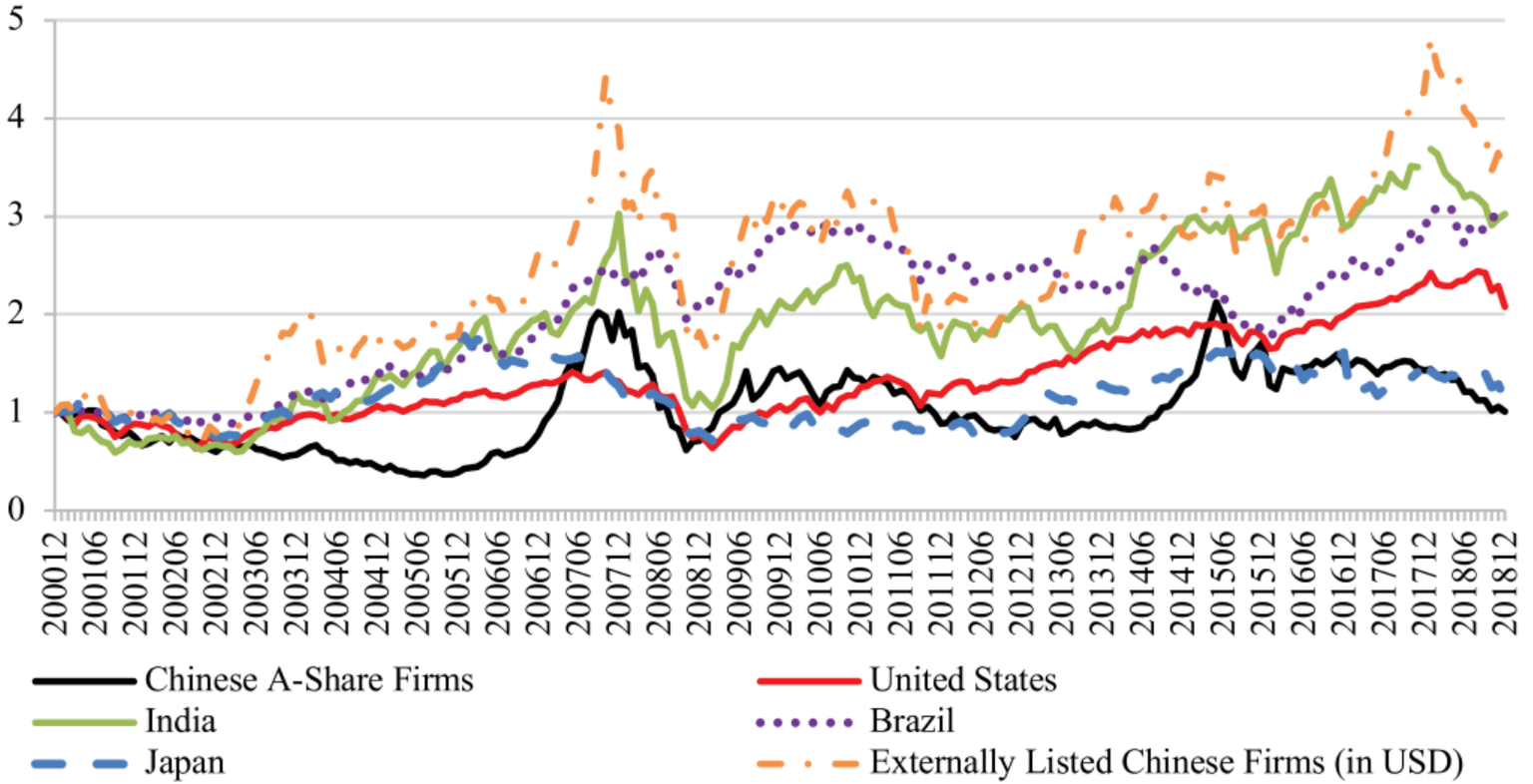



MSCI China A covers eligible mainland large/mid caps; MSCI China spans several listing venues.

*MSCI factsheets, 30 September 2026. Net total returns; China A pre-launch history is backtested.*

# Real A-share wealth barely grew in the 2000–2018 sample

Research case · Allen, Qian, Shan & Zhu · Journal of Finance, 2024




A-share portfolio: RMB 1 → RMB 1.01 in real terms, including cash dividends.

*Allen et al. (2024), Figure 1, pp. 1005–1006. Real local-currency returns; external Chinese firms shown in USD.*

# Three links connect economic growth to shareholder returns

**Which businesses?**
Listing access, sector mix and portfolio weights

→

**What reaches each share?**
Earnings, reinvestment, dilution and distributions

→

**At what price?**
Starting valuation and subsequent repricing

For a profitable company: price = earnings per share × P/E.

**Illustration**

EPS doubles; P/E halves → the share price is unchanged. Dividends add to the investor's return.

*Teaching framework; Allen et al. (2024); valuation identity from Session 1.*

# Listing rules influence which firms investors can own

**Admission criteria**
Profit records, board positioning and review

→

**Listed sample**
Some mature firms enter; other growth businesses remain private or list elsewhere

→

**Post-listing incentives**
Reporting, investment, restructuring and survival

In the study, average A-share ROA fell from 13% in the year before IPO to 6% in the year after.

An economy’s best growth opportunities need not match the firms or weights in a listed portfolio.

*Allen et al. (2024), pp. 1021–1022 and Table V.*

# Investment growth must produce cash flows for shareholders

| Evidence from Allen et al. | Interpretation |
| --- | --- |
| A-share firms invested more relative to assets than foreign comparison firms | More investment can expand the business without ensuring an adequate return |
| Net cash flow was lower, especially among large firms | Operating cash generation after investment was weaker in these comparisons |
| Matched unlisted Chinese manufacturers had stronger net cash flow | Weak listed-firm outcomes cannot be attributed only to the national economy |

**Net cash flow in this study**

Operating earnings before depreciation, less working-capital needs, taxes and capital expenditure; scaled by assets.

*Allen et al. (2024), Tables VII and VIII; sample and matching details in the paper.*

# China’s relative valuation premium became a discount

Bekaert, Ke, Wang & Xiaoyan Zhang · December 2022 working paper · 1995–2018 data




Earnings yield = E/P. Higher E/P means a lower P/E valuation; 0.06 = 6%.

*Bekaert, Ke, Wang & Zhang, The China–U.S. Equity Valuation Gap (December 2022 working paper), Figure 1.*

# Speculative resale demand can amplify valuation swings

**Disagreement and narratives**
Investors form different beliefs about future value

→

**Limited short selling**
Pessimistic views are harder to express through trades

→

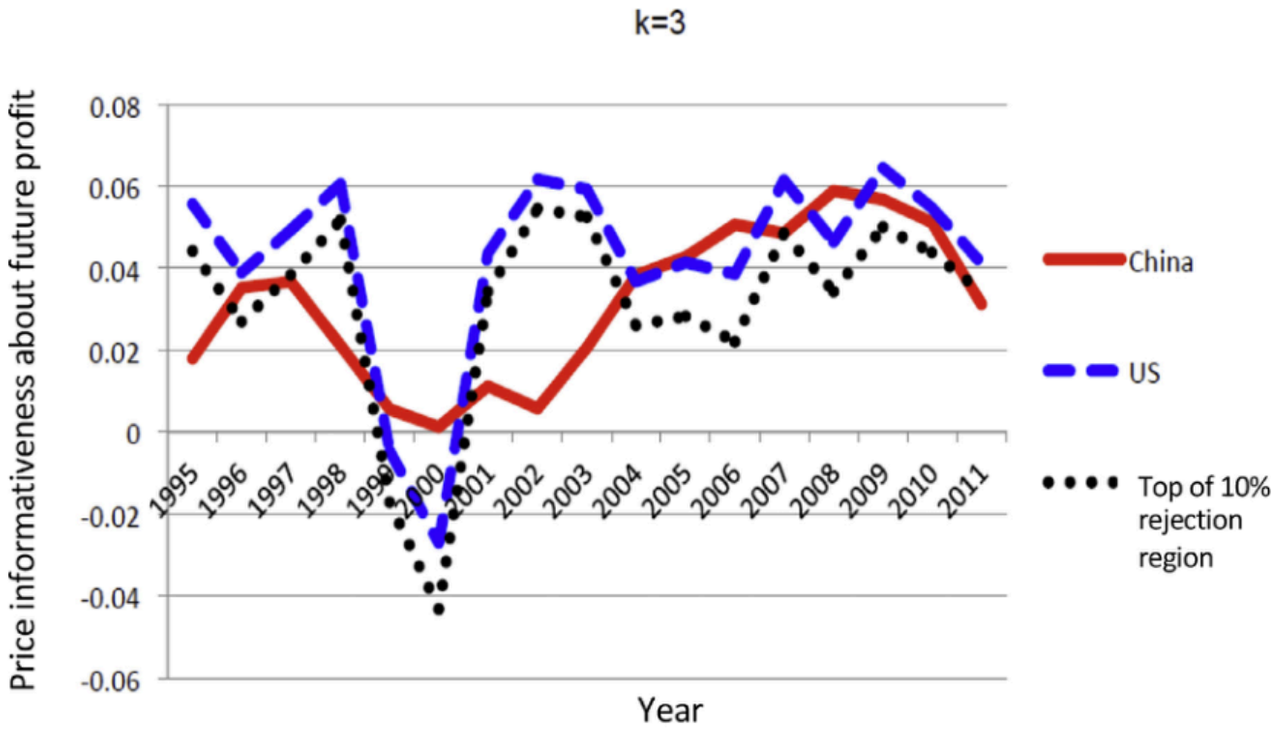
**Resale expectations**
Buyers may pay more because they expect a more optimistic buyer

| Evidence | What it adds |
|---|---|
| Chinese put warrants · 2005–2008 | Almost worthless at expiry, yet heavily traded at inflated prices |
| Retail trading · 2016–2019 | Small-account estimated trading contribution: −5.61% annually; largest group near zero after costs |
| Stocks versus Bitcoin or art | Stocks carry claims on business cash flows; resale demand can still dominate particular episodes |

*Scheinkman & Xiong (2003), JPE; Xiong & Yu (2011), AER; Jones et al. (2025), Table 8A.*

# A-share prices became informative about future profits

Jennifer Carpenter, Fangzhou Lu & Robert Whitelaw · JFE, 2021




Higher values mean prices explain more variation in future profits. The vertical axis is not a stock return.

*Carpenter, Lu & Whitelaw (2021), Figure 2, three-year forecast horizon; Figure 5 for ownership differences.*

# The evidence points to weak transmission from growth to shareholder wealth

| Link in the explanation | What the evidence supports |
|---|---|
| Economy → listed portfolio | Admission and overseas listing select different firms; large firms dominate value-weighted returns |
| Corporate expansion → cash for shareholders | Investment can grow faster than the cash it generates; governance affects outside shareholders |
| Earnings → market return | High starting valuations, speculative demand and later repricing can offset earnings growth |
| Market return → investor experience | Trading choices and costs can further reduce investors' gains |

Prices can still convey useful information about future profits throughout this process.

*Synthesis: Allen et al. (2024); Bekaert et al. (2022 WP); Jones et al. (2025); Carpenter et al. (2021).*

# What would make economic growth more rewarding for shareholders?

| Possible action | Connection to the evidence |
| --- | --- |
| Broaden access for productive growth firms | Improve the listed opportunity set |
| Strengthen governance and capital allocation | Improve the return on reinvestment and shareholder distributions |
| Improve disclosure and investor decision-making | Support valuation and reduce costly trading |

**DISCUSSION · 6 MINUTES**

**Choose one action. Explain which link it improves, what result would show progress, and why higher share prices alone would be an incomplete measure of success.**

# Implications: follow per-share value, valuation and investor costs

| For investors | For market reform |
| --- | --- |
| Evaluate the businesses and weights you actually own | Admission and exit should improve the listed opportunity set |
| Ask whether reinvestment raises future cash per share | Governance should reward productive investment and protect shareholder claims |
| Assess today’s price against future earnings and distributions | Judge progress through operating and shareholder outcomes, alongside financing raised |
| Manage turnover, fees and concentration | Support disclosure, enforcement and informed investment decisions |

**Central conclusion**

Economic growth rewards shareholders when productive businesses are investable, growth creates value per share, and the purchase price leaves room for a return.

*Implications drawn from the session’s evidence and the valuation framework.*

## Before next class

**Required**

Mishkin & Eakins: Chapters 17–19, banking institutions and bank management.

**Research follow-up**

Compare Allen et al. (2024) with Carpenter et al. (2021). Choose one Xiaoyan Zhang coauthored paper: valuation gaps or retail trading.

Next meetings: 9 and 12 November · Banks

# References · institutions and market measurement


- Mishkin & Eakins (2018), Financial Markets and Institutions, Ch. 13.
- Amstad, Sun & Xiong, eds. (2020), Handbook of China’s Financial System, Ch. 11.
- Carpenter & Whitelaw (2017), Annual Review of Financial Economics 9, 233–257.
- CAPCO: September 2026 market statistics; SSE and SZSE Trading Rules effective 6 July 2026.
- CSRC: registration rollout (2023), IPO pace (2023), delisting and implementation guidance (2024).
- HKEX Annual Report 2025; Hong Kong FSTB estimates tables (2026–27); Stock Connect guidance.
- SFC Practice Note 25 (2023); SEC depositary-receipt, VIE and HFCAA guidance; PCAOB (2025).
- Alibaba: 2024 listing and Connect announcements; FY2026 annual report and investor FAQ.
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- Hang Seng Indexes: A/H Premium factsheet, 30 April 2026; S&P DJI index methodology.
- Tesla FY2025 Form10-K; Toyota FY2024–26 financial summaries; BYD FY2025 annual report and dividend announcements.
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- Lee, Qu & Shen (2017), VoxChina: historical IPO/reverse-merger figure.

# References · research for the performance case


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- Carpenter, J. N., F. Lu & R. F. Whitelaw (2021). The real value of China's stock market. Journal of Financial Economics 139(3), 679–696.
- Goldstein, I., B. Liu & L. Yang (2026). Market feedback: Evidence from the horse's mouth. Journal of Financial Economics 180, 104255.
- Hansman, C., H. Hong, W. Jiang, Y.-J. Liu & J.-J. Meng (2025). Effects of Credit Expansions on Stock Market Booms and Busts. Review of Financial Studies 38(5), 1502–1544.
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- Qian, Y., J. R. Ritter & X. Shao (2024). Initial Public Offerings Chinese Style. JFQA 59(1), 1–38.
- Bekaert, G., S. Ke, X. Wang & X. Zhang (December 2022). The China–U.S. Equity Valuation Gap. Working paper.
- Liao, L., B. Liu & H. Wang (2014). China's secondary privatization: Perspectives from the Split-Share Structure Reform. JFE113(3),500–518.

APPENDIX

# Optional reference pages

Valuation, measurement and research interpretation

# Appendix: the finite-horizon dividend model

$$P_0 = \sum_{t=1}^{T} \frac{E[D_t]}{(1+k_e)^t} + \frac{E[P_T]}{(1+k_e)^T}$$

$$P_T = \frac{D_{T+1}}{k_e - g} \quad \text{when a constant-growth terminal model is appropriate}$$

| Input | How to interpret it |
|---|---|
| Early cash flows | Forecast business performance, reinvestment and payout |
| Required return | Use the risk framework; assess estimation uncertainty |
| Terminal growth | Use a sustainable long-run rate below the required return |
| Terminal value | A model assumption, not a directly observed future sale price |

*Mishkin & Eakins, Ch. 13.*

# Appendix: ratios that need a stated denominator

| Measure | Definition | Common confusion |
|---|---|---|
| A premium over H | A / FX-adjusted H − 1 | Different from H discount relative to A |
| H discount relative to A | 1 − FX-adjusted H / A | Uses A as the denominator |
| Index weight | Chosen share of portfolio value | Share price and company market value differ |
| Market capitalisation | Share price × outstanding shares | Growth includes new shares and new listings |
| Annualised compound return | Ending wealth / starting wealth, raised to 1/years, minus 1 | Different from the arithmetic mean of annual returns |

# Appendix: aggregate growth and per-share growth

$$EPS = \frac{\text{Net income}}{\text{Shares outstanding}}$$

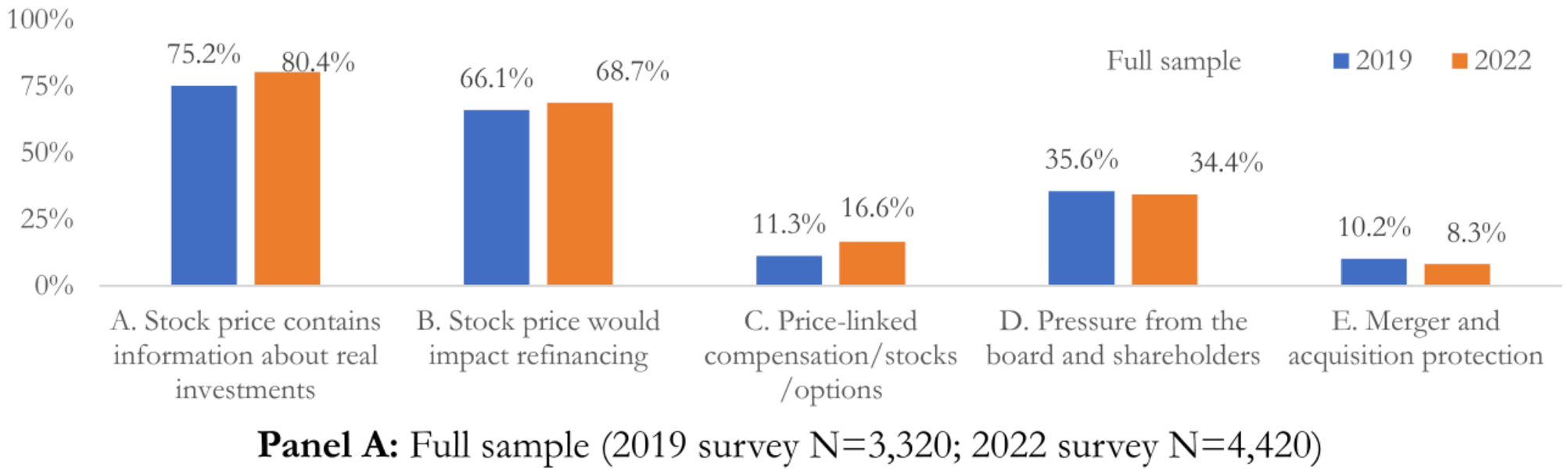
| Hypothetical company | Initial year | Later year |
|---|---|---|
| Net income | 100 | 120 |
| Shares outstanding | 100 | 150 |
| Earnings per share | 1.00 | 0.80 |

New shares can finance valuable assets. Evaluate the proceeds, issue price and subsequent cash flows.

Market expansion becomes shareholder value when existing claims benefit from the capital raised.

# Appendix: firms report learning from stock prices

Goldstein, Liu & Yang · Journal of Financial Economics, 2026 · surveys in 2019 and 2022




**Panel A:** Full sample (2019 survey N=3,320; 2022 survey N=4,420)

2022 learning response: 80.4% of 4,420 firms answering the motivation question. Multiple answers allowed.

*Goldstein, Liu & Yang (2026), Figure 3A; Carpenter, Lu & Whitelaw (2021).*

# Appendix: credit availability and market cycles

**Credit availability**
Eligible investors can finance larger positions

→

**Demand and prices**
Anticipation and buying pressure affect valuations

→

**Adverse movement**
Margin calls can reinforce selling

Hansman et al. (RFS 2025): margin-lending expansion in 2010–15 raised affected stock prices; institutions anticipated the effect.

*Hansman et al. (2025), Review of Financial Studies 38(5),1502–1544.*

# Appendix: measuring historical cash-dividend payout

$$p_y = \frac{\text{ordinary cash dividends attributed to profit year } y}{\text{earnings attributable to ordinary shareholders in year } y}$$

| Company | Financial-year ends | Cash-dividend payout history |
|---|---|---|
| Tesla | December 2023 / 2024 / 2025 | 0% / 0% / 0% |
| Toyota | March 2024 / 2025 / 2026 | 20.4% / 25.0% / 32.1% |
| BYD | December 2023 / 2024 / 2025 | 30.0% / 30.0% / 10.0% |

**Worked example · BYD 2025**

RMB 3.264bn cash dividend ÷ RMB 32.619bn attributable profit ≈10.0%.

Match dividends to the profit year. Adjust per-share comparisons for stock splits; identify buybacks separately.

*Company annual reports, financial summaries and profit-year distribution disclosures; ratios rounded.*

# Appendix: reverse valuation and sensitivity

$$M_0 = p_H \sum_{t=1}^{10} q^t + \frac{p_T(1+g_T)}{k-g_T} q^{10}, \qquad q = \frac{1+g_H}{1+k}$$

$M_0$ = trailing P/E; gH = first-stage EPS growth; k = required return; pH / pT = early / mature payout. Early payouts: 0% / 32% / 10%; mature growth gT = 3%.

Vary required return; mature payout 70%

| k | Tesla | Toyota | BYD |
|---|---|---|---|
| 8% | 52.0% | 0.2% | 9.1% |
| 10% | 60.1% | 5.0% | 14.8% |
| 12% | 67.2% | 9.2% | 19.7% |

Vary mature payout; required return 10%

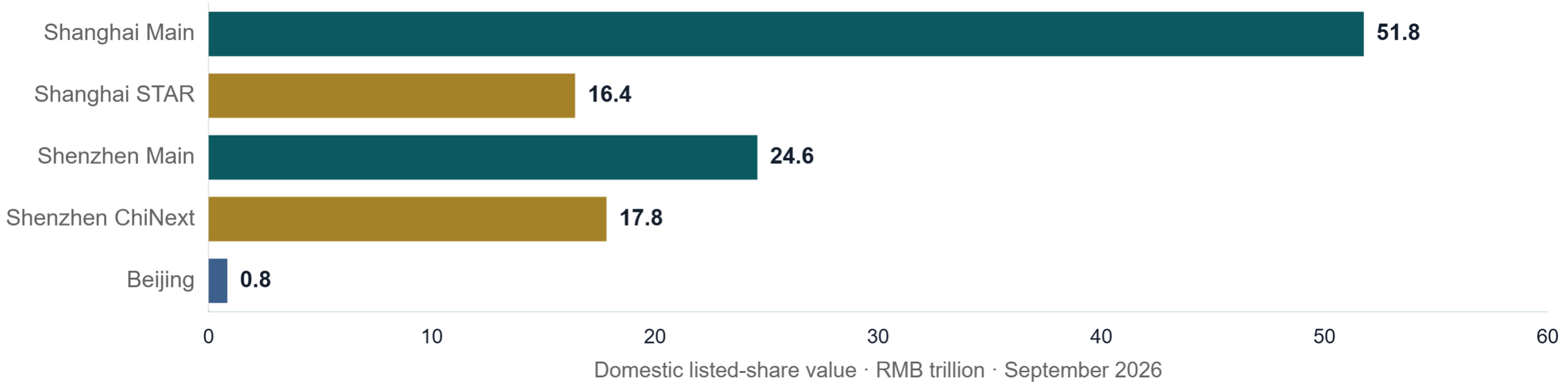
| pT | Tesla | Toyota | BYD |
|---|---|---|---|
| 50% | 65.6% | 8.0% | 18.5% |
| 70% | 60.1% | 5.0% | 14.8% |
| 90% | 56.1% | 2.8% | 12.0% |

Entries are annual EPS growth in years 1–10. Only the terminal growth rate must stay below the required return.

*Author calculations from the stated dividend model; observed P/Es are the rounded 30 October 2026 inputs.*

# Appendix: market value by board

Domestic listed-share market value · 30 September 2026 · RMB trillion




The two Main Boards account for about two-thirds of domestic listed-share value.

*China Association for Public Companies, September 2026 statistical report, Table 5-1.*

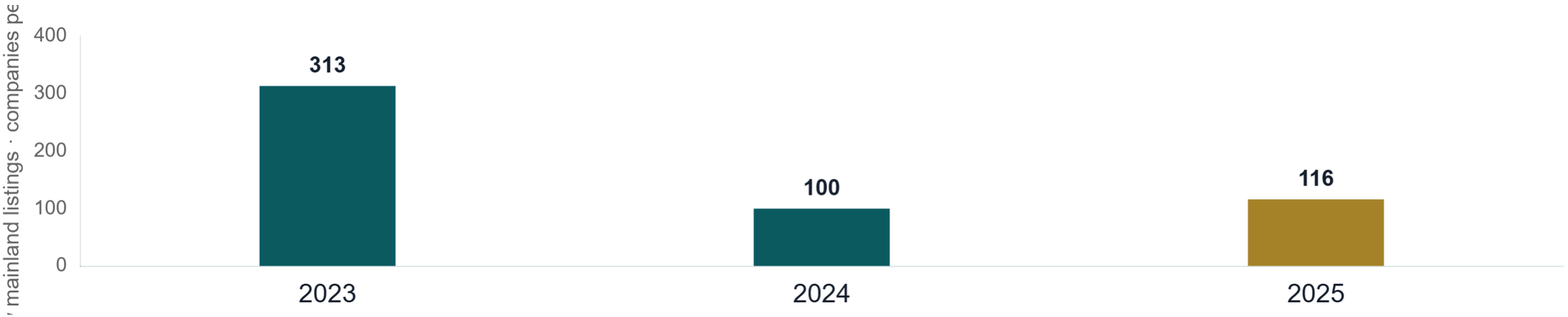
# Appendix: A-share trading rules

| Rule | Mainland A-share cash market | Implication |
|---|---|---|
| Resale | Newly bought shares generally cannot be sold the same day | Intraday reversal is constrained |
| Usual daily price limit | Main Boards: 10%; STAR and ChiNext: 20% | A limit restricts daily movement; losses can continue over several days |
| IPO exception | No daily limit in the first five trading days on these boards | Issue pricing and aftermarket price discovery are distinct |
| Short selling | Requires permitted access, eligible securities and available borrowing | A high valuation can be difficult to trade against |

*SSE and SZSE Trading Rules, effective 6 July 2026.*

# Appendix: recent IPO counts

New mainland IPO companies · full calendar years




**Latest comparable period · January–September**

2025: 78 → 2026: 123. Of the 2026 total, 62 listed on the Beijing Stock Exchange.

*China Association for Public Companies, September 2026 statistical report, Table 8-1.*