

THE INVISIBLE WEB

Decoding Stock Momentum in China

How ‘Strength Centrality’ reveals the market’s hidden influencers and followers.

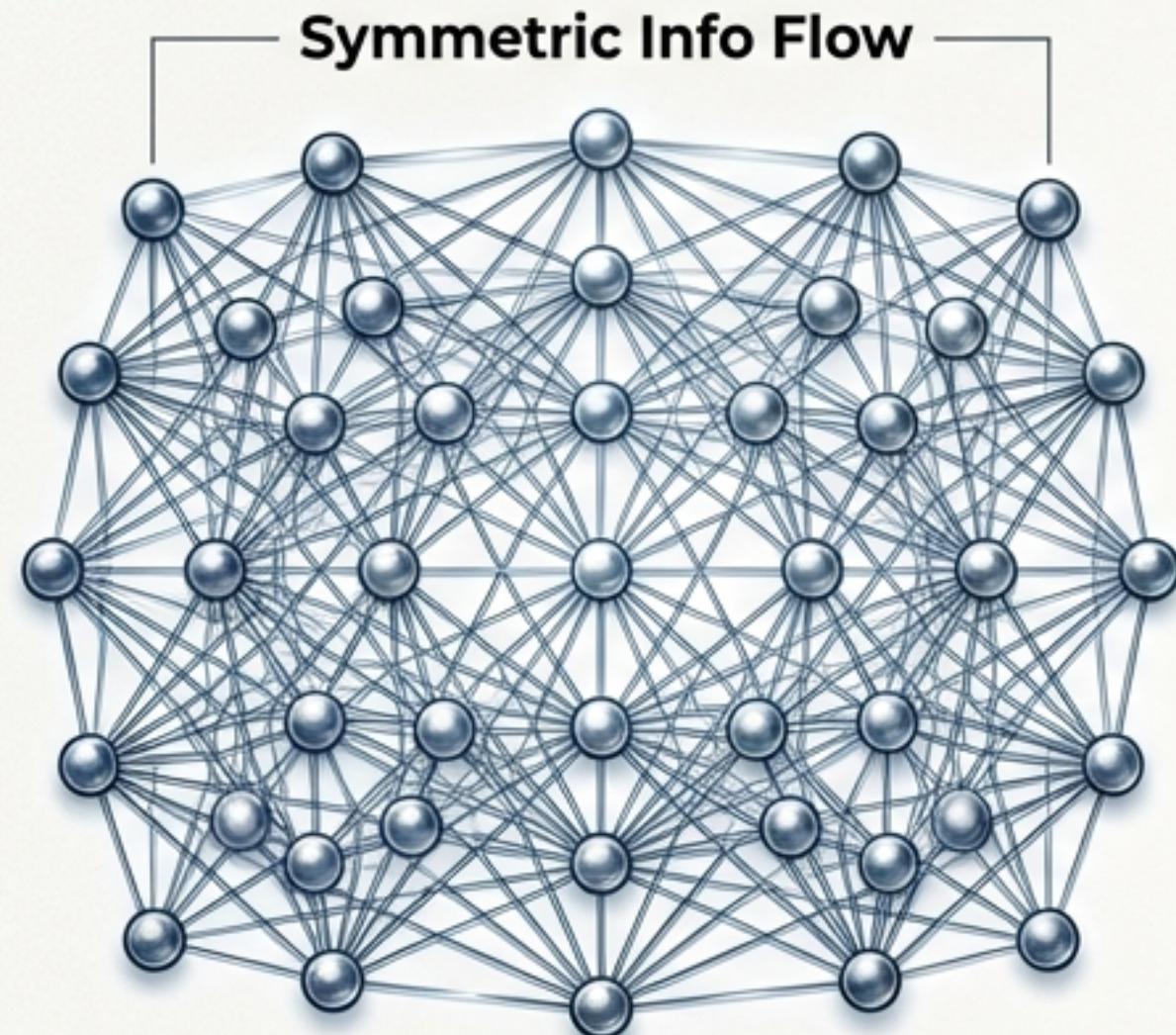
THE HOOK:

In a market of 5,000 stocks, information doesn't travel instantly. It takes a path. We found the map.

Based on the 2025 study "Detecting cross-firm momentum effects via shared analyst coverage" by Mao, Shi, Chen, and Wan. Published in the Journal of International Financial Markets, Institutions & Money.

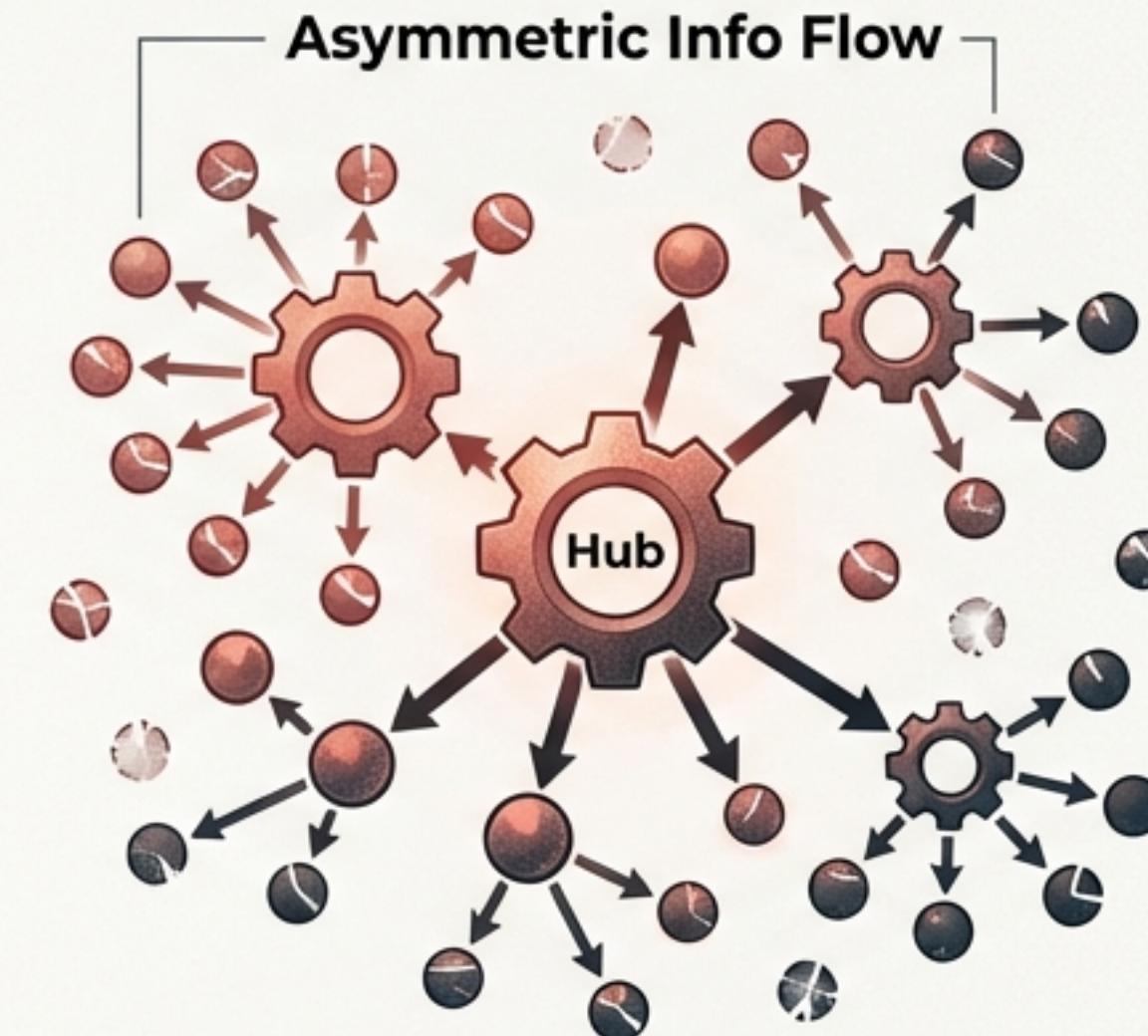
THE PROBLEM: EMERGING MARKETS ARE "NOISY" AND ASYMMETRIC

The Theory (Developed Markets)



Information spreads instantly and evenly.
Everyone knows everything at once.

The Reality (China)



Retail-dominated. Analyst attention is concentrated.
Information gets stuck.



Key Insight

The Opportunity: If we can track the trickle of information from the 'Haves' to the 'Have-Nots', we can predict the price moves of the laggards.

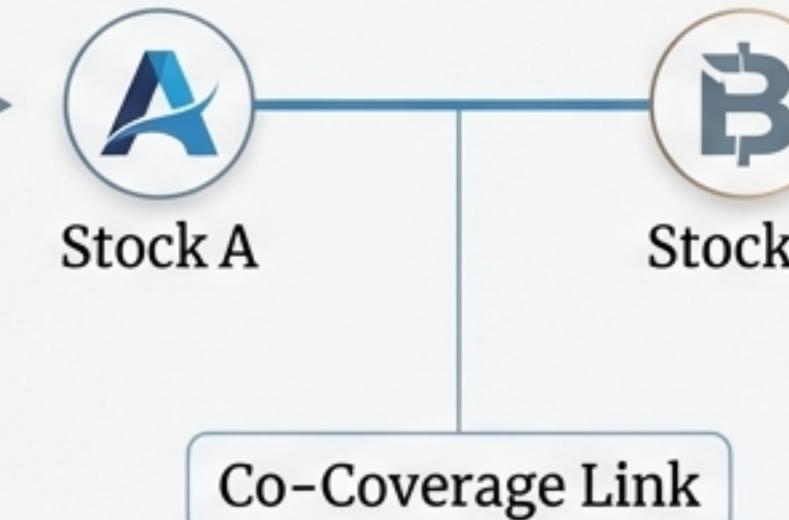


DRAWING THE MAP: THE ANALYST COVERAGE NETWORK

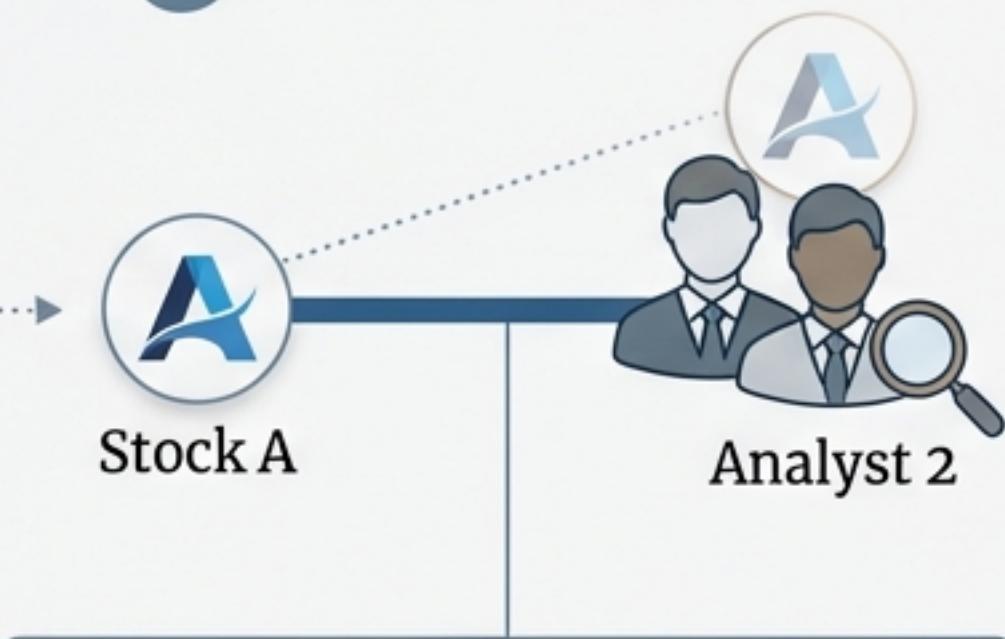
1 THE ANALYST



2 THE LINK



3 THE WEIGHT



Data Scope: 2010–2023 |
360,000+ Observations

2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 2024

We build these networks monthly, tracking millions of connections.

THE FLAW IN THE OLD MAP: NOT ALL CONNECTIONS ARE EQUAL



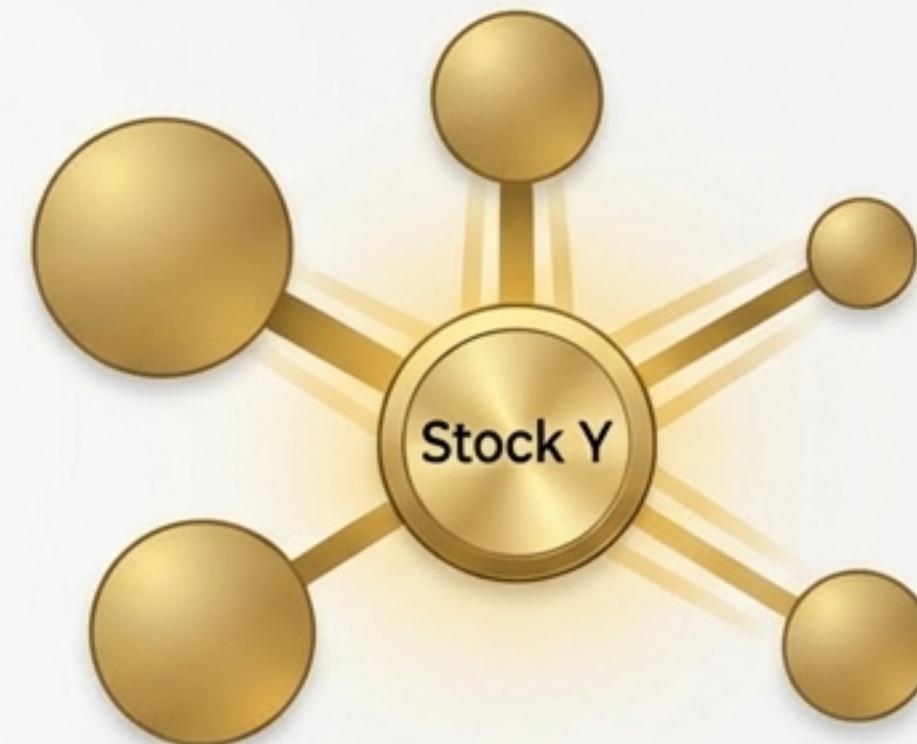
The Old Method (Simple Count)



Connection Score = 5

Treats a connection to a tiny bakery
the same as a connection to a bank.

The New Method (Strength Centrality)



Connection Score = 5 (Weighted)

Measures the "Loudness" of the connection.
A link to a Market Leader is worth more.

Previous studies (Ali & Hirshleifer, 2020) just counted friends.
We measure the power of those friends.



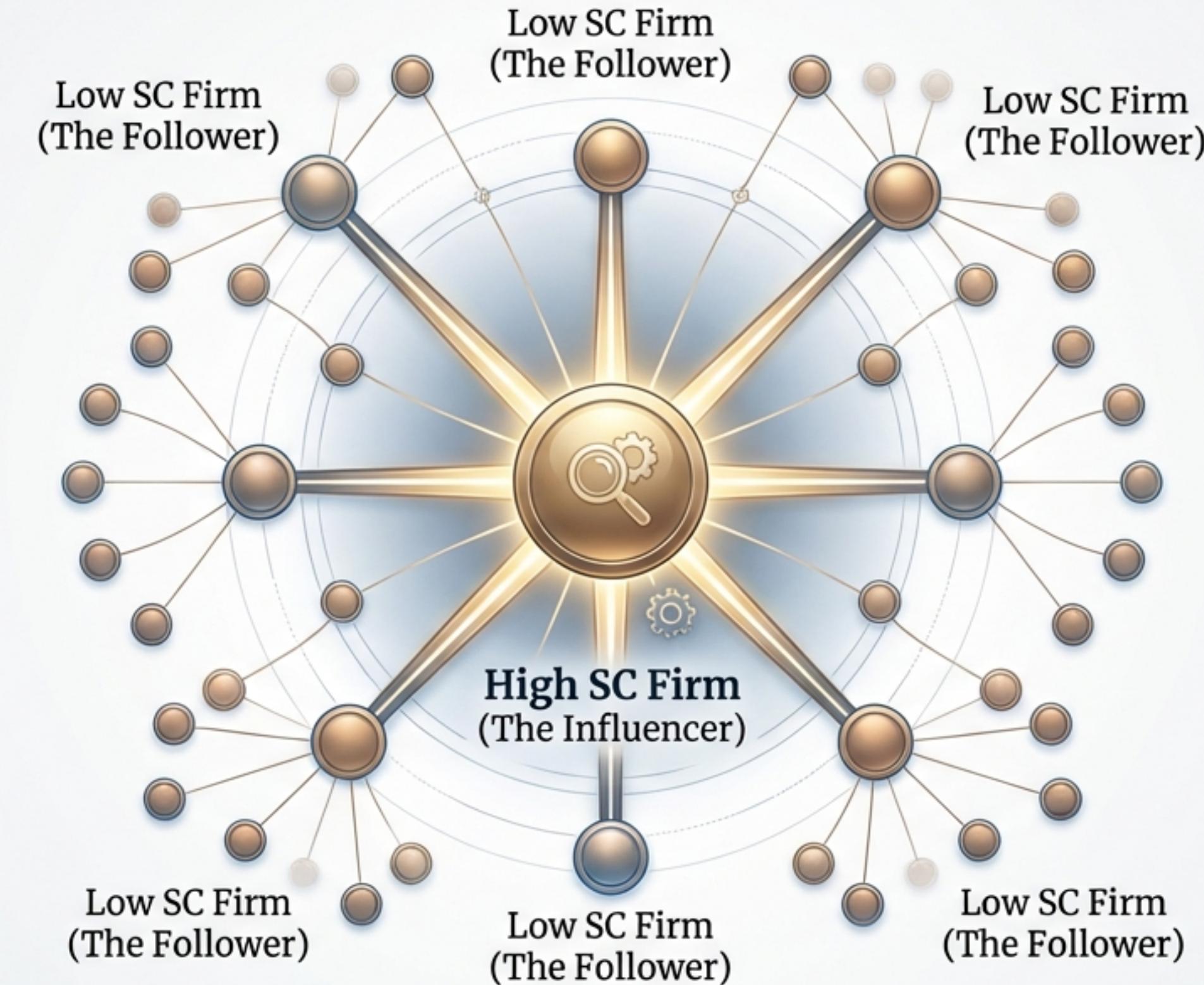
THE HERO METRIC: STRENGTH CENTRALITY (SC)

Definition

SC is the sum of the weights of all edges connected to a firm.

It measures total connectedness.

$$SC_j = \sum_j (n_{j,m})$$



The Metaphor

Think of the stock market as a social network.

The High SC stock is the 'Celebrity'. It receives news first and reacts instantly.

The Low SC stock is the 'Follower' who reacts later.

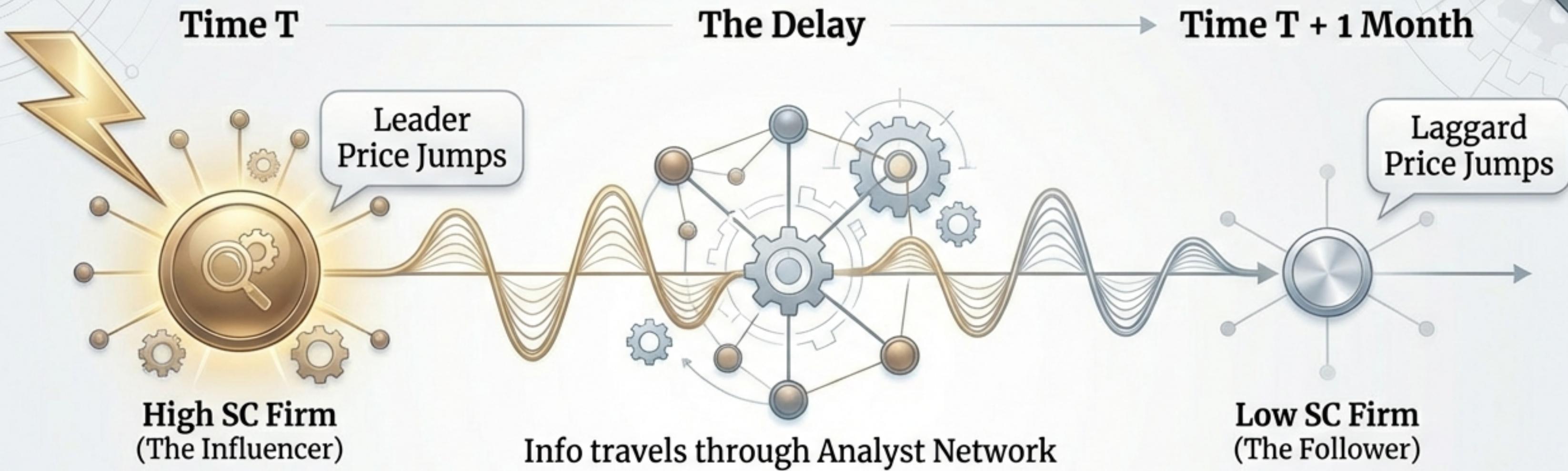


Previous studies (Ali & Hirshleifer, 2020) just counted friends. We measure the power of those friends.



NotebookLM

THE RIPPLE EFFECT: PROFITING FROM THE DELAY



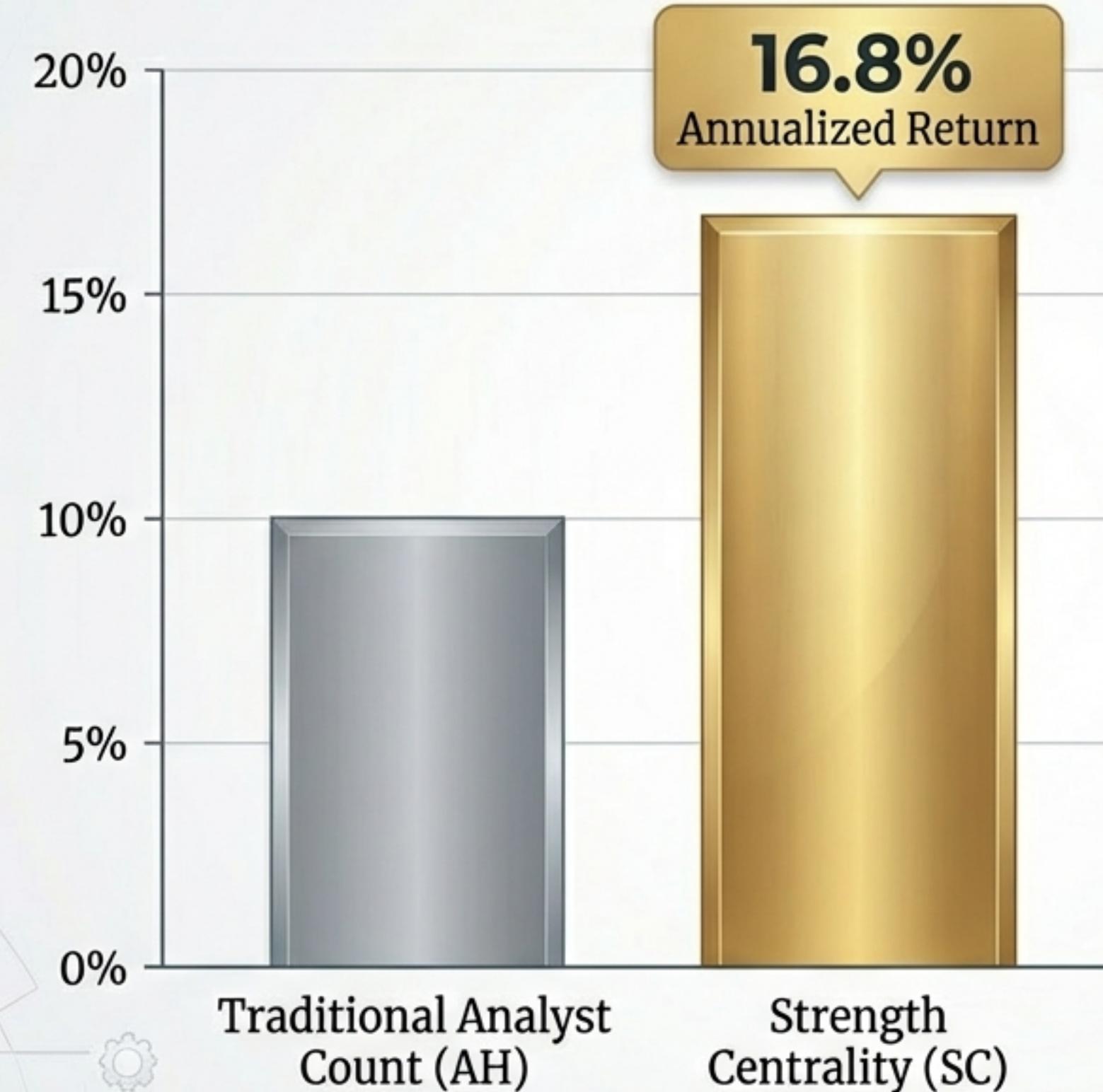
Financial Detective

The Strategy

1. Identify the Leaders (High SC).
 2. Watch their returns today.
 3. Buy their 'connected' Laggard peers tomorrow.
- We use the Leader to predict the Follower.

Previous studies (Ali & Hirshleifer, 2020) just counted friends. We measure the power of those friends.

THE VERDICT: SC OUTPERFORMS TRADITIONAL STRATEGIES



Financial Detective

Key Insight:

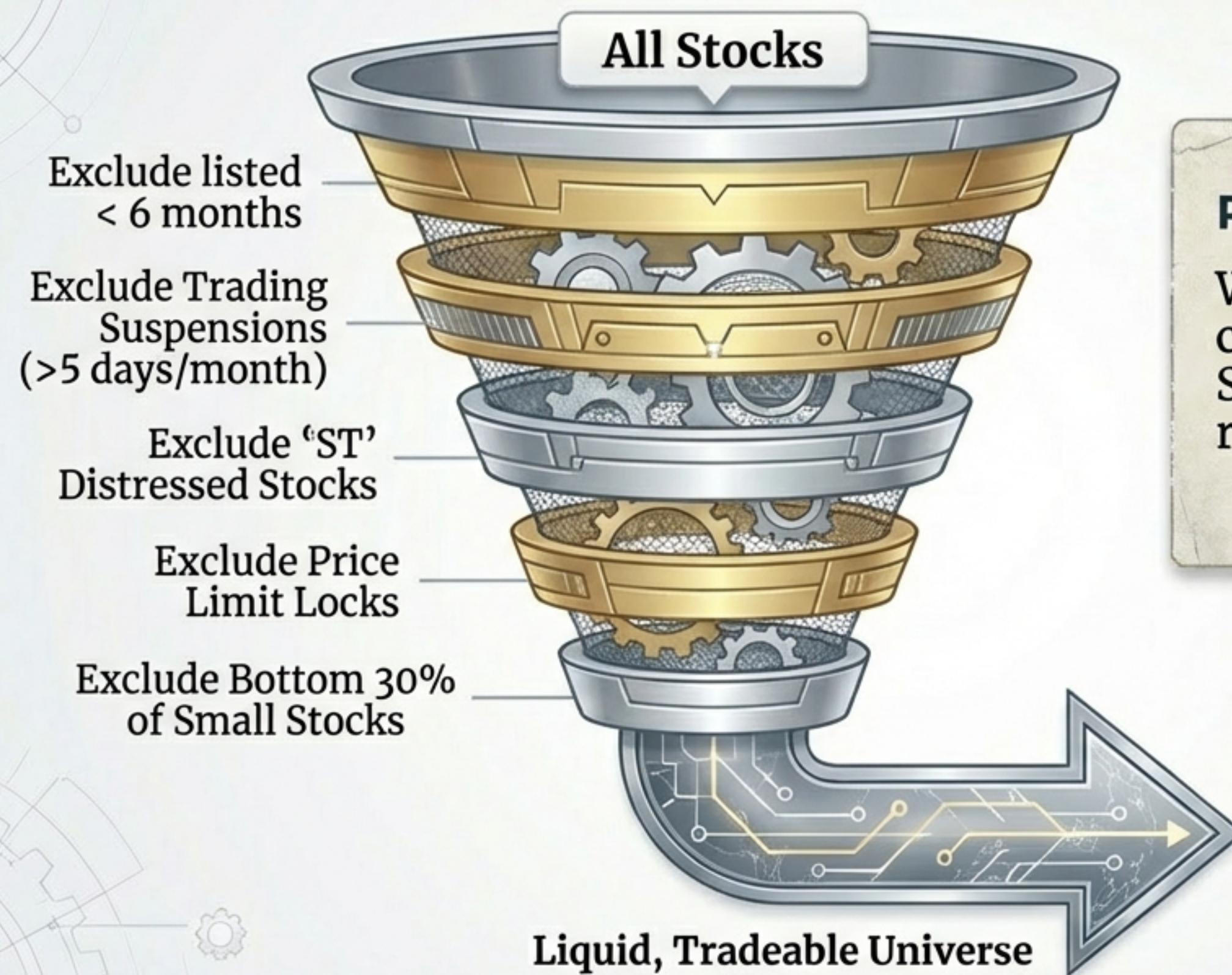
The Long-Short portfolio (buying High SC-connected stocks and shorting Low ones) generates significant alpha across all pricing models (Fama-French 6, q5, etc.).

- Monthly Alpha: 1.042%

Conclusion: This is the strongest signal for predicting cross-sectional returns in the Chinese market.

Previous studies (Ali & Hirshleifer, 2020) just counted friends. We measure the power of those friends.

SURVIVING THE STRESS TEST: THE RIGOROUS FILTER



Financial Detective

Robustness:

While traditional strategies collapsed under this filter, the Strength Centrality signal remained real and tradeable.

SC Strategy
still yields
~10% Alpha

Previous studies (Ali & Hirshleifer, 2020) just counted friends. We measure the power of those friends.

PROFILE OF A LEADER: THE HIGH SC FIRM

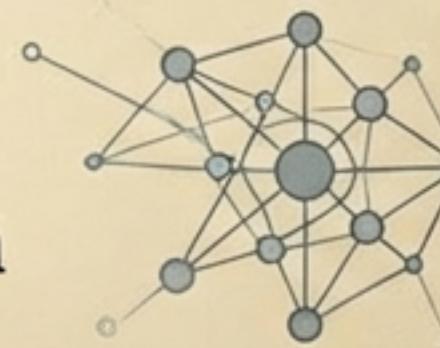
Character Dossier

DOSSIER: HIGH SC FIRM



Attributes:

- Market Cap: Large
- Analyst Coverage: High
- Search Volume: High
- Ownership: High Institutional & Foreign Exposure (QFII/FIEs)
- Trading: Low Arbitrage Costs



Role: The Information Hub.
These firms process news efficiently.
Prices reflect value quickly.
They are the bellwethers.



PROFILE OF A FOLLOWER: THE LOW SC FIRM

Role: The Periphery

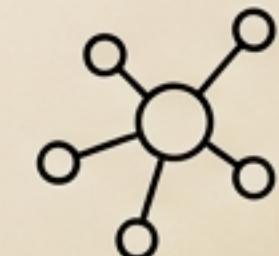
They are the last to know. Their price adjustment is sluggish, creating the profit opportunity for momentum traders.

Character Dossier

DOSSIER: LOW SC FIRM

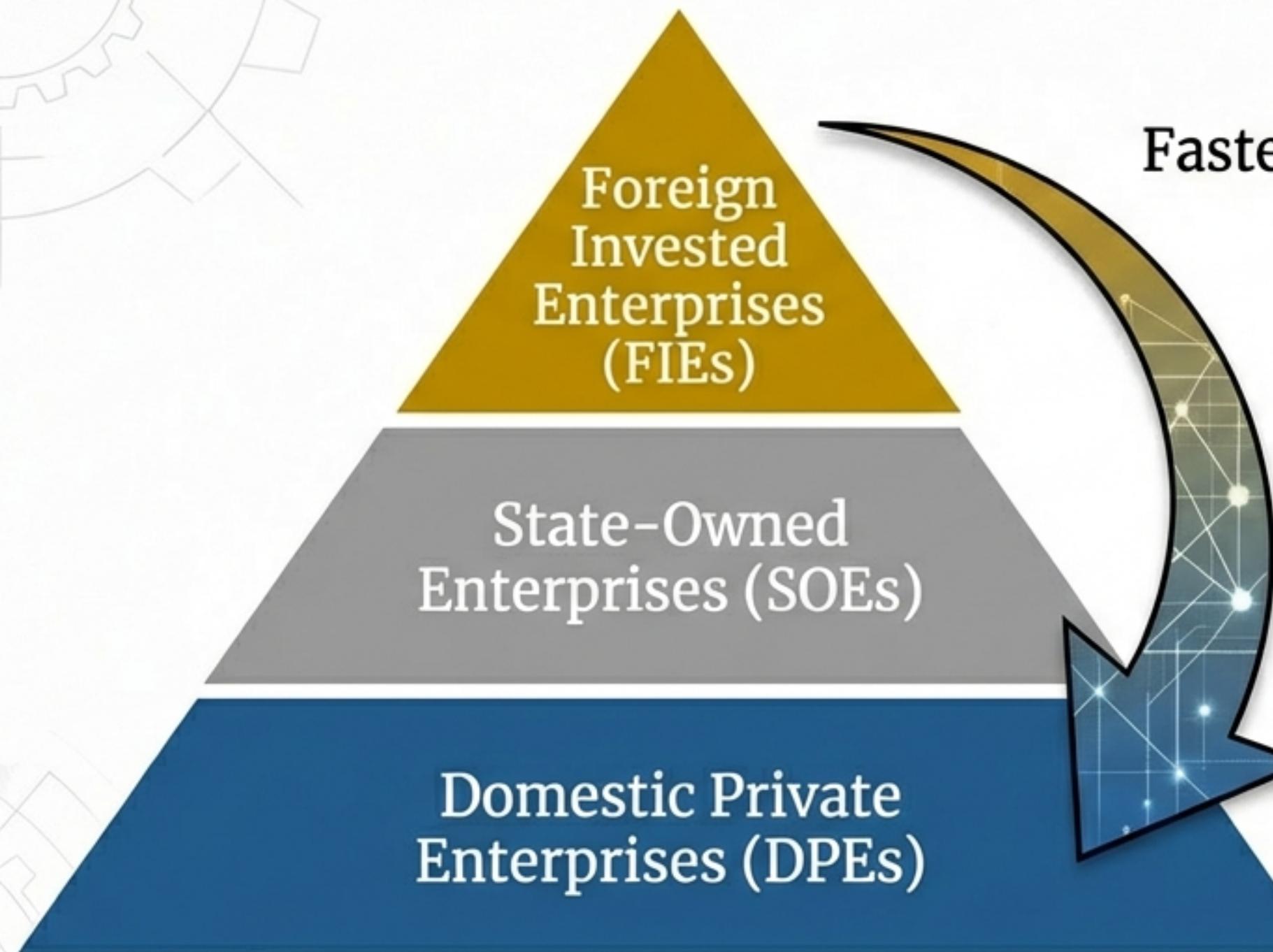


- Market Cap: Small
- Ownership: Domestic Private Enterprises (DPEs)
- Trading: High Arbitrage Costs
- Visibility: Low search volume, few analysts





THE HIERARCHY OF INFORMATION FLOW



Fastest Info Processing (Leaders)

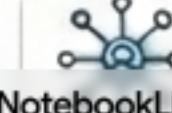


Spillover Direction: Information spills over from globalized FIEs to local DPEs. FIEs are subject to global scrutiny, making them the 'Smart Money' hubs.

Slowest Info Processing (Receivers)



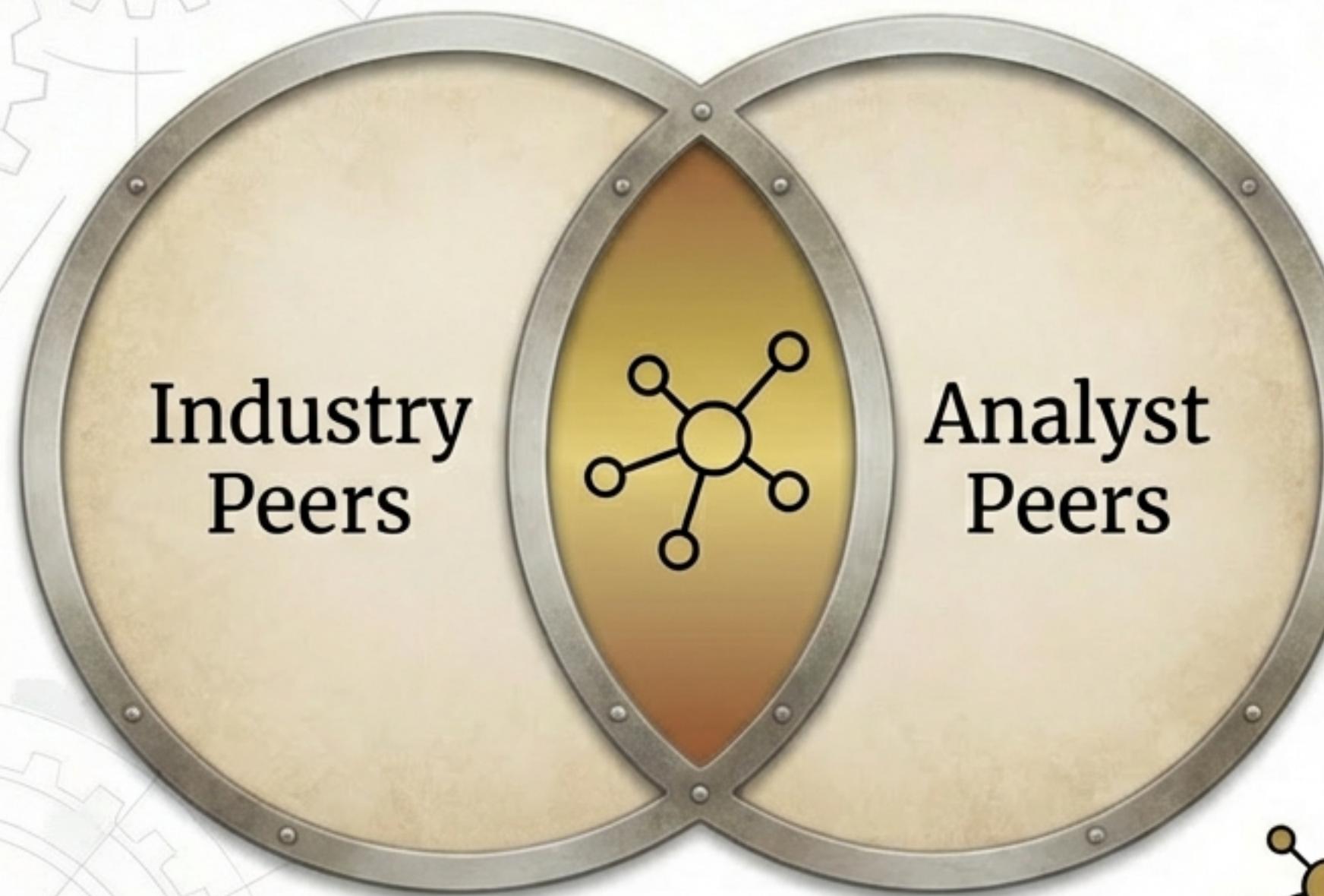
Previous studies (Ali & Hirshleifer, 2020) just counted friends. We measure the power of those friends.



NotebookLM

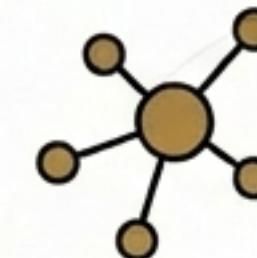


IT'S NOT JUST INDUSTRY MOMENTUM



The Skeptic's Question: Is this just big tech stocks pulling up small tech stocks?

The Answer: No.



The Test: We removed all connections between firms in the same industry.

The Result: The signal remained strong. This is a true Network Effect. A bank can predict a manufacturer if they share the same analyst network.



Previous studies (Ali & Hirshleifer, 2020) just counted friends. We measure the power of those friends.



THE MASTER KEY: WHY SC BEATS THE ALTERNATIVES

	Metric	Result
1. Merriweather	Analyst Count 	Cannot explain SC returns. 
2. Merriweather	Industry Peers 	Cannot explain SC returns. 
3. Merriweather	Strength Centrality (SC) 	Explains the others. 

The Spanning Test Verdict

Merriweather: SC is the “Master Key”. It captures cross-period fundamental linkages than any other metric.

It identifies the long-term structural pipes of information flow, not just temporary noise.

Previous studies (Ali & Hirshleifer, 2020) just counted friends. We measure the power of those friends.

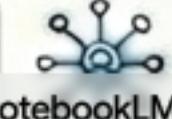


GLOBAL IMPLICATIONS: A PORTABLE TOOL



1. Don't treat all connections equally.
2. Identify the Network Centrality Leaders (High SC).
3. Watch them to predict the periphery.

Policy Insight: Financial openness (foreign investment) speeds up price efficiency. Integration creates “Hubs” that disseminate truth to the rest of the market.



CASE CLOSED: MOMENTUM IS DELAYED INFORMATION



- The Analyst Network is the highway for information.
- Strength Centrality (SC) identifies the toll-booths.
- Buy the connected peers of winning Leaders.
- Profit from the delayed reaction of the Laggards.

Momentum isn't magic; it's just information taking the scenic route to the periphery.