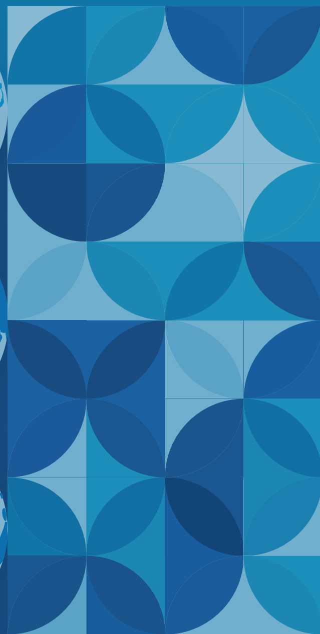
2022-2023 WILSON CHINA FELLOWSHIP

Necessary Fictions: The CSRC's Stock Market Philosophy and its Implications for US-China Engagement

John Yasuda is an Assistant Professor at Johns Hopkins University and a 2022–23 Wilson China Fellow



Abstract

Why do Chinese regulators continue to employ hard paternalistic tools that appear to undermine their efforts to build a better and more global stock market? In contrast to studies focusing on fleet-footed capital, political patronage, and state capitalism, this research project unveils the hidden *ideational* underpinnings of financial regulation in China to explain the persistence of hard paternalist tools. As a matter of Sino-American financial relations, the CSRC's interventionist behavior has fueled conflicts over information disclosure requirements, led to restrictions on US investments in China, and the de-listings of Chinese firms on American bourses. I argue that regulators in China, as they are elsewhere, are guided by a host of "necessary fictions" that undergird financial regulatory interventions. In particular, I highlight how Chinese regulators are driven by the specter of irrational investors, a paternalistic state, and an inefficient market. These economic ideas are self-reinforcing, and shape the way regulators approach the market, sometimes with devastating consequences. In a moment where bilateral regulatory mistrust threatens to dismantle many of the financial ties built-up over the last three decades, understanding the mindset of the Chinese regulator becomes all the more important.

Policy Implications and Key Takeaways

- Whereas in the Anglosphere, financial regulation assumes the presence of rational investors, an arms-length regulatory state, and semi-strong commitment to the efficient capital market hypothesis, in China, the regulator is driven by the specter of irrational investors (the anchoring fiction), a paternalistic state (the enabling fiction), and distrust in the market mechanism (the rationalizing fiction).

- US Policymakers should remain skeptical that new financial reforms in the Chinese equity market—a proposed registration-based system, increased access to on-shore markets, and a liberalizing trading regime—will lead to genuine convergence on the US-led system of financial governance.

- Pressures from global capital and the gradual diffusion of financial ideas vis a vis technical assistance, regulatory exchanges, and increased engagement in international regulatory bodies have reached their limit. Despite extensive consultations from the 1990s, financial regulators in China have settled on a regulatory philosophy diametrically opposed to the one adopted in the Anglosphere.

- Conflict between the SEC and CSRC is likely to increase in the short-to-medium term. While compromise is possible if core regulatory principles of the CSRC are not violated, increased scrutiny will likely drive Chinese-listed companies back to Hong Kong or the Mainland. US government scrutiny of outbound US investment (either by House Select Committee on China or the White House) will undermine China's integration with the global financial order. This is an unavoidable consequence of the increased securitization of financial flows.

- One area for positive engagement with China is through the stock connect schemes via Hong Kong, which provide a number of safeguards for foreign capital, while also allaying Chinese government concerns about capital flight. These initiatives should be supported and used as a trust-building mechanism. However, the continued viability of the scheme is conditional on the "One Country, Two Systems" framework, which is under pressure.

Introduction

The development of China's stock market is a story of failed promise. State efforts to liberalize, globalize, and revitalize bourses in Shanghai, Shenzhen, and Beijing have fundamentally changed the financial landscape of its capital markets with new innovation focused boards, a growth in financial product offerings, and increased on-shore foreign investment opportunities.[1] Yet its position as the second largest equities market in the world belies fundamental problems in listing, trading, and product offerings: extreme volatility, inefficient price discovery, a sclerotic listings process, and rampant corporate fraud are defining features of its stock market.[2] The Chinese equities market remains an underutilized venue for corporate financing, standing at a mere 3 percent of total social financing in 2021.[3] Why have state initiatives failed to establish a functioning stock market?

An extensive literature highlights how China's industrial policy, closed capital account, and lopsided emphasis on the state-owned sector have had a distortionary effect on its stock market development. Compounding this narrative is the *seemingly* erratic behavior of the CSRC (China Securities Regulatory Commission). Arbitrary interventions of China's national team at the direction of the CSRC, which has deployed over $158 billion to buoy the market, are viewed as warping the market.[4] The regulator's frequent bans on shorting have angered major fund managers, who argue they are deprived of a hedging tool to manage risk.[5] And, haphazard moratoriums on listings in sectors tied to national security or pose significant risk to the economy have closed down much needed access to corporate financing.[6] These approaches towards the stock market impede price discovery, contribute to moral hazard, and arguably make it more crisis prone as a risk calculus never obtains among investors.

Analyses of the CSRC's behavior have tended to focus on the institutional and political factors with less attention paid to the deeper ideological forces at play that suggest a more consistent approach to stock market governance. This paper argues that regulators in China, as they are elsewhere, are guided by a host of "necessary fictions" that undergird financial regulatory interventions.[7] A "necessary fiction" is a regulatory construct—an untested assumption taken to be true—that regulators use to make sense of an uncertain environment to identify problems and develop solutions. These constructs are fictional, in so far as the reality is feigned or imagined, either because they have yet to be em-

pirically validated, are overly reductive, or overly inclusive. They are necessary for the regulatory enterprise in so far as they provide a workable theory to test hypotheses, develop solutions, and implement policies. These necessary fictions interweave with varying cross-pressures emanating from foreign capital, state capitalist or developmental legacies, and state-business relations, which together ultimately shape a regulator's approach to the market.

An anchoring fiction identifies an idealized investor subject that is the target of regulation ("the who"). The enabling fiction explains the role of the state and its appropriate tools ("the how"). Finally, a rationalizing fiction provides the rationale for regulatory interventions ("the why"). Whereas in the Anglosphere, financial regulation assumes the presence of rational investors, an arms-length regulatory state, and semi-strong commitment to the efficient capital market hypothesis, in China, the regulator is driven by the specter of irrational investors (the anchoring fiction), a paternalistic state (the enabling fiction), and distrust in the market mechanism (the rationalizing fiction). These economic ideas shape the way regulators approach the market, sometimes with devastating consequences. As such, any account that lacks an explanation of the philosophy of the Chinese regulator risks an incomplete and ultimately inaccurate understanding of China's financial evolution.

The study's findings draw on over forty elite-level interviews from 2015 to 2019 with CSRC regulators, stock exchange directors, and financial executives and over 5000-pages of archival material. Because much of the regulatory decision making process is veiled from the broader public, interviews provide an opportunity to understand the reasoning behind regulatory rules. Interviews focused on identifying the link between a necessary fiction and a hard paternalistic approach to the stock market ("measurement data"), in addition to addressing potential confounding variables ("identifying data") (Nielsen, 2016). Data from interviews were triangulated by meeting with regulators to understand government intent, market practitioners to discuss practical effects, and those adjacent to the rule-making process for analyses. Where possible archival evidence was consulted to corroborate statements made by individuals.

The need for new research on China's stock market regulation is pressing given the rise in US-China tensions in the financial sphere and the Chinese stock market's position as second largest in the world.[8] Scholars have often

overlooked the equities markets in China because of the small size of equity financing relative to bank lending. As an empirical matter, this lacunae is problematic given that a robust equities market is viewed as crucial to de-leverage corporate balance sheets, improve corporate governance, and foster innovation in the Chinese economy.[9] As a matter of theory, focusing on changes in stock market governance and the core beliefs of regulators is crucial as differences in regulatory regimes have grown increasingly "fuzzy" and "hybridized" following the Global Financial Crisis.[10] In China, where new market-oriented practices exist alongside a state-coordinated market, identifying the necessary fictions in financial regulation will provide clarity on the ever elusive "Chinese Model" of finance.

This focus on the regulatory philosophy of the CSRC draws our attention to agents and the norms that motivate them in addressing regulatory problems. In a broad sense, scholars recognize that policymakers in China do not subscribe to a vision of market rationality.[11] But, yet, we have no insight as to how regulators understand investor rationality, efficient price formation, and market self-correction. Whereas shareholder value is the driving force in advanced capital markets, the examination of this seminal concept in a Chinese context has received scant attention.[12] Less still is understood how regulators think about moral hazard given their frequent interventions in the market. A better understanding of the mindset of Chinese regulators is a necessary first step, as US regulators seek to move China in the direction of a more open market.

Identifying the baseline ideological principles of the Chinese financial regulator has several policy implications for the United States. First, understanding that these regulatory principles effectively serve as "red lines" for the CSRC during negotiation will provide a clearer sense of the parameters for compromise. Second, the United States can more effectively seek engagement with Chinese counterparts to address specific problems in relation to an irrational investor base, inefficient markets, and bolstering their paternalistic approach. And finally, notions that more passive pressures for convergence will shift China towards global financial norms are unfounded. The SEC can no longer simply rely on its reputation as the manager of the world's deepest and most liquid capital market to nudge Chinese counterparts in the direction of more open markets.

This paper proceeds as follows. First, I identify three necessary fictions—an idealized irrational investor, an inefficient capital market, and a paternalistic state—that motivates the CSRCs behavior. Second, I highlight how alternative explanations are necessary but insufficient to explain the CSRC's regulatory behavior. Finally, I explore the potential policy implications of this work for US-China financial relations.

The Rationality Assumption, Efficient Capital Market Hypothesis, and Arms-length Governance

Scholars have identified a host of financial ideas that drive regulatory behavior that are not empirically grounded, but are taken for granted as true.[13] These fictions are adopted in order to provide a common language for regulators as they debate issues, routinize responses to stock market activity, and develop a trajectory for the market's development.[14] Over time these fictions become *necessary* to the business of regulation in that they often precede interest formation in highly uncertain environments, providing institutional blueprints, the weapons for political combat, and cognitive locks for how governments intervene in the economy.[15] Adopting a non-materialist ideational lens, thus, enables us to understand how the regulatory construction of particular actors, market dynamics, and the role of the state can vary widely as the presence of certain ideas lends itself to the construction of "actors of type x rather than type y."[16] These ideas may arise from epistemic communities, regime strategy, or a developmental mindset.[17] And because necessary fictions can be described as core beliefs about markets, they are more resilient than regulatory practices.[18]

This paper's focus on the irrational investor, a lack of trust in the market mechanism, and a paternalistic state draws on CPE scholarship that has long shown how East Asia's policymakers display a skepticism towards "market rationality," which in no small part stems from its developmental past. While global norms have pushed for a regulatory orthodoxy centered on light-touch regulation, self-regulatory bodies, and markets premised on rational actors, the logic has never been wholly embraced in East Asia.[19] While this broader aversion to market rationality has been well-explored, much less has been said about how it affects the creation of an idealized investor, the regulatory conceptions of market efficiency, and how it is linked to state action in the market.

The anchoring necessary fiction refers to who the regulator believes they are regulating—their modal investor. Investor rationality can be arrayed along a spectrum from rational to irrational. Notions of investor rationality are adopted by regulators as an "as-if" proposition in regulation, untethered to the behavior of real investors.[20] When regulators assume a rational investor, they envision market participation that is conditional on self-reliance, with informed investors given the freedom of choice.[21] These investors are rational, passive, with a long-term horizon, and of average sophistication.[22] Crucially, as a matter of law, the behavior of a hypothetical rational investor is used as a benchmark for cases of financial fraud, market manipulation, and insider trading in the United States.

In the Anglosphere, despite recent relaxations of the rationality assumption in terms of investor sophistication and vulnerability, scholars highlight how a clear thread of rationality still guides the logic of regulators.[23] To the contrary of a growing literature in behavioral economics and the law, which has advocated for a more paternalistic approach to address investor cognitive biases, the principle of investor rationality remains an anchor on regulatory development.[24] Regulators default to rationality because behavioral theories provide insufficient guidance for regulatory reform, and due to its ideational consistency with governing principles that prioritize autonomous choice.[25]

The anchoring fiction of a rational investor is closely tied to a rationalizing fiction of why markets behave the way they do. In the United States, this rationalizing fiction presents itself as a regulatory commitment to the efficient capital markets hypothesis (ECMH), which was embraced by the Securities Exchange Commission in the 1970s.[26] Markets are believed to correctly value the securities of traded firms due to a variety of forces that price new information fast enough such that arbitrage opportunities cannot be exploited. As in the case of the rationality assumption, a growing literature has questioned the wisdom of the premature adoption of this notion in regulatory practice given that economists argue that markets are somewhere in-between inefficient and efficient.[27] Evidence suggests that the SEC's commitment to the ECMH was due to political expediency rather than a firm understanding of economics.[28] Nevertheless, the ECMH remains the guiding principle of stock market regulation in much of the Anglosphere.

Given a commitment to investor rationality and an efficient market, an enabling fiction of a liberal regulatory state offers a template for how the

regulator should operate in the market. A liberal regulatory state envisions an arms-length relationship to the market and greater tolerance of risk taken on by individual investors.[29] Based on "caveat emptor"—let the buyer beware—risk is to be borne primarily by the investor, provided that all information affecting a stock price has been made available to a participant through a codified disclosure system. Listings are handled primarily by the exchange, intermediaries, and the issuer. Aside from crisis situations, the regulator seeks to preserve the efficiency of the price clearing mechanism set by market participants, and largely refrains from interventions aside from policing insider trading, market manipulation, and fraud.

An alternative trio of necessary fictions have emerged in China that guides the CSRC's regulatory interventions. The irrational investors envisioned by the CSRC are aggressive, possess a short-term horizon, and lack sophistication. Irrationality is driven by an inability to synthesize information in decision making, and exacerbated by product complexity, herding, and general overconfidence in the market.[30] While an irrational investor is not explicitly mentioned as a matter of jurisprudence, tellingly regulators have not adopted the rational investor benchmark for questions regarding materiality of price relevant information, a notable exception given the acceptance of other regulatory principles from the Anglosphere, such as Fraud on the Market theory.[31]

The regulator in China holds onto a rationalizing fiction that markets cannot be trusted to value securities in an efficient manner. China's inefficient markets have been tied to interventions by the CSRC itself, weak market surveillance, and continued market segmentation of listed companies.[32] Another thread explores distortionary interventions as a result of the state's industrial policy. However, whereas a significant debate regarding the efficiency of China's stock market continues in the academic realm, the regulator has largely concluded that its markets are not to be trusted.[33] Regulatory arguments about its inefficient market center on three facets: first, the overall lack of a working financial ecosystem to distill information, price new listings, and provide arbitration services; second, a lack of trust in institutional investors; and, third, its stage of development as an emerging stock market.

If the idealized investor subject is irrational and its markets cannot be trusted, the logical response of the regulator is to behave paternalistically in the market. China lacks the markers of what scholars define as a "regulatory

state"—regulatory independence, due process, and an arms-length approach to the market. While the institutional form for the regulatory state has been appropriated, it is as one scholar puts it, "old wine in new bottles" and genuine independent regulatory agencies in China are nowhere to be found.[34] The state does not endorse an arm's length relationship to the market. And the commitment to a rules-based system of governance premised on standardization, predictability, and equity is tenuous at best. Instead, the regulator envisions a paternalistic state girded by the conviction that the state is able to make individuals better-off than if they were to make decisions themselves. Paternalism substitutes regulatory judgment for that of the investor and seeks to enhance decision making by removing discretion or making bad decisions difficult. Rather than due process, the regulator is provided maximum flexibility to address market problems through administrative guidance. Outright bans, mandatory requirements, and penalties for bad decision-making ex-ante, leave little room on the part of investors to harm themselves or the market.[35]

Note that both liberal and state-led markets emphasize investor protection, and thus, some degree of paternalism is unavoidable to the extent that all regulatory systems impose a choice architecture that is set by a planner with the goal of influencing behavior.[36] But China's paternalist approach is hard—reducing the choice set of market participants, whereas paternalism in the Anglosphere is soft—nudging investors towards better choices without curtailing their autonomy.[37] In listings management, trading, and product innovation, we observe the CSRC operating a merit-based review of IPOs, strong control over the price mechanism, trading volume, and approvals for financial products.

Distinctions between the median practices adopted in the Anglosphere and in China should not be viewed as static categories, as regulators have and continue to adjust their regulatory practices, while underlying necessary fictions remain more resilient to change. For example, in the West, measures taken in the interest of consumer protection have involved the professionalization of the financial advisory industry, simplification of disclosure, and restricted access to certain types of investment through suitability requirements.[38] Likewise in China there have also been movements towards less paternalistic treatment of the stock market, such as the country's recent trials with a registration system for listing, widening trading bands, and the relaxation of controls over new

structured products. Despite the blurring of the lines in terms of regulatory practice, as will be shown, given the anchoring fiction of an irrational investor, the rationalizing fiction of a market inefficiency, and an enabling fiction of state paternalism, ideational inconsistency leads to a roll-back towards the default.

Alternative Explanations for China's Stock Market Regulation

Existing literature has sought to explain China's divergence from global best practice in regulation due to its closed capital account, political patronage, and its state capitalist orientation, but these analytical frameworks still leave unanswered questions. The adoption of liberal stock market governance practices is thought to be tied to pressures from fleetfooted finance following the gradual increase in cross-border mobility of capital.[39] However, China's deployment of hard paternalistic regulation has persisted even as it has increased access to the stock exchange through the Qualified Foreign Institutional Investor Scheme, and linked the Shanghai and Hong Kong Bourses. A more political explanation for the persistence of paternalism might point to the state's desire to control rents through the financial system.[40] However, paternalistic approaches in the stock market appear to hurt as much as help the state's traditional allies—big business, state-owned enterprise, and large securities firms. In China, it is the largest financial firms that must bear the brunt of the costs of state interventions when they are called on to purchase devalued shares to shore-up markets or to compensate investors for losses.[41]

The state capitalist paradigm offers another useful vantage point to explain China's approach to the stock market. Strong state control over finance is tied to legacies of industrial policy and the strategic value of sectors.[42] These arguments hinge on the idea that finance more broadly is to be used as a tool to support the state's strategic initiatives, and, thus, the sector is prevented from developing in a way that might harm institutional comparative advantage. The state capitalist argument still raises an important puzzle, however, because one of the key goals of policymakers has been to use the stock market as a tool to develop a high-tech ecosystem through NASDAQ-like boards. However, the regulator's heavy control over these markets have led to the most innovative companies listing off-shore, leading the CSRC to entertain a ban

on foreign IPOs.[43] Thus, the state's attachment to paternalism appears to be more an obstruction than a facilitation of its strategic aims.

This paper views the aforementioned factors as necessary, but insufficient to understand the dynamics of China's stock market. Arguments centered on closed-capital accounts, political patronage, and state capitalism can explain the broad contours of the CSRC's regulatory approach, but still do not capture important features in listings management, trading, and product innovation. The key to identifying the effect of the CSRC's necessary fictions then is to disentangle the effects of a regulatory commitment to an irrational investor, inefficient markets, and state paternalism from these other factors, which is done below.

A regulatory commitment to an irrational investor, an inefficient market, and a paternalistic state is clearly identifiable and shapes the CSRC's behavior. Despite its state capitalist impulses and special treatment of SOEs, these necessary fictions still guide the regulators penchant for pre-vetting companies for listings, its preference for underpricing, and share allocations to retail investors. In its secondary markets, this logic dominates regulatory decision making with strong curtailment of trading, restrictions on new products, and market interventions.

Chinese regulators envision a market populated by irrational investors, which to date drive nearly 80 percent of market turnover (Table 1). CSRC regulators involved in financial product approvals grumble that most of their investors simply "chase trends," "lack maturity," and are "too impulsive."[44] This underlying characterization of their investor base, senior regulators argue, serves as a first principle, informing most decisions that relate to listing, trading, and product innovation.[45] The emotional exuberance of investors can lead to a number of problematic behaviors. In 2015, regulators note that the severity of the market crash was due to investors being overexposed to certain stocks without adequately hedging their positions. Individuals that borrowed money to invest in the stock market through margin financing found themselves in a dangerous position, said a senior researcher at a government think tank: "individuals went long and did not go short—they were over exposed. So, when the market would collapse, what might have been a 50 percent loss, ended up being many times over."[46]

As a matter of market efficiency, to the CSRC's embarrassment, the market exhibits high levels of volatility, excessive leverage, and the overwhelming

TABLE 1. Stock Market Characteristics

	China	Korea	Taiwan	Japan	US	UK
Market Capitalization (2020)[1]	$12.2 Trillion	$2.1 trillion	$1.6 trillion	$6.7 trillion	$33.9 trillion 2019	$3.57 trillion 2014
Market turnover (2020)	$31.6 trillion	$5.2 trillion	$1.6 trillion	$6.3 trillion	$23.2 trillion 2019	$2.4 trillion 2014
Listed Companies (2020)	4154	2318	907	3754	4266	1858
Market Volatility (2010–2020)[2]	22.5 St. Dev.	18.6	>22.5	20.2	16.8	15.5
Retail investor/ volume[3]	80 percent (2019)	67 percent (2020)	75 percent (2020)	27 percent (2020)	~25 percent (2021)	20 percent (2020)
Individual ownership[4]	30 percent (2020)	28 percent (2020)	36 percent (2020)	16.8 percent (2021)	15 percent (2019)	15 percent (2020)
Institutional Ownership[5]	18.7 percent (2021)	20 percent (2017)	38 percent (2020)	30 percent (2020)	>80 percent (2019)	62 percent (2020)
Foreign Ownership[6]	6 percent (2020)	31.4 percent (2020)	25 percent (2020)	30 percent (2021)	40 percent (2019)	66 percent (2021)

References (1) World Bank (2020); TWSE (2021); (2) World Bank (2020); (3) Lockett (2021); Yang and Murdoch (2021); Taipei Times (2021); TSE (2020); BNY (2021): SS (2020); (4) Lockett and Kinder (2021);Jie (2021); TWSE (2021); Nippon (2021); Smart (2021); SS (2020) ; (5) Lin and Puchniak (2022) ; De La Cruz et al (2019); Nippon (2021);PI (2017); Segerstrom (2020); (6) Lockett and Kinder (2021); Koo (2021); TWSE (2021); Rosenthal and Burke (2020); Inman (2021)Necessary Fictions and the Chinese Stock Market

presence of small investors.[47] Markets are viewed to be thin, exacerbating volatility, analysts estimate that 60 percent of circulated shares are in fact tied up in the form of founders stock, pledged stock, and stocks used as collateral for bank financing.[48] In addition, the lack of a working financial ecosystem to distill information, price new listings, and provide arbitration services have impeded price discovery. Regulators recognize the weakness in the stock market's development: "The stock market has not really found a long-term sustainable course of development. We still have problems with pricing, our financial structure remains incomplete."[49] Investment banks and their research are still deemed to be too weak and to lack the capacity to conduct long-term research. Brokers do not yet have in place adequate monitoring systems. And, it is not clear whether lawyers devote their time towards due diligence, or as fixers, brokering deals with the state. As one foreign investor comments, "in the end you need the banks, the lawyers, the innovators, the financing, and the rule of law…but you target one piece of it and it's just not going to end up right."[50]

Regulatory skepticism of the efficiency-enhancing role of institutional investors is clear. One senior fund manager explains because institutional investors have been involved in market manipulation scandals regulators remain unwilling to loosen controls over the market. One common market manipulation scheme involves an institutional investor driving up the price of a security by purchasing a stock through multiple accounts.[51] In others, a fund might be involved in spreading rumors about a particular company and then cashing in as retail investor money follows suit. And, in some instances, major securities companies have been caught-out in money laundering networks, as was the case for Guosen securities in 2019.[52] Across the border in Hong Kong, regulators argue that mainland traders often use price sensitive information for the purposes of market manipulation.[53] Claims about insider trading in a messy chaotic market place are common as one senior financial analyst comments: "There is the idea that markets assimilate information well, and that institutional investors are good at this…the negative interpretation, of course, is that stock market is a mess and trades are based on insider information and the like."[54]

Regulators are the first to highlight how their market remains "immature," "unbalanced," and "lacking sophistication." But they argue that this is part of a multi-staged process. One ex-regulator explains that in the 1990s the issue was about how regulation was to become more standardized, and later in

2004, the primary focus was on allowing the market to take on a more authoritative role while working on issues in the company law: "It is a coming-of-age and it will take a process," she says.[55] The same regulator highlights that in the United States, the investor ecosystem was characterized by excessive volatility, fraud, and weak research: "The notion here is that China must go through the same stages, of course, with Chinese characteristics."[56]

Because regulators assume the presence of an irrational investor and an inefficient market, the CSRC's approach in the primary market is the most paternalistic in the region. Because market intermediaries do not have the capacity to conduct due diligence and irrational investors are believed to be incapable of distilling market relevant information, the state has actively taken on the role of risk mitigation on the investor's behalf. The CSRC conducts a merit-based review, vetting all listing candidates according to stringent criteria related to their business models, profitability, and underlying assets. The CSRC is also actively engaged in pricing, share allocations, and rules regarding the selling of shares following the IPO.

The necessary fictions of an irrational investor and inefficient market, however, are often overshadowed by the regulator's state capitalist management of the market. Because the initial listing of a firm relates to the raising of capital, the state's interest runs through the equities markets in terms of industrial policy and broader macro-economic goals. It is important to highlight, however, that the effect of industrial policies on regulatory deliberations occur on an episodic basis, in contrast to the regulator's longstanding concern over irrational investor behavior and market inefficiencies. IPO moratoriums have indeed been dictated in arenas that the central government has deemed to be potentially risky, such as real estate, or where national security concerns have arisen, as is the case for big technology firms. But the effects of these policies are often temporary: for example, the crackdown on technology in China did lead to a drop in IPOs for technology firms from 22 percent in 2020 to 16 percent of IPOs in 2021.[57] But by 2022, IPO applications had recovered, comprising 32 percent of the IPO pipeline.[58] By contrast, a more consistent current in regulatory decisions regarding listings are more often tied to adverse reactions by retail investors in the secondary markets that are perceived to be overly volatile: since the early 2000s, the CSRC has frozen new IPOs nine times due to investor concerns that new issuances would tighten liquidity.[59]

A more persistent state capitalist feature of the primary market is the regulator's preference for SOEs. But a deeper look at issuance rules provides support for the proposition that fears of an irrational investor and weak market efficiencies remain a defining feature of regulatory thinking even with respect to state assets. The price at which IPO shares are offered are unusually low in China. The CSRC maintains an unofficial cap of 23 times earnings per share, regardless of state-ownership, which leads to severe underpricing. This is bad for the listing company which would otherwise be able to raise more capital, but good for investors who are guaranteed a price bump on the first day of trading. The CSRC also exercises a claw back mechanism, which requires a substantial portion of the offering to be allocated to retail investors at a fixed price, which also leads to lower expected proceeds from a listing.[60] Guidance in pricing also has much to do with the fact that market intermediaries are assumed to be manipulating information to the benefit of institutional players. Qian et al. (2022) estimates that from 1990–2018, approximately 450 Billion USD was left on the table for China's listed companies due to underpricing and share allocations to retail investors.

A curious consequence of the state's paternalist approach is that it has often undermined rather than facilitated its industrial policy. One goal of the regulator has been to repatriate China's best technology firms, which listed abroad in the early 2000s, to decouple its firms from foreign finance.[61] Using a new board with loosened listing requirements and restricting participation to high net-worth individuals was seen as a way to ringfence experiments and prevent disruptions to its main boards, while facilitating the listing of start-ups, which are often not profitable at the time of listing. However, the CSRC's previous attempts to establish start-up friendly boards—the ChiNext board in 2009 and the NEEQ board in 2012—failed due to the CSRC's heavy-handed management of listing and pricing on account of concerns over volatility chasing among speculators.[62]

In 2019, the STAR market, which piloted a new registration-based system akin to that of the United States with relaxed controls on trading, has also struggled despite initial enthusiasm: 40 percent of IPOs that had been granted approvals in 2021 were terminated due to tightened rules on listing candidates' finances.[63] A part of the roll-back in the STAR market was indeed related to broader concerns by regulators over technology firms' handling of data, ques-

tions over the appropriateness of entertainment platforms, and monopolistic business practices. Ant Financial's listing denial in late 2020 also seemed to highlight the central government's concern that technology giants had grown too fast and too powerful without sufficient oversight. But most terminations of listings occurred in sectors outside the purview of the tech crackdown, such as in high-tech manufacturing and pharmaceuticals.[64] And, crucially, new rules for the STAR market were largely focused on tightening IPO sponsorship due to the weak performance of listings and individual investor losses.[65]

Further discussions with regulators reveal deep concerns about the STAR market's rule changes given China's irrational investor base and weak market dynamics. One regulator overseeing listings argued that the emphasis on information disclosure was misplaced given the lack of an ability of investors to process this information. This in turn increased the risk of fraud, the same regulator asked, "Can a process of asking for more information really address the fraud and manipulation in the market"?[66] Yet another problem was that retail investors were likely to view the market as a guaranteed win due to government support: "Investors think because the government is setting-up the new board that it will have to succeed, this also encourages non-rational behavior."[67] Finally, regulators were worried about volatility, particularly because high-tech firms were inherently risky.[68] Concerns about how these start-up boards would affect the country's investor base appears to have trumped its tech ambitions.

In China's secondary market, the effects of a logic based on investor irrationality and market inefficiency driving regulatory paternalism is less ambiguous because retail investors execute the vast majority of trades. Chinese stocks are subject to price floors and ceilings based on the previous day's closing price. On the main boards, a stock is not permitted to fluctuate more than 10 percent in either direction and, when its price limit is reached, trading is suspended for the day. In so doing, regulators argue that this functions as a "cool down" period and enables investors to recalibrate expectations.[69] Without such measures, regulators say that investors are more likely to herd into the market and drive wild price swings that ultimately lead to above average losses. One retired senior regulator said, "over time we will tweak these mechanisms...as our investor base becomes mature these things will become less prominent...but we must guide them."[70]

The stock market has additional trading restrictions in place to protect its irrational investors and preserve market integrity. China still applies stringent rules for day trading: the T+1 rule stipulates that traders can only sell a purchased stock the next trading day. High Frequency Trading, which exacerbates volatility chasing on the part of traders, is severely constrained by rules on order flow, pre-funded margin trades, and restrictions on direct access to market data.[71] The CSRC also restricts short-selling—betting that a stock price will fall. The practice was banned in 2015 during the market downturn, followed by a gradual relaxation in 2020.[72]

A positive list system is employed with respect to the types of financial products that are available to investors. This, too, has been done with the view that investors are incapable of assessing their own risks and markets are too weak to accurately price the underlying asset values of products. Aside from a period of significant financial innovation from 2010–2015, the CSRC has largely been conservative in approving new structured products and financial derivatives.[73] Access to new market segments is ringfenced to individuals following an examination of investor financial profiles.[74] The vast majority of derivative products remain on tenuous regulatory ground. Stock index futures, for example, can be subject to rules restricting "excessive trading" during market downturns as was the case in 2015, with trading curbs adjusted in 2017.[75] Unsurprisingly, China's derivative market is undeveloped relative to the size of its financial markets representing roughly 1 percent of global turnover for 2019.[76]

When all else fails, the state intervenes in the market to prevent a collapse in prices. This task has been left to a "National Team" of SOEs, Asset Management Companies, and Securities Companies.[77] The CSRC will instruct major financial institutions to shore-up markets by buying shares as they plunge. Such actions are defended as necessary to restore confidence to a skittish investor base and framed as a financial institution's duty to national service.[78] In the region, it represents the most direct intervention (i.e. purchasing equities rather than providing liquidity) and coercive approach to stemming a stock market rout (i.e. corporations are ordered to participate).[79] It is, of course, impossible to disentangle whose interests are best served by these interventions, as both state assets and retail investor positions are upheld. But, while this network of state-owned firms has benefitted from their stock holdings acquired during downturns, scholars note that the national team does

not offload shares, tying up a substantial amount of liquidity for the long-term.[80] And those seeking to sell shares run the risk of running afoul of the regulator and being labelled a market manipulator.

Why have these fictions become necessary?

The regulatory beliefs of modal investor irrationality, market efficiency, and the necessity of state paternalism run deep in the CSRC. A self-fulfilling cycle makes evidence running contrary to this logic difficult to accept. Regulators have adopted and experimented with more light-touch stock market regulation, only to backtrack or re-regulate, reasserting a paternalist approach. As discussed above, this has been the case for rules regarding new start-up boards, short trading, and wealth management products. The CSRC views its many attempts to liberalize the market as being too premature. Each time restrictions have eased the CSRC has had to deal with large investor losses, volatile markets, and, stock market crashes. Rather than view these unfortunate events as part and parcel of a difficult learning process as part of market recalibration, the CSRC re-affirms its position that investors are indeed irrational and its markets are inefficient.

> A more critical observer might argue that the CSRC is the author of its own predicament. In order to reduce overall risk to market players, the regulator frequently changes rules in order to keep market manipulators at bay, and to ensure the smooth operation of the stock market. However, investors adopt a short-term horizon precisely because rules change frequently with often devastating consequences for the investor. As a result, investors try to avoid holding a stock for too long, entering and exiting positions as rules relax and then tighten. A senior government thinktank researcher characterized it as following:

Take it from the viewpoint of the retail investor, there is far too little information within the market—massive information asymmetries—so retail investors just chase volatility.... there's a fundamental issue of policy uncertainty within the system because the entire regulatory system is one with trial and error. When rules change suddenly, long-term investors are put in a bad

position...But you have the government then saying that they need to change rules in order to deal with the retail investor problem. They've put themselves into a bind.[81]

Conclusion and Policy Implications

The regulator in China must navigate cross-pressures emanating from foreign capital, state-business relations, and state-capitalist initiatives as they manage their stock market. Yet an underlying commitment to an irrational investor, an inefficient market, and a paternalistic state remains clearly identifiable in the CSRC's approach to listings, trading, and product innovation. These deeply held positions will likely serve as impediments to further integration with global financial markets.

US Policymakers should remain skeptical that new financial reforms in the Chinese equity market—a proposed registration-based system, increased access to on-shore markets, and a liberalizing trading regime—will lead to genuine convergence on the US-led system of financial governance. Time and again pundits and scholars alike have misread regulatory reforms in China's financial markets as indicating an acceptance of global best practices, only to be disappointed as new start-up boards are shut-down, regulatory rule-changes are rolled-back, and bans on new financial products are announced.[82] Pending deeper changes to the underlying regulatory philosophy of the CSRC, a change in regulatory practices will not amount to fundamental reform.

Pressures from global capital and the gradual diffusion of financial ideas vis a vis technical assistance, regulatory exchanges, and increased engagement in international regulatory bodies have reached their limit. Despite extensive consultations from the 1990s, financial regulators in China have settled on a regulatory philosophy diametrically opposed to the one adopted in the Anglosphere. International regulations and best practices were transferred unaltered into Chinese law beginning in the 1990s as a result of consultations between the newly staffed regulatory agencies and foreign advisers.[83] Regulators managed to remain in charge of negotiations with global regulatory bodies, and thus were in control of setting the agenda for domestic financial regulatory reform.[84] But the window for fruitful financial engagement between the United States and China is fast-closing.

While most analysis contends that the rejection of a western model of financial governance can be directly tied to the rise of Xi Jinping, this paper suggests that Chinese concerns with the American regulatory approach go back far earlier. The lack of openness to a more liberal approach to the stock market began with the collapse of faith in the western regulatory order following the Global Financial Crisis. Prior to 2008, the state-market orthodoxy was premised on leadership by autonomous, non-majoritarian institutions dominated by technocratic experts.[85] While China did not implement the orthodoxy wholesale, it did appropriate certain institutional forms and parts of the agenda, such as the establishment of quasi-independent regulatory institutions, partial liberalization, and an increased role for market-based capital allocation.[86] But following the Global Financial Crisis in 2008, elite leadership grew fundamentally skeptical of western approaches.[87] Moreover, recent financial crazes, such as meme stocks, and major regulatory failures, such as the collapse of Silicon Valley Bank, have not endeared the CSRC towards American-style approaches to regulation. If the United States still seeks to play a role in facilitating China's integration with the global financial order, it will have to get its own house in order first.

This portends increasing conflict over American and Chinese financial practices in the short-term. More recent tensions have already centered on the quality of information disclosures of Chinese-listed firms in the United States, questions related to the foreign investor protections in China, and the Chinese government's intentions to repatriate technology giants to its on-shore bourses.[88] Calls for limiting the flow of US dollars to China's on-shore markets have reached fever pitch.[89]

Conflict between the SEC and CSRC over US-listed Chinese companies while contentious have been resolved because proposed rule changes did not conflict with the CSRC's underlying regulatory principles. During the 2021 Variable Interest Entity structure controversy, a long-held practice in which Chinese companies use a specialized structure to seek foreign financing offshore came under significant scrutiny by the SEC in June 2021 on account of issues related to investor protections. The CSRC then moved forward clarifying rules regarding VIEs in December 2021. In another instance, legislation was introduced by Congress in 2020, which would delist Chinese companies from US Exchanges if a special SEC-designated auditing body, the Public

Company Accounting Oversight Board, was denied access to China and Hong Kong auditors for a period of 3-years. The threat of forced de-listings of non-compliant Chinese firms eventually led to an agreement between the CSRC and SEC in December 2022. While compromises were reached, it should be noted that SEC actions and congressional investigations prompted many Chinese companies to re-list in Hong Kong or mainland bourses.

More recently, US government scrutiny has turned to outbound American investment to China, which is likely to further undermine China's convergence with the global financial order. The House Select Committee on China's recent probes into Black Rock and MSCI weighting of China in its indexes is overly broad and, if acted upon, could dramatically rewind the clock on China's financial regulatory development. And, if surgical bans by Executive Order on US tech investment by venture capital and private equity funds is expanded to include public market investments, it will undoubtedly reinforce a fortress mindset of the CSRC. A major goal and impetus of the CSRC's willingness to open-up its markets to foreign institutional investors, most notably through the stock connect and bond connect schemes, was to eventually warrant Chinese listed companies inclusion in major indexes. In so doing, the CSRC had hoped that foreign institutional investors would help improve price discovery on its domestic markets. Managing US national security concerns while also seeking to encourage China's financial market liberalization has seemingly reached an impasse.

James Fok, a former executive at Hong Kong Exchange and Clearing, does highlight one potential avenue for global capital to interface with China's onshore market through the various stock connects linking mainland bourses to Hong Kong: the Hong Kong-Shanghai Direct Connect and the Hong Kong-Shenzhen Direct Connect.[90] The stock connect schemes allowed exchanges to be linked electronically such that an investor in Shanghai could directly purchase shares listed in Hong Kong from a broker linked to a mainland stock exchange, and international investors could purchase mainland shares through a Hong Kong broker. Crucially, each market maintains its own rules and regulations, with enforcement undertaken by the local regulator. A major benefit for international institutional investors fearing potential political interference from Chinese authorities—such as the freezing of funds—is that their cash account under the stock connect scheme remains in Hong Kong. Moreover,

if ChinaClear, the mainland's clearing house, refused to release cash to be disbursed by Hong Kong Security Clearing Company (HKSCC) when Mainland A-Shares are sold by international investors, the HKSCC, which holds all mainland investors' Hong Kong Shares, could likewise refuse to settle transactions for mainland investors. Fok argues expanding Hong Kong's role as a depository center for mainland investor's holdings for international shares would allay Chinese government concerns about capital flight and vulnerability to foreign sanctions, while giving Chinese investors greater diversity of investment options to fund retirement. The West would benefit from investments from China's vast pool of bank deposits, and because shares would be purchased by individual investors, it would reduce the risk of government control. Of course, this scenario is contingent on the maintenance of the One-Country, Two Systems framework, which has been under significant pressure.

Yet even as pressures for financial decoupling ratchet-up, it will remain ever more important to avoid characterizing China's financial order in broad strokes. This paper suggests that not all of China's regulatory behavior can be simply characterized as a nefarious plot by the CCP to assert state dominance in the market. One should recognize that regulators in China believe they are addressing distinct problems with an irrational investor base, an inefficient market, and the costs of paternalistic governance.

While this paper has shown that China's necessary fictions have had a pathological effect on its markets, it does not argue that the country would be better-off adopting an Anglo-American approach. It may be more productive to consider these differing philosophical positions as engendering different trade-offs in terms of stability, efficiency, growth, and equity. As much as American commentators are wont to criticize the market philosophy of China's regulators as illiberal or anti-market, it is important to remember that the SEC's own attachment to a rational investor, efficient market, and an independent regulator are also fictions that stand on shaky empirical ground. Legal scholarship argues that relaxing assumptions about investor rationality and market efficiency might be necessary to address significant inequities in financial regulation in the United States that leave investors unprotected.[91] The tortuous debates on financial regulation in the United States suggests that deeper paradigmatic change is slow-moving, and we should expect no less in China.

Evidence from the East Asian region suggest that while China's necessary fictions will anchor the country's regulatory development, there is room for change. Necessary fictions do not operate in a vacuum. Financial regulation is shaped by different exposures to foreign capital, legacies of developmentalism, and state-business relations. China's regulatory regime, given the predominance of its state capitalist framework, preference for SOEs, and low exposure to foreign capital, alongside an ideological underpinning of investor irrationality, a lack of trust in markets, and state paternalism makes it more an extreme case. Conversely, in Japan, despite holding similar beliefs to their Chinese counterparts, the regulator's weak, hard paternalist approach to the stock market is driven by high foreign ownership of the stock market, liberalization of the economy as part of Abenomics, and major reforms in its corporate sector. And, in Korea and Taiwan, we observe how an irrational investor regulatory vision interacts with foreign capital, post-developmentalism, and state-business relations to effect a moderate, hard paternalist approach. While none of these countries have fully converged on the liberal market economy, it does suggest that China does have some flexibility in its financial regulatory evolution.

Regulators in China envision a very different type of equities market where innovation must not compromise stability; a focus on shareholder value should not disrupt a stakeholder system; and institutional investors must share the market with the region's rowdy retail investors. Notions of maximizing shareholder value, and the deployment of new financial technologies that underpin this transformation in the Anglosphere, conflicts with the normative orientations of the Chinese regulator.

The views expressed are the author's alone, and do not represent the views of the US Government, Carnegie Corporation of New York, or the Wilson Center.
Copyright 2023, Wilson Center. All rights reserved.

Notes

1. Tsai, Kellee S. "The political economy of state capitalism and shadow banking in China." *Journal of Chinese Economic Studies* 12, no. 1 (2015): 12–19; Petry, Johannes. «Financialization with Chinese characteristics? Exchanges, control and capital markets in authoritarian capitalism.» *Economy and Society* 49, no. 2 (2020): 213–238
2. Prasad, Eswar S. *Has China's Growth Gone From Miracle to Malady?*. No. w31151. National Bureau of Economic Research, 2023.
3. Peoples Bank of China. "Report on Aggregate Financing to the Real Economy (Stock) (August 2021)." (2021) accessed at http://www.pbc.gov.cn/en/3688247/3688978/3709140/4339074/index.html
4. Chen, Frank. "China's Market Moving National Team: All You Need to Know." *Asia Financial: Capital Markets.* Accessed at https://www.asiafinancial.com/chinas-shadowy-national-team-everything-you-need-to-know
5. Yan, Zhang and Ryan Woo. "China moves to limit short selling as virus looms over market reopening." *Reuters.* 2020. Accessed at https://www.reuters.com/article/us-health-china-shortselling/china-moves-to-limit-short-selling-as-virus-looms-over-market-reopening-idUSKBN1ZW0P2
6. Gough, Neil. "China Plans to Lift Moratorium on IPOS by End of Year." *New York Times.* 2015. Accessed at https://www.nytimes.com/2015/11/07/business/dealbook/china-stock-market-ipo.html
7. US financial regulation, for example, is anchored by the hypothetical behavior of a rational investor, which regulators know does not comport with actual investor behavior. Efforts to change this legal standard have proven challenging, see Sachs, Margaret V. "Materiality and social change: The case for replacing the reasonable investor with the least sophisticated investor in inefficient markets." *Tul. L. Rev.* 81 (2006): 473.
8. Fok, James A. *Financial Cold War: A View of Sino-US Relations from the Financial Markets*. John Wiley & Sons, 2021.
9. Eichengreen, B., 2014. Financial Development and Economic Growth: The Long View. *Financial Development and Cooperation in Asia and the Pacific*, p.11.
10. Kushida, K.E. and Shimizu, K., 2013. Syncretism: The politics of Japan's financial reforms. *Socio-Economic Review*, *11*(2), pp.337–369; Granier, C., Revest, V. and Sapio, A., 2019. SMEs and junior stock markets: a comparison between European and Japanese markets. *Journal of Innovation Economics Management*, (2), pp.43–67.
11. Pearson, M.M., 2005. The business of governing business in China: Institutions and norms of the emerging regulatory state. *World Politics*, *57*(2), pp.296–322.
12. Vogel, S.K., 2019. Japan's ambivalent pursuit of shareholder capitalism. *Politics & Society*, *47*(1), pp.117–144.
13. Kirshner, J. ed., 2001. *Monetary orders: Ambiguous economics, ubiquitous politics*. Cornell University Press;
14. Steinfeld, E.S., 2004. Market visions: The interplay of ideas and institutions in Chinese financial restructuring. *Political Studies*, *52*(4), pp.643–663.
15. Blyth, M., 2002. *Great transformations: Economic ideas and institutional change in the*

twentieth century. Cambridge University Press.

16. Abdelal, R., Blyth, M. and Parsons, C. eds., 2015. *Constructing the international economy*. Cornell University Press, p. 9
17. Chwieroth, Jeffrey M. ""The silent revolution:" How the staff exercise informal governance over IMF lending." *The Review of International Organizations* 8, no. 2 (2013): 265–290; Gruin, Julian, and Peter Knaack. «Not just another shadow bank: Chinese authoritarian capitalism and the 'developmental'promise of digital financial innovation.» *New political economy* 25, no. 3 (2020): 370–387; Thurbon, Elizabeth. «Developmental mindset.» In *Developmental Mindset*. Cornell University Press, 2016.
18. Schmidt, Vivien A. *The futures of European capitalism*. OUP Oxford, 2001
19. Tiberghien, Y., 2007. *Entrepreneurial states: Reforming corporate governance in France, Japan, and Korea*. Cornell University Press; Vogel, S.K., 2006. *Japan remodeled: How government and industry are reforming Japanese capitalism*. Cornell University Press
20. Rose, A.M., 2017. The Reasonable Investor of Federal Securities Law: Insights from Tort Law's Reasonable Person & Suggested Reforms. *J. Corp. L.*, *43*, p.77.
21. Kingsford-Smith, D. and Dixon, O., 2015. The consumer interest and the financial markets. In *The Oxford Handbook of Financial Regulation*
22. Avgouleas, E., 2009. The global financial crisis and the disclosure paradigm in European financial regulation: The case for reform.
23. Kingsford-Smith and Dixon, "The Consumer Interest"
24. Langevoort, D.C., 2006. The SEC as a lawmaker: Choices about investor protection in the face of uncertainty. *Wash. UL Rev.*, *84*, p.1591
25. Schwartz, A., 2015. Regulating for rationality. *Stan. L. Rev.*, *67*, p.1373.
26. Langevoort, Donald C. "Theories, assumptions, and securities regulation: Market efficiency revisited." *University of Pennsylvania Law Review* 140, no. 3 (1992): 851–920.
27. Ibid.
28. Ibid.
29. Rose, A.M, "The Rational Investor"
30. Lin, T.C., 2015. Reasonable investor (s). *BUL Rev.*, *95*, p.461
31. Liu, W. (2022). Research on the materiality standard of inside information. Modern Economy, 13(08), 1115–1125
32. Ma, Shiguang. *The efficiency of China's stock market*. Routledge, 2017.
33. For debates on stock market efficiency see Kuo, Kuo-Cheng, Wen-Min Lu, and Thanh Nhan Dinh. "An integrated efficiency evaluation of China stock market." *Journal of the Operational Research Society* 72, no. 4 (2021): 950–969
34. Pearson, MM, The Business of Governing Business; Hsueh, Roselyn. *China's regulatory state: A new strategy for globalization*. Cornell University Press, 2017.
35. Thaler, R.H. and Sunstein, C.R., 2003. Libertarian paternalism. *American economic review*, *93*(2), pp.175–179.
36. Ripken, S.K., 2015. Paternalism and securities regulation. *Stan. JL Bus. & Fin.*, *21*, p.1.
37. Thaler, Richard H., and Cass R. Sunstein. *Nudge: Improving decisions about health, wealth, and happiness*. Penguin, 2009
38. Avgouleas, E., "The Global Financial Crisis"

39. Laurence, H., 2001. *Money rules: The new politics of finance in Britain and Japan*. Cornell University Press; Posner, E., 2005. Sources of institutional change: the supranational origins of Europe's new stock markets. *World Politics*, *58*(1), pp.1–40.
40. Shih, V.C., 2008. *Factions and finance in China: elite conflict and inflation* (pp. 1–15). New York: Cambridge University Press; Rithmire, Meg, and Hao Chen. «The emergence of mafia-like business systems in China.» *The China Quarterly* 248, no. 1 (2021): 1037–1058.
41. Bloomberg. "China Stocks Face Big Risk as Thousands of Hedge Funds Near Point Where They have to Dump Shares." *Bloomberg News* accessed at https://www.bloomberg.com/news/articles/2022-05-20/hedge-fund-forced-liquidations-become-big-risk-for-china-stocks
42. Naughton, B. and Tsai, K.S. eds., 2015. *State capitalism, institutional adaptation, and the Chinese miracle*. Cambridge University Press.
43. Bloomberg. 2021. Shelved IPOs surge in China after watchdog tightens scrutiny. *Bloomberg.* March 23, https://www.bloomberg.com/news/articles/2021-03-23/shelved-ipos-surge-in-china-after-watchdog-tightens-scrutiny
44. Interview with Stock Exchange Legal Department (June 19, 2019).
45. Interviews with Stock Exchange Legal Department (June 19, 2019); Asset Management Firm (May 27 2019)
46. Interview with Central Government Think Tank (June 6, 2019).
47. Interview with Financial Analyst (June 12, 2019)
48. Ibid.
49. Interview with Government Thinktank (June 6, 2019)
50. Interview with Hedge Fund CEO (July 5, 2017)
51. Interview with Fund Manager CEO/Member of Asset Management Association of China (July 15, 2017)
52. Reuters. "China regulator urges investment banks to tighten supervision." *Reuters* 2016 accessed at https://www.reuters.com/article/us-china-csrc-brokerages-idINKBN14C0Z5
53. Interview with Cross-Border Regulator SFC (August 2, 2019)
54. Interview with Finance Scholar/Academic (March 10, 2017)
55. Interview with retired CSRC official (June 10, 2019)
56. Ibid.
57. Deloitte (2022). Q1–Q3 2022 review and Outlook for Chinese Mainland and Hong Kong IPO markets. Deloitte Market Insights
58. KPMG (2022). Mainland China and Hong Kong IPO markets: 2022 mid-Year review.
59. Zhang, S. (2017). Chinese securities regulator slows IPO approvals to bolster market confidence. South China Morning Post. https://www.scmp.com/business/ markets/article/2096962/chinese-securities-regulator-slows-ipo-approvalsbolster-market
60. Qian, Y., Ritter, J. R., & Shao, X. (2022). Initial public offerings Chinese style. Journal of Financial and Quantitative Analysis, 1(1)1–73. https://doi.org/10.1017/ s002210902200134x; Benveniste, L. M., & Busaba, W. Y. (1997). Bookbuilding vs. fixed price: An analysis of competing strategies for marketing IPOs. Journal of Financial and quantitative analysis, 32(4), 383–403
61. Interviews with Stock Exchange Directors (June 20, 2019).
62. Interview with Securities Law Adviser (July 3, 2019).
63. Lu, S., & Wang, C. (2021). Data: IPO path narrows on China's star market. https://www.

protocol.com/china/shanghai-star-ipo-termination-data
64. Ibid.
65. Ibid.
66. Interview with Stock Exchange Legal Department (June 19, 2019)
67. Ibid.
68. Ibid.
69. Interview with Securities Law Adviser (June 10, 2019).
70. Interview with Ex-CSRC Director (June 10, 2019).
71. Petry, J, 2020. "Financialization with Chinese Characteristics."
72. Shen, S., & John, A. (2020). Short selling tests China's zeal for market reform. Reuters.
73. Chen, Z., Ito, L., Yamada, T., & Zhang, B. (2018). The BOJ large-scale purchases of equity index ETFS: Float reduction and its impact on market frictions. CFA Institution Working Paper.
74. Petry, J, 2020. "Financialization with Chinese Characteristics."
75. Ibid.
76. ISDA (2021). Developing Safe, robust, and efficient derivatives markets in China. https://www.isda.org/a/nctgE/Developing-Safe-Robust-and-EfficientDerivatives-Markets-in-China-ENG.pdf
77. Interview with Securities Law Adviser (July 3, 2019).
78. Interview with Fund Manager (July 17, 2017)
79. Interview with IFC Director (May 27, 2019)
80. Allen, F., Qian, J., Shan, C., & Zhu, J. L. (2020). 11. The Development of the Chinese Stock Market. In The handbook of China's financial system. (pp. 283–313). Princeton University Press.
81. Interview with Finance Scholar/Adviser to CSRC (May 23, 2019)
82. Tan, Yeling. *Disaggregating China, Inc.: State Strategies in the Liberal Economic Order*. Cornell University Press, 2021
83. Foot, Rosemary, and Andrew Walter. *China, the United States, and global order*. Cambridge University Press, 2010.
84. Heilmann, Sebastian, and N. I. C. O. L. E. SCHULTE-KULKMANN. "The Limits of Policy Diffusion: Introducing International Norms of Anti-Money Laundering into China's Legal System." *Governance* 24, no. 4 (2011): 639–664.
85. Coen, David, and Alasdair Roberts. "A new age of uncertainty." *Governance* 25, no. 1 (2012): 5–9.
86. Pearson, M. "The Business of Governing Business"
87. Heilmann, Sebastian. "Maximum tinkering under uncertainty: unorthodox lessons from China." *Modern China* 35, no. 4 (2009): 450–462.
88. Mark, Jeremy, "US-China financial market tensions: the road to riches or ruin." *New Atlanticist*. 2022. Accessed at https://www.atlanticcouncil.org/blogs/new-atlanticist/us-china-financial-market-tensions-the-road-to-riches-or-ruin/
89. Swanson, A. and Hirsch, L., "US Aims to Curtail Technology Investment in China." *New York Times*. 2023 Accessed at https://www.nytimes.com/2023/02/09/business/us-china-investing-tech-biden.html
90. Fok, James A. *Financial Cold War: A View of Sino-US Relations from the Financial Markets*. John Wiley & Sons, 2021
91. Li, Alexandra. "The Unreasonableness of Reasonable: Rethinking the Reasonable Investor Standard." *Northwestern University Law Review* 117, no. 6 (2023): 1707–1738.