

Same same, but different: Varieties of capital markets, Chinese state capitalism and the global financial order

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journals.sagepub.com/home/cch**Johannes Petry** 

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Abstract

Since 2009, China's capital markets have developed and internationalized to an unprecedented degree, which has contributed to a lot of debates on China's rise and its implications for the global financial order. Contributing to these debates, this article analyses the development of capital markets in China and their integration into global finance between 2009 and 2019, focusing on three aspects: how Chinese capital markets are developing domestically; how they are integrating with global markets; and how Chinese capital markets are internationalizing, i.e. expanding abroad. Thereby, the article analyses the crucial role of securities exchanges who as organizers of capital markets are powerful actors that exercise considerable influence over these markets and their development. This empirical investigation reveals that while they share some characteristics with 'global' capital markets, Chinese capital markets function quite differently. The article argues that China's state-owned exchanges facilitate the development of *state-capitalist capital markets* – capital markets that follow an institutional logic derived from China's state-capitalist economic system. Rather than giving in to a neoliberal rulebook, China's capital markets represent an alternative to, resist and challenge the norms, principles and procedures of the contemporary global financial order. While different capital markets share some characteristics, they are institutionally embedded, and these institutional settings facilitate different institutional logics that underpin and inform the functioning of markets. Instead of viewing capital markets as homogeneous entities, the article therefore proposes to investigate a 'varieties of capital markets' that are shaped by different institutional logics.

Keywords

Capital markets, state capitalism, global financial order, neoliberalism, securities exchanges

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Introduction

In 1989, capital markets did not exist in China. Fast forward three decades, China's capital markets have become the second largest equity markets, second largest futures markets and third largest bond markets globally (FIA, 2018; WFE, 2018). More companies have listed in Hong Kong and Shanghai than anywhere else, and while China's markets had been virtually closed from the outside world for decades, especially since the global financial crisis (GFC) 2007–2009, they have become connected to both regional and global financial markets 'at an unprecedented pace' (ASIFMA, 2018). This growing Chinese significance in global finance is also expressed by the internationalization of the renminbi (RMB) (Lombardi and Wang, 2016), how their investments change financing patterns (Kaplan, 2016), China's growing role in development finance and global financial governance (Nölke, 2015), and with the Belt-and-Road Initiative (BRI).

The rapid growth of China's capital markets takes place within the context of a global financial order (GFO) based on neoliberal principles of open, lightly-regulated, internationally-integrated financial markets, guaranteed and facilitated by US power (Drezner and McNamara, 2013; Norrlof, 2010). Scholars are therefore debating whether China is a status quo power integrating into the GFO (Ikenberry, 2011), a reforming power (Breslin, 2013), a revisionist power challenging this (neo)liberal, US-dominated financial order (Hung, 2013) or whether global finance is itself adapting to accommodate China (McNally and Gruin, 2017). This discussion is linked to broader debates on state capitalism (e.g. Carney, 2015), where some policy makers fear that China will not play by the neoliberal rulebook on which the contemporary global (financial) order is based (e.g. Bremmer, 2010) – the US–China trade war being a case in point. In these debates, state capitalism is often defined in juxtaposition to capital markets, the epitome of liberal capitalism. As Alami and Dixon (2020: 12) point out, an important task is to investigate the relationship 'between the new state capitalism and the Western-dominated liberal capitalist world order [as well as] the current pattern of financialized globalization and neoliberalism as the dominant hegemonic project'.

By linking state capitalism, capital markets and the neoliberal GFO, this article contributes to these debates, seeking to make a twofold contribution. Empirically, the article analyses the post-GFC reform and opening process of China's capital markets between 2009 and 2019. This empirical investigation reveals that capital markets in China function significantly different from 'global' markets. While many Western commentators argue that 'proper' capital markets do not exist in China, this article argues that such assessments actually reflect the neoliberal bias that Western views of markets exhibit, thereby shedding light on the contested politics between different types of capital markets championed by China and the US. Theoretically, the article therefore proposes to re-evaluate common global political economy (GPE) conceptions of capital markets: instead of viewing these as uniform entities, in opposition to the state and interlinked with the concept of neoliberalism, to look at an institutionally embedded 'varieties of capital markets'. Applying the concept of *institutional logics* (Deeg and Jackson, 2006; Zysman, 1994) to capital markets, it argues that capital markets are heavily influenced by their institutional environment leading to different market dynamics and outcomes. In contrast to 'neoliberal' capital markets as they exist in (and are promoted by) the West, in China one can observe the development of *state-*

capitalist capital markets as Chinese capital markets are intricately linked with state institutions and play an active role in facilitating national development goals.

The article examines the crucial role of China's (stock and derivatives) exchanges as important actors who organize markets in a way that facilitates state-capitalist logic, shaping capital market dynamics and directing market outcomes towards state objectives, both within China and internationally. The capital markets organized by China's exchanges thereby provide an alternative to, resist pressures to conform with, and even challenge the neoliberal capital markets that underpin the GFO. In other words, no matter how deep the reforms, Chinese capital markets will not converge with global markets but rather maintain their distinct character – which has important implications for the study of global markets and the power relations inherent to them. While this article focuses on China, the final section outlines implications for the study of capital markets in other countries where states (continue to) play important roles in the economy.

Next to financial news coverage, policy documents and other secondary data, the article draws on attending 23 financial industry events and conducting 114 expert interviews with exchanges, brokers, investors and regulators in mainland China (Beijing, Dalian, Hangzhou, Shanghai, Shenzhen and Zhengzhou), Frankfurt, Hong Kong, Karachi, London and Singapore between June 2017 and October 2019. These interviews provide insights into how Chinese exchanges manage capital markets, often involving window guidance and informal practices, and on their interaction with global markets. The article is structured as follows: After this introduction, the relationship between institutional logic, capital markets and state capitalism, and how this applies to China, are discussed, developing the concept of state-capitalist capital markets. The following sections then analyse three aspects of state-capitalist capital markets: the domestic development of Chinese capital markets, their integration into global markets and their internationalization – which is argued represent an alternative, resistance and challenge to neoliberal capital markets. The concluding section discusses implications for future GPE research on capital markets.

Global finance, state capitalism and the institutional embeddedness of capital markets

The formation of GFOs – which Drezner and McNamara (2013: 156) define as 'the rules, norms, and procedures that govern cross-border money and finance' – has been an important research topic within GPE (Germain, 2009; Huotari and Hanemann, 2014; Langley, 2003). In its contemporary form, the GFO is facilitated by the US-led Washington Consensus and underpinned by a synchronic conception of financial markets which in the imagination of political and economic elites function as well-oiled machines only upset by external shocks (Sinclair, 2011). As Langley (2003) noted, GFOs are historically constructed, resting on 'hierarchical social and power relations' and a core characteristic of the contemporary order is the constant reification of capital markets as central institutions in organizing and governing the global economy. As such, the capital markets underpinning the GFO facilitate and perpetuate existing power relations and hierarchies within global capitalism (Bortz and Kaltenbrunner, 2018; Pistor, 2013). In this context, state capitalism is often defined as the anti-thesis of such governance through markets, as the state's predominance over markets and impairment of 'free' market mechanisms (Kurlantzick, 2016). Proponents of liberal, free markets argue that there might be state capitalism in China,

but not ‘true capitalism’ (Miron, 2015). Some scholars even suggest state capitalism (re) emerged exactly because developing countries vowed to decrease their dependence on global markets (Carney, 2015; Kurlantzick, 2016: 87–88). The ‘rules, norms, and procedures’ that govern China’s state capitalism seem at odds with global capital markets (McNally and Gruin, 2017).

Moving beyond the fact that states and capitalism have historically been in an intimate relationship (Gerschenkron, 1962), state capitalism literature focuses on a more recent empirical phenomenon – the increasing intensity of government direction and steering in economic processes, especially in emerging markets (Kurlantzick, 2016; Musacchio and Lazzarini, 2013; Naughton and Tsai, 2015). In contrast to earlier forms of state-led economic development in the late-19th (US, Germany) and mid-20th century (Stalinism, fascism, developmental states), contemporary state capitalism relies less on prohibitive tariffs (first wave) or centralized command structures (second wave) but more on market-based economic coordination which, however, is controlled, steered or influenced by the state (ten Brink and Nölke, 2013). As Huang (2012: 620) noted, state capitalism highlights ‘the essentially capitalist nature of the [socio-economic] system’ where markets are important but ‘the state plays a very large role’ through intervening into the economy and state-ownership.

While the Chinese state has recognized the usefulness of market-based mechanisms for economic coordination (Duckett, 1996), ‘free’ markets are seen as something not quite to be trusted, endogenously crisis-prone, socially unproductive and leading to a loss of control over the economic system if not strictly regulated. As McNally (2013: 38–39) argues, there is a ‘considerable distrust of markets and full-out economic liberalization’. The state rather engages in a ‘pragmatic use’ of markets, managing markets for specific policy goals (see also, Gruin, this issue). Especially with capital markets, the authorities see considerable downsides to unfettered financial activities after experiencing several scandals domestically in the 1990s and intensely studying financial crises and their socio-political impacts on other states and societies (e.g. post-USSR Russia, Japan, Asian Financial Crisis).¹

Historically, capital markets only played a minor role in China’s state capitalism. While some authors highlighted China’s gradual transition towards market-based finance (Petry, 2020a; Gabor, 2018; Gruin, 2019), many contemporary analyses still subscribe to the prevailing understanding that (state-owned) banks are the main actors in China’s financial system (Allen et al., 2017; Naughton and Tsai, 2015; Nölke et al., 2020; ten Brink, 2019). State capitalism is often understood in juxtaposition to capital markets, the epitome of liberal capitalism. However, capital markets *have* become more important in China since the GFC. As Alami and Dixon (2020: 19) noted, ‘financialization and globalization may push states to develop new institutions, policy tools, and forms of intervention in order to continue performing tasks and functions that they have long performed’. With the increasing importance of capital markets for China’s state capitalism, the link between state capitalism and capital markets requires closer scrutiny, and especially *how* the state shapes markets needs to be explored.

This article argues that the problem is conceptual in nature. While GPE literature has extensively analysed states and their variegated forms, differences between capital markets have been studied less (for a detailed discussion, see Massot, this issue).² In GPE literature, states and markets have long been analysed as opposing institutions prevailing over or constraining each other’s actions (Schwartz, 2018; Strange, 1988). While the role of states in promoting capital markets has been well-documented (Konings, 2009) and more recently a focus has emerged around ‘governing through financial markets’ (Braun et al., 2018),

capital markets and their organization are often conceptualized as uniform, and *divergencies between markets* and the sources of these differences are seldom the focus of GPE analyses. Capital markets and their development are (implicitly) linked to neoliberalism and adjoining policies of structural adjustment, marketization and privatization (Carroll and Jarvis, 2014). Similarly, in the comparative capitalism literature, state and market are also defined as mutually exclusive for economic coordination within national economies (Deeg and Jackson, 2006; Hall and Soskice, 2001). Especially with regard to the financial system, either the state facilitates credit provision, mainly through state-owned and policy-banks, or market relations fulfil this role (Zysman, 1983). Markets are coordination mechanisms that result from certain institutional arrangements – but capital markets themselves are often conceptualized as homogenous, with little internal variegation.

One could argue that capital markets and their organization represent somewhat of a ‘hollow core’ in GPE research – they are central to processes of financialization and financial globalization but how and by whom capital markets are organized is rarely studied in empirical detail (but see Braun et al., 2018; Rethel and Sinclair, 2014). While critical of their dislocating effects and societal impacts, a neoclassical conception of capital markets is often reproduced as: uniform entities; an analytical category different from/contrary to ‘the state’; and linked to a neoliberal policy paradigm. However, if not all markets are equal, they might produce different outcomes and socio-economic effects. What is missing is a better understanding of the differential organization of capital markets.

In contrast to the premise that markets are uniform, following the likes of Keynes and Polanyi, economic sociology has shown that markets are ‘embedded in distinct sets of social and political institutions’ (Ebner and Beck, 2008: 4). Markets are social phenomena that are embedded in and influenced by man-made institutional arrangements (Fligstein, 2001; Granovetter, 1985). ‘Markets do not emerge out of a vacuum’ (Ahrne et al., 2015: 9), how and by whom markets are organized matters. For capital markets, this function is mainly fulfilled by securities exchanges.³ Instead of mere institutions/platforms on which market transactions take place, exchanges are powerful actors in their own right who actively organize and shape capital markets.⁴ As Bernards and Campbell-Verduyn (2019: 783) emphasize, ‘power often depend[s] on control over key financial infrastructures’ that enable the functioning of financial markets. Exchanges are such actors whose business is to organize, create and control their infrastructural arrangements. Rather than investors who are active within markets, as infrastructure providers exchanges play a more architectural role for capital markets. By deciding the ‘rules of the game’ and acting as gatekeepers in capital markets, deciding who gets in, what is traded and how trading is conducted, exchanges are crucial in shaping capital markets (Petry, 2020b).

But both capital markets and exchanges are embedded and shaped by their institutional environment. As Deeg and Jackson (2006: 152) highlight, ‘these institutional configurations create a particular contextual “logic” or rationality of economic action’. Every economy consists of a set of institutions which create distinct patterns of constraints and incentives that shape and channel actors’ behaviours (Zysman, 1994: 245–246). Hence, given the existing institutional structure, a particular institutional logic emerges that is distinct from other institutional contexts (Thornton and Ocasio, 2008). So, while functionally all capital markets are characterized by market-based mechanisms of coordination between buyers, sellers and investors, applying the concept of *institutional logic* to capital markets reveals how the institutional embeddedness of markets and market organizers shapes these markets, leading to different market dynamics and outcomes. Instead of looking at capital markets as

homogeneous entities, this article proposes to analyse capital markets as variegated. Exchanges hereby act as transmission mechanisms facilitating these different forms of how markets work.

Consequently, how exchanges (i.e. market organizers) are governed and which constraints and incentives they face matters. In the West, exchanges are publicly traded companies that have to make profitable business decisions to increase shareholder value; they are situated within an institutional setting informed by a neoliberal institutional logic. Importantly, six global exchange groups (GEGs) dominate global capital markets: accounting for ~50% of exchange industry profits, futures trading volume and stock market capitalization globally (Burton-Taylor, 2018; FIA, 2018; WFE, 2018), running the largest markets, owning the most important products/licenses and technological know-how (Petry, 2020b). These GEGs are interlinked with and co-constitute processes of financialization and actively facilitate neoliberal ideas of how capital markets are supposed to work (Petry, 2020c). The ostensible purpose of these capital markets that underpin the neoliberal GFO is to achieve 'efficiency' by enabling the generation of (private) profit, which is achieved by the principles of 'free markets' and 'free flows of capital' that should be responsible for allocating economic resources without state intervention (McNally, 2013: 36). While states are tasked with creating markets in neoliberalism, they should not intervene into these once established (Mudge, 2008; Peck and Thickett, 2002). The underlying neoliberal institutional logic that informs the functioning of these markets depoliticizes those markets, proposes a ('supposed') separation between state and capital markets, and puts a significant degree of trust and power in the collective agency of private (financial) capital actors to achieve 'efficient' outcomes by maximizing (private) profit (Major, 2012). While the state is not absent, its priority is enabling private profit creation instead of other socio-economic outcomes, cementing the power of private finance capital (Harvey, 2005; Slobodian, 2018). Capital markets organized by these (mainly US-based) GEGs that dominate and perpetuate the GFO should therefore be conceptualized as *neoliberal capital markets*.

While some argue that China's state capitalism has adopted elements of neoliberalism (McNally, 2013, 2020; So and Chu, 2015), this article argues that merely adopting market-mechanisms (e.g. capital markets) does not make China neoliberal. While market-based finance emerged as an important economic governance tool in China (Gabor, 2018), Chinese capital markets function fundamentally different than neoliberal capital markets. This is because exchanges and capital markets are situated within a very different institutional context – that of state capitalism. The institutional logic of China's state capitalism is not simply one of command-and-control but a combination of top-down state coordination and bottom-up market competition (Naughton and Tsai, 2015). As McNally (2015: 709) emphasizes, China's capitalism 'relies on a unique duality or dialectic whereby state-capitalist features are balanced by [...] a variety of hybrid institutional arrangements' (also, Sum, 2019). Chinese capital markets also follow this institutional logic. Bottom-up you have millions of profit-driven speculating investors that create manias, panics and crashes like in any capital market. But while profit creation for private finance capital is the primary underlying principle in neoliberal markets, importantly, in China, the state intervenes into capital markets to steer them into 'productive' tracks that facilitate state objectives. The defining difference between neoliberal and state-capitalist logic is not the existence of markets per se but rather the principles that underlie market organization

(profit creation vs state objectives) and the actors that dominate/shape these markets (private finance capital vs state institutions).

While investors act as entrepreneurs, ‘certain levers of state control remain intact’ (McNally, 2015: 715). As the organizers of capital markets, exchanges remain strictly in government control. Shanghai Stock Exchange (SSE), Shenzhen Stock Exchange (SZSE), Shanghai Futures Exchange (SHFE), Dalian Commodity Exchange (DCE), Zhengzhou Commodity Exchange (ZCE), China Financial Futures Exchange (CFFEX), Shanghai Gold Exchange (SGE), Shanghai Clearing House (SHCH) and China Foreign Exchange Trading System (CFETS) are all part of China’s regulatory apparatus for supervising and managing the financial system, often described as ‘front line regulators’ directly working with the China Securities Regulatory Commission (CSRC) or People’s Bank of China (PBoC) which report to the State Council. As an interviewee stated, these ‘infrastructural arrangements [are important] because this is where you can control the market’.⁵ The exchanges are also deeply embedded in the *nomenklatura* system (Edin, 2003); doing a good job as senior exchange manager (i.e. directing markets towards state policies) is important for party officials to eventually get promoted to higher positions.⁶ As Heilmann (2005: 2) notes, ‘the financial industry can therefore justifiably be treated as an integral part of the political system’. In contrast to being ‘marketized’, exchanges in China are rather ‘politicized’. Therefore, capital markets can be understood as a site where the authorities exercise ‘statecraft [through] financial control’ (Sum, 2019: 386). Hence, Chinese exchanges organize markets by designing market infrastructures that aim to shape market behaviour by monitoring, regulating and managing the behaviour of market participants and direct market outcomes towards the accomplishment of state objectives, both within China and abroad. Rather than neoliberal, the capital markets organized by China’s state-owned exchanges should hence be conceptualized as *state-capitalist capital markets*.

While this section draws on China/GEGs to develop ideal-typical conceptions of state-capitalist and neoliberal capital markets, empirical realities are more complex. Of course, state guidance of capital markets is never absolute, and China’s capital market development is also characterized by misguided attempts to intervene into markets, failed policy experimentation or external pressures influencing the decisions of Chinese authorities. After all, neither the Chinese state, nor its central institutions like the Chinese Communist Party (CCP) are monolithic or all-mighty entities (ten Brink, 2019). Similarly, neoliberal markets are neither purely laissez-faire as considerable hybridity and entanglement between states and financial markets exists (Braun, 2018; Braun et al., 2018). Neoliberal or state-capitalist, they are both capital markets populated by profit-driven investors and prone to speculative dynamics. However, what can be observed is that in China, a fundamentally different way of thinking about, managing and governing capital markets has emerged, as these markets are permeated by but also reproduce the institutional logic of Chinese state capitalism.

The next three sections analyse China’s state-capitalist capital markets and their interaction with the GFO. First, capital markets in China are analysed domestically, showing how Chinese exchanges develop markets that represent a distinct *alternative* to neoliberal capital markets. However, states are not closed-off national containers but interconnected and embedded within global economic and political structures (i.e. the GFO). Second, the integration of China’s capital markets with global markets is therefore analysed, demonstrating that China’s integration into global finance through its exchanges (largely) conforms with state-capitalist logic, demonstrating their *resistance* to conform with neoliberal capital markets. Third, the push to internationalize state-capitalist capital markets is

analysed, that is the expansion of state-capitalist logic of running markets in international cooperations and other countries. This is especially important with respect to questions of power in the global economy as this indicates how Chinese capital markets not only resist but also *challenge* US-dominated neoliberal capital markets.

State-capitalist capital markets: An alternative to neoliberal capital markets

During the Third Plenary Session of the CCP's 18th National Congress in 2013, the Chinese government officially declared that markets had a 'decisive role' to play in allocating resources and facilitating growth in the Chinese economy, a position that was reaffirmed during the 19th Congress in 2017 and is exemplified by the tremendous post-GFC growth of capital markets. However, the growing importance of market-based finance in China does not represent a shift towards neoliberalism but rather a perpetuation of Chinese state capitalism through financial means (Petry, 2020a). China's state-owned exchanges organize market infrastructures that establish constraints and incentives for market actors, whereby they attempt to direct market outcomes towards specific state policies. While populated by profit-driven, speculating investors, state-capitalist institutional logic is engrained in market infrastructures through which exchanges shape how markets work (Table 1).

These infrastructures function differently as capital markets fulfil a different role within state capitalism. In 2017, Xi Jinping noted that the tasks of China's financial sector were above all '[to] better serve the real economy, containing financial risks and deepening financial reforms'⁷ – thereby actively contributing to the development of China's state capitalism. Hence, markets are organized to facilitate these policies. As one interviewee noted, 'Chinese markets are the only markets where the exchanges don't encourage speculation; because they are worried about the risk'.⁸ While 'foreign exchanges have to press every single dollar out of their business'⁹ and 'try to attract as much trading as possible',¹⁰ the objective for China's exchanges is to control trading volumes; as one interviewee explained: 'Chinese exchange leaders don't like crazy volumes, because crazy volumes mean risks for them rather than revenue'.¹¹ While speculation is rampant in Chinese markets, the authorities aim to steer and constrain unhampered market activity as financial risks can easily transform into social risks (e.g. rising unemployment, slow economic growth) which would undermine the CCP's 'performance legitimacy' (Sum, 2019). Therefore, financial infrastructures are 'designed with control in mind'¹² and a massive monitoring and intervention system was established.

There are for instance great differences in how exchanges manage market (data) access. In contrast to GEGs where continuous streams of market data is sold for profit, facilitating high-frequency trading (HFT) (MacKenzie, 2018), in China, market data only comes as snap-shots (2–4 per second) making HFT difficult as information asymmetries between investors decrease. Every trade needs to go through a Chinese broker, which enables the exchanges to trace every single trade to an ID card, the so-called 'see-through monitoring system'. As one interviewee explained, the system is called '*see-through*' because we can see through individual investors account – if something happens in the market, we know who did it'.¹³ This also creates responsibilities for brokers to ensure their members' compliance with exchanges' rules as violations would fall back on them.¹⁴ In contrast to global markets, dark pools or similar intransparent venues do not exist in China. Furthermore, portfolio

Table 1. Market infrastructures in neoliberal vs state-capitalist capital markets (author's table).

	Neoliberal capital markets	State-capitalist capital markets
Speculation	Encouraged, e.g. through incentive schemes	Discouraged, e.g. by trading rules (hedge/spec)
Market data	Continuous flow, costly, differential access	Snap-shots, free, little/no discrimination
Regulatory oversight	Limited, privatized (dark pools, etc.)	Extensive, see-through monitoring system
Market access	Unequal (co-location, direct market access; DMA)	Relatively equal (co-location limited, no DMA)
Account structure	Omnibus (little oversight)	Individual (complete oversight)
Margin requirements	Portfolio margining, margin offsets	Full margining, no offsets, margin monitoring
Position limits	Very few, only in certain products	Extensive, strictly enforced, all products
Trading rules	Few order limits, countless order types	Strict order limits, hedging quotas
Trading speed	(Ultra)high frequency trading encouraged	No day trading for stocks, slow for futures
Non-compliance	Few sanctions (speculation encouraged)	Order cancelled, brokers called, fees increased
Exchange motivation	Marketized (profit-driven, shareholders)	Politicized (policy-driven, state objectives)
Dominant actors	Private finance capital	State institutions
Institutional logic	'efficiency' through creation of private profit/separation of state and market	State control and direction of market/markets facilitate state policies

margin offsetting that would lower margins on large trading positions does not exist, another deliberate move to discourage speculation. By limiting order types and introducing order (cancellation)/position limits, exchanges also change the incentive structures for certain kinds of speculative trading. In stock markets intraday trading is not possible, effectively preventing HFT, while by keeping order (cancellation) limits low in futures markets HFT is reduced. As one interviewee noted: 'How many orders you can cancel, how many orders you can send per minute, that matters, because HFT needs to test the market, right? [...] And there are measures in place to control that.'¹⁵ This is not to say that HFT does not exist in China – in fact it emerged in 2014 and has been growing since in Chinese futures markets.¹⁶ But it is not as widespread and much more constrained than in global markets.¹⁷

Instead of placing trust in markets' ability to self-correct and achieve 'efficient' outcomes, in China, assessments about the social usefulness of financial trading are made – that 'finance should serve the real economy'. This leads to stark contrasts in the evaluation of different financial products. While 'people are thinking that stocks at least lead to something',¹⁸ when it comes to derivatives, 'I think sometimes the Chinese regulators, they still [...] debate whether they're a necessary evil [laughs]',¹⁹ and that 'they are quite sceptical about allowing derivative markets to grow uncontrolled'.²⁰ Here again, the Chinese exchanges have different measures in place. When trading in Chinese futures markets, traders have to indicate if their trades are for hedging or speculative purposes and strict position limits apply (e.g. 20 lots/day). If investors have reached their position limit for speculative trades and want to trade more contracts, this is only possible if they apply for hedging quotas with individual exchanges and for individual contracts. Here, investors must sufficiently document their need to hedge an underlying position and the exchanges monitor hedging activities to prevent abuse. If there was a mismatch, e.g. an investor hedged CSI 300 Futures worth RMB100 million while his equity position was only worth RMB70 million, the exchange would punish such fraudulent behaviour.²¹ In order to steer market behaviour towards such 'productive' outcomes, strict position limits and hedging quotas play an important role, commodity futures are treated preferentially to financial futures (which are seen as 'speculative' by regulators), and almost every futures contract needs to be physically delivered.

With a similar objective in mind, the exchanges also constantly monitor trading activities through their 'transaction supervision departments', whose job is to detect suspicious trading activities that could indicate market manipulation or insider trading.²² The stock exchanges monitor the trading of all listed stocks and when, for instance, a company's stock quickly rises while trading volume does not rise accordingly, they will suspect insider trading, resulting in an investigation of the company. The futures exchanges instead monitor certain core figures like the trading volume-to-open interest ratio to determine whether illicit trading activities take place or whether there is 'over-speculation' in certain products.²³ If there is too much trading, exchanges will increase intra-day execution fees and intra-day margins for those contracts or call top-traders and their brokers, telling them to stop trading for the day. As a former exchange employee noted: 'You have no idea how many calls I gave to these large accounts, telling them to stop trading! [...] But it's not written down anywhere, it's just window guidance'.²⁴ Non-compliance is also punished by the exchanges – trades can be annulled, also retrospectively, warnings will be issued and when investors repeatedly violate rules, they are banned from trading temporarily or even lose their trading licence. As one interviewee mentioned, 'when you read Futures Daily [a Chinese financial newspaper], every day there will be announcements of this or that company who has been

suspended from trading because of rule violations, it happens every day'.²⁵ As (most) investors and brokers try not to cross this line, these measures have a preventive effect, 'stopping these things from happening in the first place'.²⁶

But there are also multiple, sometimes competing, objectives underlying processes of market organization and management. Partially, these measures are in place to facilitate social stability as capital markets have become important for the social fabric of China's state capitalism. In the absence of a sufficient public social security system and a simultaneous strain on the familial social security system due to the legacy of the one-child policy and a (consequently) aging population – investing into the stock market serves as a fix and was actively promoted by the state (Dal Maso, 2015). Starting in the 1990s, slogans such as 'getting rich is glorious' animated millions of retail investors to invest into the stock market. From being non-existent before 1990, around 50 million trading accounts had been created by 1999, more than 168 million active trading accounts existed by 2013, and these retail investors conduct 90% of trading.²⁷ Today, the promise of a Chinese dream, socialism with Chinese characteristics and political stability are all intricately linked with the performance of the stock market. These investors are often described as 'children', 'financially illiterate' and 'gamblers' whose speculative trading activity is driven by rumours. However, these retail investors also legitimize the political rule of the CCP; as one interviewee stated, 'at a grander scale, it is about social stability'.²⁸ This reveals the partially contradictory nature of state-capitalist institutional logic. On the one hand, the state aims to control financial instability, and on the other hand, it has interwoven social stability with capital market participation which in turn potentially decreases financial stability. Therefore, the authorities do not want investors 'protesting in front of the CSRC or PBoC'²⁹ because they lost money in the stock market. Hence, the exchanges' above-mentioned system of risk monitoring and management is used in a delicate balancing act between allowing retail investors to participate in markets but also reduce the volatility that they bring into markets, professionalize/educate them and protect them from themselves and more sophisticated investors.

Of course, the exchanges sometimes fail to achieve their goals or their risk management is not always effective as demonstrated by the 2015/16 market crash. But even the exchanges' management of such failures showcases a different way of governing markets. First, the regulators called in the 'national team'; as one interviewee explained, 'the government just gives goals to the large asset owners – you can't sell anymore... that's not a rule and not written, but you better not try to ignore that [chuckles]'.³⁰ To further stem the crisis, the exchanges put measures in place considered 'draconian by Western standards'.³¹ There was a crackdown on margin lending operations, investigations were started into 'malicious short-selling' and stock shorting was temporarily restricted. As one interviewee stated: 'some institutions were even asked to forfeit their shorting position – we were one of them [laughs]'.³² And after being the world's most-traded equity index futures in 2015, the CSI 300 futures market was killed over night because of fears that it would exacerbate the stock market downturn (see, Petry, 2020a). Such swift state-directed market intervention would be unlikely and hardly possible in neoliberal capital markets where market infrastructures are privatized and distanced from the state.

In contrast to the perception of some Western commentators, capital markets – as characterized by market-based mechanisms that facilitate the trading of securities between investors – do exist in China. However, as this section highlighted, these capital markets function very differently from neoliberal capital markets. Rather than detached from the

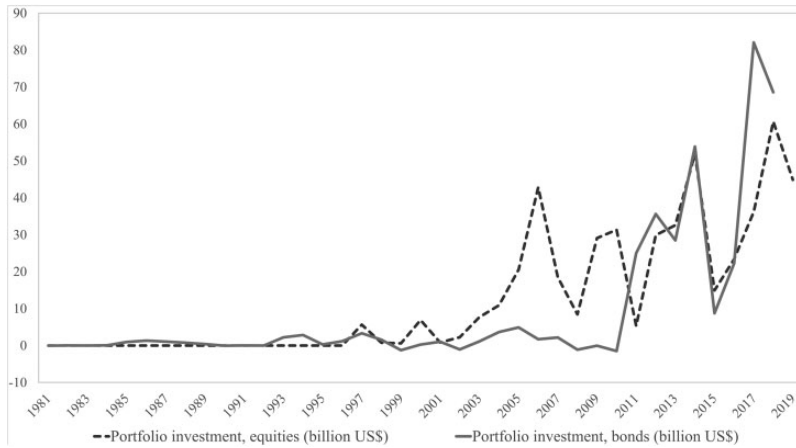


Figure 1. China's portfolio investment net inflows, 1979–2019.

Source: World Bank (2020).

state and facilitating the creation of private profit, they are embedded into and function according to the institutional logic of China's state capitalism, actively managed by China's exchanges to facilitate state objectives. Thereby, they represent a clear *alternative* to the neoliberal capital markets that underpin the GFO.

Integrating into global finance: Resisting neoliberal capital markets

A second important dimension of China's state-capitalist capital markets is their integration into global markets. From being virtually isolated 20 years ago, portfolio investment that flowed into China increased unprecedentedly post-GFC (Figure 1). In neoliberal capital markets which are based on the principle of free capital movements, international investors' ability to withdraw funds serves as disciplinary mechanism (Bortz and Kaltenbrunner, 2018; Rommerskirchen, 2020). The GFO is self-reinforcing. However, instead of opening the floodgates, giving up state control and giving in to neoliberal logic, the Chinese exchanges structured the opening of China's capital markets so that it enables foreign investor participation while simultaneously maintaining a distinctively state-capitalist logic of running capital markets (see also McNally, 2015: 714–715). China's capital markets essentially resist pressures to conform with the GFO.

Why internationalize in the first place? China has an ambiguous relationship with foreign investors. As one interviewee stated, 'it's absolutely a love and hate story, they love the money, love the stability, hate giving up control. . . and hate it if foreign investors want to dominate the terms'.³³ On the one hand, foreign investors support the professionalization of China's financial industry and are crucial for China's aspirations of becoming a global financial power. Therefore, international players are let into the market to train/educate local institutions, making them ready to venture into global markets. On the other hand, the authorities are wary of losing control through an increasing influx of foreign money³⁴ – especially as controlling capital flows, exchange rate and financial system are important mechanisms of China's international integration. As one interviewee noted, with 'domestic

[speculators], they can sort of, shut the gate and release the dog and then you tow in line³⁵ – which is not necessarily possible when integrated into global markets. Therefore, the way Chinese exchanges open their markets for foreign investors enables their participation while maintaining their state-capitalist market logic.

Foreigners are not allowed to freely participate in Chinese markets but only if they establish local entities, so-called wholly foreign-owned enterprises (WFOEs).³⁶ As several interviewees noted, setting up WFOEs to trade in capital markets is accepted by the authorities – because they are registered in China, subject to Chinese laws, funds/profits cannot be easily repatriated, and they can be monitored and controlled by the Chinese exchanges.³⁷ Through a strict and lengthy process, the regulators decide who receives a WFOE license, and ultimately, the exchanges define which of their activities are legitimate. As WFOEs operate in a grey area, the exchanges always have ‘probable cause’³⁸ against them, and they are ideal scapegoats during a market downturn.³⁹ One Shanghai-based foreign asset manager, therefore, called China a ‘façade of an open market’.⁴⁰ Although the world’s large financial players are active in Chinese markets, monitored by the Chinese exchanges, they have to play according to Chinese rules – in contrast to global markets, they are at the bottom of the food chain.

When foreign investors want to trade into China from abroad, even more restrictions apply. Instead of a Big Bang liberalization, the opening-up of Chinese capital markets is conducted in a highly controlled, reversible manner and the infrastructural arrangements that enable foreign investor access maintain capital controls, in contrast to neoliberal capital markets where the abolishment of capital controls has been a central feature. As one interviewee explained:

I have an analogy... [...] If you look at capital controls as a wall, people have eliminated them in different ways... and you can remove the wall, full liberalisation, Big Bang, and that has a whole range of problems... you can remove it gradually... or you can do what the Chinese are doing and build holes through it. It’s this pilot project approach, you build holes and then you think you can repair them if needed, and you leave the height of the wall more or less intact.⁴¹

Since 2003, the first such mechanisms were the QFII and RQFII schemes, where foreign investors could apply for investment quotas. However, only 200–300 institutions were issued quotas, with restrictions on what can be traded and the repatriation of profits. The establishment of the Stock Connects between Hong Kong Stock Exchange (HKEx), SSE and SZSE in 2014 and 2016 marked a turning point.⁴² Especially as this was crucial for MSCI’s decisions to include Chinese A-shares into its Emerging Market indices, a milestone in the opening process and an ‘accolade’ for China’s aspiration to becoming a global financial power (Petry et al., 2019). This index inclusion was a boon for China’s integration into global markets. While ‘Chinese regulators still don’t like hedge funds, fast money, [...] MSCI inclusion attracts the right kind of foreign investors – long-term, passive, they trade very little...’⁴³ Resulting long-term foreign inflows into Chinese stocks are estimated at US\$400 billion over the next decade (He, 2018). However, this unprecedented inflow of foreign capital will take place according to rules set out by China’s exchanges.

Basically, the Stock Connects enable foreign traders to trade Chinese stocks via HKEx, and vice versa. Importantly, these Connects are ‘closed loops’: if mainland investors invested in Hong Kong-listed shares through the Connect and decided to sell these, the resulting HKD-denominated proceeds get transferred into RMB and channelled back to their

now basically being applied to foreign investors. As one interviewee noted, this was: ‘forcedly pushed into the Hong Kong market’ and that ‘HKEx has definitely adjusted a lot of things in order to accommodate trading in China’.⁴⁷ Now, the Chinese exchanges can monitor the trading activities of every single international investor accessing their markets, a level of scrutiny unthinkable in global markets; as HKEx’s CEO Charles Li stated, ‘while Europe is struggling with MiFID II, in China you have MiFID 10’.⁴⁸

In fact, all other mechanisms that integrated China with global markets and enable foreign investors access – Bond Connect, (R)QFII, London-Shanghai Stock Connect, D-Shares listed on CEINEX, SGE’s international board or internationalized commodity contracts on SHFE, DCE and ZCE – are similarly designed to keep capital controls intact (Figure 2).⁴⁹ As one interviewee noted, ‘step by step there is a whole market infrastructure emerging’ that connects China with the outside world.⁵⁰ But while China is increasingly integrating with global finance, international investors have to play according to Chinese rules. Attempts to shape market behaviour and steer market outcomes are maintained by China’s exchanges, following China’s state-capitalist logic of organizing capital markets, and demonstrating China’s *resistance* to conform with neoliberal capital markets underpinning the GFO.

Internationalizing China’s capital markets: Challenging neoliberal capital markets

In their current form, global markets are not perceived as fair but as being stacked against Chinese interests, rather benefitting Western private financial actors (see Massot, this issue: 15). Similar to RMB internationalization, the internationalization of China’s capital markets is part of the state’s strategy to change the rules of the game in global finance or at least to create a level-playing field that does not disadvantage China. Hence, in recent years Chinese exchanges have started to internationalize (see Figure 3); and as they expand abroad, they partially ‘export’ China’s state-capitalist capital markets, facilitating China’s state-capitalist logic of running capital markets abroad – thereby *challenging* the neoliberal capital markets that underpin the GFO.

Since 2016, SZSE, SSE, CFFEX and ZCE opened offices in Hong Kong, SHFE, DCE and ZCE opened Singapore offices, and SHCH has a London office. They held the World Federation of Exchanges (WFE) chairmanship, the new CCP12⁵¹ headquarter is based in Shanghai, they participated in and sponsored evermore industry conferences and events (FIA, FOW, ASIFMA, etc.), and they engaged in countless cooperations with other exchanges. In these arrangements, however, global partner exchanges often make concessions to their Chinese counterparts, and the infrastructural arrangements emerging from those follow a state-capitalist logic of running markets.

One such example is CEINEX, a joint venture between Deutsche Börse, CFFEX and SSE based in Frankfurt. While CEINEX uses Deutsche Börse’s trading and clearing infrastructure, through their 60% ownership stake, the Chinese exchanges set the tone in the cooperation and steer it towards national development goals. In 2018, CEINEX for instance started listing Chinese blue-chip companies in Germany, so-called D-Shares, which enables Chinese companies a secondary listing in Germany – thereby facilitating the funding opportunities, ‘going out’ strategy, international standing and recognition of Chinese companies. And while CEINEX has not yet been commercially successful, several interviewees point out

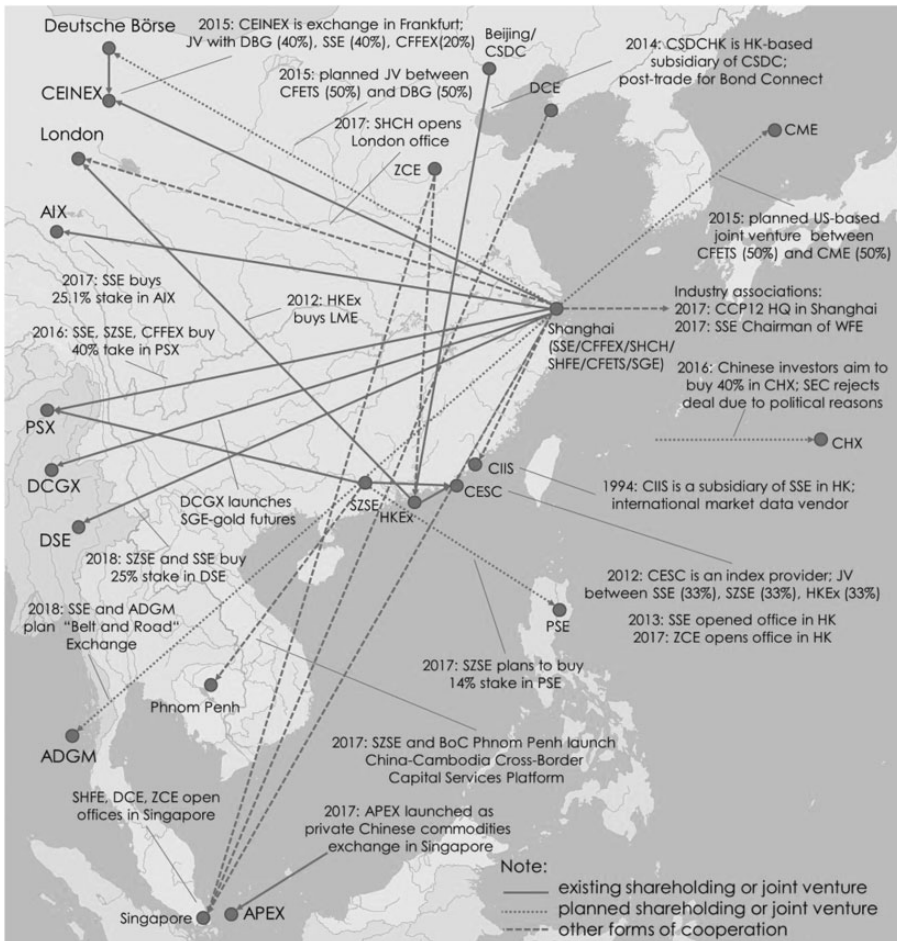


Figure 3. China's exchanges going abroad, 2019 (author's graph).

Source: interview data, financial news, press releases.

its importance in forging a financial bond between Germany and China.⁵² At the Euro Finance Week, Continental Europe's largest financial industry conference in Frankfurt, CEINEX for instance sponsors a designated 'China Day', emphasizing Sino-German economic and financial interdependencies.⁵³ CEINEX is not designed to create profit – its purpose is to facilitate broader state policies and aspirations, more closely following a state-capitalist than a neoliberal logic despite being based outside of China. The same pattern exists in international cooperations with HKEx or the London–Shanghai Connect. Global counterparts make concessions and Chinese characteristics and their logic of running markets – not for profit but interlinked with political objectives – prevail. As one interviewee stated, 'all these collaborations obviously are in direct connection with the policy side [...] it's just part of the bigger picture of economic policies'.⁵⁴

The US is notably (largely) absent from Chinese exchanges' internationalization, partially because the US is wary of Chinese influence. A case in point being the SEC's refusal of the

ailing Chicago Stock Exchange's acquisition through a Chinese consortium. The planned acquisition even became a topic in Trump's presidential campaign who vehemently opposed the deal, exactly because it was not perceived as a 'normal' acquisition but linked to China's state-capitalist system. Vice versa, China also actively challenges the US, as highlighted by a dispute between US-based ICE Group and China's ZCE. In 2015, ICE wanted to list copy-cat contracts of ZCE futures on its new Singaporean exchange. While such replications are standard procedure in neoliberal markets, ZCE feared losing liquidity and pricing power – a clear break with state-capitalist logic of running markets where financial trading is linked to more political-economic objectives. Subsequently, ZCE threatened to sue ICE and the CSRC approached Singapore's regulator to stop the launch of ICE's products. In the end, ICE Futures Singapore opened with a delay – without the copy-cat contracts.⁵⁵ Effectively, China pressured the US-based and world's second-largest exchange group to delist contracts in a third country because this contradicted China's state-capitalist logic of running capital markets, effectively exporting their institutional logic.

Similarly, Chinese exchanges challenge US-dominated, USD-denominated global commodities markets, as commodity futures function as reference prices for physical commodity trading. In global markets, Chinese companies felt that they had to accept higher prices. As one interviewee noted:

every five years they need to agree on a price with the Australian iron ore producer backed by the Western buying power, and they always got very ripped off in the negotiations, you know, because you have to mark reference to the market price and the market didn't take place anywhere near you, it takes place globally... so, that's something the government is putting focus on.⁵⁶

As China's Global Times stated, 'commodity pricing power reflects a country's national strength in the existing world economic order' (Zhe, 2016). Following state-capitalist logic where markets facilitate state objectives, Chinese exchanges are aiming to create globally recognized benchmarks to 'have a say' in commodity pricing, as prices created in Chinese markets would better reflect local demand and supply rather than prices determined in the US where participating Chinese firms have little power.⁵⁷ As an interviewee stated, 'Chinese (companies) felt unfairly treated, cheated or discriminated against in global market because when they want to buy, prices go up, when they want to sell, prices go down...'.⁵⁸ If these markets were situated in China, regulated by Chinese exchanges, the state could steer these markets, and forestall oligopolistic behaviour by producing companies as it exists in global markets (Massot, 2020: 9). Consequently, having their own benchmarks would give Chinese companies 'better' prices. As one interviewee noted, 'this goes against free market views... their aim is to set the rules themselves by creating their own products'.⁵⁹

To gain commodity pricing power, the Chinese exchanges started to internationalize strategically important commodity contracts (crude oil, iron ore, gold), while (mostly) maintaining the previously identified characteristics of Chinese capital markets (Table 1). A move that seems to be paying off: six months after its launch in March 2018, SHFE's crude oil contract gained a 16% market share in global oil futures markets, displacing Dubai as the world's third-largest benchmark, while the market shares of WTI and Brent dropped from 60 to 52% and 38 to 32%, respectively (Evans, 2018). This Chinese crude-oil contract has the potential to significantly influence the RMB's role in the GFO (for a detailed analysis, see McNally, 2020), as also exemplified by increasing talk in mainstream financial media about

the emergence of ‘petro-yuan’ (Duguid, 2018). Especially in oil markets, ‘they want to their own benchmark to block the influence of the US’.⁶⁰ China is trying hard to gain ground in global commodity markets, thereby shaping these markets in their image.

Chinese exchanges also became very active in developing countries, helping them to develop their capital markets by training local exchanges, providing technology and offering know-how to build advanced markets. As one interviewee noted, ‘all countries need financial infrastructures’ and that ‘it’s a strategic choice of the Chinese government’ to help facilitate their development.⁶¹ Consequently, dozens of cooperations between Chinese and smaller exchanges are emerging across Asia, the Middle East and even Eastern Europe. Some of these involve product cooperations: the Dubai Gold Exchange for instance listed RMB-denominated gold futures based on SGE’s gold benchmark, while the Budapest Stock Exchange agreed to launch a similar product, contributing to China’s aim to establish globally recognized benchmarks. Furthermore, when Chinese exchanges are buying ownership stakes, their engagements are not commercially driven. As one interviewee noted, ‘there is no business case [for these acquisitions], it just doesn’t make sense’.⁶² While this holds true from the logic of neoliberal markets whose aim is the generation of profit, these market development processes follow a state-capitalist logic, aiming to facilitate Chinese state policies.

Most prominently, this can be observed in Chinese exchanges’ engagement with BRI countries. Here, they started to heavily cooperate with local exchanges, buying significant ownership stakes, promising to develop their markets, and facilitating technology transfer and staff trainings. Since 2016, Chinese exchanges conducted dozens of trainings and workshops with local regulators and exchanges, agreed to jointly build a BRI-Exchange in Abu Dhabi, bought 40% in Pakistan Stock Exchange (PSX), 25% in Astana International Exchange (AIX) and 25% in Dhaka Stock Exchange (DSE). The case of PSX is instructive in this respect, where in 2016, a Chinese-led consortium (mainly CFFEX, SSE, SZSE) acquired a 40% stake with a financially generous offer and the promise to modernize PSX. But while ‘of course mutual benefit and cooperation is important, [as] shareholder [China’s exchange] can exert some influence’.⁶³ In return, the Chinese consortium has a majority on the board of directors and the right to nominate top management positions, including the CEO. In addition, CFFEX personnel is working on-site to develop new financial products and mechanisms that would link Chinese and Pakistani capital markets. Similar developments can be observed in other cases, such as AIX and DSE.

However, when helping to develop these markets, presumably they will be more aligned with Chinese principles and practices of market organization than with neoliberal markets. As Zeng Zheng, Director of the NDRC Market Research Institute, noted: ‘Western standards are good but with Chinese characteristics they are much more suitable for developing countries’, and that ‘BRI helps you to set standards’.⁶⁴ In the case of PSX, the role of private financial actors has for instance been reduced; as one interviewee noted ‘after acquisition [the] dominance of local brokers within the Board has been significantly diluted’.⁶⁵ Furthermore, the new management is aiming to change market dynamics – ‘they have introduced greater transparency [and] data leakages have largely reduced’.⁶⁶ Furthermore, PSX is ‘tightening the regulatory regime’, so that now ‘brokers need to follow clearly specified standardized recording and accounting procedures of their dealing/transactions with investors’ that will be regularly audited (Siddiqui, 2017), a system that sounds less like international practice and more like China’s ‘see-through monitoring system’.

With the internationalization of China's exchanges and their activities, they are effectively extending their state-capitalist logic of running capital markets abroad. As part of a larger systemic shift in the GPE, this also emphasizes how Chinese markets are not only qualitatively different from Western-centric conceptions of markets but that they are also actively *challenging* those neoliberal capital markets that underpin the GFO (see also, Chesse, this issue). Especially, within the broader context of a decentring of Western-centric conceptions of markets (see, Introduction, this issue), this is an important dimension of China's capital markets development.

Beyond China: Towards a 'varieties of capital markets'

China's capital markets have been developing and internationalizing rapidly since the GFC. But rather than resembling the neoliberal capital markets underpinning the GFO, what can be observed in China is a gradual development of capital markets whose primary underlying institutional logic is controlling and directing markets towards state objectives, a logic that follows from China's state-capitalist institutional setting. Of course, state control is never absolute, and capital market development in China is also characterized by failed attempts to control market outcomes (e.g. 2015/2016 market crash), failed policy experimentation (e.g. failed cooperations) or external pressures influencing the decisions of Chinese authorities (e.g. commodity pricing). However, what can be observed in China is that a way of thinking about, managing and governing capital markets has emerged that is fundamentally different from the neoliberal capital markets that underpin the GFO.

While many Western commentators argue that 'proper' capital markets do not exist in China, such assessments reflect the neoliberal bias that Western views of markets exhibit, shedding light on the contested politics between two different conceptions of capital markets championed by China and the US. This has become all too obvious in the ongoing US–China trade war where finance has become an important topic. The results of this analysis hence contradict the idea that China's capital markets will eventually liberalize and get more 'developed' and 'sophisticated' – but rather that no matter how deep the reforms, Chinese capital markets remain distinct from neoliberal capital markets. Through the actions and practices of Chinese securities exchanges, the power of the Chinese state is facilitated within and through *state-capitalist capital markets*, representing an alternative to, but also resisting and challenging the neoliberal capital markets underpinning the GFO.

This case study hence highlights the need to re-evaluate the conceptual toolbox with which we analyse global finance. In political economy literature, capital markets are often viewed as homogeneous entities, an analytical category different from/contrary to 'the state', and capital market development is often linked to a neoliberal policy paradigm. However, as the findings of this article demonstrate, conceptually capital markets (and exchanges) should be analysed separate from neoliberalism. While capital markets can follow and facilitate neoliberal logic, this is not necessarily the case. Rather, capital markets are embedded within specific institutional settings whose institutional logic shapes how they function. Capital markets in China are situated within and function according to the institutional logic of state capitalism that fuses bottom-up entrepreneurship and top-down state control. Thereby, capital markets actively contribute to the perpetuation of China's state-capitalist system, both domestically and internationally. This conceptual point is especially important when extending an analysis of capital markets beyond China. For future research endeavours, it might therefore be worthwhile investigating a 'varieties of capital markets'

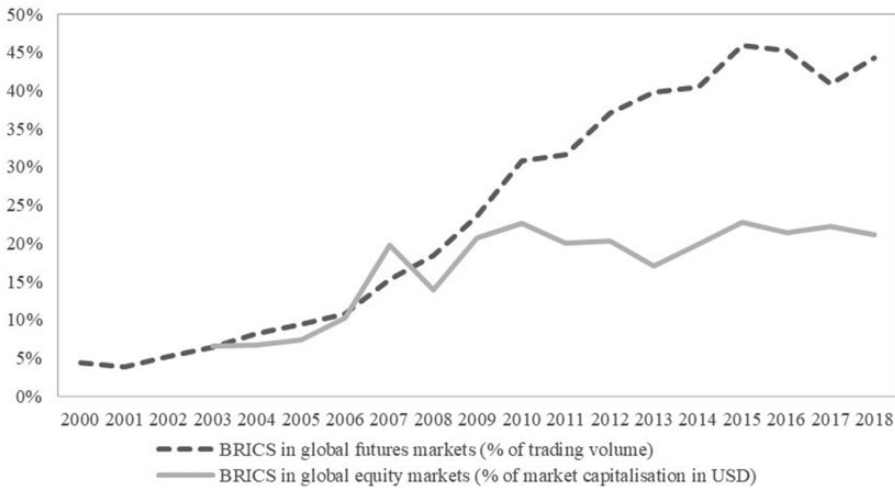


Figure 4. Rising significance of Brazil, Russia, India and China in global finance, 2019 (author's calculation, data for China includes Hong Kong).
Source: WFE (2018) and FIA (2018).

that are shaped by different institutional logics and differ from a uniform conception of 'global', 'Anglo-American' or 'neoliberal' capital markets that exist in countries where the state maintains a qualitatively different role within the economy (Fichtner, 2016). Especially, as these economies – such as the BRICs – today account for an increasing share of global capital markets (Figure 4).

While this case study focused on China, anecdotal evidence points towards the existence of non-liberal capital markets elsewhere. Similar to China's ICE-ZCE story, since 2017, Indian exchanges have been trying to force offshore derivatives trading onshore to regain control over trading and facilitate the development of their domestic markets. Brazilian exchanges have tried to gain commodity pricing power, and along with Korea and Turkey, US index provider MSCI is investigating limited investor access (i.e. non-compliance with neoliberal norms of open markets) in those four countries' capital markets (Tan and Robertson, 2018). Similar to Chinese exchanges' BRI investments, the Japanese and Korean exchange groups, have also been heavily investing into underdeveloped South East Asian exchanges in Laos, Myanmar or Cambodia on behalf of their respective government's regional economic strategies.⁶⁷ Furthermore, in Korea, Taiwan and India, foreign ownership of national securities exchanges is severely limited and state-exchange relationships more closely resemble the Chinese institutional logic than those in the West.

These empirical examples are important in the context of state capitalism in other countries (Kurlantzick, 2016). Viktorov and Abramov (2016), for instance, explore the Russian state's post-GFC expansion into its financial markets, albeit Russia has been less successful in thereby pursuing its development agenda. The development of local currency bond markets in East Asia through hybrid public-private institutions also points in this direction (Rethel and Sinclair, 2014). Similarly, developmental states such as Korea have not revoked their role in shaping their financial and economic systems (Thurbon, 2016), and Islamic

Finance also follows different logics than neoliberal markets (Rethel, 2011). What are commonalities and differences between state-capitalist capital markets? Between neoliberal capital markets? Do capital markets exist on a continuum between neoliberal and state-capitalist institutional logic or are these logics more variegated? Are there cross-temporal similarities and differences between capital markets in 21st-century state capitalisms and 20th-century developmental states? More research is needed that comparatively analyses different institutional logics and how they influence capital markets.

Especially post-GFC, global financial governance seems to be transforming with China at the centre, ‘taking the lead in promoting a *managed* yet ambitious form of global financial [...] integration’ (Grabel, 2017: xv; emphasis added). While China is challenging the neoliberal markets that underpin the GFO, is it alone? State-capitalist economies are quickly becoming major global financial players as their economies increasingly adopt market-based financial practices. With a shift in the global economy away from a predominance of ‘Anglo-American’ capitalism and the rise of state-capitalist economies, these developments have important implications for the GFO as different domestic market configurations undoubtedly shape the global economic order. In turn, this inevitably challenges the power relations that are facilitated by neoliberal capital markets and are embedded within the US-dominated GFO. If commonalities exist between state-capitalist capital markets and they play according to different rules, they could truly change the game. This article therefore proposes analysing these ‘varieties of capital markets’ as a research agenda to understand the interplay of models of capitalism, their trajectories of financialization and how they interact with, integrate into and ultimately shape the global financial and economic order.

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Notes

1. Interview: research department, Chinese exchange (Shanghai, 14 May 2018).
2. This paper focuses on capital markets as a specific subset of markets.
3. While other actors also matter for capital markets (e.g. professional associations, central banks, regulatory agencies), their analysis goes beyond the scope of this paper.
4. For a detailed discussion of 'exchanges as actors', see Petry (2020b).
5. Interview: research department, regulator (Beijing, 12 September 2019).
6. Interview: China business development, global exchange (Hong Kong, 10 July 2017).
7. Speech: 5th National Financial Work Conference (Beijing, 14 July 2017).
8. Interview: international department, broker (Hong Kong, 26 September 2018).
9. Interview: consultant, Chinese exchange (Shanghai, 9 May 2018).
10. Interview: consultant, Chinese exchange (Shanghai, 24 April 2018).
11. Interview: China business development, global exchange (Hong Kong, 7 July 2017).
12. Interview: emerging market strategist, global exchange (London, 11 January 2018).
13. Interview: international department, exchange (Hong Kong, 21 June 2017).
14. Interview: hedge fund manager (Shanghai, 16 April 2018).
15. Interview: business development, global exchange (Hong Kong, 19 September 2018).
16. Interview: international department, broker (Shanghai, 25 September 2019).
17. Interview: international department, broker (Shanghai, 26 April 2018).
18. Interview: China business development, global exchange (Hong Kong, 7 July 2017).
19. Interview: international department, global exchange (China, 5 July 2017).
20. Interview: APAC director, financial infrastructure provider (Hong Kong, 26 June 2017).
21. Interview: hedge fund manager (Shanghai, 16 April 2018).
22. Interview: research department, regulator (Beijing, 30 October 2018).
23. Interview: consultant, Chinese exchange (Shanghai, 9 May 2018).
24. Interview: business development, global exchange (Beijing 7 November 2018).
25. Interview: international department, broker (Shenzhen, 18 May 2018).
26. Interview: consultant, Chinese exchange (Beijing, 29 October 2018).
27. Speech: CSRC chairman Guo Shuqing 'To develop a more open and inclusive capital market in China', Asian Financial Forum (14 January 2013).
28. Interview: business development, global exchange (Hong Kong, 19 September 2018).
29. Interview: hedge fund manager (Hong Kong, 27 June 2017).
30. Interview: CEO, asset manager (Hong Kong, 28 June 2017).
31. Interview: product development, global exchange (Frankfurt, 2 February 2018).
32. Interview: hedge fund manager (Shanghai, 24 September 2019).
33. Interview: CEO, asset manager (Hong Kong, 28 June 2017).
34. Interview: private equity firm (Shenzhen, 22 June 2017).
35. Interview: APAC director, financial infrastructure provider (Hong Kong, 26 June 2017).
36. Interview: managing partner, asset manager (Shanghai, 15 May 2018).
37. Interview: research department, Chinese exchange (Shanghai, 14 May 2018).
38. Interview: consultant, Chinese exchange (Shanghai, 9 May 2018).
39. A prominent case is the Russian trading firm Yishidan International Trading whose trading on CFFEX was retroactively declared illegal, had to pay a considerably fine and was banned from trading indefinitely (interview: research department, regulator; Beijing, 30 October 2018).
40. Interview: managing partner, asset manager (Shanghai, 15 May 2018).
41. Interview: emerging markets strategist, exchange (London, 11 January 2018).
42. In 2017, Hong Kong-China Bond Connect was also launched.
43. Interview: product development, asset manager (Hong Kong, 3 July 2017).
44. Interview: managing partner, asset manager (Hong Kong, 27 June 2017).

45. Interview: strategy department, exchange (Hong Kong, 30 June 2017).
46. Interview: emerging markets strategist, global exchange (London, 11 January 2018).
47. Interview: general manager, global exchange (Hong Kong, 27 September 2018).
48. Observation: 'Global exchange leaders' panel, FIA Asia Conference (Singapore, 29 November 2017).
49. Interview: strategy department, Chinese exchange (Shanghai, 9 May 2018).
50. Interview: APAC director, financial infrastructure provider (Hong Kong, 29 June 2017).
51. CCP12 is the global association for clearing houses.
52. Interviews: business development departments, global exchanges (Hong Kong, 30 June 2017 and 10 July 2017).
53. Observation: Euro Finance Week China Days (Frankfurt, 15 November 2017 and 14 November 2018).
54. Interview: Chinese financial market consultancy (London, 13 October 2017).
55. Interview: APAC director, global exchange (Hong Kong, 30 June 2017).
56. Interview: China business development, global exchange (Hong Kong, 7 July 2017).
57. Interview: emerging market strategist, global exchange (London, 11 January 2018).
58. Interview: consultant, Chinese exchange (Shanghai, 8 May 2018).
59. Interview: managing partner, asset manager (Shanghai, 15 May 2018).
60. Interview: China business development, global exchange (Hong Kong, 20 September 2018).
61. Interview: research department, regulator (Beijing, 31 October 2018).
62. Interview: APAC director, global exchange (Hong Kong, 30 June 2017).
63. Interview: research department, regulator (Beijing, 31 October 2018).
64. Observation: 'New Model in International Cooperation' Panel, Euro Finance Week China Day (Frankfurt, 14 November 2018).
65. Interview: executive director, broker (Karachi, 30 August 2018).
66. Interview: asset manager (Karachi, 9 August 2018).
67. Interview: research department, Asian exchange (London, 9 October 2017).

References

- Ahrne G, Aspers P and Brunsson N (2015) The organization of markets. *Organization Studies* 36(1): 7–27.
- Alami I and Dixon AD (2020) State capitalism(s) redux? Theories, tensions, controversies. *Competition & Change* 24(1): 70–94.
- Allen F, Qian JQ and Gu X (2017) An overview of China's financial system. *Annual Review of Financial Economics* 9(1): 191–231.
- ASIFMA (2018) *China's Capital Markets: Continuing to Navigate the Road Ahead*. Hong Kong, China: Asia Securities Industry & Financial Markets Association.
- Bernards N and Campbell-Verduyn M (2019) Understanding technological change in global finance through infrastructures. *Review of International Political Economy* 26(5): 773–789.
- Bortz PG and Kaltenbrunner A (2018) The international dimension of financialization in developing and emerging economies. *Development and Change* 49(2): 375–393.
- Braun B (2020) Central banking and the infrastructural power of finance: The case of ECB support for repo and securitization markets. *Socio-Economic Review* 18(2): 395–418.
- Braun B, Gabor D and Hübner M (2018) Governing through financial markets: Towards a critical political economy of Capital Markets Union. *Competition & Change* 22(2): 101–116.
- Bremmer I (2010) *The End of the Free Market: Who Wins the War between States and Corporations?* New York, NY: Portfolio.
- Breslin S (2013) China and the global order: Signalling threat or friendship? *International Affairs* 89(3): 615–634.

- Burton-Taylor (2018) *Exchange global share & segment sizing 2018*. Osprey, FL: Burton-Taylor International Consulting/TC-ICAP.
- Carney RW (2015) The stabilizing state: State capitalism as a response to financial globalization in one-party regimes. *Review of International Political Economy* 22(4): 838–873.
- Carroll T and Jarvis DSL (2014) Introduction: Financialisation and development in Asia under late capitalism. *Asian Studies Review* 38(4): 533–543.
- Chessé A (This Issue) The Worth of Nations: The Symbolic Construction of Market Economies. Paper presented at Conceptualising Markets Workshop, University of Ottawa, 25–26 March 2019.
- Dal Maso G (2015) The financialization rush: Responding to precarious labor & social security by investing in the Chinese stock market. *South Atlantic Quarterly* 114(1): 47–64.
- Deeg R and Jackson G (2006) Towards a more dynamic theory of capitalist variety. *Socio-Economic Review* 5(1): 149–179.
- Drezner DW and McNamara KR (2013) International political economy, global financial orders and the 2008 financial crisis. *Perspectives on Politics* 11(1): 155–166.
- Duckett J (1996) The emergence of the entrepreneurial state in contemporary China. *The Pacific Review* 9(2): 180–198.
- Duguid K (2018) Iran oil sanctions could advance China's 'petro-yuan'. *Reuters*, 10 May.
- Ebner A and Beck N (2008) *The Institutions of the Market: Organizations, Social Systems, and Governance*. Oxford, UK: Oxford University Press.
- Edin M (2003) State capacity and local agent control in China: CCP cadre management from a township perspective. *The China Quarterly* 173: 35–52.
- Evans D (2018) Shanghai shakes up global oil trading. *Nikkei Asian Review*, 17 October.
- FIA (2018) *FIA Global Exchange Volume Dataset*. Brussels, Belgium/Singapore/London, UK/Washington, DC: Futures Industry Association.
- Fichtner J (2016) Perpetual decline or persistent dominance? Uncovering Anglo-America's true structural power in global finance. *Review of International Studies* 43(1): 3–28.
- Fligstein N (2001) *The Architecture of Markets: An Economic Sociology of Twenty-First-Century Capitalist Societies*. Princeton, NJ: Princeton University Press.
- Gabor D (2018) Goodbye (Chinese) shadow banking, hello market-based finance. *Development and Change* 49(2): 394–419.
- Germain R (2009) Financial order and world politics: Crisis, change and continuity. *International Affairs* 85(4): 669–687.
- Gerschenkron A (1962) *Economic Backwardness in Historical Perspective*. Cambridge, MA: Harvard University Press.
- Grabel I (2017) *When Things Don't Fall apart: Global Financial Governance and Developmental Finance in an Age of Productive Incoherence*. Cambridge, MA: MIT Press.
- Granovetter M (1985) Economic action and social structure: The problem of embeddedness. *American Journal of Sociology* 91(3): 481–510.
- Gruin J (2019) *Communists Constructing Capitalism: State, Market, and the Party in China's Financial Reform*. Manchester, UK: Manchester University Press.
- Gruin J (This Issue) The epistemic evolution of market authority: big data, blockchain, and China's neostatist challenge to neoliberalism. *Competition and Change*.
- Hall PA and Soskice D (eds) (2001) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford, UK: Oxford University Press.
- Harvey D (2005) *A Brief History of Neoliberalism*. Oxford, UK: Oxford University Press.
- He L (2018) US\$400 billion expected to flow into Chinese stocks after MSCI inclusion. *South China Morning Post*, 15 May.
- Heilmann S (2005) Regulatory innovation by Leninist means: Communist party supervision in China's financial industry. *The China Quarterly* 181(March): 1–21.
- Huang PCC (2012) Profit-making state firms and China's development experience: "State Capitalism" or "Socialist Market Economy"? *Modern China* 38(6): 591–629.

- Hung H-F (2013) China: Saviour or challenger of the Dollar hegemony? *Development and Change* 44(6): 1341–1361.
- Huotari M. and Hanemann T (2014) Emerging powers and change in the global financial order. *Global Policy* 5(3): 298–310.
- Ikenberry GJ (2011) The future of the liberal world order: Internationalism after America. *Foreign Affairs* 90(3): 56–68.
- Kaplan SB (2016) Banking unconditionally: The political economy of Chinese finance in Latin America. *Review of International Political Economy* 23(4): 643–676.
- Konings M (2009) The construction of US financial power. *Review of International Studies* 35(1): 69–94.
- Kurlantzick J (2016) *State Capitalism: How the Return of Statism is Transforming the World*. Oxford, UK: Oxford University Press.
- Langley P (2003) *World Financial Orders: An Historical International Political Economy*. London, UK: Routledge.
- Lombardi D and Wang H (eds) (2016) *Enter the Dragon: China in the International Financial System*. Waterloo, Canada: CIGI Press.
- MacKenzie D (2018) Material signals: A historical sociology of high-frequency trading. *American Journal of Sociology* 123(6): 1635–1683.
- Major A (2012) Neoliberalism and the new international financial architecture. *Review of International Political Economy* 19(4): 536–561.
- Massot P (2020) Market power and marketisation: Japan and China's impact on the iron ore market, 50 years apart. *New Political Economy* 25(4): 511–534.
- Massot P (This Issue) The state of the study of the market in political economy: China's rise shines light on conceptual shortcomings. *Competition and Change*.
- McNally CA (2013) The challenge of refurbished state capitalism: Implications for the global political economic order. *Dms - Der Moderne Staat* 6(1): 33–48.
- McNally CA (2015) The political economic logic of RMB internationalization: A study in Sino-capitalism. *International Politics* 52(6): 704–723.
- McNally CA (2020) Chaotic mélange: Neo-liberalism and neo-statism in the age of Sino-capitalism. *Review of International Political Economy* 27(2): 281–301.
- McNally CA and Gruin J (2017) A novel pathway to power? Contestation and adaptation in China's internationalization of the RMB. *Review of International Political Economy* 24(4): 599–628.
- Miron J (2015) Should China's meltdown be surprising? *Cato Institute*, 2 September.
- Mudge SL (2008) What is neo-liberalism? *Socio-Economic Review* 6(4): 703–731.
- Musacchio A and Lazzarini SG (2013) *Reinventing State Capitalism: Leviathan in Business, Brazil and Beyond*. Cambridge, MA: Harvard University Press.
- Naughton B and Tsai KS (eds) (2015) *State Capitalism, Institutional Adaptation, and the Chinese Miracle*. Cambridge, MA: Cambridge University Press.
- Nölke A (2015) International financial regulation and domestic coalitions in state-permeated capitalism: China and global banking rules. *International Politics* 52(6): 743–759.
- Nölke A, ten Brink T, May C, et al. (2020) *State-Permeated Capitalism in Large Emerging Economies*. London, UK: Routledge.
- Norrlöf C (2010) *America's Global Advantage: US Hegemony and International Cooperation*. Cambridge, MA: Cambridge University Press.
- Peck, J and Tickell A (2002) Neoliberalizing space. *Antipode* 34(3): 380–404.
- Petry J, Fichtner J and Heemskerk EM (2019) Steering capital: The growing private authority of index providers in the age of passive asset management. *Review of International Political Economy*. Epub ahead of print. DOI: 10.1080/09692290.2019.1699147.
- Petry J (2020a) Financialization with Chinese characteristics? Exchanges, control and capital markets in authoritarian capitalism. *Economy and Society* 49(2): 213–238.

- Petry J (2020b) From national marketplaces to global providers of financial infrastructures: Exchanges, infrastructures and structural power in global finance. *New Political Economy*. Epub ahead of print. DOI: 10.1080/13563467.2020.1782368.
- Petry J (2020c) Securities exchanges: Subjects and agents of financialization. In: Mader P, Mertens D and Van der Zwan N (eds) *The Routledge International Handbook of Financialization*. London, UK: Routledge, pp.253–264.
- Pistor K (2013) A legal theory of finance. *Journal of Comparative Economics* 41(2): 315–330.
- Rethel L (2011) Whose legitimacy? Islamic finance and the global financial order. *Review of International Political Economy* 18(1): 75–98.
- Rethel L and Sinclair TJ (2014) Innovation and the entrepreneurial state in Asia: Mechanisms of bond market development. *Asian Studies Review* 38(4): 564–581.
- Rommerskirchen C (2020) Foreign bond investors and market discipline. *Competition & Change* 24(1): 3–25.
- Schwartz HM (2018) *States versus Markets: The Emergence of a Global Economy*. Basingstoke, UK: Palgrave Macmillan.
- Siddiqui S (2017) Making changes: PSX initiates process to launch derivatives. *The Tribune*, 19 February.
- Sinclair TJ (2011) Stay on target! Implications of the global financial crisis for Asian capital markets. *Contemporary Politics* 17(2): 119–131.
- Slobodian Q (2018) *Globalists: The End of Empire and the Birth of Neoliberalism*. Cambridge, MA: Harvard University Press.
- So A and Chu Y-W (2015) *The Global Rise of China*. Cambridge, MA: Polity Press.
- Strange S (1988) *States and Markets*. London, UK: Pinter.
- Sum N-L (2019) Ordoliberal Authoritarian Governance in China since 1978: World market, performance legitimacy, and Biosovereign ordering. *South Atlantic Quarterly* 118(2): 381–400.
- Tan A and Robertson B (2018) MSCI weighs capping India, Brazil weights over investor access. *Bloomberg*, May 30.
- ten Brink T (2019) *China's Capitalism. A Paradoxical Route to Economic Prosperity*. Philadelphia, PA: University of Pennsylvania Press.
- ten Brink T and Nölke A (2013) Staatskapitalismus 3.0. *Dms - Der Moderne Staat* 6(1): 21–32.
- Thornton PH and Ocasio W (2008) Institutional logics. In: Greenwood R, Oliver C, Suddaby R, et al. (eds) *The SAGE Handbook of Organizational Institutionalism*. London, UK: SAGE, pp.99–128.
- Thurbon E (2016) *Developmental Mindset: The Revival of Financial Activism in South Korea*. Ithaca, NY: Cornell University Press.
- Viktorov I and Abramov A (2016) The state capture of Russian non-bank financial institutions and markets after the 2008 crisis. *Competition & Change* 20(1): 3–20.
- WFE (2018) *Statistics: Monthly Report. December 2018*. London, UK: World Federation of Exchanges.
- World Bank (2020) *World Development Indicators*. Washington, D.C.: World Bank Group.
- Zhe W (2016) Yuan-denominated gold benchmark an important step in gaining pricing influence. *Global Times*, 20 April.
- Zysman J (1983) *Government, Markets and Growth: Financial Systems and the Politics of Industrial Change*. Ithaca, NY: Cornell University Press.
- Zysman J (1994) How institutions create historically rooted trajectories of growth. *Industrial and Corporate Change* 4(1): 243–283.