The Rising Star in the East: Unveiling China's Star Market, the Registration-based IPO Regime and Capital Markets Law Reform

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Abstract

This article discusses and analyses the latest capital markets law reform in China, which involves the launch of the star market (sci-tech innovation board) at the Shanghai Stock Exchange as well as the introduction of the "registration-based" IPO regime to replace the previous "approval-based" system. The article considers whether laws can be used as a useful and transformative tool to create deep and liquid capital markets and to promote technological developments.

Introduction[1]

Science and technology innovations have been the main drivers of economic growth throughout human history. From the late 19th century to the early 20th century, Thomas Edison invented the telegraph, light bulb and motion pictures among 1,093 patents that he acquired, contributing to the technological revolution of the United States and the country's rise as a global superpower.[2] In 1908, Henry Ford created the Model T and developed the assembly line for manufacturing cars, resulting in the mass production of automobiles and the transportation revolution.[3] In the 1970s, Bill Gates and Paul Allen started to design the operating systems for micro-computers and incorporated Microsoft.[4] Microsoft created the DOS and Windows systems, making personal computers easily accessible by billions of people, which has greatly improved business efficiency and reshaped the way most people live and work. Today, the world is facing a new wave of technological advances such as electric cars, artificial intelligence (AI), the Internet of Things (IoT), 3D printing, biometrics, and lab-grown organs. There is no doubt that

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[1] For the convenience of international readers, the Chinese currency—Renminbi or RMB—in this article is accompanied by a conversion into US dollars ($). The exchange rate between US$ and RMB was 1: 7.03 on 4 November 2019.

[2] History.com, "Thomas Edison", available at: *http://www.history.com/topics/inventions/thomas-edison* [Accessed 11 May 2020].

[3] Biography, "Henry Ford", available at: *http://www.biography.com/business-figure/henry-ford* Accessed 11 May 2020].

[4] Sophie Curtis, "Bill Gates: a history at Microsoft" (4 February 2014), *Telegraph*, available at: *http://www.telegraph.co.uk/technology/bill-gates/10616991/Bill-Gates-a-history-at-Microsoft.html* [Accessed 11 May 2020].

developing cutting-edge technologies needs strong capital support. The global venture capital investments reached $255 billion in 2018, rising sharply from $175 billion in 2017.[5] Apart from private equities, the stock markets around the world welcomed 1,359 initial public offerings (IPO) in 2018 with a combined amount of $204.8 billion being raised.[6] Most of the funds went to three sectors: technology, health care, and industrials.

According to La Porta et al., the legal environment, which includes the quality of legal rules and their enforcement, plays an important role in shaping the size and extent of a country's capital markets.[7] The "law matters" thesis suggests that laws can be used as an effective tool to create deep and liquid financial markets. Consequently, China has been actively reforming its capital markets laws and securities regulations to provide more accessible and affordable financing methods for its tech entrepreneurs. For a long time, Chinese capital markets have been hostile towards high-tech companies as regulators, and stock exchanges have promulgated strict listing standards regarding profitability and share ownership, which prevents most internet and technological companies from listing in the domestic markets. Nonetheless, things have changed radically in recent years. For instance, the China Securities Regulatory Commission (CSRC) started to allow certain foreign-listed Chinese companies to issue Chinese Depositary Receipts (CDR) to get a second listing in the Shanghai or Shenzhen stock exchanges.[8] Besides, in 2019, the United Kingdom and China jointly launched the Shanghai–London Stock Connect (SLSC), which enables eligible Shanghai or London-listed companies to issue depositary receipts to access each other's stock markets.[9] Clearly, the SLSC not only grants Chinese tech companies a wider access to international investors, but also increases the attractiveness and liquidity of both Shanghai and London stock markets.

Most recently, China has established the science and technology innovation board, which is commonly referred to as the "sci-tech innovation board" or "star market", as the latest capital markets reform to assist the fundraising of tech enterprises and enhance the international competitiveness of the Shanghai Stock Exchange (SSE). At present, the total market capitalisation of SSE and Shenzhen Stock Exchange (SZSE) stands at RMB45.6 trillion ($6.49 trillion), which is 56% of China's GDP; in contrast, the total market cap of US stock markets is $36 trillion, equivalent to 180% of the US GDP.[10] This indicates that the Chinese capital markets still have huge growth potential to match the scale of the Chinese economy, as well as to meet the financing demands of Chinese businesses. In November 2018, President Xi Jinping made a keynote speech at the opening ceremony of the First China International Import Expo in Shanghai where he announced the launch

[5] KPMG, "Venture Pulse: Q4'18 Global analysis of venture funding", available at: *https://home.kpmg/xx/en/home/insights/2019/01/venture-pulse-q4-18-global-analysis-of-venture-funding.html* [Accessed 11 May 2020].

[6] EY, "Big vs agile? Global IPO trends: Q4 2018", available at: *http://www.ey.com/Publication/vwLUAssets/ey-global-ipo-trends-report-q4-2018/$FILE/ey-global-ipo-trends-report-q4-2018.pdf* [Accessed 1 November 2019].

[7] Rafael La Porta et al., "Legal Determinants of External Finance" (1997) 52 *Journal of Finance* 1131, 1149.

[8] Lerong Lu and Ningyao Ye, "Chinese Depositary Receipts: What They Are, How They Work and Why This Represents a Golden Opportunity" (2018) 33 *Journal of International Banking and Financial Law* 529, 529.

[9] Lerong Lu and Ningyao Ye, "Shanghai-London Stock Connect: Operating Mechanism, Opportunities and Challenges" (2019) 34 *Journal of International Banking and Financial Law* 684, 685.

[10] Song Xuetao, "What is the historical significance of sci-tech innovation board?" (2 March 2019), *TF*, available at: Securities, *http://pdf.dfcfw.com/pdf/H3_AP201903041302384303_1.pdf* [Accessed 11 May 2020].

of the star market within SSE.[11] It is a brand new trading platform with various experimental capital market reforms, including the "registration-based" IPO system. On 13 June 2019, the sci-tech innovation board was officially opened at the Shanghai Lujiazui Forum.[12] On 22 July 2019, the first group of 25 companies, including China Railway Signal & Communication, Anji Technology, and Shanghai MicroPort Endovascular MedTech, were admitted to trading at the star market. On the debut date, the 25 companies saw an average share price rise of 139.55% and an average price-to-earnings (P/E) ratio of 120, and the total trading volume for the first five days exceeded RMB140 billion ($19.91 billion).[13] On 8 August 2019, the second group of companies obtained a listing on the star market, including Amlogic, the semi-conductor maker, and Shanghai Friendess Electronic Technology Corp Ltd.[14]

Against this backdrop, this article aims to introduce and analyse the latest reform of capital markets law in China, including the star market and the registration-based IPO system. It re-examines the "law matters" thesis by considering whether the Chinese law reform is able to create deeper and more liquid capital markets and promote technological innovations. The analysis is conducted through law and finance as well as law and technology lenses. Following the introduction, the second section discusses the status quo of China's multi-layer capital markets and why the star market is a game-changer to China's financial system. The third section examines the rationales of launching the star market, which is said to provide extra funding for China's technological and innovative enterprises and will help the city of Shanghai to build a world-leading international financial centre. The fourth section analyses the biggest regulatory reform in the star market—the registration-based IPO regime. The fifth section continues to evaluate the latest laws and regulatory rules governing the star market, such as listing standards, information disclosure requirements, market exit rules, and investor suitability. The sixth section concludes.

[11] *China Daily*, "Science and technology innovation board" (7 November 2018), available at: *http://www.chinadaily.com.cn/a/201811/07/WS5be23110a310eff303286fda.html* [Accessed 11 May 2020].

[12] *Global Times*, "China launches sci-tech innovation board, stressing further financial opening-up amid trade war" (13 June 2019), available at: *http://www.globaltimes.cn/content/1154078.shtml* [Accessed 11 May 2020].

[13] Xinhua, "The first week of sci-tech innovation board: how the first 25 listing companies performed?" (27 July 2019), *Global Times*, available at: *http://www.xinhuanet.com/fortune/2019-07/27/c_1210216065.htm* [Accessed 11 May 2020].

[14] Xinhua, "The second group of companies obtained listing in sci-tech innovation board" (7 August 2019).

China's multi-level capital markets—is the star market a game-changer?

Table 1: An overview of China's equity markets and their characteristics[15]

Equity Markets in China	**Shanghai Stock Exchange (SSE)**		**Shenzhen Stock Exchange (SZSE)**			**National Equities Exchange and Quotations (NEEQ)**	**Regional Equity Markets**
	SSE Main Board	**SSE Sci-Tech Innovation Board**	**SZSE Main Board**	**SZSE Small and Medium-Sized Cap Board**	**SZSE Growth Enterprises Market**		
Market Type	Exchange trading	Exchange trading	Exchange trading	Exchange trading	Exchange trading	Over-the-counter	Over-the-counter
Typical Issuers	Large corporation, Blue chip	Technological and innovative enterprises	Large corporation, Blue chip	Small and medium-sized enterprises	Half-mature enterprises not meeting the listing requirements of the main boards	Growing Enterprises	Non-public local enterprises
IPO Regime	Approval system	Registration system	Approval system	Approval system	Approval system	Registration system	Registration system
Market Liquidity	Highest	Moderate to Low	Highest	High	Moderate	Low	Low
Investor Threshold	Lowest	Moderate	Lowest	Lowest	Low	High	High

Over the past two decades, China has introduced a multi-level capital markets system comprising various exchange trading and over-the-counter (OTC) venues.[16] In terms of exchange trading, China has two stock exchanges: the Shanghai Stock Exchange (SSE) and the Shenzhen Stock Exchange (SZSE). In total, there are over 3,500 companies listed in SSE and SZSE.[17] The SSE holds a main board as well as the latest sci-tech innovation board. The SZSE has three different boards: main board, small and medium-sized cap board, and growth enterprises market. Each board or market targets the listing of different companies depending on their respective sizes, industries, financing needs and development stages. The main boards of SSE and SZSE focus on the listing of large-cap and blue-chip companies. The SZSE small and medium-sized cap board mainly serves the champions of small and medium-sized enterprises in the country. In order to list shares in the main boards and small and medium-sized cap board, companies have to make profits continuously over the past three accounting years with an accumulated profit amount of over RMB30 million ($4.27 million) and to have the accumulated net cash flow amount of over RMB50 million ($7.11 million) or the accumulated revenue of over RMB300 million ($42.7 million).[18] The SZSE growth enterprises market, or ChiNext board, targets fast-growing enterprises with less stringent listing standards compared with main boards. Listing applicants have to make profits continuously over the past two years with an accumulated profit amount of over RMB10 million ($1.42 million) or have to make profits for the past year with a revenue over RMB50 million ($7.11 million).[19] Regarding OTC markets, the National Equities Exchange and Quotations (abbreviated as NEEQ and also known as New Third Board) provides a financing platform for innovative and entrepreneurial macro, small, or medium-sized businesses. As of the end of 2018, 10,691 companies are listed on the NEEQ, including 914 on the innovation tier and 9,777 on the base tier, with a total market capitalisation of RMB3.45 trillion ($490 billion).[20] Aside from the NEEQ, there are also regional equity markets which offer the venue and facilitates non-public local companies to issue securities and raise funds locally as well as accommodating the transfer of such securities.[21] It is estimated that over 100,000 companies are quoted in regional equity markets. Becoming a listed company is considered a great prestige for Chinese entrepreneurs, owing to the strict listing standards in China, in particular, those for the main boards of SSE and SZSE. Any Chinese companies, in order to get a public listing, have to satisfy the following criteria according to the PRC Securities Law:

(1) have a robust and well-run organisational structure;
(2) have continuous operation ability;
(3) the financial and accounting reports of last three years have been issued with an unqualified audit report;

[15] The chart is compiled by the author.
[16] Shanghai Stock Exchange, "China Capital Market Overview", available at: *http://english.sse.com.cn/investors/introduction/chinacapital/* [Accessed 1 November 2019].
[17] Lu and Ye, "Chinese Depositary Receipts" (2018) 33 *Journal of International Banking and Financial Law* 529, 529.
[18] Shanghai Stock Exchange, "Listing on SSE", available at: *http://www.sse.com.cn/services/list/listedinsse/bluechips/a/20170825/b254004db4002ca4bd105c017adb374a.pdf* [Accessed 11 May 2020].
[19] Shanghai Stock Exchange, "Listing on SSE".
[20] National Equities Exchange and Quotations Company Limited, "About NEEQ", available at: *http://www.neeq.com.cn/en/about_neeq/introduction.html* [Accessed 11 May 2020].
[21] PRC Securities Law 2020 art.98.

(4) the issuer, its controlling shareholders, or actual controllers have not committed crimes including corruption, bribery, embezzlement, misappropriation of property, and the disruption of the order of the socialist market economy, over the last three years; and

(5) other conditions prescribed by the securities regulatory authority.[22]

Given the various trading places serving different kind of companies and investors, the star market is said to fill a major gap in China's capital markets by combining the advantages of both exchange trading platforms and off-exchange trading venues. As shown in the above table, the SSE and SZSE main boards, the small and medium-sized cap board, and the ChiNext board are formally regulated exchange trading platforms with high market liquidity because most Chinese citizens can take part in the trading activities as there is no investment threshold. However, those markets have strict and onerous listing rules. Any IPO applicants of the SSE and SZSE have to obtain the administrative approval from CSRC and stock exchanges, apart from satisfying relevant standards in company law and securities regulations. It is referred to as the "approval-based" IPO regime by the Chinese regulator. On the contrary, it is relatively easy for businesses to get a listing in the OTC platforms such as NEEQ and regional equity markets since they use the "registration-based" IPO system and do not censor substantial business data of issuers like profitability and the value of assets. However, both markets suffer a severe problem of low liquidity as they have made extremely high thresholds for individual investors, which stops most Chinese citizens from trading at such forums. For example, investors need to possess at least RMB5 million ($710,000) financial assets to be eligible to trade shares at the NEEQ.[23] Clearly, the star market has combined the benefits of both exchange trading and OTC trading by offering tech companies an easy access to a highly liquid market within the SSE. It has relatively lax listing standards similar to OTC trading while listed companies can enjoy sufficient liquidity and trading volumes comparable to the main boards. Obviously, the star market has differentiated itself from other existing markets and appeals to most domestic and international investors.

Rationales of introducing the star market

Table 2: Top 10 Global Unicorn Companies 2019 (unicorns mean billion-dollar-worth tech start-ups founded in the 2000s and not yet listed on a public exchange)[24]

Rank	Name	Valuation (US$ billion)	Headquarters
1	Ant Financial	150	Hangzhou, China
2	ByteDance	75	Beijing, China
3	Didi Chuxing	55	Beijing, China
4	Infor	50	New York City, USA

[22] PRC Securities Law 2020 art.12.
[23] National Equities Exchange and Quotations Investor Suitability Regulatory Rules 2017 art.5.
[24] Source: Hurun Research Institute, "Hurun Global Unicorn List 2019", available at: *http://www.hurun.net/EN/Article/Details?num=A38B8285034B* [Accessed 11 May 2020].

Rank	Name	Valuation (US$ billion)	Headquarters
5	JUUL Labs	48	San Francisco, USA
6	Airbnb	38	San Francisco, USA
6	Lufax	38	Shanghai, China
8	SpaceX	35	Los Angeles, USA
9	WeWork	30	New York City, USA
10	Stripe	23	San Francisco, USA

The Chinese economy is facing multiple challenges such as the slow-down of GDP growth and the China–US trade war.[25] In order to boost high-quality economic growth, China has made several policy initiatives, including the establishment of the star market, to support the growth of high-tech industries by granting entrepreneurs additional financing resources. In the past, Chinese tech companies were mostly reliant on foreign venture capital (VC) or private equity (PE) funds to raise money. For example, Alibaba in 2000 received a $20 million investment from Japan's Soft bank, and Tencent in 2001 obtained $31 million capital from South Africa's Naspers.[26] That's why Alibaba and Tencent, two largest tech giants in China, now have foreign investors as their majority shareholders. Similarly, when raising funds in the capital markets, most Chinese tech businessessuch as NetEase, Sina, Sohu, Alibaba, JD, and NIO obtained a listing in overseas markets outside mainland China as Chinese law had not allow unprofitable companies to go public until the recent law change. The CSRC also prohibits the foreign dominant ownership in Chinese public companies and restricts the use of dual-class shares and variable interest entities (VIE) which are commonly used by tech start-ups. Obviously, a lot of securities regulations in China seem outdated compared with the fast growth of tech companies and their innovative financing structures. In recent years, promoting technological innovation has become a top priority for the Chinese Government as the country has fostered a massive high-tech industry. China is the largest patent-filing country in the world, as the country made 1,381,594 patent applications in 2017, compared with 606,956 applications for the US and 318,479 applications for Japan.[27] Moreover, China now has 206 unicorn companies, which are private tech businesses with a valuation of over $1 billion and less than a 10-year history, more than 203 unicorn companies in the United States.[28] China has launched the "Made in China 2025" campaign aimed at upgrading its industry capacities to produce more high value-added products and services.[29] The initiative set out specific goals for 10 prioritised industries including robotics, new generation information technology, aviation and aerospace equipment,

[25] Keith Bradsher, "China's Economic Growth Slows as Challenges Mount", (17 October 2019), *New York Times*, available at: *http://www.nytimes.com/2019/10/17/business/china-economic-growth.html* [Accessed 11 May 2020].

[26] Vinnie Lauria, "Instant Replay: Naspers-Tencent Echoes the SoftBank-Alibaba Story" (17 July 2019), *Forbes*, available at: *https://www.forbes.com/sites/vinnielauria/2019/07/17/instant-replay-naspers-tencent-echoes-the-softbank-alibaba-story/* [Accessed 11 May 2020].

[27] World Intellectual Property Organisation (WIPO), *World Intellectual Property Indicators 2018*, available at: *http://www.wipo.int/edocs/pubdocs/en/wipo_pub_941_2018.pdf* [Accessed 11 May 2020].

[28] Hurun, "Hurun Global Unicorn List 2019".

[29] Alice Tse and Julianna Wu, "Why 'Made in China 2025' triggered the wrath of President Trump" (11 September 2018), *South China Morning Post*, available at: *http://multimedia.scmp.com/news/china/article/made-in-China-2025/index.html* [Accessed 11 May 2020].

maritime equipment and hi-tech ships, railway transport, new energy and energy-saving vehicles, energy equipment, agricultural equipment, new materials, and biopharma and hi-tech medical devices. Besides, a 2018 policy paper issued by the State Council (Chinese cabinet) and CSRC has been encouraging a group of so-called "pilot enterprises" in the areas of internet, big data, cloud computing, artificial intelligence, software and integrated circuit, advanced equipment manufacturing and biomedicine to issue CDR or new shares in mainland China, as long as they meet one of the following standards: for those enterprises which have already been listed abroad, the market capitalisation should be no less than RMB200 billion ($25.6 billion); and for those which are still private, they should have an annual revenue of no less than RMB3 billion ($429 million) as well as a market capitalisation of no less than RMB20 billion ($2.86 billion), or they can demonstrate the rapid growth of revenue plus having self-developed and international leading technologies while maintaining an advantageous position amongst industry competitors.[30] It is clear that the development of capital markets in China is left behind its industrial and technological growth, so that is why China urgently needs to overhaul its capital markets law to create a more friendly financing market for tech businesses to raise capital. This serves as the first justification for introducing the star market.

Table 3: The Global Financial Centres Index 25 (March 2019)[31]

Global Financial Centre	**Ranking**	**Rating**	**Change in the ranking**	**Change in the rating**
New York	1	794	0	▲6
London	2	787	0	▲1
Hong Kong	3	783	0	0
Singapore	4	772	0	▲3
Shanghai	5	770	0	▲4
Tokyo	6	756	0	▲10
Toronto	7	755	▲4	▲27
Zurich	8	739	▲1	▲7
Beijing	9	738	▼1	▲5
Frankfurt	10	737	0	▲7
Sydney	11	736	▼4	▲2
Dubai	12	733	▲3	▲11
Boston	13	732	0	▲7
Shenzhen	14	730	▼2	▲4
Melbourne	15	729	▲5	▲30

[30] State Council, "The State Council office on forwarding the CSRC's notice on developing the pilot scheme of allowing innovative enterprises to issue shares or depository receipts in mainland China" (GUOFABAN 2018, No.21) art.3.

[31] Source: Z/Yen Partners, "The Global Financial Centres Index 25" (March 2019), available at: *https://www.longfinance.net/media/documents/GFCI_25_Report.pdf* [Accessed 11 May 2020].

Furthermore, the launch of the sci-tech innovation board is of strategic importance to promote Shanghai as a leading international financial centre. In the early 20th century, Shanghai was the largest financial centre in the Far East, but its status had fallen owing to the socialist revolution in the 1950s.[32] In the late 1970s, China started to re-embrace the market economy and underwent a series of economic and financial reforms guided by the "reform and open-up" policy. This has led to the resurgence of Shanghai as an international financial centre. In 2018, the total transaction volume of the city's financial markets reached RMB1,645.8 trillion ($234.10 trillion), up 15.2% from the previous year.[33] There are 1,605 financial institutions in Shanghai, among which 30% are foreign institutions.[34] Shanghai is also the economic centre of Yangtze River Delta region, one of the most economically developed areas in the country. Based on its strong economic foundation and financial strength, Shanghai is set to become a top international financial centre like New York, London, Hong Kong, and Singapore in the 2020s. According to the Global Financial Centre Index 2019, Shanghai is ranked the 5th largest financial centre in the world (see Table 3). Recently, the Shanghai Municipal Government has released an action plan to accelerate the building of Shanghai international financial centre. The overall objective is that,

> "by 2020, Shanghai will establish its Renminbi product-dominated global financial market position with strong abilities of financial resources allocation and market radiation. It will basically form a fair, innovative, efficient, transparent, and open financial services system with rule of law. It will basically build an international financial centre compatible with the economy strength of China and the international status of Renminbi. It will step into the frontier of global financial centres".[35]

More specifically, the Shanghai international financial centre is said to comprise "6 centres and 1 system", including: a global asset management centre, a cross-border investment and a financing services centre (which is mainly to support the "belt and road initiative"), financial a technology (fintech) centre, an international insurance centre (e.g. insurance market, re-insurance market, and Shanghai insurance exchange), a global renminbi asset pricing, payment and settlement centre, a financial risks management and stress-testing centre, and a world-class financial ecosystem.[36] Apart from supporting the development of international financial institutions and financial markets, Shanghai's city congress passed the Local Finance Regulatory Provision in April 2020, which aims to provide a better regulatory framework (including financial supervision, risk management, information sharing, and the protection of consumers' rights) for local financial organisations such as small-loan companies, financing guarantee companies, regional stock markets, pawnshops, financial leasing companies,

[32] Lerong Lu, *Private Lending in China: Practice, Law, and Regulation of Shadow Banking and Alternative Finance* (Abingdon: Routledge, 2018), p.21.

[33] Shanghai Government Official Website, *http://www.shanghai.gov.cn/nw2/nw2314/nw2319/nw12344/u26aw58032.html* [Accessed 11 May 2020].

[34] Shanghai Government Official Website.

[35] People's Bank of China et al., "The Action Plan on Building Shanghai International Financial Centre (2018–2020)", available at: *http://www.shanghai.gov.cn/nw2/nw2314/nw2315/nw4411/u21aw1360150.html* [Accessed 11 May 2020].

[36] People's Bank of China et al., "The Action Plan on Building Shanghai International Financial Centre (2018–2020)".

commercial factoring companies and local asset management company.[37] Evidently, the sci-tech board will support the bid of Shanghai to become a leading international financial centre as well as a technological innovation centre. It can boost the high-quality growth of the Chinese economy and brings more and better investment opportunities for investors in China and beyond.

The registration-based IPO regime

On 1 March 2019, the CSRC issued "Sci-tech innovation board initial public offering share registration administrative measures (trial implementation)" and "Sci-tech innovation board listed companies continuous supervision measures (trial implementation)", laying down basic rules for the listing and trading activities at the star market.[38] Subsequently, the CSRC and the SSE promogulated a series of regulatory rules for the star market, unleashing the latest capital markets law reform in China. The biggest change in the reform comes from the adoption of the "registration-based" IPO system. At present, both the SSE and SZSE have adopted a so-called "approval-based" IPO system under which listing applicants are subject to strict financial censor and administrative approval by the CSRC's Public Offering Review Committee. The emphasis of China's securities regulation lies on the pre-listing financial checks rather than post-listing information disclosure. IPO applicants have to pass at least three rounds of administrative reviews to obtain a final approval from the securities regulator. On average, an IPO application will take 589 days.[39] The ultra-long waiting time makes some issuers give up their listing plans in mainland China and turn to stock markets in Hong Kong and New York. Occasionally, the CSRC will freeze new IPOs completely, as it can refuse to grant approvals in order to control the supply of new shares and stabilise share prices and the share index in a bear market.[40] The "approval-based" system is criticised as being inefficient and opaque, as the regulator has excessive power in deciding the outcomes of IPO applications. Therefore, China's capital markets have been gradually transitioning towards a more market-oriented "registration-based" IPO system. In December 2015, the standing committee of the National People's Congress, the Chinese Parliament, authorised the implementation of "registration-based" IPOs.[41] This provides a legal basis for the trial of "registration-based" IPOs in the star market which significantly reduces governmental intervention in the capital markets. Thus, the CSRC will no longer conduct a substantial examination of the issuing companies as long as their investment bankers, accountants and lawyers provide valid legal and financial documentations in compliance with the relevant regulations. The "registration-based" system has reduced the costs of IPOs while shortening the

[37] *Shanghai Municipal Local Finance Regulatory Provision* (April 2020).

[38] Shanghai Stock Exchange, "Regulations of Launching the Star Market and Experimenting Registration-Based IPO", available at: *http://www.sse.com.cn/lawandrules/sserules/tib/* [Accessed 11 May 2020].

[39] Xueqiu, "The length of the company's queue in the first half of 2019: Available for an average of 19 months, The second half of the year is expected to speed up the audit!", available at: *http://xueqiu.com/4200978411/129419178* [Accessed 11 May 2020].

[40] Nan Ma and Gabriel Wildau, "Beijing's visible hand lies heavy on China IPOs" *Financial Times* (26 March 2015), p.18.

[41] CSRC, "The person in charge of the China Securities Regulatory Commission answered questions from the reporter on the establishment of the Shanghai Stock Exchange Science and Technology Innovation Board and the pilot registration system", available at: *http://www.csrc.gov.cn/pub/newsite/zjhxwfb/xwdd/201811/t20181105_346199.html* [Accessed 11 May2020].

time frame. However, it requires a higher level of information disclosure obligations for issuers after the IPO to protect the interests of investors. The latest amendment of the PRC Securities Law reaffirmed the adoption of "registration-based" IPO for Chinese stock markets, and its specific scope and implementation steps will be decided by the State Council.[42] However, the transition towards "registration-based" IPO will be a gradual process, as it started with the trial at Sci-tech innovation board in Shanghai. Then it will be used by Shenzhen's ChiNext board, followed by the widespread experiments in other segments of Chinese markets.

There are three major distinctions between "approval-based" and "registration-based" IPO regimes. First, from a theoretical point of view, it is concerned with the question that who has the power to issue securities. Under the "approval-based" system, legislators think that securities issuance is closely related to public interests, as thousands of retail and institutional investors will become involved in the subscription and trading of such securities. Therefore, issuing securities should be viewed as a chartered right, so applicants need a special administrative approval from public agencies such as the securities regulator. In contrast, the underlying ideology of the "registration-based" system is that issuing securities is a natural economic right belonging to modern enterprises. On this basis, companies should be allowed to issue shares without restrictions, providing that they fulfil the information disclosure obligations. Second, the two systems have different methods of checking the authenticity and accuracy of information relating to the issuers and their securities. Regarding the "approval-based" system, the securities regulator is undertaking the sole responsibility of examining the substantial information of the issuers. However, under the "registration-based" system, the responsibility of scrutinising information has been transferred to a diversity of bodies including the stock exchange, law firm, accountancy firm, and investment bank. Third, the two systems are reliant on different political and legal environments. The "approval-based" system requires a large and strong government, as the securities regulator monopolises the power of issuing securities and it can determine the issuing price, the amount of capital to be raised, as well as the exact listing date. Under this kind of IPO arrangement, self-regulatory bodies and market participants play a more supplementary role in the process of securities offering. However, the free market has a say in the "registration-based" IPO system since the securities regulator is not directly involved in the decision of granting or refusing an IPO. Accordingly, whether an IPO is successful depends on the complicated gaming between various market players including issuers, underwriters, legal professionals, accountants, and investors.

Star market—the latest laws and regulations

In response to the launch of the star market and the introduction of the "registration-based" IPO system, the CSRC and SSE have learned from international experience to design a more effective and efficient legal framework for regulating securities issuance and trading. In particular, the "registration-based" system is more dependent on the post-IPO information disclosure requirements to

[42] PRC Securities Law 2020 art.9.

protect the legitimate interests of investors. Thus, the attention of the securities regulators will be placed on ensuring the truthfulness and comprehensiveness of information provided by the issuers on a continuous basis. This section summarises the main points of latest laws and regulations surrounding the star market as follows.

Differentiated listing standards

The star market no longer solely relies on traditional indicators set by CSRC, such as net asset and profit level, to evaluate a company's feasibility to obtain a listing. It gives more listing opportunities to innovative and technological enterprises whose businesses are at an early stage but have great potential to thrive and become industry leaders in the future. However, the new model could result in the difficulty for investment banks to determine a proper market valuation and offering price for prospective issuers. It produces extra risks for public investors as well, because the traditional valuation methods such as price-to-earnings (P/E) ratio or price-to-book (P/B) ratio will be less effective in guiding the investments. Generally speaking, the star market has relaxed the listing standards for issuing companies. It has broken a long-term rule in China's A-share market that listing companies must make profits before floating their shares publicly. The star market allows some high-tech businesses to go public when still making losses, as long as they display strong business strength and potential in certain fields. The regulators and stock exchange will comprehensively consider multiple factors concerning the listing applicants, such as market capitalisation, profit, revenue, research and development (R & D) expenditure, cash flow, and technological achievement. The IPO applicants have to meet at least one of the following standards to be eligible for the star market[43]:

- the predicted market cap is no less than RMB1 billion ($140 million)and the company has made positive profits over the past two years with an accumulated profit amount of no less than RMB50 million ($7.11 million), or the predicted market cap is no less than RMB1 billion ($140 million) and the company has made positive profits for one year with a accumulated profit amount of no less than RMB100 million ($14.22 million);
- the predicted market cap is no less than RMB1.5 billion ($213.36 million), the revenue of the previous year is no less than RMB200 million ($28.45 million), and the R & D Expenditure of the past three years should be no less than 15% of the accumulated revenues of the past three years;
- the predicted market cap is no less than RMB2 billion ($284.48 million), the revenue of the previous year is no less than RMB300 million ($42.67 million), and the accumulated net cash flow of the previous three years should be no less than RMB100 million ($14.22 million);
- the predicted market cap is no less than RMB3 billion ($430 million) and the revenue of the previous year is no less than RMB300 million ($42.67 million); and

[43] Shanghai Stock Exchange Sci-Tech Innovation Board Share Listing Rules 2019 art.2.1.2.

- the predicted market cap is no less than RMB4 billion ($570 million) and the main business or product has obtained regulatory approvals from the relevant authorities which have a large potential market and have made staged achievements. Pharmaceutical companies need to have at least one core product that has obtained approval to carry out Phase-II clinical trials. Companies in other sectors should have significant technological advantages and satisfy relevant criteria.

Red-chip companies, variable interest entities, and dual-class shares

The sci-tech innovation board accepts the listing of red-chip companies which are incorporated in a foreign jurisdiction but have main business interests in mainland China.[44] Traditionally, foreign-registered companies are not allowed to obtain a listing on the main boards of SSE and SZSE. In practice, a large number of Chinese tech businesses have been incorporated in jurisdictions having favourable tax policies and legal frameworks such as Cayman Islands, British Virgin Islands, and Singapore. As a result, the red-chip companies, despite conducting most of their businesses in or with China, are not allowed to list their shares in China. This partly accounts for the popularity of overseas listing for Chinese tech companies. As for the star market, red-chip companies are able to issue either new shares or CDRs to be traded in the SSE. In April 2019, Segway-Ninebot Ltd, which produces two-wheeled personal transporters and robotics, filed the first application to apply for a CDR listing in the star market.[45] Moreover, it is common for red-chip companies to adopt variable interest entities (VIEs) which are complex off-shore financing and legal structures to help foreign investors evade Beijing's restriction of foreign ownership in companies from industries such as the internet, finance and education.[46]VIEs are banned on the main board of the SSE, but they are allowed in the star market. Moreover, tech and innovative businesses including Facebook and Google often use dual-class shares with weighted voting rights to help business founders maintain the control of their businesses even if they only have a minority of shares. This is because external VC and PE investments often significantly dilute the ownership of tech entrepreneurs. Mr Liu Qiangdong, the founder and CEO of the Nasdaq-listed *JD.com*, a leading online shopping platform in China, owns 15.4% of shares in *JD.com* but has 79% of voting rights thanks to the design of dual-class shares.[47] Although this kind of legal arrangement is extremely beneficial for the founder and management team of tech companies, it is widely criticised for breaching the principle of shareholder democracy and equality by giving some shareholders more votes per share than others.[48] Dual-class shares are

[44] Shanghai Stock Exchange Sci-Tech Innovation Board Share Listing Rules (2019), Ch.13: "Red-chip companies and the coordination of cross-border issues".

[45] Ninebot Ltd, "CDR public offering prospectus" (April 2019), available at: *http://static.sse.com.cn/stock/information/c/201904/6cb9b97495db4b80aeeb99eac8e35c49.pdf* [Accessed 11 May 2020].

[46] Ningyao Ye and Lerong Lu, "How to Harness a Unicorn? Demystifying China's Reform of Share Listing Rules and Chinese Depositary Receipts (CDRs)" (2019) 30 *International Company and Commercial Law Review* 454, 457–458.

[47] Eastmoney, "The latest shareholding structure of JD.com revealed" (10 May 2019), available at: *http://stock.eastmoney.com/a/201905091118284644.html* [Accessed 11 May 2020].

[48] Henry Angest, "In defence of dual-class shares with different rights", *Financial Times* (17 April 2019), p.9.

prohibited in most Chinese capital markets, but they are allowed in the latest star market, subject to sufficient risk warning and explanation in the listing prospectus.

Daily price fluctuation limit

The SSE and SZSE have been implementing a daily price limit of 10% on common stocks listed on the main boards and 5% on special treatment stocks.[49] It is a market stabilisation mechanism preventing the share price from fluctuating fiercely within one trading day, giving retail investors more time to react to the market change. Unlike countries having mature capital markets such as the US or the UK, where institutional investors play a main role in trading, in China retail investors contribute to over 90% of daily trading volume.[50] Therefore, China's stock markets have seen a high level of volatility and speculative bubbles often occur; for example, within 12 months, the SSE composite index rose from around 2,000 points in July 2014 to the peak of 5,166.35 points on 12 June 2015.[51] The price limit rule seems necessary for China's markets as it can mitigate the irrational price movements and prevent excessive speculation. However, the price limit is criticised as causing the opposite effect sometimes by exacerbating the price rise and fall. Judged by behavioural finance, the price limit will have psychological impacts on both trading parties, which subsequently change their trading behaviour. For instance, if the share price hits the upper limit (+10%), it is likely that the seller will raise his or her expectation of the selling price and determine to sell the shares on later dates at a higher price. Similarly, if buyers are unable to purchase the shares owing to the upper circuit breaker, their determination to buy such shares will be reinforced so they will be more likely to purchase the shares at a higher price in the following trading day. The star market has introduced a loosened daily price cap, as there will be no price movement limits during the first five trading days when a company firstly goes public; after that, the daily limit of price fluctuation will be set at 20%.[52] This gives investors twice space to respond to the market price movement, which is conducive to the effective price-discovery mechanism and improves market liquidity.

Stricter market exit rules

For a long time, China's A-share market was described as having "no exits" because very few public companies are delisted as a result of underperformance and other illegal issues. Therefore, in the eyes of most Chinese entrepreneurs, obtaining an IPO is the symbol of ultimate success which brings them numerous practical benefits.[53] This means that public companies enjoy endless financing resources from banks and capital markets and will obtain an extra layer of protection against bankruptcy, as the businesses will never "die" after becoming a public company. Clearly, this is a disaster for the investors, as the shares of some worst-performing

[49] Ting Chen et al., "Daily Price Limits and Destructive Market Behaviour" (2019) 208 *Journal of Econometrics* 249, 249.
[50] "China's stock market: A crazy casino", *The Economist*, 26 May 2015.
[51] Lerong Lu and Longjie Lu, "Unveiling China's Stock Market Bubble: Margin Financing, the Leveraged Bull and Governmental Responses" (2017) 32 *Journal of International Banking Law and Regulation* 146, 147.
[52] Shanghai Stock Exchange Sci-Tech Innovation Board Share Trading Special Regulation 2019 art.18.
[53] Lerong Lu, *Private Lending in China* (2018), p.57.

business are still afloat. As a response, the star market has announced stricter delisting rules for underperforming companies. There are several situations which might lead to the delisting of a public company, such as the fraudulent issuance of shares, the violation of information disclosure requirements, or if a company violates laws in relation to national security, public safety, ecological safety, production safety, and public health security.[54] The company can also be delisted by the exchange if it fails to meet the regulatory standards regarding share transactions and key financial indicators. For example, the SSE will delist companies encountering the following situations[55]:

- the accumulated trading volume for 120 consecutive trading days is less than 2 million shares;
- the closing price for 20 consecutive trading days is less than the par value of the share;
- the market cap for 20 consecutive trading days is less than RMB300 million ($42.67 million);
- the number of shareholders for 20 consecutive trading days is less than 400; and
- other situations specified by the SSE.

Strengthened information disclosure rules

The "registration-based" IPO system and other market-oriented listing and trading rules call for stronger information disclosure obligations to be imposed on the issuers. Information disclosure lies at the heart of modern securities regulation, as investors should be provided with sufficient and accurate information relating to the securities that they are trading. Investors can only make informed investment decisions when an adequate amount information is given to them. Under the "approval-based" IPO regime, the securities regulator is undertaking the primary responsibility of substantially assessing the quality of issuers before the shares are offered to the public, and therefore investors can rely on the regulator to screen out qualified investment objectives. However, the "registration-based" IPO system restricts the role of the securities regulator in the share-offering process and, as a result, the post-IPO information disclosure becomes especially important and necessary for investors who can only rely on themselves to judge the quality of the securities that they are going to subscribe or purchase. As for the star market, listed tech and innovative companies are required to fully disclose any risk factors that might have significant adverse impacts on the company's core competitiveness, operation activities, and future growth.[56] Moreover, if the issuers have not made a profit, they should fully disclose the reasons for why they are not making a profit, and its impact on the company cash flow, business development, talent recruitment, the stability of the entrepreneurial team, R & D investment, strategic investment, and growth sustainability.[57] The new PRC Securities Law also strengthened the

[54] Shanghai Stock Exchange Sci-Tech Innovation Board Share Listing Rules (2019), Ch.12: "Delisting".
[55] Shanghai Stock Exchange Sci-Tech Innovation Board Share Listing Rules (2019), art.12.3.1.
[56] Sci-Tech Innovation Board Listed Companies Continuous Supervision Measures (Trial Implementation) (2019), art.12.
[57] Sci-Tech Innovation Board Listed Companies Continuous Supervision Measures (Trial Implementation) (2019), art.12.

requirement of information disclosure for the issuer as it has to notify the CSRC and stock exchange about the following important incidents and explain the cause and potential impact:

(1) a major change in the company's operating principles and the scope of business;
(2) the company's major investment activities, e.g. the company's major asset purchases and sales within one year, the amount of which exceed 30% of the company's total assets, or the company decides to mortgage, pledge, sell or discard its principal business assets if the transaction involves the disposal of over thirty percent of the value of such assets;
(3) the company enters into major business contracts, provides significant guarantees, engages in connected transactions, which might have significant influence on the company's assets, liabilities, legal rights, and operating results;
(4) the company incurs major debts or faces default situations such as failing to pay major debts when they fall due;
(5) the company faces major losses;
(6) the company faces significant changes of external conditions in relation to its production and operation;
(7) the change of the company's directors or the change of over one-third of its supervisors or managers, or when the chairman of the board of directors or managers are unable to perform their duties;
(8) major changes in shareholders having over 5% of shares in the company or the change of company's actual controller about its shareholding or controlling companies, or the major changes in the actual controller and its controlling companies engaging in the same or similar businesses as the issuer;
(9) the company's plan to pay dividends and increase capital, the major changes in the company's ownership structure, the company's decisions regarding capital reduction, merger, division, dissolution and bankruptcy application, or the company enters into the bankruptcy proceeding according to law or the company is ordered to close down;
(10) major litigation and arbitration relating to the company, or the decisions of the general meeting of shareholders and the board of directors have been revoked or declared null and void in accordance with the law;
(11) the company is suspected of a crime and being investigated in accordance with the law, or the company's controlling shareholders, actual controllers, directors, supervisors and senior management personnel are suspected of a crime and under compulsory measures according to law; or
(12) other matters prescribed by the securities regulatory authority under the State Council.[58]

[58] PRC Securities Law 2020 art.80.

Investor suitability test

The CSRC and SSE try to ensure that the investments in the star market are only suitable for those retail investors with appropriate funding, investment experience, and risk tolerance ability. As companies listed in the star market are mostly tech businesses whose futures are highly uncertain, the relevant investments tend to be riskier. It needs investors to have better knowledge, extra experience and more money to participate in the market. The latest regulation requires that individual investors must have at least two-year trading experience, and hold financial assets worth no less than RMB500,000 ($71,120) for 20 trading days, to open an account to trade shares at the star market.[59] Clearly, this stops investors with a lower risk appetite and less funding from directly participating in the trading, which might be the best protection for them. The PRC Securities Law also distinguishes ordinary investors from professional investors based on their overall asset, financial asset, investment knowledge and experience, and professional ability, as ordinary investors will receive extra protection when they have disputes with securities companies who bear the burden of proof.[60] If investors do not pass the above thresholds, they will still be able to invest in the star market indirectly through purchasing units in mutual funds that have access to the star market. Share issuance in the star market will be conducted via both online and offline channels. Regarding online issuance, the issuer will use the online trading network of the SSE to list and sell the new shares, whilst the investors will subscribe to these shares by the same network. Online issuance mainly targets individual investors. In contrast, offline issuance does not go through the trading system of the SSE and primarily it is open privately to professional and institutional investors such as securities firms, mutual funds, trust companies, insurance companies, qualified foreign institutional investors (QFII), and non-public investment funds. The newly issued shares at the star market will be sold to institutional investors who enjoy certain priority over individual investors. At least 50% of off-line issuance will first be allotted to mutual funds, social security funds, pension funds, enterprise annuity funds, and insurance firms.[61] If the total number of shares after the public offering does not exceed 400 million, the offline issuance should be no less than 70% of the total issuance; if the total number of shares is over 400 million or the issuer is not yet making profits, the offline issuance should be no less than 80%.[62]

Extra judicial supports

A sound securities regulatory system cannot exist without a supportive and effective law enforcement mechanism. On 21 June 2019, the Supreme People's Court of China issued "Some Opinions on Providing Judicial Supports for the Establishment of Sci-Tech Innovation Board and the Experiment of Registration-Based System" (the "Opinions") as the principles guiding judicial practices in relation to securities and futures disputes as well as the protection of investors' interests in the star

[59] Shanghai Stock Exchange Sci-Tech Innovation Board Share Trading Special Regulation 2019 art.4.
[60] PRC Securities Law 2020 art.89.
[61] Shanghai Stock Exchange Sci-Tech Innovation Board Share Issuance and Underwriting Implementing Measures 2019 art.12.
[62] Shanghai Stock Exchange Sci-Tech Innovation Board Share Issuance and Underwriting Implementing Measures 2019 art.12.

market. It is the first time in the history of Supreme People's Court that it has produced special and comprehensive judicial opinions for capital markets law enforcement. In terms of the jurisdiction, any civil and commercial disputes relating to securities issuance, IPO underwriting contracts, IPO sponsorship contracts, and securities fraud in the star market will be heard by Shanghai Financial Court.[63] Established in August 2018, the Shanghai Financial Court specialises in finance-related lawsuits, and it is the first of its kind in China which aims to provide a better business environment and dispute resolution forum for investors from home and abroad. [64] The Opinions also stipulate the civil liabilities for breaching relevant information disclosure obligations. The controlling shareholders, or actual controller of the issuing companies, will directly owe civil liabilities to investors if they conduct fraud issuance or make false statements.[65] In addition, the court will fully respect the special corporate governance arrangements of tech and innovative companies which are compatible with technological innovations, such as weighted voting rights and stock option incentives for senior managers, as long as such arrangements do not violate laws and regulations.[66] Furthermore, the court will try to enhance the judicial protection for the intellectual properties (IP) belonging to listed companies in the star market when dealing with IP cases relating to patents and technological contracts and punishing IP infringements.[67]

Conclusion

Technology and finance go hand in hand, as technological innovations can only be achieved with strong capital supports. By analysing the latest market law reform in China, this article has demonstrated that laws can be used an effective and creative tool to increase the depth and liquidity of capital markets and to promote technological advances. The latest star market in the Shanghai Stock Exchange has given a more accessible financing channel to tech and innovative enterprises in China. The article has evaluated the two main reasons for China to introduce the star market in 2019. First, China has one of the largest tech industries in the world and holds most unicorn companies, but its capital markets law and securities regulation are hostile to tech businesses as they prohibits the listing of loss-making businesses incorporated in a foreign jurisdiction with VIE structures and dual-class shares. The star market has scrapped all these restrictions and welcomes red-chip companies obtaining a listing in Shanghai, which can alleviate the financing difficulties of tech entrepreneurs by allowing them to raise funds at home. Second, Shanghai aims to become a top international financial centre in the 2020s. There is no denying that the star market will support Shanghai's bid to become a world-leading IFC rivalling London, New York, Hong Kong and Singapore, and to build a city of the future with advanced technologies. Among various reform

[63] Supreme People's Court, "Some Opinions on Providing Judicial Supports for the Establishment of Sci-Tech Innovation Board and the Experiment of Registration-Based System" (FAFA 2019 No.17) art.3.

[64] Supreme People's Court, "First-of-its-kind financial court gets down to work in Shanghai" (22 August 2018), available at: *http://english.court.gov.cn/2018-08/22/content_36806558.htm* [Accessed 11 May 2020].

[65] Supreme People's Court, "Some Opinions on Providing Judicial Supports for the Establishment of Sci-Tech Innovation Board and the Experiment of Registration-Based System" (FAFA 2019 No.17) art.5.

[66] Supreme People's Court, "Some Opinions on Providing Judicial Supports for the Establishment of Sci-Tech Innovation Board and the Experiment of Registration-Based System" (FAFA 2019 No.17) art.6.

[67] Supreme People's Court, "Some Opinions on Providing Judicial Supports for the Establishment of Sci-Tech Innovation Board and the Experiment of Registration-Based System" (FAFA 2019 No.17) art.7.

initiatives, the highlight of the star market is the adoption of the "registration-based" IPO system known for its devolution of IPO power from the securities regulator to the stock exchange and other market participants. Compared with the conventional "approval-based" IPO regime, the new system lets the market play a greater role in the share offering process. It might lead to a more efficient and liquid financing system to support the growth of real economy and tech businesses. Nonetheless, the "registration-based" IPO system is more dependent on the post-IPO information disclosure obligations for issuers, and an effective enforcement regime to protect the interests of public investors, which should be the focus of future capital markets law reform. Other reform measures in the star market include the diverse listing standards, stricter market exist rules, enhanced information disclosure obligations, stringent investor suitability test, and extra judicial supports to combat securities frauds and IP infringements. In a nutshell, the star market and the "registration-based" IPO system are mostly appealing to market participants especially Chinese tech companies and investors. However, the effectiveness of China's capital markets law reform remains to be seen over next few years, as more empirical data is needed to test the real costs and benefits of this reform.