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The Development of Chinese Financial Markets

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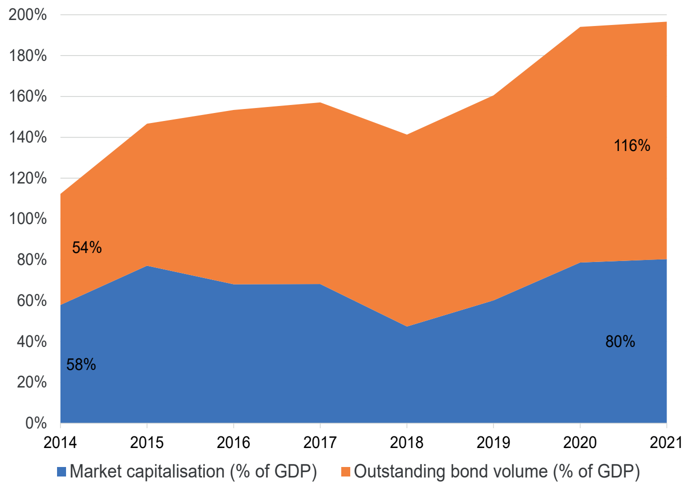
- Since the 1990s, Chinese financial markets have expanded very significantly. Shanghai and Shenzhen are now respectively the world's third and sixth largest stock exchanges by market capitalisation (see Chart on this page). In the past, China relied on its large State-run banks to finance its economy and these banks still wield substantial influence today. However, the need for modern and efficient capital markets is well acknowledged by the Chinese authorities, in order to meet the challenges of innovation and greening. In addition, the development of investment opportunities for households and businesses represents a lynchpin for economic and financial stability in light of the high level of savings.

- Although the expansion of financial markets has been rapid, it is not yet complete. Their functioning is impeded by major State intervention, inefficient structuring and the fact that they are still relatively unsophisticated. Some of these problems are in the process of being rectified through structural and prudential reform, including opening up the markets internationally.

- Despite persistent capital control measures, the opening of the markets is ongoing but in a conservative and limited manner. Hong Kong, where mainland Chinese firms account for 80% of the market capitalisation, is still paramount for both international investors' access to Chinese markets and Chinese access to global markets. Concurrently, mainland China is becoming increasingly accessible for foreign investors.

- The Chinese authorities were shaken by the 1997 Asian crisis, the 2008 financial crisis and the 2015 stock market crash. The two keywords are therefore modernisation and regulation as the authorities are looking to structure credit, rate and operational risk management, and make the markets more transparent and less procyclical.

Strongly expanding Chinese markets



Source: PBoC.
Figures for outstanding bond volume prior to 2014 are not available.

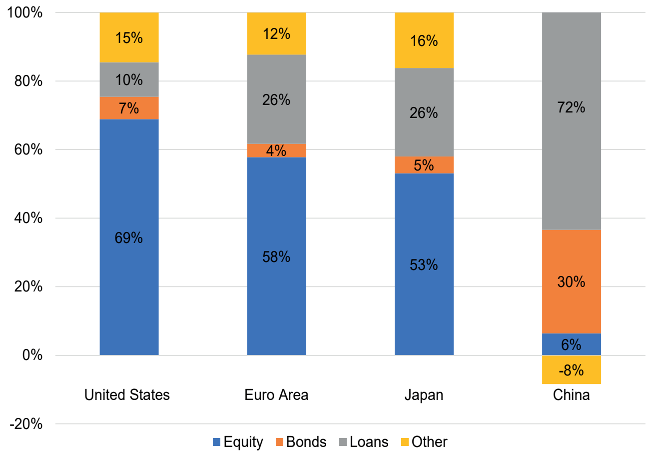
Lab Trésor

1. A strong expansion of the Chinese financial markets, in an economy that is still highly reliant on banks

Equity and bond markets were set up in Shenzhen and Shanghai in 1991 and have expanded rapidly. On the equity market side, these two stock exchanges are now the world's third and sixth largest by market capitalisation (in October 2022, Chinese market capitalisation stood at $10,100bn compared with $46,500bn in the United States and $13,400bn in the euro area at end-2021). Between 2015 and 2021, the size of the bond market (which is centred on an interbank market which records 84% of bond transactions) and exchange markets tripled, and it now only trails the United States on the global stage.

That being so, financial markets only make a fairly limited contribution to financing the Chinese economy. At the end of 2021, market capitalisation and outstanding bond volume in China accounted respectively for around 80% and 116% of GDP as against 201% and 216% in the United States and 93% and 116% in Europe.[1] On the one hand, this is due to massive bank financing for businesses, with outstanding corporate bank credit accounting for 173% of GDP in China (compared with 51% in the United States at end-2021 according to the Bank for International Settlements (BIS)),[2] with banks being the source of over 70% of corporate financing (see Chart 1). On the other hand, a huge proportion of Chinese savings is channelled towards property which represents 78% of household assets,[3] or towards remunerated sight deposits (the People's Bank of China (PBoC) benchmark rate is 1.5%).

Chart 1: Financing of non-financial corporations in 2019



Source: SIFMA, 2022.[4]

2. The goals of greening, innovation and openness are yet to materialise

2.1. Greening is still in its early stages

After their introduction in 2016, China has become the world's largest market for so-called green bonds, although they account for only 2.5% of the country's total bond issuance (as against 20% of issuance in 2021 and 6% of total outstanding bond volume in the United States).[5] Environmental, social and governance (ESG) asset management products are also emerging and represent 1.7% of all asset management products,[6] whereas the outstanding volume managed by green funds accounts for 1.7% of the total outstandings of Chinese funds.

Despite recent improvements, the sector still lacks transparency and does not yet comply with international standards. The general public is not always informed of projects funded by green bonds and disclosure of ESG reports is not mandatory for all listed companies. More importantly, according to the International Monetary Fund (IMF), 50% of Chinese green bonds are not seen as such in other countries, as they finance "clean coal", for example.

This situation could be improved by the July 2022 publication of new guidelines along the lines of the International Capital Market Association's Green Bond

(1) The ratio of capitalisation to GDP is valid for the euro area (stock exchange data, *DG Trésor calculations*), with the ratio for outstanding bond volume being valid for the entire European Union (source: International Capital Markets Association).
(2) See SIFMA's "2022 Capital Markets Fact Book".
(3) See T. Carré et al. (2022), "China's Dependence on the Property Sector as an Engine of Growth", *Tresor-Economics* No. 311.
(4) For China, the "Other" category encompasses bank acceptance, FDI, errors and omissions.
(5) In 2021, bond issuance totalled $1,958bn according to SIFMA, with green bond issuance amounting to $400bn according to the US Federal Reserve (J. Caramichael and A. Rapp (2022), "The Green Corporate Bond Issuance Premium", International Finance Discussion Papers 1346. Washington: Board of Governors of the Federal Reserve System, https://doi.org/10.17016/IFDP.2022.1346).
(6) "China ESG Development White Paper 2021" from Caixin Insights.

Principles, with an eye to harmonising "green" bond certification. With the previous Chinese taxonomy, use of 50% of the funds for this type of project was enough for green bond classification. Technical work is also underway with the European Union (EU) on a "common ground taxonomy", which aims at comparing (but not harmonising) European and Chinese taxonomies.[7]

2.2. Markets are increasingly focused on innovative companies

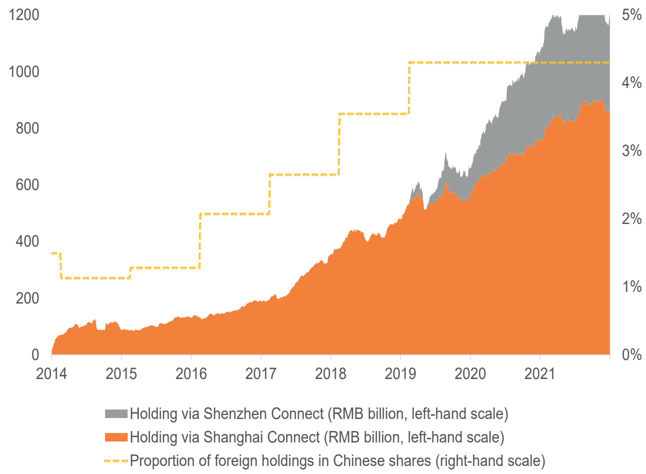
As innovative companies are smaller and have a riskier and more uncertain business activity, their financing solely by the banks is relatively more costly. The ChiNext Market of the Shenzhen Stock Exchange, which focuses on innovation, was opened in 2009, followed by its counterpart STAR Market in Shanghai in 2019. They have become the world's leading markets for raising capital with $20.5bn and $25.3bn raised respectively between January and September 2022.[8] At the end of 2021, the creation of a third market catering for these companies, the Beijing Stock Exchange, was announced. These three exchanges now account for 21% of total Chinese capitalisation, with ChiNext leading the pack with 71% of market capitalisation of innovative SMEs (see below).

2.3. A still relatively restricted international openness, with Hong Kong as the driver

The Chinese authorities' discourse is centred on promoting the openness of the financial sector and the interconnection of domestic and foreign capital markets. International investors are increasingly interested in China, as shown by Chinese products being included in a number of benchmark indices.[9] With the Qualified Foreign Institutional Investor (QFII) programme, which has been gradually extended and relaxed since it was introduced in 2002, China has opened up foreigners' access to its markets. The programme now allows foreign banks to fully own certain types of Chinese-registered financial service companies (in particular, transaction intermediation and corporate finance consulting).

Nevertheless, China's financial markets are still relatively closed (see Chart 2). In September 2021, foreigners only held 3% of Chinese onshore outstanding bond volume (as against 38% in the United States and 11% in Japan) and 3.8% of onshore market capitalisation (15% in the United States and 30% in Japan). China also bans foreign investment in firms seen as strategic, such as new technologies or telecommunications, using negative lists and it more broadly restricts joint ventures with local partners. More generally, China refuses to open its financial account as it fears huge capital flight which would have major repercussions for its exchange rate management.[10]

Chart 2: Chinese shareholdings by non-residents



Source: CEIC.

Hong Kong is central to the opening of Chinese markets (see Box 1). The Stock Connect programmes, which were initiated in 2014, provide foreign investors with access to Chinese products (shares, bonds, exchange-traded funds (ETFs) and wealth management products).[11],[12]

Extending the programmes to cover insurance products is currently under discussion. At the same time, Hong Kong gives access to foreign capital for Chinese firms which are listed there.

(7) See "Common Ground Taxonomy – Climate Change Mitigation Instruction Report" (europa.eu)
(8) Source: FSDC. The Korea Stock Exchange is in third place for IPOs in 2022 with $11bn. The global trend is for a slowdown in IPOs.
(9) MSCI Global Index in 2019, FTSE WGBI in 2021, etc.
(10) The liberalisation of capital flows would lead either to the end of fixed exchange rates or loss of independence of monetary policy according to Mundell's Incompatibility Triangle.
(11) According to the International Institute of Finance, between 70% and 80% of Chinese financial products owned by foreigners are held through the Stock Connect programmes. The remainder are held directly from mainland China by foreigners based there.
(12) "Connect" means that an investor operating on a market has access to products available on the other market without being formally registered on it.

Moreover, there are still limited numbers of Chinese investors on foreign markets although they can invest in Hong Kong securities using the Southbound Connect (limited to a quota of RMB 42bn per day, i.e. €6bn).[13] The State Administration of Foreign Exchange (SAFE) verifies and can limit all forex transactions and, therefore, capital outflows. Chinese companies can list themselves abroad, especially in the United States ($100bn raised over the last two decades) and in Hong Kong. Firms looking for financing do not often turn to Europe although there have been several issues of Chinese certificates of deposit under the Stock Connect schemes between the stock exchanges of Shanghai, Shenzhen, London and Zurich.

Box 1: Hong Kong's undecided future

Hong Kong's appeal for Chinese firms has been substantially bolstered since the 2017 regulatory reform which authorised the issuance of dual-class shares and secondary listings of mainland companies with primary listings abroad. These less stringent regulations have attracted some of the largest Chinese companies, particularly in the new technology sectors, and high-growth innovative industrial firms such as Xiaomi, Alibaba and Meituan.

This wave of listings gave significant momentum to the Hong Kong IPO market which rose 104% between 2016 and 2020. Chinese companies now account for 80% of market capitalisation. In the future, Hong Kong could benefit from a "homecoming" listing trend due to concerns about delisting in the United States. In 2022, for eight companies, these operations represented 30% of funds raised by IPO in Hong Kong. The likelihood of a wave of homecoming listings has diminished after the announcement of an agreement between the Public Company Accounting Oversight Board (PCAOB) and the Chinese authorities giving the former access to the audit work papers of Chinese companies listed in New York.

For a number of quarters now, Hong Kong has been faced with a generally negative backdrop. Some of this has to do with Beijing's stepping up its political control in the wake of the 2019 demonstrations. Hong Kong's image is being increasingly aligned with that of the Chinese regime and recent policy choices (zero-COVID policy, opacity surrounding Chinese offshore listings, regulatory tightening around the tech sector) are causing uncertainty for international investors. Lastly, competition from new financial centres, such as Singapore or Shanghai and Shenzhen in China, represents a challenge to its appeal. This context translated into a major slowdown in new listings of Chinese firms since the second half of 2021 (down 76% year on year for funds raised by IPO in Hong Kong during the first three quarters of 2022). To address this, the Hong Kong government has recently kick-started a public relations campaign aimed at the authorities, banks and international investors.

Nevertheless, Hong Kong is still a financial centre that is totally open to foreign investors and is not subject to any capital control measures. It has a freely convertible currency pegged to the US dollar through a reliable currency board regime and is grounded in a common law legal tradition. These factors, which allow it to stand out from Chinese onshore financial centres and have enabled it to play a central part in the controlled liberalisation of China's capital account, have been safeguarded up to now. They constitute structural advantages that will ensure that Hong Kong remains a key financial centre in the coming years.

(13) The exchange rate used here is €1 = RMB 7.

3. Shortcomings, risks and imbalances are being gradually addressed by the authorities

3.1. Markets structurally favour State-owned enterprises

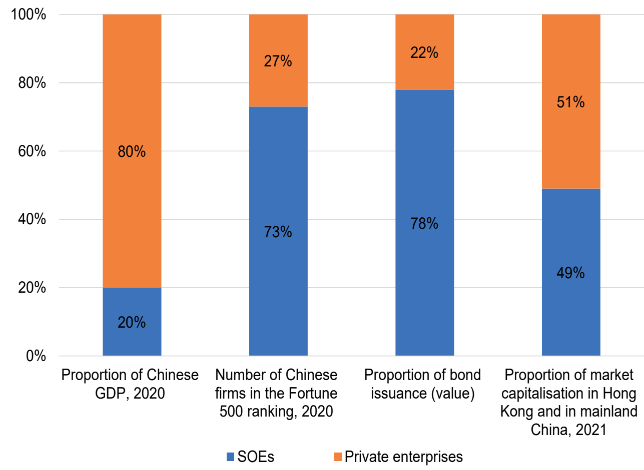
Historically, credit ratings have been very high in China. At end-2020, 80% of issued bonds had an AAA- rating or higher compared with 7% in the United States. This is not necessarily an accurate reflection of the quality of the rated companies. According to CSCI Pengyuan, a Chinese credit rating agency, 4.49% of Chinese bonds rated AAA or higher defaulted between 2014 and 2022, compared with 0.13% for firms rated by Moody's.[14] For many years, a very high rating was required in order to be listed and this favoured State-owned enterprises (SOEs) as there was the perception of an implicit government guarantee.[15]

Moreover, the stock market performance of listed companies are contingent on political factors. Investors are encouraged to focus on sectors deemed as priorities under the national industrial policy. The guarantee of backing from the authorities causes a discrepancy between the stock market valuation and the economic value of the companies in question, and could trigger speculative bubbles to form in certain sectors.[16]

This means that private companies are crowded out of the financial markets. According to the Peterson Institute, 52% of the 100 leading Chinese enterprises in terms of capitalisation have State or local authority shareholdings (and three-quarters of them are over 50%-owned). As regards bonds, private companies only accounted for 22% of issuance in 2021.

This situation is very gradually shifting. In 2021, 13 SOEs defaulted (57% of bond defaults). Information is slowly becoming more transparent with the reform of the credit rating agency sector (reform of models in August 2021, authorisation of foreign rating agencies in 2019). In August 2021, there were 268 rating downgrades (more than for the whole of 2020). During 2021, the proportion of BBB+ and lower ratings rose from 2% to 13%.

Chart 3: SOEs and private enterprises



Sources: Bruegel, Gavekal, CEIC.

3.2. An investor base with insufficient numbers of professionals

Individual investors are over-represented (34%)[17] unlike major long-term investors (29% according to Caixin, compared with over 80% in the United States, in Hong Kong or in Japan according to Goldman Sachs), such as pension funds, insurance companies and mutual funds, which have historically ensured market liquidity. In China, the lack of professionals in the investor base enables stock promoters to over-value companies as they have no concerns about downward adjustments initiated by professional investors. This goes some way to explaining the volatility of Chinese markets.

(14) CSCI Pengyuan Credit Rating (July 2022), "Comparative Analysis of Defaulting in China and Worldwide From 2014 to 2022" - Accessible in Chinese via this link. Also see M. Livingston et al. (2018), "Are Chinese Credit Ratings Relevant? A Study of the Chinese Bond Market and Credit Rating Industry", Journal of Banking and Finance 87 (2018) 216-232.
(15) Z. Geng and J. Pan (2021), "The SOE Premium and Government Support in China's Credit Market", NBER Working Paper 26575; E. Jurzyk and C. Ruane (2021), "Resource Misallocation Among Listed Firms in China: The Evolving Role of State-Owned Enterprise", IMF Working Paper WP/21/75; T. Huang and N. Véron (2022), "Is the Private Sector Retreating in China? Not Among Its Largest Companies", Bruegel Blog, 5 April.
(16) For example, open political support for the Chinese semiconductor sector enabled its firms to raise substantial funds at the end of 2022 in spite of the restrictions introduced by the American government in October.
(17) This figure is taken from the publications of Chinese securities firms. Different sources, such as Caixin, refer to a proportion of 60% but this also factors in leading managers having large amounts of shares and whose practices are far removed from the 34% of small shareholders.

To address this, between 2015 and 2021, the authorities increased the number of public investment funds from 1,900 to 9,000, representing an outstanding volume under management of 8.1% of market value. The funds' activity initially focused on the monetary market but, since 2019, it has been channelled towards shares under the impetus of the China Securities Regulatory Commission (CSRC), the market regulator. Concurrently, insurance companies have been expanding their market activity as, in 2013, the China Banking and Insurance Regulatory Commission (CBIRC), the prudential authority, authorised them to hold up to 30% of their assets in the capital of companies, including shares. Setting up private pension funds is currently under consideration. Lastly, the gradual opening of the onshore market is also aimed at boosting professional investor participation. These measures seem to be paying off as there has been a downtrend in the proportion of individual investors in traded volumes and an increase in the share of domestic institutional investors (29% at end-October 2022, compared with 16% in 2018).

3.3. Market fragmentation undermines effective capital allocation

The bond and equity markets are fragmented between various platforms abiding by different rules concerning, for example, registration and information disclosure, and with poor interoperability. On the bond market, non-bank investors do not have access to the interbank market but only to exchange markets despite the fact that the same products are traded on both. Similarly, companies listed on local stock exchanges encounter problems in shifting up to national level.

Competition between authorities goes some way to explaining this situation. Bond market oversight is shared between the PBoC (Chinese central bank tasked with interbank market surveillance) and the CSRC (responsible for exchange markets). Issuance rules are jointly managed by the PBoC, the CSRC, the National Development and Reform Commission (NDRC, the State's planning agency) and the Ministry of Finance, depending on the category of issuer. The role of the SAFE and local institutions is also variable. These circumstances generate complexity and additional compliance costs.

To date, measures intended to reduce fragmentation have met with little success. In early 2022, the Shanghai and Shenzhen stock exchanges and market infrastructure offered the prospect of being able to access both markets while only being registered with one of them. In June, foreign investors already connected to the interbank bond market were authorised to connect to the exchange markets. That said, the recent setting up of the Beijing Stock Exchange, with very similar features to the STAR Market or the ChiNext Market, has compounded the issue of fragmentation.

3.4. Trading rules and the product offering still lack sophistication

On the stock market, 17% of shares are "non-negotiable". They give their holders the same rights as normal shares but cannot be traded on the markets. They are often held by public managers whose interests do not necessarily match those of the market.

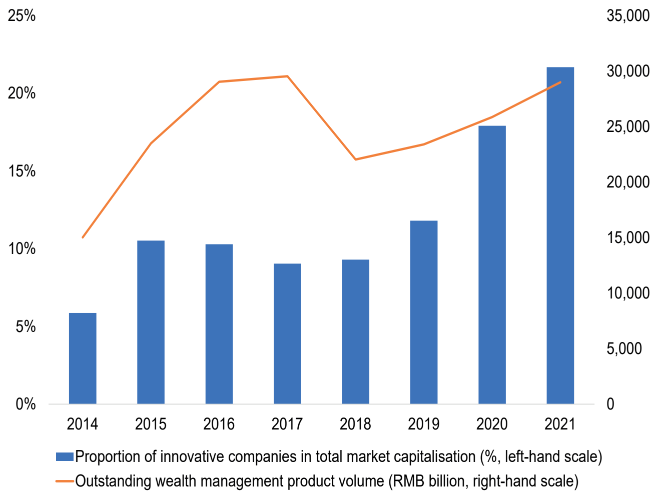
In Shanghai and Shenzhen, a limit of share price change for each trading day has been set at + or - 10%. Margin trading and short selling mechanisms are limited; they have been authorised since 2008 and now account for 2.2% of Chinese market capitalisation as against 15% worldwide. Stock exchanges are striving to expand these mechanisms which are supposed to improve market liquidity and the accuracy of valuations. However, the authorities are restricting this trend over concerns about financial stability.

As regards products, there is not yet a high-yield market for securities carrying a risk of default and corresponding high returns. At present, some risky issuers still have high ratings due to the implicit guarantee and this can lead to abrupt corrections in the event of default; while those without such ratings are not authorised to issue. Generally speaking, the notion of default is not well accepted in China and bankruptcy law is still being developed.

Although China is the world's leading market for commodity derivative trading on stock exchanges (70% of traded lots pass through it according to the China Central Depository & Clearing Co, Ltd.), the market for financial derivatives is still underdeveloped. The market for over-the-counter (OTC) financial derivatives stands at 1% of global trading volumes according to the International Swaps and Derivatives Association (ISDA). To expand and regulate this market, an initial Futures and Derivatives Law was adopted in April 2022. It lays down rules on trading practices, clearing and settlement, and formally bans insider trading, market manipulation and the disclosure of confidential information.

Lastly, investments by individuals of their savings on the markets is limited by poorly-adapted products. For instance, the development of wealth management products (see Chart 4) is still in its infancy (4% of household assets at end-June 2022).

Chart 4: Two trends on the Chinese markets



Source: CEIC.

3.5. The continued presence of "zombie" firms

Since the introduction of delisting arrangements in 2001, only 147 companies have been delisted in China (compared with 170 in the United States during 2021 alone). Some non-profitable or zombie firms manage to stay listed without turning a profit despite the fact that there is a minimum profit threshold. This especially concerns companies subsidised by local authorities which may artificially inflate profits as they are partly assessed on the number of locally-listed firms. The rules were recast in 2020 with the elimination of the profit threshold, automatic delisting if the share price falls below RMB 1 (in line with international standards) and a shortened delisting process. Since then, there has been an increase in delistings (40 in May 2022).

On the equity market, the listing process takes over a year and is contingent on opaque decisions from the CSRC. These issues mean that companies get themselves listed through alternative back-door listing strategies (indirect access to listing by acquiring all the assets of a shell company) which fosters speculation on the companies subject to takeovers. To address this issue, a new registration system has been introduced which lays down a deadline for approval of between 120 and 210 days. It steps up information disclosure requirements, authorises platforms to analyse registration applications and liberalises the setting of IPO prices.

3.6. The need to protect investors and fight fraud

Until 2020, fraud went largely unpunished and fines were limited. The 2020 Securities Law introduced a representative litigation mechanism, which is similar to the American class action, and which allows for collective proceedings and compensation for a variety of offences such as misrepresentation, insider trading and market manipulation. In November 2021, a court in Guangzhou handed down a landmark judgment in the first lawsuit of this type by ordering Kangmei (China's leading pharmaceutical manufacturer) to pay RMB 2.46bn (€351m) to more than 50,000 shareholders.

The 2020 Securities Law also bolstered the fight against stock market offences by heightening information disclosure requirements and substantially increasing financial sanctions by raising the upper limit for fines in cases of fraud to 100% of the value of the shares, compared with 5% previously; to RMB 5m for insider trading (i.e. €714,000), compared with RMB 600,000 previously; and to RMB 10m for market manipulation, compared with RMB 3m previously.

4. Outlook

The recent history of Chinese markets appears to be a sound indicator of what their future holds. The size of markets is increasing, they are becoming greener, more open and more focused on new technologies. Lastly, the manner in which they operate is becoming more aligned with international standards. However, such linear development does carry risks. In the short term, uncertainty around economic conditions in China has led to capital flight and falling share prices throughout 2022. In the medium term, the return to an ideology-driven economic policy could affect the upgrading of Chinese markets. In financial matters, this is already reflected both in the discourse of the authorities, which are making the fight against the "disorderly expansion of capital" a priority, and in some of their actions (regulatory crackdown on tech giants, uncertainty surrounding Chinese listings abroad).

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