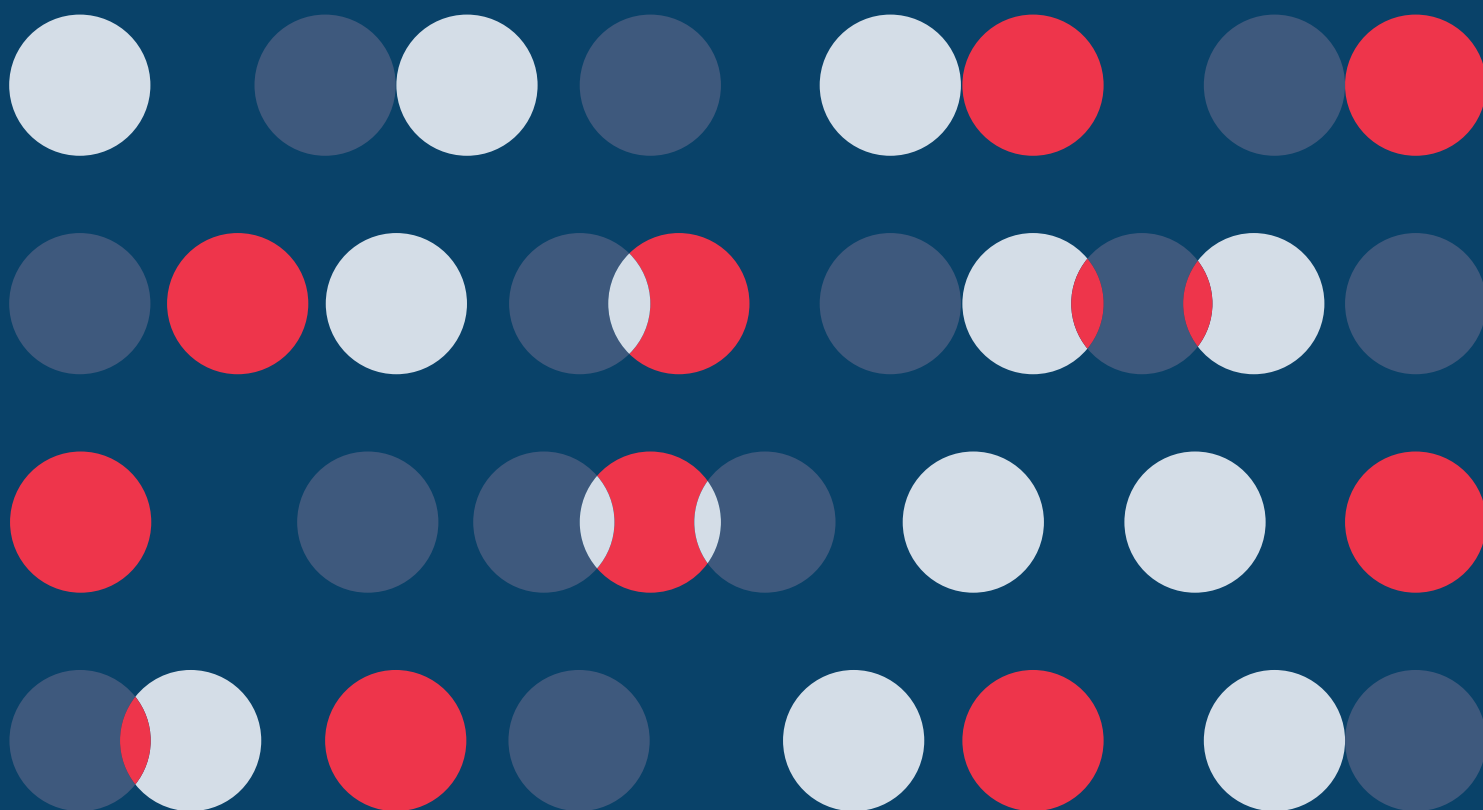


October 2019

RESEARCH REPORT

RISING DEMAND FOR BLOCK TRADING IN
THE MAINLAND AND HONG KONG SECURITIES MARKETS



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SUMMARY

Block trading mechanism of equities is important to minimise price impact and avoid unwanted signalling of large-sized transactions, which is detrimental to best execution by brokers. It provides an efficient way to buy or sell large blocks of shares in a single transaction with more certainty in transaction price and timing than trading on the auction market. Various block trading mechanisms prevail in global markets. These include off-exchange negotiated trades with post-trade reporting to an exchange, separate off-exchange trading platforms or dark pools, or specialised on-exchange block trading mechanism. Despite the differences in block trading mechanisms, there is a growing trend in block trading on major stock exchanges as hinted by the growth in negotiated trades.

The growth of the asset management industry is a primary driver for block trading. For an active asset manager, the price impact of lit orders of on-exchange large-sized transactions erodes the active returns. For a passive asset manager, the costs of rebalancing on index stocks can be significant and much higher than the management fees received. In addition, creation/redemption of fund units sometimes involve large-sized transactions within a short time frame. Demand also comes from other trading purposes: mergers and acquisitions, share repurchases as well as transactions by private equities and major shareholders. The development of equity derivatives and structured products may increase demand for block trading to enhance efficiency of shares delivery at settlement. Besides, findings of empirical studies showed that negotiated trades (or the “upstairs market”) effectively provide extra liquidity and reduce price impact, particularly for stocks with low liquidity in the on-exchange limit-order book.

In the Mainland market, the Shanghai and Shenzhen stock exchanges provide dedicated platforms for block trading. In contrast to world major markets, block trading of A shares in the Mainland has been dominated by sell-initiated trades — mainly the placement of shares by major shareholders after the lock-up period of their substantial shareholdings, rather than by trades addressing the demand from asset management business. This may explain why the average transaction size of negotiated trades in the Mainland has been much larger than those in major stock markets. Nevertheless, the situation is expected to change as the access by global investors to the A-share market has been expanded through Northbound Stock Connect. The asset management of offshore institutional investors in A shares is expected to grow further after the inclusion of A shares into global indices and the quadrupling of daily quota of net purchases under Northbound Stock Connect. The increased global institutional participation is expected to increase the demand for block trading of A shares.

In the Hong Kong market, the exchange’s manual trade mechanism accommodates the reporting by Exchange Participants of block trades through private negotiations between brokers, internal crossing or dark pools. The turnover of negotiated trades reached the highest in 2018. Evidenced by the relatively high average transaction size, negotiated trades in the Hong Kong market are believed to comprise mostly of block trades. The growth in block trading could, to a certain extent, be attributable to the growth in asset and wealth management businesses in Hong Kong. Moreover, Mainland investors have become increasingly interested in diversifying their portfolios through mutual funds with exposures in Hong Kong stocks. The potential demand for block trading from Mainland funds through Southbound Stock Connect is expected to grow further.

Given the growing potential demand for cross-border block trading and that cross-border trading between the Mainland and Hong Kong markets is now conducted largely via the Stock Connect schemes, it is worth considering the enhancement of Mainland-Hong Kong market connectivity with block trading facilities under appropriate arrangements and controllable environment, so as to meet investors’ demand. Cross-border market liquidity can thereby be further enhanced and investors can benefit from even better execution.

1. THE SIGNIFICANCE OF BLOCK TRADING MECHANISM IN EQUITIES TRADING

1.1 What is a block trade?

A block trade means a purchase or sale of a large amount of securities in a single transaction. Block trades are often conducted not on the open auction market in order to lower transaction cost or price impact, i.e. to prevent the price to be driven up for purchases or down for sales, by avoiding the disclosure of large-sized orders to the open market, such that a “best execution” price could be attained. Stock exchanges which have block trading mechanism impose different thresholds on the number of shares or transacted amount for block trades. They also implement different modes of block trading.

Block trades are usually executed through off-exchange methods. These include negotiation between brokers who then report the trade to the stock exchange (negotiated trades), as well as intransparent trading on alternative trading venues (or dark pools). The advantage of off-exchange execution is pre-trade anonymity as other investors cannot see the large orders in bid-ask queues on the exchange. This avoids price movements in a direction unfavourable to the buyer/seller that placed the large order before its execution. Besides, large orders may be able to match off-exchange with other reserved or hidden liquidity which do not place their orders on exchange.

There are two common modes of block trading:

- **Negotiated trades** are also called “upstairs market” where brokers make private large order negotiations on behalf of clients and the resultant transaction will be reported to a stock exchange for central clearing for mitigating counterparty risks. These trades are mainly liquidity-motivated with the aim to reduce execution costs.
- **Dark pool** block trading has become increasingly popular. While the anonymity of investor identity and trade size avoids unwanted signalling that would have price impact, investors are concerned about the potential trade price deviation between dark pools and exchanges, due to the information asymmetry of investors¹, and the risk of front-running by the dark-pool operator. The use of dark pools should be accompanied by proper regulations and investor safeguards.

On-exchange (referred to as “downstairs market”) block trades usually have high price impact. It is because the lit orders may send an information signal to the market that attracts more trades in the same direction. An empirical study² estimated the asymmetric price impacts of on-exchange block trades in major markets — during 1999 to 2002, the block trade price was about 0.16%-0.34% higher than the open price (in terms of ask quotes) for block purchases but 0.32%-0.42% lower than the open price (in terms of bid quotes) for block sales. Some may use algorithmic trading of smaller trades to execute a block order (e.g. trade strategies using volume-weighted average price (VWAP) or time-weighted average price (TWAP)), but this may add uncertainty to execution cost. The use of on-exchange block trades may be enhanced by exploring ways to avoid information leakage (e.g. introducing hidden order type).

These modes of block trade execution contribute to minimising price impacts and uncertainty of the transaction price.

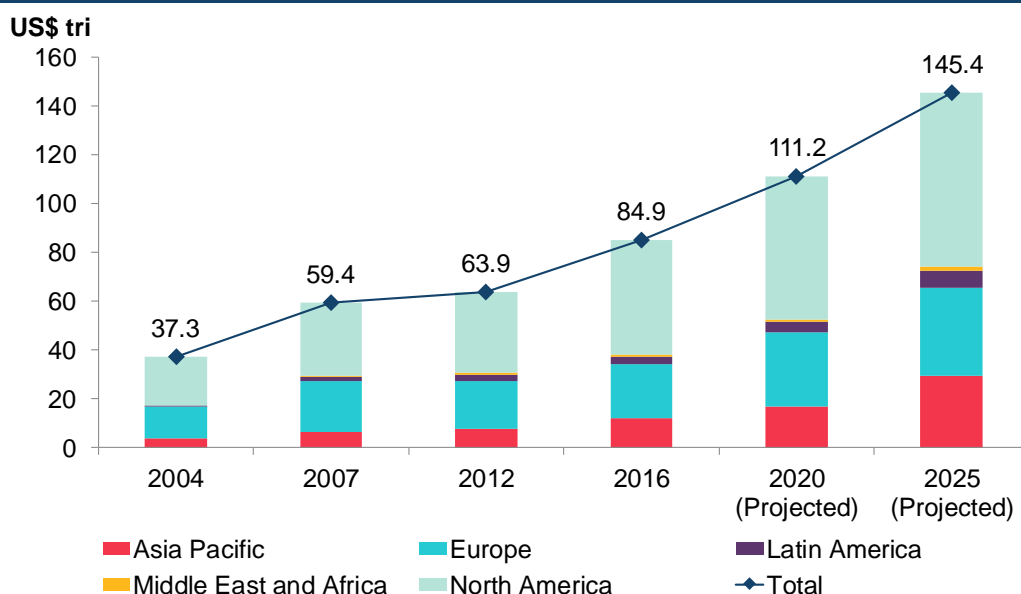
¹ To limit the price difference between trading on dark pools and exchanges, the US regulator adopted regulations (e.g. Regulation NMS Rule 611) in 2005 to ensure that orders are executed at the best displayed prices or better.

² Frino, A., D. Gerace, A. Lepone. (2007) “Block trades and associated price impact: International evidence on the two asymmetries”, *Papers for European Financial Management Association 2007 Annual Meetings*.

1.2 The underlying demand for block trading in global markets

The growth of asset management is a fundamental driver for higher demand for block trading by buy-side institutions. As the assets under management (AUM) of investment funds continue to grow, the total transaction amount for purchases and sales will increase. According to PricewaterhouseCoopers (PwC), the global AUM of the asset and wealth management industry were US\$84.9 trillion in 2016 and were expected to grow across all regions and reach US\$111.2 trillion in 2020 and US\$145.4 trillion in 2025 (see Figure 1). Mainland China is one of the fastest growing markets — its total AUM reached RMB 48 trillion (US\$7.4 trillion) in 2016 and was expected to double to about RMB 90 trillion (US\$14 trillion) in 2022³. Hong Kong’s asset and wealth management industry reached an AUM of HK\$23.9 trillion (US\$3.1 trillion) in 2018⁴.

Figure 1. Estimated global assets under management (2004 to 2025)



Source: PwC. (2017) “Asset & wealth management revolution: Embracing exponential change”, PwC website, 30 October 2017.

Block trading mechanism is important to minimise the price impact for both active and passive asset management. The absence of block trading mechanism on exchanges may increase the cost of execution significantly.

- **For active asset management**, asset managers apply various investment strategies with the aim to outperform benchmark indices for active returns (“alpha” returns). Active investment strategies accounted for 71% of global AUM in 2016⁵. An empirical study⁶ looked into 26 active equity managers in Australia and found that the price impact of round-trip transactions (a pair of purchase and sale) were significant compared to their active returns (0.27% versus 0.92%). In addition, the redemptions of fund units may become intense during market downturn that the fund needs to sell large blocks of securities to meet the redemption needs. This explains why some funds adopt “swing pricing” that allows the fund manager to adjust the fund’s net asset value (NAV) per share in order to

³ Source: Oliver Wyman. (2018) “Global asset managers in China: Riding the waves of reform”, Oliver Wyman’s website, March 2018.

⁴ Source: The Securities and Futures Commission (SFC)’s survey report. “Asset and Wealth Management Activities Survey 2018”, published on the SFC’s website, July 2019. (Referred to as the “SFC Asset Management Survey 2018”.)

⁵ Source: PwC. (2017) “Asset & wealth management revolution: Embracing exponential change”, PwC website, 30 October 2017. (Referred to as the “PwC 2017 Paper”.)

⁶ Gallagher D. R., A. Looi. (2003) “An examination of the market impact cost of active Australian equity managers”, *SIRCA Research Report*, Sydney.

pass on the estimated trading costs associated with redemptions and subscriptions to investors⁷.

- **For passive asset management**, the asset managers track the performance of benchmark indices. Passive investment strategies were found to account for 17% of global AUM in 2016⁸. A research paper⁹ noted that index trackers accounted for more than 10% of market capitalisation for S&P 500 (US large-cap index) stocks and about 6% for Russell 2000 (US small-cap index) stocks in 2000. The same study found that the market impact of index rebalancing activities of passive funds in the US could be significant (up to 168 basis points (bps)), compared to the annual management fee of about 10 bps for index funds (see Table 1). The price impact could be even more significant during the last few minutes before market close or at the closing auctions of trading days of index rebalancing if there is no block trading mechanism in place. As for creation and redemption of units of exchange traded funds (ETF), similar to mutual funds, a large amount of securities may be traded within a short time frame for arbitrage to minimise the premium/discount of the ETFs or liquidation to meet redemption needs¹⁰.

Index	Ratio of market capitalisation of additions and deletions to the index total	Abnormal returns of additions/deletions	Impact on returns
S&P 500	5.0%	5%	25 bps
S&P 1500	3.4%	7%	25 bps
Russell 2000	16.8%	10%	168 bps
Russell 3000	1.8%	10%	18 bps
NASDAQ 100	5.6%	3%	17 bps
Dow Jones TMI	1.8%	0%	0 bps

Source: Quinn and Wang 2003 Paper.

In addition to long-only asset management, some sophisticated professional investors are interested in **equity structured products** (e.g. equity-linked instruments or ELI) or derivatives. These products are usually settled through physical delivery. For example, an investor invested in a bull equity-linked note (ELN) where the investor is required to purchase the shares at an agreed strike price when the share price at the settlement date falls below an airbag level that is lower than the agreed strike price. The transaction amount at settlement on behalf of investors can be high, especially for cases in which the products are created for only a few high-net-worth individuals. If investors need to purchase a large amount of shares on-exchange for settlement of the ELN, it may send a wrong signal to the market and increase the stock price volatility. In this case, anonymous block trading is a way to provide higher certainty of transaction prices for ELN settlement, which will be beneficial to investors and the overall market. It would also support the development of various structured products and derivatives to meet the demand of asset management.

⁷ See Arnold and Porter Kaye Scholer LLP. (2016) "SEC adopts new rules: Fund liquidity, reporting and disclosure and 'swing pricing'", Lexology.com, 6 December 2016.

⁸ Source: PwC 2017 paper.

⁹ Quinn, J. and F. Wang. (2003) "The impact of adds and deletes on the returns of stock indexes", *Applied Finance Project*, Haas MFE Program, University of California Berkeley. (Referred to as the "Quinn & Wang 2003 Paper".)

¹⁰ Source: Dickson, J. M. and J. J. Rowley. (2014) "Best practices for ETF trading: Seven rules of the road", Vanguard research, September 2014.

Further to asset management, **corporate actions** also contribute to the demand for block trading mechanism. Block purchases can be used by companies for repurchases to support the share price. Some research¹¹ noted the benefits of privately-negotiated repurchases over on-exchange repurchases — the company can repurchase a large amount of shares through block trading within a short period of time and the company can avoid the administrative expenses associated with approaching a large number of shareholders.

Another demand for block trading is from **mergers and acquisitions (M&A)**. Negotiated block purchase is one of the ways for an acquirer to gain control of a large fraction of a company's shares and the blocks are typically traded at a premium¹². A research paper¹³ explained that the premium consists of benefits to managers and owners and found that the trades for M&As with subsequent changes in top management had higher premia among 756 negotiated block trades during 1987 to 2002. The paper also noted that the transaction prices of block trades may serve as a reference for the bid price on large shareholders' stakes. This highlights the importance of block trading on price discovery among institutional investors.

Moreover, **private equities and major shareholders** would benefit from block trading. Private equity sponsors (or financial sponsors) acquire companies with a view towards eventual sale or public offering to potential investors. Block trading is one of the ways to trade share stakes that could provide higher certainty of execution price and shorter period of execution for buyers and sellers of share blocks. According to Dealogic, sponsor-related block trades in the US rose from US\$28.6 billion during 2005 to 2010 to US\$170.8 billion during 2011 to 2016¹⁴. Similar case happened in Asia Pacific: Naspers owned 33% stake of Tencent at its start-up stage since 2001 and sold HK\$9.8 billion or 2% stake of Tencent in a block trade in the Hong Kong market at a discount of 7.8% to the prevailing market prices¹⁵. This was the largest block trade in Asia Pacific on record¹⁶. During the bull market in 2015, some major shareholders traded their share blocks in the Hong Kong market and the discounts were just around 3%-4%, less than the normal level of about 10%¹⁷.

In summary, block trades of equities are used in the global markets by buy-side and sell-side institutional investors with benefits in terms of minimising price impact and certainty of timing and execution costs. Moreover, these benefits are not at the expenses of other investors on the exchange (downstairs) market. These are discussed in the next sub-section.

1.3 International experience on the complementary nature of block trading

Some investors are concerned about fairness, for example, whether the upstairs market provides or takes liquidity from the downstairs market and whether brokers will front-run their clients (like trades in dark pools). The international experience may shed light on these.

Empirical evidence showed that the upstairs market for block trading is a complement and not a substitute of the downstairs markets for small orders. Although there are worries that the fragmentation of markets will lead to order substitution, the upstairs market

¹¹ See, for example, Atkins, P., P. Korff. (2013) "Questions surrounding share repurchases", *Harvard Law School Forum on Corporate Governance and Financial Regulation*, 14 March 2013..

¹² See, for example, Bittlingmayer, G. (1999) "The market for corporate control (including takeovers)", *Encyclopedia of Law and Economics, Vol. III — The Regulation of Contracts*, Boudewijn Bouckaert and Gerritt De Geest, Edward Elgar and the University of Ghent.

¹³ Hwang, J. H. (2004) "Whose private benefits of control — Owners or managers?", unpublished working paper, Indiana University, Bloomington.

¹⁴ Source: "Building up US ECM a block at a time", Dealogic website, 17 October 2017.

¹⁵ Source: "Tencent drops a further \$22 billion after Naspers trims stake", *Bloomberg* website, 23 March 2018.

¹⁶ Source: Ditto.

¹⁷ Source: "DEALTALK: Hong Kong stock surge spurs block trade boom; China bank deals seen", *Reuters* website, 21 April 2015.

was said to add extra liquidity and trading from order creation — literature¹⁸ highlighted that some traders in the upstairs market wish to transact a large block of shares at lower costs (liquidity motivated) but do not want to reveal their full orders or information to the downstairs market. These trades can only be effected in the upstairs market but not in the downstairs market.

An exchange example is Euronext Paris. The exchange allows block trades through negotiations, VWAP rules and exercising options and derivatives. A study¹⁹ looked into the data during January to March 2007 and found that stocks with active upstairs markets were more liquid (lower bid-ask spread) and had a larger trading volume on the downstairs market, compared to other stocks. The study also found that low liquidity (high bid-ask spread) on the downstairs market does not induce investors to route their orders to the upstairs market.

Another example is the Toronto Stock Exchange (TSX). The exchange has a separate system for orders in the upstairs market but immediately disclosed the trades to the market after transaction conclusion. Those orders in the upstairs market are required to be priced at least as favourable as those available in the downstairs market at the same time. A study²⁰ looked into the data of June 1997 on 5,840 upstairs trades (about 55.5% of trading volume) reported to the TSX. The study concluded that the upstairs market does not “cannibalise or free ride off” the downstairs market. The upstairs market offers price improvement over the limit orders available in the downstairs market for one-quarter of the block trades. It also found that a trade is more likely to be executed upstairs when there is a wider bid-ask spread, and when there is less depth on the opposite side of the limit order book, in the downstairs market.

Evidence showed that block trades in the upstairs market are liquidity-motivated and attracts unexpressed liquidity. A study²¹ looked into 92,170 block trades of French stocks during April 1997 to March 1998 and found that 67% of these trade (compared to 20%-30% in the New York Stock Exchange (NYSE)) were conducted in the upstairs market. The findings suggested that there was order creation from unexpressed liquidity and showed that the actual execution costs in the upstairs market was only 35% of displayed and unexpressed liquidity in the downstairs market. Similarly, another study²² on 21,077 block trades on the NYSE supported that block trades in the upstairs market were liquidity-motivated and these trades will not occur without the upstairs market.

Upstairs brokers not only intermediate block trades but also play an important role to uphold fairness to investors. A study²³ examined 69,449 block trades on the Australian Securities Exchange (ASX) during 1993 to 1998 and found no evidence of higher market impact or wider bid-ask spread of the downstairs market due to the existence of the upstairs market. Besides, the paper suggested lowering or cancelling the threshold for block trades at AUS\$1 million to facilitate block trades for small-sized stocks so as to let more block traders enjoy the benefits of lower execution costs. The paper highlighted the importance of brokers in the upstairs

¹⁸ See Burdett, K. and M. O'Hara. (1987) “Building blocks: An introduction to block trading”, *Journal of Banking and Finance*, Vol. 11, pp.193-212, and Seppi, D. J. (1990) “Equilibrium block trading and asymmetric information”, *Journal of Finance*, Vol. 45 (March 1990), pp.73-94.

¹⁹ See Lefebvre, J. (2010) “Block trades and market liquidity on Euronext Paris”, Working Paper, Paris December 2010 Finance Meeting EUROFIDAI – AFF.

²⁰ Smith, B. F., D. A. S. Turnbull and R. W. White (2001) “Upstairs market for principal and agency trades: Analysis of adverse information and price effects”, *Journal of Finance*, Vol. 56, Issue 5, pp.1723-1746.

²¹ See Bessembiner, H. and K. Venkataraman. (2004) “Does an electronic stock exchange need an upstairs market?”, *Journal of Financial Economics*, Vol. 73, Issue 1, pp.3-36.

²² See Madhavan, A. and M. Cheng. (1997) “In search of liquidity: Block trades in the upstairs and downstairs Markets”, *The Review of Financial Studies*, Vol. 10, Issue 1, pp.175-203.

²³ Fong, K. Y. L., A. Madhavan, P. L. Swan and F. D. Foster. (2004) “Upstairs, downstairs: Does the upstairs market harm the downstairs?”, unpublished working paper, University of New South Wales.

market to filter out “front-running” trades and search for counterparties. In respect of the role of filtering “front-running” trades, although upstairs brokers know the identities of the counterparties, they are willing to trade off short-term information gains from principal trades for the relationships with long-term customers who pay more for agency trades²⁴. In respect of the role of searching for counterparties, a paper²⁵ cited an example of routing large orders from the limit order book on the Paris Bourse to the dealer market in London, which is partly attributable to lower costs and relative ease of search for counterparties in London’s deep dealer market.

These study findings provide empirical support to the complementary nature of the upstairs (off-exchange) market to the downstairs (on-exchange) market.

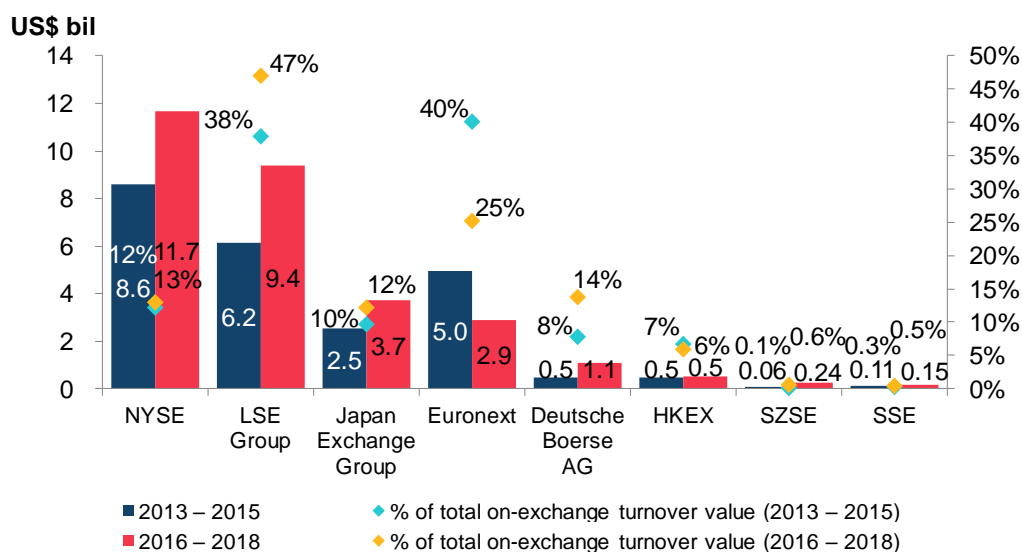
1.4 Global growth trend of block trading on the upstairs market

The turnover of negotiated trades in the upstairs market has increased across many major exchanges in recent years. Statistics of the World Federation of Exchanges (WFE) on negotiated trades (negotiated deals and reported trades²⁶) on an exchange are used as the proxy for block trading in the upstairs market. The statistics showed that the average daily turnover value of negotiated trades during 2016 to 2018 was higher than that during 2013 to 2015 for major exchanges in the US, Europe and Asia (see Figure 2). The proportion of negotiated trades in total turnover value on the exchange was higher in the US and Europe than in Asia. For the US, larger transaction size contributed to the increase (the average deal size of negotiated trades rose from US\$9,473 during 2013 to 2015 to US\$13,830 during 2016 to 2018). For Europe, the increase may contribute to a reshuffling in the composition of block trading among exchanges and other trading venues. (See Appendix 1 on the recent development of alternative trading venues in Europe in the light of regulatory changes.) For the Hong Kong market, the turnover of negotiated trades has been relatively stable in the two periods. It is worth noting that the trading value of the negotiated trades on the Shenzhen Stock Exchange (SZSE) during 2016 to 2018 increased by about 3.1 times from the level during 2013 to 2015 while that on the Shanghai Stock Exchange (SSE) rose by 30% across the same periods.

²⁴ See Aitken, M. J., G. Garvey and P. L. Swan. (1995) “How brokers facilitate trade for long-term clients in competitive securities markets”, *The Journal of Business*, Vol. 68 (1), January 1995, pp.1-33.

²⁵ De Jong, F., T. Nijman, and A. Roell. (1995) “A comparison of the cost of trading French stocks on the Paris Bourse and on SEAQ International”, *European Economic Review*, Vol. 39, pp.1277-2301.

²⁶ Negotiated deals are trades confirmed through a system managed (directly or indirectly) by the exchange, where both seller and buyer agree on the transaction (price and quantity). This system checks automatically if the transaction is compliant with the exchange rules, including most often the consistency with electronic order book price. Reported trades are trades reported through a Trade Reporting Facility (TRF) where only one counterparty provides information on the trade and the TRF offers dissemination services at the request of the reporting trader. The other counterparty could use this facility if reporting is mandatory. Note that data across different exchanges may not be fully comparable due to different trading and reporting rules.

Figure 2. Average daily turnover value of negotiated trades of major stock exchanges (2013 – 2015 and 2016 – 2018)

Note: The numbers may include not only placements or upstairs block trades but also other types of negotiated deals, and are therefore not entirely comparable across exchanges because of different reporting rules and calculation methods.

Source: Calculated based on the statistics available on the WFE website.

Table 2 shows the larger average transaction size of negotiated trades vis-à-vis order-book trades on selected key exchanges, including Hong Kong Exchanges and Clearing Limited (HKEX). The average transaction size of negotiated trades on the SSE and the SZSE was about US\$5-6 million during 2016 to 2018, which were significantly higher than other major stock exchanges and were over 1,800 times of the order-book trades on the respective exchanges. The large average transaction size of negotiated trades on the SSE and the SZSE hinted at the potentially strong demand for block trading of A shares. However, block trading accounted for only a very small proportion (less than 1%) of total on-exchange trading in the Mainland, compared to other exchanges (for example, 6% on HKEX, 13% on NYSE and 47% on the London Stock Exchange (LSE) Group during 2016 to 2018, see Figure 2). The contributing factors to this and the characteristics of Mainland block trading activities are discussed in Section 2.

Table 2. Average transaction size on major exchanges by execution method (2016 – 2018)

Exchange	Negotiated trades (US\$)	On-exchange electronic order book (US\$)	Ratio (times)
SSE	6,105,183	3,007	2,030.4
SZSE	5,262,434	2,905	1,811.6
Euronext	1,582,698	8,669	182.6
LSE Group	74,354	7,241	10.3
Deutsche Boerse AG	64,358	11,192	5.8
HKEX	17,400	7,634	2.3
NYSE	13,830	10,530	1.3

Note: Japan Stock Exchange Group is excluded since the data on number of transactions is not available.

Source: Calculated based on the statistics available on the WFE website.

2. BLOCK TRADING IN MAINLAND CHINA

2.1 Block trading mechanism for A shares in Mainland China

Block trading of A shares in Mainland China is subject to the exchanges' trading rules²⁷. There are limits on the transaction size and trade price. The minimum transaction size of A-share block trades is 300,000 shares or RMB 2 million. For block trades of state-owned A shares, the major shareholders are subject to additional requirements, which include the approvals required for share sales exceeding the thresholds based on the ratio of shareholding and the minimum transaction price which is set at the higher of volume-weighted average of closing prices during the last 30 trading days or the net asset value based on the latest audited annual report²⁸.

The market prices of A shares will exclude block trades. The prices of block trades will not be used for the calculation of indices and the settlement prices of derivatives such as index futures. Nevertheless, block trade turnover is included in the calculation of securities turnover at the end of the trading day.

The SSE and the SZSE provide dedicated platforms for block trading. The block trading platforms on the SSE and the SZSE are available only to onshore institutions (exchange members or accredited investors²⁹). Qualified Foreign Institutional Investors (QFII) and Renminbi Qualified Foreign Institutional Investors (RQFII) can participate through their onshore brokers who are exchange members³⁰. Users can submit orders or trades to the block trading platform. The information of block trades, including stock code and name, price and volume of transactions and names of buyers and sellers, will be disclosed at the end of the trading day on the respective websites of the stock exchanges.

The submission types of order/trade allowed by the SSE/SZSE are:

- **Intent orders** show the intention of block purchases or block sales. These can be submitted during 09:30-11:30 and 13:00-15:30 on the SSE and during 09:15-11:30 and 13:00-15:30 on the SZSE.
- **Fixed-price orders** are orders with the price fixed at either the market closing price or VWAP³¹. These orders can be submitted during 15:00-15:30 on the SSE and during 15:05-15:30 on the SZSE. The submitted orders will be matched according to time priority.

²⁷ Sources of information on the Mainland block trading mechanism are these versions of the trading rules: *Trading Rules of the Shanghai Stock Exchange* (《上海證券交易所交易規則》), issued by the SSE, 6 August 2018; *Trading Rules of the Shenzhen Stock Exchange* (《深圳證券交易所交易規則》), issued by the SZSE, 30 September 2016.

²⁸ Source: *Measures for the Supervision and Administration of State-owned Equities of Listed Companies* (《上市公司國有股權監督管理辦法》), issued by the State-owned Assets Supervision and Administration Commission (SASAC), 16 May 2018.

²⁹ Accredited investors include Social Security Fund, pension funds and charity funds, investment plans registered with the Asset Management Association of China (AMAC), fund managers of private funds and investors that meet the China Securities Regulatory Commission (CSRC)'s requirement on accredited investors. See details in the *Interim Measures for the Supervision and Administration of Privately-Offered Investment Funds* (《私募投資基金監督管理暫行辦法》), issued by the CSRC, 21 August 2014.

³⁰ See the *SSE Detailed Implementation Rules on Securities Trading of QFIIs and RQFIIs* (《上海證券交易所合格境外機構投資者和人民幣合格境外機構投資者證券交易實施細則》), issued by the SSE, 19 March 2014 and the *SZSE Detailed Implementation Rules on Securities Trading of QFIIs and RQFIIs* (《深圳證券交易所合格境外機構投資者和人民幣合格境外機構投資者證券交易實施細則》), issued by the SZSE, 25 April 2014.

³¹ Fixed-price orders at VWAP are allowed on the SZSE but these are suspended on the SSE at the moment according to the *Notice on Revising the Trading Rules of the Shanghai Stock Exchange* (《關於修訂《上海證券交易所交易規則》的通知》), issued by the SSE, 6 August 2018.

- **Execution trades** are reported negotiated block trades. Both the buyer and the seller are required to report the block trade. Input of execution trades on equities takes place during 15:00-15:30 on both exchanges³².

2.2 Block trading activities

Despite the given discount of 30% to the exchange handling fees for block trading of A shares³³, the annual turnover value of negotiated trades (comprising mostly of block trades) accounted for only about 0.1%-0.6% of the market total during 2012 to 2018 (see Figure 2). Among the factors are the relatively low institutional participation and the liquidity constrained by the block trading mechanism and related regulations.

Firstly, although the Mainland market allows the direct access by virtually all kinds of onshore institutional investor, and the indirect access by QFIIs/RQFIIs, to the block trading platforms, the majority of offshore institutional investors actually do not have the QFII/RQFII status but invest in A shares through the Northbound Stock Connect schemes. Moreover, the onshore institutional investor base is still small — the institutional trading value accounted for a small share of about 10%-20% of total market trading value³⁴, which is lower than in other major markets (e.g. 55% of total trading value in the Hong Kong market)³⁵. The volume of block trades generated by the asset management needs of these onshore institutional investors, not to say by QFIIs/RQFIIs, would therefore be relatively low. The restricted access of other offshore institutions would further limit the number of counterparties on the block trading platform and affect the timing and pricing of block trades. Secondly, the liquidity is constrained because, as reflected by offshore market participants, both money and shares are locked up in the block trading platforms until the block trades are reported and disclosed. Thirdly, block trading of state-owned shares is subject to even more restrictions as discussed in Section 2.1. All these contribute to the relatively low market share of block trading in Mainland China.

Nevertheless, block trading on the Mainland exchanges appeared to have picked up in recent years. The turnover of negotiated trades rose to a peak of RMB 736 billion in 2016 after the stock index reached a recent high in 2015 (see Figure 3).

³² The allowed time periods of 09:30-11:30, 13:00-15:00 and 16:00-17:00 for the input of execution trades on the SSE are not applicable at the moment. See the *Notice on Revising the Trading Rules of the Shanghai Stock Exchange* (《關於修訂《上海證券交易所交易規則》的通知》), issued by the SSE, 6 August 2018.

³³ See the details of trading fees on the SSE's and the SZSE's websites.

³⁴ Source: "Comparison between A shares and US stocks: Investor structure and trading pattern" (《A股與美股對比：投資者結構及交易特徵》), Sina's website, 9 June 2019.

³⁵ Source: HKEX survey, "Cash Market Transaction Survey 2018", published on the HKEX website, July 2019.

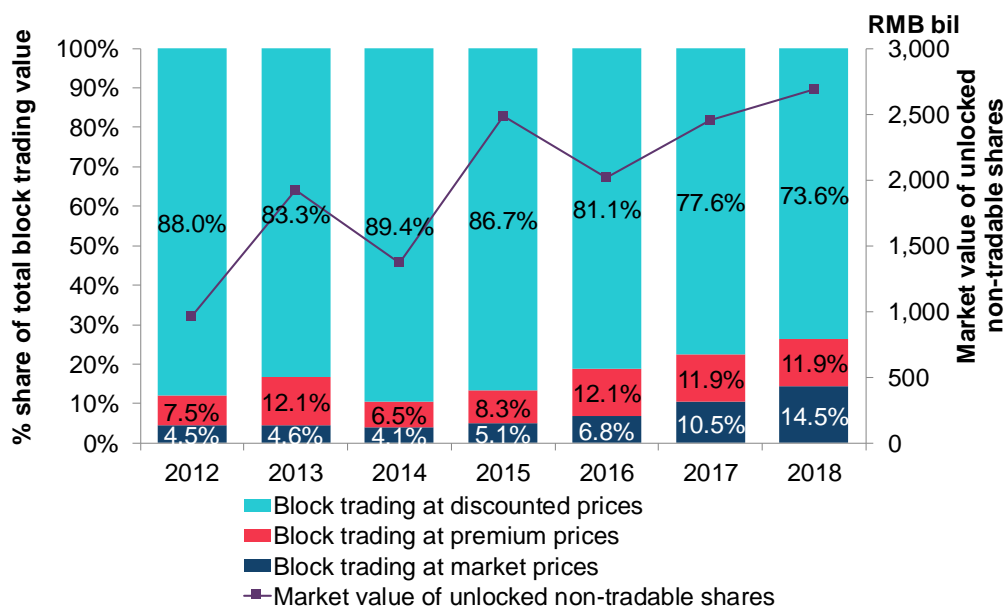
Figure 3. Annual turnover value of negotiated trades in Mainland China and daily closings of the CSI 300 Index (2012 – 2018)



Source: WFE for turnover value of negotiated trades; Bloomberg for stock index data.

Block trading is one of the main ways to buy and sell non-tradable shares after the expiry of trading restrictions (unlocking)³⁶. When these shares become tradable, major shareholders can sell their stakes to investors in the market. Block trades of A shares, therefore, have been dominated by sell-initiated trades, which may add pressure to price volatility. These sell-initiated block trades are usually traded at a discount to market prices. It is observed that the share of block trading traded at discounted prices contributed about 74%-89% of total block trading turnover in recent years (see Figure 4).

Figure 4. Composition of block trades in Mainland China and market value of unlocked non-tradable shares (2012 – 2018)



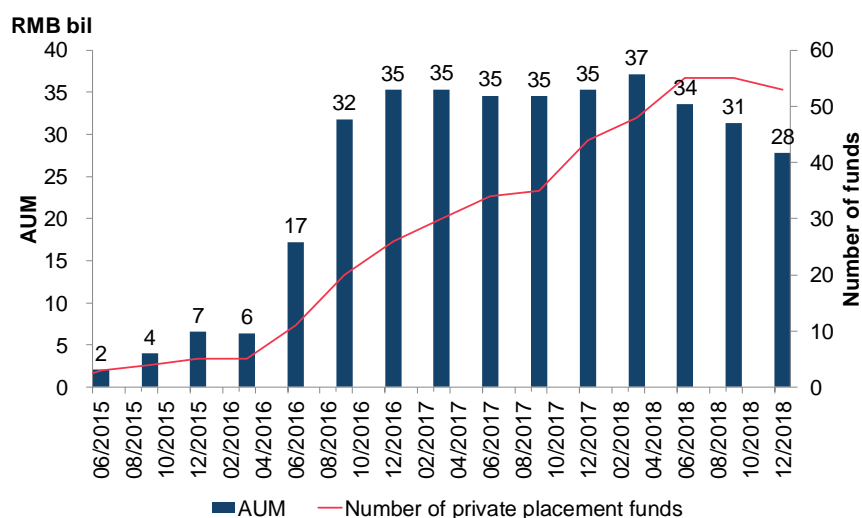
Source: eastmoney.com.

³⁶ Source: "While unlocking of non-tradable shares under new regulations on cutting stakes is approaching, private equity investment institutions actively participate in block trading" (《減持新規限售股解禁期至 私募積極介入大宗交易業務》), *China Fund* (《中國基金報》), 4 June 2018.

To promote more balanced trading behaviour and a transparent market, the China Securities Regulatory Commission (CSRC) issued guidelines in July 2015, January 2016 and May 2017³⁷ for substantial shareholders and senior management of listed companies, as well as private placement funds³⁸ on selling their stakes. According to the latest guidelines in 2017, block sales of shares by the aforesaid stakeholders are subject to certain restrictions. For those who hold more than five percent of a listed company's stakes or have acquired shares through private placement, the sales of non-tradable shares shall not exceed 50% of their total holdings in a 12-month period after unlocking. The shares transferred through block trading shall not exceed two percent of the company's total shares in 90 days, and the buyers are subject to a lock-in period of six months³⁹. Owing to the various restrictions, the proportion of block trades effected at discounted prices (a proxy of sell-initiated block trades) decreased gradually since 2016 and reached the lowest of 74% in 2018 since 2012.

In addition, certain equity mutual funds have relied on block trading mechanism to meet their redemption requirements. These include private placement funds, which were introduced in February 2015⁴⁰. The shares in private placement are usually sold at a discount to market prices by the listed companies with a lock-in period of one year or three years⁴¹. Upon the expiry of the lock-in period, the fund can sell its shares held through the open market or block trading⁴². As of end-2018, there were 53 private placement funds with an AUM of RMB 28 billion (see Figure 5).

Figure 5. The AUM and number of private placement funds in Mainland China at quarter-ends (2015Q2 – 2018Q4)



Source: Wind.

³⁷ These are: CSRC Announcement [2015] No. 18 — *Substantial Shareholders, Directors, Supervisors and Senior Executives of Listed Companies Shall Not Reduce Shareholding Within Six Months* (《中證監公告[2015]18號——上市公司大股東及董事、監事、高級管理人員6個月內不得減持》), CSRC Announcement [2016] No. 1 — *Certain Provisions on Shareholding Reduction by Substantial Shareholders, Directors, Supervisors and Senior Executives of Listed Companies* (《中證監公告[2016]1號——上市公司大股東、董監高減持股份的若干規定》), and CSRC Announcement [2017] No. 9 — *Certain Provisions on the Reduction of Shares Held in a Listed Company by Substantial Shareholders, Directors, Supervisors and Senior Executives of Listed Companies* (《中證監公告[2017]9號——上市公司大股東、董監高減持股份的若干規定》), issued by the CSRC.

³⁸ Private placement funds are equity mutual funds dedicated to acquire shares by private placement of shares.

³⁹ SSE's *Detailed Implementation Rules on the Reduction of Shares Held in a Listed Company by Substantial Shareholders, Directors, Supervisors and Senior Executives of Listed Companies*, issued by the SSE, 27 May 2017; SZSE's *Detailed Implementation Rules on the Reduction of Shares Held in a Listed Company by Substantial Shareholders, Directors, Supervisors and Senior Executives of Listed Companies*, issued by the SZSE, 27 May 2017.

⁴⁰ Source: "UBS SDIC RUILI transform from private placement funds into LOF, stay or go?" (《轉型LOF·國投瑞利告別定增·該走還是留?》), *National Business Daily* (《每日經濟新聞》), 8 August 2016.

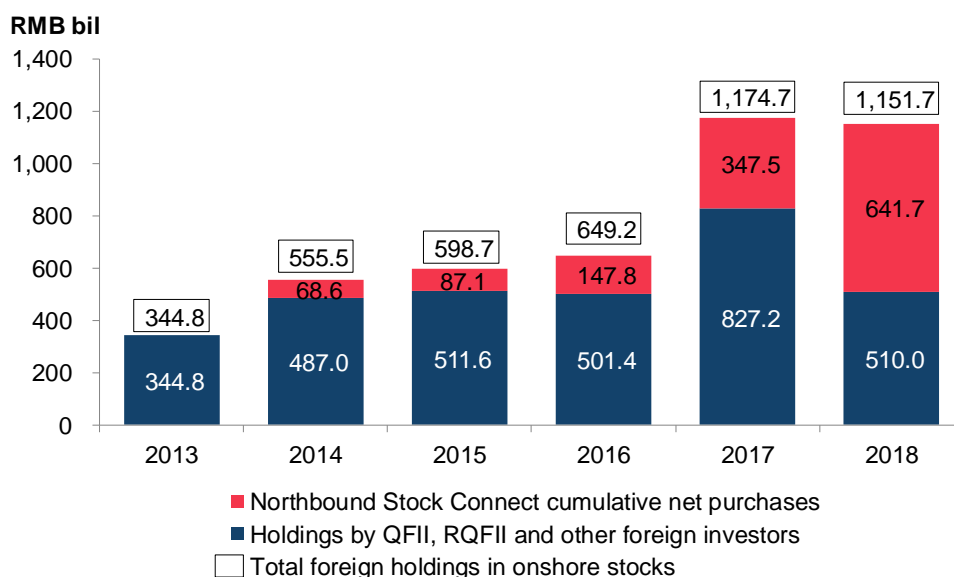
⁴¹ Source: "Analysis on investment method and source of return for the private placement market" (《定增市場的投資方法及收益來源解析》), *Gelonghui*, 30 November 2017.

⁴² Source: "New trends of private placement funds: Block trading becomes new 'stairs' for selling stakes" (《定增基金真會玩:大宗交易成減持新「梯子」》), *The Economic Observer* (《經濟觀察報》), 16 September 2017.

2.3 Potential demand for block trading of A shares via Northbound Stock Connect

The investor base of A shares has been expanded through the Northbound Stock Connect scheme to include a more extensive global institutional investor (and retail investor) population than QFIIs and RQFIIs. The scheme has become the most preferred channel to trade A shares in 2018 (see Figure 7). These investors may potentially have a high demand for block trading of A shares.

Figure 6. Year-end total foreign investments in Mainland onshore stocks (2013 – 2018)



Note: The amount of holdings by QFIIs, RQFIIs and others is estimated as the difference between the total foreign holdings in onshore stocks and the cumulative net purchases via Northbound Stock Connect.

Source: HKEX for the cumulative net purchases via Northbound Stock Connect; Wind for the total foreign holdings in onshore stocks.

Statistics showed that more and more institutions participate in Northbound Stock Connect — the number of Special Segregated Accounts (SPSAs)⁴³ increased from about 1,700 in June 2017 to 6,363 in September 2018⁴⁴ and further to over 8,200 in July 2019⁴⁵. This is partly attributable to the daily quota of net purchase through Northbound Stock Connect being quadrupled from RMB 13 billion to RMB 52 billion (the same quota applies to Shanghai Connect and Shenzhen Connect) since May 2018 ahead of the inclusion of A shares in major global indices. Currently block trading arrangement through Northbound Stock Connect is only available to certain cases of non-trade transfers⁴⁶. However, if an institution needs to execute a large Northbound trading order for other purposes, it can only break it down into smaller orders to be traded on the exchange. This is evidenced by the average transaction

⁴³ An SPSA is used by an institution (under an investor identification number) to fulfill the pre-trade checking requirement for trading through Northbound Stock Connect. One SPSA can execute orders through up to 20 Exchange Participants (EPs). The EP should have prior arrangements to confirm that the fund manager client has the authority to aggregate SPSA orders across SPSAs and decide the appropriation allocation and it complies with applicable laws, rules and regulations without any misappropriation of client assets. (See *Frequently Asked Questions* (question 1.48.1) issued by HKEX on its website, 3 September 2018.)

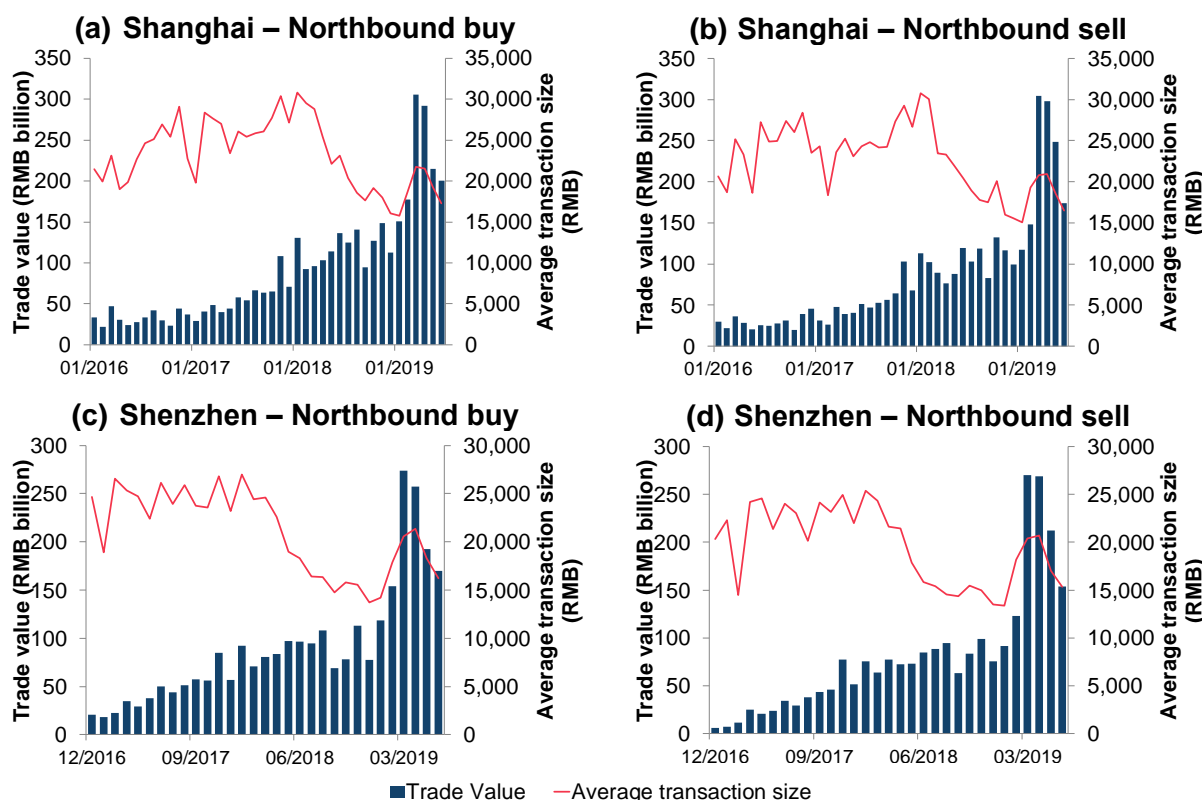
⁴⁴ See "Consultation on further weight increase of China A shares in the MSCI indexes", MSCI's website on index consultations, December 2018.

⁴⁵ Source: HKEX.

⁴⁶ These include stock borrowing and lending, rectification of erroneous trades, post-trade allocation of shares from aggregated orders to funds or sub-funds in different accounts by fund managers and a few other cases. See "Information Book for Market Participants" for Stock Connect (Section 3.37 Non-trade Transfer), HKEX website, 15 February 2019.

size of Northbound trading (see Figure 7) being comparable to that of Mainland's on-exchange electronic order book at around RMB 20,000 (see Table 2).

Figure 7. Northbound monthly turnover and average transaction size (Jan 2016 – Jun 2019)



Note: Shenzhen Connect was launched in December 2016.
Source: HKEX.

The turnover of A shares through Northbound Stock Connect is expected to grow further along with the increasing offshore passive investment in A shares, which is boosted by the inclusion of A shares into global equity indices. With the expected further expansion of global index baskets covering A shares and the growth in associated ETFs, the demand for block trading of A shares by global investors will increase in the events of index rebalancing or creation/redemption of fund units:

- **MSCI** started to include A shares into its global index series, including Emerging Markets Index (EM Index), since June 2018 with an initial partial inclusion factor of 5% (or about 0.8% by weighting as of May 2018) in two phases through August 2018. The inclusion factor will gradually increase to 100% (or about 16.2% by weighting)⁴⁷. In February 2019, MSCI decided to increase the inclusion factor from 5% to 20% for large-cap and mid-cap stocks in phases throughout 2019 and 2020⁴⁸ (Figure 8a). Given that the AUM of funds tracking MSCI EM Index was about US\$1.8 trillion as of June 2018⁴⁹, the investment in A shares would increase from about US\$20 billion initially to about US\$300 billion after full inclusion.
- **FTSE Russell** started Phase 1 inclusion of A shares into the FTSE Global Equity Index Series (GEIS), including the Emerging Index, from June 2019 with 3 tranches through

⁴⁷ Source: Chia, C. P., "The world comes to China", a blog post on MSCI's website, 23 May 2018

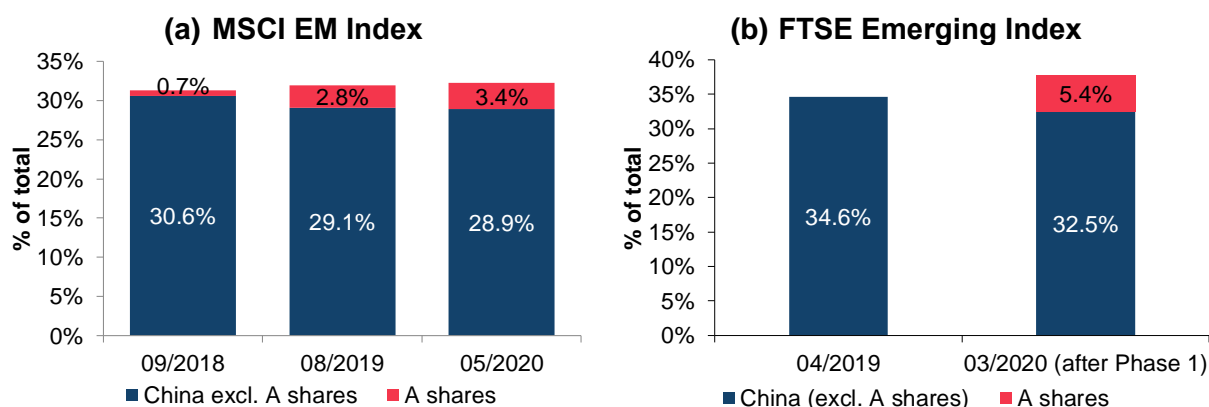
⁴⁸ Source: "Conclusion of consultation on further weight increase of China A shares in the MSCI indexes", Index Consultations webpage on MSCI's website, February 2019.

⁴⁹ Source: "MSCI – A leader in equity indexes", MSCI's website, 2019.

March 2020 (Figure 8b). The inclusion is expected to attract initial inflows of about US\$10 billion into A shares by index tracking funds⁵⁰.

- **S&P Dow Jones** started to include A shares into its global benchmark indices with a weight factor of 25% effective from September 2019⁵¹.

Figure 8. Projected weightings of Chinese stocks in MSCI EM Index and FTSE Emerging Index after inclusion of A shares



Note: For MSCI EM Index, the weightings were calculated based on share prices as of 22 January 2019. For FTSE Emerging (large- and mid-cap) Index, the weightings after 3 tranches of Phase 1 in March 2020 were calculated based on share prices as of 21 June 2019.

Source: “Conclusion of consultation on further weight increase of China A shares in the MSCI indexes”, Index Consultations webpage on MSCI’s website, February 2019; “China A shares inclusion — Seven key points”, a blog post on FTSE Russell’s website, 24 June 2019.

The increased popularity of structured products would be another driver of the demand for Northbound block trading. A study⁵² reported a gradual growth of the sales of retail structured products in Asia, despite tighter regulations imposed after the global financial crisis during 2007-2008. The study noted that the outstanding sales volume for retail structured products offered in major Asian markets (including Mainland China, Hong Kong, Japan, South Korea, and Singapore) exceeded US\$750 billion as of end-2015, representing a compound annual growth rate of 4% since 2012. An expected growth of offshore equity structured products and derivatives with A shares as the underlying assets will drive up the demand for block trading in order to enhance the settlement efficiency of these products (see Section 1.2).

In a nutshell, the potential demand for block trading of A shares is expected to grow with a more extensive A-share institutional investor base trading through Northbound Stock Connect and their increased asset allocation to A shares.

⁵⁰ Source: “FTSE Russell promotes China A shares to emerging market status”, FTSE Russell Press Release, 26 September 2018.

⁵¹ Source: “S&P Dow Jones Indices’ 2018 country classification consultation results”, index announcement of S&P Dow Jones Indices, 5 December 2018.

⁵² Wu, A. and C. Pitts. (2017) “Asian structured products”, *Research Foundation Briefs*, Vol. 3, Issue 6, August 2017.

3. BLOCK TRADING IN THE HONG KONG MARKET

3.1 Manual trade mechanism in the Hong Kong market

The Hong Kong market provides a manual trade mechanism which accommodates block trades of Hong Kong stocks. A manual trade is a trade concluded by private negotiation between Exchange Participants (EPs) but not by public auction and order matching on the Orion Trading Platform — Securities Market (OTP-C) of the Stock Exchange of Hong Kong (SEHK), the securities market operating subsidiary of HKEX. Manual trades are subject to requirements of trade reporting to the SEHK. There are two types of manual trade — non-direct business transactions (trade type “M”) and direct business transactions (trade type “X”, sometimes called “crossing transactions”). A Type M transaction refers to a trade executed by two different EPs. A Type X transaction refers to a trade between different investors executed by the same EP. Direct business transactions also cover transactions in dark pools or Alternative Liquidity Pools (ALPs) operated in the Hong Kong market. Block trades in the Hong Kong market can be executed as either type of manual trade.

Manual trades in the Hong Kong market are flexible in terms of order size and trading hours but subject to limits on order price for crossing transactions. There is no explicit threshold of transaction size for manual trades (e.g. applicable for a one-share trade). However, a large order with a size above 3,000 board lots⁵³ during pre-opening and Continuous Trading Session (CTS) can only be executed as a manual trade because it exceeds the maximum order size for automatic order matching on OTP-C. Manual trades can be conducted any time, including the pre-opening session, CTS, Closing Auction Session (CAS) and after trading hours (after-hours), which are subject to exchange rules of reporting time for manual trades (see the paragraph below). Manual trades that are crossing transactions during CTS are subject to upper and lower price limits of 24 tick sizes. In other words, the price must be within the range of the lowest of 24 spreads below the previous closing price, the lowest bid and the lowest ask price up to the time of the transaction on the day and the highest of 24 spreads above the previous closing price, the highest bid and the highest ask price up to the time of the transaction on the day⁵⁴.

For trade transparency, timely trade reporting is required for manual trades in the Hong Kong market. For manual trades not executed on dark pools, EPs are required to report the trade within 15 minutes of trade execution on the trading day (T day) and not later than 9:45 a.m. on the following trading day (T+1 day) for after-hours manual trades. For manual trades executed on dark pools⁵⁵, EPs are required to report them within 1 minute of trade execution. For a direct manual trade (i.e. a crossing transaction), including transactions on dark pools, the EP is required to report and review the details of the manual trade. For a non-direct manual trade, the selling EP is required to report it while the buying EP is required to review the reported details of the trade within the trading session of the reporting day. Every EP is required to perform day-end review of both sales and purchases journals including manual trades.

The prices of manual trades are not be used for determining a stock’s market price for dissemination and index calculation purposes while the turnover of manual trades is included in calculating the market turnover. For constituents of Hang Seng Composite LargeCap, MidCap and SmallCap indices and H shares which have corresponding A shares listed on a

⁵³ A board lot is the fixed number of shares as the trading unit for a stock, which may differ across stocks.

⁵⁴ See SEHK’s *Rules of the Exchange*, Chapter 5 Trading.

⁵⁵ According to a report by the SFC (*Report on the Thematic Review of Alternative Liquidity Pools in Hong Kong*, 9 April 2018), there are 16 dark pools operated in Hong Kong, which are mainly brokers’ or banks’ internal crossing engines. The buy and sell orders received by the same EP in the dark pool are matched internally (internalisation) before sending to the exchange market. Based on HKEX’s data, the turnover of dark pools operated by EPs was about HK\$15-25 billion (or 1.0%-1.7% of total market turnover) during October 2016 to September 2017. The regulators are aware of the potential investor protection issues relating to dark pools and therefore has banned the access of retail investors to dark pools since December 2015.

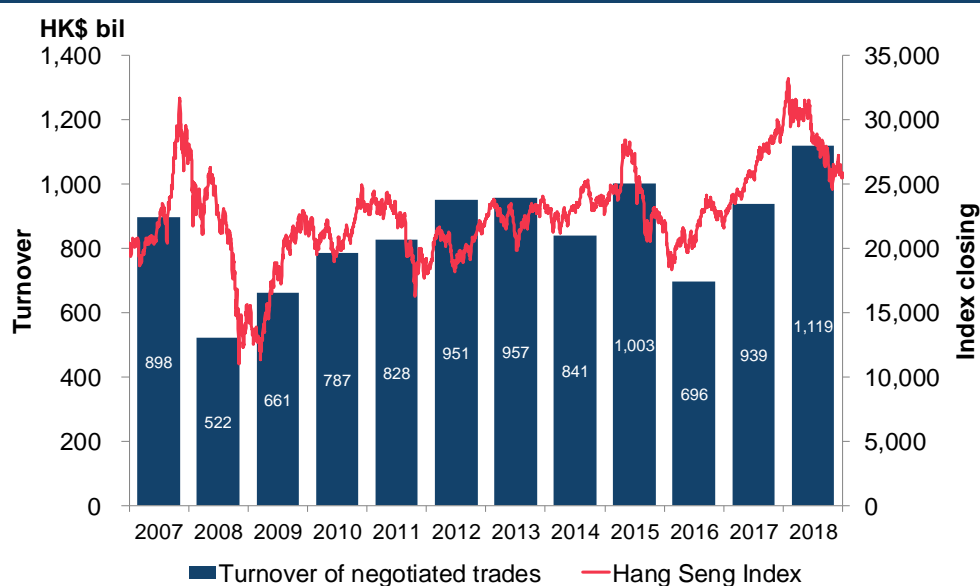
Mainland exchange, the closing prices are determined through the auction scheme during CAS. The closing prices of other stocks⁵⁶ are determined by taking the median of 5 snapshots on the nominal prices at 15-second interval starting from 3:59:00 p.m of the CTS until they are added into CAS effective from 8 October 2019.

The different trading arrangements for block trades on the SSE, the SZSE and HKEX are presented in Appendix 2.

3.2 Block trading activities of Hong Kong stocks

The WFE statistics on negotiated trades are used as the proxy of block trades on HKEX. The statistics reflect manual trade⁵⁷ in which block trades accounted for the majority share. The turnover value of negotiated trades rose to a record high in 2018 when the Hang Seng Index (HSI) reached a record high in the same year (see Figure 9). The turnover of negotiated trades and the performance of the HSI appeared to have similar trends. This reflects, to a certain extent, that block trading in the Hong Kong market tends to be more active during times of market rally and less active during a market downturn. The phenomenon is different from the prevalence of sell-initiated block trading in the Mainland market.

Figure 9. Annual turnover of negotiated trades in the Hong Kong market and daily closings of Hang Sang Index (2007 – 2018)



Source: WFE for turnover of negotiated trades; Bloomberg for index data.

The demand for block trading of Hong Kong stocks for purposes discussed in Section 1 above is supported by the growth of asset and wealth management businesses in Hong Kong, which reached HK\$23,955 billion as of end-2018⁵⁸. These include asset management and fund advisory businesses, which reached HK\$16,447 billion in 2018. These institutional investors include active and passive asset managers who may trade blocks of shares for purposes as

⁵⁶ Effective from 8 October 2019, the list of securities covered by CAS will be expanded to include all equities, including depository receipts, investment companies, preference shares and stapled securities, as well as funds (including ETFs and real estate investment trusts (REITs)). Source: “HKEX to expand closing auction session to all equities and funds”, HKEX News Release, 5 July 2019.

⁵⁷ Given no volume threshold, manual trades in the Hong Kong market cover not only placement and upstairs block trades, but also some trades with much smaller order sizes — odd lots (transacted quantities of less than one board lot) and special lots (transacted quantities not equal to a whole number of board lots). HKEX’s data showed that placement of shares (a major kind of block trades) accounted for about 4% of the total market turnover, whereas all negotiated trades accounted for about 6% of the total market turnover.

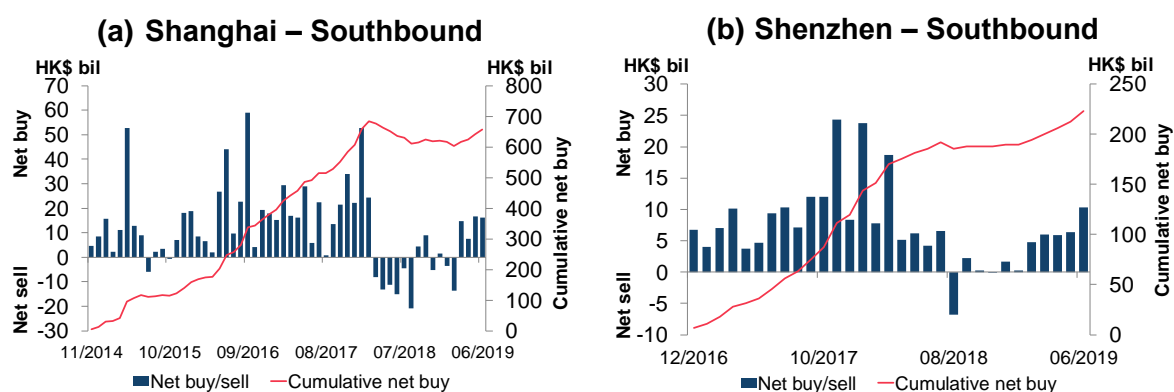
⁵⁸ Source: The SFC Asset Management Survey 2018.

mentioned in Section 1.2. Stocks listed in Hong Kong involved in block trading would include H shares, the liquidity of which would be boosted by the “H share full circulation” pilot scheme. The CSRC announced the launch of a pilot scheme in December 2017⁵⁹ to implement “full circulation” of H shares through the conversion of non-tradable shares held by Mainland shareholders into H-shares for selected H-share companies. Subsequently, three Chinese companies were approved for H-share full circulation during 2018. The non-tradable shares held by major shareholders and senior management of H-share companies upon H-share full circulation would become tradable in the Hong Kong market. Given the smooth operation of the pilot scheme, the CSRC and relevant authorities are exploring to expand the scope of H-share full circulation⁶⁰. This may lead to the rising demand for the buying and selling of large blocks of H shares originally held by the Mainland major shareholders.

3.3 Potential demand for block trading via Southbound Stock Connect

Continual growth in cross-border asset management covering Hong Kong-listed stocks is expected upon increased Mainland-Hong Kong connectivity. Similar to Northbound Stock Connect, the daily quota of net purchases is expanded four times from RMB 10.5 billion to RMB 42 billion in May 2018 for Southbound Stock Connect (the same quota applies to Shanghai Connect and Shenzhen Connect). The cumulative Southbound net purchases of Hong Kong stocks have been growing — the amount reached HK\$657.1 billion for Shanghai Connect and HK\$223.1 billion for Shenzhen Connect as of end-June 2019 (see Figure 10). During the first half of 2019, the average daily turnover (ADT) (buy and sell included) through Southbound Stock Connect was about HK\$7.1 billion and HK\$4.0 billion respectively for Shanghai Connect and Shenzhen Connect. The turnover accounted for about 5%-6% of total market turnover in Hong Kong. (See Figure 11)

Figure 10. Net buy/sell of Hong Kong stocks through Southbound Stock Connect (Nov 2014 – Jun 2019)

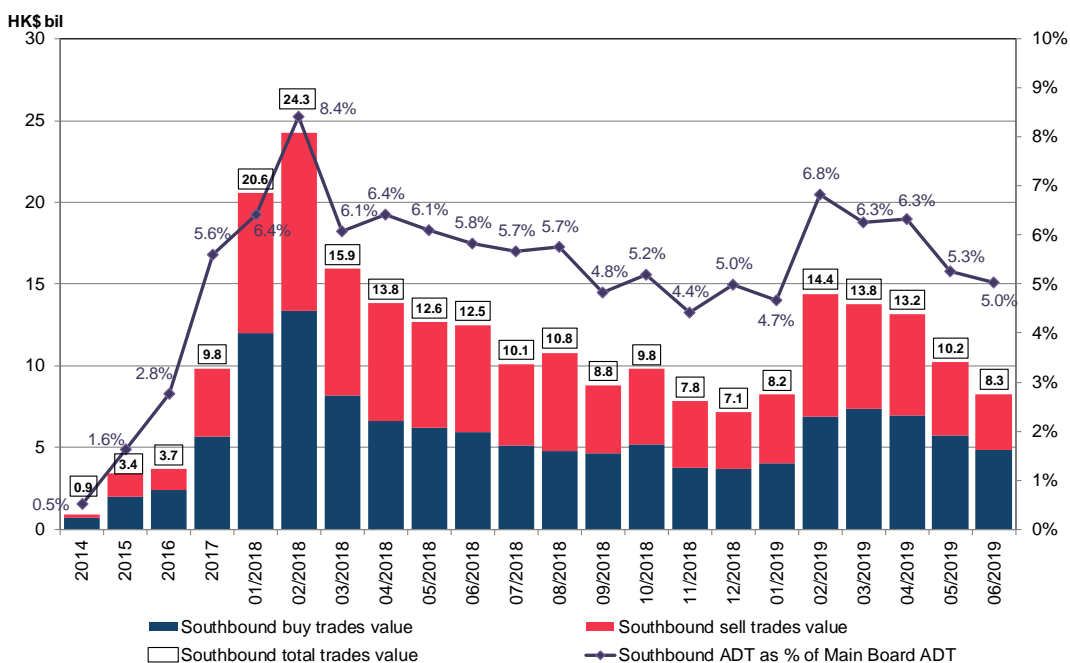


Source: HKEX.

⁵⁹ “CSRC deepen the reform of offshore listing regime”(〈中國證監會深化境外上市制度改革〉), CSRC News Release, 29 December 2017.

⁶⁰ Source: “CSRC spokesman’s press Q&A on further expansion of opening capital markets”(〈證監會有關負責人就進一步擴大資本市場對外開放答記者問〉), the CSRC’s website, 14 June 2019.

Figure 11. Average daily turnover value of Southbound trading (2014 – Jun 2019)



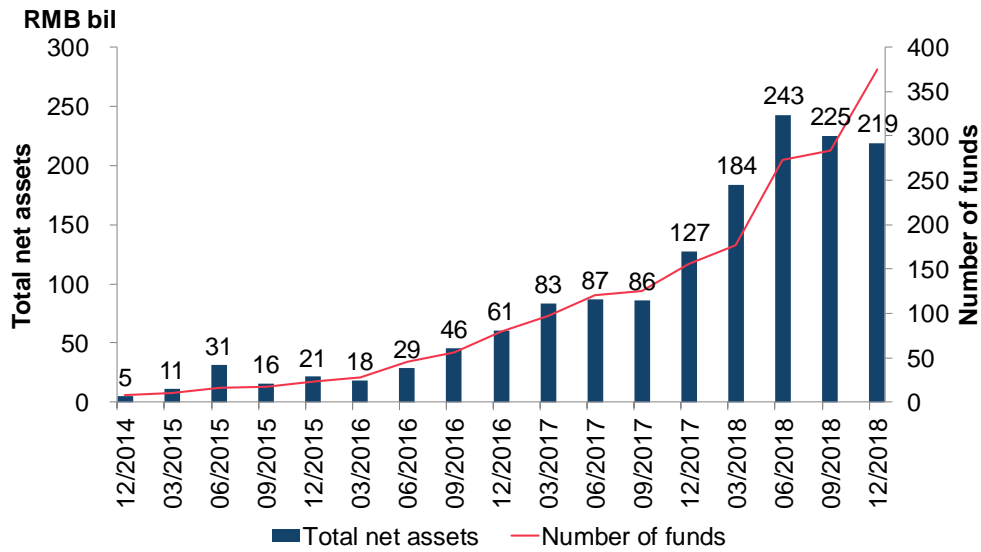
Note: Data starts from 17 Nov 2014 when Shanghai Connect was launched. Shenzhen Connect is included since launch on 5 Dec 2016.

Source: HKEX.

The growth in Southbound trading activities is partly attributable to the growing participation of Mainland mutual funds. These include Qualified Domestic Institutional Investors (QDII) funds and funds that invest in Hong Kong stocks through Southbound Stock Connect (referred to as “Mainland Connect Funds”)⁶¹. As of end-2018, the number of Mainland Connect Funds reached a record high of 375, with total net assets of RMB 219 billion in Hong Kong stocks (see Figure 12). The active management and creation/redemption of fund units may involve large-sized transactions within a short time frame, which increase the demand for block trading (see Section 1.2). As block trading is currently not available under Southbound Stock Connect, these mutual funds may execute large orders by algorithmic trading of small trades. This is evidenced by the average transaction size through Southbound trading (see Figures 13) being comparable to that on the on-exchange electronic order book in the Hong Kong market at around HK\$60,000 (see Table 2 in Section 1.4).

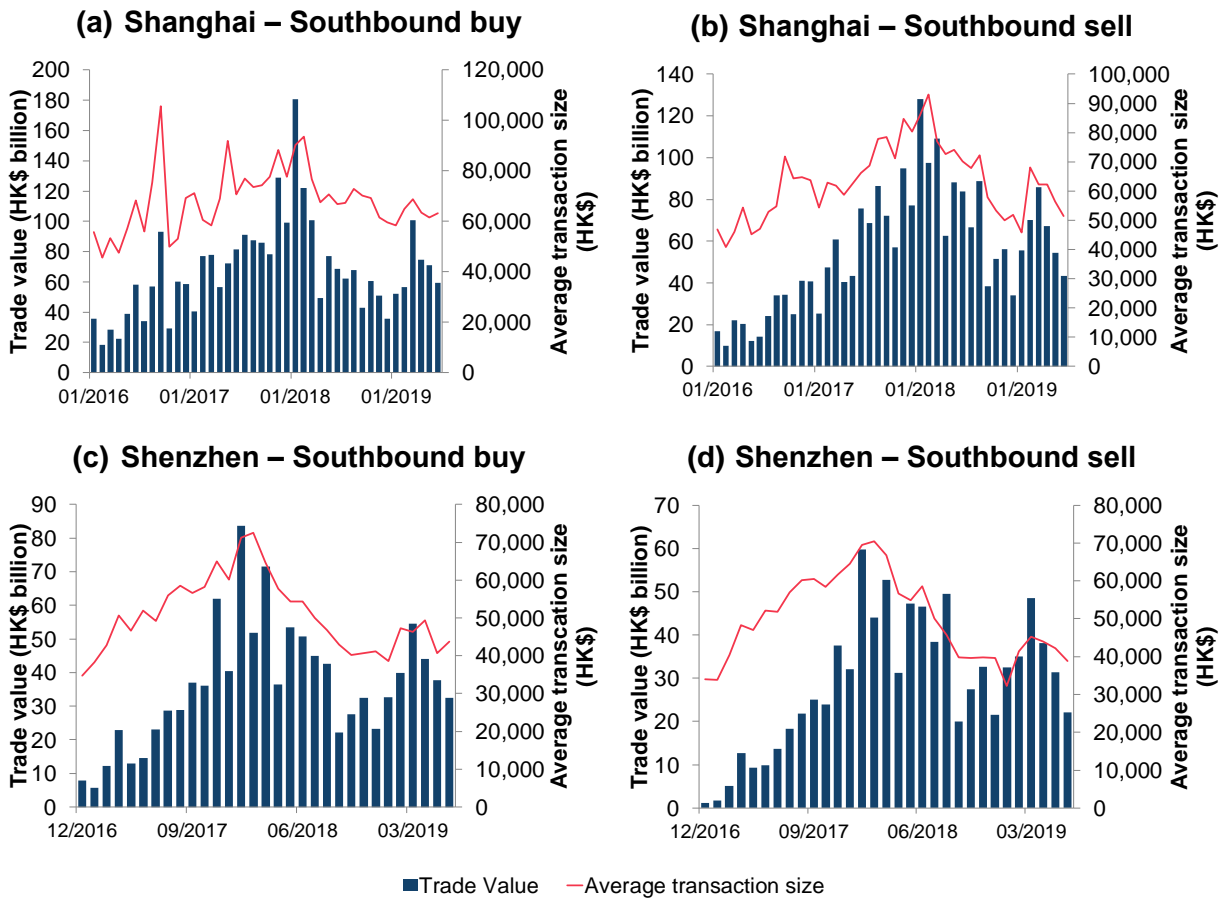
⁶¹ See “Earnings reports of SH-HK-SZ Connect Funds: Limited development of QDII funds and the rise of SH-HK-SZ Connect Funds”(《滬港深基金業績報告：QDII 基金發展受限 滬港深基金崛起》), *jjj.com.cn*, 19 January 2018.

Figure 12. Mainland Connect Funds — Total net assets and number of funds at quarter-ends (2014Q4 – 2018Q4)



Note: Only the funds reported quarterly total net assets are included. Some funds have more than one tranche.
Source: Wind.

Figure 13. Southbound monthly turnover and average transaction size (Jan 2016 – Jun 2019)



Note: Shenzhen Connect was launched in December 2016.
Source: HKEX.

4. CONCLUSION

Block trading mechanism of equities is important to minimise the price impact of large-sized transactions and avoid unwanted signaling to the market. It provides an efficient way to buy or sell large blocks of shares in a single transaction with more certainty in timing and transaction price than trading on the auction market. The growth of global asset management has been driving up the demand for block trading. Such demand arises from index rebalancing and the creations and redemptions of fund units, as well as the development of structured products and equity derivatives, which require block trading for efficient settlement of securities.

In both the Mainland and Hong Kong markets, the stock exchanges provide special mechanisms to facilitate block trading or the reporting of negotiated trades (which include block trades). In the Mainland, block trading has been dominated by sell-initiated trades, which are mainly the placement of shares by major shareholders after the lock-up period of their substantial shareholdings. This is in contrary to block trading driven more by asset management activities as in developed markets like Hong Kong. Nevertheless, market-opening factors, including the enhanced access by global investors to the A-share market through Northbound Stock Connect, the expanded daily quota of Northbound net purchases, as well as the expected increase in global passive investment in A shares as a result of the inclusion of A shares into global indices, would all contribute to the rising demand for block trading in the Mainland for asset management purposes, like that in the global markets.

The Hong Kong market, in parallel, also faces the rising demand for block trading. Driving factors include the growth of asset management businesses in Hong Kong, the growing number and size of Mainland funds investing in Hong Kong stocks and the potential expansion of H-share full circulation scheme that may lead to the buying and selling of large blocks of H shares originally held by the Mainland major shareholders of H-share companies.

Given the growing potential demand for cross-border block trading and that cross-border trading between the Mainland and Hong Kong markets is now conducted largely via the Stock Connect schemes, it is worth considering the enhancement of Mainland-Hong Kong market connectivity with block trading facilities under appropriate arrangements and a controllable environment to meet investors' demand. Cross-border market liquidity can thereby be further enhanced and investors can benefit from better execution.

APPENDIX 1. RECENT DEVELOPMENT OF ALTERNATIVE TRADING VENUES IN EUROPE

European stock exchanges have launched block trading facilities to tap into dark-pool liquidity. The growth of activities on these facilities is prominent because of regulatory developments — the second version of the Markets in Financial Instruments Directive (MiFID II). In Europe, a dark pool can be exempted for pre-trade transparency by meeting one of the four waivers⁶², including on negotiated trade, reference price, order management facility and large-in-scale (Table A1).

Table A1. MiFID pre-trade transparency waivers for trading venues	
Type of waiver	Description
Negotiated Trade Waiver (NTW)	This allows trades to be negotiated off order book between two parties provided that it is within the VWAP spread of the trade (i.e. the low and high VWAP of a trade), or the price of the trade is subject to conditions other than the current market price.
Reference Price Waiver (RPW)	This allows the matching of orders at an external reference source at the midpoint of the BID and ASK of, say, the primary venue.
Order Management Facility Waiver (OMF)	This allows a venue to hold orders in its order management system pending execution and disclosure (e.g. iceberg orders or stop-loss, etc.).
Large-in-Scale (LIS)	This waiver is to allow for large orders at any price or mechanism to forgo the pre-trade transparency requirement. The trade has to be over a certain level (which varies per size up to 500,000 Euros for large caps).

Source: European Securities and Markets Authority (ESMA).

Since 2018, MiFID II has banned the use of broker crossing networks (which accounted for 4%-5% of European equities trading)⁶³. Double volume caps (DVC)⁶⁴ are introduced to limit the dark trading under the reference price waiver (RPW) and the negotiated transaction waiver (NTW) — 4% of the total volume of trading in an instrument per trading venue and 8% of the total in that instrument across all European Union (EU) trading venues. Once these thresholds are passed, trading venues are required to suspend the dark trading of the equity instrument for a six-month period. The waiver on large-in-scale (LIS) has become more important for dark pools and the thresholds (minimum size) of large-in-scale orders increase with increasing average daily turnover of the securities.

While some banks set up systematic internalisers (SI) to fill the gap⁶⁵, European stock exchanges have launched their dark-pool facilities for the large-in-scale trades. These include Turquoise Plato (co-operation between the London Stock Exchange and Plato Partnership) for European and US stocks launched in September 2016 and Euronext Block (partnership between Euronext and AX Trading) for European stocks launched in July 2017. Block trading on these facilities recorded daily record highs in recent two years — €653 million on 31 January 2019 on Turquoise Plato Block Discovery (a platform of Turquoise Plato for matching block trade indications or conditional orders)⁶⁶ and €24 million on 1 August 2018 on Euronext Block⁶⁷.

⁶² Source: "Waivers from Pre-trade Transparency", European Securities and Markets Authority (ESMA), 20 June 2016.

⁶³ Source: Puaar, A., J. Schack and A. Kemmsies, "Let there be light: Rosenblatt's Monthly Dark Liquidity Tracker – European Edition", Rosenblatt Securities' market structure analysis, 21 September 2018.

⁶⁴ See *Double volume cap mechanism* webpage on ESMA's website, viewed on 2 August 2019.

⁶⁵ See Hadfield, W., "These are the two words traders will be paying attention when Europe's New Rules kick in", *Bloomberg*, 18 December 2017.

⁶⁶ Source: *Turquoise Plato Block Discovery* webpage on LSE Group's website, viewed on 31 July 2019.

⁶⁷ Source: Taylor, V., "Euronext Block continues to grow: Record trades and planned improvements", a post on LinkedIn's website, 4 September 2018.

APPENDIX 2. BLOCK TRADING ARRANGEMENTS IN THE MAINLAND AND HONG KONG MARKETS

Feature	Shanghai Stock Exchange	Shenzhen Stock Exchange	HKEX
Execution method	Dedicated platform for trade intention, private negotiations and fixed-price auctions		Private negotiations (No dedicated platform)
Thresholds on quantity	300,000 shares or RMB 2 million		No
Trade hours	<u>Intent order:</u> 09:30-11:30; 13:00-15:30 <u>Execution trade:</u> 15:00-15:30 <u>Fixed-price order:</u> 15:00-15:30	<u>Negotiated trade (Intent order):</u> 09:15-11:30; 13:00-15:30 <u>Negotiated trade confirmation (Execution trade):</u> 15:00-15:30 <u>Fixed-price order:</u> 15:05-15:30	Any time
Limits on transaction price	Within $\pm 10\%$ of previous close (For ST and *ST stocks: within $\pm 5\%$ of previous close or RMB 0.01 if previous close of the A share is below RMB 0.1)	Within $\pm 10\%$ of previous close (For ST and *ST stocks: within $\pm 5\%$ of previous close)	Within 24 tick sizes above the day-high and below the day-low up to the time of transaction during CTS of the trading day
Impact on index calculation and settlement of derivatives	Not included in the calculation of prices for stock indices or settlement prices of equity derivatives but included in the securities' turnover		
Reporting requirement	<p>For negotiated block trades, both buyers and sellers are required to report the trade.</p> <p>The reporting is done through the submissions according to the trading hours above.</p>		<p>For negotiated trades, only sellers (or the EP for a crossing transaction) are required to report the trade</p> <p>Must be reported within 15 minutes on T day (or not later than 9:45 on T+1 day for after-hours trades) for trades concluded in non-dark pools and within 1 minute on T day for trades concluded in dark pools</p>

Note: Stocks with "ST" or "ST*" label are stocks under "special treatment", which are a kind of risk alert label for the attention of investors.

Source: HKEX's website and Chapter 5 of *Rules of the SEHK; Trading Rules of the SSE* (《上海證券交易所交易規則》), issued by the SSE, 6 August 2018; *Trading Rules of the SZSE* (《深圳證券交易所交易規則》), issued by the SZSE, 30 September 2016.

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