

China Market Strategy

Research Analysts

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**Contribution by
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contributed by Shen Hu.

STRATEGY

How much leverage in China's stock market?

Figure 1: Types of financing channels in China's stock market

Channels	Est. size	Financial institutions	Clients
Margin financing	1.7 tn	Brokers (banks)	Big individual investors, hedge funds
Other non-bank loan type of financing:	-1.4-1.7 tn		
Umbrella trust	400-500 bn	Banks, trust companies, brokers	Hedge funds, big individual investors
Pledge-style stock repo	600-800 bn	Brokers (banks)	Institutional investors, big shareholders
Outright-style stock repo	3.8 bn	Brokers	Institutional investors, big shareholders
Stock returns sw ap	400 bn	Brokers	Institutional investors
Bank loans:			
Loans that might flow into stock market indirectly	-1.3-2.5 tn	Banks	Individual investors

Source: WIND, CEIC

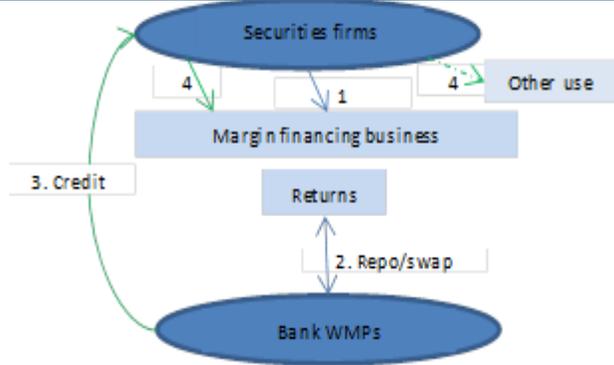
In view of the recent discussion about leverage in the stock market, we review various types of financing channels in the market based on our channel checks.

- **Margin financing and others.** In margin financing, which is around Rmb1.7 tn, data is most transparent and well-known to the market. Other than that, there are other types of informal financing channels, like the well discussed umbrella trust, and “pledge-style stock repo” (mostly by major shareholders of listed companies) and “stock returns swap” (effectively investors borrowing proprietary books of securities companies to trade). Together, they could account for another Rmb1.4-1.7 tn. Bank loans indirectly flowing into stock trading would be another source of financing. If we assume 5-10% of individual and SME loans (ex. home mortgage and credit card loans) are used elsewhere, this would be another Rmb1.3-2.5 tn of funds.
- **6-9% of market cap funded by debt.** Based on the above calculation, it is possible that about 6-9% of market cap is funded by these financing channels. However, while margin trade accounted for about 15% of market turnover, we do not think it is fair to say that 30-50% of turnover is funded by borrowing based on straight-line projection, as the turnover ratio of margin trade is much higher than the market as a whole.
- **Keep exposure but be cautious.** We believe the concern over rising leverage in the market, as well as the difficulty for regulators to monitor the exact scale, could start to trigger a more cautious attitude of the government towards the market. After such a big rally in the past 12 months, we think it is time for the A-share market to have some correction. We are relatively more positive on H shares, and prefer laggard sectors such as banks, diversified financials (mainly Cinda), healthcare, telecoms and consumer.

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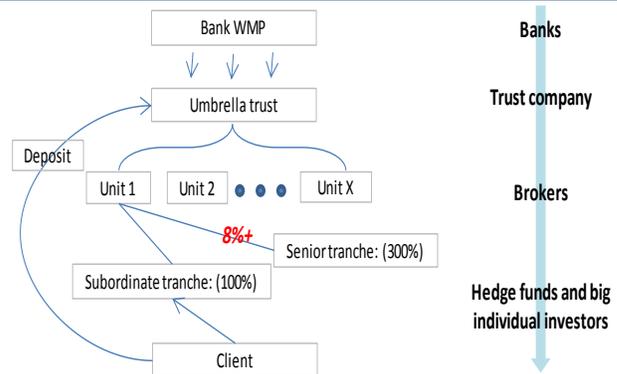
Focus charts

Figure 2: Margin financing



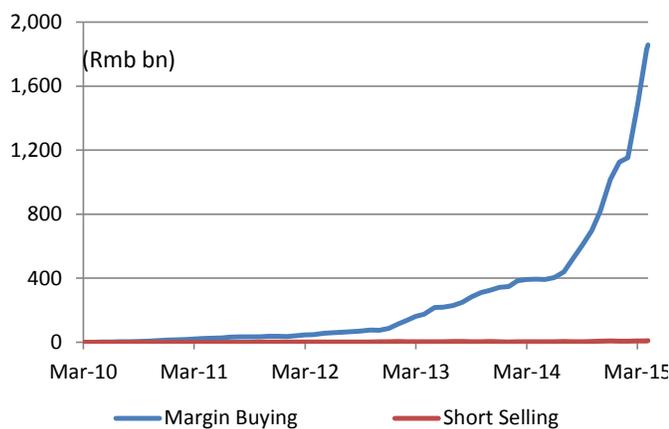
Source: Credit Suisse

Figure 3: Umbrella trust



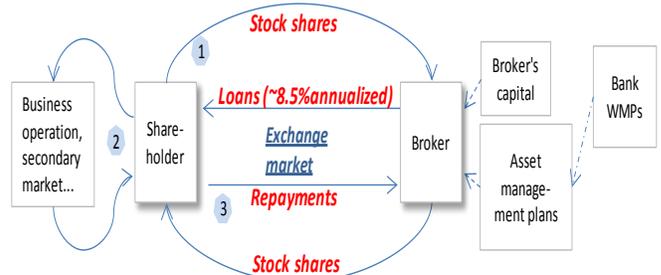
Source: Credit Suisse

Figure 4: Balances of margin financing



Source: Credit Suisse

Figure 5: Pledge-style stock repo



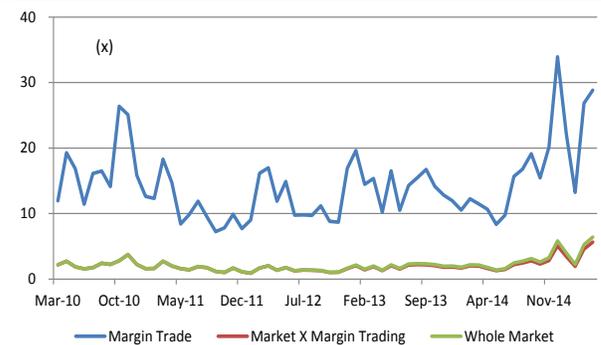
Source: Credit Suisse

Figure 6: A type of stock returns swap



Source: Credit Suisse

Figure 7: Turnover ratio related to margin trading is much higher than overall market



Source: Wind

Leverage on A-share market

Recently, there has been a lot of discussion about the leverage of China's A-share market. Whilst the information on margin financing is more transparent, there is very little information about other types of financing. The purpose of this short report is to outline the mechanism of other types of stock market financing channels in China, and their potential sizes. However, due to the limited amount of official information, the sizes of such financings are arrived at mainly from our channel checks with industry participants or our rough estimation.

We outline the mechanism of other types of stock market financings and their sizes, other than margin financing

Various financing channels

Investors can use various channels to get loans for their secondary market investments. The most direct tools include margin financing, pledge-style and outright-style stock repo, stock returns swap and umbrella trusts. But it's possible that some loans indirectly flow into secondary market investment. In a broader sense, asset management products, such as asset management plans of securities firms, products of subsidiaries of mutual fund companies and hedge fund products, may also sell the senior tranche of their products to fixed-income-seeking investors.

Investors can use various channels to get loans for their secondary market investment

Figure 8: Types of financing channels in China's stock market

Channels	Est. size	Financial institutions	Clients
Margin financing	1.7 tn	Brokers (banks)	Big individual investors, hedge funds
Other non-bank loan type of financing:	~1.4-1.7 tn		
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Pledge-style stock repo	600-800 bn	Brokers (banks)	Institutional investors, big shareholders
Outright-style stock repo	3.8 bn	Brokers	Institutional investors, big shareholders
Stock returns swap	400 bn	Brokers	Institutional investors
Bank loans:			
Loans that might flow into stock market indirectly	~1.3-2.5 tn	Banks	Individual investors

Source: Credit Suisse

In this report, we try to summarise all the funding channels and estimate how much leverage there is on the whole A-share market.

Margin financing

Figure 9: Balances of margin financing

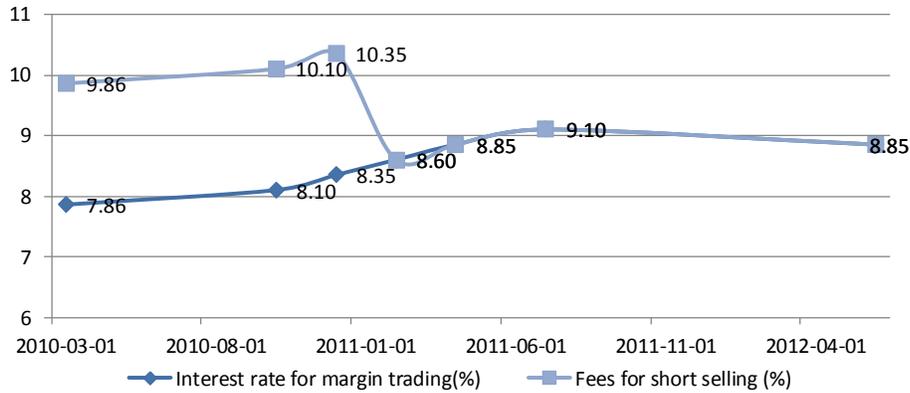


Source: Wind

Margin financing is the main source of funding. The balance of margin trading is much bigger than short selling—Rmb1.75 tn as of 22 April. By the end of March, it is about 10.8% of the free-float market cap.

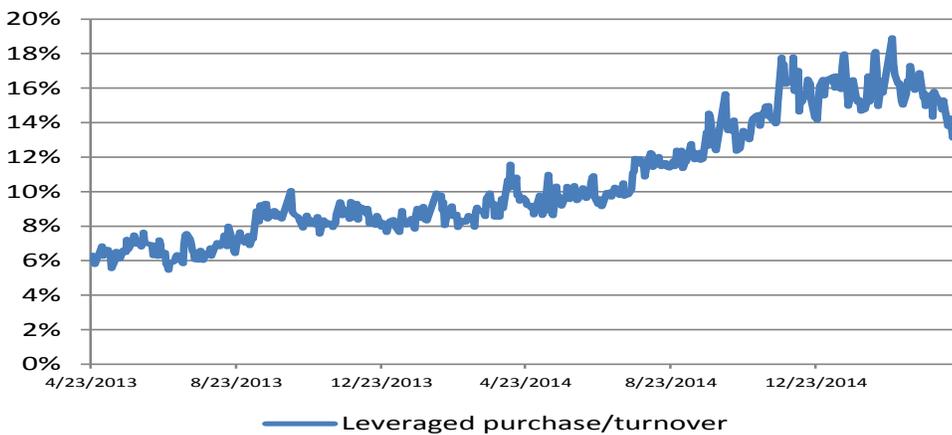
Margin financing is the main source of funding

Figure 10: Rates for margin trading and short selling (Citic Securities)



Source: Wind

Figure 11: Leveraged purchase/turnover

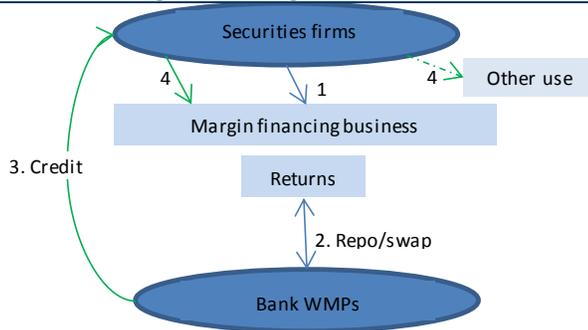


Source: Wind

The credit is finally coming from wealth management products of banks

A majority of the credit is finally coming from wealth management products of banks. Securities firms do swaps or repos with returns of margin financing as underlying assets. The interest rate is something around ~6%.

Figure 12: The structure of margin financing



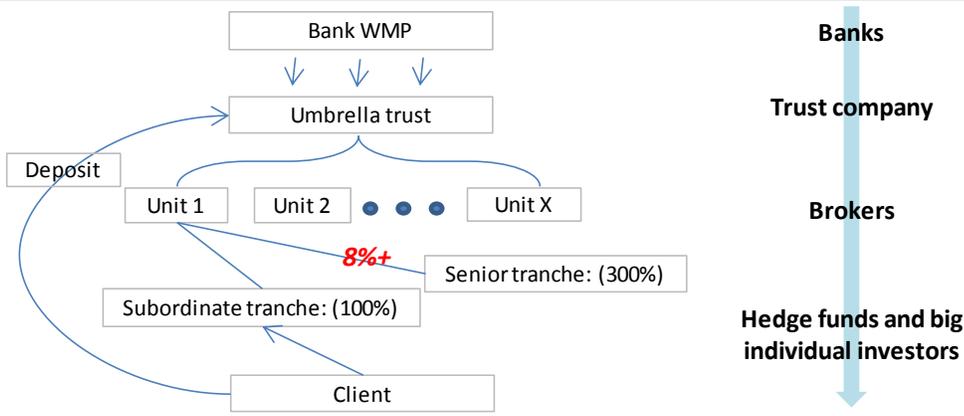
Source: Credit Suisse

Umbrella trust

Umbrella trust enables trust companies to borrow money from banks, separate it into smaller packages, and then lend to small hedge funds or big individual investors.

Umbrella trusts enable trust companies to borrow money from banks

Figure 13: The structure of umbrella trust



Source: Credit Suisse

The leverage ratio of umbrella trusts was 3-5 times until February, but dropped to 2-3 times recently. The threshold for a package can be as low as Rmb1 mn. Trust companies rely on brokers to promote umbrella trusts to investors. Maturities can be 0.5, 1.0, 1.5 or 2 years.

Leverage ratio of umbrella recently dropped from 3-5 times to 2-3 times

Since 3 February, CSRC has banned brokers from distributing and promoting umbrella trusts, which curbed its rapid growth. Especially, Great Wall Securities has been penalised by CSRC for selling umbrella trusts. On 17 April, CSRC again put emphasis on the restriction. The big brokers appear to be complying.

Most big brokers have stopped doing umbrella trust business

CBRC hasn't officially banned banks and trust companies from doing umbrella trust business, but many banks have gradually stopped issuing new credit to due umbrella trusts, or cut the size of this business.

Many banks gradually have stopped issuing new credit to due umbrella trusts

We estimate the scale of outstanding umbrella trusts is Rmb400-500 bn.

Pledge-style stock repo (质押式回购) and outright-style stock repo (约定购回式证券交易)

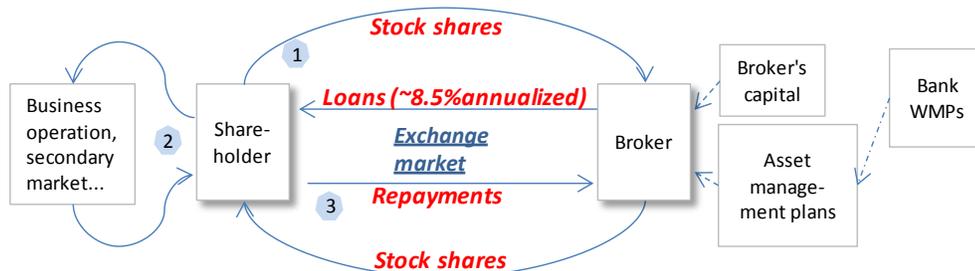
By pledging their stock shares or other securities to banks, trust companies, securities firms or their asset management plans, owners can receive loans for various purposes. The pledge-style stock repo via brokers, or the pledge-style stock repo on the exchange, started in June 2013. Compared with off-exchange stock repo, it is more convenient and its cost is lower. Brokers can dispose of the pledged stock shares at any time if the share price drops. As a result, it is growing more quickly than off-market stock repo. Apart from doing it using their own capital, brokers can also issue asset management plans, so that bank wealth management products can fund these loans indirectly.

The pledge-style stock repo via brokers, or the pledge-style stock repo on the exchange, started in June 2013

We think a considerable percentage of these loans are used for secondary market investment, including so called "market value management." Interest rates for investors are usually above 8%. The contract can be of three years at the most. Our channel check and noncomprehensive statistics suggest the scale of brokers' pledge-style stock repo is between Rmb600 bn and Rmb800 bn.

We estimate the scale of brokers' pledge-style stock repo is between Rmb600 bn and Rmb800 bn

Figure 14: Pledge-style stock repo



Source: Credit Suisse

Outright-style stock repo is an older business. In outright-style stock repo, the shareholder agrees to sell his stock shares to a broker, and buy them back from the broker at an agreed price on an agreed future date. He pays interest for the loan in this period. The maximum contract period is one year. The interest rate is ~9%. The scale of outright repo is much smaller than pledge repo, partly because the broker is only allowed to use its own capital in this business, which might be changed in the future. According to Wind, the unsettled balance is ~Rmb3.8 bn.

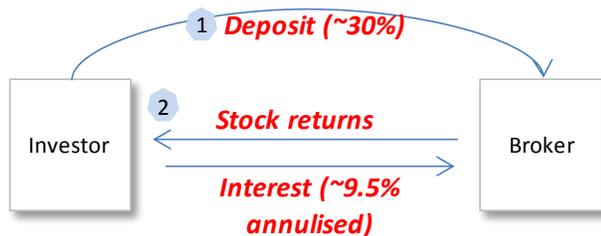
According to Wind, the unsettled balance of outright-style stock repo is ~Rmb3.8 bn

Stock returns swap

Stock returns swap as a new business of securities firms started in 2013. It is often compared to “OTC margin financing.” Nearly 20 brokers are doing it now. There are three types of swaps, but only one type prevails, which is investors pay interest at a fixed rate in exchange for returns of certain stocks. We estimate the scale of this business is around Rmb400 bn. And we think a large part of it has been invested in secondary market stocks, with an estimated average leverage ratio of 300%.

We estimate the scale of stock returns swap at around Rmb400 bn

Figure 15: A type of stock returns swap



Source: Credit Suisse

In the beginning of a contract period, an investor designates certain stocks, and pays a sum of deposit (usually above 30% of contract value, but depending on the stock) to the broker. The broker may purchase and hold the stock for him. At the end of the contract period, he pays interest to the broker and receives returns of these stocks.

Bank loans that might flow into secondary market

There is seldom any discussion on this issue. However, given the large size of bank loans in China, any percentage of bank loans going into the stock market could easily be a very large number. Given the stock market has already gone up more than 100% in past 12 months, it would be unrealistic to expect people to not use some of the normal credit they sourced from the banks to invest in the market. Indeed, we think that the household and SME loans (excluding housing mortgage and credit card loans) could be most vulnerable to being “mis-used” in the stock market.

People may also use some of the normal credit they sourced from the banks to invest in the stock market.

Figure 16: Household and SME loans (Rmb tn)

	Household loans	Mortgage loans	Credit Card loans	Household loans (ex Mortgage & Credit Card loans)	SME loan	Household loans (x Mortgage & Credit Card) +SME loans
2011-09	13.19	6.94	0.69	5.56	10.13	15.69
2011-12	13.60	7.14	0.81	5.65	10.76	16.41
2012-03	14.11	7.30	0.75	6.06	10.38	16.44
2012-06	14.73	7.49	0.86	6.38	10.87	17.25
2012-09	15.53	7.80	1.00	6.73	11.29	18.02
2012-12	16.13	8.10	1.14	6.89	11.58	18.47
2013-03	17.11	8.57	1.35	7.19	11.78	18.97
2013-06	18.21	9.07	1.53	7.61	12.25	19.86
2013-09	19.21	9.47	1.70	8.04	12.82	20.86
2013-12	19.85	9.80	1.85	8.20	13.21	21.41
2014-03	20.78	10.29	1.88	8.61	13.7	22.31
2014-06	21.73	10.74	2.04	8.95	14.17	23.12
2014-09	22.51	11.12	2.19	9.20	14.55	23.75
2014-12	23.14	11.52	2.34	9.28	15.46	24.74
2015-03	24.04	12.10	2.38	9.56	15.89	25.45

Source: PBOC

For individual banks, it is never easy to ascertain what the loans are eventually used for. But for certain loans, the risks of indirectly flowing into stock market are higher. Of all the types of individual consumption loans, home renovation loans are the most difficult to track, since only a contract is required and the money can be paid to any individual contractor. Following home renovation loans, to different extents, loans for education, medical treatment and traveling can be redirected to the stock market too. It is most difficult to “borrow” primary housing mortgage loans, for the money directly goes to developers’ bank accounts and is closely watched. It is also not easy to divert credit card loans for other purposes.

On the side of business loans both issued to individuals and companies, the possibility also exists. A frequently used method is the debtor collects properties belonging to a third-party, pays him interest and uses his properties to get collateralised loans from a bank. Using this method, tens or even hundreds of billions can be borrowed from banks and invested in businesses that generate higher returns; for example, P2P lending or secondary market.

As of March 2015, the balance of individual loans is Rmb24 tn, including Rmb16 tn consumption loans and Rmb8 tn business loans. Excluding Rmb12 tn individual loans for house purchase and Rmb2.4 tn of credit card loans (estimated number based on recent growth trends) from it, household borrowing would be around Rmb9.6 tn, while SME loan balance is Rmb15.9 tn. If we assume 5-10% of the combined household and SME loans are indirectly invested in the stock market, this will translate into an additional Rmb1.3-2.5 tn purchasing power in the stock market. To put it into perspective, total outstanding loans in March 2015 were almost Rmb86 tn, so Rmb1.3-2.5 tn will be around 1.5-3% of total loans. This is not an aggressive assumption after the stock market more than doubled in the past one year, generating a return much better than any other business in China. Also, we have assumed big companies would not use any of their working capital or fixed investment project loans to play the market. If they do, the amount of bank funding going to the stock market will be even bigger.

We estimate Rmb1.3-2.5 tn loans were transferred to the stock market

Implications

The biggest challenge of leverage in China, no matter whether it is in the real economy or the stock market, is the difficulty in accessing the true size of leverage, as market players have always been showing strong capability to bypass the formal regulations. Based on our rough calculations below, total outstanding borrowing related to stock market is probably 2x or more than the margin financing data suggests, but even the regulator may

Total outstanding borrowing related to the stock market is probably 2x or more than the margin financing data suggests

not be able to have a very concrete idea about the size of financing, and we don't think the regulators will be very comfortable with the current lack of transparency. In this case, we think there will be two major implications:

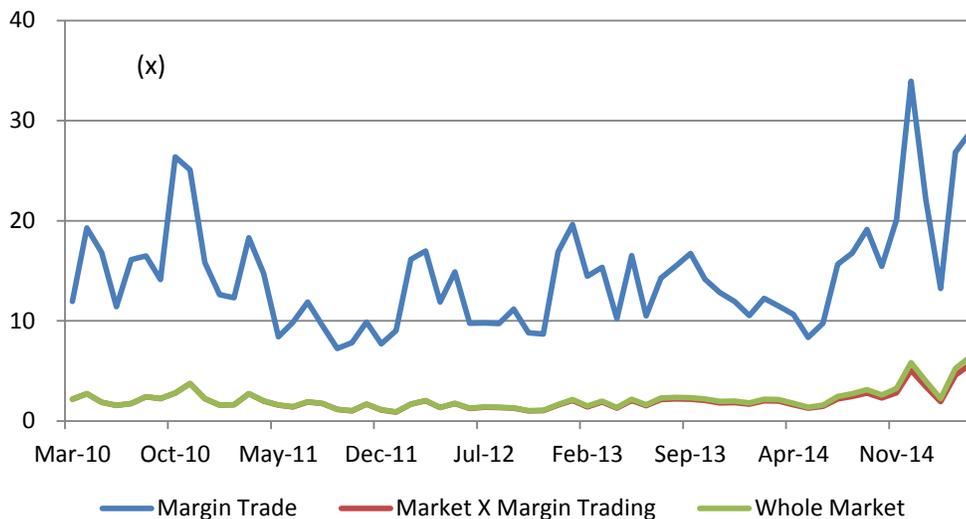
(1) We believe the government could start sending out more signals that it has started to have some concerns about the market, as it would likely become more concerned about the actual leverage and the potential negative impact should a downturn arrive. Anyway, with the major board still trading at an expensive, though not extreme, valuation, in our view, a downturn would be more in the government's interest than an overheated market.

(2) Currently, outstanding margin loans account for about 3.3% of the total A-share market cap. Therefore, if we combine the other sources of financing, it is not unreasonable to say that various kinds of leveraged financing account for about 6-9% of the total market cap. However, while the turnover related to margin financing accounted for about 15-16% of market turnover in April 2015, we don't think that leverage funding would account for 30-50% of turnover as the ratio of total leveraged financing vs outstanding margin financing suggests. The major reason being the trading behaviour. As shown in Figure 18 below, for the whole market, annualised turnover to market cap is about 6x in April 2015 (itself a very high figure compared to most other markets at only 1-2x), but turnover related to margin trading vs the outstanding margin loans funded market cap was a staggering 29x in that month. It basically means that there must have been a lot of very short-term trades completed using margin financing—possibly even multiple times intraday trading in one day. By contrast, excluding the margin trading turnover and margin loans, the turnover ratio becomes much smaller and close to the overall market. Therefore, it seems that the trading activities are much less active when other types of financing channels are involved.

Government could start sending out more signals that it has start to have some concerns about the stock market

The various kinds of leveraged financing channels may account for about 6-9% of total market cap

Figure 17: Turnover ratio related to margin trading is much higher than overall market



Source: WIND

(3) Our market strategy remains more cautious on the A-share market, we think there could be absolute downside from here until the end of this year, and for the A-share small cap universe, there could be a significant downside. We are relatively more positive on H-share, but it is largely because some of the big cap sectors like banks and telecoms are still trading at a reasonable valuation even after the rally. Our index targets for Shanghai Composite Index and H-share Index are 3,500 and 15,000 already, implying 21.9% downside and 3.7% upside, respectively. Sectors like banks, telecoms and consumer (mostly A-share as they are cheaper than H share in similar sectors) are our favourite.

We remain more cautious on China A share market.

Please refer to the disclosure appendix on page 12

Companies Mentioned (Price as of 04-May-2015)

China Cinda Asset Management Co., Ltd (1359.HK, HK\$4.74)
Citic Securities (600030.SS, Rmb33.75)

Disclosure Appendix

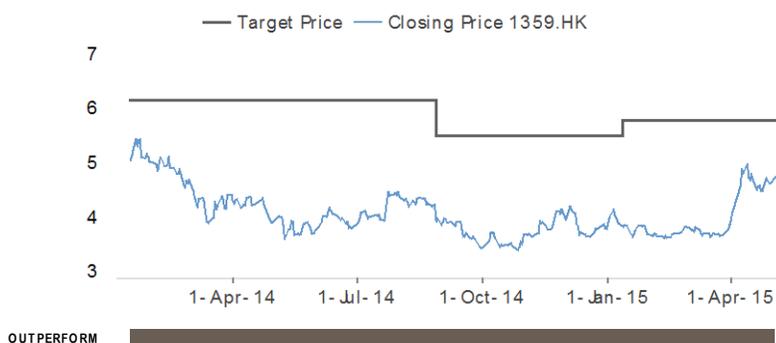
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3-Year Price and Rating History for China Cinda Asset Management Co., Ltd (1359.HK)

1359.HK	Closing Price	Target Price	
Date	(HK\$)	(HK\$)	Rating
16-Jan-14	5.05	6.14	O *
28-Aug-14	3.92	5.50	
12-Jan-15	3.82	5.78	
28-Apr-15	4.66	5.78	*

* Asterisk signifies initiation or assumption of coverage.



3-Year Price and Rating History for Citic Securities (600030.SS)

600030.SS	Closing Price	Target Price	
Date	(Rmb)	(Rmb)	Rating
31-May-12	13.77	12.96	N
20-Jul-12	12.82		R
22-Feb-13	13.71	14.88	N *
26-Feb-13	13.54	14.86	
27-Mar-13	12.77	14.81	
25-Apr-13	12.51	14.86	
06-Jun-13	12.72	13.80	
02-Jul-13	10.19	11.50	
01-Dec-13	12.90	13.00	
22-Jan-14	12.08	13.50	
19-Feb-14	11.49	12.50	
07-Aug-14	13.08	13.80	
06-Oct-14	13.32	15.30	O
08-Dec-14	25.50	22.00	N
02-Jan-15	33.90	22.80	
08-Jan-15	35.25	23.30	U
19-Jan-15	29.62	22.80	
27-Jan-15	28.05	24.80	
23-Mar-15	33.32	25.60	
20-Apr-15	33.63	33.30	N
29-Apr-15	35.58	33.70	

* Asterisk signifies initiation or assumption of coverage.



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Companies Mentioned (Price as of 04-May-2015)

Hundsun Technologies Co., Ltd (600570.SS, Rmb118.0)
Shanghai Pudong Development Bank (600000.SS, Rmb17.81)

Disclosure Appendix

Important Global Disclosures

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3-Year Price and Rating History for Hundsun Technologies Co., Ltd (600570.SS)

600570.SS	Closing Price	Target Price	
Date	(Rmb)	(Rmb)	Rating
29-May-12	14.35	17.00	O
27-Mar-13	11.79	15.00	
26-Aug-13	18.24	14.50	N
27-Oct-14	39.89	23.00	U
19-Nov-14	41.75	23.00	*
10-Mar-15	82.04	45.00	

* Asterisk signifies initiation or assumption of coverage.



3-Year Price and Rating History for Shanghai Pudong Development Bank (600000.SS)

600000.SS	Closing Price	Target Price	
Date	(Rmb)	(Rmb)	Rating
14-Mar-14	8.99	12.19	O
21-Oct-14	9.78	13.90	
27-Jan-15	15.01	17.10	N
21-Apr-15	18.16	18.10	*

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Underperform/Sell*	16%	(43% banking clients)
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