

Quantitative Monographs

Can we trade on news sentiment in China? Part II: onshore mutual fund

The intersection of news sentiment and on-shore institutional trading activity

In our previous research note ["Can we trade on news sentiment in China?"](#) we investigated the *DataYes News Sentiment Dataset*; we created a factor based on news sentiment and studied the intersection of news sentiment with our Northbound investor factor (see ["Who is the smart money in China?"](#)) to show that significant performance improvement can be obtained. In this note we study the intersection of our news sentiment factor with the positioning and trading of Chinese on-shore mutual funds (see ["Who is the smart money in China? Part II: onshore ..."](#)). We create two strategies based on the holdings of selected on-shore mutual funds, and one strategy based on their quarterly inflow/outflow that delivers a monthly residual alpha as high as 180bps.

Higher news sentiment, higher retail trading, so more alpha for smart money

Similar to the result obtained in our first note, we find evidence that the correlation between retail investor trading and news sentiment is positive at the quarterly horizon and that the correlation between news sentiment and on-shore mutual fund flow is negative. In particular, we show that when there is consensus between the news sentiment score and the holdings signal we can improve the performance of our on-shore mutual fund strategy and deliver annualized returns as high as 25% for a Sharpe ratio of 1.4. We also demonstrate that the impact of news sentiment is low for stocks subject to larger quarterly inflow from institutional investors. Yet, when inflows are low enough and sentiment is low, stocks dramatically underperform in the subsequent quarter.

Screens based on smart money and news sentiment

In 2020, we launched the China Smart Money screens, based on the positioning and trading of on-shore and off-shore institutional investors. In this report we provide illustrative screens used to create the three strategies discussed in this report.

Figure 1: Top screens from our model

Ticker	Company Name	Sector	Market Cap (Rmb bn)	Mutual fund Score	Mutual fund Rank	Sentiment Score	Sentiment Basket
300014	EVE	Industrials	189.3	7.42%	1	7.42	high
002841	CVTE	Tech	54.6	6.61%	2	1.11	low
002049	GUOXIN MICRO	Tech	73.2	5.95%	3	2.26	mid
300413	HAPPIGO	Cons Disc	75.4	5.90%	4	4.78	high
000333	MIDEA GROUP	Cons Disc	661.7	5.42%	5	8.59	high
601012	LONGI	Tech	405.6	5.23%	6	13.84	high
300144	SONGCHENG	Cons Disc	36.3	5.17%	7	1.76	low
000661	CCHN	Health Care	164.0	5.08%	8	3.54	mid
000961	ZHONGNAN CONST.	Real Estate	29.5	5.02%	9	3.16	mid
600031	SANY	Industrials	343.0	4.78%	10	6.67	high

Note: This screen is based on the holding positions of Mutual fund investors, as well as News Sentiment Scores; the portfolio is rebalanced quarterly, with data as of Jan 2021; the screen is valid for Feb, Mar and Apr 2021.

Source: DataYes, Wind, UBS Quant Research

Equities

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Contents

Executive summary	3
Can we trade on news sentiment?	4
Quarterly rebalance results.....	4
Latest screens	6
News Sentiment vs. institutional investors	7
Smart money works... ..	7
...better where retail investors are active	10
Trading at the intersection of smart-money signal and news sentiment	12
Latest screens	15

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Executive summary

In this report, we extend our previous research on news sentiment and investigate how a news sentiment score performs at a quarterly horizon. We demonstrate that the information contained in the signal give access to a high capacity, low turnover signal. We then investigate the news sentiment signal in the context of our Chinese on-shore mutual fund signal (["Who is the smart money in China? Part II: onshore ..."](#)). We show that significant performance improvement is available at the intersection of news sentiment and signals based on on-shore mutual funds holdings and flow.

We demonstrate that generally, there is more alpha at the extreme of the intersection and in particular when incorporating on-shore Chinese mutual fund holdings together with the news sentiment score.

More interestingly when studying the signal based on quarterly flow, we are able to demonstrate that stocks that are subject to large quarterly inflow from on-shore Chinese mutual funds outperform in the subsequent quarter, regardless of how they score on news sentiment. Yet, when news sentiment is low and fund flows are low or negative, stocks underperform in the subsequent quarter.

Here are the three strategies presented in this research note.

Strategy 1: Holdings-News | High-conviction signals only

- Long: High-Mutual fund, High-Sentiment basket
- Short: Low- Mutual fund, Low-Sentiment basket

Strategy 2: Holdings-News | Exclude high-conviction contrarian signals

- Long: High Mutual fund, ex. Low Sentiment
- Short: Low Sentiment, ex. Mutual fund

Strategy 3: Flow-News

- Long: High Mutual fund flow
- Short: Low Sentiment, Low Mutual fund flow

Can we trade on news sentiment?

In our previous report ["Can we trade on news sentiment in China?"](#) we showed that a typical short-horizon portfolio based on our news sentiment factor does suffer from high turnover at short-term horizons. This would be very impractical to trade, subject to execution risk and most if not all returns would simply vanish after accounting for trading costs. Yet we were also able to demonstrate that the signal has a positive IC at longer horizons. In that note we focused on a monthly rebalanced version of the portfolio. In the following, we report on the performance of the news sentiment factor at a quarterly horizon and we investigate the interaction of the signal with the quarterly signal derived from on-shore mutual funds holdings.

Quarterly rebalance results

In this section, we investigate a vanilla single factor model that is based on the past 3 months of aggregated news sentiment and trades for the subsequent quarter. As in the previous report, we test our results on the constituents of the CSI 300 Index.

Quarterly rebalance

Trading strategy:

- (1) Sort the universe into three baskets using the News Sentiment Score
- (2) Long stocks in the top 1/3, ie, the High-Sentiment basket
- (3) Short the bottom 1/3, ie, the Low-Sentiment basket

Figure 2: Information coefficient (IC, average = 1.5%) of News Sentiment Score

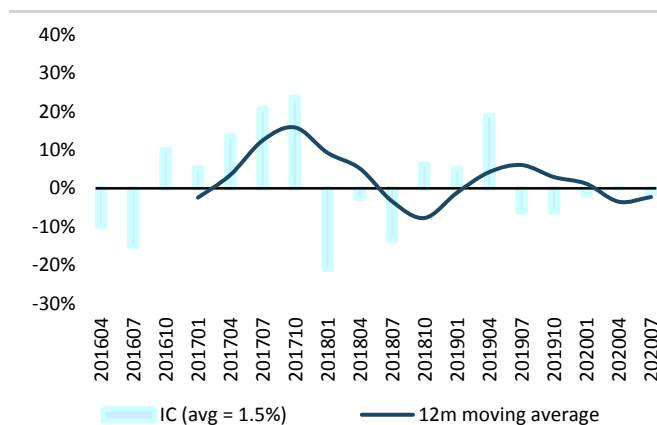
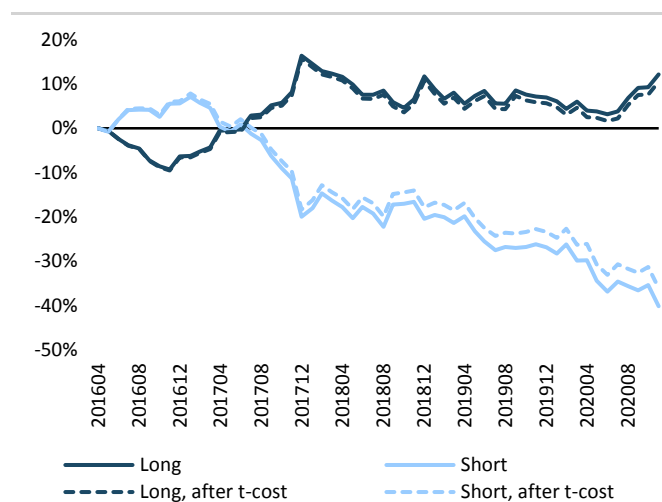


Figure 4: Strategy performance of News Sentiment Score



Source: DataYes, Wind, UBS Quant Research; strategy is quarterly rebalanced, and back-test is within the universe of the CSI300 Index constituents; performance is above chart is the excess return of long/short baskets relative to the benchmark index performance.

Figure 5: Performance statistics

	Performance after t-cost		
	Long	Short	L-S
Annualised Excess Return	2.3%	-7.9%	10.1%
Annualised Volatility	7.6%	8.4%	14.6%
Risk-adjusted Excess Return	0.3	-0.9	0.7
Quarterly One-side Turnover	18.3%	45.6%	63.9%
Maximum Drawdown	-14.0%	-8.6%	-15.9%

	Loading on generic factors		
	Long	Short	L-S
Market	0.0 (0.85)	-0.1 (-1.52)	0.1 (1.93)
Size (SMB)	0.1 (0.43)	0.2 (0.95)	-0.1 (-0.56)
Value (HML)	-0.2 (-3.36)	-0.2 (-2.68)	0.0 (0.15)
Momentum (HML)	0.0 (-0.10)	0.0 (-0.24)	0.0 (0.14)
Liquidity (HML)	0.4 (2.59)	-0.1 (-0.44)	0.6 (2.12)
Five-Factor Alpha	-0.2% (-0.98)	-0.6% (-1.81)	0.3% (0.97)

Source: DataYes, Wind, UBS Quant Research; in the lower panel of above table, we regress strategy performance on traditional risk premia factors including market, size, value, momentum, and liquidity, and we report the coefficients and alpha as above (t-values in brackets); numbers in bold are statistically significant at the 5% level.

In Figure 2 to Figure 5 we report on the performance of the quarterly rebalanced news sentiment signal. Similar to our previous observations studying the monthly rebalanced signal, we show stronger performance of the short leg of the strategy. At the three month horizon, the alpha remains positive and significant but lower at 30bps per quarter compared to 40bps per month (see previous [note](#)). The quarterly results differ from the monthly results in terms of exposures to common factors. The strategy has no significant beta against any of Market, Size, Value, and Momentum, and only a significant beta to liquidity.

In Figure 6 and Figure 7, we provide indicative screens for the names in the top and bottom baskets based on the quarterly news sentiment score in the next section.

Short > long

30bps of quarterly alpha

Latest screens

Figure 6: Top 10 stocks based on news sentiment

Ticker	Company Name	Sector	Market Cap (Rmb bn)	Sentiment Score
600104	SAIC MOTOR	Cons Disc	256.3	25.87
000858	WULIANGYE	Cons Stpls	1105.1	19.22
600519	KWEICHOW MOUTAI	Cons Stpls	2658.3	18.47
600690	HAIER	Cons Disc	200.9	13.95
601012	LONGI	Tech	405.6	13.84
000002	VANKE-A	Real Estate	270.0	13.47
601238	GAC GROUP	Cons Disc	75.1	11.13
600030	CITIC SECURITIES	Financials	278.2	10.97
600036	CMB	Financials	1054.1	10.42
600276	HR	Health Care	550.3	10.05

Source: DataYes, Wind, UBS Quant Research

Figure 7: Bottom 10 stocks based on news sentiment

Ticker	Company Name	Sector	Market Cap (Rmb bn)	Sentiment Score
688036	TRANSSION	Tech	80.2	0.18
003816	CGN	Utilities	26.7	0.33
002153	SHIJI INFORMATION	Tech	21.0	0.33
600362	JCCL	Materials	39.1	0.44
000708	CITIC STEEL	Materials	35.1	0.48
601577	BANK OF CHANGSHA	Financials	10.0	0.54
300408	CCTC	Tech	64.7	0.57
603156	HEBEI YANGYUANZHUI BEVERAGE	Cons Stpls	17.5	0.61
000066	CGT GROUP	Tech	50.7	0.69
600867	THDB	Health Care	22.7	0.79

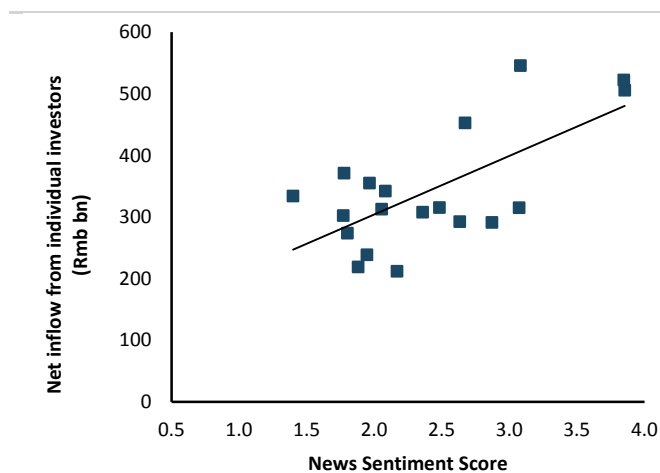
Source: DataYes, Wind, UBS Quant Research

News Sentiment vs. institutional investors

In Figure 8 we document a significant positive correlation between news sentiment and retail inflow at the quarterly horizon. This is similar to our findings in our [previous note](#) that looked at the same signals at the monthly horizon. Hence, we conclude that the correlation between news sentiment and retail flow is a persistent phenomenon. In Figure 9, we study the correlation between the quarterly news sentiment and the quarterly institutional inflow. We use our in-house score for on-shore Chinese mutual fund smart money (see [report](#)) and we also report on the relationship between news sentiment and the inflow from all large-size trades, greater than Rmb1,000,000 per trade. For both measures we document a small and negative correlation.

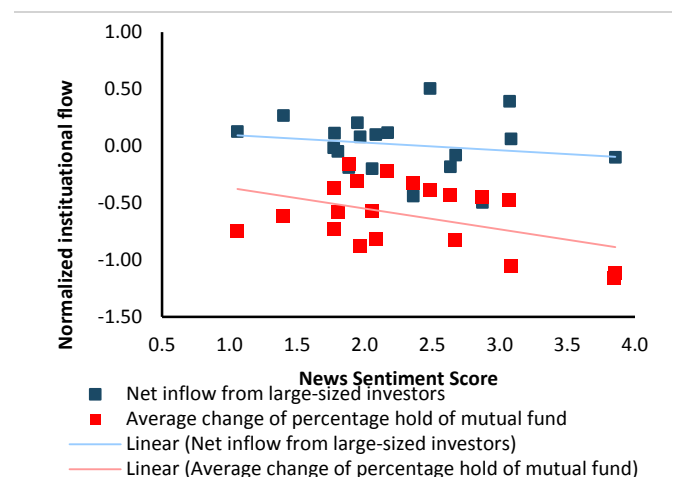
In the following we recall the performance results of our on-shore mutual fund signals based on holdings and quarterly flow. Then we augment both signals using the quarterly news sentiment score.

Figure 8: News Sentiment Score vs Retail inflow



Source: DataYes, Wind, UBS Quant Research; the news sentiment in above chart is the quarterly average score across the broader China A-share market; the net inflow from individual investors is measured by small-sized trades with less than Rmb 40,000 per each trade, according to definition from Wind.

Figure 9: News Sentiment Score vs Institutional flow

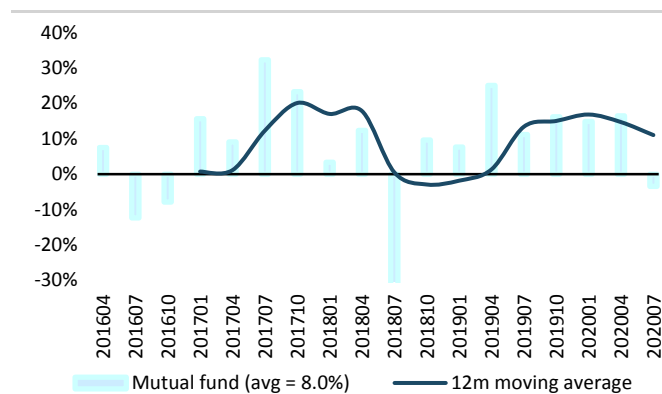


Source: DataYes, Wind, UBS Quant Research; the news sentiment in above chart is the quarterly average score across the broader China A-share market; the net inflow from large-sized investors is measured by large-sized trades with more than Rmb 1,000,000 per each trade, according to definition from Wind.

Smart money works...

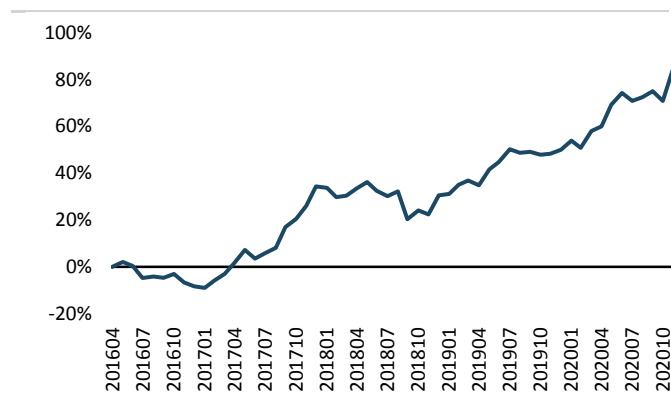
In Figure 10 to Figure 13 we present results based on a factor constructed off Chinese on-shore mutual funds holdings. The portfolio is rebalanced quarterly based on the previous quarter of data. The stocks are ranked based on the holdings. The long leg corresponds to the top tercile of stocks and the short leg to the lowest tercile of stocks and the returns time series are excess returns to the CSI before and after transaction costs. The backtest results show a Long-Short annualized return of 18.5% with a Sharpe ratio of 1.2 and a Maximum drawdown of 15.8%. The portfolio has significant betas against Market, Size, and Value but not against Momentum and Liquidity. The residual alpha after regressing against these five factors is 180bps.

Figure 10: Information coefficient (IC, average = 8.0%) of Mutual fund investor holdings



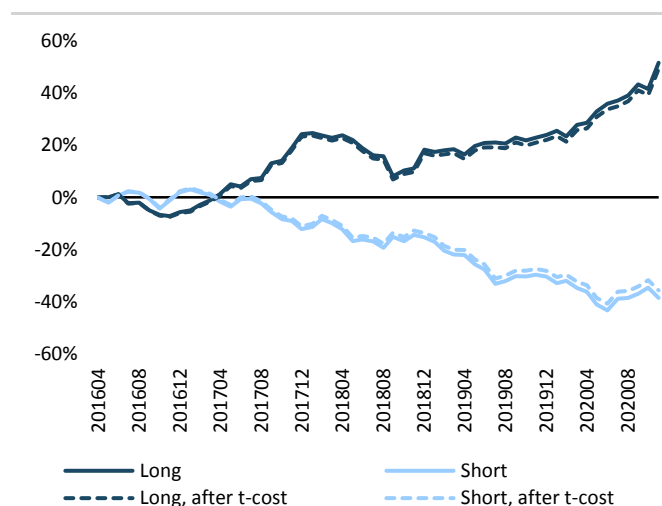
Source: DataYes, Wind, UBS Quant Research

Figure 11: Long-short strategy performance, based on Mutual fund, after t-costs



Source: DataYes, Wind, UBS Quant Research

Figure 12: Performance based on Mutual fund holdings



Source: DataYes, Wind, UBS Quant Research; strategy is quarterly rebalanced, and back-test is within the universe of the CSI300 Index constituents; performance is above chart is the excess return of long/short baskets relative to the benchmark index performance.

Figure 13: Performance statistics

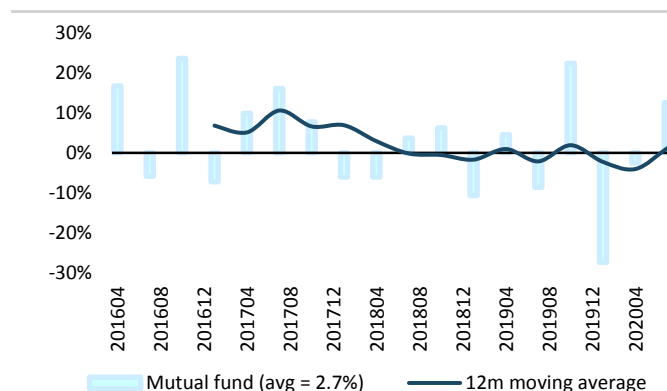
	Performance after t-cost		
	Long	Short	L-S
Annualised Excess Return	10.7%	-7.8%	18.5%
Annualised Volatility	10.0%	8.3%	15.1%
Risk-adjusted Excess Return	1.1	-0.9	1.2
Quarterly One-side Turnover	27.8%	33.5%	61.3%
Maximum Drawdown	-16.8%	-9.0%	-15.8%

	Loading on generic factors		
	Long	Short	L-S
Market	0.2 (3.00)	-0.2 (-2.77)	0.4 (3.76)
Size (SMB)	-0.3 (-1.46)	0.4 (2.16)	-0.6 (-2.32)
Value (HML)	0.1 (1.64)	-0.4 (-5.49)	0.6 (4.47)
Momentum (HML)	-0.2 (-1.35)	0.0 (0.29)	-0.2 (-1.11)
Liquidity (HML)	0.2 (0.91)	0.3 (1.57)	-0.1 (-0.32)
Five-Factor Alpha	0.6% (1.85)	-1.2% (-4.22)	1.8% (3.85)

Source: DataYes, Wind, UBS Quant Research; in the lower panel of above table, we regress strategy performance on traditional risk premia factors including market, size, value, momentum, and liquidity, and we report the coefficients and alpha as above (t-values in brackets); numbers in bold are statistically significant at the 5% level.

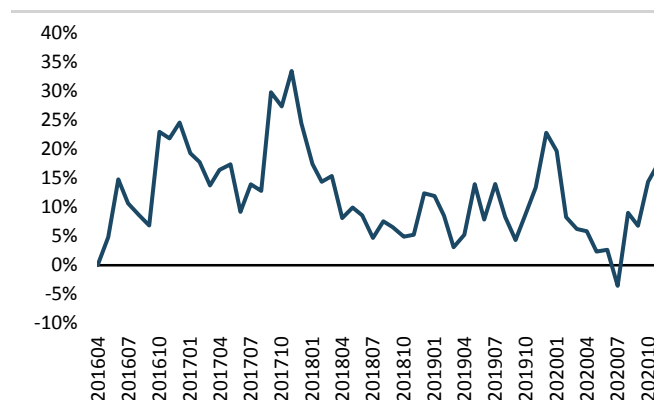
In Figure 14 to Figure 17 we report on the performance of a strategy based on the quarterly flow of mutual funds. The stocks are ranked on the change in positioning from one quarter to the subsequent quarter. The long leg of the strategy corresponds to the top decile of stocks and the short leg to the bottom decile. The performance is strong on the long leg. Stocks subject to larger inflow in one quarter deliver strong positive performance in the next quarter. The long leg has an annualized return of 10.3% and a Sharpe ratio of 0.6. The Short leg appears to behave differently and maybe not as initially expected. The data demonstrates that, on average, the stocks subject to the largest outflow in one quarter tend to outperform in the following quarter, at least from the end of 2018.

Figure 14: Information coefficient (IC, average = 2.7%) of Mutual fund investor flow



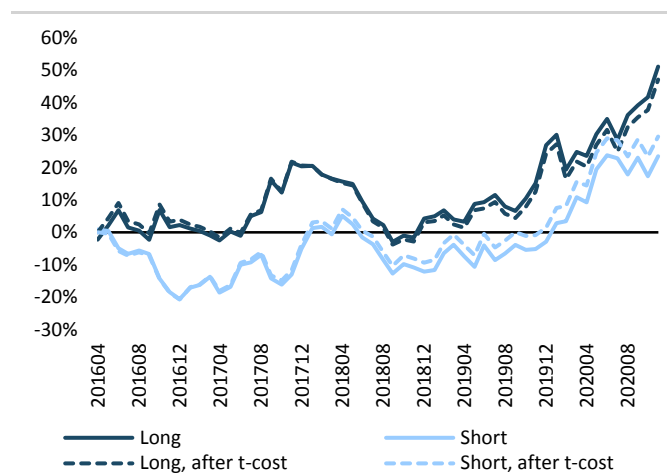
Source: DataYes, Wind, UBS Quant Research

Figure 15: Long-short strategy performance, based on Mutual fund, after t-costs



Source: DataYes, Wind, UBS Quant Research

Figure 16: Performance based on Mutual fund investor flow



Source: DataYes, Wind, UBS Quant Research; strategy is quarterly rebalanced, and back-test is within the universe of the CSI300 Index constituents; performance is above chart is the excess return of long/short baskets relative to the benchmark index performance.

Figure 17: Performance statistics

	Performance after t-cost		
	Long	Short	L-S
Annualised Excess Return	10.3%	6.4%	3.8%
Annualised Volatility	16.3%	14.6%	20.9%
Risk-adjusted Excess Return	0.6	0.4	0.2
Quarterly One-side Turnover	74.8%	66.7%	141.5%
Maximum Drawdown	-25.6%	-50.2%	-37.0%
	Loading on generic factors		
	Long	Short	L-S
Market	0.3 (2.24)	0.1 (1.19)	0.1 (0.95)
Size (SMB)	-0.2 (-0.61)	-0.1 (-0.37)	-0.1 (-0.15)
Value (HML)	0.5 (3.18)	0.4 (2.38)	0.1 (0.48)
Momentum (HML)	-0.2 (-0.73)	0.0 (0.07)	-0.2 (-0.51)
Liquidity (HML)	0.4 (1.03)	0.2 (0.36)	0.3 (0.41)
Five-Factor Alpha	0.6% (1.00)	0.5% (0.82)	0.1% (0.11)

Source: DataYes, Wind, UBS Quant Research; in the lower panel of above table, we regress strategy performance on traditional risk premia factors including market, size, value, momentum, and liquidity, and we report the coefficients and alpha as above (t-values in brackets); numbers in bold are statistically significant at the 5% level.

In the next section we investigate the intersection of quarterly news sentiment with the quarterly signals based on Chinese on-shore mutual fund holdings and flows. We demonstrate that significant performance improvement is available when accounting for the influence of news sentiment and retail investor trading when considering the insights of institutional investors.

...better where retail investors are active

In Figure 18 to Figure 20 we look at the intersection of the quarterly news sentiment score with our quarterly signal based on the stock holdings of Chinese on-shore mutual funds.

Higher sentiment, more alpha

In Figure 18 and Figure 19 we rank stock initially on the three terciles of Chinese on-shore mutual fund holding scores, then each tercile is split into three terciles base on news sentiment scores. We note from the charts that performance improves, in particular in the extreme of the intersection where there is a consensus between the two signals.

Figure 18: Annualised excess returns of double-sorting baskets (bf. costs)

		Mutual fund Positions			
		High	Mid	Low	H - L
News Sentiment	High	13.8%	0.1%	-12.0%	25.8%
	Mid	8.2%	7.2%	-9.7%	17.9%
	Low	3.3%	0.8%	-14.8%	18.1%

Source: DataYes, Wind, UBS Quant Research

Figure 19: Risk-adjusted returns of double-sorting baskets (bf. costs)

		Mutual fund Positions			
		High	Mid	Low	H - L
News Sentiment	High	1.11	0.01	-1.13	2.25
	Mid	0.84	0.70	-0.96	1.80
	Low	0.39	0.08	-1.31	1.70

Source: DataYes, Wind, UBS Quant Research

Figure 20 shows the performance of the 10 mutual deciles based on the quarterly change in holdings at the intersection with news sentiment. The signal is rebalanced quarterly and based of the last quarter of data. There appears to be several notable trends in the data. Firstly, when the inflow from on-shore mutual funds is high enough, the sentiment score does not seem to have a significant impact on the performance of the stocks in the subsequent quarter. The results are more mixed when the quarterly inflow become lower or turns negative. There is evidence in the data of news sentiment and potentially retail traders influencing the performance of stocks when the score based on on-shore mutual fund flow is low (see in particular basket 8 to Low with High and Mid sentiment score). It would not be surprising that retail, as it accounts for as much as 80% of the daily traded value, can push the performance of stocks that are less favoured by mutual funds. We also notice that when there is a tendency to have consensus, and both sentiment is low and mutual fund flow score is low enough (basket 5 to Low), the performance of stocks in the subsequent quarter turns significantly negative.

Strength of institutional investor inflow is a predictor of next quarter performance

Figure 20: Annualised excess returns of double-sorting baskets (bf. costs)

		Mutual fund Positions										
		High	Basket2	Basket3	Basket4	Basket5	Basket6	Basket7	Basket8	Basket9	Low	H - L
News Sentiment	High	11.2%	4.4%	1.5%	8.7%	-9.3%	-6.6%	-8.5%	3.5%	1.3%	4.7%	6.6%
	Mid	21.4%	5.9%	5.6%	-8.8%	-4.8%	5.1%	-5.9%	9.2%	8.2%	4.4%	17.0%
	Low	2.7%	16.7%	2.3%	-3.6%	-8.8%	-12.4%	-24.2%	-8.3%	-10.7%	-2.0%	4.7%

Source: DataYes, Wind, UBS Quant Research

Based on the comments above, we derive three strategies similar to the strategies presented in our previous note ("[Can we trade on news sentiment in China?](#)"), to trade the intersection of news sentiment and signals based on on-shore Chinese mutual fund holdings.

Strategy 1:

- (1) Long: High-Mutual fund, High-Sentiment basket
- (2) Short: Low- Mutual fund, Low-Sentiment basket

Strategy 2:

- (1) Long: High Mutual fund, ex. Low News Sentiment
- (2) Short: Low News Sentiment, ex. High Mutual fund

3 new strategies to access better risk adjusted returns

Strategy 3:

- (1) Long: High Mutual fund (High, Basket 2)
- (2) Short: Low News Sentiment, and Low Mutual fund

(Basket 5, Basket 6, basket 7, basket 8, Basket 9, Low)

In the next section we report on the performance of our three new strategies at the intersection of new sentiment and Chinese on-shore institutional holdings and flows.

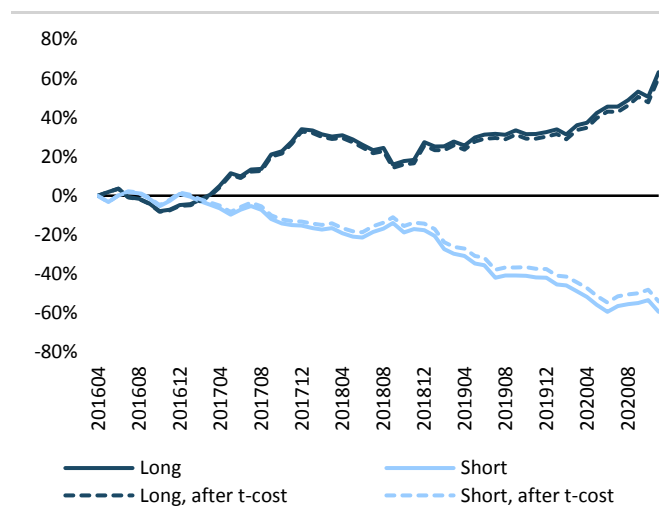
Trading at the intersection of smart-money signal and news sentiment

Strategy 1: High-conviction signals only

In our first strategy we investigated the interaction effect of having both high (low) Mutual fund scores and high (low) sentiment scores. The strategy is rebalanced quarterly, within the universe of the CSI300 Index constituents:

- (1) Long: High-Mutual fund, High-Sentiment basket
- (2) Short: Low- Mutual fund, Low-Sentiment basket

Figure 21: Strategy 1 performance



Source: DataYes, Wind, UBS Quant Research; strategy is quarterly rebalanced, and back-test is within the universe of the CSI300 Index constituents; performance is above chart is the excess return of long/short baskets relative to the benchmark index performance.

Figure 22: Performance statistics

	Performance after t-cost		
	Long	Short	L-S
Annualised Excess Return	13.2%	-11.8%	25.0%
Annualised Volatility	12.4%	8.9%	17.7%
Risk-adjusted Excess Return	1.1	-1.3	1.4
Quarterly One-side Turnover	34.5%	61.1%	95.7%
Maximum Drawdown	-18.6%	-7.7%	-21.1%
	Loading on generic factors		
	Long	Short	L-S
Market	0.2 (2.35)	-0.2 (-2.33)	0.4 (2.96)
Size (SMB)	-0.3 (-1.36)	0.3 (1.17)	-0.6 (-1.63)
Value (HML)	0.1 (1.29)	-0.3 (-2.21)	0.4 (2.28)
Momentum (HML)	-0.2 (-1.40)	0.0 (-0.21)	0.2 (-0.74)
Liquidity (HML)	0.4 (1.24)	0.0 (0.05)	0.4 (0.74)
Five-Factor Alpha	0.7% (1.78)	-1.1% (-2.45)	1.8% (2.74)

Source: DataYes, Wind, UBS Quant Research; in the lower panel of above table, we regress strategy performance on traditional risk premia factors including market, size, value, momentum, and liquidity, and we report the coefficients and alpha as above (t-values in brackets); numbers in bold are statistically significant at the 5% level.

We show in Figure 21 and Figure 22 that there is better risk adjusted performance that can be accessed at the intersection of news sentiment and our on-shore mutual fund signal. We note better absolute performance on both the long side and the short side. The Long-Short strategy has an annualised return of 25% and a Sharpe ratio of 1.4 compared to 18.5% and 1.2 for the initial strategy. The strategy is significantly exposed to the Market and to the Value factor. It has no significant exposure to Size, Momentum, and Liquidity. The alpha is very similar at 180bps per quarter.

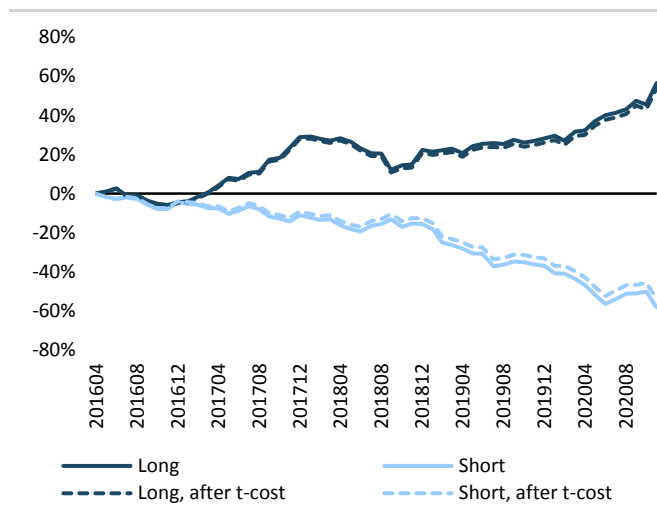
Strategy 2: Exclude high-conviction contrarian signals

In our second strategy we devise a strategy that, on the long side, trades all high Mutual fund scores that do not fall in the low-sentiment basket. On the short side, we sell the stocks that are ranked low on sentiment signal and exclude the names that are subject to a high Mutual fund position (see the intersection baskets in Figure 23 and Figure 24). As a result, we double the size of the investable universe.

- (1) Long: High Mutual fund, ex. Low News Sentiment
- (2) Short: Low News Sentiment, ex. High Mutual fund

1234

Figure 23: Strategy 2 performance



Source: DataYes, Wind, UBS Quant Research; strategy is quarterly rebalanced, and back-test is within the universe of the CSI300 Index constituents; performance is above chart is the excess return of long/short baskets relative to the benchmark index performance.

Figure 24: Performance statistics

	Performance after t-cost		
	Long	Short	L-S
Annualised Excess Return	11.8%	-11.7%	23.5%
Annualised Volatility	10.7%	8.7%	15.8%
Risk-adjusted Excess Return	1.1	-1.4	1.5
Quarterly One-side Turnover	30.2%	51.3%	81.5%
Maximum Drawdown	-17.3%	-6.7%	-19.9%
	Loading on generic factors		
	Long	Short	L-S
Market	0.2 (3.07)	-0.1 (-1.76)	0.4 (3.12)
Size (SMB)	-0.3 (-1.40)	0.2 (1.05)	-0.5 (-1.59)
Value (HML)	0.2 (1.62)	-0.3 (-2.73)	0.4 (2.83)
Momentum (HML)	-0.2 (-1.28)	0.0 (-0.09)	-0.1 (-0.76)
Liquidity (HML)	0.3 (1.02)	-0.1 (-0.43)	0.4 (0.94)
Five-Factor Alpha	0.7% (1.88)	-0.7% (-1.99)	1.4% (2.51)

Source: DataYes, Wind, UBS Quant Research; in the lower panel of above table, we regress strategy performance on traditional risk premia factors including market, size, value, momentum, and liquidity, and we report the coefficients and alpha as above (t-values in brackets); numbers in bold are statistically significant at the 5% level.

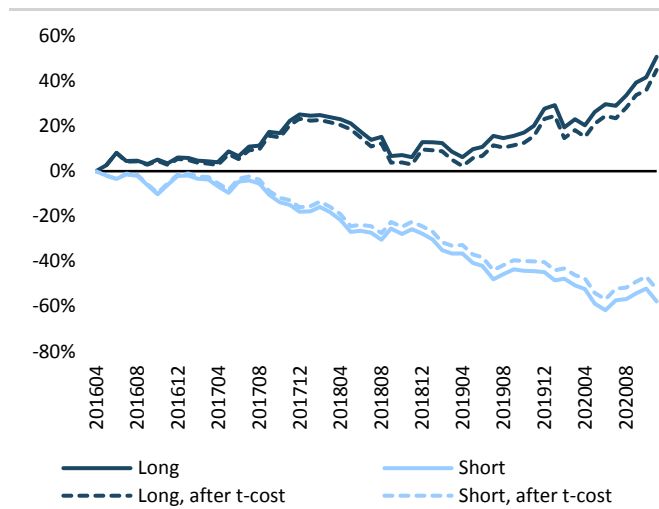
The overall results are once again showing an improvement on the initial strategy and in particular in terms of absolute performance. The Long-Short strategy has an annualized return of 23.5%. This is lower than the 25% of Strategy 1 but greater than the initial on-shore mutual fund strategy. The Sharpe ratio improves at 1.5, compared with 1.4 for Strategy 1 and 1.2 for the initial strategy. Similar to Strategy 1, Strategy 2 has significant exposure to the Market and Value factors and no significant exposure to Size, Momentum, and Liquidity. The quarterly alpha is lower at 140bps.

Strategy 3:

In Strategy 3 we now focus on the quarterly flow from selected Chinese on-shore mutual funds at the intersection with news sentiment. As discussed earlier in the report, we long the top 2 deciles of stocks based on the flow score, regardless of how the stocks score on new sentiment. The short leg is constructed to capture only stocks that fall in the lowest tercile based on news sentiment and that have sufficient low quarter-on-quarter inflow (or even outflow).

- (1) Long: High Mutual fund (High, Basket 2)
- (2) Short: Low News Sentiment, and Low Mutual fund
(Basket 5, Basket 6, basket 7, basket 8, Basket 9, Low)

Figure 25: Strategy 3 performance



Source: DataYes, Wind, UBS Quant Research; strategy is quarterly rebalanced, and back-test is within the universe of the CSI300 Index constituents; performance is above chart is the excess return of long/short baskets relative to the benchmark index performance.

Figure 26: Performance statistics

	Performance after t-cost		
	Long	Short	L-S
Annualised Excess Return	9.8%	-11.4%	21.2%
Annualised Volatility	12.9%	9.9%	19.1%
Risk-adjusted Excess Return	0.8	-1.1	1.1
Quarterly One-side Turnover	79.6%	83.9%	163.5%
Maximum Drawdown	-21.0%	-10.1%	-17.5%
	Loading on generic factors		
	Long	Short	L-S
Market	0.3 (2.87)	-0.2 (-1.96)	0.4 (3.36)
Size (SMB)	0.0 (-0.13)	0.2 (1.01)	-0.3 (-0.75)
Value (HML)	0.3 (2.50)	-0.3 (-2.54)	0.5 (3.47)
Momentum (HML)	-0.1 (-0.94)	0.1 (0.47)	-0.2 (-0.99)
Liquidity (HML)	0.6 (1.91)	-0.1 (-0.36)	0.7 (1.63)
Five-Factor Alpha	0.4% (0.86)	-0.9% (-2.35)	1.3% (2.14)

Source: DataYes, Wind, UBS Quant Research; in the lower panel of above table, we regress strategy performance on traditional risk premia factors including market, size, value, momentum, and liquidity, and we report the coefficients and alpha as above (t-values in brackets); numbers in bold are statistically significant at the 5% level.

Overall, the results show an improvement in both risk adjusted returns and alpha. First, on the long side specifically, as we double the size on the investment universe by going long the first two deciles instead of the first decile of stocks, we get a slight decrease in annualized returns from 10.3% down to 9.8% but the Sharpe ratio increases to 0.8 from 0.6. The alpha is also reduced to 40bps from 60bps. On the short side, the change is more drastic and news sentiment helps to differentiate stocks with low inflow that are likely to underperform in the next quarter. Annualised returns are now -11.4% compared to 6.4% and the alpha is -90bps compare to 50bps. Overall the Long-Short strategy has significant exposure to Market and Value and no significant exposure to Size, Momentum, and Liquidity. The monthly alpha is increased to 130bps from 10bps for the initial strategy.

Figure 27 and Figure 28 show the top and bottom names in for Strategies 1 and 2 at the intersection of the Mutual fund holdings and the news sentiment factor. Figure 29 Figure 30 show the top and bottom 20 names for Strategy 3.

Latest screens

Figure 27: Top 20 names based on strategy 1 & 2

Ticker	Company Name	Sector	Market Cap (Rmb bn)	Mutual fund Score	Mutual fund Rank	Sentiment Score	Sentiment Basket
300014	EVE	Industrials	189.3	7.42%	1	7.42	high
002841	CVTE	Tech	54.6	6.61%	2	1.11	low
002049	GUOXIN MICRO	Tech	73.2	5.95%	3	2.26	mid
300413	HAPPIGO	Cons Disc	75.4	5.90%	4	4.78	high
000333	MIDEA GROUP	Cons Disc	661.7	5.42%	5	8.59	high
601012	LONGI	Tech	405.6	5.23%	6	13.84	high
300144	SONGCHENG	Cons Disc	36.3	5.17%	7	1.76	low
000661	CCHN	Health Care	164.0	5.08%	8	3.54	mid
000961	ZHONGNANCONSTRUCTION	Real Estate	29.5	5.02%	9	3.16	mid
600031	SANY	Industrials	343.0	4.78%	10	6.67	high
002271	ORIENTAL YUHONG	Materials	81.6	4.78%	11	4.72	high
300124	INOVANCE	Industrials	133.9	4.74%	12	3.87	mid
601899	ZIJIN MINING	Materials	188.5	4.74%	13	3.70	mid
002027	FOCUS MEDIA	Cons Disc	159.4	4.72%	14	3.43	mid
600522	ZTT	Tech	32.2	4.50%	15	1.38	low
000568	LUZHOU LAO JIAO	Cons Stpls	377.4	4.37%	16	12.84	high
600690	HAIER	Cons Disc	200.9	4.14%	17	13.95	high
300529	JAFRON	Health Care	36.3	4.09%	18	1.42	low
600887	YILI	Cons Stpls	262.1	4.02%	19	4.58	high
600438	TONGWEI	Tech	197.2	3.98%	20	7.98	high

Source: DataYes, Wind, UBS Quant Research; above screen is based on the holding positions of Mutual fund investors, as well as the News Sentiment Scores; portfolio is quarterly rebalanced and data as of January 2021; screen is valid for February, March and April 2021.

Figure 28: Bottom 20 names based on strategy 1 & 2

Ticker	Company Name	Sector	Market Cap (Rmb bn)	Mutual fund Score	Mutual fund Basket	Sentiment Score	Sentiment Rank
688036	TRANSSION	Tech	80.2	0.40%	mid	0.18	1
003816	CGN	Utilities	26.7	0.01%	low	0.33	2
002153	SHIJI INFORMATION	Tech	21.0	0.04%	low	0.33	3
600362	JCCL	Materials	39.1	0.06%	low	0.44	4
000708	CITIC STEEL	Materials	35.1	0.32%	mid	0.48	5
601577	BANK OF CHANGSHA	Financials	10.0	0.01%	low	0.54	6
300408	CCTC	Tech	64.7	3.70%	high	0.57	7
603156	HEBEI YANGYUANZHUI BEVERAGE	Cons Stpls	17.5	0.01%	low	0.61	8
000066	CGT GROUP	Tech	50.7	0.48%	mid	0.69	9
600867	THDB	Health Care	22.7	0.66%	mid	0.79	10
002463	HDGF	Tech	29.3	0.02%	low	0.79	11
600352	ZHEJIANG LONGSHENG	Materials	44.6	0.01%	low	1.07	12
002773	KHPG	Health Care	27.7	0.57%	mid	1.07	13
002841	CVTE	Tech	54.6	6.61%	high	1.11	14
601117	CNCEC	Materials	27.3	0.02%	low	1.12	15
000876	NEW HOPE	Cons Stpls	91.5	0.28%	mid	1.17	16
600600	TSINGTAO BREWERY	Cons Stpls	61.8	1.33%	high	1.18	17
600025	HUANENG LANCANG RIVER HYDROPOWER	Utilities	80.3	0.11%	low	1.26	18
600183	SYTECH	Tech	58.4	0.25%	mid	1.29	19
002044	MEINIAN ONEHEALTH	Health Care	54.4	3.96%	high	1.29	20

Source: DataYes, Wind, UBS Quant Research; above screen is based on the holding positions of Mutual fund investors, as well as the News Sentiment Scores; portfolio is quarterly rebalanced and data as of January 2021; screen is valid for February, March and April 2021.

Figure 29: Top 20 names based on strategy 3

Ticker	Company Name	Sector	Market Cap (Rmb bn)	Mutual fund Score	Mutual fund Rank	Sentiment Score	Sentiment Basket
300408	CCTC	Tech	64.7	3.67%	1	0.57	low
000333	MIDEA GROUP	Cons Disc	661.7	3.56%	2	8.59	high
603799	HUAYOU COBALT	Materials	109.6	3.41%	3	5.44	high
600522	ZTT	Tech	32.2	2.46%	4	1.38	low
002841	CVTE	Tech	54.6	2.31%	5	1.11	low
002493	RSPC	Materials	198.9	2.08%	6	2.22	mid
002415	HIKVISION	Tech	525.7	1.89%	7	6.75	high
600690	HAIER	Cons Disc	200.9	1.56%	8	13.95	high
002049	GUOXIN MICRO	Tech	73.2	1.36%	9	2.26	mid
000895	SHUANGHUI	Cons Stpls	63.1	1.31%	10	2.17	mid
002812	CHUANGXIN	Materials	70.8	1.28%	11	5.13	high
600887	YILI	Cons Stpls	262.1	1.27%	12	4.58	high
300014	EVE	Industrials	189.3	1.23%	13	7.42	high
600660	FYG	Cons Disc	118.2	1.20%	14	3.32	mid
002157	ZHENGHANG TECH	Cons Stpls	39.5	1.18%	15	2.48	mid
000661	CCHN	Health Care	164.0	1.12%	16	3.54	mid
002311	HAID GROUP	Cons Stpls	108.4	1.08%	17	2.11	mid
002142	BANK OF NINGBO	Financials	228.1	1.05%	18	0.42	low
603259	WUXI APPTTEC	Health Care	235.1	0.98%	19	6.54	high
000568	LUZHOU LAO JIAO	Cons Stpls	377.4	0.94%	20	12.84	high

Source: DataYes, Wind, UBS Quant Research; above screen is based on the fund flow of Mutual fund investors, as well as the News Sentiment Scores; portfolio is quarterly rebalanced and data as of January 2021; screen is valid for February, March and April 2021.

Figure 30: Bottom 20 names based on strategy 3

Ticker	Company Name	Sector	Market Cap (Rmb bn)	Mutual fund Score	Mutual fund Rank	Sentiment Score	Sentiment Basket
600926	HZBANK	Financials	74.1	-0.07%	191	1.66	low
600674	SCTE	Utilities	48.2	-0.08%	192	1.39	low
600989	BAOFENG ENERGY	Materials	32.2	-0.08%	193	1.52	low
600183	SYTECH	Tech	58.4	-0.09%	194	1.29	low
600763	TCMEDICAL	Health Care	97.5	-0.09%	195	1.34	low
601838	BANK OF CHENGDU	Financials	19.7	-0.12%	196	2.00	low
601668	CSCEC	Industrials	195.0	-0.13%	197	1.30	low
000876	NEW HOPE	Cons Stpls	91.5	-0.14%	198	1.17	low
688036	TRANSSION	Tech	80.2	-0.16%	199	0.18	low
300529	JAFRON	Health Care	36.3	-0.21%	200	1.42	low
603899	M&G	Industrials	86.6	-0.23%	201	1.62	low
300003	LEPU MEDICAL	Health Care	41.4	-0.31%	202	1.99	low
002938	AVARY HOLDING	Tech	19.3	-0.42%	203	1.98	low
600872	JONJEE HI-TECH	Cons Stpls	53.5	-0.59%	204	1.35	low
000708	CITIC STEEL	Materials	35.1	-0.63%	205	0.48	low
002384	DSBJ	Tech	27.6	-0.65%	206	1.52	low
300144	SONGCHENG	Cons Disc	36.3	-1.08%	207	1.76	low
002773	KHPG	Health Care	27.7	-1.10%	208	1.07	low
600845	BAOSIGHT	Tech	55.9	-2.12%	209	1.66	low
002600	JPMF	Tech	22.8	-2.25%	210	1.71	low

Source: DataYes, Wind, UBS Quant Research; above screen is based on the fund flow of Mutual fund investors, as well as the News Sentiment Scores; portfolio is quarterly rebalanced and data as of January 2021; screen is valid for February, March and April 2021.

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Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%

Source: UBS. Rating allocations are as of 31 December 2020.

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