

Asia-Pacific Portfolio Strategy

Korea Strategy: Short-selling resumption and its equity market implications

- **The extensive short-selling ban will soon end.** Short-selling in Korea is scheduled to resume on the first trading day of May after the longest such ban in Korea's history. This event is top of mind for equity investors who wonder how this may affect the market and their portfolios.
- **Three reasons why resumption of short selling may not hurt the market, in our view:**
 - 1. A resumption of short selling may attract more foreign flows.** Short-selling volumes have been positively correlated with foreign flows, and such flows have weakened when short-selling was banned. We expect foreign flows to pick up once short-selling resumes and note that foreign net buying has been positively correlated with KOSPI returns ytd.
 - 2. An increase of short-selling interest is not a negative signal.** Since 2016, the KOSPI index and short-selling balances have been positively correlated, at times over 90%. Short selling is not the sole determinant of price performance and improves market efficiency and price discovery.
 - 3. Episodic evidence: temporary market weakness but fundamentals prevail.** Short selling was banned and then restored twice: May 2009 and November 2011. In these episodes, the equity market corrected and was volatile, but regained lost ground after 1 month and surpassed its respective pre-short sale resumption high.
- **Short-sell screens:** We highlight two screens of potential short sale candidates once the ban ends. First, the top 20 stocks from the KOSPI 200 index that still have the greatest short-selling balance relative to their market cap. Second, a subset of these shorted stocks that have strongly outperformed during the short sale ban and have weak growth prospects.
- **Stay overweight Korea.** We reaffirm our overweight equity market view with a 3700 KOSPI 12m target (+16%). Korea is the most cyclically sensitive market in Asia Pacific and the global economy is recovering strongly. Earnings growth should be the region's fastest (70%/25% for 2021/22) and valuations are at average discount levels to global comparables despite a shift in index composition that argues for a better rating.

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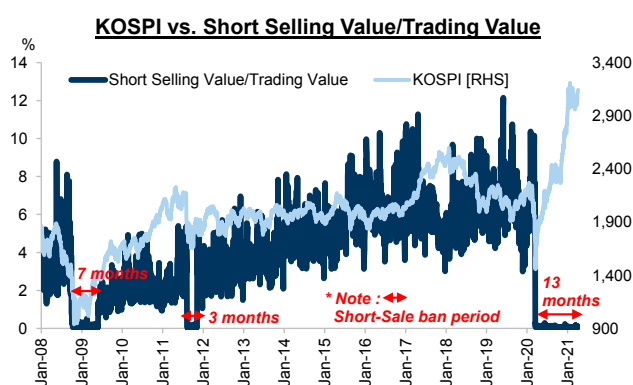
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What happened to short-selling?

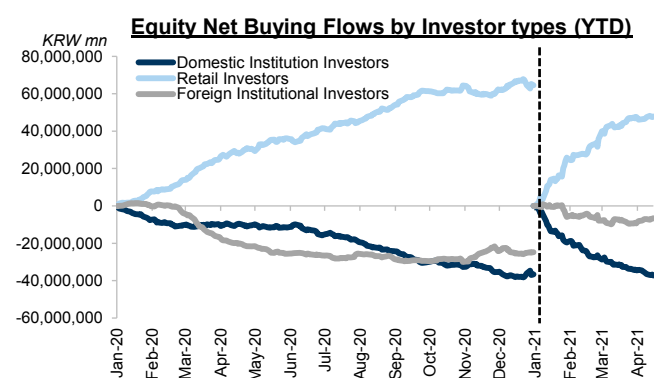
Short-selling was banned in March last year in response to the pandemic-induced equity market plunge. This is the longest such restriction in Korea's history and a longer ban than in any other Asian regional market. The short selling ban will end on the last trading day of April and short selling will resume on May 3rd. During the short selling ban, the KOSPI Index gained 87% fueled by strong retail buying. The ban has extended longer than expected, largely because retailers expressed strong concerns over the resumption of short-selling which has almost entirely been done by domestic and foreign institutional investors.

Exhibit 1: Korea equity market has banned short-selling since March 2020 following the COVID-19 pandemic outbreak. This is the longest short sale ban in the market's history.



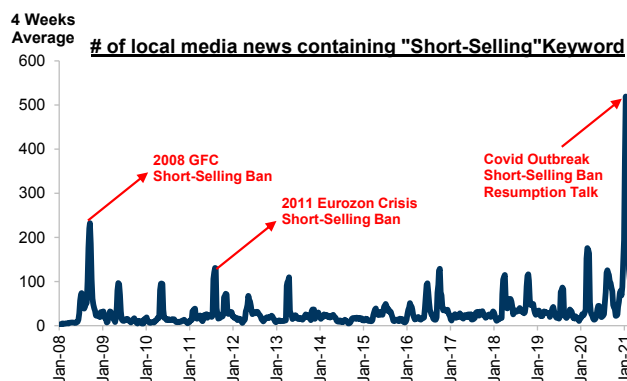
Source: Quantwise, Goldman Sachs Global Investment Research

Exhibit 2: Retail investors have driven Korea equity net buying flows since the beginning of 2020



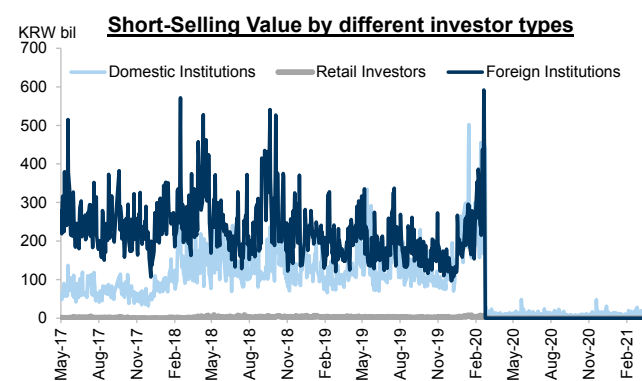
Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 3: Short-Selling resumption has been recently highlighted by local media



Source: Korea Press Foundation, Goldman Sachs Global Investment Research

Exhibit 4: Institutional investors have been the major short-sellers; retail investors have hardly participated



Source: Quantwise, Goldman Sachs Global Investment Research

In response to retail concerns and successive Covid-19 outbreak waves, the authorities extended the short-selling ban twice in August and February. Also, to address retail investors' worries and curb potential market volatility, the Financial Services Commission has introduced some revisions to the short sale rules including 1) allowing short-selling only for KOSPI200/KOSDAQ150 stocks and 2) expanding short-selling to authorized retail investors, but imposing caps on retailers until they have demonstrated experience in this area.

Exhibit 5: Short-selling ban related timeline and key revisions from the Financial Services Commission

| Short-Selling ban related events timeline and Key Revisions | |
|--|--|
| Date | Key Event |
| 3/16/2020 | The Financial Services Commission started a temporary ban on stock short selling for six months amid a market rout triggered by the outbreak of the new coronavirus. |
| 8/27/2020 | The Financial Services Commission announced to extend its pandemic-imposed ban on short-selling for another six months until March 15 2021 |
| 2/3/2021 | South Korea's FSC (Financial Services Commission) has announced a decision to extend the short-selling ban until 2 May 2021. |
| 5/3/2021 | Short-selling will be resumed to KOSPI 200/KOSDAQ 150 constituents after the longest short-selling ban |
| Key Revisions on Short-Selling rules from Financial Services Commission | |
| 1. Short-Selling resumption from May 3 on KOSPI 200 and KOSDAQ 150 stocks | |
| 2. The FSC will improve detection of and punishment on illegal short-selling activities and the market maker rules to prevent market abuse | |
| 3. The authorities will work to address the issue of discrepancy in terms of access to short-selling by institutional and retail investors. | |
| 4. As such, the FSC in consultation with the Korea Financial Investment Association has decided to expand the securities lending system to retail investors upon which securities finance companies will assume the payment burden. On May 3, it is expected that about 2 to 3 KRW trn in securities lending will become available | |
| 5. the FSC will gradually allow retail investors to engage in short-selling depending on their individual experience and capabilities | |
| 6. There will be investment caps on retail investors to prevent excessive losses until they get more experienced. In this regard, the maximum short orders for beginners will be set at KRW30 mn. For those with more than five times of short-selling experience over the recent 2 years with the cumulated amount of stock borrowing of KRW50mn or more, the cap will be set at KRW70 mn. For professional investors or those with more than 2 years of short-selling experience, there will be no investment limit. | |

Source: Financial Services Commission, Data compiled by Goldman Sachs Global Investment Research

Is short-selling negative for Korea equities?

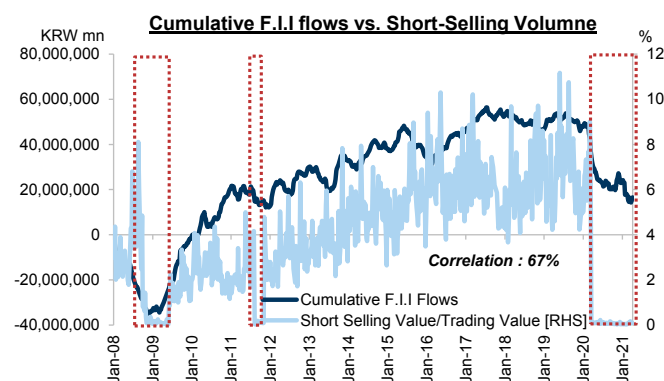
In contrast to concerns that the resumption of short-selling could impair the prospects for Korea equities, we view it in a more constructive light. In particular, a resumption of short selling may attract more foreign flows. Moreover, the history of market performance vs. short sale activity shows the market can rise as short selling interest increases. Overall, we expect the market to look through technical issues such as this and trade on the underlying fundamentals, which we view as positive and supportive of further upside.

1) Foreign flows and short-selling

Foreign investors typically comprise a major part of short-selling activities and foreign flows are meaningfully correlated with short-selling volumes. The narrative explaining this fact pattern is that many foreign investors engage in the Korean equity market on a targeted basis which involves hedging strategies. Because of this, short-selling volumes have historically been positively correlated with foreign flows, and such flows have weakened when short-selling was banned. Based on this historical pattern, we expect foreign flows to pick up once short-selling resumes.

Furthermore, unlike last year's equity market, the Korean equity market's upside this year has been driven more by foreign flows than retail flows. Daily foreign flows have been positively correlated with daily KOSPI returns, whereas retail flow correlations have been negative. If the resumption of short-selling attracts additional foreign flows, the equity market could benefit as a result.

Exhibit 6: Foreign flows are positively correlated with short selling activity and flows have historically weakened during short-sale bans



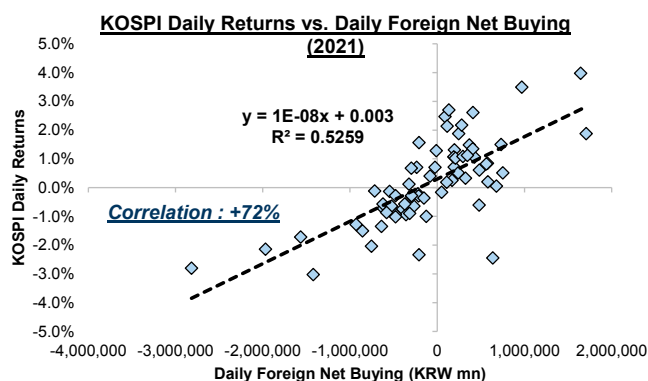
Source: Quantwise, Goldman Sachs Global Investment Research

Exhibit 7: Following the resumption of short-selling, foreign inflows increased and equity market returns improved

| Short-Selling Ban Period | 2008-09 | 2011 | 2020-21 |
|---|-----------|-----------|-----------|
| Start Date | 1-Oct-08 | 10-Aug-11 | 16-Mar-20 |
| End Date | 29-May-09 | 9-Nov-11 | Present |
| Period Length | 7 months | 3 months | 13 Months |
| Cumulative F.I.I Flows during the ban (KRW trn) | 2.7 | -1.5 | -20.8 |
| After resumption cumulative F.I.I Flows for the same period (KRW trn) | 22.3 | 5.9 | - |
| KOSPI Returns during the ban (%) | -3.0% | 5.6% | 87.5% |
| After resumption KOSPI Returns for the same period (%) | 18.9% | 10.0% | - |

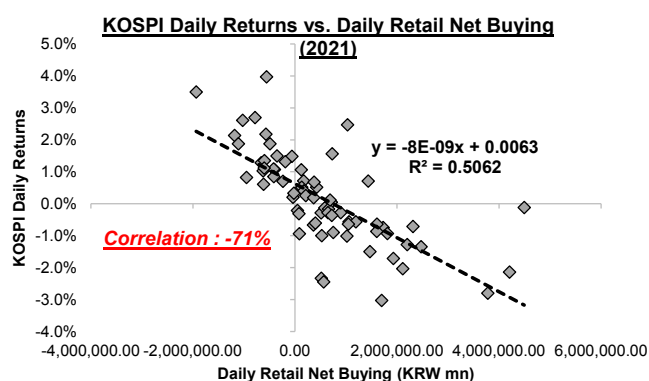
Source: Quantwise, Goldman Sachs Global Investment Research

Exhibit 8: Foreign net buying has been positively correlated with KOSPI returns so far this year



Source: Quantwise, Goldman Sachs Global Investment Research

Exhibit 9: Unlike foreign flows, retail net buying has been negatively correlated with daily KOSPI returns this year

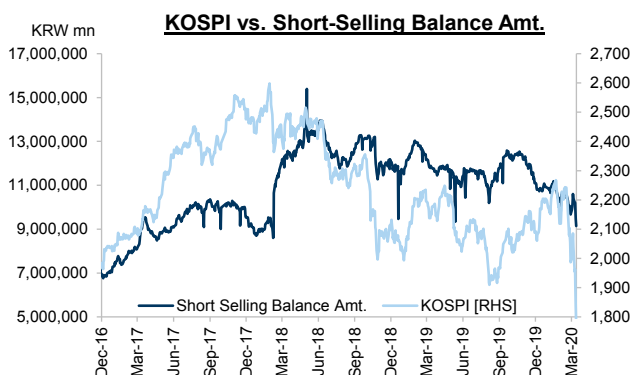


Source: Quantwise, Goldman Sachs Global Investment Research

2) KOSPI vs. short-selling interest

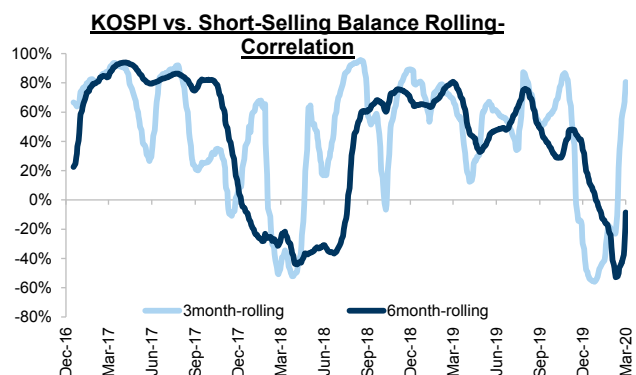
Although short-sale interest is an expression of protection for downside risks, an increase of short-selling interest does not always signal a market drop. Based on historically available data since 2016, the KOSPI index and short-selling balances have generally been positively correlated, with the level reaching over 90% on many occasions. This can be explained by noting that the absolute level of short interest will rise as the level of the equity underliers that are being hedged rises. Furthermore, short selling may reflect the directional view of some market participants, but it is not the sole determinant of price performance: the overall balance of buying and selling pressure drives price formation, not the actions of a single type of investor. In fact, short selling improves market efficiency and aids price discovery. We therefore do not view the resumption of short selling as a reason to expect weak market performance.

Exhibit 10: Short-selling interest has been generally correlated with the market index



Source: Quantwise, Goldman Sachs Global Investment Research

Exhibit 11: The rolling correlation between KOSPI and short-selling balance has typically been positive, reaching 90% on multiple occasions

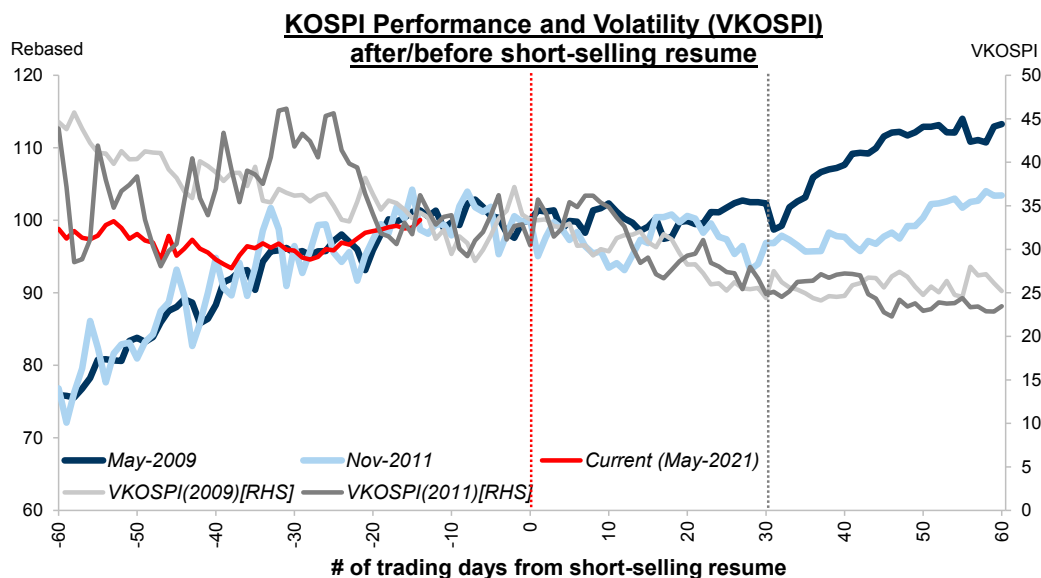


Source: Quantwise, Goldman Sachs Global Investment Research

3) After previous short selling resumptions, the market rose after temporary weakness

There were two previous instances when short selling was banned and then resumed: May 2009 and November 2011. In these episodes, the equity market experienced a technical correction and short-term volatility ahead of the resumption and also weakened modestly after the reintroduction of short selling. However, after a month, the equity market regained lost ground and in each case surpassed its respective pre-short sale resumption high. This suggests that fundamentals are likely to drive the market once this technical issue is digested.

Exhibit 12: In the past two episodes when short selling resumed, Korean equities appreciated after moderate temporary weakness



Source: Bloomberg, Quantiwise, Goldman Sachs Global Investment Research

Potential short sell candidates once short selling resumes

We highlight two screens of potential short sale candidates once the short selling ban ends. First, we show the top 20 stocks that still have the greatest short-selling balance amount relative to their market cap from KOSPI 200 constituents. (These are short sell positions that were established before the latest ban in March 2020 and have been maintained since.) Although these stocks don't always underperform in the market, they are the most favored by investors who are interested in short-selling.

Exhibit 13: We screen the most shorted stocks relative to their market cap from KOSPI 200 universe

| Ticker | Company name | Market | Sector | Liquidity | | | SS Bal Balance to Mkt Cap | Growth and Valuations | | | | | GS | |
|-----------|--|--------|------------------------|-----------------|-------------------------------------|---------------------|------------------------------------|-----------------------|--------------------|---------------|---------------|---------------|--------------|----------------------------|
| | | | | Quoted Price | Listed market cap (US\$mn) | 6M ADVT (US\$mn) | | 21E EPSg (%) | 22E EPSg (%) | 21E P/E(X) | 21E P/B(X) | 21E ROE(%) | GS Rating | Potential Upside (%) |
| 032350 KP | Lotte Tour Development Co., Ltd. | Korea | Consumer Discretionary | 19350 | 1,199 | 10 | 6.7% | - | - | - | 6.2 | -14.7 | NC | - |
| 042670 KP | Doosan Infracore Co., Ltd. | Korea | Industrials | 10800 | 2,122 | 42 | 3.4% | 54.0 | 13.2 | 10.0 | 0.9 | 9.2 | NC | - |
| 008770 KP | HOTEL SHILLA CO., LTD. | Korea | Consumer Discretionary | 83700 | 2,939 | 49 | 3.0% | - | 222.3 | 68.6 | 5.0 | 7.3 | N | 2.7 |
| 068270 KP | Celltrion, Inc. | Korea | Health Care | 309500 | 38,140 | 431 | 2.7% | 39.2 | 16.2 | 58.4 | 10.6 | 19.6 | S | -44.1 |
| 034220 KP | LG Display Co., Ltd. | Korea | Information Technology | 25150 | 8,052 | 80 | 1.4% | - | 5.5 | 11.0 | 0.7 | 6.9 | S | -48.3 |
| 010140 KP | Samsung Heavy Industries Co., Ltd. | Korea | Industrials | 7480 | 4,216 | 69 | 1.4% | - | - | - | 1.2 | -5.2 | NC | - |
| 009540 KP | KOREA SHIPBUILDING & OFFSHORE ENGI | Korea | Industrials | 134500 | 8,517 | 46 | 1.0% | - | 24.3 | 37.9 | 0.8 | 2.3 | NC | - |
| 000100 KP | Yuhan Corporation | Korea | Health Care | 65800 | 4,120 | 32 | 0.9% | -44.2 | 21.4 | 40.1 | 2.3 | 5.6 | B | -26.7 |
| 000720 KP | Hyundai Engineering & Construction Co., Ltd. | Korea | Industrials | 46400 | 4,623 | 43 | 0.8% | 257.9 | 16.9 | 11.8 | 0.7 | 6.4 | NC | - |
| 093370 KP | Foosung Co., Ltd. | Korea | Materials | 11150 | 924 | 24 | 0.8% | 339.5 | 116.6 | 39.0 | 4.5 | 11.9 | NC | - |
| 180640 KP | HANJIN KAL Corp. | Korea | Industrials | 54700 | 3,243 | 21 | 0.8% | - | 407.2 | 105.3 | 3.0 | 2.5 | NC | - |
| 008350 KP | Namsun Aluminum Co., Ltd. | Korea | Materials | 3945 | 389 | 13 | 0.7% | - | - | - | - | - | NC | - |
| 204320 KP | Mando Corp | Korea | Consumer Discretionary | 64600 | 2,714 | 57 | 0.7% | 3211.7 | 19.4 | 15.7 | 1.7 | 12.1 | CS | - |
| 032640 KP | LG Uplus Corp | Korea | Communication Services | 13200 | 5,157 | 37 | 0.7% | 36.8 | 14.4 | 8.8 | 0.7 | 8.6 | B | 21.2 |
| 030200 KP | KT Corporation | Korea | Communication Services | 28600 | 6,682 | 34 | 0.6% | 12.1 | 14.2 | 9.5 | 0.5 | 5.3 | N | -12.6 |
| 052690 KP | KEPCO Engineering & Construction Co., Inc. | Korea | Industrials | 37200 | 1,272 | 6 | 0.6% | 21.1 | -15.6 | 57.9 | 2.8 | 4.8 | NC | - |
| 251270 KP | Netmarble Corp. | Korea | Communication Services | 141000 | 10,842 | 44 | 0.6% | 4.7 | 13.8 | 35.2 | 2.3 | 6.2 | S | -54.6 |
| 009240 KP | Hanssem Co., Ltd. | Korea | Consumer Discretionary | 117500 | 2,474 | 9 | 0.6% | 6.6 | 17.3 | 29.3 | 3.3 | 11.3 | B | 19.1 |
| 090430 KP | Amorepacific Corp. | Korea | Consumer Staples | 267000 | 13,965 | 54 | 0.5% | 896.8 | 31.6 | 52.6 | 3.9 | 7.6 | B | 2.6 |
| 064960 KP | SNT MOTIV CO., LTD | Korea | Consumer Discretionary | 59700 | 781 | 6 | 0.5% | 48.1 | 5.9 | 10.2 | 1.0 | 10.4 | NC | - |
| Median | | | | | 3,681 | 39 | 0.8% | 39 | 17 | 35 | 2 | 7 | | -13 |

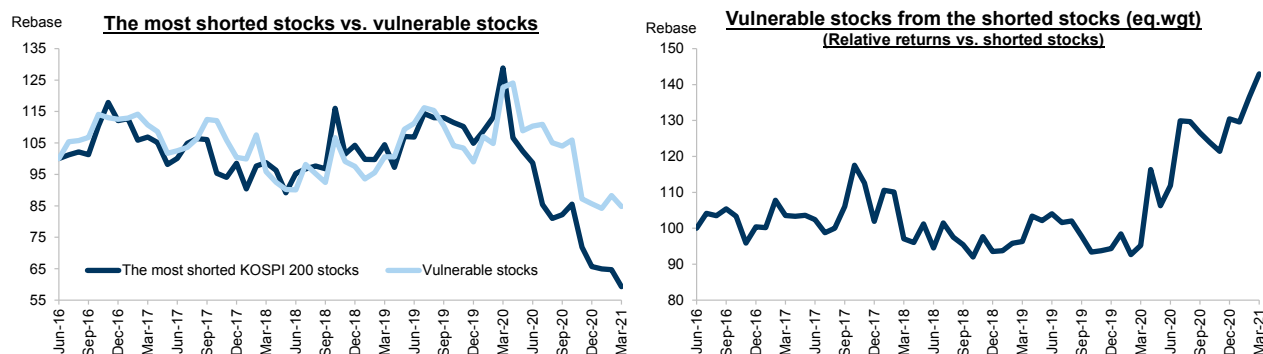
Note (1): Valuations and earnings growth forecasts are based on I/B/E/S estimates. Pricing as of Apr. 15, 2021

(2): B = Buy, N = Neutral, S = Sell, CS = Coverage Suspended. * denotes stocks in our regional Conviction list. GS/GH Ratings are those of our equity analysts.

Source: FactSet, Quantwise, Goldman Sachs Global Investment Research

In addition to the most shorted stocks, we also highlight a subset of shorted stocks within the KOSPI200 universe that have strongly outperformed during the short sale ban and have weak growth prospects. These may be vulnerable to renewed short selling once such activity resumes.

Exhibit 14: Vulnerable stocks with short-selling interest that have meaningfully outperformed the most shorted stocks; these may attract added short selling once the ban is lifted



Source: FactSet, Quantwise, Goldman Sachs Global Investment Research

Exhibit 15: We also screen a subset of shorted stocks within the KOSPI200 universe that have strongly outperformed during the short sale ban and have weak growth prospects

| Ticker | Company name | Market | Sector | Liquidity | | | >0% | >KOSPI2 | 15%> | | |
|---------------|-------------------------------------|--------|------------------------|--------------|----------------------------|------------------|----------------------------------|------------------------------|----------------------|------------|-------------|
| | | | | Quoted Price | Listed market cap (US\$mn) | 6M ADVT (US\$mn) | | | Growth and Valuation | | |
| | | | | | | | Short-Selling Balance to Mkt Cap | Returns since Short-Sale Ban | 21E EPSg | 22E EPSg | 21E P/E(X) |
| 000240 KP | HANKOOK & COMPANY CO., LTD. | Korea | Consumer Discretionary | 18900 | 1,573 | 8 | 0.01% | 86% | -12.0 | 5.0 | 11.6 |
| 086280 KP | HYUNDAI GLOVIS Co., Ltd. | Korea | Industrials | 184000 | 6,174 | 66 | 0.02% | 86% | 3.8 | 9.4 | 11.0 |
| 006800 KP | MIRAE ASSET SECURITIES CO., LTD. | Korea | Financials | 10100 | 5,741 | 23 | 0.30% | 88% | 6.9 | -2.9 | 7.8 |
| 097950 KP | CJ CheilJedang Corporation | Korea | Consumer Staples | 417000 | 5,617 | 27 | 0.31% | 91% | -17.5 | 13.9 | 11.8 |
| 020000 KP | Handsome Corp | Korea | Consumer Discretionary | 41950 | 924 | 4 | 0.06% | 103% | 3.1 | 6.2 | 10.5 |
| 071050 KP | KOREA INVESTMENT HOLDINGS CO LTD | Korea | Financials | 106000 | 5,285 | 35 | 0.22% | 106% | 13.9 | -4.3 | 6.3 |
| 185750 KP | Chong Kun Dang Pharmaceutical Corp. | Korea | Health Care | 148000 | 1,513 | 65 | 0.06% | 106% | -9.3 | 9.7 | 19.3 |
| 120110 KP | Kolon Industries, Inc. | Korea | Materials | 60800 | 1,468 | 20 | 0.10% | 138% | -26.0 | 12.6 | 12.3 |
| 039490 KP | Kiwoom Securities Co., Ltd | Korea | Financials | 136000 | 3,168 | 26 | 0.10% | 143% | 3.2 | -11.4 | 4.8 |
| 006280 KP | Green Cross Corporation | Korea | Health Care | 396000 | 4,141 | 143 | 0.13% | 236% | 13.9 | -17.2 | 48.9 |
| 001120 KP | LG International Corp | Korea | Industrials | 30950 | 1,073 | 11 | 0.26% | 259% | -63.1 | -6.5 | 10.9 |
| Median | | | | | 3,168 | 26 | 0.10% | 106% | 3.1 | 5.0 | 11.0 |

Note (1) : Valuations and earnings growth forecasts are based on I/B/E/S estimates. Pricing as of Apr, 15, 2021

Source: Quantivise, FactSet, Goldman Sachs Global Investment Research

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Reg AC

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