

美国降息利好光储，8月逆变器出口增长良好

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投资要点:

- **周观点:** 本周美联储宣布自 2020 年 3 月以来首次进行降息，将联邦基金利率目标区间下调 50 个基点，我们认为，此轮降息将加速光储系统平价，有望刺激海外光储需求的释放。国内方面，江苏省电力交易中心启动分布式新能源聚合参与绿电市场交易试点，明确分布式光伏、风电等新能源可通过直接或聚合方式参与市场，鼓励分布式新能源与聚合商使用电子营业执照办理入市相关业务。我们认为，此举为其他地区提供了光伏发电入市的范式，将加速光伏清洁能源替代进程。此外，光伏产业链方面，多晶硅致密料价格有所上涨，硅片、电池、组件等环节价格保持平稳，8 月逆变器出口金额同环比增长明显。我们认为目前市场整体处于周期底部，政策支持导向明确，长期趋势看好。
- **本周组合:** 海外增长趋势明确、且受益于后续可能出现的欧洲降息周期（**阳光电源、锦浪科技、固德威**），异质结等新技术持续取得进步（**通威股份、迈为股份**），行业格局稳定的辅材龙头（**福斯特、福莱特**）；OBB 电池技术推广受益的设备材料商（**奥特维、宇邦新材**）。
- **8 月逆变器出口同环比增长明显，组件部分承压。** 2024 年 8 月我国逆变器出口金额 8.61 亿美元（同比+24.9%，环比+9.5%），同环比增长明显。出口逆变器数量 528.76 万台。2024 年 8 月我国组件出口金额 22.3 亿美元（同比-27%，环比-6%）。
- **江苏启动分布式新能源聚合参与绿电市场交易试点。** 9 月 18 日，江苏省电力交易中心发布《关于开展江苏分布式新能源聚合参与省内绿电市场交易试点入市相关工作的通知》。通知明确分布新能源聚合参与绿电市场的经营主体和需要满足的条件，鼓励分布式新能源与聚合商使用电子营业执照办理入市相关业务。
- **多晶硅致密料价格上涨，其他环节平稳。** Infolink Consulting 9 月 18 日最新报价，致密料均价为 39.5 元/kg，环比上涨 1.3%；硅片端，P 型 182/210 硅片均价分别为 1.25、1.70 元/片；N 型 182-183.75/182*210/210 硅片均价分别为 1.08、1.23、1.50 元/片，均环比持平；电池端，PERC 电池 182/210 均价分别为 0.28、0.285 元/W，环比持平；TOPCON 电池 182/210 均价 0.28、0.28 元/W，环比持平；组件端，双玻 PERC182*182-210mm、210mm、双玻 TOPCON 和 HJT 四种组件均价分别为 0.73、0.74、0.75、0.88 元/W，双玻 PERC182/210mm 环比持平；中国集中式、分布式均价分别为 0.73、0.75 元/W；PREC 组件印度本土产、美国、欧洲组件分别为 0.17、0.25、0.10 美元/W，环比持平；TOPCON 组件印度、美国、欧洲均价 0.10、0.28、0.11 元/W，环比持平；辅材端，3.2mm/2.0mm 镀膜光伏玻璃均价分别为 22、13 元/平方米，环比持平。
- **最新一周涨跌幅排名前位，光伏板块估值偏低。** 我们选取 52 家光伏企业作为光伏板块的样本公司，与其他板块做对比。根据 Wind 数据，光伏板块最近一周涨跌幅-1.72%，跑输沪深 300 指数成份 2.76 个百分点，相比 SW 行业分类各板块涨幅排名靠后。年初以来光伏板块累计涨跌幅为-18.28%，跑输沪深 300 指数成份 25.26 个百分点，相比 SW 行业各类板块排名靠后。光伏板块 TTM-整体法估值为 21.71 倍，与 SW 行业分类各板块相比，排名位于前部。光伏板块 TTM 整体法估值自 21 年底以来持续下降，目前略有回升趋势，光伏板块相对沪深 300 的估值溢价 2.68 倍，仍处于历史中下水平。
- **风险提示。** 行业政策风险；竞争加剧风险；新技术风险；产品价格波动风险。

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1. 光伏产业链价格跟踪

根据 Infolink Consulting 公众号，最新光伏价格更新如下：

多晶硅：致密料均价为 40 元/kg，环比上涨 1.3%；

硅片：P 型 182-183.75/210 硅片均价分别为 1.25、1.70 元/片，环比均持平；N 型 182-183.75/182*210/210 硅片均价分别为 1.08、1.23、1.50 元/片，环比均持平；

电池：PERC 电池 182-183.75/210 均价分别为 0.28、0.285 元/W，环比持平；TOPCON 电池 182-183.75/182*210 均价 0.28、0.28 元/W，环比均持平；

组件：双玻 PERC182*182-210mm、双玻 PERC210mm、双玻 TOPCON 和 HJT 四种组件均价分别为 0.73、0.74、0.75、0.88 元/W，双玻 PERC182*182-210mm 和 PERC210mm 环比持平；中国集中式、分布式均价分别为 0.73、0.75 元/W，环比持平；PREC 组件印度本土产、美国、欧洲组件分别为 0.17、0.25、0.10 美元/W，环比持平；TOPCON 组件印度、美国、欧洲均价 0.1、0.28、0.11 元/W，环比持平；

玻璃：3.2mm/2.0mm 镀膜光伏玻璃均价分别为 22、13 元/平方米，环比持平。

表 1 光伏产业链周度价格 (Infolink Consulting — 2024.9.18)

	最高价	最低价	均价	涨跌幅(%)	涨跌(元)
多晶硅					
多晶硅致密料 (元/kg)	43	37.5	40	1.3%	0.5
硅片					
单晶 P 型硅片-182-183.75mm/150μm (元/片)	1.25	1.25	1.25	0.0%	0
单晶 P 型硅片-210mm/150μm (元/片)	1.75	1.70	1.70	0.0%	0
单晶 N 型硅片-182-183.75mm /130μm (元/片)	1.08	1.06	1.08	0.0%	0
单晶 N 型硅片-182*210mm/130μm (元/片)	1.25	1.23	1.23	0.0%	0
单晶 N 型硅片-210mm/130μm (元/片)	1.50	1.50	1.50	0.0%	0
电池片					
单晶 PERC182-183.75mm/23.1% (元/W)	0.29	0.27	0.28	0.0%	0
单晶 PERC 电池片-210mm/23.1% (元/W)	0.29	0.28	0.285	0.0%	0
TOPCon 电池片-182-183.75mm/24.7% (元/W)	0.29	0.27	0.28	0.0%	0
TOPCon 电池片-182*210mm/24.7% (元/W)	0.29	0.27	0.28	0.0%	0
组件					
182*182-210mm 单晶 PERC 组件 (元/W)	0.79	0.65	0.73	0.0%	0
210mm 单晶 PERC 组件 (元/W)	0.80	0.68	0.74	0.0%	0
182*182-210mm 单晶 TOPCon 组件 (元/W)	0.80	0.67	0.75	0.0%	0
210mm 单晶 HJT 组件 (元/W)	0.90	0.80	0.88	0.0%	0
中国项目-集中式项目 (元/W)	0.75	0.68	0.73	0.0%	0
中国项目-分布式项目 (元/W)	0.80	0.67	0.75	0.0%	0
单晶 PERC 组件-印度本土产 (\$/W)	0.18	0.15	0.17	0.0%	0
单晶 TOPCon 组件-印度 (\$/W)	0.11	0.08	0.10	0.0%	0
单晶 PERC 组件-美国 (\$/W)	0.30	0.20	0.25	0.0%	0
单晶 TOPCon 组件-美国 (\$/W)	0.30	0.22	0.28	0.0%	0
单晶 PERC 组件-欧洲 (\$/W)	0.18	0.08	0.10	0.0%	0
单晶 TOPCon 组件-欧洲 (\$/W)	0.12	0.09	0.11	0.0%	0
组件辅材					
光伏玻璃 3.2mm 镀膜 (元/m ²)	22.00	21.50	22.00	0.0%	0
光伏玻璃 2.0mm 镀膜 (元/m ²)	13.00	12.50	13.00	0.0%	0

资料来源：Infolink Consulting 公众号，HTI

根据中国有色金属工业协会硅业分会微信公众号价格统计：本周（9月18号）多晶硅 N 型棒状硅价格出现小幅上调，N 型多晶硅成交价格区间维持至 3.90-4.40 万元/吨，成交均价调整为 4.17 万元/吨，环比上涨 0.24%。其余品种报价维持平稳。

本周 N 型硅料新单价格出现上调，其主要原因为中小企业目前多以观望为主，实际成交较为有限，现阶段市场大单成交多以龙头企业为主，推涨市场均价。目前多晶硅企业成交价格出现分歧，成交价格呈现两极分化的局面。本周出现实质性的大单成交，推测下游企业有重建库存的潜在可能。

表 2 光伏多晶硅周度价格（硅业分会——2024.9.18；万元/吨）

项目	最高价	最低价	均价	波动	波动%
N 型料成交价	4.40	3.90	4.16	+0.01	+0.24%
复投料成交价	3.90	3.50	3.64	0	0.00%
单晶致密料成交价	3.60	3.30	3.45	0	0.00%
单晶菜花料成交价	3.30	3.00	3.14	0	0.00%
N 型颗粒硅	3.75	3.65	3.73	0	0.00%

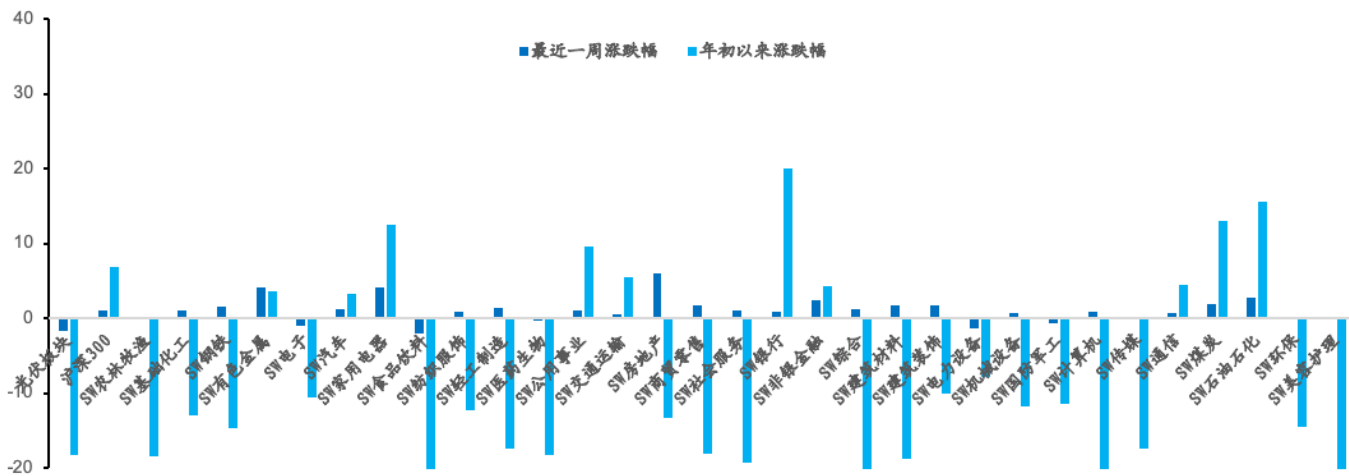
资料来源：中国有色金属工业协会硅业分会微信公众号，HTI

2. 板块涨跌幅及估值情况

我们选取 52 家光伏企业作为光伏板块的样本公司，与其他板块做对比。

根据 Wind 数据，光伏板块最近一周涨跌幅-1.72%，跑输沪深 300 指数成份 2.76 个百分点，相比 SW 行业分类各板块涨幅排名靠后。年初以来光伏板块累计涨跌幅为-18.28%，跑输沪深 300 指数成份 25.26 个百分点，相比 SW 行业各类板块排名靠后。

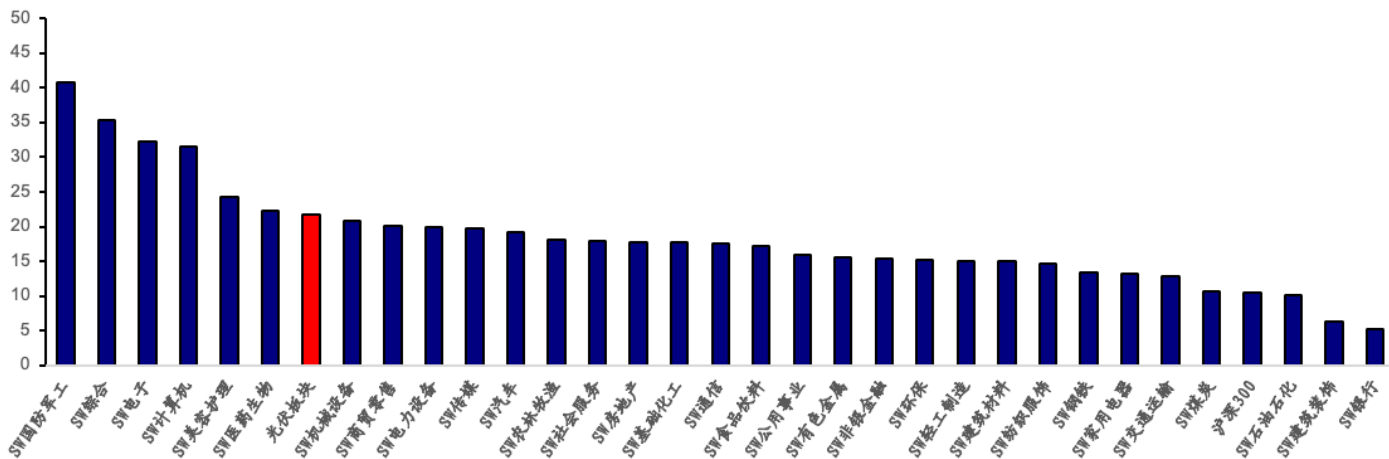
图1 各板块最新一周涨跌幅对比——总市值加权平均（%）



资料来源：Wind, HTI

估值方面，光伏板块 2024 年 9 月 20 日 TTM-整体法估值为 21.78 倍，与 SW 行业分类各板块相比，排名位于前部。

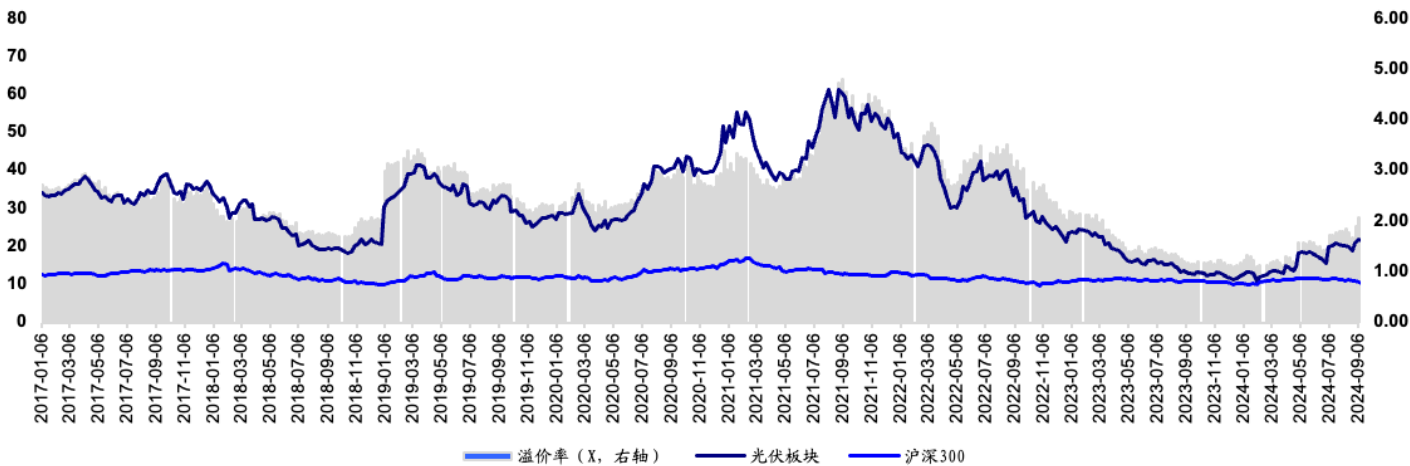
图2 各板块 2024 年 9 月 20 日 TTM 整体法估值 (X)



资料来源: Wind, HTI

从估值变化趋势来看，光伏板块 TTM 整体法估值自 21 年底以来持续下降，目前略有回升趋势，光伏板块相对沪深 300 的估值溢价 2.68 倍，仍处于历史中下水平。

图3 光伏板块历史估值及与沪深 300 对比 (TTM 整体法)



资料来源: Wind, HTI

3. 重点事项

江苏启动分布式新能源聚合参与绿电市场交易试点

9月18日，江苏省电力交易中心发布《关于开展江苏分布式新能源聚合参与省内绿电市场交易试点入市相关工作的通知》。通知明确，分布新能源聚合参与绿电市场的经营主体为分布式新能源、分布式新能源聚合商、电力用户、售电公司等，分布式新能源可选择直接参与或者由聚合商聚合参与绿电市场。文件指出，需要满足的分布式新能源条件包括：具有法人资格、财务独立核算、能够独立承担民事责任；依法取得发电项目核准或备案文件；依法豁免发电类电力业务许可证；具备单独计量或相应计量能力和替代技术手段，满足电力市场计量结算要求；已签订自然人、非自然人分布式新能源购售电合同；已签订新能源场站并网调度协议，仅指6千伏及以上并网的分布式电源。文件鼓励分布式新能源与聚合商使用电子营业执照办理入市相关业务。

4. 风险提示

- (1) 行业政策波动风险；
- (2) 竞争加剧风险；
- (3) 新技术替代风险；
- (4) 产品价格波动风险。

APPENDIX 1

Summary

Investment Highlights:

Weekly View: The Fed announced its first rate cut since March 2020, lowering the federal funds rate target range by 50 basis points. We believe this will accelerate the parity of PV storage systems and stimulate overseas demand. Domestically, Jiangsu Power Exchange Center launched a pilot for distributed new energy aggregation to participate in the green electricity market, allowing distributed PV and wind power to enter the market directly or through aggregation. This sets a precedent for other regions and will accelerate the transition to clean energy. In the PV industry chain, polysilicon dense material prices rose, while prices for silicon wafers, cells, and modules remained stable. Inverter export value in August increased significantly both YoY and MoM. We believe the market is at a cyclical bottom with clear policy support and a positive long-term trend.

This Week's Portfolio: Companies with clear overseas growth trends and potential benefits from a possible European rate cut cycle (Sungrow Power Supply, Ginlong Technologies, GoodWe Technologies Co Ltd), companies making progress in new technologies like heterojunction (Tongwei, Suzhou Maxwell Technologies), leading auxiliary material companies with stable industry positions (Hangzhou First Applied Material, Flat Glass), and equipment material suppliers benefiting from OBB cell technology promotion (Wuxi Autowell Technology, YourBest New-type Materials).

Inverter exports in August increased significantly YoY and MoM, while module exports faced pressure. In August 2024, China's inverter export value was USD 861 million (YoY +24.9%, MoM +9.5%), with 5.29 million units exported. Module export value was USD 2.23 billion (YoY -27%, MoM -6%).

Jiangsu launched a pilot for distributed new energy aggregation to participate in the green electricity market. On September 18, Jiangsu Power Exchange Center issued a notice on the pilot work for distributed new energy aggregation to participate in the provincial green electricity market, clarifying the operating entities and conditions for market entry, and encouraging the use of electronic business licenses for related transactions.

Polysilicon dense material prices rose, other segments stable. According to Infolink Consulting's latest quote on September 18, the average price of dense material was RMB 39.50/kg, up 1.3% MoM. For silicon wafers, the average prices for P-type 182/210 wafers were RMB 1.25 and 1.70 per piece, respectively, and for N-type 182-183.75/182*210/210 wafers, the average prices were RMB 1.08, 1.23, and 1.50 per piece, respectively, all stable MoM. For cells, the average prices for PERC cells 182/210 were RMB 0.28 and 0.285 per watt, respectively, and for TOPCON cells 182/210, the average price was RMB 0.28 per watt, all stable MoM. For modules, the average prices for double-glass PERC 182*182-210mm, 210mm, double-glass TOPCON, and HJT modules were RMB 0.73, 0.74, 0.75, and 0.88 per watt, respectively, all stable MoM. The average prices for centralized and distributed modules in China were RMB 0.73 and 0.75 per watt, respectively. The average prices for PERC modules produced in India, the USA, and Europe were USD 0.17, 0.25, and 0.10 per watt, respectively, all stable MoM. The average prices for TOPCON modules in India, the USA, and Europe were RMB 0.10, 0.28, and 0.11 per watt, respectively, all stable MoM. For auxiliary materials, the average prices for 3.2mm/2.0mm coated PV glass were RMB 22 and 13 per square meter, respectively, all stable MoM.

Latest Weekly Performance Rankings: The PV sector's valuation is relatively low. We selected 52 PV companies as sample companies for the PV sector and compared them with other sectors. According to Wind data, the PV sector's weekly rise and fall was -1.72%, underperforming the CSI 300 index by 2.76 percentage points. The PV sector's cumulative rise and fall since the beginning of the year was -18.28%, underperforming the CSI 300 index by 25.26 percentage points. The PV sector's TTM overall approach valuation was 21.71 times, ranking at the forefront compared to other SW industry sectors. The PV sector's TTM overall approach valuation has been declining since the end of 2021 and is currently showing a slight upward trend. The PV sector's valuation premium relative to the CSI 300 is 2.68 times, still at a historically low level.

Risk Warning: Industry policy risk; intensified competition risk; new technology risk; product price fluctuation risk.

附录 APPENDIX

重要信息披露

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中性，未来 12-18 个月内预期相对基准指数变化不大，基准定义如下。根据

FINRA/NYSE 的评级分布规则，我们会将中性评级划入持有这一类别。

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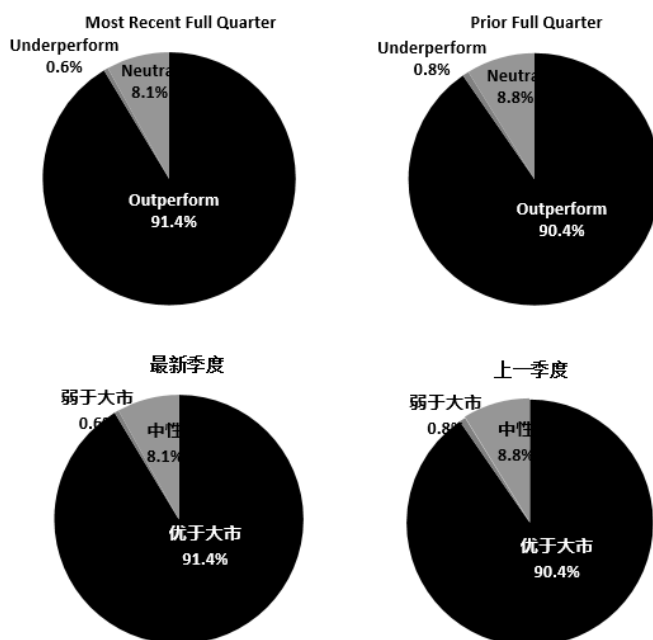
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Benchmarks for each stock's listed region are as follows: Japan – TOPIX, Korea – KOSPI, Taiwan – TAIEX, India – Nifty100, US – SP500; for all other China-concept stocks – MSCI China.



截至 2024 年 6 月 30 日海通国际股票研究评级分布

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投资银行客户*	3.1%	4.8%	0.0%

*在每个评级类别里投资银行客户所占的百分比。

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买入，未来 12-18 个月内预期相对基准指数涨幅在 10%以上，基准定义如下

中性，未来 12-18 个月内预期相对基准指数变化不大，基准定义如下。根据 FINRA/NYSE 的评级分布规则，我们会将中性评级划入持有这一类别。

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各地股票基准指数：日本 – TOPIX, 韩国 – KOSPI, 台湾 – TAIEX, 印度 – Nifty100; 其他所有中国概念股 – MSCI China.

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HTI Equity Research Coverage	91.4%	8.1%	0.6%
IB clients*	3.1%	4.8%	0.0%

*Percentage of investment banking clients in each rating category.

BUY, Neutral, and SELL in the above distribution correspond to our current ratings of Outperform, Neutral, and Underperform.

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SELL: The stock's total return over the next 12-18 months is expected to be below the return of its relevant broad market benchmark, as indicated below.

Benchmarks for each stock's listed region are as follows: Japan – TOPIX, Korea – KOSPI, Taiwan – TAIEX, India – Nifty100; for all other China-concept stocks – MSCI China.

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