

万丰奥威 Zhejiang Wanfeng Auto Wheel (002085 CH)

首次覆盖：铝镁深加工龙头，乘通航发展东风

Deep Processing Leader of Aluminum and Magnesium, Ride on the Development of General Aviation: Initiation

观点聚焦 Investment Focus

首次覆盖优于大市 Initiate with OUTPERFORM

评级	优于大市 OUTPERFORM
现价	Rmb6.00
目标价	Rmb9.30
市值	Rmb13.12bn / US\$2.03bn
日交易额 (3 个月均值)	US\$19.24mn
发行股票数目	2,187mn
自由流通股 (%)	42%
1 年股价最高最低值	Rmb7.91-Rmb5.09

注：现价 Rmb6.00 为 2021 年 9 月 28 日收盘价



资料来源：Factset

	1mth	3mth	12mth
绝对值	17.9%	7.8%	-13.0%
绝对值 (美元)	18.3%	7.7%	-8.1%
相对 MSCI China	20.3%	26.9%	-6.8%

(Rmb mn)	Dec-20A	Dec-21E	Dec-22E	Dec-23E
营业收入	10,699	11,550	13,280	15,462
(+/-)	-15%	8%	15%	16%
净利润	566	550	670	875
(+/-)	-37%	-3%	22%	31%
全面摊薄 EPS (Rmb)	0.26	0.25	0.31	0.40
毛利率	20.2%	19.8%	20.5%	21.4%
净资产收益率	10.6%	9.6%	10.8%	12.8%
市盈率	23	24	20	15

资料来源：公司信息, HTI

(Please see APPENDIX 1 for English summary)

股权结构：外延式收购引领公司步入快速增长通道。

公司通过收购公司的方式，成为了“全球汽车金属轻量化推动者”。在轻量化方面，公司通过收购万丰摩轮（100%）、上海达克罗（100%）、万丰镁瑞丁（100%）和无锡雄伟（95%）分别进军铝合金摩托车轮毂、环保涂覆、镁合金零部件和高强度钢冲压件领域。

公司亦通过收购的形式进军通用飞机行业，目前已成为全球前三大通航飞机制造商。2020 年 4 月，公司收购万丰飞机工业 55% 股权，使得公司进入通用航空先进飞机制造业的新蓝海。2021 年 2 月，国资青岛城投入驻万丰飞机工业，并持有其 35% 的股权。2021 年 6 月，北京航发基金收购剩余 10% 股权。我们认为，引入国资企业和专业航空投资机构作为股东，为万丰飞机工业的快速发展铺平了道路。

产业链：已形成“双引擎”驱动战略。

2020 年，公司正式确立以“镁合金-铝合金-轻质高强度钢”金属材料轻量化应用为主线的新发展格局，实施“双引擎”驱动战略：成为“全球汽车金属轻量化推动者”和“通用飞机创新制造企业的全球领跑者”。

公司轻量化材料生产规模全球领先，镁合金和铝合金产业实现行业全球领跑，模具冲压件和环保涂覆产业实现行业国内领跑。

财务数据：截至 2021 年 6 月 30 日，公司在手现金为 16 亿，资产负债率为 53%，净资产为 76 亿，净利润率 5%，ROE 为 4%，期间费用率为 12%，净利润为 2 亿，经营性净现金 3 亿，投资活动产生的现金为-2 亿，筹资活动产生的现金为-3 亿，净现金流减净利润为-3 亿。

盈利预测与估值：我们预计公司 2021-2023 年 EPS 分别为 0.25 元、0.31 元、0.40 元。参考可比公司给予明年 30 倍 PE 估值，合理价值 9.30 元。首次覆盖给予优于大市评级。

风险提示：镁价上涨影响原材料采购；飞机业务市占率未及预期。

施毅 Yi Shi
yi.shi@htisec.com

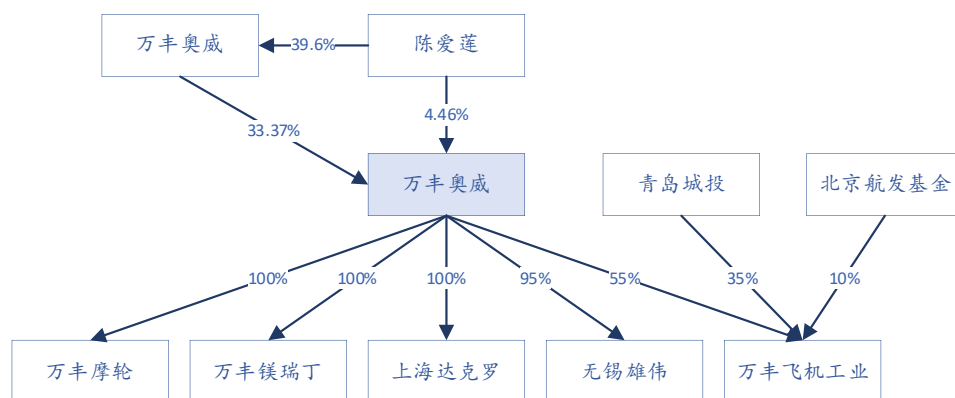
一、股权结构：外延式收购引领公司步入快速增长通道

浙江万丰奥威汽轮股份有限公司（万丰奥威）始创于 2001 年，总部位于浙江新昌。截至 2021 年二季度，公司的控股股东为万丰奥特控股集团，其持有公司 33.37% 的股份；公司的实际控制人是陈爱莲，其持有公司 4.46% 的股份，并持有万丰集团 39.6% 的股份。

公司通过收购公司的方式，成为了“全球汽车金属轻量化推动者”。在轻量化方面，公司通过收购万丰摩轮（100%）、上海达克罗（100%）、万丰镁瑞丁（100%）和无锡雄伟（95%）分别进军铝合金摩托车轮毂、环保涂覆、镁合金零部件和高强度钢冲压件领域。

公司亦通过收购的形式进军通用飞机行业，目前已成为全球前三大通航飞机制造商。2020 年 4 月，公司收购万丰飞机工业 55% 股权，使得公司进入通用航空先进飞机制造业的新蓝海。2021 年 2 月，国资青岛城投入驻万丰飞机工业，并持有其 35% 的股权。2021 年 6 月，北京航发基金收购剩余 10% 股权。我们认为，引入国资企业和专业航空投资机构作为股东，为万丰飞机工业的快速发展铺平了道路。

图1 万丰奥威股权结构（截至 2021 年 6 月 30 日）



资料来源：Wind，海通国际

二、产业链：已形成“双引擎”驱动战略

2020 年，公司正式确立以“镁合金-铝合金-轻质高强度钢”金属材料轻量化应用为主线的新发展格局，实施“双引擎”驱动战略：成为“全球汽车金属轻量化推动者”和“通用飞机创新制造企业的全球领跑者”。

公司轻量化材料生产规模全球领先，镁合金和铝合金产业实现行业全球领跑，模具冲压件和环保涂覆产业实现行业国内领跑。铝合金：已形成 4000 多万套铝合金车轮的产能，是全球最大的铝合金轮毂供应商之一，其中摩托车轮毂产量约占全球市场份额的 1/3。镁合金：子公司万丰镁瑞丁在大型镁合金压铸件有绝对的竞争优势，4000 吨位后掀背门板已经在 2015 年实现供应，其产品在北美市场占有率达 65% 以上。模具冲压件：已成为全球前十大汽车冲压部件供应商。环保涂覆：已成为中国最大的涂覆加工基地之一。

图2 万丰奥威全球产业布局



资料来源：万丰奥威 2020 年报，海通国际

表 1 万丰奥威轻量化战略相关业务

技术与产品	对应子公司	产能	成就
铝合金汽车轮毂	-	1800 万套	全球最大铝合金轮毂供应商之一
铝合金摩托车轮毂	万丰摩轮	2200 万件	全球最大铝合金轮毂供应商之一，约占全球市场份额的 1/3
镁合金零部件	万丰镁瑞丁	配备 70 台 500 吨~4500 吨各类型号的压铸机，其中 30 台为 2500 吨以上特大型压铸机	全球最大镁合金零部件供应商之一
高强度钢冲压件	无锡雄伟	-	全球前十大汽车冲压部件供应商
环保涂覆	上海达克罗	7 万吨	全国最大环保涂覆加工基地之一

资料来源：万丰奥威官网，海通国际

公司已成为全球前三大通航飞机制造商。公司全球拥有 3 个飞机制造基地（中国、奥地利、加拿大）、3 个飞机设计研发中心（奥地利、加拿大、捷克）、1 个飞机制造工程中心（中国）。公司现已开始钻石 DA40 飞机、DF 轻型运动类飞机整机生产。公司拥有轻型运动飞机系列以及钻石系列飞机 DA20、DA40、DA42、DA62 和 DA50、DART 等 8 种基本型、16 款机型的知识产权。

万丰飞机工业在青岛设立全资子公司并投资年产 220 架钻石飞机项目（120 架 DA50 和 100 架 HK36）。公司预计项目建设期 7 个月，投资回收期为 5.8 年，产能会陆续释放过程，公司预计项目建成达产后销售收入 12.8 亿元/年，净利润 1.7 亿元/年。目前，项目 DA50 已完成 TC 取证，国内 VTC 的申请顺利进行。

公司钻石飞机参加 2021 年 9 月 28 日至 10 月 3 日第十三届中国珠海航展，参展机型有钻石 DA20、DA40、DA42、DA50、DA62 和 HEMEP 混合动力飞机 6 款机型。

表 2 2020 年万丰奥威主营业务分析

	收入（万元）	毛利（万元）	毛利率
汽车零部件制造	906883	167592	18.48%
飞机制造	163039	48374	29.67%

资料来源：万丰奥威 2020 年年报，海通国际

三、财务数据

截至 2021 年 6 月 30 日，公司在手现金为 16 亿元，资产负债率为 53%，净资产为 76 亿元，净利润率 5%，ROE 为 4%，期间费用率为 12%，净利润为 2 亿元，经营性净现金 3 亿元，投资活动产生的现金为-2 亿元，筹资活动产生的现金为-3 亿元，净现金流减净利润为-3 亿元。

表 3 万丰奥威财务数据（截至 2021 年 6 月 30 日）

	数值
在手现金（亿元）	16
资产负债率%	53
净资产（亿元）	76
净利润率%	5
ROE%	4
期间费用率%	12
净利润（亿元）	2
经营性净现金（亿元）	3
投资活动产生的现金（亿元）	-2
筹资活动产生的现金（亿元）	-3
净现金流-净利润（亿元）	-3

资料来源：Wind，海通国际

表 4 万丰奥威过去 5 年盈利表

	净利（亿元）	扣非净利（亿元）	净利率%	ROE
2016/12/31	9.6	8.9	11.4	20.4
2017/12/31	9.0	7.7	9.8	15.9
2018/12/31	9.6	7.3	9.1	15.5
2019/12/31	7.7	5.8	7.5	12.3
2020/12/31	5.7	4.2	7.1	9.8

资料来源：Wind，海通国际

四、盈利预测与估值

我们预计公司 2021-2023 年 EPS 分别为 0.25 元、0.31 元、0.40 元。参考可比公司给予明年 30 倍 PE 估值，合理价值 9.30 元。首次覆盖给予优于大市评级。

表 5 可比公司估值表（截至 2021 年 9 月 28 日）

	代码	归母净利润 2022E	市值（亿元）	市盈率 2022E
云海金属	002182	5.11	144	28.1
中简科技	300777	4.82	215	44.6
立中集团	300428	7.86	106	13.5
平均值				28.7

资料来源：Wind，海通国际

五、风险提示

镁价上涨影响原材料采购；飞机业务市占率未及预期。

财务报表分析和预测

主要财务指标	2020	2021E	2022E	2023E	利润表 (百万元)	2020	2021E	2022E	2023E
每股指标 (元)					营业总收入	10,699	11,550	13,280	15,462
每股收益	0.26	0.25	0.31	0.40	营业成本	8,539	9,263	10,552	12,153
每股净资产	2.45	2.61	2.82	3.13	毛利率%	20.2%	19.8%	20.5%	21.4%
每股经营现金流	0.79	-0.84	0.22	0.29	营业税金及附加	54	58	67	77
每股股利	0.50	0.09	0.09	0.09	营业税金率%	0.5%	0.5%	0.5%	0.5%
价值评估 (倍)					营业费用	203	219	252	294
P/E	23.19	23.87	19.60	15.00	营业费用率%	1.9%	1.9%	1.9%	1.9%
P/B	2.45	2.30	2.13	1.92	管理费用	591	635	731	851
P/S	1.23	1.14	0.99	0.85	管理费用率%	5.5%	5.5%	5.5%	5.5%
EV/EBITDA	10.29	16.54	14.11	11.91	EBIT	975	996	1,248	1,584
股息率%	8.3%	1.5%	1.5%	1.5%	财务费用	269	249	312	351
盈利能力指标 (%)					财务费用率%	2.5%	2.2%	2.4%	2.3%
毛利率	20.2%	19.8%	20.5%	21.4%	资产减值损失	-10	0	0	0
净利率	5.3%	4.8%	5.0%	5.7%	投资收益	1	9	7	10
净资产收益率	10.6%	9.6%	10.8%	12.8%	营业利润	796	860	1,065	1,383
资产回报率	3.5%	2.8%	3.0%	3.6%	营业外收支	33	0	0	0
投资回报率	7.0%	5.5%	6.3%	7.2%	利润总额	829	860	1,065	1,383
盈利增长 (%)					EBITDA	1,758	1,201	1,469	1,800
营业收入增长率	-15.3%	8.0%	15.0%	16.4%	所得税	64	155	192	249
EBIT 增长率	-20.7%	2.2%	25.2%	26.9%	有效所得税率%	7.7%	18.0%	18.0%	18.0%
净利润增长率	-36.8%	-2.8%	21.8%	30.6%	少数股东损益	199	155	204	260
偿债能力指标					归属母公司所有者净利润	566	550	670	875
资产负债率	53.0%	59.7%	60.7%	60.7%					
流动比率	1.06	1.04	1.04	1.06	资产负债表 (百万元)	2020	2021E	2022E	2023E
速动比率	0.69	0.82	0.80	0.83	货币资金	1,675	0	0	0
现金比率	0.25	0.00	0.00	0.00	应收账款及应收票据	2,315	7,468	8,622	10,025
经营效率指标					存货	2,310	2,080	2,531	2,854
应收帐款周转天数	78.97	75.99	76.99	76.65	其它流动资产	710	857	862	941
存货周转天数	98.73	81.98	87.56	85.70	流动资产合计	7,009	10,405	12,016	13,820
总资产周转率	0.67	0.58	0.60	0.63	长期股权投资	1	1	1	1
固定资产周转率	2.20	2.35	2.67	3.08	固定资产	4,872	4,922	4,972	5,022
					在建工程	259	259	259	259
					无形资产	1,665	2,146	2,709	3,244
					非流动资产合计	8,964	9,471	10,091	10,674
现金流量表 (百万元)	2020	2021E	2022E	2023E	资产总计	15,973	19,876	22,107	24,494
净利润	566	550	670	875	短期借款	3,544	4,871	5,732	6,433
少数股东损益	199	155	204	260	应付票据及应付账款	1,128	3,244	3,716	4,272
非现金支出	801	205	222	216	预收账款	0	14	11	15
非经营收益	178	248	305	341	其它流动负债	1,940	1,882	2,110	2,301
营运资金变动	-8	-3,000	-914	-1,052	流动负债合计	6,613	10,011	11,569	13,021
经营活动现金流	1,736	-1,842	486	639	长期借款	1,179	1,179	1,179	1,179
资产	-422	-712	-842	-799	其它长期负债	672	672	672	672
投资	10	0	0	0	非流动负债合计	1,851	1,851	1,851	1,851
其他	1,486	9	7	10	负债总计	8,464	11,862	13,420	14,872
投资活动现金流	1,075	-703	-835	-789	实收资本	2,187	2,187	2,187	2,187
债权募资	4,529	1,327	861	701	归属于母公司所有者权益	5,354	5,703	6,173	6,848
股权募资	0	0	0	0	少数股东权益	2,155	2,310	2,514	2,774
其他	-7,359	-458	-512	-551	负债和所有者权益合计	15,973	19,876	22,107	24,494
融资活动现金流	-2,831	870	348	149					
现金净流量	-14	-1,675	0	0					

备注: (1) 表中计算估值指标的收盘价日期为 9 月 29 日; (2) 以上各表均为简表

资料来源: 公司年报 (2020), 海通国际

APPENDIX 1**Summary**

Shareholding Structure: Outbound acquisitions lead the company into a rapid growth path.

The company has become a "global driver of lightweight metal for automobiles" through the acquisition of companies. In terms of lightweighting, the company has entered the aluminum alloy motorcycle wheel, environmental protection coating, magnesium alloy parts and high-strength steel stamping parts by acquiring Wanfeng Motorcycle (100%), Shanghai Dacron (100%), Wanfeng Magnesium Riding (100%) and Wuxi Xiongwei (95%) respectively.

In April 2020, the Company acquired 55% equity interest in Wanfeng Aircraft Industry, which enabled the Company to enter the new blue ocean of advanced aircraft manufacturing for general aviation. In February 2021, the state-owned Qingdao City Capital invested in Wanfeng Aircraft Industry and held 35% equity interest in it. In June 2021, the Beijing Aviation Development Fund acquired the remaining 10% equity. We believe that the introduction of state-owned enterprises and professional aviation investment institutions as shareholders paves the way for the rapid development of Wanfeng Aircraft Industry.

Industry chain: A "double-engine" driving strategy has been formed.

In 2020, the company formally established the new development pattern of "magnesium alloy - aluminum alloy - lightweight high-strength steel" metal material lightweight application as the main line, and implemented the "double engine" driving strategy: to become the "global automotive metal Lightweight driver" and "global leader of general aircraft innovative manufacturing enterprise".

The company is a global leader in the production scale of lightweight materials, a global leader in magnesium alloy and aluminum alloy industry, and a domestic leader in mold stamping parts and environmental protection coating industry.

Financial data: As of June 30, 2021, the company had cash on hand of 1.6 billion yuan, gearing ratio of 53%, net assets of 7.6 billion yuan, net profit margin of 5%, ROE of 4%, period expense ratio of 12%, net profit of 200 million yuan, net cash from operations of 300 million yuan, cash from investing activities of -200 million yuan, cash from financing activities of -300 million yuan, net cash flow less net profit of -300 million yuan.

Earnings forecast and valuation: We expect the company's eps to be 0.25 yuan, 0.31 yuan and 0.40 yuan for 2021-2023, respectively. Referring to comparable companies to give 30 times PE valuation next year, we initiate with an "OUTPERFORM" rating with the reasonable value of 9.30 yuan.

Risks: Magnesium price increase affects raw material procurement; the market share of aircraft business is not as expected.

附录 APPENDIX

重要信息披露

本研究报告由海通国际分销，海通国际是由海通国际研究有限公司(HTIRL)，Haitong Securities India Private Limited (HSIPL)，Haitong International Japan K.K. (HTIJKK)和海通国际证券有限公司(HTISCL)的证券研究团队所组成的全球品牌，海通国际证券集团(HTISG)各成员分别在其许可的司法管辖区内从事证券活动。

IMPORTANT DISCLOSURES

This research report is distributed by Haitong International, a global brand name for the equity research teams of Haitong International Research Limited ("HTIRL"), Haitong Securities India Private Limited ("HSIPL"), Haitong International Japan K.K. ("HTIJKK"), Haitong International Securities Company Limited ("HTISCL"), and any other members within the Haitong International Securities Group of Companies ("HTISG"), each authorized to engage in securities activities in its respective jurisdiction.

HTIRL 分析师认证 Analyst Certification:

我，施毅，在此保证 (i) 本研究报告中的意见准确反映了我们对本研究中提及的任何或所有目标公司或上市公司的个人观点，并且 (ii) 我的报酬中没有任何部分与本研究报告中表达的具体建议或观点直接或间接相关；及就此报告中所讨论目标公司的证券，我们（包括我们的家属）在其中均不持有任何财务利益。I, Yi Shi, certify that (i) the views expressed in this research report accurately reflect my personal views about any or all of the subject companies or issuers referred to in this research and (ii) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report; and that I (including members of my household) have no financial interest in the security or securities of the subject companies discussed.

利益冲突披露 Conflict of Interest Disclosures

海通国际及其某些关联公司可从事投资银行业务和/或对本研究中的特定股票或公司进行做市或持有自营头寸。就本研究报告而言，以下是有关该等关系的披露事项（以下披露不能保证及时无遗漏，如需了解及时全面信息，请发邮件至 ERD-Disclosure@htisec.com）

HTI and some of its affiliates may engage in investment banking and / or serve as a market maker or hold proprietary trading positions of certain stocks or companies in this research report. As far as this research report is concerned, the following are the disclosure matters related to such relationship (As the following disclosure does not ensure timeliness and completeness, please send an email to ERD-Disclosure@htisec.com if timely and comprehensive information is needed).

300428.CH 目前或过去 12 个月内是海通的客户。海通向客户提供非投资银行业务的证券相关业务服务。

300428.CH is/was a client of Haitong currently or within the past 12 months. The client has been provided for non-investment-banking securities-related services.

包头盛泰汽车零部件制造有限公司目前或过去 12 个月内是海通的客户。海通向客户提供非证券业务服务。

包头盛泰汽车零部件制造有限公司 is/was a client of Haitong currently or within the past 12 months. The client has been provided for non-securities services.

海通在过去的 12 个月中从包头盛泰汽车零部件制造有限公司获得除投资银行服务以外之产品或服务的报酬。

Haitong has received compensation in the past 12 months for products or services other than investment banking from 包头盛泰汽车零部件制造有限公司.

评级定义 (从 2020 年 7 月 1 日开始执行):

海通国际 (以下简称“HTI”) 采用相对评级系统来为投资者推荐我们覆盖的公司: 优于大市、中性或弱于大市。投资者应仔细阅读 HTI 的评级定义。并且 HTI 发布分析师观点的完整信息, 投资者应仔细阅读全文而非仅看评级。在任何情况下, 分析师的评级和研究都不能作为投资建议。投资者的买卖股票的决策应基于各自情况 (比如投资者的现有持仓) 以及其他因素。

分析师股票评级

优于大市, 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。

弱于大市, 未来 12-18 个月内预期相对基准指数跌幅在 10%以上, 基准定义如下

各地股票基准指数: 日本 – TOPIX, 韩国 – KOSPI, 台湾 – TAIEX, 印度 – Nifty100, 美国 – SP500; 其他所有中国概念股 – MSCI China。

Ratings Definitions (from 1 Jul 2020):

Haitong International uses a relative rating system using Outperform, Neutral, or Underperform for recommending the stocks we cover to investors. Investors should carefully read the definitions of all ratings used in Haitong International Research. In addition, since Haitong International Research contains more complete information concerning the analyst's views, investors should carefully read Haitong International Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Analyst Stock Ratings

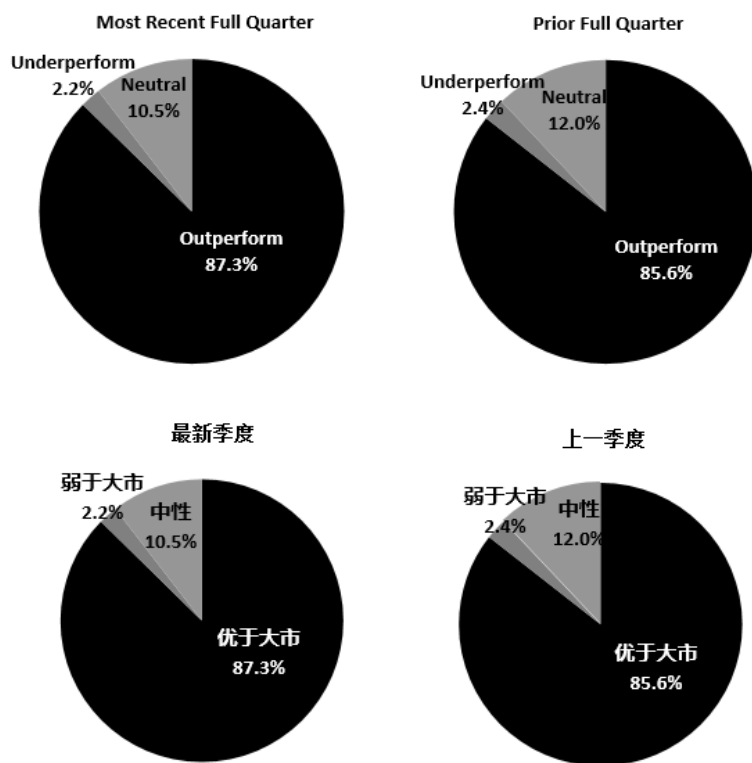
Outperform: The stock's total return over the next 12-18 months is expected to exceed the return of its relevant broad market benchmark, as indicated below.

Neutral: The stock's total return over the next 12-18 months is expected to be in line with the return of its relevant broad market benchmark, as indicated below. For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category.

Underperform: 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, US – SP500; for all other China-concept stocks – MSCI China.

评级分布 Rating Distribution



截至 2021 年 6 月 30 日海通国际股票研究评级分布

	优于大市	中性 (持有)	弱于大市
海通国际股票研究覆盖率	87.3%	10.5%	2.2%
投资银行客户*	6.4%	6.1%	3.7%

*在每个评级类别里投资银行客户所占的百分比。

上述分布中的买入, 中性和卖出分别对应我们当前优于大市, 中性和落后大市评级。

只有根据 FINRA/NYSE 的评级分布规则, 我们才将中性评级划入持有这一类别。请注意在上表中不包含非评级的股票。

此前的评级系统定义 (直至 2020 年 6 月 30 日):

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。

卖出, 未来 12-18 个月内预期相对基准指数跌幅在 10%以上, 基准定义如下

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。

Haitong International Equity Research Ratings Distribution, as of Jun 30, 2021

	Outperform	Neutral (hold)	Underperform
HTI Equity Research Coverage	87.3%	10.5%	2.2%
IB clients*	6.4%	6.1%	3.7%

*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.

For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category. Please note that stocks with an NR designation are not included in the table above.

Previous rating system definitions (until 30 Jun 2020):

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

NEUTRAL: The stock's total return over the next 12-18 months is expected to be in line with the return of its relevant broad market benchmark, as indicated below. For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category.

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.

海通国际非评级研究: 海通国际发布计量、筛选或短篇报告，并在报告中根据估值和其他指标对股票进行排名，或者基于可能的估值倍数提出建议价格。这种排名或建议价格并非为了进行股票评级、提出目标价格或进行基本面估值，而仅供参考使用。

Haitong International Non-Rated Research: Haitong International publishes quantitative, screening or short reports which may rank stocks according to valuation and other metrics or may suggest prices based on possible valuation multiples. Such rankings or suggested prices do not purport to be stock ratings or target prices or fundamental values and are for information only.

海通国际 A 股覆盖: 海通国际可能会就沪港通及深港通的中国 A 股进行覆盖及评级。海通证券（600837.CH），海通国际于上海的母公司，也会于中国发布中国 A 股的研究报告。但是，海通国际使用与海通证券不同的评级系统，所以海通国际与海通证券的中国 A 股评级可能有所不同。

Haitong International Coverage of A-Shares: Haitong International may cover and rate A-Shares that are subject to the Hong Kong Stock Connect scheme with Shanghai and Shenzhen. Haitong Securities (HS; 600837 CH), the ultimate parent company of HTISG based in Shanghai, covers and publishes research on these same A-Shares for distribution in mainland China. However, the rating system employed by HS differs from that used by HTI and as a result there may be a difference in the HTI and HS ratings for the same A-share stocks.

海通国际优质 100 A 股 (Q100) 指数: 海通国际 Q100 指数是一个包括 100 支由海通证券覆盖的优质中国 A 股的计量产品。这些股票是通过基于质量的筛选过程，并结合对海通证券 A 股团队自下而上的研究。海通国际每季对 Q100 指数成分作出复审。

Haitong International Quality 100 A-share (Q100) Index: HTI's Q100 Index is a quant product that consists of 100 of the highest-quality A-shares under coverage at HS in Shanghai. These stocks are carefully selected through a quality-based screening process in combination with a review of the HS A-share team's bottom-up research. The Q100 constituent companies are reviewed quarterly.

重要免责声明:

非印度证券的研究报告: 本报告由海通国际证券集团有限公司（“HTISGL”）的全资附属公司海通国际研究有限公司（“HTIRL”）发行，该公司是根据香港证券及期货条例（第 571 章）持有第 4 类受规管活动（就证券提供意见）的持牌法团。该研究报告在 HTISGL 的全资附属公司 Haitong International (Japan) K.K.（“HTIJK”）的协助下发行，HTIJK 是由日本关东财务局监管为投资顾问。

印度证券的研究报告: 本报告由从事证券交易、投资银行及证券分析及受 Securities and Exchange Board of India（“SEBI”）监管的 Haitong Securities India Private Limited（“HTSIPL”）所发行，包括制作及发布涵盖 BSE Limited（“BSE”）和 National Stock Exchange of India Limited（“NSE”）上市公司（统称为「印度交易所」）的研究报告。HTSIPL 于 2016 年 12 月 22 日被收购并成为海通国际证券集团有限公司（“HTISG”）的一部分。

所有研究报告均以海通国际为名作为全球品牌，经许可由海通国际证券股份有限公司及/或海通国际证券集团的其他成员在其司法管辖区发布。

本文件所载信息和观点已被编译或源自可靠来源，但 HTIRL、HTISGL 或任何其他属于海通国际证券集团有限公司（“HTISG”）的成员对其准确性、完整性和正确性不做任何明示或暗示的声明或保证。本文件中所有观点均截至本报告日期，如有更改，恕不另行通知。本文件仅供参考使用。文件中提及的任何公司或其股票的说明并非意图展示完整的内容，本文件并非/不应被解释为对证券买卖的明示或暗示地出价或征价。在某些司法管辖区，本文件中提及的证券可能无法进行买卖。如果投资产品以投资者本国货币以外的币种进行计价，则汇率变化可能会对投资产生不利影响。过去的表现并不一定代表将来的结果。某些特定交易，包括设计金融衍生工具的，有产生重大风险的可能性，因此并不适合所有的投资者。您还应认识到本文件中的建议并非为您量身定制。分析师并未考虑到您自身的财务情况，如您的财务状况和风险偏好。因此您必须自行分析并在适用的情况下咨询自己的法律、税收、会计、金融和其他方面的专业顾问，以期在投资之前评估该项建议是否适合于您。若由于使用本文件所载的材料而产生任何直接或间接的损失，HTISG 及其董事、雇员或代理人对此均不承担任何责任。

除对本文内容承担责任的分析师外，HTISG 及我们的关联公司、高级管理人员、董事和雇员，均可不时作为主事人就本文件所述的任何证券或衍生品持有长仓或短仓以及进行买卖。HTISG 的销售员、交易员和其他专业人士均可向 HTISG 的相关客户和公司提供与本文件所述意见相反的口头或书面市场评论意见或交易策略。HTISG 可做出与本文件所述建议或意见不一致的投资决策。但 HTIRL 没有义务来确保本文件的收件人了解到该等交易决定、思路或建议。

请访问海通国际网站 www.equities.htisec.com，查阅更多有关海通国际为预防和避免利益冲突设立的组织和行政安排的内容信息。

非美国分析师披露信息: 本项研究首页上列明的海通国际分析师并未在 FINRA 进行注册或者取得相应的资格，并且不受美国 FINRA 有关与本项研究目标公司进行沟通、公开露面和自营证券交易的第 2241 条规则之限制。

IMPORTANT DISCLAIMER

For research reports on non-Indian securities: The research report is issued by Haitong International Research Limited ("HTIRL"), a wholly owned subsidiary of Haitong International Securities Group Limited ("HTISGL") and a licensed corporation to carry on Type 4 regulated activity (advising on securities) for the purpose of the Securities and Futures Ordinance (Cap. 571) of Hong Kong, with the assistance of Haitong International (Japan) K.K. ("HTIJKK"), a wholly owned subsidiary of HTISGL and which is regulated as an Investment Adviser by the Kanto Finance Bureau of Japan.

For research reports on Indian securities: The research report is issued by Haitong Securities India Private Limited ("HSIPL"), an Indian company and a Securities and Exchange Board of India ("SEBI") registered Stock Broker, Merchant Banker and Research Analyst that, inter alia, produces and distributes research reports covering listed entities on the BSE Limited ("BSE") and the National Stock Exchange of India Limited ("NSE") (collectively referred to as "Indian Exchanges"). HSIPL was acquired and became part of the Haitong International Securities Group of Companies ("HTISG") on 22 December 2016.

All the research reports are globally branded under the name Haitong International and approved for distribution by Haitong International Securities Company Limited ("HTISCL") and/or any other members within HTISG in their respective jurisdictions.

The information and opinions contained in this research report have been compiled or arrived at from sources believed to be reliable and in good faith but no representation or warranty, express or implied, is made by HTIRL, HTISCL, HSIPL, HTIJKK or any other members within HTISG from which this research report may be received, as to their accuracy, completeness or correctness. All opinions expressed herein are as of the date of this research report and are subject to change without notice. This research report is for information purpose only. Descriptions of any companies or their securities mentioned herein are not intended to be complete and this research report is not, and should not be construed expressly or impliedly as, an offer to buy or sell securities. The securities referred to in this research report may not be eligible for purchase or sale in some jurisdictions. If an investment product is denominated in a currency other than an investor's home currency, a change in exchange rates may adversely affect the investment. Past performance is not necessarily indicative of future results. Certain transactions, including those involving derivatives, give rise to substantial risk and are not suitable for all investors. You should also bear in mind that recommendations in this research report are not tailor-made for you. The analyst has not taken into account your unique financial circumstances, such as your financial situation and risk appetite. You must, therefore, analyze and should, where applicable, consult your own legal, tax, accounting, financial and other professional advisers to evaluate whether the recommendations suits you before investment. Neither HTISG nor any of its directors, employees or agents accepts any liability whatsoever for any direct or consequential loss arising from any use of the materials contained in this research report.

HTISG and our affiliates, officers, directors, and employees, excluding the analysts responsible for the content of this document, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research report. Sales, traders, and other professionals of HTISG may provide oral or written market commentary or trading strategies to the relevant clients and the companies within HTISG that reflect opinions that are contrary to the opinions expressed in this research report. HTISG may make investment decisions that are inconsistent with the recommendations or views expressed in this research report. HTI is under no obligation to ensure that such other trading decisions, ideas or recommendations are brought to the attention of any recipient of this research report.

Please refer to HTI's website www.equities.htisec.com for further information on HTI's organizational and administrative arrangements set up for the prevention and avoidance of conflicts of interest with respect to Research.

Non U.S. Analyst Disclosure: The HTI analyst(s) listed on the cover of this Research is (are) not registered or qualified as a research analyst with FINRA and are not subject to U.S. FINRA Rule 2241 restrictions on communications with companies that are the subject of the Research; public appearances; and trading securities by a research analyst.

分发和地区通知:

除非下文另有规定, 否则任何希望讨论本报告或者就本项研究中讨论的任何证券进行任何交易的收件人均应联系其所在国家或地区的海通国际销售人员。

香港投资者的通知事项: 海通国际证券股份有限公司("HTISCL")负责分发该研究报告, HTISCL 是在香港有权实施第 1 类受规管活动(从事证券交易)的持牌公司。该研究报告并不构成《证券及期货条例》(香港法例第 571 章)(以下简称"SFO")所界定的要约邀请, 证券要约或公众要约。本研究报告仅提供给 SFO 所界定的"专业投资者"。本研究报告未经过证券及期货事务监察委员会的审查。您不应仅根据本研究报告中所载的信息做出投资决定。本研究报告的收件人就研究报告中产生或与之相关的任何事宜请联系 HTISCL 销售人员。

美国投资者的通知事项: 本研究报告由 HTIRL, HSIPL 或 HTIJKK 编写。HTIRL, HSIPL, HTIJKK 以及任何非 HTISG 美国联营公司, 均未在美国注册, 因此不受美国关于研究报告编制和研究分析人员独立性规定的约束。本研究报告提供给依照 1934 年"美国证券交易法"第 15a-6 条规定的豁免注册的「美国主要机构投资者」("Major U.S. Institutional Investor")和「机构投资者」("U.S. Institutional Investors")。在向美国机构投资者分发研究报告时, Haitong International Securities (USA) Inc. ("HTI USA") 将对报告的内容负责。任何收到本研究报告的美国投资者, 希望根据本研究报告提供的信息进行任何证券或相关金融工具买卖的交易, 只能通过 HTI USA。HTI USA 位于 340 Madison Avenue, 12th Floor, New York, NY 10173, 电话 (212) 351-6050。HTI USA 是在美国于 U.S. Securities and Exchange Commission ("SEC") 注册的经纪商, 也是 Financial Industry Regulatory Authority, Inc. ("FINRA") 的成员。HTIUSA 不负责编写本研究报告, 也不负责其中包含的分析。在任何情况下, 收到本研究报告的任何美国投资者, 不得直接与分析师直接联系, 也不得通过 HSIPL, HTIRL 或 HTIJKK 直接进行买卖证券或相关金融工具的交易。本研究报告中出现的 HSIPL, HTIRL 或 HTIJKK 分析师没有注册或具备 FINRA 的研究分析师资格, 因此可能不受 FINRA 第 2241 条规定的与目标公司的交流, 公开露面和分析师账户持有的交易证券等限制。投资本研究报告中讨论的任何非美国证券或相关金融工具(包括 ADR)可能存在一定风险。非美国发行的证券可能没有注册, 或不受美国法规的约束。有关非美国证券或相关金融工具的信息可能有限。外国公司可能不受审计和汇报的标准以及与美国境内生效相符的监管要求。本研究报告中以美元以外的其他货币计价的任何证券或相关金融工具的投资或收益的价值受汇率波动的影响, 可能对该等证券或相关金融工具的价值或收入产生正面或负面影响。美国收件人的所有问询请联系:

Haitong International Securities (USA) Inc.
340 Madison Avenue, 12th Floor
New York, NY 10173
联系人电话: (212) 351 6050

DISTRIBUTION AND REGIONAL NOTICES

Except as otherwise indicated below, any Recipient wishing to discuss this research report or effect any transaction in any security discussed in HTI's research should contact the Haitong

International salesperson in their own country or region.

Notice to Hong Kong investors: The research report is distributed by Haitong International Securities Company Limited (“HTISCL”), which is a licensed corporation to carry on Type 1 regulated activity (dealing in securities) in Hong Kong. This research report does not constitute a solicitation or an offer of securities or an invitation to the public within the meaning of the SFO. This research report is only to be circulated to “Professional Investors” as defined in the SFO. This research report has not been reviewed by the Securities and Futures Commission. You should not make investment decisions solely on the basis of the information contained in this research report. Recipients of this research report are to contact HTISCL salespersons in respect of any matters arising from, or in connection with, the research report.

Notice to U.S. investors: As described above, this research report was prepared by HTIRL, HSIPL or HTIJKK. Neither HTIRL, HSIPL, HTIJKK, nor any of the non U.S. HTISG affiliates is registered in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution to “major U.S. institutional investors” and “U.S. institutional investors” in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended. When distributing research reports to “U.S. institutional investors,” HTI USA will accept the responsibilities for the content of the reports. Any U.S. recipient of this research report wishing to effect any transaction to buy or sell securities or related financial instruments based on the information provided in this research report should do so only through Haitong International Securities (USA) Inc. (“HTI USA”), located at 340 Madison Avenue, 12th Floor, New York, NY 10173, USA; telephone (212) 351 6050. HTI USA is a broker-dealer registered in the U.S. with the U.S. Securities and Exchange Commission (the “SEC”) and a member of the Financial Industry Regulatory Authority, Inc. (“FINRA”). HTI USA is not responsible for the preparation of this research report nor for the analysis contained therein. Under no circumstances should any U.S. recipient of this research report contact the analyst directly or effect any transaction to buy or sell securities or related financial instruments directly through HSIPL, HTIRL or HTIJKK. The HSIPL, HTIRL or HTIJKK analyst(s) whose name appears in this research report is not registered or qualified as a research analyst with FINRA and, therefore, may not be subject to FINRA Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. Investing in any non-U.S. securities or related financial instruments (including ADRs) discussed in this research report may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to U.S. regulations. Information on such non-U.S. securities or related financial instruments may be limited. Foreign companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect within the U.S. The value of any investment or income from any securities or related financial instruments discussed in this research report denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related financial instruments. All inquiries by U.S. recipients should be directed to:

Haitong International Securities (USA) Inc.
340 Madison Avenue, 12th Floor
New York, NY 10173
Attn: Sales Desk at (212) 351 6050

中华人民共和国的通知事项: 在中华人民共和国（下称“中国”，就本报告目的而言，不包括香港特别行政区、澳门特别行政区和台湾）只有根据适用的中国法律法规而收到该材料的人员方可使用该材料。并且根据相关法律法规，该材料中的信息并不构成“在中国从事生产、经营活动”。本文件在中国并不构成相关证券的公共发售或认购。无论根据法律规定或其他任何规定，在取得中国政府所有的批准或许可之前，任何法人或自然人均不得直接或间接地购买本材料中的任何证券或任何权益权益。接收本文件的人员须遵守上述限制性规定。

加拿大投资者的通知事项: 在任何情况下该等材料均不得被解释为在任何加拿大的司法管辖区内出售证券的要约或认购证券的要约邀请。本材料中所述证券在加拿大的任何要约或出售行为均只能在豁免向有关加拿大证券监管机构提交招股说明书的前提下由 Haitong International Securities (USA) Inc. (“HTI USA”) 予以实施，该公司是一家根据 National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations (“NI 31-103”) 的规定得到「国际交易商豁免」 (“International Dealer Exemption”) 的交易商，位于艾伯塔省、不列颠哥伦比亚省、安大略省和魁北克省。在加拿大，该等材料在任何情况下均不得被解释为任何证券的招股说明书、发行备忘录、广告或公开发行。加拿大的任何证券委员会或类似的监管机构均未审查或以任何方式批准该等材料、其中所载的信息或所述证券的优点，任何与此相反的声明即属违法。在收到该等材料时，每个加拿大的收件人均将被视为属于 National Instrument 45-106 Prospectus Exemptions 第 1.1 节或者 Securities Act (Ontario) 第 73.3(1) 节所规定的「认可投资者」 (“Accredited Investor”)，或者在适用情况下 National Instrument 31-103 第 1.1 节所规定的「许可投资者」 (“Permitted Investor”)。

新加坡投资者的通知事项: 本研究报告由 Haitong International Securities (Singapore) Pte Ltd (“HTISSPL”) [公司注册编号 201311400G] 于新加坡提供。HTISSPL 是符合《财务顾问法》（第 110 章） (“FAA”) 定义的豁免财务顾问，可 (a) 提供关于证券、集体投资计划的部分，交易所衍生品合约和场外衍生品合约的建议 (b) 发行或公布有关证券、交易所衍生品合约和场外衍生品合约的研究分析或研究报告。本研究报告仅提供给符合《证券及期货法》（第 289 章）第 4A 条项下规定的机构投资者。对于因本研究报告而产生的或与之相关的任何问题，本研究报告的收件人应通过以下信息与 HTISSPL 联系：

Haitong International Securities (Singapore) Pte. Ltd
50 Raffles Place, #33-03 Singapore Land Tower, Singapore 048623
电话: (65) 6536 1920

日本投资者的通知事项: 本研究报告由海通国际证券有限公司所发布，旨在分发给从事投资管理的金融服务提供商或注册金融机构（根据日本金融机构和交易法（“FIEL”））第 61（1）条，第 17-11（1）条的执行及相关条款）。

英国及欧盟投资者的通知事项: 本报告由从事投资顾问的 Haitong International Securities Company Limited 所发布，本报告只面向有投资相关经验的专业客户发布。任何投资或与本报告相关的投资行为只面对此类专业客户。没有投资经验或相关投资经验的客户不得依赖本报告。Haitong International Securities Company Limited 的分支机构的净长期或短期金融权益可能超过本研究报告中提及的实体已发行股本总额的 0.5%。特别提醒有些英文报告有可能此前已经通过中文或其它语言完成发布。

澳大利亚投资者的通知事项: Haitong International Securities (Singapore) Pte Ltd, Haitong International Securities Company Limited 和 Haitong International Securities (UK) Limited 分别根据澳大利亚证券和投资委员会（以下简称“ASIC”）公司（废除及过度性）文书第 2016/396 号规章在澳大利亚分发本项研究，该等规章免除了根据 2001 年《公司法》在澳大利亚为批发客户提供金融服务时海通国际需持有澳大利亚金融服务许可的要求。ASIC 的规章副本可在以下网站获取：www.legislation.gov.au。海通国际提供的金融服务受外国法律法规规定的管制，该等法律与在澳大利亚所适用的法律存在差异。

印度投资者的通知事项: 本报告由从事证券交易、投资银行及证券分析及受 Securities and Exchange Board of India (“SEBI”) 监管的 Haitong Securities India Private Limited (“HTSIPL”) 所

发布，包括制作及发布涵盖 BSE Limited (“BSE”) 和 National Stock Exchange of India Limited (“NSE”) (统称为「印度交易所」) 研究报告。

本项研究仅供收件人使用，未经海通国际的书面同意不得予以复制和再次分发。

版权所有：海通国际证券集团有限公司 2019 年。保留所有权利。

People's Republic of China (PRC): In the PRC, the research report is directed for the sole use of those who receive the research report in accordance with the applicable PRC laws and regulations. Further, the information on the research report does not constitute "production and business activities in the PRC" under relevant PRC laws. This research report does not constitute a public offer of the security, whether by sale or subscription, in the PRC. Further, no legal or natural persons of the PRC may directly or indirectly purchase any of the security or any beneficial interest therein without obtaining all prior PRC government approvals or licenses that are required, whether statutorily or otherwise. Persons who come into possession of this research are required to observe these restrictions.

Notice to Canadian Investors: Under no circumstances is this research report to be construed as an offer to sell securities or as a solicitation of an offer to buy securities in any jurisdiction of Canada. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by Haitong International Securities (USA) Inc., a dealer relying on the "international dealer exemption" under National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations ("NI 31-103") in Alberta, British Columbia, Ontario and Quebec. This research report is not, and under no circumstances should be construed as, a prospectus, an offering memorandum, an advertisement or a public offering of any securities in Canada. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon this research report, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence. Upon receipt of this research report, each Canadian recipient will be deemed to have represented that the investor is an "accredited investor" as such term is defined in section 1.1 of National Instrument 45-106 Prospectus Exemptions or, in Ontario, in section 73.3(1) of the Securities Act (Ontario), as applicable, and a "permitted client" as such term is defined in section 1.1 of NI 31-103, respectively.

Notice to Singapore investors: This research report is provided in Singapore by or through Haitong International Securities (Singapore) Pte Ltd ("HTISSPL") [Co Reg No 201311400G. HTISSPL is an Exempt Financial Adviser under the Financial Advisers Act (Cap. 110) ("FAA") to (a) advise on securities, units in a collective investment scheme, exchange-traded derivatives contracts and over-the-counter derivatives contracts and (b) issue or promulgate research analyses or research reports on securities, exchange-traded derivatives contracts and over-the-counter derivatives contracts. This research report is only provided to institutional investors, within the meaning of Section 4A of the Securities and Futures Act (Cap. 289). Recipients of this research report are to contact HTISSPL via the details below in respect of any matters arising from, or in connection with, the research report:

Haitong International Securities (Singapore) Pte. Ltd.

10 Collyer Quay, #19-01 - #19-05 Ocean Financial Centre, Singapore 049315

Telephone: (65) 6536 1920

Notice to Japanese investors: This research report is distributed by Haitong International Securities Company Limited and intended to be distributed to Financial Services Providers or Registered Financial Institutions engaged in investment management (as defined in the Japan Financial Instruments and Exchange Act ("FIEL") Art. 61(1), Order for Enforcement of FIEL Art. 17-11(1), and related articles).

Notice to UK and European Union investors: This research report is distributed by Haitong International Securities Company Limited. This research is directed at persons having professional experience in matters relating to investments. Any investment or investment activity to which this research relates is available only to such persons or will be engaged in only with such persons. Persons who do not have professional experience in matters relating to investments should not rely on this research. Haitong International Securities Company Limited's affiliates may have a net long or short financial interest in excess of 0.5% of the total issued share capital of the entities mentioned in this research report. Please be aware that any report in English may have been published previously in Chinese or another language.

Notice to Australian investors: The research report is distributed in Australia by Haitong International Securities (Singapore) Pte Ltd, Haitong International Securities Company Limited, and Haitong International Securities (UK) Limited in reliance on ASIC Corporations (Repeal and Transitional) Instrument 2016/396, which exempts those HTISG entities from the requirement to hold an Australian financial services license under the Corporations Act 2001 in respect of the financial services it provides to wholesale clients in Australia. A copy of the ASIC Class Orders may be obtained at the following website, www.legislation.gov.au. Financial services provided by Haitong International Securities (Singapore) Pte Ltd, Haitong International Securities Company Limited, and Haitong International Securities (UK) Limited are regulated under foreign laws and regulatory requirements, which are different from the laws applying in Australia.

Notice to Indian investors: The research report is distributed by Haitong Securities India Private Limited ("HSIPL"), an Indian company and a Securities and Exchange Board of India ("SEBI") registered Stock Broker, Merchant Banker and Research Analyst that, inter alia, produces and distributes research reports covering listed entities on the BSE Limited ("BSE") and the National Stock Exchange of India Limited ("NSE") (collectively referred to as "Indian Exchanges").

This research report is intended for the recipients only and may not be reproduced or redistributed without the written consent of an authorized signatory of HTISG.

Copyright: Haitong International Securities Group Limited 2019. All rights reserved.

<http://equities.htisec.com/x/legal.html>