

11月 PMI 扩张至 50.3%；特斯拉发布人形机器人新动态

Yuewei Zhao
yw.zhao@htisec.com

Jingbo Zhao
jb.zhao@htisec.com

Qiwen Liu
qw.liu@htisec.com

Kunyang Wang
ky.wang@htisec.com

投资要点：

- **板块表现：**从各行业横向比较来看，2024 年第 48 周（2024 年 11 月 25 日至 2024 年 11 月 29 日），机械设备行业相对沪综指周累计超额收益为正，在所有行业中排名第七，周累计超额收益为+1.44pct。2024 年至今机械设备行业年累计超额收益为-4.7pct。
- **宏观数据：11 月 PMI 为 50.3%，环比上升 0.2%，制造业市场需求景气水平有所回升。**1) 规上工业企业利润：根据国家统计局官网，1-10 月份，全国规模以上工业企业实现利润总额 58680.4 亿元，同比下降 4.3%。1-10 月份，采矿业实现利润总额 9845.3 亿元，同比下降 12.7%；制造业实现利润总额 42223.1 亿元，下降 4.2%；电力、热力、燃气及水生产和供应业实现利润总额 6612.0 亿元，增长 11.5%。1-10 月份，主要行业利润情况如下：通用设备制造业下降 0.1%，专用设备制造业下降 5.2%，1-10 月份，规模以上工业企业实现营业收入 110.96 万亿元，同比增长 1.9%。2) PMI 指数：根据国家统计局官网，11 月份，制造业采购经理指数（PMI）为 50.3%，比上月上升 0.2 个百分点，制造业扩张步伐小幅加快。生产指数为 52.4%，比上月上升 0.4 个百分点，表明制造业企业生产活动进一步加快。新订单指数为 50.8%，比上月上升 0.8 个百分点，表明制造业市场需求景气水平有所回升。原材料库存指数为 48.2%，与上月持平，仍低于临界点，表明制造业主要原材料库存量较上月下降。
- **工业气体：杭氧集团 2 套 11 万空分开车成功；液态气周均价环比下跌。**1) 杭氧集团：根据杭氧集团微信公众号，由杭氧集团研制的为宝丰能源内蒙古 260 万吨煤制烯烃示范项目配套的 6 套 11 万空分 1 号和 2 号装置成功出氧，这是目前我国单套规模最大、国产化程度最高的特大型空分设备。2) 气体价格：根据卓创资讯工业气体官方微信公众号，截至本周四（11 月 28 日，全国价格）：① 液氧：均价 398 元/吨，环比跌 0.75%，同比涨 4.74%；② 液氮：均价 411 元/吨，环比跌 1.4%，同比跌 8.1%；③ 液氩：均价 648 元/吨，环比跌 3.71%，同比跌 45.36%；④ 管束氦气：长协客户拿货周均价 97.5 元/立方米，环比持平，同比跌 34.56%；⑤ 高纯氦气：批量 40L 瓶装均价 658.93 元/瓶，环比持平，同比跌 34.56%；⑥ 氩气：均价 29142.86 元/立方米，环比涨 0.49%，同比跌 40.35%；⑦ 氦气：均价 350 元/立方米，环比持平，同比跌 36.36%；⑧ 氟气：125 元/立方米，环比持平，同比跌 32.69%。
- **轨交装备：广湛高铁发布时速 350 公里复兴号智能动车组招标。**根据铁路建设规划微信公众号，11 月 28 日，《新建广州至湛江高速铁路时速 350 公里复兴号智能动车组（8 辆编组）采购招标招标公告》发布。招标数量为 15 组，预计 2025 年 12 月底前交付，根据早前招标计划，预算控制价在 28 亿左右。
- **锂电设备：清陶 15GWh 半固态电池产线（二期）启动。**根据高工锂电微信公众号，11 月 28 日，清陶固态电池西南产业基地项目启动仪式举行，该项目计划总投资 100 亿元，将建成成都首条半固态电池生产线，年产能达 15GWh。其中，项目一期已于去年 5 月完成产线建设并投产；二期项目也正式启动，建设时间预计 3 年，项目全面达产后，预计实现年产值超百亿元。

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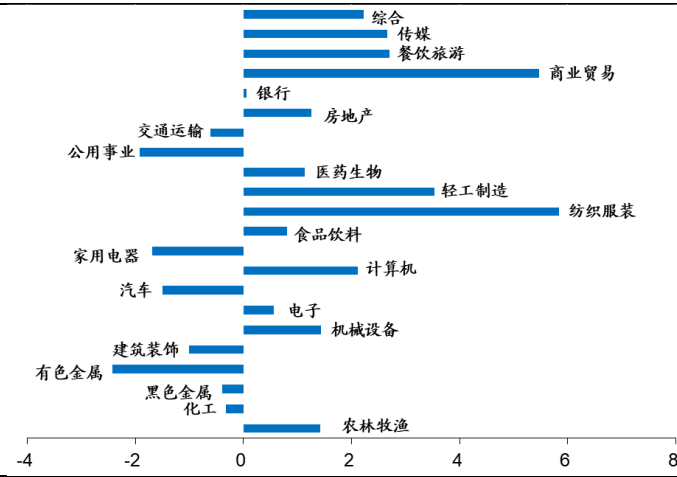
- **光伏设备：本周，硅片、电池片、组件价格环比持平，硅料价格环比下降；双良节能助力世界首台低热值煤 660 兆瓦 CFB 示范机组通过 168 小时试运行；高测股份获得新的海外签单，将为土耳其客户提供切片工厂级解决方案。** 1) 根据 Infolink Consulting 微信公众号的数据，本周光伏价格：多晶硅致密料成交价为 39.5 元/公斤，环比下降 0.5%，单晶硅片 182 成交价为 1.150 元/片，环比持平，单晶硅片 210 成交价为 1.700 元/片，环比持平；单晶 PERC 182 电池片成交价为 0.275 元/W，环比持平，单晶 PERC 210 电池片成交价为 0.280 元/W，环比持平；TOPCon182 电池片成交价为 0.270 元/W，环比持平；182 单晶 PERC 组件均价为 0.680 元/W，环比持平，210 单晶 PERC 组件均价为 0.690 元/W，环比持平。2) 根据双良节能微信公众号，11 月 27 日，在陕西咸阳市彬州市，彬长低热值煤 660MW 超超临界 CFB 示范工程 1 号机组通过 168 小时试运行，标志着工程建设取得圆满成功，正式投入生产运行。该项目的全钢结构间冷塔工程，由双良节能 EPC 总承包，目前系统平稳运行，各项性能指标均达到优良标准。3) 根据高测股份微信公众号，近日，高测股份获得新的海外签单，将为土耳其客户提供切片工厂级解决方案。公司依靠多年自主研发建立的“切割设备、切割耗材、切割工艺”技术闭环优势，以产品力向上构筑硬实力，同时发挥在工业自动化领域的技术沉淀，以及在切片产能端的规划落地与运营经验等优势，根据客户产能需求“定制”切片工厂级解决方案。
- **机器人：特斯拉发布 Optimus 视频新动态，灵巧手更加流畅。** 根据人形机器人发布微信公众号，11 月 28 日，特斯拉机器人官方账号发布视频新动态，Optimus 已经可以稳稳地接住迎面抛来的网球并放下，手指可相对灵活地弯曲。视频配文“Got a new hand for Black Friday”黑色星期五获得了新的手。视频中的 Optimus 两只手外观区别较为明显，左手大小整体有缩小，结构更加紧凑。视频中工作人员进行了 2 次抛球，将球抛至 Optimus 的右侧，而 Optimus 则用左手在空中对网球进行了抓取动作，持有数秒后松开手，
- **船舶：中国船舶新型 LNG 运输船命名交付；沪东中华与宝武特冶金携手合作突破 LNG 船液货舱国产化。** 根据中国船舶微信公众号：1) 11 月 25 日，中国船舶集团旗下江南造船联合中船贸易为阿布扎比国家石油公司（ADNOC）建造的我国首艘 17.5 万立方米大型 Mark III Flex 薄膜式液化天然气（LNG）运输船“AL SHELILA”号提前 2 个月命名交付，奋力冲刺四季度目标任务，为后续船建造交付奠定了坚实的基础。2) 近日，中国（长兴）LNG（液化天然气）产业联盟在上海举行“LNG 产业联盟全国产殷瓦构件首制件鉴定会”，我国首个由国产化殷瓦钢和殷瓦焊丝制作的 LNG 船液货舱殷瓦构件顺利通过专业鉴定。这是中国船舶集团有限公司旗下沪东中华与中国宝武钢铁集团有限公司旗下宝武特冶金携手合作取得的重要突破，意味着国产化殷瓦构件实船应用指日可待。
- **工程机械：庞源租赁指数周线 418。据 CME 观测，11 月挖掘机国内销量 8600 台左右。** 1) 周度指数：根据庞源租赁公众号，11 月第 4 周庞源租赁指数周线为 418；其 5 周线、半年线、年线分别为 401、423、442。2) 根据工程机械杂志公众号，经草根调查和市场研究，CME 预估 2024 年 11 月挖掘机（含出口）销量 16900 台左右，同比增长 13% 左右。市场持续回暖：国内市场筑底回升态势明显，出口市场逐步修复，持续复苏。

- **叉车：安徽合力更换可转债募投资金用途，收购整机生产基地和重要货叉供应商。** 1) 可转债：根据安徽合力《关于拟终止可转换公司债券部分募投项目并将剩余募集资金投入其他募投项目的公告》，公司拟终止公开发行可转换公司债券募投项目“新能源车辆建设项目”和“智能工厂二期项目”，并将上述两个项目合计 1.5 亿元的预计剩余募集资金投向变更至募投项目“高端铸件基地项目”。“新能源车辆建设项目”和“智能工厂二期项目”所建设的厂房、新增的主要工艺设备均已投入使用并实现批量生产，后续预期投入较小。高端铸件基地项目主要生产工业车辆及工程机械配重类、动力传动箱/桥类和小型铸钢件三大类高端铸件，规划产能为年产 20 万吨，通过调配募投资金投向，尽快实现全面投产，加快满足公司“十四五”乃至“十五五”期间整机产能扩张的需求。2) 收并购：根据安徽合力《关于收购安徽和安机电有限公司持有的安徽好运机械有限公司、安徽安鑫货叉有限公司全部股权暨关联交易的公告》，公司决定以现金方式收购和安机电持有的“好运机械”65.15%股权、“安鑫货叉”51%股权。本次交易实施的目的是为持续优化公司治理体系，有效减少公司日常关联交易，充分发挥产业链协同优势，通过加快实施专业化重组整合，进一步巩固提升公司核心竞争力。
- **出口链：本周人民币兑美元汇率小幅升值。** 1) 本周五美元兑人民币即期汇率为 7.23，环比上周五下降 0.17%，欧元兑人民币汇率为 7.65，环比上周五上升 1.32%。2) 本周中国出口集装箱运价指数（CCFI）中，综合指数为 1474.00，同比上升 71.85%，环比上升 0.41%；欧洲航线为 2031.02，同比上升 108.47%，环比上升 0.47%；美东航线为 1247.45，同比上升 46.18%，环比上升 1.93%；美西航线为 1083.23，同比上升 50.37%，环比下降 5.98%；东南亚航线为 1258.76，同比上升 83.48%，环比上升 5.46%。
- **本周建议关注标的：** 中国中车、杭氧股份、杰瑞股份、宏华数科、华锐精密、奥特维、柏楚电子、双环传动、豪迈科技、恒立液压、三一重工、徐工机械、银都股份、华测检测、巨星科技、中集集团。
- **风险提示：** 固定资产投资放缓、信贷政策收紧、潜在的贸易保护主义等。

机械行业二级市场表现

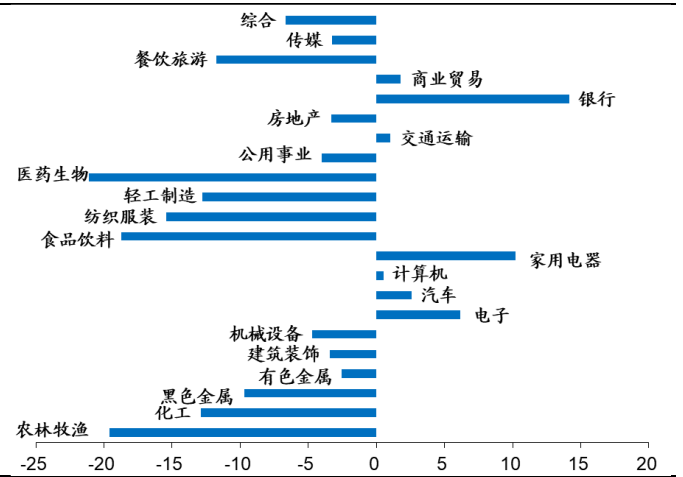
从各行业横向比较来看，2024年第48周（2024年11月25日至2024年11月29日），机械设备行业相对沪综指周累计超额收益为正，在所有行业中排名第七，周累计超额收益为+1.44pct。2024年至今机械设备行业年累计超额收益为-4.7pct。

图1 各行业相对沪综指周累计超额收益 (pct)



资料来源：Wind、HTI

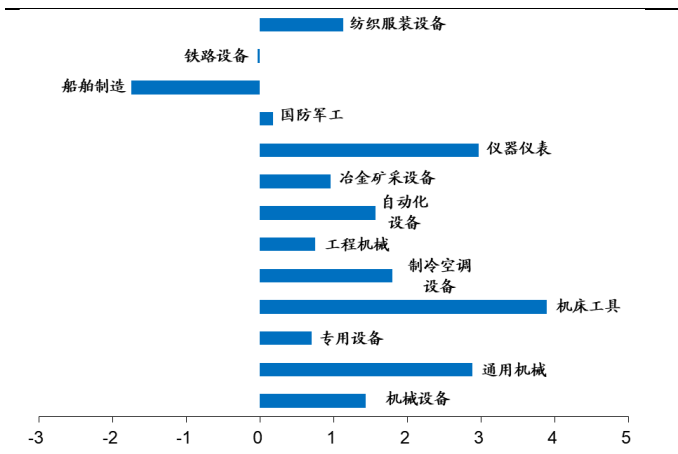
图2 各行业相对沪综指2024年累计超额收益 (pct)



资料来源：Wind、HTI

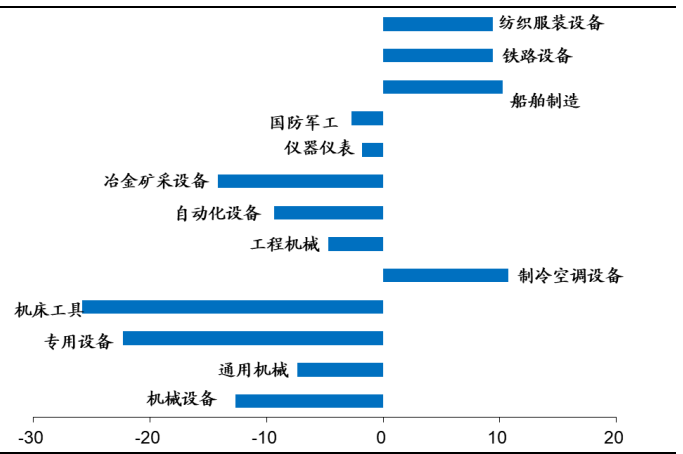
从机械内部子板块来看，2024年第48周（2024年11月25日至2024年11月29日），机械内部各板块周累计超额收益大部分为正值。从2024年累计超额收益看，机械内部的船舶制造、铁路设备、纺织服装设备、制冷空调设备跑赢大盘。

图3 各子行业指数相对沪综指周累计超额收益 (pct)



资料来源：Wind、HTI

图4 各子行业指数相对沪综指2024年累计超额收益 (pct)

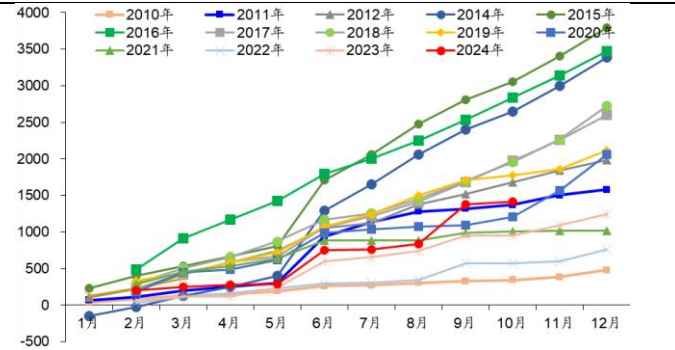


资料来源：Wind、HTI

1. 细分子行业数据汇总

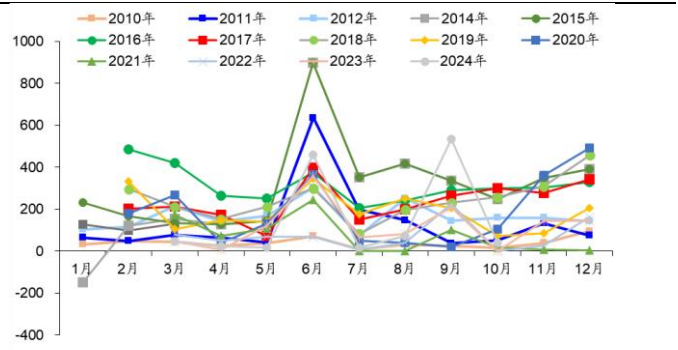
1) 轨道交通设备

图5 累计动车组生产量 (辆)



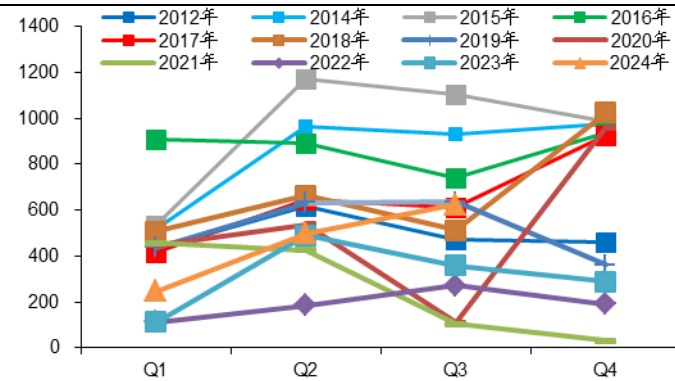
资料来源: Wind、国家统计局、HTI

图6 单月动车组生产量 (辆)



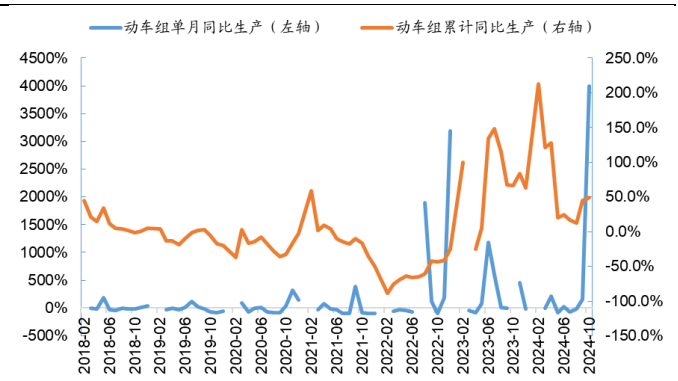
资料来源: Wind、国家统计局、HTI

图7 单季度动车组生产量 (辆)



资料来源: Wind、国家统计局、HTI

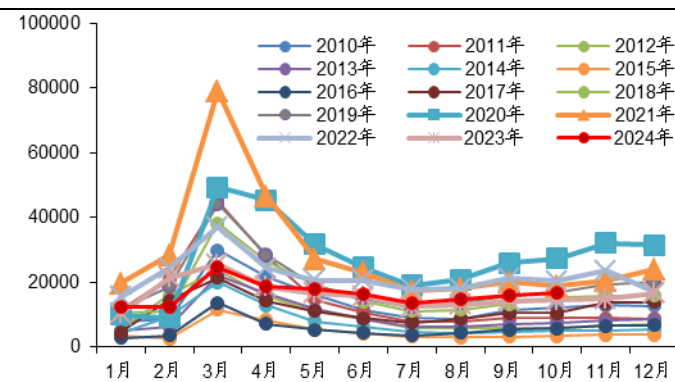
图8 动车组产量同比



资料来源: Wind、国家统计局、HTI

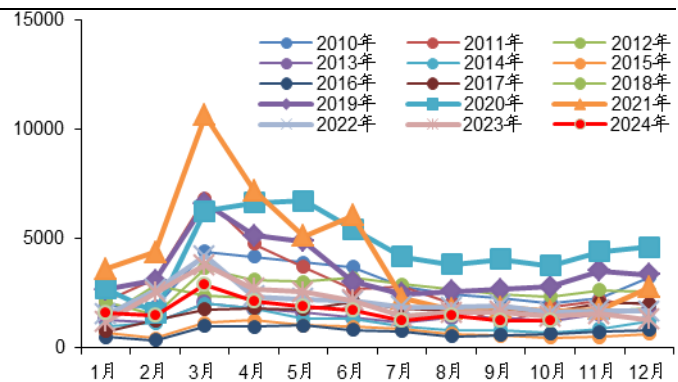
2) 工程机械

图9 挖掘机销量 (辆)



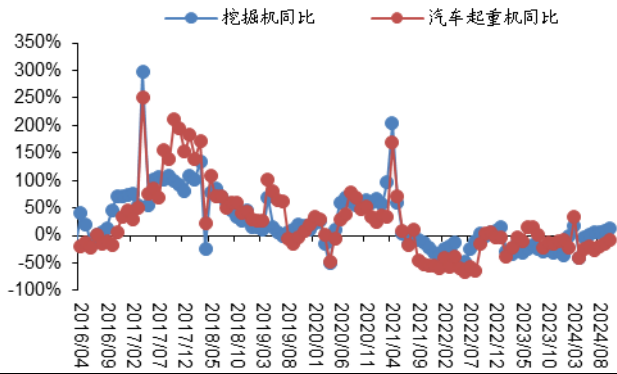
资料来源: Wind、中国工程机械工业协会、HTI

图10 汽车起重机销量 (辆)



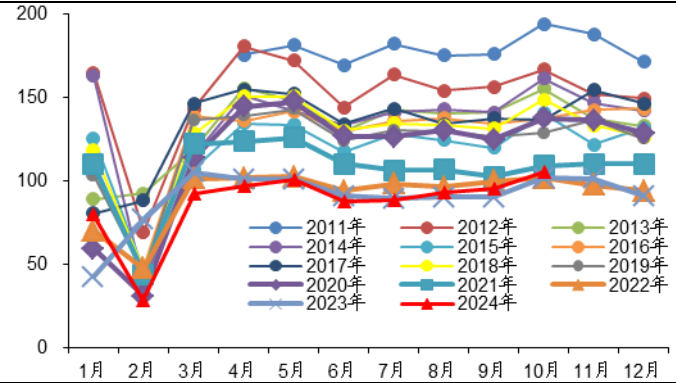
资料来源: Wind、中国工程机械工业协会、HTI

图11 挖掘机、汽车起重机月销量同比



资料来源 Wind、中国工程机械工业协会、HTI

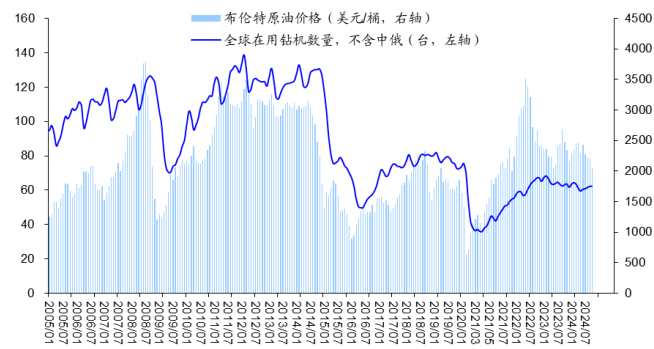
图12 挖机开挖小时数（小时）



资料来源：Wind、小松官网、HTI

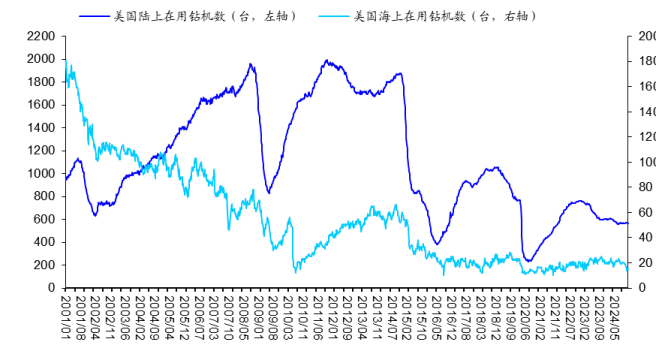
3) 油服装备

图13 全球在用钻机数量及布伦特原油均价



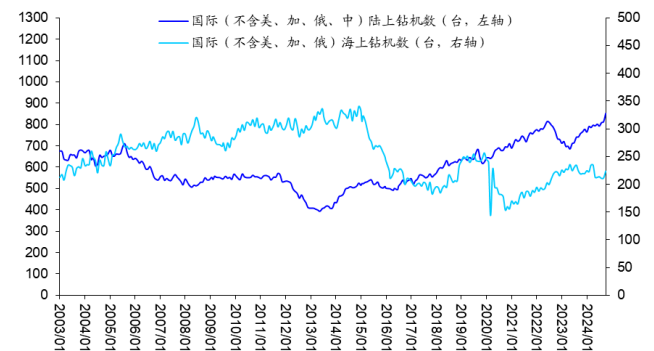
资料来源：BakerHughes、Wind、HTI

图14 美国海上及陆上在用钻机数量



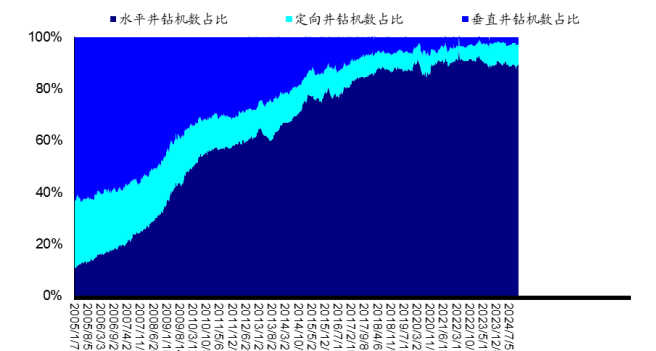
资料来源：BakerHughes、HTI

图15 国际海上及陆上在用钻机量



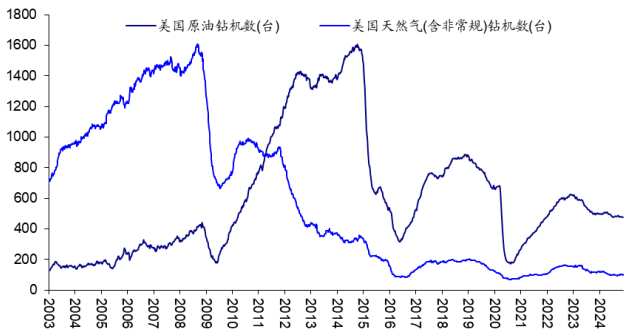
资料来源：BakerHughes、HTI

图16 美国各类钻机数占比



资料来源：BakerHughes、HTI

图17 美国原油和天然气钻机数



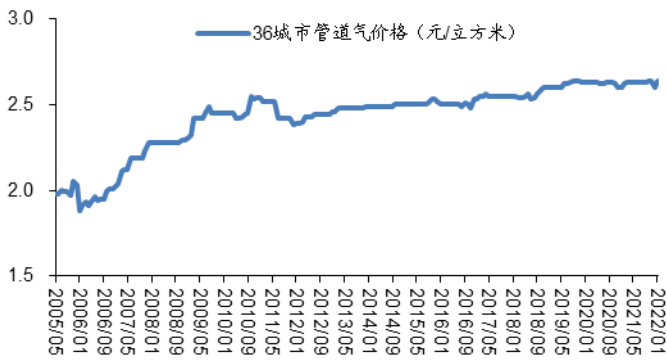
资料来源: Wind、HTI

图18 中国 LNG 市场价格



资料来源: Wind、HTI

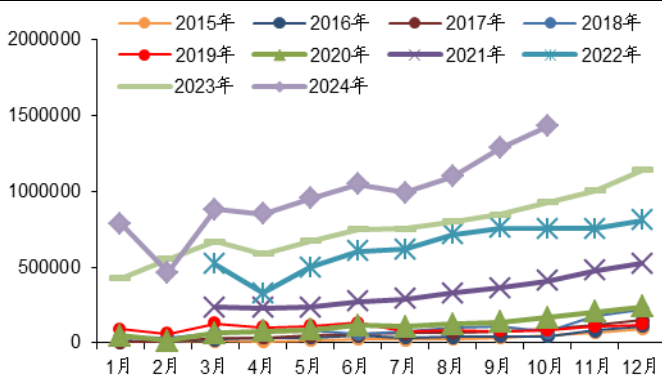
图19 中国天然气管道气价格



资料来源: Wind、HTI

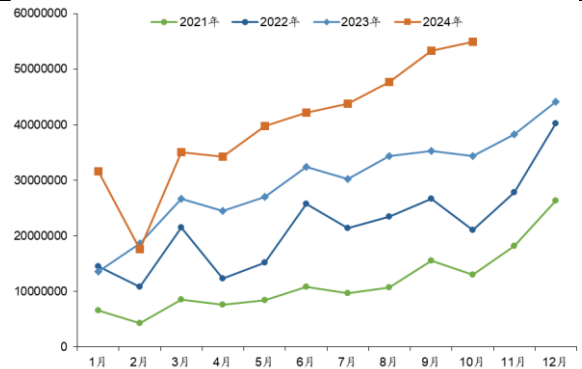
4) 锂电设备

图20 新能源汽车产量(辆)



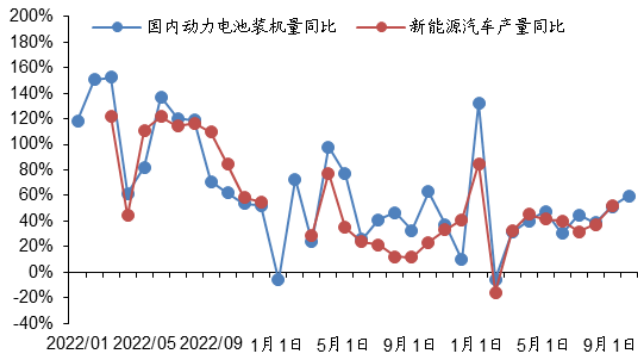
资料来源: Wind、高工锂电、HTI

图21 国内动力电池装机量(KWh)



资料来源: 高工锂电、HTI

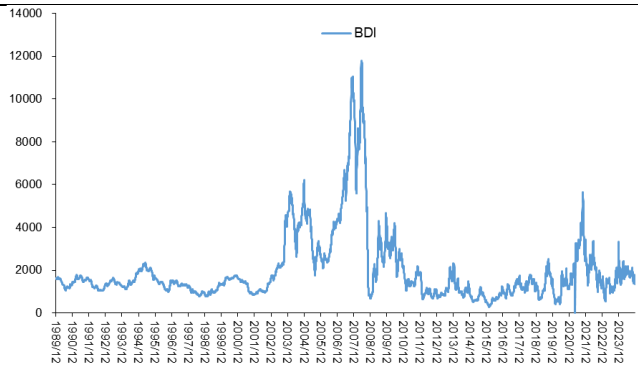
图22 新能源汽车产量和动力电池装机量单月同比



资料来源：Wind、高工锂电、HTI

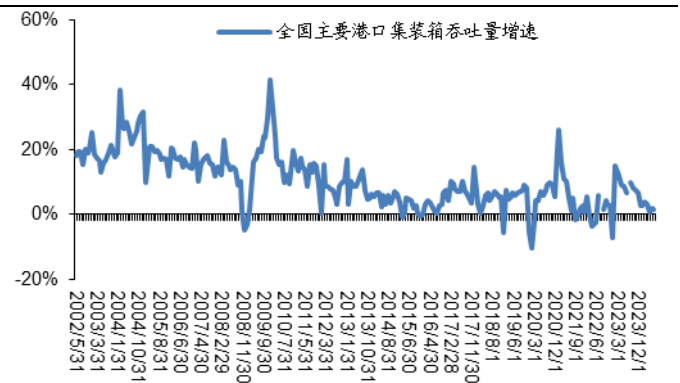
5) 集装箱

图23 BDI 指数



资料来源：Wind、HTI

图24 集装箱吞吐量增速



资料来源：Wind、HTI

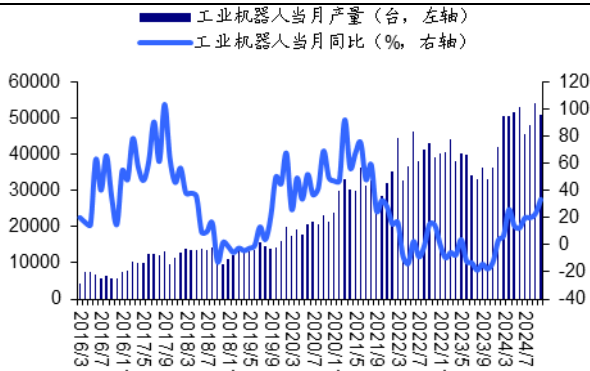
图25 货物吞吐量增速



资料来源：Wind、HTI

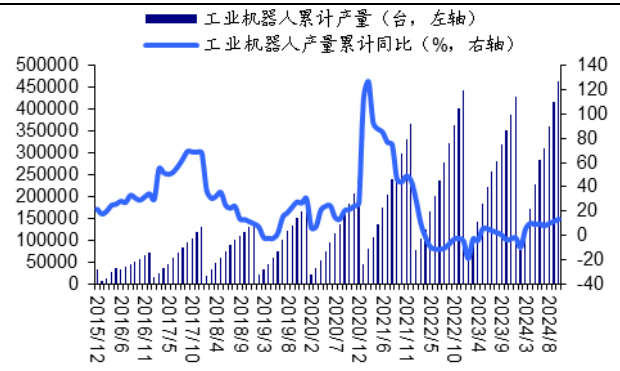
6) 工业机器人

图26 工业机器人单月产量



资料来源：Wind、国家统计局、HTI

图27 工业机器人累计产量



资料来源：Wind、国家统计局、HTI

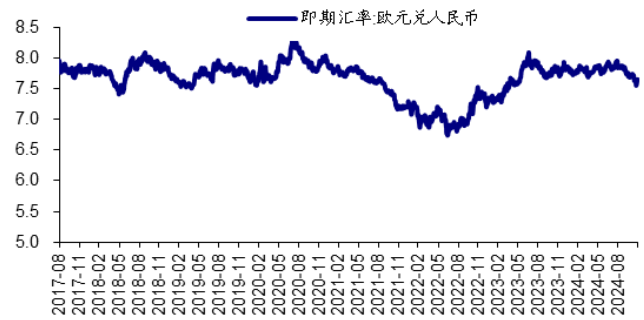
7) 出口链

图28 即期汇率：美元



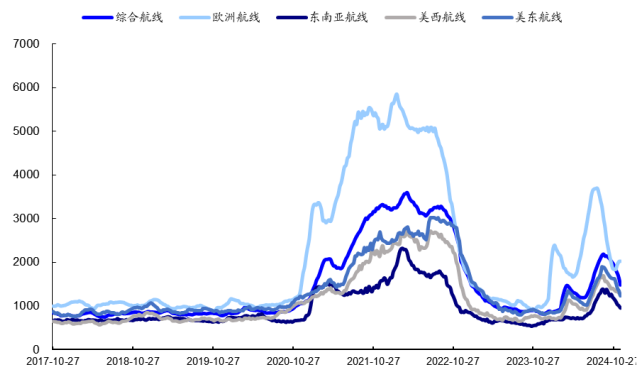
资料来源：Wind、HTI

图29 即期汇率：欧元



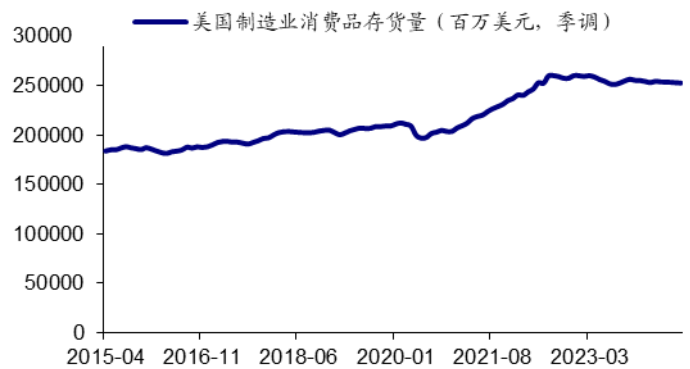
资料来源：Wind、HTI

图30 中国出口集装箱运价指数 (CCFI)



资料来源：Wind、HTI

图31 美国制造业消费品存货量



资料来源：Wind、HTI

2. 风险提示

固定资产投资放缓、信贷政策收紧、潜在的贸易保护主义。

APPENDIX 1

Summary

Investment Highlights:

Sector Performance: In the 48th week of 2024, the machinery sector outperformed the Shanghai Composite Index, ranking seventh with a weekly excess return of +1.44 percentage points. Year-to-date, the sector's excess return is -4.7 percentage points.

Macroeconomic Data: November PMI was 50.3%, up 0.2 percentage points, indicating a slight recovery in manufacturing demand. 1) **Industrial Enterprises:** From January to October, large-scale industrial enterprises achieved a total profit of RMB 5.87 trillion, down 4.3% YoY. Mining profits were RMB 984.53 billion, down 12.7% YoY; manufacturing profits were RMB 4.22 trillion, down 4.2% YoY; utilities profits were RMB 661.2 billion, up 11.5% YoY. Revenue for these enterprises was RMB 110.96 trillion, up 1.9% YoY. 2) **PMI Index:** November's manufacturing PMI was 50.3%, up 0.2 percentage points, with production and new orders indices showing slight increases.

Industrial Gases: Hangzhou Oxygen Plant Group successfully launched two 110,000 cubic meter air separation units. Liquid gas prices fell weekly. 1) **Hangzhou Oxygen Plant Group:** Developed for Ningxia Baofeng Energy Group's project, these are the largest domestic air separation units. 2) **Gas Prices:** As of November 28, liquid oxygen averaged RMB 398/ton, down 0.75% weekly; liquid nitrogen RMB 411/ton, down 1.4%; liquid argon RMB 648/ton, down 3.71%; helium RMB 97.5/cubic meter, unchanged; high-purity helium RMB 658.93/bottle, unchanged; xenon RMB 29,142.86/cubic meter, up 0.49%; krypton RMB 350/cubic meter, unchanged; neon RMB 125/cubic meter, unchanged.

Rail Transit Equipment: Guangzhou-Zhanjiang high-speed rail announced a tender for 350 km/h Fuxing intelligent EMUs, with 15 sets expected by December 2025, budgeted at approximately RMB 2.8 billion.

Lithium Battery Equipment: Qingtao's 15GWh semisolid battery line (Phase II) launched, with a total investment of RMB 10 billion, aiming for an annual output value exceeding RMB 10 billion.

Suggested Targets: CRRC Corporation, Hangzhou Oxygen Plant Group, Yantai Jereh Oilfield, Hangzhou Honghua Digital Technology Stock, Zhuzhou Huarui Precision Cutting Tools, Wuxi Autowell Technology, Shanghai Friendess Electronic Technology Corporation, Zhejiang Shuanghuan Driveline, Himile Mechanical Science and Technology (Shandong), Jiangsu Hengli Hydraulic, Sany Heavy Industry, XCMG Construction Machinery, Yindu Kitchen Equipment, Centre Testing International Group, Hangzhou GreatStar Industrial, China International Marine Containers (Group).

Risk Warning: Slowdown in fixed asset investment, tightening credit policies, potential trade protectionism.

附录 APPENDIX

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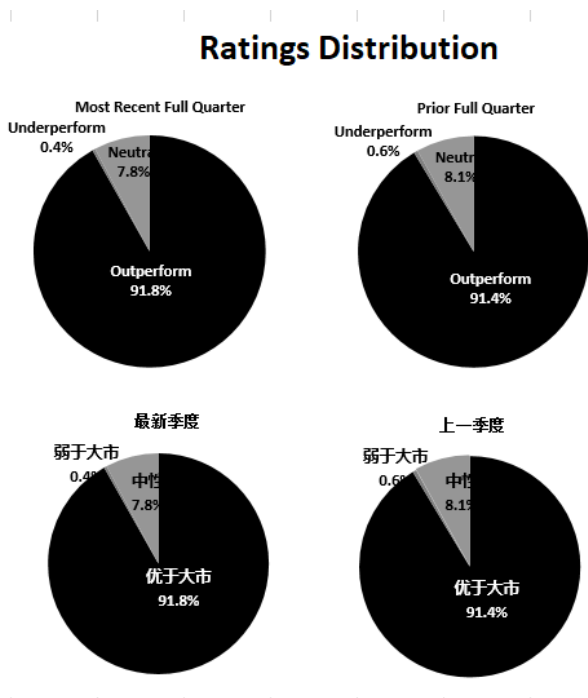
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*在每个评级类别里投资银行客户所占的百分比。

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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.

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IB clients*	3.5%	4.4%	0.0%

*Percentage of investment banking clients in each rating category.

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研究机构名称: Haitong Securities India Private Limited

SEBI 研究分析师注册号: INH000002590

地址: 1203A, Floor 12A, Tower 2A, One World Center

841 Senapati Bapat Marg, Elphinstone Road, Mumbai 400 013, India

CIN U74140MH2011FTC224070

电话: +91 22 43156800 传真: +91 22 24216327

合规和申诉办公室联系人: Prasanna Chandwaskar ; 电话: +91 22 43156803; 电子邮箱: prasanna.chandwaskar@htisec.com

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Name of the entity: Haitong Securities India Private Limited

SEBI Research Analyst Registration Number: INH000002590

Address : 1203A, Floor 12A, Tower 2A, One World Center

841 Senapati Bapat Marg, Elphinstone Road, Mumbai 400 013, India

CIN U74140MH2011FTC224070

Ph: +91 22 43156800 Fax:+91 22 24216327

Details of the Compliance Officer and Grievance Officer : Prasanna Chandwaskar : Ph: +91 22 43156803; Email id: prasanna.chandwaskar@htisec.com

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