

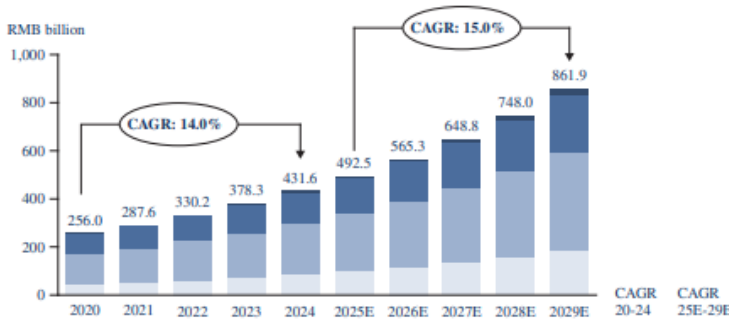
What's Hot Today:

► China Robotics: Core Components Driving Domestic Breakthrough

Advancements in AI have transformed robotics applications from simple automated machinery into intelligent physical AI platforms, driving a new wave of commercial demand. Coped with IoTs, lower hardware costs and faster computing speed, these factors are unlocking the potential of robots. The sector covers three major categories: traditional industrial robots, collaborative robots and service robots. According to Frost & Sullivan, the global robotics market is projected to grow at a 15% CAGR from 2025 to 2029, reaching RMB862 billion by 2029.

Fig 1: Total Revenue (RMB'bn)

Market Size of Global Robot Market (by revenue), 2020-2029E



	2020	2021	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	CAGR 20-24	CAGR 25E-29E
■ Cobot	2.5	3.7	4.7	5.8	7.5	9.8	13.1	18.0	25.0	35.0	32.0%	37.4%
■ Traditional Industrial Robot	82.6	93.3	105.6	117.9	129.2	145.7	164.1	184.6	207.8	233.3	11.8%	12.5%
■ Service Robot	129.9	142.2	161.9	185.0	212.1	241.5	275.6	315.1	360.8	413.9	13.0%	14.4%
■ Other Robots	41.0	48.3	58.1	69.6	82.9	95.5	112.5	131.1	154.5	179.7	19.3%	17.1%

Source: Huayan Robotics IPO Offering, Frost & Sullivan data, Sunwah Kingsway Research

The robotics value chain consists of three layers: upstream core components, midstream OEM R&D and manufacturing, and downstream end applications. Among them, upstream core components stand out as both the largest cost component (accounting for 60%–70% of total production cost) and the most critical segment defining performance, precision and cost competitiveness. With high technical barriers and decisive influence on product capability, core components have become the focal point and growth area of the global robotic industry.

Against this backdrop, we highlight the key players in the upstream components sectors:

China & HK Indices	CLOSE	1D	YTD
HSI	26,394	1.7%	3.0%
HSCEI	8,905	2.1%	-0.1%
HSCCI	4,347	0.6%	8.3%
CSI300	4,736	1.1%	2.3%
Shanghai A	4,253	0.7%	6.1%
Shanghai B	269	0.8%	6.1%
Shenzhen A	2,860	1.8%	8.0%
Shenzhen B	1,201	0.4%	-5.0%

Key Int'l Indices	CLOSE	1D	YTD
Dow Jones	48,578	0.2%	1.1%
S&P 500	7,041	0.3%	2.9%
Nasdaq	24,102	0.4%	3.7%
NIKKEI Index	59,066	-0.8%	17.3%
FTSE Index	10,589	0.3%	6.6%
CAC Index	8,262	-0.1%	1.4%
DAX Index	24,154	0.4%	-1.4%

Commodities	CLOSE	1D	YTD
GOLD (US\$/oz.)	4,790	-0.0%	11.1%
STEEL (US\$/oz.)	2,965	-1.5%	16.6%
SILVER (US\$/oz.)	78	-0.7%	10.0%
CRUDE OIL (US\$/bbl)	94	3.7%	62.3%
COPPER (US\$/oz.)	13,270	-0.1%	6.8%
ALUMINIUM (US\$/oz.)	3,643	2.3%	21.6%
PLATINUM (US\$/oz.)	2,091	-1.0%	1.9%
ZINC (US\$/oz.)	3,424	2.4%	9.8%
WHEAT (US\$/bu)	598	0.8%	18.7%
CORN (US\$/bu)	457	-0.6%	0.9%
SUGAR (US\$/lb)	107	-0.5%	
SOYBEAN (US\$/bu)	1,180	-0.2%	10.0%
PVC (US\$/t)	5,085	-0.3%	70.8%
CRB	374	0.9%	3.0%
BDI			32.3%

Exchange Rates	USD	HKD	EUR	JPY	CHF	RMB
USD		7.825	0.849	159.170	0.784	6.823
HKD	0.128		0.108	20.341	10.014	0.872
EUR	1.178	9.219		187.500	1.083	8.036
JPY	0.006	4.917	0.533		0.492	0.043
CHF	1.276	9.986	1.083	203.139		8.712
RMB	0.147	1.147	0.124	23.337	0.115	

Market Sentiment	CURRENT	5D
CDS Monitor - USD SR 5Y		
Greece	N/A	N/A
Ireland	83	-2.4%
Italy	139	-0.6%
Portugal	207	-0.0%
Spain	108	0.3%
VIX	17	-8.0%

Source: Bloomberg

Robot Reducers: High-Value Core Components

As key transmission components, which often account for over 30% of total costs, robot reducers slow motor speed and amplify torque to enable stability, creating precise movement and strong load-bearing capability. The high-end segment is dominated by Japanese and German manufacturers. Domestic suppliers include market leader Harmonic Green Wave Harmonic Drive (688017.SH), which has established partnerships with North American customers. Zhongli (002896.SZ) offers a full portfolio of various reducer types and Shuanghuan Transmission (002472.SZ) is a leading domestic player in RV (rotary vector) reducers. Tuopu (601689.SH) and Sanhua (002050.SZ) are also key suppliers of humanoid robot actuators and integrated joint systems.

Lead Screws: The "Linear Muscles"

Lead screws are the core components for linear movement, translating the rotational power of motors into linear displacement to enable accurate positioning, stable loading and smooth operation. They typically account for 5%–10% of industrial robot costs, and about 15%–20% in humanoid robots.

Again, high-end applications are controlled by large Japanese and European manufacturers. Among domestic players, Hengli Hydraulic (601100.SH) achieves mass production of planetary roller screws and cooperates with North American customers. Wuzhou Xinchun (603667.SH) supplies core components and finished products. Zhejiang Rongtai (603119.SH) focuses on planetary roller screws for miniature dexterous hands. Tuopu (601689.SH) and Sanhua (2050.HK) focus primarily on humanoid robots and are key suppliers of lead screws and linear actuators.

Servo Motors: The "Power Heart" of Robots

Servo motors are the core driving components that endow robots with precise, responsive power. They convert electrical energy into mechanical energy, working alongside reducers and lead screws to accurately control joint speed, torque and position, ensuring smooth, stable and reliable movement. They represent around 15% of industrial robot costs and 20% in humanoid robots.

Domestic suppliers include Shenzhen Inovance Technology (300124.SZ), a leading provider of frameless torque motors and joint modules with a broad customer base. Moons' (603728.SH) is a coreless motor manufacturer ranked top-3 globally in its segment and Bukod (688160.SH) supplies frameless torque motors for humanoid robot customers.

Our views: We believe that robot applications will expand significantly with the development of AI technology. At present, the bottleneck is not capacity, but the supply of core components. Manufacturers in this segment enjoy a stable competitive landscape, high value orders and stronger profitability than midstream assemblers. We are confident that some of these Chinese enterprises, with cost and supply chain advantages, will assume an increasingly important role in the global robotics value chain.

We like the following leading players:

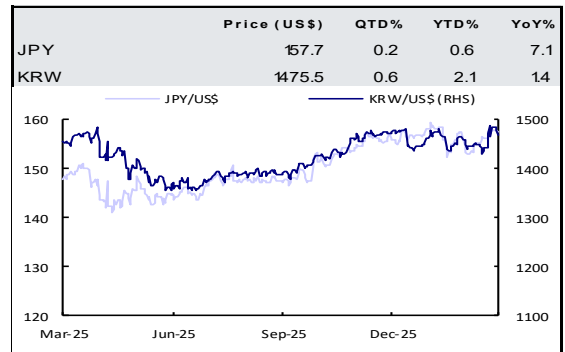
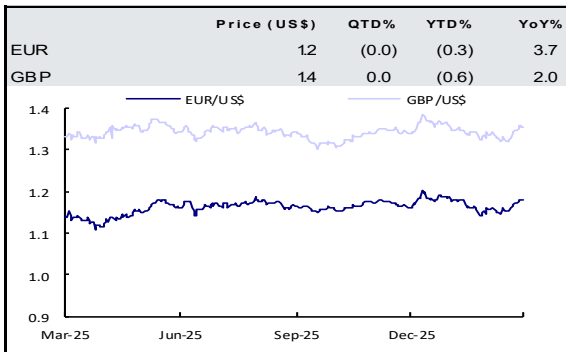
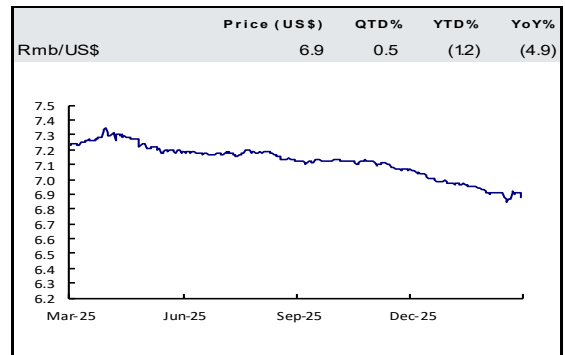
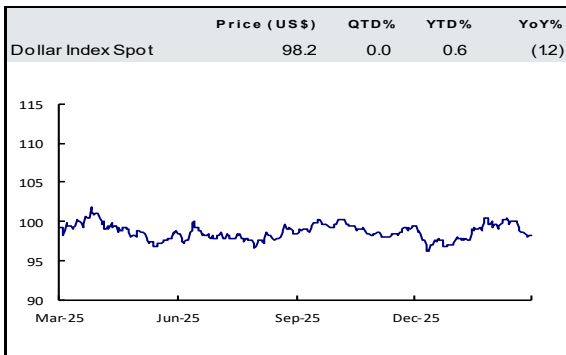
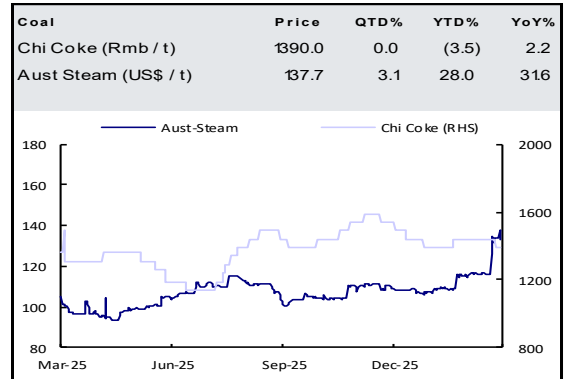
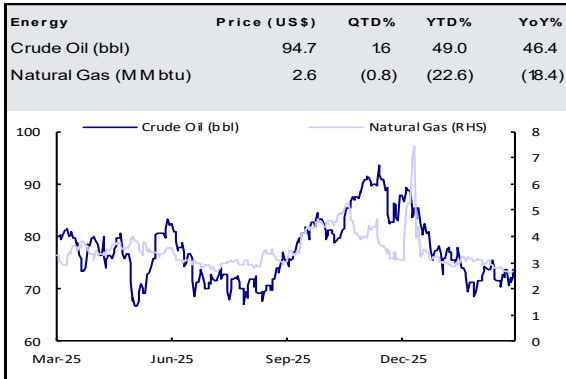
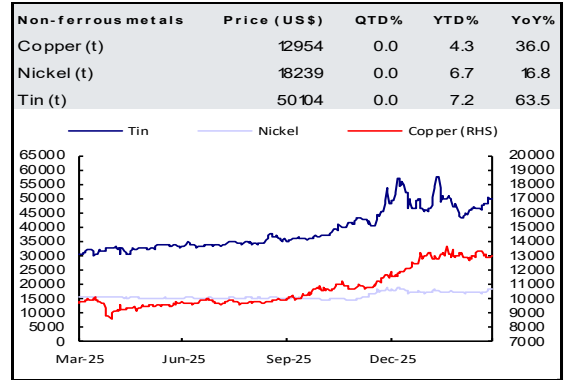
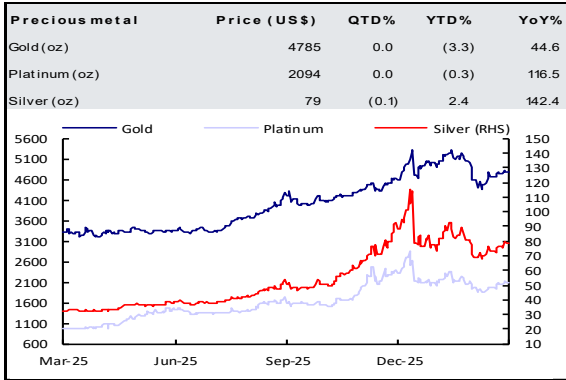
- 1). Green Wave Harmonic Drive (688017.SH, RMB207.98, RMB38bn)** - Leading domestic harmonic reducer manufacturer that has broken Japan's monopoly; a core supplier for Tesla's humanoid robots, trading at 214x FY26E P/E.

- 2). Sanhua Intelligent Controls (2050.HK, HK\$31.62, HK\$133bn)** - Core supplier of rotary actuators and a key partner for Tesla's humanoid robots, trading at 41x FY26E P/E.

- 3). Tuopu Group (601689.SH, RMB61.16, RMB106bn)** - Leading manufacturer of linear actuators with in-house developed planetary roller screws; a major supplier to Tesla, trading at 30x FY26E P/E.

- 4). Shenzhen Inovance Technology (300124.SZ, RMB66.84, RMB181bn)** - Leading domestic supplier of servo systems, with a focus on frameless torque motors and joint modules for robot applications, trading at 27x FY26E P/E.

Market Watch – Major Commodities and Currencies



Source: Bloomberg

US Economic Calendar

Indicators	Freq	Obs Date	Expected Release Date
Initial Jobless Claims	WoW		16-Apr-26
Industrial Production	MoM		16-Apr-26
Wholesale Inventories	MoM		29-Apr-26
Housing Starts / Building Permits	MoM		29-Apr-26
Factory Orders	MoM		4-May-26
Existing Home Sales	MoM		11-May-26
PPI	MoM		13-May-26
ISM Manufacturing PMI	MoM		1-May-26
Personal Income & Spending	MoM		30-Apr-26
Durable Goods Orders	MoM		29-Apr-26
Trade Balance	MoM		5-May-26
Employment Report	MoM		8-May-26
CPI	MoM		12-May-26
Retail Sales	MoM		21-Apr-26
GDP	QoQ		30-Apr-26
Consumer Confidence	MoM		28-Apr-26
New home Sales	MoM		5-May-26
Business Inventories	MoM		21-Apr-26
Auto Sales	MoM		

China Economic Calendar

Indicators	Freq	Obs Date	Expected Release Date
PMI Manufacturing	MoM		30-Apr-26
Foreign Exchange Reserves	QoQ		7-May-26
Money Supply - M2	MoM		9-May-26
Trade Balance	MoM		9-May-26
PPI	MoM		11-May-26
CPI	MoM		11-May-26
Retail Sales	MoM		18-May-26
Industrial Production	MoM		18-May-26
GDP	YoY		15-Jul-26

Hong Kong Economic Calendar

Indicators	Freq	Obs Date	Expected Release Date
Unemployment Rate	MoM		23-Apr-26
CPI	MoM		23-Apr-26
Trade Balance	MoM		28-Apr-26
Money Supply - M2	MoM		30-Apr-26
GDP	QoQ		5-May-26
Retail Sales	MoM		6-May-26
PMI	MoM		6-May-26
Foreign Currency Reserve	MoM		7-May-26
Producer Prices Index	QoQ		12-Jun-26
Industrial Production	QoQ		12-Jun-26
Composite Interest Rate	MoM		

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