Hakuto / 7433

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Research Coverage Report by Shared Research Inc.

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How to read a Shared Research report: This report begins with the trends and outlook section, which discusses the company's most recent earnings. First-time readers should start at the business section later in the report.

Executive summary

Multi-business firm: from electronics trading to chemical manufacturing

Hakuto is a unique mini-conglomerate. It is both an electronics trading company and industrial chemical manufacturer. The origin of the company's electronics trading business is a trading company founded in 1953 to import raw quartz for use in electronic devices. The industrial chemical manufacturing business started in 1960 as a new unit aimed at diversifying the company's operations and enhancing stability. At present, Hakuto is a conglomerate centered on these two main businesses. Its operations focus on Japan and the Asia region.

Given its manufacturing DNA, Hakuto is a technology-driven company and even its electronics trading business has an engineering division. The trading business provides equipment installation and maintenance services, and employs Field Application Engineers (FAEs) with a high level of technical expertise. Shared Research believes that this focus on technology and synergies between the two seemingly different businesses are sources of Hakuto's strength. While firms operating in the semiconductor space tend to have large fluctuations in earnings performance, the company's earnings are relatively stable. In terms of relative size among semiconductor trading companies, Hakuto is medium size but its profit margins match those of the sector leaders.

Trends and outlook

In FY03/19, the company posted consolidated sales of JPY140.1bn (+1.0% YoY), operating profit of JPY3.7bn (-2.6%), recurring profit of JPY3.6bn (-5.1% YoY), and net income attributable to parent company shareholders of JPY2.5bn (-24.8% YoY). Trends in the three core segments were as follows. In the Electronic Devices and Components segment, despite robust sales of semiconductor devices for automobiles, growth in sales was marginal and profit declined as a result of discontinuing memory cards in FY03/18. In the Electronic and Electric Equipment segment, 1H sales and profits were buoyed by robust sales of PCB manufacturing equipment (contact lithographic exposure equipment, laminators). In the Industrial Chemicals segment, sales and profit increased on robust demand for polymerization-inhibitors and catalysts as well as increased demand for cosmetic base materials in the petrochemical industry.

For FY03/20, Hakuto forecasts sales of JPY160.0bn (+14.2% YoY), operating profit of JPY4.0bn (+9.8% YoY), recurring profit of JPY4.0bn (+11.7% YoY), and net income attributable to parent company shareholders of JPY2.8bn (+13.2% YoY). It expects to grow sales in each segment with the goal of achieving medium-term management plan targets (sales of JPY180.0bn and operating profit of JPY7.0bn in FY03/21). The focus areas for each of the three core segments are as follows. In the Electronic Devices and Components segment, it aims for further growth in the automotive field, where self-driving technology and enhanced safety equipment are rapidly advancing, as well as fields expected to see increased technological innovation, such as IoT and 5G communications-related. In the Electronic and Electric Equipment segment, Hakuto will strive to win orders for FPC manufacturing equipment in semiconductor manufacturing fields undergoing miniaturization and Asian markets centering on the Greater China area. In the Industrial Chemicals segment, at the same time as continuing initiatives to strengthen sales of polymerization-inhibitors for monomers in Asian markets, it will focus efforts on sales of environmentally-friendly products, including in new areas.

Strengths and weaknesses

Shared Research views the company's strengths as having a product lineup with varying business cycles, its status as an independent trading company, and the fact that many employees are science and engineering graduates. Weaknesses include Hakuto's high dependence on semiconductor devices, challenges maintaining its current pace of growth, and a hollowing out of the domestic business (see Strengths and weaknesses).

Key financial data

Income statement (JPYmn)	FY03/11 Cons.	FY03/12 Cons.	FY03/13 Cons.	FY03/14 Cons.	FY03/15 Cons.	FY03/16 Cons.	FY03/17 Cons.	FY03/18 Cons.	FY03/19 Cons.	FY03/20 Cons. Est.
Sales	**110,910**	**116,148**	**111,823**	**132,619**	**131,073**	**116,296**	**127,599**	**138,744**	**140,123**	**160,000**
YoY	14.1%	4.7%	-3.7%	18.6%	-1.2%	-11.3%	9.7%	8.7%	1.0%	14.2%
Gross profit	**17,543**	**18,065**	**17,115**	**19,095**	**19,481**	**17,221**	**16,495**	**18,301**	**18,667**	**-**
YoY	12.3%	3.0%	-5.3%	11.6%	2.0%	-11.6%	-4.2%	10.9%	2.0%	-
GPM	15.8%	15.6%	15.3%	14.4%	14.9%	14.8%	12.9%	13.2%	13.3%	-
Operating profit	**4,392**	**4,222**	**3,101**	**4,043**	**4,307**	**2,906**	**2,069**	**3,740**	**3,642**	**4,000**
YoY	62.1%	-3.9%	-26.6%	30.4%	6.5%	-32.5%	-28.8%	80.8%	-2.6%	9.8%
OPM	4.0%	3.6%	2.8%	3.0%	3.3%	2.5%	1.6%	2.7%	2.6%	2.5%
Recurring profit	**4,023**	**4,187**	**3,435**	**4,218**	**4,555**	**2,873**	**1,989**	**3,772**	**3,580**	**4,000**
YoY	62.0%	4.1%	-18.0%	22.8%	8.0%	-36.9%	-30.8%	89.6%	-5.1%	11.7%
RPM	3.6%	3.6%	3.1%	3.2%	3.5%	2.5%	1.6%	2.7%	2.6%	2.5%
Net income	**2,200**	**2,244**	**2,005**	**2,336**	**3,394**	**2,034**	**1,903**	**3,287**	**2,473**	**2,800**
YoY	33.0%	2.0%	-10.6%	16.5%	45.3%	-40.1%	-6.4%	72.7%	-24.8%	13.2%
Net margin	2.0%	1.9%	1.8%	1.8%	2.6%	1.7%	1.5%	2.4%	1.8%	1.8%
Per share data (JPY)										
Shares issued (year-end; '000)	24,137	24,137	24,137	24,137	24,137	24,137	24,137	24,137	24,137	-
EPS	99.9	102.6	91.7	106.9	155.1	93.0	87.2	154.9	118.5	136.2
EPS (fully diluted)	-	-	-	-	-	-	-	-	-	-
Dividend per share	35.0	35.0	35.0	35.0	40.0	40.0	40.0	46.0	50.0	-
Book value per share	1,829.6	1,880.7	1,992.5	2,128.6	2,318.5	2,330.4	2,413.2	2,568.0	2,658.1	-
Balance sheet (JPYmn)										
Cash and cash equivalents	13,232	13,382	11,364	11,417	12,437	8,366	7,748	9,428	7,608	-
Total current assets	**59,121**	**59,120**	**59,686**	**65,259**	**66,046**	**60,655**	**61,081**	**68,490**	**70,901**	**-**
Tangible fixed assets	6,755	6,560	6,545	8,040	7,293	6,850	6,764	6,739	6,638	-
Intangible fixed assets	298	651	1,509	1,342	1,332	1,109	819	453	325	-
Investments and other assets	7,190	6,049	6,435	8,166	8,112	7,749	9,595	9,643	8,960	-
Total assets	**73,364**	**72,381**	**74,176**	**82,808**	**82,785**	**76,365**	**78,261**	**85,326**	**87,826**	**-**
Accounts payable	15,084	14,080	13,817	17,431	16,790	15,309	16,557	18,104	18,623	-
Short-term debt	7,809	6,783	5,996	6,439	5,349	2,344	2,282	6,453	7,752	-
Total current liabilities	**25,706**	**25,281**	**24,644**	**28,196**	**25,706**	**20,993**	**21,805**	**27,930**	**30,650**	**-**
Long-term debt	5,333	4,050	4,163	5,600	3,864	2,527	1,410	1,269	634	-
Total fixed liabilities	**7,448**	**5,840**	**5,978**	**8,083**	**6,280**	**4,597**	**3,707**	**3,813**	**2,540**	**-**
Total liabilities	**33,154**	**31,119**	**30,622**	**36,280**	**31,986**	**25,590**	**25,513**	**31,743**	**33,190**	**-**
Net assets	**73,364**	**72,379**	**74,175**	**82,808**	**82,785**	**76,364**	**78,261**	**85,326**	**87,826**	**-**
Total interest-bearing debt	13,142	10,833	10,159	12,039	9,213	4,871	3,692	7,722	8,386	-
Cash flow statement (JPYmn)										
Cash flows from operating activities	73	3,602	695	1,732	4,296	2,087	2,571	-459	-1,198	-
Cash flows from investing activities	-650	-497	-1,846	-2,069	-374	44	-1,209	214	-152	-
Cash flows from financing activities	684	-3,131	-1,623	1,010	-3,658	-5,469	-1,947	1,777	-699	-
Financial ratios										
ROA (RP-based)	5.7%	5.7%	4.7%	5.4%	5.5%	3.6%	2.6%	4.6%	4.1%	-
ROE	5.6%	5.5%	4.7%	5.2%	7.0%	4.0%	3.7%	6.2%	4.6%	-
Equity ratio	54.8%	57.0%	58.7%	56.2%	61.4%	66.5%	67.4%	63.2%	62.2%	-

Source: Shared Research based on company data
Note: Figures may differ from company materials due to differences in rounding methods

Recent updates

Highlights

On **July 31, 2019,** Hakuto Co., Ltd. announced earnings results for Q1 FY03/20; see the results section for details.

On **July 19, 2019**, Shared Research updated the report following interviews with the company.

On **May 8, 2019,** the company announced earnings results for full-year FY03/19.

For previous releases and developments, please refer to the News and topics section.

Trends and outlook

Quarterly trends and results

Cumulative	FY03/18				FY03/19				FY03/20	FY03/20	
(JPYmn)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	% of 1H	1H Est.
Revenue	37,007	71,825	105,651	138,744	33,768	68,743	104,947	140,123	35,657	48.2%	74,000
YoY	40.0%	31.8%	14.1%	8.7%	-8.8%	-4.3%	-0.7%	1.0%	5.6%		7.6%
Gross profit	4,582	9,323	13,891	18,301	4,756	9,337	14,005	18,667	4,416		
YoY	24.8%	22.7%	11.8%	10.9%	3.8%	0.2%	0.8%	2.0%	-7.1%		
GPM	12.4%	13.0%	13.1%	13.2%	14.1%	13.6%	13.3%	13.3%	12.4%		
SG&A expenses	3,694	7,410	11,023	14,561	3,644	7,379	11,158	15,024	3,665		
YoY	8.1%	6.9%	1.3%	0.9%	-1.4%	-0.4%	1.2%	3.2%	0.6%		
SG&A ratiio	10.0%	10.3%	10.4%	10.5%	10.8%	10.7%	10.6%	10.7%	10.3%		
Operating profit	887	1,912	2,868	3,740	1,112	1,957	2,847	3,642	750	50.0%	1,500
YoY	249.2%	186.7%	85.2%	80.8%	25.4%	2.4%	-0.7%	-2.6%	-32.6%		-23.4%
OPM	2.4%	2.7%	2.7%	2.7%	3.3%	2.8%	2.7%	2.6%	2.1%		2.0%
Recurring profit	1,071	2,085	3,013	3,772	1,190	2,000	2,881	3,580	713	47.5%	1,500
YoY	163.1%	172.9%	92.3%	89.6%	11.1%	-4.1%	-4.4%	-5.1%	-40.1%		-25.0%
RPM	2.9%	2.9%	2.9%	2.7%	3.5%	2.9%	2.7%	2.6%	2.0%		2.0%
Net income	853	1,582	2,837	3,287	836	1,346	1,883	2,473	492	44.7%	1,100
YoY	193.1%	209.0%	189.5%	72.7%	-2.0%	-14.9%	-33.6%	-24.8%	-41.1%		-18.3%
Net margin	2.3%	2.2%	2.7%	2.4%	2.5%	2.0%	1.8%	1.8%	1.4%		1.5%

Quarterly	FY03/18				FY03/19				FY03/20
(JPYmn)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Revenue	37,007	34,818	33,826	33,093	33,768	34,975	36,204	35,176	35,657
YoY	40.0%	24.1%	-11.2%	-5.5%	-8.8%	0.5%	7.0%	6.3%	5.6%
Gross profit	4,582	4,741	4,568	4,410	4,756	4,581	4,668	4,662	4,416
YoY	24.8%	20.7%	-5.4%	8.5%	3.8%	-3.4%	2.2%	5.7%	-7.1%
GPM	12.4%	13.6%	13.5%	13.3%	14.1%	13.1%	12.9%	13.3%	12.4%
SG&A expenses	3,694	3,716	3,613	3,538	3,644	3,735	3,779	3,866	3,665
YoY	8.1%	5.7%	-8.5%	-0.2%	-1.4%	0.5%	4.6%	9.3%	0.6%
SG&A ratiio	10.0%	10.7%	10.7%	10.7%	10.8%	10.7%	10.4%	11.0%	10.3%
Operating profit	887	1,025	956	872	1,112	845	890	795	750
YoY	249.2%	148.2%	8.4%	67.7%	25.4%	-17.6%	-6.9%	-8.8%	-32.6%
OPM	2.4%	2.9%	2.8%	2.6%	3.3%	2.4%	2.5%	2.3%	2.1%
Recurring profit	1,071	1,014	928	759	1,190	810	881	699	713
YoY	163.1%	184.0%	15.6%	79.9%	11.1%	-20.1%	-5.1%	-7.9%	-40.1%
RPM	2.9%	2.9%	2.7%	2.3%	3.5%	2.3%	2.4%	2.0%	2.0%
Net income	853	729	1,255	450	836	510	537	590	492
YoY	193.1%	229.9%	168.2%	-51.2%	-2.0%	-30.0%	-57.2%	31.1%	-41.1%
Net margin	2.3%	2.1%	3.7%	1.4%	2.5%	1.5%	1.5%	1.7%	1.4%

Source: Shared Research based on company data
Note: Figures may differ from company materials due to differences in rounding methods

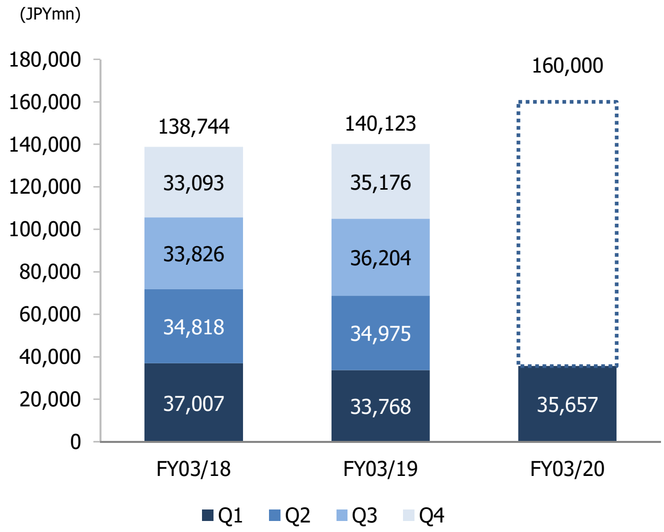
Change in accounting methodology: Starting in Q1 FY03/19, the company changed the currency conversion method it used for converting the revenues and expenses at its overseas subsidiaries from the market exchange rate on the last day of the accounting period to the average exchange rate over the entire accounting period. This change reduced 1H FY03/18 sales by JP557mn, operating profit by JPY17mn, both recurring profit and pre-tax profit by JPY18mn, and net income by JPY14mn. The figures for FY03/18 results used in this report, including YoY comparisons, are based on the reported figures prior to this adjustment.

Cumulative (JPYmn)	FY03/18 Q1	FY03/18 Q2	FY03/18 Q3	FY03/18 Q4	FY03/19 Q1	FY03/19 Q2	FY03/19 Q3	FY03/19 Q4	FY03/20 Q1
Sales	**37,007**	**71,825**	**105,651**	**138,744**	**33,768**	**68,743**	**104,947**	**140,123**	**35,657**
YoY	40.0%	31.8%	14.1%	8.7%	-8.8%	-4.3%	-0.7%	1.0%	5.6%
Electronic Devices and Components	29,538	56,043	83,194	106,223	25,585	52,523	81,477	107,668	28,043
YoY	55.0%	38.3%	18.1%	7.8%	-13.4%	-6.3%	-2.1%	1.4%	9.6%
% of total	79.5%	77.7%	78.4%	76.2%	75.4%	76.0%	77.3%	76.5%	78.3%
Electronic and Electric Equipment	5,034	10,806	15,681	21,085	5,498	10,899	15,217	21,544	4,692
YoY	2.3%	19.8%	7.0%	9.9%	9.2%	0.9%	-3.0%	2.2%	-14.7%
% of total	13.5%	15.0%	14.8%	15.1%	16.2%	15.8%	14.4%	15.3%	13.1%
Industrial Chemicals	2,431	4,968	7,646	10,247	2,680	5,312	8,231	10,886	2,915
YoY	-1.2%	0.7%	2.5%	4.3%	10.2%	6.9%	7.7%	6.2%	8.8%
% of total	6.5%	6.9%	7.2%	7.4%	7.9%	7.7%	7.8%	7.7%	8.1%
Other	171	341	515	680	174	345	521	688	176
YoY	-1.7%	-1.7%	-0.2%	0.6%	1.8%	1.2%	1.2%	1.2%	1.1%
% of total	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Adjustments	-168	-334	-496	-657	-169	-336	-500	-664	-170
Operating profit	**887**	**1,912**	**2,908**	**3,740**	**1,112**	**1,957**	**2,847**	**3,642**	**750**
YoY	249.2%	186.7%	87.7%	80.8%	25.4%	2.4%	-2.1%	-2.6%	-32.6%
Electronic Devices and Components	432	767	1,262	1,426	465	852	1,321	1,331	269
YoY	-	-	578.5%	219.0%	7.6%	11.1%	4.7%	-6.7%	-42.2%
% of total	48.7%	40.1%	43.4%	38.1%	41.8%	43.5%	46.4%	36.5%	35.9%
Electronic and Electric Equipment	206	617	840	1,254	392	639	765	1,418	214
YoY	11.4%	68.6%	16.8%	56.0%	90.3%	3.6%	-8.9%	13.1%	-45.4%
% of total	23.2%	32.3%	28.9%	33.5%	35.3%	32.7%	26.9%	38.9%	28.5%
Industrial Chemicals	216	431	706	904	267	481	755	932	229
YoY	-10.4%	-3.8%	11.4%	4.3%	23.6%	11.6%	6.9%	3.1%	-14.2%
% of total	24.4%	22.5%	24.3%	24.2%	24.0%	24.6%	26.5%	25.6%	30.5%
Other	6	12	23	27	9	17	26	16	7
YoY	50.0%	-7.7%	4.5%	-	50.0%	41.7%	13.0%	-40.7%	-22.2%
% of total	0.7%	0.6%	0.8%	0.7%	0.8%	0.9%	0.9%	0.4%	0.9%

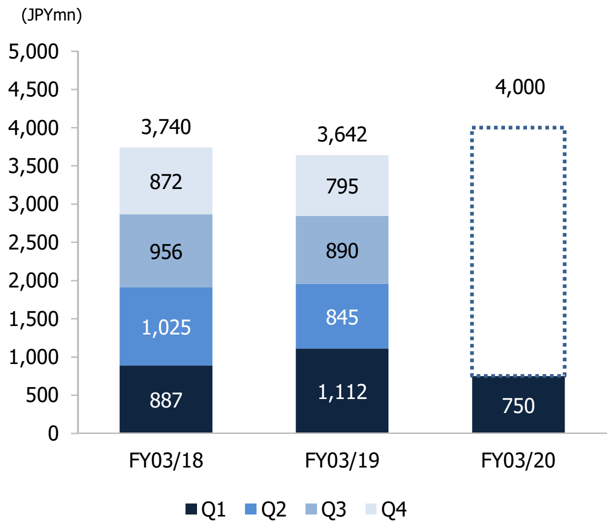
Quarterly (JPYmn)	FY03/18 Q1	FY03/18 Q2	FY03/18 Q3	FY03/18 Q4	FY03/19 Q1	FY03/19 Q2	FY03/19 Q3	FY03/19 Q4	FY03/20 Q1
Sales	**37,007**	**34,818**	**33,826**	**33,093**	**33,768**	**34,975**	**36,204**	**35,176**	**35,657**
YoY	40.0%	24.1%	-11.2%	-	-8.8%	0.5%	7.0%	6.3%	5.6%
Electronic Devices and Components	29,538	26,505	27,151	23,029	25,585	26,938	28,954	26,191	28,043
YoY	55.0%	23.4%	-9.3%	-18.0%	-13.4%	1.6%	6.6%	13.7%	9.6%
% of total	79.5%	75.8%	79.9%	69.3%	75.4%	76.7%	79.6%	74.1%	78.3%
Electronic and Electric Equipment	5,034	5,772	4,875	5,404	5,498	5,401	4,318	6,327	4,692
YoY	2.3%	40.8%	-13.5%	19.1%	9.2%	-6.4%	-11.4%	17.1%	-14.7%
% of total	13.5%	16.5%	14.3%	16.3%	16.2%	15.4%	11.9%	17.9%	13.1%
Industrial Chemicals	2,431	2,537	2,678	2,601	2,680	2,632	2,919	2,655	2,915
YoY	-1.2%	2.6%	6.1%	9.7%	10.2%	3.7%	9.0%	2.1%	8.8%
% of total	6.5%	7.3%	7.9%	7.8%	7.9%	7.5%	8.0%	7.5%	8.1%
Other	171	170	174	165	174	171	176	167	176
YoY	-1.7%	-1.7%	3.0%	3.1%	1.8%	0.6%	1.1%	1.2%	1.1%
% of total	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Adjustments	-168	-166	-162	-161	-169	-167	-164	-164	-170
Operating profit	**887**	**1,025**	**996**	**832**	**1,112**	**845**	**890**	**795**	**750**
YoY	249.2%	148.2%	12.9%	60.0%	25.4%	-17.6%	-10.6%	-4.4%	-32.6%
Electronic Devices and Components	432	335	495	164	465	387	469	10	269
YoY	-	-	19.0%	-37.2%	7.6%	15.5%	-5.3%	-93.9%	-42.2%
% of total	48.7%	32.7%	49.7%	19.7%	41.8%	45.8%	52.7%	1.3%	35.9%
Electronic and Electric Equipment	206	411	223	414	392	247	126	653	214
YoY	11.4%	127.1%	-36.8%	387.1%	90.3%	-39.9%	-43.5%	57.7%	-45.4%
% of total	23.2%	40.1%	22.4%	49.8%	35.3%	29.2%	14.2%	82.1%	28.5%
Industrial Chemicals	216	215	275	198	267	214	274	177	229
YoY	-10.4%	3.9%	47.8%	-15.0%	23.6%	-0.5%	-0.4%	-10.6%	-14.2%
% of total	24.4%	21.0%	27.6%	23.8%	24.0%	25.3%	30.8%	22.3%	30.5%
Other	6	6	11	4	9	8	9	-10	7
YoY	50.0%	-33.3%	22.2%	-	50.0%	33.3%	-18.2%	-350.0%	-22.2%
% of total	0.7%	0.6%	1.1%	0.5%	0.8%	0.9%	1.0%	-1.3%	0.9%

Source: Shared Research based on company data
Note: Figures may differ from company materials due to differences in rounding methods

Quarterly sales



Quarterly operating profit



Source: Shared Research based on company data
Note: Figures may differ from company materials due to differences in rounding methods

Q1 FY03/20 results (out July 31, 2019)

Earnings results for Q1 FY03/20 (April–June 2019)

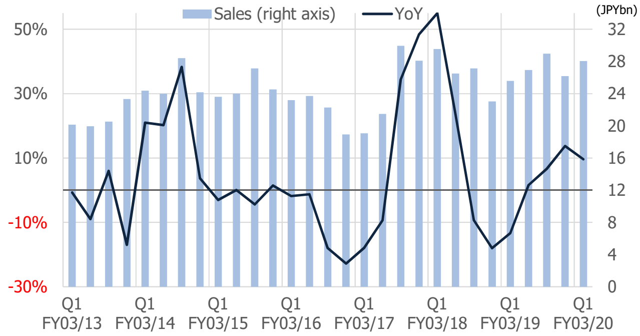
- Consolidated sales: JPY35.7bn (+5.6% YoY)
- Consolidated gross profit: JPY4.4bn (-7.1% YoY)
- Consolidated SG&A expenses: JPY3.7bn (+0.6% YoY)
- Consolidated operating profit: JPY750mn (-32.6% YoY)
- Consolidated recurring profit: JPY713mn (-40.1% YoY)
- Net income*: JPY492mn (-41.1% YoY)

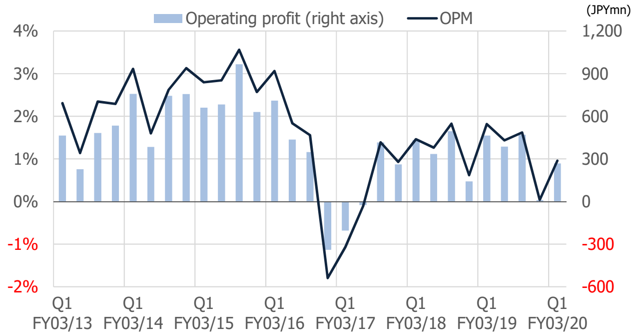
*Net income refers to profit attributable to owners of the parent.

- Electronics industry trend: Impact from US-China trade friction has been limited thus far, but areas being affected are broadening, making for an increasingly serious situation.
- Company performance: Overall sales fell in the Electronic Devices and Components segment, owing to lower sales of lithographic exposure equipment used in PCB manufacturing for smartphones, which had been robust in Q1 FY03/19. The lower sales reflect the decline in companies' appetite for investment in new equipment or postponed investment plans. Industrial Chemicals segment sales increased, supported by steady demand for polymerization inhibitors and activated carbon from the oil and petrochemicals industry, and increased demand for cosmetic base materials. According to the company, results are broadly in line the management's start-of-year forecast.

Electronic Devices and Components

Performance





Source: Shared Research based on company data

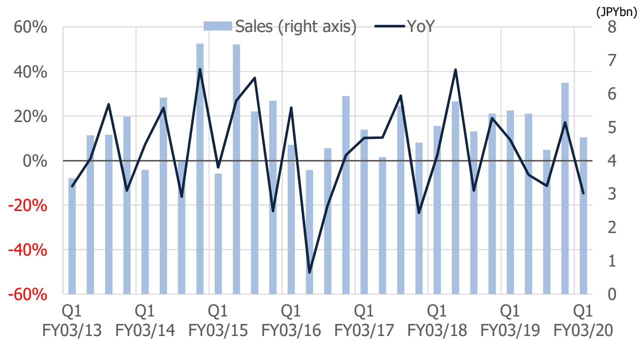
Earnings results for Q1 FY03/20 (April–June 2019)

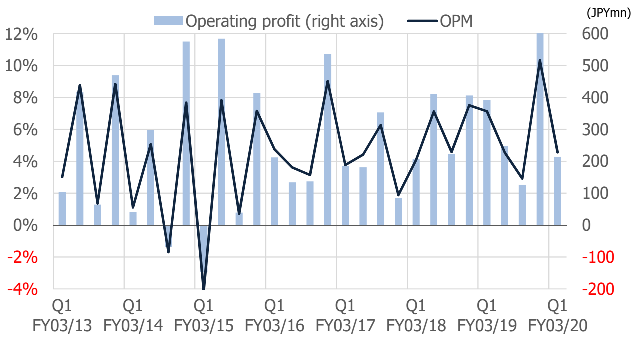
- Segment sales: JPY28.0bn (+9.6% YoY)
- Segment profit: JPY269mn (-42.2% YoY)
- Segment trend: Sales growth was supported by a rebound in sales of semiconductor devices used in information communication devices such as tablets, and an increase in sales of telecom-related electronic components amid rising 5G-related investments. Strong sales in those areas offset weak sales to the Chinese market of motor-related semiconductor devices used in home electric appliances (air conditioners, etc.). The decline in profit was mainly due to a change in sales composition and a decline in the proportion of products with relatively high profitability.

Memory card business: The Singapore subsidiary booked approximately JPY8.0bn in FY03/17 and JPY4.0bn in FY03/18 in large-scale orders for memory cards between Q2 FY03/17 and Q1 FY3/18. Sales had initially been projected to be JPY6.0bn over FY03/18, but owing to the low margin, transient and special nature of the business, the company discontinued memory cards in Q2 FY03/18. Eliminating the impact of this, sales in the Electronic Devices and Components segment maintained an upward trend of 5–10% in FY03/18 and 10–15% against initial FY03/19 forecasts.

Electronic and Electric Equipment

Performance





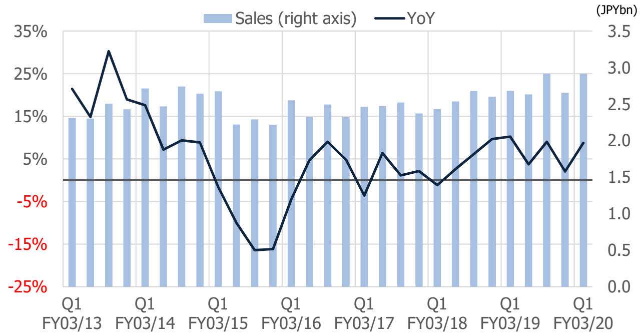
Source: Shared Research based on company data

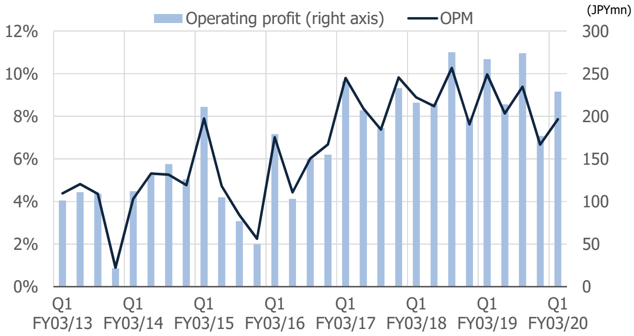
Earnings results for Q1 FY03/20 (April–June 2019)

- Segment sales: JPY4.7bn (-14.7% YoY)
- Segment profit: JPY214mn (-45.4% YoY)
- Segment trend: The declines in sales and profit reflect customers' postponed investment plans, which weakened demand for lithographic exposure equipment used in manufacturing PCBs used for smartphones and for steppers used to manufacture IC packages.

Industrial Chemicals

Performance





Source: Shared Research based on company data

Earnings results for Q1 FY03/20 (April–June 2019)

- Segment sales: JPY2.9bn (+8.8% YoY)
- Segment profit: JPY229mn (-14.2% YoY)
- Segment trend: Sales growth was supported by strong consumption of petrochemicals, which boosted sales of the company's polymerization inhibitors and catalysts, and solid sales of the cosmetics business' bio-polymers. Strong sales in these two areas outweighed sluggish sales of papermaking chemicals in the paper and pulp business, which continues to struggle amid a global decline in papermaking caused by the spread of digital media. Profit, however, declined owing to increased competition faced by the company's polymerization-inhibitors and other products from rival or substitute products.

Other

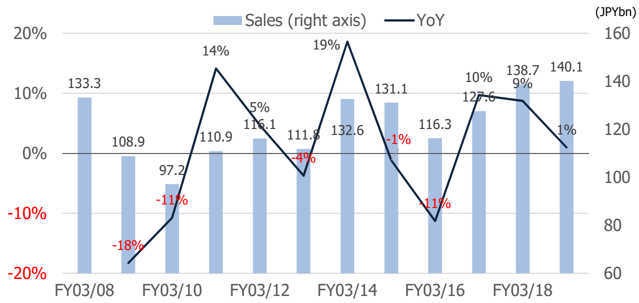
Earnings results for Q1 FY03/20 (April–June 2019)

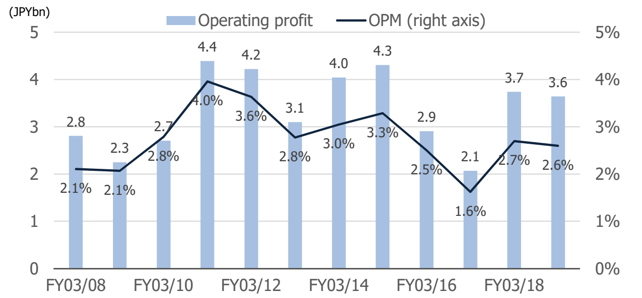
- Segment sales: JPY176mn (+1.1% YoY)
- Segment profit: JPY7mn (-22.2% YoY)
- The segment is mainly engaged in management of the company's operations and logistics, and acting as an agency for insurance companies.

For details on past results, please refer to the Historical performance section.

Full-year company forecasts

	FY03/17			FY03/18			FY03/19			FY03/20 Est.		
(JPYmn)	1H	2H	FY	1H	2H	FY	1H	2H	FY	1H	2H	FY
Total sales	**54,491**	**73,108**	**127,599**	**71,825**	**66,919**	**138,744**	**68,743**	**71,380**	**140,123**	**74,000**	**86,000**	**160,000**
Electronic Devices and Components	40,532	58,022	98,554	56,043	50,180	106,223	52,523	55,145	107,668	-	-	-
Devices	26,723	35,418	62,141	36,533	35,463	71,996	38,044	-	-	-	-	-
Components	13,810	22,602	36,412	19,510	14,716	34,226	14,478	-	-	-	-	-
Electronic and Electric Equipment	9,019	10,172	19,191	10,806	10,279	21,085	10,899	10,645	21,544	-	-	-
Industrial Chemicals	4,933	4,895	9,828	4,968	5,279	10,247	5,312	5,574	10,886	-	-	-
Other	347	329	676	341	339	680	345	343	688	-	-	-
YoY	-9.1%	29.8%	9.7%	31.8%	-8.5%	8.7%	-4.3%	6.7%	1.0%	7.6%	20.5%	14.2%
Electronic Devices and Components	-13.6%	40.8%	11.9%	38.3%	-13.5%	7.8%	-6.3%	9.9%	-	-	-	-
Devices	-17.4%	22.9%	1.6%	36.7%	0.1%	15.9%	4.1%	-	-	-	-	-
Components	-5.0%	82.5%	35.3%	41.3%	-34.9%	-6.0%	-25.8%	-	-	-	-	-
Electronic and Electric Equipment	10.2%	-1.2%	3.9%	19.8%	1.1%	9.9%	0.9%	3.6%	-	-	-	-
Industrial Chemicals	1.1%	1.6%	1.4%	0.7%	7.8%	4.3%	6.9%	5.6%	-	-	-	-
Other	-2.3%	-6.5%	-4.4%	-1.7%	3.0%	0.6%	1.2%	1.2%	-	-	-	-
Gross profit	**7,599**	**8,896**	**16,495**	**9,323**	**8,978**	**18,301**	**9,337**	**9,330**	**18,667**	**-**	**-**	**-**
GPM	13.9%	12.2%	12.9%	13.0%	13.4%	13.2%	13.6%	13.1%	13.3%	-	-	-
SG&A expenses	6,931	7,495	14,426	7,410	7,151	14,561	7,379	7,645	15,024	-	-	-
SG&A-to-sales ratio	12.7%	10.3%	11.3%	10.3%	10.7%	10.5%	10.7%	10.7%	10.7%	-	-	-
Operating profit	**667**	**1,402**	**2,069**	**1,912**	**1,828**	**3,740**	**1,957**	**1,685**	**3,642**	**1,500**	**2,500**	**4,000**
YoY	-64.4%	35.6%	-28.8%	186.7%	30.4%	80.8%	2.4%	-7.8%	-2.6%	-23.4%	48.4%	9.8%
OPM	1.2%	1.9%	1.6%	2.7%	2.7%	2.7%	2.8%	2.4%	2.6%	2.0%	2.9%	2.5%
Recurring profit	**764**	**1,225**	**1,989**	**2,085**	**1,687**	**3,772**	**2,000**	**1,580**	**3,580**	**1,500**	**2,500**	**4,000**
YoY	-59.9%	26.8%	-30.8%	172.9%	37.7%	89.6%	-4.1%	-6.3%	-5.1%	-25.0%	58.2%	11.7%
RPM	1.4%	1.7%	1.6%	2.9%	2.5%	2.7%	2.9%	2.2%	2.6%	2.0%	2.9%	2.5%
Net income	**512**	**1,391**	**1,903**	**1,582**	**1,705**	**3,287**	**1,346**	**1,127**	**2,473**	**1,100**	**1,700**	**2,800**
YoY	-62.8%	111.4%	-6.4%	209.0%	22.6%	72.7%	-14.9%	-33.9%	-24.8%	-18.3%	50.8%	13.2%
Net margin	0.9%	1.9%	1.5%	2.2%	2.5%	2.4%	2.0%	1.6%	1.8%	1.5%	2.0%	1.8%





Source: Shared Research based on company data
Note: Figures may differ from company materials due to differences in rounding methods.

FY03/20 earnings forecasts (out May 8, 2019)

- Sales: JPY160.0bn (+14.2% YoY)
- Operating profit: JPY4.0bn (+9.8% YoY)
- Recurring profit: JPY4.0bn (+11.7% YoY)
- Net income*: JPY2.8bn (+13.2% YoY)

*Net income attributable to parent company shareholders

As of end-Q1 FY03/20, the company's full-year forecasts are unchanged.
Hakuto expects to grow sales in each segment toward achieving its medium-term targets in FY03/21: sales of JPY180.0bn, operating profit of JPY7.0bn.

Electronic Devices and Components: Hakuto aims for further growth in the automotive domain—where rapid advancements are being made in self-driving technology and enhanced safety equipment—as well as the IoT, 5G communications, and other domains that have been seeing increased technological innovation. Among products the company expects to experience notable growth are those from Cypress Semiconductor Corporation and ST Microelectronics, primarily intended for automotive use.

- **Electronic and Electric Equipment:** Hakuto will strive to win orders for semiconductor manufacturing equipment, which has seen a growing demand for miniaturization, and FPC manufacturing equipment mainly in Greater China and other Asian markets. In addition, it aims to introduce new items, including environment measurement devices from Pfeiffer Vacuum GmbH, while bolstering its business in the medical equipment segment.
- **Industrial Chemicals:** While continuing initiatives to strengthen sales of polymerization-inhibitors for monomers in Asian markets, it will also focus efforts on sales of environmentally-friendly products, including in new fields.

Historical earnings forecast accuracy

Results vs. Initial Est. (JPYmn)	FY03/10 Cons.	FY03/11 Cons.	FY03/12 Cons.	FY03/13 Cons.	FY03/14 Cons.	FY03/15 Cons.	FY03/16 Cons.	FY03/17 Cons.	FY03/18 Cons.	FY03/19 Cons.
Sales (Initial Est.)	98,000	110,000	110,000	120,000	124,000	142,000	136,000	128,000	134,000	148,000
Sales (Results)	97,167	110,910	116,148	111,823	132,619	131,073	116,296	127,599	138,744	140,123
Results vs. Initial Est.	**-0.8%**	**0.8%**	**5.6%**	**-6.8%**	**7.0%**	**-7.7%**	**-14.5%**	**-0.3%**	**3.5%**	**-5.3%**
Operating profit (Initial Est.)	1,500	3,200	4,100	4,500	3,500	4,200	4,400	3,300	3,200	4,500
Operating profit (Results)	2,709	4,392	4,222	3,101	4,043	4,307	2,906	2,069	3,740	3,642
Results vs. Initial Est.	**80.6%**	**37.2%**	**3.0%**	**-31.1%**	**15.5%**	**2.5%**	**-34.0%**	**-37.3%**	**16.9%**	**-19.1%**
Recurring profit (Initial Est.)	1,500	3,100	4,000	4,500	3,600	4,300	4,400	3,400	3,300	4,700
Recurring profit (Results)	2,483	4,023	4,187	3,435	4,218	4,555	2,873	1,989	3,772	3,580
Results vs. Initial Est.	**65.5%**	**29.8%**	**4.7%**	**-23.7%**	**17.2%**	**5.9%**	**-34.7%**	**-41.5%**	**14.3%**	**-23.8%**
Net income (Initial Est.)	800	2,000	2,500	2,900	2,500	2,800	2,900	2,300	2,400	3,400
Net income (Results)	1,655	2,200	2,244	2,005	2,336	3,394	2,034	1,903	3,287	2,473
Results vs. Initial Est.	**106.8%**	**10.0%**	**-10.3%**	**-30.9%**	**-6.6%**	**21.2%**	**-29.9%**	**-17.3%**	**37.0%**	**-27.3%**

Source: Shared Research based on company data
Note: Figures may differ from company materials due to differences in rounding methods.

The company focuses on profitability, and eschews unreasonable orders. It also tends to give conservative forecasts. Consequently, judging from past estimates and actual results, its earnings tend to be generally stable, other than in unusual circumstances such as are described below, and regularly surpass the initial targets.

- **FY03/09:** Results were substantially below initial forecasts, mainly due to the impact of the 2008–09 global financial crisis (market contraction in Europe and the US, high raw material prices, exchange rate fluctuations).
- **FY03/13:** The recurrence of debt crises in Europe in 1H and economic slowdown in China caused a deceleration in capital expenditures, resulting in the company falling short of initial forecasts.
- FY03/15: Sales missed the firm’s targets, but profit beat initial projections thanks to contributions from profit upturns for both overseas and domestic subsidiaries.
- **FY03/16:** Profits missed the company’s initial targets due to the impact of a main client’s withdrawal from the LED business and inventory reserves that accrued because of a drop in sales of smartphone and tablet parts to the Chinese market.
- **FY03/17:** The company revised down forecasts as steep exchange rate fluctuations in Q1 impaired 1H profits, but with some recovery made in 2H it managed to revise up forecasts again for the full year.
- **FY03/18:** Hakuto commented from the start that its forecasts were conservative, and it made steady progress from Q1, with robust sales related to PCB/FPC manufacturing equipment covering for delays in the high-margin stepper business, allowing it to finish the year above plan despite rapid yen appreciation in Q4.
- **FY03/19:** For its core Electronic Devices and Components business Hakuto suffered from weak demand from China for connectors for use in consumer and industrial devices, while it also had discontinued the memory card business that had contributed during FY03/18. As a result, although sales were up YoY, both sales and profits came in below the initial plan.

Long-term outlook

Along with FY03/16 results, Hakuto announced a new medium-term management plan, E&C + 2020, which will be carried out through FY03/21. The plan's vision is to realize sustainable growth and to improve Hakuto's corporate value by pursuing synergies between electronics and chemicals, and mixing new elements into the company's technological strength and its unique high value-added business models.

The medium-management plan's targets in its final year (FY03/21) are sales of JPY180.0bn, operating profit of JPY7.0bn. The company aims to focus on balanced growth in each business and on reaching its targets. Along with the profit expansion, it will seek improvement in asset efficiency by reducing inventories and liquidating debts, while pursuing ROE of more than 8%.

Segment sales targets for the final year of the medium-term plan (FY03/21) and CAGR over the five-year period of the plan (FY03/16–FY03/21) are shown below.

- Consolidated sales target for FY03/21: JPY180.0bn
  - Electronic devices: JPY95.0bn (52.8% of total sales; CAGR of 9%)
  - Electronic components: JPY42.0bn (23.3%; 9%)
  - Electronic and electrical equipment: JPY30.0bn (16.7%; 10%)
  - Industrial chemicals: JPY13.0bn (7.2%; 6%).

The company announced four basic policies in the medium-term plan: 1) strengthening profit base; 2) actively cultivating new markets and businesses; 3) strengthening overseas businesses; and 4) building a management system that drives growth. In an attempt to strengthen profit base, Hakuto plans to focus on M&As in addition to developing new businesses. The company also plans to enter the smart house, environmental equipment and medical equipment fields as it looks to expand into new markets and businesses. The company has been accelerating efforts to develop local opportunities as part of an effort to strengthen its overseas businesses.

Basic policies in medium-term plan

Strengthening profit base	・Focus on selected fields within existing businesses ・Establish new profit streams by developing next generation core items ・Generate greater value by exploiting M&A
Actively cultivate new markets and businesses	・Tap opportunities in markets not targeted by its current electronics and expand its business domain (penetrate the smart house, environmental equipment and medical equipment fields) ・Foster new businesses by integrating group companies and business divisions
Strengthen overseas businesses	・Create a marketing framework that emphasizes local businesses in Asia, press ahead with business reforms ・Strengthen auto-related businesses by establishing bases in Europe and the UK
Build a management system that drives growth	・Efficient and effective management system (bolster human resource, IT, financial and IR strategies)

Source: Shared Research based on company data

Hakuto aims to achieve sales of JPY45.0bn (25% of consolidated sales) by end FY03/21 from new products and businesses created through these measures. At overseas businesses, it aims at a roughly 2.1x YoY increase to JPY80.0bn (44%) in sales and a 3x YoY increase to JPY3.6bn in operating profit.

Medium-term targets in overseas business

(JPYbn)	FY03/15 Act.	FY03/16 Act.	FY03/17 Plan	FY03/21 Year-end target	5 year average growth rate*
Sales	48.8	38.3	44.2	80.0	16%
Operating profit	1.7	1.2	1.3	3.6	25%

Source: Shared Research based on company data
*Average annual growth rate from FY03/16 to FY03/21

Medium-term overseas business strategies

Focus on local businesses	• Create items that will allow the company to expand sales in local markets, viewed as a future revenue stream • Business reforms meant to move away from one that facilitates business transfers to one that focuses on developing local business opportunities
Optimize overall group initiatives	• Press forward with global human resource strategy (optimize profit distribution among different operations, create personnel system) • Optimize business structure to exploit strength of each operation
Establish an operational global supply chain	• Quickly set up operations in Europe and further develop those in the US • Penetrate growth regions (includes Northern India, Myanmar, and Indonesia)

Source: Shared Research based on company data

Segment growth strategies

Electronic Devices and Components

With regards to Hakuto's mainstay electronic devices division, the company expects the automotive market to grow, and thus aims to expand products and strengthen customer strategies in light of the implementation of automatic driving. In other divisions, the company plans to step up efforts on discovering products for growing markets, enhancing marketing and technology capabilities, and increasing a group-wide presence in the industry through launch and expansion of such new businesses as module sales and a kitting business.

In general electronic components, the company plans to shift its target markets from telecommunications and consumer electronics to automotive, industrial and medical. It will also work to develop new businesses including for RFID.

Electronic and Electric Equipment

The recent hollowing out and withdrawal of Japanese domestic manufacturers, as well as competition from emerging overseas companies have resulted in stalled growth in this segment. Hakuto will continue selecting and concentrating in existing business areas, aiming at profit stabilization and boosting capital efficiency. In its mainstay PCB manufacturing equipment division, the company aims to reinforce manufacturing functions and increase value through development and market launch of such new products as next-generation steppers. The company also plans full-scale entry into business areas including environmental, medical and laser. The company expects these measures will help its business shift to a sustainable growth structure.

Industrial chemicals

This segment has steadily expanded scale of operations since Hakuto acquired distribution rights in the Japanese market for products from a German company BASF in 2012. Hakuto plans to strengthen marketability of its own products, which the company thinks is the starting point for an industrial chemicals manufacturer, and stabilize businesses earnings in domestic petroleum refining, petrochemicals, and pulp and paper markets. It will also focus on cosmetics and overseas chemical markets. With regards to the environmental areas, which include cleaning of petroleum storage tanks and odor control countermeasures for factories, the company will work to expand its businesses.

Business

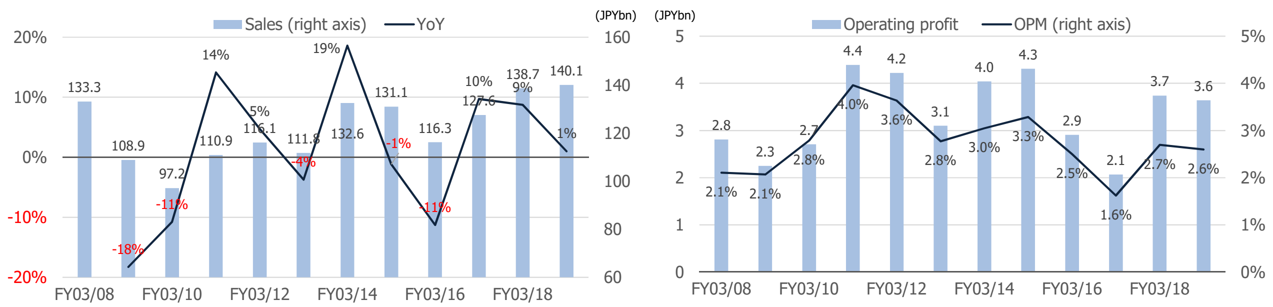
Business description

Multi-business firm: from electronics trading to chemical manufacturing

Hakuto is a unique mini-conglomerate. It is both an electronics trading company and an industrial chemical manufacturer. The company's electronics trading business started as a trading company founded in 1953 to import raw quartz for use in electronic devices. The industrial chemical manufacturing business started in 1960 to diversify the company's operations and enhance stability.

What sets Hakuto apart is its technology-oriented structure, its three distinct business segments that provide a stable business foundation, and its diverse product offerings in growth markets. Although at heart an electronics trading company, Hakuto has an engineering division in each of its business areas. That allows the company to provide its customers with comprehensive technical services, including technical support from the planning, development, and design stages through the equipment installation, calibration, and maintenance stages. It also boasts of a strong cohort of Field Application Engineers (FAEs) with technical expertise. Consequently, while firms operating in the electronics-related space tend to have large fluctuations in earnings performance, since Hakuto operates as more than just a trading company, the company's earnings are relatively stable. Hakuto is medium sized compared to other semiconductor trading companies, but its profit margins match those of the sector leaders (see the Profitability snapshot, financial ratios section).

Performance trends



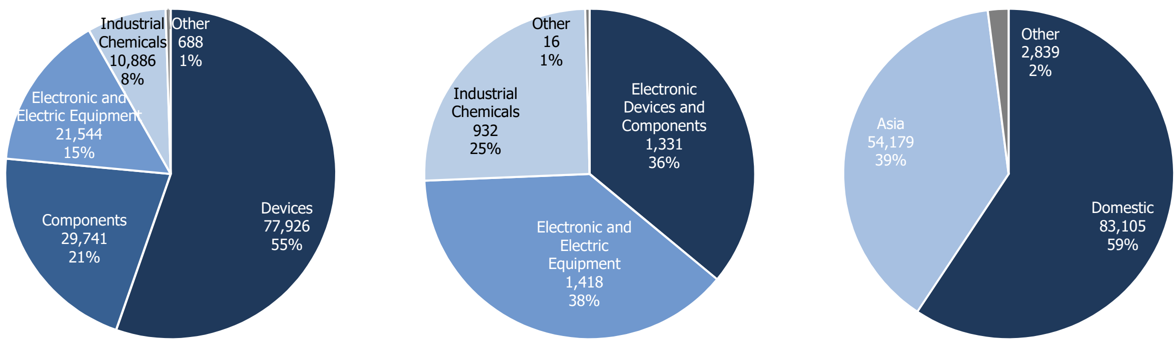
Source: Shared Research based on company data

Business segments

Electronics trading accounts for 90% of total sales; industrial chemicals manufacturing accounts for 10% of total sales

In FY03/19, the electronics trading business accounted for around 90% of sales. Less than 10% were from industrial chemicals. The electronics trading business is comprised of two segments—Electronic Devices and Components, and Electronic and Electric Equipment. Within the Electronic Devices and Components segment are three divisions—semiconductor devices, general electronic components, and optical components. The industrial chemicals segment contains petroleum refinery and petrochemical, paper, and pulp, and other related activities (including cosmetics).

Sales composition by segment (left), operating profit by segment (center), sales by region (right)



Source: Shared Research based on company data
Percentages for sales, operating profit, and sales by region are calculated based on simple sums of the respective components.

Cumulative (JPYmn)	FY03/11 Cons.	FY03/12 Cons.	FY03/13 Cons.	FY03/14 Cons.	FY03/15 Cons.	FY03/16 Cons.	FY03/17 Cons.	FY03/18 Cons.	FY03/19 Cons.	FY03/20 Cons. Est.
Sales	**110,910**	**116,148**	**111,823**	**132,619**	**131,073**	**116,296**	**127,599**	**138,744**	**140,123**	**160,000**
YoY	14.1%	4.7%	-3.7%	18.6%	-1.2%	-11.3%	9.7%	8.7%	1.0%	14.2%
Electronic Devices and Components	95,882	89,661	83,951	100,940	99,301	88,098	98,554	106,223	107,668	125,302
YoY	17.0%	-6.5%	-6.4%	20.2%	-1.6%	-11.3%	11.9%	7.8%	1.4%	16.4%
% of total	78.4%	76.8%	74.6%	75.7%	75.4%	75.3%	76.8%	76.2%	76.5%	78.3%
Semiconductor devices	61,490	59,509	55,694	65,526	65,801	61,186	62,141	71,996	77,926	
YoY		-3.2%	-6.4%	17.7%	0.4%	-7.0%	1.6%	15.9%	8.2%	
% of total	50.2%	50.9%	49.5%	49.1%	49.9%	52.3%	48.5%	51.6%	55.4%	
Electronic components	24,583	30,152	28,256	35,355	33,500	26,913	36,412	34,226	29,741	
YoY		22.7%	-6.3%	25.1%	-5.2%	-19.7%	35.3%	-6.0%	-13.1%	
% of total	20.1%	25.8%	25.1%	26.5%	25.4%	23.0%	28.4%	24.6%	21.1%	
Electronic and Electric Equipment	18,658	18,593	18,308	21,089	22,343	18,477	19,191	21,085	21,544	22,650
YoY	22.2%	-0.3%	-1.5%	15.2%	5.9%	-17.3%	3.9%	9.9%	2.2%	5.1%
% of total	15.2%	15.9%	16.3%	15.8%	17.0%	15.8%	15.0%	15.1%	15.3%	14.2%
Industrial Chemicals	7,169	7,871	9,545	10,566	9,399	9,694	9,828	10,247	10,886	12,021
YoY	1.9%	9.8%	21.3%	10.7%	-11.0%	3.1%	1.4%	4.3%	6.2%	10.4%
% of total	5.9%	6.7%	8.5%	7.9%	7.1%	8.3%	7.7%	7.4%	7.7%	7.5%
Other	667	691	696	727	709	707	676	680	688	
YoY	6.0%	3.6%	0.7%	4.5%	-2.5%	-0.3%	-4.4%	0.6%	1.2%	
% of total	0.5%	0.6%	0.6%	0.5%	0.5%	0.6%	0.5%	0.5%	0.5%	
Adjustments	-11,466	-668	-678	-705	-681	-682	-652	-657	-664	
Operating profit	**4,392**	**4,222**	**3,101**	**4,043**	**4,307**	**2,906**	**2,069**	**3,740**	**3,642**	**4,000**
YoY	62.1%	-3.9%	-26.6%	30.4%	6.5%	-32.5%	-28.8%	80.8%	-2.6%	9.8%
Electronic Devices and Components	2,329	2,316	1,707	2,642	2,940	1,152	447	1,404	1,331	
YoY	22.0%	-0.6%	-26.3%	54.8%	11.3%	-60.8%	-61.2%	214.1%	-5.2%	
% of total	53.0%	54.9%	55.0%	65.3%	68.3%	39.6%	21.6%	37.5%	36.5%	
Electronic and Electric Equipment	1,113	1,302	1,055	846	889	1,018	804	1,246	1,418	
YoY	-1624.0%	17.0%	-19.0%	-19.8%	5.1%	14.5%	-21.0%	55.0%	13.8%	
% of total	25.3%	30.8%	34.0%	20.9%	20.6%	35.0%	38.9%	33.3%	38.9%	
Industrial Chemicals	508	576	343	513	443	587	867	904	932	
YoY	-3.0%	13.5%	-40.5%	49.6%	-13.6%	32.5%	47.7%	4.3%	3.1%	
% of total	11.6%	13.6%	11.1%	12.7%	10.3%	20.2%	41.9%	24.2%	25.6%	
Other	1	15	14	17	20	26	19	27	16	
YoY	-70.1%	1212.3%	-6.7%	21.4%	17.6%	30.0%	-26.9%	42.1%	-40.7%	
% of total	0.0%	0.4%	0.5%	0.4%	0.5%	0.9%	0.9%	0.7%	0.4%	

Source: Shared Research based on company data
Figures may differ from company materials due to differences in rounding methods.
Figures are before elimination of intersegment transactions.

Electronics trading

This is the company's main profit driver. The company handles a range of products serving electronics manufacturers, from semiconductors and electronic components to manufacturing equipment. Electronics products are characterized by short development and life cycles, with manufacturers having diverse procurement needs for advanced components. Hakuto employs a sales team who possess technical knowledge, allowing it to precisely identify customer needs and then procure and supply high value-added products from around the world. The company's solutions often include a design component. It acts as a development partner, linking its customers to suppliers and contributing to the development of state-of-the-art products matching customers' individual needs.

Hakuto operates as more than just an import/export agent and marketer on commission. It is also a "technology trading company" that provides its customers with development support and equipment maintenance. Although at heart a trading company, its staff have technical expertise in several areas, allowing the company to provide its customers with comprehensive support. Other trading companies specializing in electronics tend to strengthen their technical support as part of their strategy to boost value-added. However, Hakuto's key customers include major manufacturers, government agencies, and research institutes, and hence it has adopted this uncompromising approach to technical expertise as its business philosophy since its founding in 1953.

The following are overviews for each segment.

Electronic Devices and Components

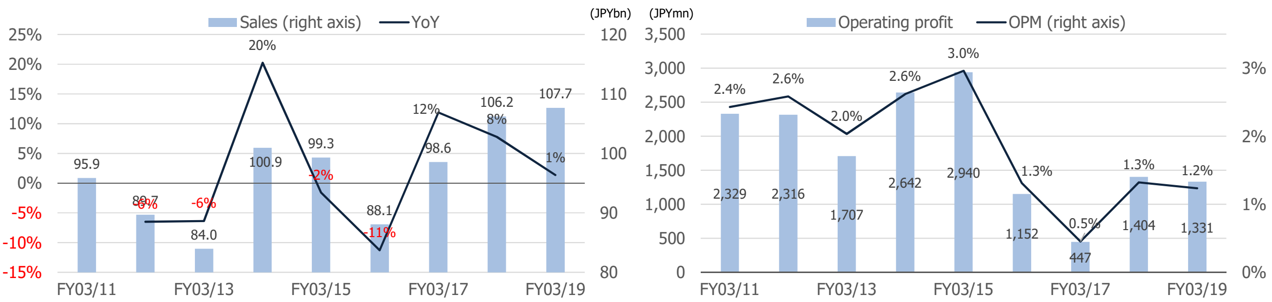
This is Hakuto's core business. During FY03/19 sales for the segment reached JPY107.7bn (76.5% of total sales) and segment profit came to JPY1.3bn (36.0%). However, with an operating margin of 1.2%, profitability was low compared to the other segments.

Within the segment are the semiconductor devices, general electronic components, and optical components divisions. Of segment sales, semiconductor devices accounted for 72.4%, general electronic components for 21.5% , and optical components for 6.1%. The company does not disclose a breakdown of operating profit by division, but regarding profitability trends, it appears that general electronic components and optical components are displaying higher profitability.

Main customers are in the electronics, automotive, and infrastructure sectors. Applications cover a broad spectrum, ranging from consumer products to R&D and production. In semiconductor devices, the company supplies these customers with state-of-the-art semiconductors. The Electronic Devices division procures and supplies these customers with advanced semiconductor equipment, while the Electronic Components division does the same for high quality, high function mechanical components and modular products.

Just over 10% of the segment's workforce is made up of field application engineers (FAEs), who not only provide technical support for the semiconductors handled but are also involved in design-related activities, such as proposing specific semiconductors to match a customer's product development needs.

Sales and operating profit



Source: Shared Research based on company data

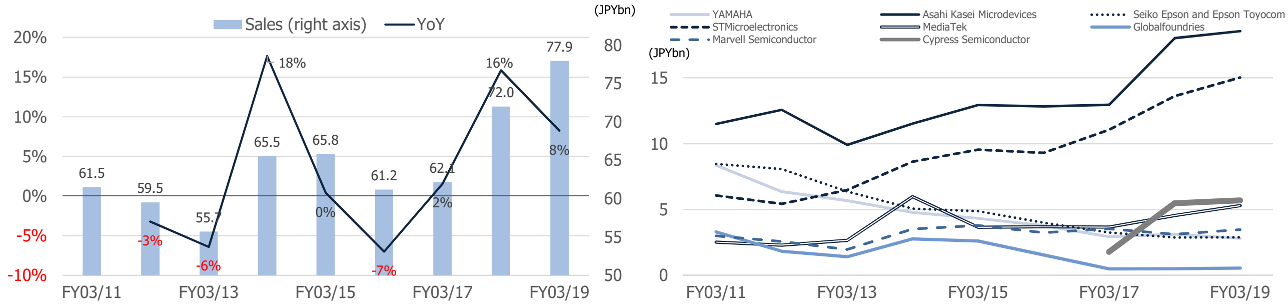
Electronic Devices

The main products handled are microprocessors, graphics semiconductors, field programmable gate arrays (FPGA; an integrated circuit designed to allow customers to customize the circuit design), sound generator semiconductors, quartz devices, and other semiconductor devices. Main customer sectors include automotive, manufacturers of consumer equipment and manufacturers of telecom equipment.

The Electronic Devices division is the mainstay of the Electronic Devices and Components segment. It handles devices for such applications as automobiles, consumer electronics, motors for consumer equipment and tablets. Because of the great number of products involved and large customer transactions, its contribution to sales is large, but price competition in the segment is also fierce. As a result, the profit margin is low compared to other segments. Nevertheless, at present sales are robust, especially for automobiles where the introduction of smart controls is proceeding at a torrid pace.

Major suppliers include such domestic and overseas semiconductor manufacturers as Asahi Kasei Microsystems Co., Ltd. (wholly owned subsidiary of Asahi Kasei Corporation [TSE1: 3407]), Yamaha Corp (TSE1: 7951), ST Microelectronics NV (NYSE: STM), Cypress Semiconductor Corporation (NASDAQ: CY), SP Media-Tec Co., Ltd. (TPE: 2454), Marvell Technology Group Ltd (NASDAQ: MRVL), and Seiko Epson Corp (TSE1: 6724). Hakuto has recently increased the commercial rights it holds for foreign-branded semiconductors. From FY03//19 it is expected to increasingly do so, especially for Cypress Semiconductor products for automobile use. Hakuto's strategy appears to be that by expanding its product lineup it can achieve an optimal business balance while more dynamically responding to market needs. Consequently, Hakuto handles products from major manufacturers while also working to increase sales of products from many small-scale producers that have original technology and products.

Sales



Source: Shared Research based on company data

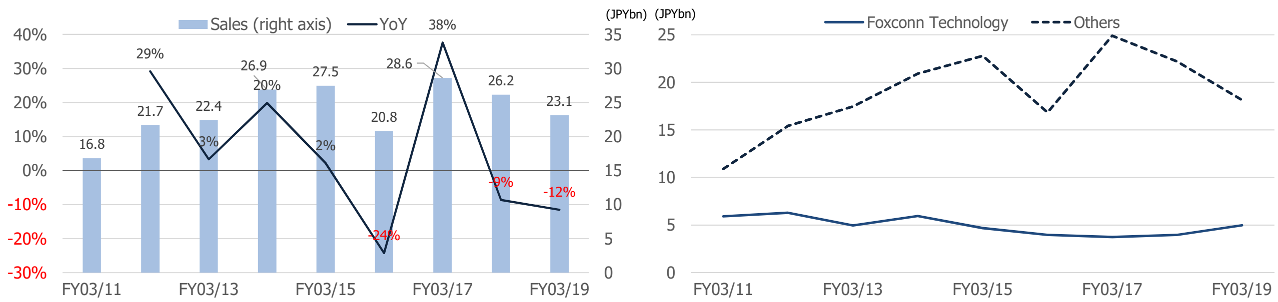
Electronic Components

Main products include various kinds of connectors, LCD panels, electrical components and materials, products to prevent electromagnetic interference (EMI), heat sinks, and optical components.

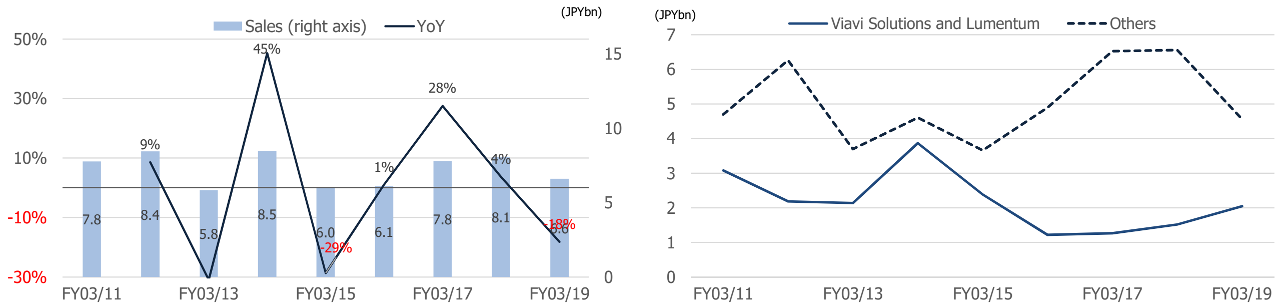
The electronic components business within the electronic devices and components segment handles products covering a range of fields, from PCs to telecom, consumer equipment, and OA equipment. Connectors are the mainstay, but the company offers a broad product lineup and thus can cater to a wide range of electronics-related customer needs for all types of electrical components and electrical materials. Although the company does not disclose the division’s profit margins, they appear to be higher than in electronic devices.

According to the company, it expects rapid growth for the optical components business, as a result of the technological innovations now occurring in growth fields like 5G and IoT. And since it has already been involved in these areas for around a decade, it claims to have a leg up on other companies. Moreover, since the LCD panel business has been adversely impacted by the drying up of growth previously seen in the OA equipment market, Hakuto has shifted its focus to growth markets, such as the automobile sector, cultivating new markets such as the radio-frequency identification (RFID) business, and getting involved in new sectors.

Sales of general electronic components



Sales of optical components



Source: Shared Research based on company data

Electronic and Electric Equipment

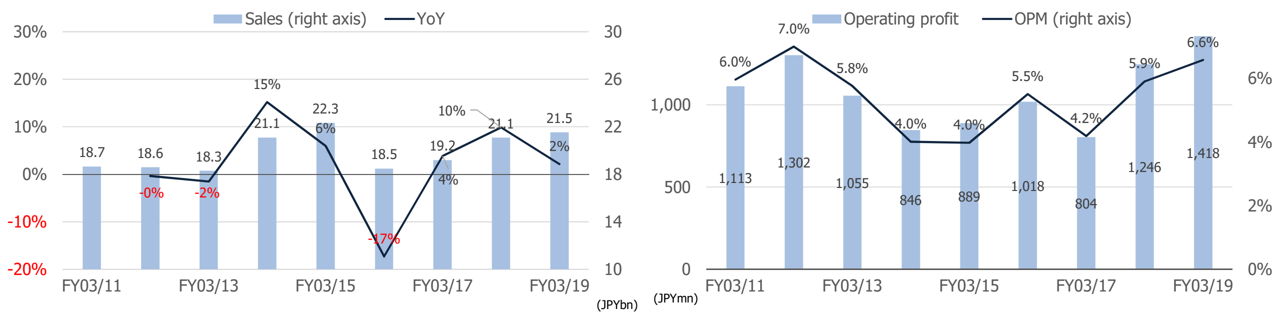
Main products handled are PCB manufacturing equipment, vacuum equipment, and physics and chemistry-related analysis apparatus.

In this segment, Hakuto proactively works to acquire distribution agency rights from domestic and overseas manufacturers of equipment and analysis apparatus related to state-of-the-art technologies, while at the same time it deploys a sales team with technical expertise that provides support to meet the varying needs of customers concerning technological trends or R&D. In FY03/19, segment sales reached JPY21.5bn (+1.9% YoY) while segment profit came to JPY1.4bn (+13.1% YoY) with an operating margin of 6.6%.

Although the operating margin is high compared to the Electronic Devices and Components business, that is due to the value added for the technical services required to handle changes in specifications for calibrating and customizing equipment delivered to customers. Roughly 40% of the company's staff working in this segment are service staff who offer total customer support for everything from defining the specifications to providing after-service.

The company develops and manufactures its own brand of PCB manufacturing equipment. The company's Isehara Technical Center in Kanagawa Prefecture provides maintenance services and offers product demonstrations.

Sales and operating profit



Source: Shared Research based on company data
Note: FY03/19 figures are based on the company's initial forecasts.

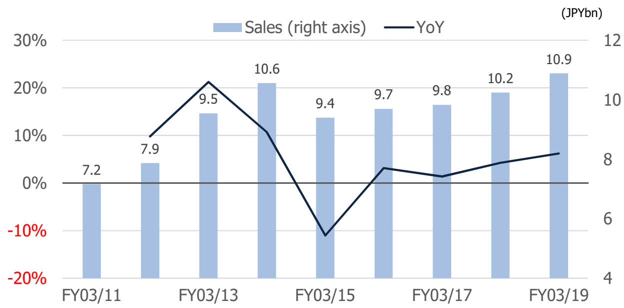
Industrial Chemicals

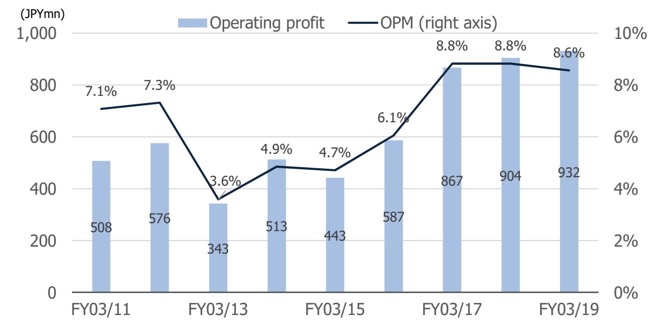
Main products handled are as follows:

- ▷ Petroleum refinery and petrochemical: corrosion inhibitor, desalting agent, antifoulant, fluid catalytic cracking (FCC) catalyst.
- ▷ Pulp and paper: anti-foaming agent, deposit control agent, felt conditioner, pulp cleansing aid.
- ▷ Automotive: paint overspray detackifier, paint pipe-cleaning agent.
- ▷ Water treatment and boiler: water treatment additives, ion exchange resin.
- ▷ Cosmetics: cosmetics base material (Alcasealan), commissioned cosmetics development.

In this segment the company acts both as a manufacturer of original products and a distributor for a number of domestic and overseas manufacturers. In FY03/19, segment sales were JPY10.9bn (+6.3% YoY), segment profit was JPY932mn (+3.1% YoY), and the operating margin was 8.6%. The specialty factor for the products the company handles translates into a profit margin for this area above the company's average. In its specialty chemicals manufacturer capacity, the company aims to help customers enhance productivity as well as improve environmental performance in such fields as petroleum refining, petrochemicals, pulp and paper, and automotive. Hakuto also uses microbial polysaccharide technology to manufacture and supply materials for cosmetics manufacturers on an OEM basis. Product development is carried out at Hakuto's plant and research laboratory in Yokkaichi, Mie Prefecture.

Sales and operating profit





Source: Shared Research based on company data

Involvement in new fields to expand business

To maintain sustainable growth, the company continuously reviews and updates its product lineup. The company also collaborates with, and makes investments in, partner companies in fields with strong growth potential. Since FY03/13, the company has established alliances and capital tie-ups with the following partners:

	Date	New transaction	Sales target
2019			
	5/13	Signed contract for exclusive sales rights in Japan with Wave2Wave Solution Corporation and NTT Advanced Technology Corporation	
2017			
	11/7	Signed new distributor contract with MAXIM Integrated (US)	
2016			
	10/16	Signed new distributor contract with OtO Photonics (Taiwan)	JPY50mn in FY03/18, JPY100mn in FY03/19
	5/23	Service started in Hakuto Czech	Sales mainly of electronic parts and equipment
	2/17	Started sales of HIKARI Smart Home System with C-Cube	
2015			
	12/25	Newly installed solar power system in Isehara Logistics Center for electricity sales	
	11/12	Signed new distributor contract with Cypress Semiconductor	
2014			
	12/15	Signed new distributor contract with Next Biomatrix (Norway)	JPY1.5bn in three years
	11/04	Began handling new product samples fro Veeco Instruments (US)	JPY4.0bn by FY03/15, JPY5.0bn by end of 2015 of all Veeco products
	5/09	Signed new distributor contract with Compass-EOS (Israel)	JPY100mn for FY03/15, JPY300mn for FY03/16, JPY1bn for FY03/17
	5/02	Signed new distributor contract with Ambarella (US)	JPY50mn for FY03/15, JPY300mn for FY03/16, JPY500mn for FY03/17
	4/03	Signed new distributor contract with CYMBET (US)	JPY100mn for FY03/15, JPY300mn for FY03/16, JPY500mn for FY03/17
	4/01	Commenced electicity sales at Hakuto Miyazaki Solar Park	
		Began handling new product samples from Aviacomm	
	2/03	Signed new distributor contract with Hitachi Consumer Marketing	
	1/28	Commenced electicity sales at Hakuto Noboribetsu Solar Park	
2013			
	12/18	Commenced electicity sales at Hakuto Fukushima Solar Park	
	9/30	Operations started at Hakuto Takigawa Hohoemi Solar Park	
	9/06	Operations started at Hakuto Igurazu Solar Park	
	9/2	Began sales of Spansion (US) products	JPY3bn for FY03/16
		Signed new distributor contract with Veeco Instruments (US)	JPY4bn for FY03/15, JPY5bn for FY03/16
	8/7	Signed new distributor contract with Hittite Microwave (US)	JPY1bn for FY03/15, JPY2bn for FY03/16
	6/4	Signed new distributor contract with PLX Technology (US)	JPY1bn for FY03/16
	3/26	Groundbreaking ceremony for Hakuto Takikawa Hohoemi Megasolar Power Plant	
	3/18	Signed new distributor contract with Aviacomm (US)	JPY1bn for FY03/16
	1/31	Signed agreement to construct megasolar power plant in Takikawa City, Hokkaido	
	1/29	Isehara service center reopened following renovations	
2012			
	12/28	Groundbreaking ceremony for Hakuto Igurazu Solar Power Plant	
	12/26	Signed new distributor agreement with W. L. Gore & Associates (US)	
	12/18	Signed new distributor agreement with Fujitsu Semiconductor	JPY3bn for FY03/16
	8/22	Established subsidiary for consumer PV sales after merger	JPY2.6bn for FY03/14
	6/22	Established Matsumoto Satellite Office	
	6/4	Signed new distributor agreement with LitePoint (US)	JPY1bn for FY03/15
	4/23	Signed new distributor agreement with International Rectifier (US)	

Source: Shared Research based on company data

Hakuto's unique sales system delivers a low inventory loss rate

Hakuto's trading business uses a sales structure that is different from that of its competitors, one of the sources of the company's strength. Main characteristics:

"Vertical" team structure results in enhanced relations with customer companies and reduced inventory loss rate

Unlike other semiconductor trading companies, Hakuto uses "vertically" organized sales teams based on the supplier. The company's competitors typically have marketing staff highly versed in a particular product. These employees are responsible for procurement, and separate sales people focus on managing a specific customer account. However, at Hakuto, the same individual fulfills both the marketer and account manager roles.

Since the account is handled by a different person depending on the product category, several sales staff may be involved in serving a specific customer, particularly large customers. At first glance, such a system may appear inefficient, but sales persons are in contact not only with the customer's purchasing department, but also with many other divisions. This is advantageous, as it enables Hakuto to build close relationships with customers.

Reduced inventory loss rate

One of the major advantages of having one sales person responsible for each product is the low rate of inventory loss. According to the company, if a sales person makes sales calls to 100 customers, around 30 customers will make sample orders and, on average, this will lead to large-volume orders from around 10 customers. Since Hakuto's competitors typically have several employees involved in each potential sale, additional time is required to coordinate the team. Communication errors with the client can easily arise, which can lead to problems in precision of order fulfillment. In contrast, Hakuto has one person handling both marketing and sales, which makes it easier to monitor market trends, competition and customer needs.

Since responsibility is not split among several people, managing the profitability of each product is also made easier. Hakuto, focusing more on profitability than on growing sales, will place an order with a supplier only after receiving a written purchase pledge from a customer. This aids in keeping inventories to a minimum. According to Hakuto's CEO, other trading companies often place orders with suppliers before receiving a written pledge of purchase, since winning orders is given top priority. However, in the company's case, 80-90% of its inventory already has a purchase pledge from a customer, and the annual inventory loss is less than JPY100mn. For this reason, Hakuto states that the inventory loss rate is lower than the industry average

The company assigns at least one sales person to manage each product. Even in the cases of newly acquired distribution rights for a start-up company's new product, at least one sales person is assigned to that product as his sole responsibility. However, Hakuto maintains its focus on profitability, even for new products. Although high-volume orders require additional sales people, lowering profitability, the company aims to achieve profitability for a product within three years, and gross profit per sales person of JPY30mn per year. Hakuto manages profit on a departmental basis, and each department is set a profit target that is above the previous year's result. Two to four groups are within each department, and establishment of new groups is left to the discretion of departmental management. Each department must aim for maximum profitability, coordinating newly established groups and maintaining profitable groups.

Maintenance capability

High level of maintenance capability. According to the company, almost no other distributors in Japan are capable of providing maintenance on machinery that ranges from universal small-scale equipment to large-scale equipment. Hakuto has handled a variety of equipment, beginning with measuring instruments immediately after its founding. Apart from a few exceptions, the company provides clients with comprehensive solutions from installation to maintenance. According to the company, its competitors rarely provide such services, and this gives customers peace of mind when procuring equipment through Hakuto.

To execute the vertically integrated sales method, the company needs to employ many sales people with strong technical knowledge. For this reason, it actively recruits new staff with engineering backgrounds. With regard to maintenance capabilities, Hakuto runs the Isehara Technical Center, where it aims to increase its maintenance knowledge. In both sales and maintenance, accumulating expertise takes time, and it will be difficult for competitors to quickly catch up. Shared Research believes this focus on profitability, combined with its unique sales method, are important sources of Hakuto's strength (see Strengths and weaknesses).

Suppliers and customers

Hakuto has around 600 domestic suppliers and around 4,500 domestic customers (company data). The number has remained stable over the years. The company did not disclose the corresponding number of overseas suppliers and customers but said it is considerably smaller.

Recognizing the risk of overdependence on specific suppliers or customers whether in Japan or abroad, Hakuto does business with many companies. Its group companies around the world allow it to seamlessly market its products to customers both at home and abroad. The main customers are Panasonic Corp (TSE1: 6752), Fujitsu Ltd. (TSE1: 6702), Denso Corporation (TSE1:

6902), and Aisin Seiki Co., Ltd. (TSE1:7259). However, the company does not have any "big customers" accounting for more than 10% of its total sales. Purchase amounts for its top three suppliers in the Electronic Devices and Components segment in FY03/19 were JPY18.6bn (Asahi Kasei Microdevices Corporation), JPY15.0bn (Seiko Epson Corporation), and JPY5.7bn (Cypress Semiconductor Corporation).

Hakuto emphasizes profitability over the level of sales. According to the company, it sets a GPM target for each product, and conducts sales with this target in mind. The GPM target for devices appears to be around 10%, around 30% for equipment, and around 50% for industrial chemicals (with its high weighting of in-house products).

Hakuto sets its own credit parameters for each customer, and conducts business based on those parameters. Thanks to this systematic approach, the level of doubtful receivables is low, not exceeding several million yen annually. The company says that this level remained relatively stable even during the 2008-09 global financial crisis.

Manufacturing

Although Hakuto is a trading firm, the company manufactures some products sold in the Industrial Chemicals and Electronic Devices and Components businesses. Production results for FY03/19 (on a sales amount basis) were JPY1.5bn (+31.3% YoY) for Electronic Devices and Components and JPY6.0bn (+7.7%) for Industrial Chemicals. The proportion of sales for the company's own production to total segment sales were 1.4% for Electronic Devices and Components and 54.8% for industrial chemicals.

Sales channel by product category

- **Electronic Devices and Components**: In addition to sales by the parent, sales are handled by consolidated subsidiaries Hakuto Enterprises Ltd (Hong Kong), Hakuto Enterprises (Shanghai) Ltd, Hakuto (Thailand) Ltd, Hakuto Singapore Pte Ltd, Hakuto Taiwan Ltd, and Hakuto Trading (Shenzhen) Ltd. Consolidated subsidiary Moldec Co Ltd manufactures and sells electronic components, and processes some electronic components on behalf of the company.
- **Electronic and Electric Equipment:** In addition to sales by the parent, sales are handled by consolidated subsidiaries Hakuto Enterprises Ltd (Hong Kong), Hakuto Enterprises (Shanghai) Ltd, Hakuto (Thailand) Ltd, Hakuto Singapore Pte Ltd, and Hakuto Taiwan Ltd. Some electronic and electric equipment is bought from affiliate San Ei Giken Inc. Affiliate ASA Systems Inc. carries out sales and computer software development for electronic and electric equipment. Some of these products are sold among Hakuto's consolidated group companies.
- **Industrial Chemicals:** In addition to sales of in-house manufactured products, the company also sells some products manufactured by other companies.
- **Others:** Consolidated subsidiary Hakuto A&L Co Ltd undertakes subcontracted operations on behalf of other group companies.

Sales by region

Hakuto is expanding overseas operations in conjunction with that of its domestic customers. Overseas sales are increasing. Since 1973, the company has established offices in Hong Kong, Taiwan and Singapore, and has developed independent businesses to match the needs of local markets. According to the company, around 50% of sales of these overseas operations are from local business, and profit margins are higher than in Japan. There are also many products for which Hakuto's commercial rights are only valid for overseas offices. In the future, cultivating overseas markets will be a key management priority.

Sales by region

Cumulative (JPYmn)	FY03/11 Cons.	FY03/12 Cons.	FY03/13 Cons.	FY03/14 Cons.	FY03/15 Cons.	FY03/16 Cons.	FY03/17 Cons.	FY03/18 Cons.	FY03/19 Cons.
Sales	**110,910**	**116,148**	**111,823**	**132,619**	**131,073**	**116,296**	**127,599**	**138,744**	**140,123**
YoY	14.1%	4.7%	-3.7%	18.6%	-1.2%	-11.3%	9.7%	8.7%	1.0%
Electronic Devices and Components	76,893	75,232	68,783	82,654	75,289	68,624	71,428	80,901	83,105
YoY	6.0%	-2.2%	-8.6%	20.2%	-8.9%	-8.9%	4.1%	13.3%	2.7%
% of total	69.3%	64.8%	61.5%	62.3%	57.4%	59.0%	56.0%	58.3%	59.3%
Electronic and Electric Equipment	32,444	40,162	42,356	48,702	54,816	45,676	54,396	55,857	54,179
YoY	33.1%	23.8%	5.5%	15.0%	12.6%	-16.7%	19.1%	2.7%	-3.0%
% of total	29.3%	34.6%	37.9%	36.7%	41.8%	39.3%	42.6%	40.3%	38.7%
Other	1,573	754	684	1,263	968	1,996	1,775	1,986	2,839
YoY	590.1%	-52.1%	-9.3%	84.6%	-23.4%	106.2%	-11.1%	11.9%	43.0%
% of total	1.4%	0.6%	0.6%	1.0%	0.7%	1.7%	1.4%	1.4%	2.0%
Overseas sales ratio	30.7%	35.2%	38.5%	37.7%	42.6%	41.0%	44.0%	41.7%	40.7%

Source: Shared Research based on company data

Impact of exchange rates

To hedge forex risks, the company uses forward exchange contracts and other instruments. Basically, the company hedges for both purchases and sales by using forward exchange contracts (for both purchases and sales of foreign currency) to lock in a fixed rate on the settlement dates. In its currency management, the company has adopted an in-company policy of avoiding trying to time the currency market, and instead hedges in order to ensure profits from its product sales transactions. It therefore enters into foreign exchange contracts with the aim of avoiding forex market fluctuations.

As shown in the table below, within the parent's results—which constitute a major portion of the group's results—purchases from overseas account for almost half of all purchases. The company has 11 overseas subsidiaries in Asia. Financial statements for each region are prepared in local currency and subsequently converted to yen for the preparation of consolidated statements. Consequently, the exchange rate used at the time of conversion has an impact on the subsequent consolidated statements.

Purchase turnover of the parent by region (includes CoGS and outsourcing costs)

(JPYmn)	FY03/10	FY03/11	FY03/12	FY03/13	FY03/14	FY03/15	FY03/16	FY03/17	FY03/18
Total	60,353	71,415	71,439	69,186	85,018	80,711	73,671	78,577	99,092
Domestic procurement	34,971	44,320	41,408	36,311	42,384	44,056	42,074	44,767	54,897
Overseas procurement	25,382	27,095	30,030	32,875	42,633	36,654	31,596	33,809	44,194
Overseas ratio	42.1%	37.9%	42.0%	47.5%	50.1%	45.4%	42.9%	43.0%	44.6%

Source: Shared Research based on company data

Main group companies

The group comprises the parent and group companies (15 subsidiaries and two affiliates). The group spans Japan and the Asia region (China, Taiwan, Singapore, and Thailand). Among the subsidiaries, one company, Hakuto Enterprises Ltd (Hong Kong), accounts for over 10% of consolidated sales. Main companies:

Consolidated subsidiaries

	Company	Voting rights ratio	Businesses
Domestic	Moldec Co., Ltd	100%	Manufacture and sales of high precision plastics
	Hakuto A&L Co., Ltd.	100%	Administration and logistics
	Hakuto Life Science Co., Ltd.	100%	Purchase of chemical raw materials and products
Overseas	Hakuto Enterprises Ltd.	100%	Export and import of electronic equipment and components
	Hakuto Singapore Pte. Ltd.	100%	Export and import of electronic equipment and components
	Hakuto Taiwan Ltd.	100%	Export and import of electronic equipment and components
	Hakuto Enterprises (Shanghai) Ltd.	100%	Export and import of electronic equipment and components
	Hakuto (Thailand) Ltd.	100%	Export and import of electronic equipment and components
	Hakuto Engineering (Thailand) Ltd.	100%	Export and import of electronic equipment and components
	Hakuto Trading (Shenzhen) Ltd.	100%	Import of electronic components

Source: Shared Research based on company data

Equity-method affiliates

	Company	Voting rights ratio
Domestic	San ei giken inc.	33%
	ASA Systems Inc.	30%

Source: Shared Research based on company data

Profitability snapshot, financial ratios

Comparison between sales of top 10 semiconductor trading companies and Hakuto Co, Ltd.

Ticker	Company Name	Sales (JPYmn)									
		FY03/10	FY03/11	FY03/12	FY03/13	FY03/14	FY03/15	FY03/16	FY03/17	FY03/18	FY03/19
7433	**Hakuto Co., Ltd.**	**97,167**	**110,910**	**116,148**	**111,823**	**132,619**	**131,073**	**116,296**	**127,599**	**138,744**	**140,123**
2715	Elematec Corporation	88,299	110,614	115,417	129,405	143,442	181,876	216,824	203,004	196,238	183,399
2737	TOMEN DEVICES CORPORATION	138,909	189,693	151,426	137,383	174,654	171,882	189,372	156,677	197,569	217,632
3132	Macnica Fuji Electronics Holdings, Inc. *	149,263	188,440	188,893	196,452	255,967	284,673	405,315	398,503	504,085	524,235
3156	Restar Holdings Corporation **	215,162	303,585	257,162	284,508	317,042	280,672	288,684	273,752	301,449	205,771
7537	MARUBUN CORPORATION	207,948	210,455	242,708	220,200	260,424	280,320	279,571	270,698	347,508	326,694
8084	Ryoden Trading Company, Limited	168,586	197,016	202,723	203,730	224,766	237,877	221,990	219,225	236,494	240,312
8140	Ryosan Company, Limited	194,377	216,154	217,887	206,534	238,399	233,552	228,149	218,003	254,077	249,688
8150	SANSHIN ELECTRONICS CO., LTD.	178,415	182,670	144,159	147,963	192,240	219,091	199,075	167,654	157,257	147,879
8154	KAGA ELECTRONICS CO.,LTD.	239,391	237,811	229,856	216,405	257,852	255,143	245,387	227,209	235,921	292,779
		Operating profit (JPYmn)									
7433	**Hakuto Co., Ltd.**	**2,709**	**4,392**	**4,222**	**3,101**	**4,043**	**4,307**	**2,906**	**2,069**	**3,740**	**3,642**
2715	Elematec Corporation	2,905	4,113	4,081	4,147	5,246	7,375	6,868	5,406	6,480	6,335
2737	TOMEN DEVICES CORPORATION	2,760	4,037	3,487	1,928	2,364	2,435	1,907	1,252	2,598	3,528
3132	Macnica Fuji Electronics Holdings, Inc. *	3,314	6,360	6,887	5,747	8,456	9,195	9,729	10,473	15,163	15,324
3156	Restar Holdings Corporation **	2,734	4,431	5,389	7,360	6,925	5,578	6,487	-6,603	4,384	4,508
7537	MARUBUN CORPORATION	2,150	2,754	2,842	2,991	3,912	4,688	3,212	2,883	3,771	5,048
8084	Ryoden Trading Company, Limited	1,498	4,084	4,003	4,414	5,278	4,992	3,673	2,730	5,078	5,624
8140	Ryosan Company, Limited	4,786	6,078	3,511	3,673	5,144	5,925	5,538	4,659	5,665	5,236
8150	SANSHIN ELECTRONICS CO., LTD.	2,190	2,163	1,008	2,032	2,517	3,260	1,913	804	1,763	1,965
8154	KAGA ELECTRONICS CO.,LTD.	1,582	3,423	2,067	1,260	5,106	6,362	7,788	6,879	8,119	7,570
		Operating profit margin									
7433	**Hakuto Co., Ltd.**	**2.8%**	**4.0%**	**3.6%**	**2.8%**	**3.0%**	**3.3%**	**2.5%**	**1.6%**	**2.7%**	**2.6%**
2715	Elematec Corporation	3.3%	3.7%	3.5%	3.2%	3.7%	4.1%	3.2%	2.7%	3.3%	3.5%
2737	TOMEN DEVICES CORPORATION	2.0%	2.1%	2.3%	1.4%	1.4%	1.4%	1.0%	0.8%	1.3%	1.6%
3132	Macnica Fuji Electronics Holdings, Inc. *	2.2%	3.4%	3.6%	2.9%	3.3%	3.2%	2.4%	2.6%	3.0%	2.9%
3156	Restar Holdings Corporation **	1.3%	1.5%	2.1%	2.6%	2.2%	2.0%	2.2%	-	1.5%	2.2%
7537	MARUBUN CORPORATION	1.0%	1.3%	1.2%	1.4%	1.5%	1.7%	1.1%	1.1%	1.1%	1.5%
8084	Ryoden Trading Company, Limited	0.9%	2.1%	2.0%	2.2%	2.3%	2.1%	1.7%	1.2%	2.1%	2.3%
8140	Ryosan Company, Limited	2.5%	2.8%	1.6%	1.8%	2.2%	2.5%	2.4%	2.1%	2.2%	2.1%
8150	SANSHIN ELECTRONICS CO., LTD.	1.2%	1.2%	0.7%	1.4%	1.3%	1.5%	1.0%	0.5%	1.1%	1.3%
8154	KAGA ELECTRONICS CO.,LTD.	0.7%	1.4%	0.9%	0.6%	2.0%	2.5%	3.2%	3.0%	3.4%	2.6%

Source: Shared Research based on data for individual companies.
*Established after merger of MACNICA, Inc. and Fuji Electronics Co., LTD. in April 2015. Prior figures are for MACNICA.
**Established after merger of UKC Holdings Corporation and Vitec Holdings Co., Ltd. in April 2019. Prior figures are for UKC Holdings Corporation.

Maintaining stable profit levels in the semiconductor and electronics fields since 2008

In the 2000s, the semiconductor industry saw brisk performance amid fast-growing demand. However, the operating environment changed in fall of 2008 with the onset of the global financial crisis. In 2H 2009, sales across many sectors—including PCs, mobile phones, and automotive—turned stagnant, and the operating performance of semiconductor-related companies deteriorated rapidly. Although there were signs of a recovery in 2011, the impact of sluggish European economies and other factors meant a full recovery did not ensue.

Given these market conditions, the performance of semiconductor-related companies has fluctuated greatly, and industry realignment and consolidation has been an ongoing feature across the globe. In the electronics trading sector, rapid changes in customer performance in the consumer electronics and mobile phone industries has led to large performance fluctuations, and some trading companies have seen performance slide, forcing many companies to restructure.

In this environment, Hakuto has maintained relatively stable profits compared with the industry. Hakuto's sales are in the mid-range of the top 30 electronics trading companies in Japan. However, operating profit on an absolute basis compares favorably with other companies in the top 10. In terms of OPM, Hakuto consistently ranks high.

Shared Research believes that the stability of Hakuto's revenues can be attributed to two factors. It has a balanced business model not limited to one particular business. In addition, it employs many technical staff, and can provide technical services that differentiate it from competitors (see Strategy section).

Market and value chain

The semiconductor device business is at the core of Hakuto's operations. Sales by this business account for around half of overall sales. As such, semiconductor market trends are an important factor to consider when looking at Hakuto's earnings.

According to the spring market outlook released by World Semiconductor Trade Statistics (WSTS) in May 2019, as far as the global semiconductor market in 2019 is concerned, sales are forecast to decline by 12% YoY, as smartphone-related demand levels off with the impact of deteriorated market conditions, triggered by China-US trade friction since the second half of 2018, expected to continue. On the other hand, in 2020, sales are projected to rebound 5% YoY thanks to recovery in data center capex investment, expansion of various services resulting from the introduction of 5G, the electrification and expanded functionality of vehicles.

WSTS is a statistics-gathering organization. It was established in 1984, and most semiconductors manufacturers around the globe are members. WSTS compiles the semiconductor shipment values and volumes of its members, broken down by product category and region (Japan, Americas, Europe, Asia Pacific). Statistics are released monthly. It publishes the world's only statistics with standardized classifications for all manufacturers. The WSTS outlook conference takes place twice yearly in May and November. WSTS currently has 43 member companies (semiconductor manufacturers).

World semiconductor market trends

The global market for semiconductors saw total semiconductor sales in 2018 increase USD56.6bn YoY to USD468.8bn (equivalent to roughly JPY5.2tn). This represented a 13.7% YoY increase in dollar terms, maintaining double-digit growth for the second straight year (21.6% in 2017).

However, the WSTS forecasts an overall decline in sales of 12.5% YoY for the global semiconductor market in 2019, adversely impacted by ongoing China-US trade friction since the latter half of 2018. Furthermore, memories—which although accounting for roughly 30% of all semiconductor sales in terms of monetary amount are easily influenced by market conditions—are expected to see a drop of slightly above 30% YoY, despite the fact sales of memories had been growing rapidly from 2017.

Japan semiconductor market trends

Japan's semiconductor market (yen-based) grew 7.5% YoY in 2018 to JPY4.4tn.

For 2019, Japan's semiconductor market (yen-based) is expected to contract 10.0% YoY to around JPY4.0tn. (We note the market is expected to fall 9.7% YoY in USD terms owing to the forex impact). After that, the market is also projected to rebound 3.9% YoY on a yen basis to JPY4.1tn in 2020..

The WSTS definition of semiconductor market is "the region where semiconductor products are sold to a third party by a semiconductor manufacturer", regardless of the nationality or location of production plant. Third party refers to semiconductor users (electronics manufacturers), EMS and semiconductor trading firms. Consequently, the shipment value for the Japan market is based on sales by manufacturers worldwide to third parties in Japan. Even if the buyer ships the semiconductors overseas to be used in the production of electronics goods, this is still defined as part of the Japan market.

Regional Breakdown of Shipments by Value (2016 onward are estimates)

	CY2010	CY2011	CY2012	CY2013	CY2014	CY2015	CY2016	CY2017	CY2018	CAGR 15-18
Worldwide (USDmn)	298,315	299,521	291,562	305,584	335,843	335,168	338,931	408,691	437,265	9.3%
America	53,675	55,197	54,359	61,496	69,324	68,738	65,537	86,458	95,380	11.5%
Europe	38,054	37,391	33,163	34,883	37,459	34,258	32,707	38,048	39,799	5.1%
Japan	46,561	42,903	41,056	34,795	34,830	31,102	32,292	36,350	37,990	6.9%
Asia Pacific	160,025	164,030	162,985	174,410	194,230	201,070	208,395	247,834	264,097	9.5%
Japan (JPYbn)	4,083	3,419	3,274	3,396	3,681	3,765	3,507	4,058	4,214	3.8%

Source: Shared Research based on WSTS Japan

Barriers to entry

Full-scale new entry: difficult. The trading business does not require large-scale plant or facilities. However, the core sales broking operations need networks of suppliers and customers. In recent years, specialty trading firms undertake development support activities for customers, and this requires the accumulation of technical expertise. Although limited entry is possible for new entrants where the trading business generates synergies with the entrant's main business, full-scale new entry is seen as difficult.

According to the company, Japanese suppliers are moving further toward a non-factory model (smaller sales and production functions) to reduce fixed costs and enable greater focus on product development. This means increasing need for trading companies with technical knowledge and understanding. However, when a product's sales volume increases, some suppliers suggest that they will switch to direct sales to end-customers rather than dealing with a trading company. In such cases, Hakuto can appeal to suppliers by emphasizing that its highly honed market prowess adds value by developing new customers and promoting new products—functions the supplier could not handle on its own. Among recent cases, around 80% of suppliers who have cancelled contracts with Hakuto in the past have ended up returning, according to the company. This shows that most suppliers cannot ignore the company's marketing capabilities.

Competition

Semiconductor trading companies can be divided into manufacturer-affiliated firms and independent firms. Since the range of products handled is diverse, each firm tends to have its own distinct characteristics. However, manufacturer-affiliated firms tend to rely heavily on their parent's products. According to Hakuto, Ryoden Trading Co Ltd has a similar business model since it not only has a semiconductor business but handles equipment and has production operations. However, Ryoden's sales are largely dependent on parent Mitsubishi Electric Corp (TSE1:6503).

Since Hakuto is independent, it has diverse suppliers and there is little direct friction between suppliers. Major independent semiconductor trading companies include Macnica Fuji Electronics Holdings Inc. (TSE1: 3132), Marubun Corp (TSE1: 7537) and Kaga Electronics Co Ltd (TSE1: 8154). Kaga has similarities to Hakuto through its diverse businesses. However, Kaga has a broad array of businesses including golf and food, and has little direct competitive overlap with Hakuto. The distinctive characteristics of domestic semiconductor trading companies are summarized below.

Major Semiconductor Trading Companies and their Characteristics

Ticker	Company	Description
7433	Hakuto Co., Ltd.	Specialist independent trading company handling electronics. Large weighting of foreign products. Development-oriented sales a feature. Also has industrial chemicals manufacturing business. Developing China market.
2715	Elematec CORPORATION	Specializes in electronic materials and components. Under the Toyota Tsusho umbrella. Shifting focus from smartphones to automotive.
2737	TOMEN DEVICES CORPORATION	Trader of semiconductors and liquid crystal products under the Toyota Tsusho umbrella. Primarily sells Samsung Electronics' DRAM and flash memory products.
7631	Macnica Fuji Electronics Holdings, Inc. *	One of the leading independent semiconductor trading in Japan. Has strength in discovering technologies to market. Also covers security-related products. Current holding company established in April 2015, following merger of Macnica and Fuji Electronics, Inc.
3156	Restar Holdings Corporation **	General electronics trading company, focusing on semiconductors and electronic components. Established in April 2019 when Vitec Holdings merged with UKC Holdings (formed through a merger between Kyoshin Technosonic and USC, a specialist handling Sony products).
7537	MARUBUN CORPORATION	Independent trading firm specializing in foreign-made semiconductors, established in 1844 as a clothing wholesaler. Sales mostly from semiconductor devices. Also covers in medical and measuring instruments.
8084	Ryoden Trading Company, Limited	Largest Mitsubishi Electric-affiliated trading firm. Covers a wide range of products including FA, elevators, air conditioning, as well as semiconductors. Expanding coverage of products made by non-Mitsubishi companies.
8140	Ryosan Company, Limited	One of the largest independent semiconductor trading firms. Mainly handles Renesas Electronics products (especially the products from former NEC Electronics). Large engineering workforce. Expanding China market following acquisition of a Hong Kong-based trading company.
8150	SANSHIN ELECTRONICS CO., LTD.	Major semiconductor trader. Mainly covers Renesas Electronics products. Covers semiconductors used in consumer electronics such as game consoles, as well as products for industrial applications. Large sales overseas.
8154	KAGA ELECTRONICS CO., LTD.	Independent trading firm focusing on EMS and specializing in automotive and IoT. Also covers energy saving products for commercial facilities and convenience stores.

Source: Shared Research based on JAPAN COMPANY HANDBOOK and company data
*In April 2015 Macnica Inc. merged with Fuji Electronics Co., Ltd. after Macnica Inc. had been delisted in March 2015.
**In April 2019 UKC Holdings Corporation merged with Vitec Holdings Co., Ltd..

With regard to overseas semiconductor trading firms, major distributors include Avnet (Nasdaq: AVT) and Arrow Electronics, Inc. (Nasdaq: ARW). According to the company, although these large distributors have the image of carrying a large amount of inventory, they in fact also put a lot of focus on technical support. To sell IBM semiconductors, Avnet recruited 200 IBM engineers. The business model of such firms is not simply broking, but is based on the assumption of offering technical support. Hakuto's president says that these overseas semiconductor trading firms differ from Hakuto in that they have focused on devices, whereas the company has sought to achieve a balance with its other businesses; nonetheless, they share the same emphasis on technical expertise in order to stay ahead in competition.

Strategy

The company is conscious of the need to maintain stable earnings in existing businesses while constantly being on the lookout for new commercial rights opportunities. It recognizes the importance of building overall group profit. For this reason, it sees the need to maintain a growth balance across all four businesses—components, devices, equipment and chemicals—while avoiding bias toward one business. To realize this goal, the company has formulated the following differentiation strategies:

Balanced management

Hakuto's operations are not concentrated in any particular field, but spread over a range of businesses, underpinning stable management. Suppliers and customers are not dominated by a single firm, and trading takes place with a large number of companies. The company does not rely solely on the electronics component field, but spans electronic and electric equipment, and industrial chemicals. If business is concentrated on a single field or industry, a company's performance is greatly affected by the performance of the sector as a whole. Since Hakuto operates in three segments, each with different business cycles, it can maintain a stable balance in sales and profits. In this respect, Hakuto is a rare case in the industry for its diversity of suppliers and products.

Technical services

Despite being a trading company, Hakuto employs a large number of technical staff. The company collaborates with suppliers to provide customers with technical support.
In the Electronic Devices and Components segment, FAEs not only provide technical support for semiconductors but undertake design activities by proposing semiconductors that match customers' product development needs.
In the Electronic and Electric Equipment segment, FSEs provide total support encompassing equipment customization, installation, calibration and maintenance. The company carries out equipment maintenance and product demonstrations in its Isehara Technical Center (maintenance cost: JPY50mn per year) in Kanagawa Prefecture. According to the company, it has technical service capabilities on par with a manufacturer, one of Hakuto's competitive advantages.

Strengths and weaknesses

Strengths

- **Product lineup with varying business cycles:** Company founder Shigeo Takayama entered the industrial chemicals business at an early stage to avoid over-dependence on a single sector. His move paid off, and the company's present business spans four product categories of electronic devices, electronic components, electronic and electric equipment, and industrial chemicals. Many of Hakuto's competitors have a high dependence on semiconductor devices and see large fluctuations in operating performance. In contrast, Hakuto's operating results are broadly stable due to the varying business cycles of its segments.
- **Independent trading company:** Trading companies specializing in semiconductors are broadly divided into manufacturer-affiliated firms and independent firms. Manufacturer-affiliated firms have backup from the parent company, but handle a limited range of products. This indirectly narrows the customer base, making performance particularly susceptible to the impact of supplier and customer performance. Hakuto is not affected by an equity relationship with its suppliers, and has a high level of flexibility in dealing with suppliers and customers. Hakuto also has its finger on the pulse of the industry through relationships with many manufacturers and customers.
- **Many employees are science and engineering graduates:** Hakuto sees itself as a technology-driven trading company. This status is supported by the recruitment of many science and engineering graduates. According to the company, although it has recently increased the ratio of humanities graduates, 70-80% of new recruits are still from a science or engineering background. By having many science and engineering graduates in sales roles, there is more technical understanding between employees, and new recruits make rapid progress in on-the-job training.

Weaknesses

- **High dependence on semiconductor devices:** Even if the ratio is low compared with peers, semiconductor devices account for more than half of the company's sales. Responding to any decline in Japan's electronics manufacturing sector will be a key challenge.
- **Challenge maintaining growth pace:** Hakuto's business model is based on building up a large number of niche products. For this reason considerable effort is needed to maintain a high growth rate by adding a large number of new businesses. Although the business is buttressed by staff with a deep technical understanding, competitors are also trying to add more value by boosting technical capabilities. In addition, the ratio of employees with science and engineering backgrounds is gradually falling, so one of the longer-term challenges will be to maintain the company's human resource edge.
- **Hollowing out of the domestic business:** The company's trading business customers are moving production to Asia to be closer to future consumer markets, and Hakuto is moving more of its business to Asia in tandem with this trend. However, the more this trends advances, the greater the risk of a hollowing out of domestic operations. For this reason, the company is devoting considerable energy to finding better ways to serve domestic customers, including acquisition of commercial rights.

Historical financial statements

Income statement

Income statement	FY03/10	FY03/11	FY03/12	FY03/13	FY03/14	FY03/15	FY03/16	FY03/17	FY03/18	FY03/19
(JPYmn)	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Total sales	97,167	110,910	116,148	111,823	132,619	131,073	116,296	127,599	138,744	140,123
Electronic Devices and Components	81,985	95,882	89,661	83,951	100,940	99,301	88,098	98,554	106,223	107,668
Semiconductor devices		61,490	59,509	55,694	65,526	65,801	61,186	62,141	71,996	77,926
Electronic components		24,583	30,152	28,256	35,355	33,500	26,913	36,412	34,226	29,741
Electronic and Electric Equipment		18,658	18,593	18,308	21,089	22,343	18,477	19,191	21,085	21,544
Industrial Chemicals		7,169	7,871	9,545	10,566	9,399	9,694	9,828	10,247	10,886
Other		667	691	696	727	709	707	676	680	688
YoY	-10.8%	14.1%	4.7%	-3.7%	18.6%	-1.2%	-11.3%	9.7%	8.7%	1.0%
Electronic Devices and Components	-	17.0%	-6.5%	-6.4%	20.2%	-1.6%	-11.3%	11.9%	7.8%	1.4%
Electronic and Electric Equipment	-	-	-0.3%	-1.5%	15.2%	5.9%	-17.3%	3.9%	9.9%	2.2%
Industrial Chemicals	-	-	9.8%	21.3%	10.7%	-11.0%	3.1%	1.4%	4.3%	6.2%
Other	-	-	3.6%	0.7%	4.5%	-2.5%	-0.3%	-4.4%	0.6%	1.2%
Gross profit	15,622	17,543	18,065	17,115	19,095	19,481	17,221	16,495	18,301	18,667
GPM	16.1%	15.8%	15.6%	15.3%	14.4%	14.9%	14.8%	12.9%	13.2%	13.3%
SG&A expenses	12,913	13,151	13,843	14,014	15,052	15,174	14,315	14,426	14,561	15,024
SG&A-to-sales ratio	13.3%	11.9%	11.9%	12.5%	11.3%	11.6%	12.3%	11.3%	10.5%	10.7%
Operating profit	2,709	4,392	4,222	3,101	4,043	4,307	2,906	2,069	3,740	3,642
Electronic Devices and Components	1,909	2,329	2,316	1,707	2,642	2,940	1,152	447	1,404	1,331
Electronic and Electric Equipment	-73	1,113	1,302	1,055	846	889	1,018	804	1,246	1,418
Industrial Chemicals	523	508	576	343	513	443	587	867	904	932
Other	4	1	15	14	17	20	26	19	27	16
YoY	20.4%	62.1%	-3.9%	-26.6%	30.4%	6.5%	-32.5%	-28.8%	80.8%	-2.6%
Electronic Devices and Components			-0.6%	-26.3%	54.8%	11.3%	-60.8%	-61.2%	214.1%	-5.2%
Electronic and Electric Equipment			17.0%	-19.0%	-19.8%	5.1%	14.5%	-21.0%	55.0%	13.8%
Industrial Chemicals			13.5%	-40.5%	49.6%	-13.6%	32.5%	47.7%	4.3%	3.1%
Other			1,212.3%	-6.7%	21.4%	17.6%	30.0%	-26.9%	42.1%	-40.7%
OPM	2.8%	4.0%	3.6%	2.8%	3.0%	3.3%	2.5%	1.6%	2.7%	2.6%
Electronic Devices and Components		2.4%	2.6%	2.0%	2.6%	3.0%	1.3%	0.5%	1.3%	1.2%
Electronic and Electric Equipment		4.5%	4.3%	3.7%	2.4%	2.7%	3.8%	2.2%	3.6%	4.8%
Industrial Chemicals		2.7%	3.1%	1.9%	2.4%	2.0%	3.2%	4.5%	4.3%	4.3%
Other		0.2%	2.2%	2.0%	2.3%	2.8%	3.7%	2.8%	4.0%	2.3%
Non-operating income (expenses)	-226	-369	-35	334	175	248	-33	-80	32	-62
Recurring profit	2,483	4,023	4,187	3,435	4,218	4,555	2,873	1,989	3,772	3,580
YoY	23.3%	62.0%	4.1%	-18.0%	22.8%	8.0%	-36.9%	-30.8%	89.6%	-5.1%
RPM	2.6%	3.6%	3.6%	3.1%	3.2%	3.5%	2.5%	1.6%	2.7%	2.6%
Extraordinary gains (losses)	-75	-314	-168	-361	-519	498	-37	-13	739	-35
Tax charges	678	1,432	1,724	1,069	1,363	1,660	801	73	1,224	1,071
Implied tax rate	28.2%	38.6%	42.9%	34.8%	36.8%	32.9%	28.2%	3.7%	27.1%	30.2%
Net income attrib. to parent company shareholders	1,655	2,200	2,244	2,005	2,336	3,394	2,034	1,903	3,287	2,473
YoY	-405.3%	33.0%	2.0%	-10.6%	16.5%	45.3%	-40.1%	-6.4%	72.7%	-24.8%
Net margin	1.7%	2.0%	1.9%	1.8%	1.8%	2.6%	1.7%	1.5%	2.4%	1.8%

Source: Shared Research based on company data
Figures may differ from company materials due to differences in rounding methods.

As for earnings trends in the semiconductor industry, in fall 2008 the onset of the global financial crisis triggered a slump in worldwide consumption, and the earnings performance of most companies deteriorated dramatically. In 2011–12, although there were signs of a recovery, in 2013 slowdowns in China and Europe led to difficult conditions once again. Consequently, the semiconductor sector has seen ongoing realignment and consolidation.

Hakuto was unable to avoid the impact of these various external conditions, but its steady earnings from the industrial chemicals business helped it maintain a relatively stable profit level.

Balance sheet

Balance sheet (JPYmn)	FY03/10 Cons.	FY03/11 Cons.	FY03/12 Cons.	FY03/13 Cons.	FY03/14 Cons.	FY03/15 Cons.	FY03/16 Cons.	FY03/17 Cons.	FY03/18 Cons.	FY03/19 Cons.
ASSETS										
Cash and deposits	13,450	13,232	13,382	11,364	11,417	12,437	8,366	7,748	9,428	7,608
Accounts receivable	26,810	30,293	29,065	29,613	34,749	32,874	33,550	32,682	34,627	37,132
Inventories	10,792	13,214	14,449	16,264	16,537	18,699	16,397	17,821	22,216	25,402
Other	3,058	2,516	2,295	2,579	2,654	2,164	2,377	2,841	2,235	788
Allowance for doubtful accounts	-143	-134	-71	-134	-98	-128	-35	-11	-16	-29
Total current assets	**53,967**	**59,121**	**59,120**	**59,686**	**65,259**	**66,046**	**60,655**	**61,081**	**68,490**	**70,901**
Total tangible fixed assets	**6,845**	**6,755**	**6,560**	**6,545**	**8,040**	**7,293**	**6,850**	**6,764**	**6,739**	**6,638**
Total intangible fixed assets	**225**	**298**	**651**	**1,509**	**1,342**	**1,332**	**1,109**	**819**	**453**	**325**
Investment securities	5,419	6,621	5,473	5,869	7,600	7,324	7,329	9,184	9,253	8,446
Deferred tax assets	117	74	75	39	212	40	30	52	60	142
Other	502	495	502	527	354	748	390	359	330	372
Investments and other assets	**6,037**	**7,190**	**6,049**	**6,435**	**8,166**	**8,112**	**7,749**	**9,595**	**9,643**	**8,960**
Total fixed assets	**13,108**	**14,243**	**13,260**	**14,489**	**17,548**	**16,739**	**15,709**	**3,707**	**3,813**	**2,540**
Total assets	**67,075**	**73,364**	**72,381**	**74,176**	**82,808**	**82,785**	**76,365**	**78,261**	**85,326**	**87,826**
LIABILITIES										
Accounts payable	12,549	15,084	14,080	13,817	17,431	16,790	15,309	16,557	18,104	18,623
Short-term debt	7,368	7,809	6,783	5,996	6,439	5,349	2,344	2,282	6,453	7,752
Other	2,488	2,814	4,418	4,831	4,326	3,567	3,340	2,966	3,373	4,275
Total current liabilities	**22,405**	**25,706**	**25,281**	**24,644**	**28,196**	**25,706**	**20,993**	**21,805**	**27,930**	**30,650**
Long-term debt	4,233	5,333	4,050	4,163	5,600		2,527	1,410	1,269	634
Other	2,059	2,115	1,790	1,815	2,483	2,416	2,070	2,297	2,544	1,906
Total fixed liabilities	**6,292**	**7,448**	**5,840**	**5,978**	**8,083**	**6,280**	**4,597**	**3,707**	**3,813**	**2,540**
Total liabilities	**28,696**	**33,154**	**31,119**	**30,622**	**36,280**	**31,986**	**25,590**	**25,513**	**31,743**	**33,190**
Shareholders' equity	37,542	38,900	40,372	41,612	43,183	46,172	47,035	48,131	49,083	49,973
Capital stock	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100
Capital surplus	7,492	7,492	7,491	7,491	7,289	7,289	7,289	7,289	7,289	7,289
Retained earnings	25,956	27,493	28,965	30,205	31,777	34,714	35,756	36,782	39,186	40,460
Treasury stock	-4,006	-4,185	-4,184	-4,184	-3,982	-3,932	-4,109	-4,040	-5,492	-5,876
Minority interests	141	218	150	-	-	-	-	-	-	-
Other	696	1,092	738	1,941	3,345	4,627	3,739	-	-	-
Total net assets	**38,379**	**40,210**	**41,260**	**43,553**	**46,528**	**50,799**	**50,774**	**52,748**	**53,583**	**54,635**
Working capital	25,053	28,423	29,434	32,060	33,855	34,783	34,638	33,946	38,739	43,911
Total interest-bearing debt	11,600	13,142	10,833	10,159	12,039	9,213	4,871	3,692	7,722	8,386
Net debt	-1,849	-91	-2,549	-1,205	622	-3,224	-3,495	-4,056	-1,706	778

Source: Shared Research based on company data
Figures may differ from company materials due to differences in rounding methods.

Assets

Although the company also manufactures industrial chemicals, its core business is that of a trading company. Since trading company operations do not require large-scale facilities, the ratio of tangible fixed assets is low. Working capital, such as trade receivables and inventory, account for a large portion of assets. Since FY03/10, the company has aggressively increased inventory, reflecting its ardent efforts to handle new products.

The rise in inventories in FY03/13 was reflected in the increase in PV panels following the full-fledged entry into the PV business, along with expansion in overseas operations. Working capital is rising with the increase in inventories. In FY03/16, however, the company streamlined its assets and this resulted in reduced inventories and working capital.

According to the company, accounts receivable from Japanese customers are generally collected within around three months, versus one or two months for foreign customers. Excluding the results for FY03/16 when revenue declined considerably as the company overhauled its recycled energy purchasing system and the semiconductor market cratered, the accounts receivable collections period for the company as a whole has trended at about three months. However, Shared Research believes that during FY03/19 as transactions with major customers increased, the collection period lengthened. Also, with the rapid contraction of the semiconductors market in the latter half of the year, there was a buildup in inventory and other issues, resulting in a stretching out of the collection period.

Investments and other assets are mostly investments in securities. According to the company, it intends to consider a shareholding policy that takes into account the degree of contribution to operations as well as being attentive to investment returns.

Liabilities

Accompanying the expansion in business scale in FY03/14, interest-bearing debt increased slightly. However, in FY03/15, debt again decreased, falling JPY2.8bn YoY to JPY9.2bn. As a result, the company recorded net cash of JPY3.2bn in FY03/15 after posting net debt of JPY622mn in FY03/14. The upward trend has since continued; the interest-bearing debt dependence ratio (interest-bearing debt/total assets) at end FY03/16 was 6.4%, and the debt/equity ratio was 0.1x. Overall, liabilities were low.

Net assets

Net assets in FY03/16 remained flat year on year but are showing a rapid growing trend. As the total assets decreased due to streamlining measures in FY03/16, the equity ratio was 66.5% (up from 61.4% the previous year).

Cash flow statement

Cash flow statement (JPYmn)	FY03/10 Cons.	FY03/11 Cons.	FY03/12 Cons.	FY03/13 Cons.	FY03/14 Cons.	FY03/15 Cons.	FY03/16 Cons.	FY03/17 Cons.	FY03/18 Cons.	FY03/19 Cons.
Cash flows from operating activities (1)	**4,723**	**73**	**3,602**	**695**	**1,732**	**4,296**	**2,087**	**2,571**	**-459**	**-1,198**
Cash flows from investing activities (2)	**-510**	**-650**	**-497**	**-1,846**	**-2,069**	**-374**	**44**	**-1,209**	**214**	**-152**
Free cash flow (1+2)	**4,214**	**-577**	**3,105**	**-1,151**	**-337**	**3,922**	**2,131**	**1,362**	**-245**	**-1,350**
Cash flows from financing activities	**-3,997**	**684**	**-3,131**	**-1,623**	**1,010**	**-3,658**	**-5,469**	**-1,947**	**1,777**	**-699**
Depreciation and amortization of goodwill (A)	630	596	630	576	809	1,095	1,053	874	899	674
Capital expenditures (B)	-337	-695	-658	-1,759	-2,930	-817	-394	-386	-589	-405
Working capital changes (C)	-1,028	3,370	1,012	2,626	1,795	928	-145	-692	4,793	5,172
Simple FCF (NI + A + B - C)	**2,974**	**-1,269**	**1,204**	**-1,804**	**-1,580**	**2,744**	**2,838**	**3,083**	**-1,196**	**-2,430**

Source: Shared Research based on company data
Figures may differ from company materials due to differences in rounding methods.

Cash flows from operating activities

Reflecting stable earnings, operating cash flows are fundamentally steady. However, the negative trend prevailing since FY03/18 can primarily be attributed to increases in accounts receivable, accounts payable, and inventory assets. The company has presumably worked to maintain product inventories and quality control to handle transactions with Tier 1 major customers (primarily in the automobile sector) that have been on the rise in recent years.

Cash flows from investing activities

Since the trading business accounts for the majority of operations, there is little need for investment in fixed assets. In FY03/19, there was a JPY364mn YoY increase in cash used, resulting in a net cash outflow from investing activities. The main reason was against the background of fixed assets acquired reached JPY405mn. According to the company, the accumulation of a number of comparatively small-scale contracts for such items as demonstration-use equipment and introduction of computer systems basically led to fluctuations in purchases and sales of securities and bank account deposits and withdrawals.

Cash flows from financing activities

In FY03/19, although borrowings increased by JPY666mn from FY03/18, the period also saw decreases in dividend payments and treasury stock, resulting in a net cash outflow (vs. a net cash inflow in FY03/18). Concerning the company's business operations, as previously noted, transactions with major customers increased and there was also a trend towards relatively longer payment terms. It therefore appears that the company will need to raise capital with the aim of securing sufficient working capital.

Historical performance

Full-year FY03/19 results (out May 8, 2019)

Earnings results for full-year FY03/19 (April 2018–March 2019)

- Consolidated sales: JPY140.1bn (+1.0% YoY)
- Consolidated gross profit: JPY18.7bn (+2.0% YoY)
- Consolidated SG&A expenses: JPY15.0bn (+3.2% YoY)
- Consolidated operating profit: JPY3.6bn (-2.6% YoY)
- Consolidated recurring profit: JPY3.6bn (-5.1% YoY)
- Net income*: JPY2.5bn (-24.8% YoY)

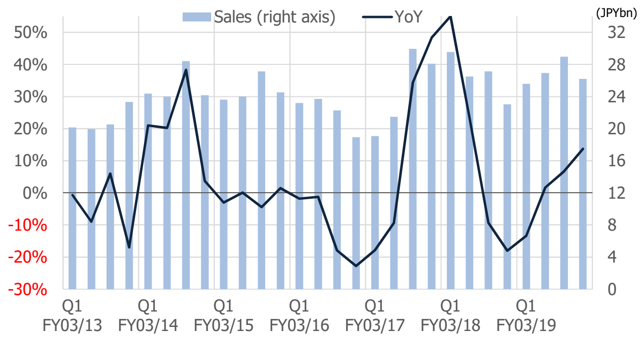
*Net income refers to profit attributable to owners of the parent.

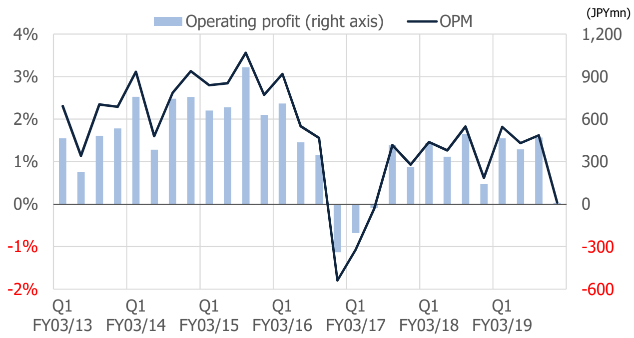
Electronics industry trend: The car electronics field remained stable amid the shift to electric vehicles, but other fields weakened as a result of the downturn in smartphone demand, reduced appetite for capital expenditure in the Chinese manufacturing sector and other factors.

Company performance: Although sales of semiconductor devices remained favorable, overall sales in the Electronic Devices and Components segment declined. This mainly reflected the impact of discontinuing sales of memory cards. In the Electronic and Electric Equipment segment, 1H sales of PCB lithographic exposure equipment for smartphones in particular remained firm. Sales increased in the Industrial Chemicals segment as sales of polymerization inhibitors and catalysts for the oil and petrochemicals industry remained upbeat and sales of cosmetic base materials remained firm.

Electronic Devices and Components

Performance





Source: Shared Research based on company data

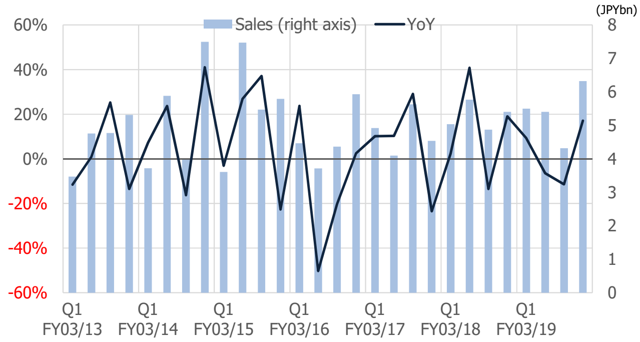
Earnings results for full-year FY03/19 (April 2018–March 2019)

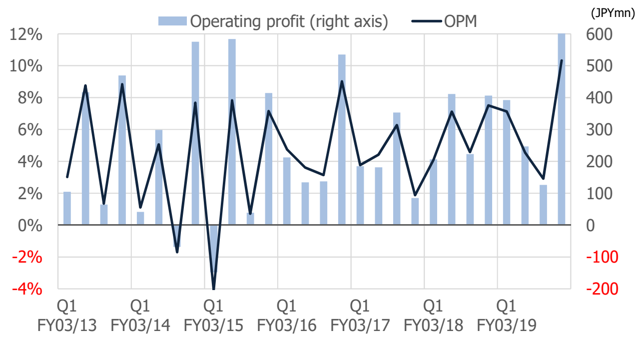
- Segment sales: JPY107.7bn (+1.4% YoY)
- Segment profit: JPY1.3bn (-6.7% YoY)
- Segment trend: Demand grew for semiconductor devices used in automotive products, but weakened for connectors mainly for consumer and industrial applications in China. Another factor negatively affecting FY03/19 results was the discontinuation of memory cards*, which had brought in sales of JPY4.1bn in Q1 FY03/18.

*Memory card business: The Singapore subsidiary booked approximately JPY8.0bn in FY03/17 and JPY4.0bn in FY03/18 in large-scale orders for memory cards between Q2 FY03/17 and Q1 FY3/18. Sales had initially been projected to be JPY6.0bn over FY03/18, but owing to low margins and the transient and special nature of the business, the company discontinued memory cards in Q2 FY03/18. Discounting the impact of this, sales in the Electronic Devices and Components segment maintained an upward trend of 5–10% in FY03/18 and 10–15% against initial FY03/19 forecasts.

Electronic and Electric Equipment

Performance





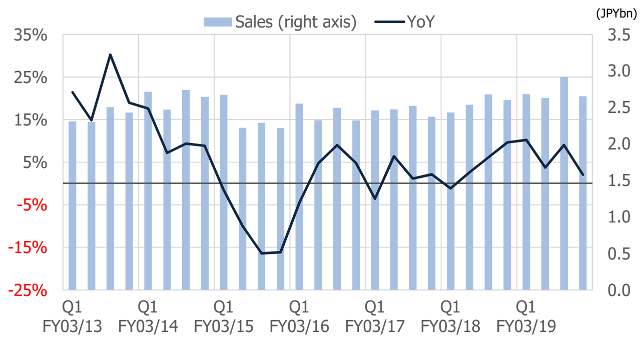
Source: Shared Research based on company data

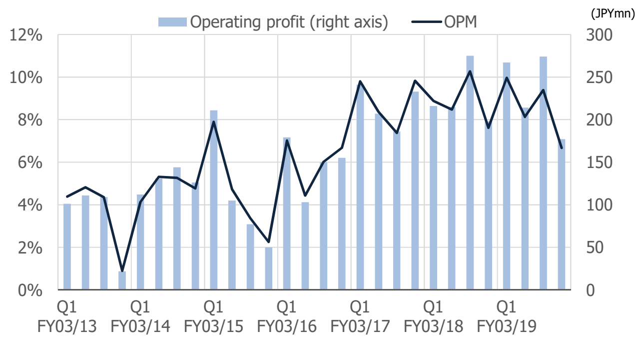
Earnings results for full-year FY03/19 (April 2018–March 2019)

- ▷ Segment sales: JPY21.5bn (+2.2% YoY)
- ▷ Segment profit: JPY1.4bn (+13.1% YoY)
- ▷ Segment trend: Sales of vapor deposition equipment used in smartphone lens manufacturing fell in China, but 1H sales of PCB lithographic exposure equipment were upbeat, particularly to Taiwanese companies in the smartphone manufacturing industry.

Industrial Chemicals

Performance





Source: Shared Research based on company data

Earnings results for full-year FY03/19 (April 2018–March 2019)

- ▷ Segment sales: JPY10.9bn (+6.2% YoY)
- ▷ Segment profit: JPY932mn (+3.1% YoY)
- ▷ Segment trend: In paper and pulp, sales of papermaking chemicals were sluggish owing to weaker global demand for papermaking amid the spread of digital media. In petrochemicals, sales of polymerization inhibitors and catalysts remained firm amid strong consumption, while in cosmetics, sales of bio-polymers were upbeat.

Other

Earnings results for full-year FY03/19 (April 2018–March 2019)

- ▷ Segment sales: JPY688mn (+1.2% YoY)
- ▷ Segment profit: JPY16mn (-40.7% YoY)

- The segment is mainly engaged in management of the company's operations and logistics, and acting as an agency for insurance companies.

Q3 FY03/19 results (out February 13, 2019)

Consolidated earnings results for cumulative Q3 FY03/19 (April–December 2018)

- Sales: JPY104.9bn (-0.7% YoY)
- Gross profit: JPY14.0bn (+0.8% YoY)
- SG&A expenses: JPY11.2bn (+1.2% YoY)
- Operating profit: JPY2.8bn (-0.7% YoY)
- Recurring profit: JPY2.9bn (-4.4% YoY)
- Net income*: JPY1.9bn (-33.6% YoY)

*Net income attributable to parent company shareholders

The nine-month period through Q3 FY03/10 (April–December 2018) saw diverging trends within the electronics industry. In those areas served by Hakuto, the company saw a very noticeable decline in demand for manufacturing equipment from Chinese manufacturers. In contrast, demand from the automotive electronics sector remain steady thanks to automakers' programs to build electric vehicles (which will require a review of everything from manufacturing processes to parts in order to handle the change in the power train resulting from the switch from gasoline/diesel-powered engines to battery-powered engines). With an operating environment like this, sales trends varied by segment but solid results the Industrial Chemical segment were enough to reduce the decline in overall sales and earnings stemming from lower sales at the Electronic Devices and Components and the Electronic and Electric Equipment segments.

- At its Electronic Devices and Components segment, the company saw continued strong demand for semiconductor devices thanks to automakers' electric vehicle programs but segment sales as a whole still finished down as a result of the company's discontinuation of sales of low-margin memory cards in Q1 FY03/19. At the Electronic and Electric Equipment segment, sales of PCB lithography equipment for smartphones remained firm, but this was not enough to offset the slump in sales in vacuum equipment and segment sales still finished down. In contrast, sales at the Industrial Chemicals segment finished up, bolstered by continued strong sales of polymerization-inhibitors and catalysts for the oil/petrochemical industry, and cosmetics base materials.

- On the earnings front, deteriorating market conditions led to a 5.7% YoY decline in segment profit at the Electronic and Electric Equipment segment. In contrast, segment profit at the Electronic Devices and Components segment rose 5.2%, aided by both strong demand for semiconductor devices from the automotive market and reduced sales of low-margin products, while stable trends at the Industrial Chemicals segment led to a 6.9% rise in segment profit, limiting the decline in operating profit as a whole to 0.7%.

Electronic Devices and Components

Earnings results for cumulative Q3 FY03/19 (April–December 2018)

- Segment sales: JPY81.5bn (-1.2% YoY)
- Segment profit: JPY1.3bn (+5.2% YoY)

About 60%-70% of segment sales are accounted for by semiconductor devices. Within semiconductor devices, the company saw rising demand for power ICs, microcontrollers, and other devices for automotive use. In contrast, demand for semiconductor devices used in consumer and industrial applications (such as air conditioners and industrial robots) softened, especially from the Chinese market; the company also reported a drop in demand for connectors at other electronic parts used in large household electric appliances.

On the earnings front, the company suffered little as a result of its decision to discontinue sales of low-margin memory cards (which generated JPY4.1bn in sales in Q1 FY03/18) and, with the aid of continued strong demand from the automotive sector and stable foreign exchange rates, was able to log an increase segment profit YoY.

Electronic and Electric Equipment

Earnings results for cumulative Q3 FY03/19 (April–December 2018)

- Segment sales: JPY15.2bn (-1.7% YoY)
- Segment profit: JPY765mn (-5.7% YoY)

While the company saw a drop in sales to China (mainly through its subsidiary in Shanghai) of vapor deposition equipment for smartphone lens coating, this was offset in part by strong sales (mainly through its subsidiary in Taiwan) of lithography exposure equipment to local companies for use in manufacturing printed circuit boards and flexible circuit boards used smartphones. Segment profit also finished down, hurt by declining sales of vapor deposition equipment for lens coating and lower margins.

Industrial Chemicals

Earnings results for cumulative Q3 FY03/19 (April–December 2018)

- Segment sales: JPY8.2bn (+7.7% YoY)
- Segment profit: JPY755mn (+6.9% YoY)

Within the segment, sales are largely split between the petroleum/petrochemical market, the paper/pulp market, and the cosmetics market. During the nine-month period through Q3 FY03/19, the segment saw firm demand from the petroleum/petrochemical market for polymerization-inhibitors and catalysts. Demand from the paper/pulp market was weak as worldwide sales of chemicals used in papermaking remained depressed by the ongoing shift to digital media. Sales to the cosmetics market ran ahead of plan, aided by the build-up of Hakuto Life Science Co., Ltd (a wholly owned subsidiary established in April 2018) and strong demand from major cosmetics manufacturers for Alcasealan (the company's water-absorbent bio-polymer made from microbes) for use in cosmetic bases. Segment profit also finished up, thanks to solid gains in the petroleum/petrochemical and cosmetics areas.

Other

Earnings results for cumulative Q3 FY03/19 (April–December 2018)

- Segment sales: JPY521mn (+1.2% YoY)
- Segment profit: JPY26mn (+15.3% YoY)

The segment is mainly engaged in management of the company’s operations and logistics, and acting as an agency for insurance companies.

1H FY03/19 results (out October 29, 2018)

- 1H FY03/19: Sales down 4.3% YoY, operating profit up 2.4% YoY. The decline in sales reflects the dropout of a large, low-margin project booked at this time last year. Operating profit finishes ahead of plan and up across all segments

- ▷ Operating profit: Steady growth in earnings across all segments driven by semiconductor devices for automotive and industrial equipment-related applications and, at the Electronic and Electric Equipment segment, PCB-related equipment
- ▷ Versus forecasts: 1H sales and profits surpassed forecasts. Based in part on the status of semiconductor devices for automotive application, the company believes it possible to achieve its full-year forecasts
- ▷ Electronic Devices and Components: Sales down 6.3%, and operating profit up JPY85mn. The decline in sales reflects the dropout of a large project booked at this time last year. In addition to robust performance of automotive products, sales of items for consumer and industrial application remained firm
- ▷ 2H: Sense of adjustment regarding some products for industrial application, but those for automotive use expected to remain robust. Changes to distribution channels at some suppliers to contribute
- ▷ New business area: Monitoring services for elderly households may become a driving force in future. Targeting device sales of JPY3–4bn in next three to four years
- ▷ Electronic and Electric Equipment: Sales up 0.9%, operating profit up JPY22mn. Additional investment in PCB/FPC equipment business centering on Taiwanese companies led to higher sales of manufacturing equipment. Contributions also from stepper business
- ▷ Demand for vapor deposition equipment for smartphone lens manufacturing at the Shanghai subsidiary turned to a downward trend, but was offset by an increase in PCB/FPC
- ▷ PCB/FPC: Sales measures proved effective by leveraging overall ability and ample product lineup for various processes. Steppers likely to continue performing well from 2H onward
- ▷ New products: Steady increase in laser processing systems. Hakuto plans to begin handling of Buckley Systems' electromagnets for accelerators
- ▷ Industrial Chemicals: Sales up 6.9%, operating profit up JPY50mn. Strong sales of catalysts and polymerization inhibitors, reflecting solid demand in the petrochemicals sector; strong sales of cosmetics base materials
- ▷ Increased production capacity for base materials, but must be increased further as horizontal expansion of customer brands progresses. Now studying possibility of expanding production further
- ▷ FY03/20: Worth watching are monitoring services and expanded sales targeting automobile market in Electronic Devices and Components and steppers, laser processing, and new commercial rights in Electronic and Electric Equipment

Results summary

1H sales down 4.3% YoY, operating profit up 2.4%. Decline in sales reflects dropout of large, low-margin projects booked at this time last year. Operating profit finishes ahead of plan and up across all segments

For 1H FY03/19, Hakuto posted sales of JPY68.7bn (-4.3% YoY) and operating profit of JPY2.0bn (+2.4% or +JPY45mn YoY) as earnings increased despite the drop in sales as the OPM rose 0.2pp to 2.8%. The decline in sales was largely due to the drop-out of a large, low-margin memory card project (JPY4.1bn) that was discontinued in 1Q FY03/18. Both sales and operating profit finished ahead of the company's initial 1H forecast of JPY68.0bn for sales and JPY1.9bn for operating profit.

Earnings were up across all segments, though in Q1 the gains were driven by the Electronic and Electric Equipment segment, which benefited from a strong demand for PCB/FPC equipment, while in Q2 the gains were driven by the Electronic Devices and Components segment, which benefited from continued strong growth in demand for semiconductor devices used in automotive electronics.

Change in accounting methodology: Starting in Q1 FY03/19, the company changed the currency conversion method it used for converting the revenues and expenses at its overseas subsidiaries from the market exchange rate on the last day of the accounting period to the average exchange rate over the entire accounting period. This change reduced 1H FY03/18 sales by JP557mn, operating profit by JPY17mn, both recurring profit and pre-tax profit by JPY18mn, and net income by JPY14mn. The figures for FY03/18 results used in this report, including YoY comparisons, are based on the reported figures prior to this adjustment.

Sales: Sales push in automotive and industrial equipment markets bears fruit, offsets downturn in sales of PCB manufacturing equipment caused by a drop in demand for vapor deposition equipment used for coating lens

The company saw sales up YoY as the sale of semiconductor devices for automobiles as well as equipment for consumer and industrial use in the Electronic Devices and Components segment were robust. In the Electronic and Electric Equipment segment, while sales of vapor deposition equipment for smartphone lens coating were on a downward trend, sales of PCB manufacturing equipment (PCB/FPC) were up YoY. Although demand for vapor deposition equipment has slowed since 2H FY03/18, demand for equipment for PCB/FPC manufacturing equipment remained robust, contributing to segment earnings.

In steppers for semiconductor packages, a business in the spotlight of late, the company shipped one system in Q1, and had been expecting to receive orders for one or two units in Q2. We plan to confirm the status of these orders during our upcoming interview with the company.

Sales of semiconductor devices for tablets had been weak due to inventory adjustments and other factors, while automobile-related sales had been on the rise; these trends appear to have continued in 1H. It's noteworthy that strategic efforts to strengthen the company's position in the market have been successful.

Operating profit: Steady growth across all segments

Operating profit rose 2.4% or JPY45mn YoY to JPY2.0bn. Earnings were up across all segments, as was the operating profit margin. Sales growth in the Electronic and Electric Equipment and in Industrial Chemicals appears to have resulted in a steady profits uplift. Driven mostly by decreases in personnel and depreciation expenses, SG&A expenses declined by 0.4% (JPY31mn) YoY, albeit partly because of a high base for YoY comparison. This represented stronger cost control than that called for in the full-year forecast (for a JPY1.1bn increase in SG&A expenses). However, this was partly because hiring did not proceed as expected, so if hiring goes more smoothly in 2H, related expenses are likely to increase. Operating profit came in JPY107mn above the company's 1H forecast of JPY1.9bn. The operating profit margin improved YoY for all segments, rising 0.2pp on a consolidated basis to 2.8% (versus plan of 2.7%).

Cash flows from operating activities: Contribution from trimming accounts receivable

Starting in 2H FY03/18, Hakuto is promoting the slimming down of its balance sheet. The implication is that it wants to prevent its balance sheet from swelling as sales of semiconductor devices increase, mostly for automotive applications. Naturally it aims to improve asset efficiency in addition to improving cash flows. In 1H FY03/19, in addition to the conventional sale of accounts receivable, the company added the trust method and included foreign currency-denominated receivables in the scope of application, thereby reducing foreign exchange risk through forex management. From the perspective of capital costs, it also determined to reduce its strategic equity holdings where possible (and has already begun selling off holdings). The company says its 1H cash flows from operating activities were JPY1.4bn (+JPY700mn YoY), but might have been negative if not for the transfer of its accounts receivable. In conjunction with the improvement in cash flows from operating activities, it repaid JPY1.5bn in loans. As of end 1H, the company had a receivables balance of about JPY3.7bn (of which self-settled trusts and foreign currency-denominated receivables totaled about JPY2.0bn).

2H outlook

Hakuto expects the business environment to remain robust in 2H, despite some deceleration of the global economy. There is concern about the impact of US-China trade friction on the Chinese economy, with some fields already affected. In addition, forex movements may impact some businesses of overseas subsidiaries. The company recognizes these risks and is responding appropriately as it continues aiming to achieve its full-year forecasts.

In light of these circumstances, the company is conducting the following initiatives in 2H: a) Semiconductor devices: capturing strong automotive components business without fail; b) Continuing timely procurement to counter lengthening delivery times; c) Electronic and electric equipment: ensuring orders and sales on major projects; and d) Strengthening inventory management for products in business areas with weakening demand. The following are overviews of key measures by segment.

Electronic Devices and Components

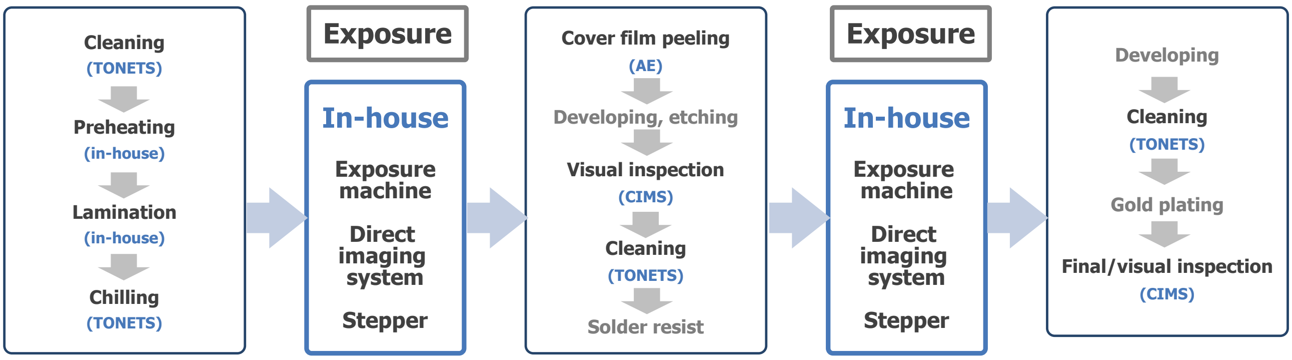
In regard to the automotive business, a number of items Hakuto was involved in designing about three years ago (in joint development with customers from the design phase) have now reached the mass production phase at those customers and are therefore contributing to Hakuto's earnings. The company says, in light of the status of past design projects and sales activities during the last financial year, it should be able to maintain similar contributions in 2H as in 1H. However, in the case of high voltage semiconductors and other semiconductors requiring special processes, delivery periods have been extended by about a year, and there are some products for which the supply (procurement side) is inadequate. Hakuto aims to negotiate with its suppliers to meet customer demand.

Electronic and Electric Equipment

In Electronic and Electric Equipment, Hakuto expects contributions from the order and sale of multiple steppers for PCB/FPC manufacturers in 2H. In 1H, this business drove earnings on the successes of a sales structure that leverages a rich product lineup covering various FPC-related processes and overall ability. Recently the company has been enhancing its sales activities with a focus on the comprehensiveness of its product lineup (including proprietary products), since especially in terms of FPC-related equipment, it handles everything from cleaning equipment (TONETS Corporation) for preprocessing to equipment for the lithographic exposure process to visual inspection systems (Hong Kong CIMS) for post-processing. It has also been catching a tailwind of increased demand for imaging devices and devices for related processing in connection with the shift to multilayer FPCs. One of the company's strengths is imaging devices, where it has a full lineup that includes low-end contact lithographic exposure equipment, middle-range direct imaging devices, and high-end steppers for semiconductor packages, and it is working to capture related and peripheral demand.

2H started out a little behind schedule versus forecasts, but Hakuto still expects to ship several steppers (one unit sold in Q1 and one ordered in Q2). It also expects to win orders for more units than it plans to ship, so if things proceed favorably, steppers will contribute to earnings more in FY03/20 than in FY03/19. There is some risk in terms of demand related to semiconductor packages, which require precision steppers, but the company also expects contributions related to PCB/FPC equipment, since it expects demand for new cleaning equipment and final visual inspection systems with new functions.

PCB/FPC manufacturing process and equipment handled by Hakuto



Source: Shared Research based on company data

Expansion to new business areas

At its November 2018 results briefing, Hakuto introduced its expansion into new business areas, including: A) monitoring service for the elderly (electronic devices division): Anshin Light™; B) RFID (Electronic Devices and Components): promotions targeting the apparel and logistics industries in Japan and support for overseas customers' expansion into Asia by using its network of bases; C) laser processing systems (Electronic and Electric Equipment): shift from selling components to selling full systems; and D) new products (Electronic and Electric Equipment): electromagnets for accelerators.

Of these, if progress goes according to plan, Anshin Light™ may show some interesting development in terms of profit. The product was developed by Toppan Printing Co., Ltd. (TSE: 7911) in cooperation with Hakuto and consulting and system planning and development company iZE Co., Ltd., and is positioned as a new solutions business under Hakuto's growth strategy for devices. As Japanese society ages, local governments are looking for ways to ensure that residents receive emergency notices and evacuation information. This monitoring service not only achieves this, but also allows local governments to confirm whether elderly residents are home. According to a press release from Toppan Printing, the devices at the heart of the service cost

JPY25,000 (in lots of 5,000 units) and monthly operational fees total about JPY1,000 (including telecommunication, system, and maintenance fees). At a briefing, Hakuto says it is in charge of procuring the devices and is targeting JPY3.0bn in sales of the devices alone over three to four years. In addition to device sales, the company also expects a portion of the monthly fees, so it has high hopes for the success of the project. At the briefing, Hakuto said it expects only about JPY30mn from sales of the device in FY03/19, but it will be worth watching future developments.

The company is also pouring energy into laser processing systems. It is moving away from the selling components in favor of selling full systems. In response to customer needs, it developed a proprietary laser welding system (combining fiber lasers, Galvano scanners, and control software), with which it aims to set itself apart from competitors through processing performance. It hopes to set an affordable price for the system as it aims to expand its presence in the laser processing market. Hakuto plans to display the system at a trade show in January 2019. Related sales are still minor, but the company has high hopes for the system.

The company has added electromagnets for accelerators to the lineup of products it handles. It already handled pelletron accelerators from US company National Electrostatics Corporation (NEC) and cyclotrons from US company Advanced Cyclotron Systems Inc. (ACSI), but will now begin handling electromagnets from New Zealand's Buckley Systems, the world's largest maker of electromagnets for use in semiconductor manufacturing. Hakuto says Buckley Systems has sold electromagnets in Japan worth some JPY5bn.

It seems Hakuto will be in charge of winning new orders, and it is already hoping to capture demand at a high brilliance 3GeV synchrotron light source facility for soft x-rays to be constructed in the Tohoku region. According to a government estimate, the expected cost for the facility will run about JPY34.0bn, with about half of that (JPY17.0bn) for the accelerator. A storage ring uses a large number of electromagnets, estimated to cost some JPY8.5bn. Hakuto believes the facility will use about 1,500 individual electromagnets, with each costing millions of yen. Buckley Systems has 60–70% of the global market for electromagnets, so Hakuto has high hopes for this business.

Full-year plan

Hakuto has not revised its full-year forecasts, but based on the status of semiconductor devices for automobiles and the company's order backlog (JPY45.1bn as of end Q2), it believes it will be possible to achieve its full-year forecasts. In terms of recent order trends, there was some adjustment going on in August and September, but orders are actually slightly above forecasts so far in October and November. By segment:

- ▷ Electronic Devices and Components: Despite a bearish tone in components for robots and some other industrial machines, mainstay semiconductor devices for automobiles remain strong, and the company expects higher sales from distribution channel changes in Q4.
- ▷ Electronic and Electric Equipment: The FPC equipment business remains strong, with steppers and laser processing systems also likely to contribute.
- ▷ Industrial Chemicals: Performance likely to be favorable on increased production of cosmetics base materials. It is worth noting that distribution channel changes will only contribute to higher sales for the full year starting in FY03/20.

Q2 outlook (For reference; as of Q1)
As indicated above, in semiconductor devices, sales for automobile were upbeat in Q1 and are expected to remain the same in Q2, with sales for the consumer electronics and industrial electronics industries also remaining firm, and sales of devices for tablets recovering. In the Electronic and Electric Equipment segment, the company expects vapor deposition equipment sales to continue declining in Q2, but thinks this will be offset by growth in PCB/FPC manufacturing equipment. It also anticipates orders for one or two steppers for semiconductor packages. In the Industrial Chemicals segment, sales of petrochemical materials are expected to sustain the same trend as in Q1 and the company also expects continued buoyancy in sales of base materials for cosmetics, despite production capacity bottlenecks. SR thinks there will be no notable changes in the earnings structure, with no one-time factors likely to elevate SG&A expenses and extraordinary losses.

Electronic Devices and Components

Electronic Devices and Components: Sales down 6.3%, and OP up JPY85mn. Lower sales reflect drop-out of large projects booked at this time last year; demand from automotive electronics market remained strong, as did demand from the consumer and industrial electronics markets

Segment sales of JPY52.5bn were down 6.3% YoY while segment profit of JPY852mn was up 11.1% (JPY85mn) YoY. Sales of automotive components remained strong owing to the progress made in the Advanced Driver Assistance Systems (ADAS) and electric powertrain systems, backed by firm demand from the start of the year (sales of devices by three semiconductor companies centered on automotive applications increased JPY1.3bn or 7% YoY). Sales of industrial equipment-related components remained favorable on strong demand from overseas capital investment. Performance in consumer equipment and home electronic appliances appears to have been robust.

The decline in sales YoY reflected a) the drop-out of a large, low-margin memory card project (JPY4.1bn) that was discontinued in Q1 FY03/18, and b) softness in the tablet sector due to inventory adjustment. Excluding the impact of the large memory card project, sales were up about 1% YoY. It seems the company also is steadily implementing initiatives to strengthen packaged sales of automotive equipment and to add value (see Anshin Light™ mentioned earlier).

Electronic and Electric Equipment

Electronic and Electric Equipment: Sales up 0.9%, operating profit up JPY22mn. Investment in equipment for PCB/FPC centering on Taiwanese companies contributed to sales expansion of the company's manufacturing equipment, as did steppers

Segment sales of JPY10.9bn were up 0.9% YoY and segment profit of JPY639mn was up 3.6% (JPY22mn) YoY. Sales continued to be boosted by additional investment in PCB/FPC manufacturing equipment for next-generation smartphones centered on Taiwanese companies. This offset the downward trend in demand for vapor deposition equipment for lens coating used in smartphones, mainly at the Shanghai subsidiary (in decline since Q3). The top-line gains notwithstanding, segment sales came in slightly short of the company's initial 1H forecast of JPY11.3bn. With PCB/FPC manufacturing equipment maintaining favorable performance, the company sold one stepper in Q1 and won an order for one stepper in Q2. It expects orders and sales of multiple steppers in 2H. If progress goes to plan, it is possible steppers will become the driver for PCB/FPC-related equipment by FY03/20. We will continue to watch progress in this regard.

For reference (as of Q1): Hakuto offers a full lineup of PCB lithographic exposure equipment, running the gamut from steppers for semiconductor packaging to direct imaging devices and equipment for PCB/FPC manufacturing. In Q1, sales apparently were brisk by and large. Over the full year the company aims to sell six steppers for semiconductor packaging; it sold one unit in Q1 and expects to receive orders for another one or two units in Q2. In light of robust demand, Hakuto expects sales to remain firm also in direct imaging devices and equipment for PCB/FPC manufacturing in Q2.

Sales of vapor deposition equipment for lens coating are expected to continue losing momentum from Q2 onward, partly in reflection of dwindling profitability. However, this was already priced in the initial company forecasts and expected to be compensated by higher sales of PBC lithographic exposure equipment. Therefore it appears to be of no great concern to the company.

Industrial Chemicals

Industrial Chemicals: Sales up 6.9%, operating profit up JP5.0bn, with gains underpinned by steady demand for catalysts and polymerization-inhibitors from petrochemical industry, strong sales of cosmetics bases

Segment sales of JPY5.3bn were up 6.9% YoY and segment profit of JPY481mn was up 11.6% YoY. In the industrial chemicals segment, sales of catalysts and polymerization inhibitors remained robust, reflecting solid demand in the petrochemical industry. Sales of cosmetics base materials (bio-polymers) continued to grow. In paper and pulp manufacturing, against a backdrop of harsh market environment resulting from a worldwide cutback on use of resources, sales of papermaking chemicals were sluggish. Development of its own brand of cosmetics has been something of an uphill battle, but the company plans to enhance its sales efforts in Fiji (where the brand is already sold in 13 stores), Singapore, and Thailand by promoting the eco-friendliness of its proprietary cosmetics base materials*.

Cosmetics base materials: Hakuto uses biotechnology to produce the jelly-like substance Alcasealan (a natural polysaccharide) that can serve as part of an excellent skin protection system. One strength of Alcasealan is that, due to the use of a new emulsifying technique (Bio-Globule Emulsion) based on the substance's physical properties, it does not require surfactants, which are considered to have a negative impact on the environment.

For reference (as of Q1): For base materials for cosmetics, Hakuto has struggled to grow sales because of insufficient production capacity. By the end of FY03/19, though, it plans to expand capacity by 1.5x, the effects of which should be felt from FY03/20. Sales of proprietary products seem to remain at the same level as the year prior.

From a profit perspective, the OPM is improving in tandem with change in the product mix, and this trend is seen continuing in Q2 onward. OPM apparently shows steady progress on a year-on-year basis and versus target.

Other

Segment sales of JPY345mn were up 1.2% YoY and segment profit of JPY17mn was up 41.7% YoY. The segment engages in management of the company's operations and logistics. It also acts as an agency for insurance companies.

Q1 FY03/19 results (out July 31, 2018)

- FY03/19: Q1 sales down 8.8%, OP up 25.4%. The decline in sales reflects the impact of low-profit large-scale projects in FY03/18. Operating income improved in all segments
- OP: Steady accumulation of profits across all segments, with earnings driven by semiconductor devices for automotive and industrial equipment-related applications and, at the Electronic and Electric Equipment segment, PCB-related equipment
- Electronic Devices and Components: Sales down 13.4%, and OP up JPY33mn. The sales performance reflected the fall-off in large scale projects in FY03/18. In addition to robust performance of components for automobiles, sales of components for consumer and industrial application remained firm
- Electronic and Electric Equipment: Sales up 9.2%, OP up JPY186mn. Additional investment in PCB/FPC equipment business centering on Taiwan contributed to increased sales of manufacturing equipment. Contributions also from stepper business
- Demand for vapor deposition equipment for smartphone lens manufacturing at the Shanghai subsidiary turned to a downward trend, but was offset by an increase in PCB/FPC
- Industrial use: Sales up 10.2%, OP up JPY51mn. Strong sales of catalysts and polymerization inhibitors, reflecting solid demand in the petrochemicals sector; strong sales of cosmetics base materials
- Q2 onward: The company expects semiconductor device performance to be similar to Q1. In Electronic Devices and Components, it expects growth in PCB/FPC equipment to continue offsetting a downturn in vapor deposition equipment

Results summary

Q1 sales down 8.8%, OP up 25.4%. The decline in sales reflects impacts of low-profit large-scale projects in FY03/18. Operating profit up in all segments

For Q1 FY03/19, Hakuto posted sales of JPY33.8bn (down 8.8% YoY) and operating profit of JPY1.1bn (+25.4% or +JPY200mn YoY); profit increased despite the sales decline. OPM improved 0.9pp to 3.3%. The sales decrease was largely due to the impact of lower margin large-scale projects in FY03/18. Each segment increased operating profit, underpinned in particular by Electronic and Electric Equipment which benefited from a strong performance of equipment for PCB/FPC. Apparently, all segments also performed largely in line with plan.

Sales: Sales push in automotive and industrial equipment markets bearing fruit, favorable market environment for PCB manufacturing equipment continues

The company saw sales up YoY as the sale of semiconductor devices for automobiles as well as equipment for consumer and industrial use in the Electronic Devices and Components segment were robust. In the Electronic and Electric Equipment segment, while sales of vapor deposition equipment for smartphone lens coating were on a downward trend, sales of PCB manufacturing equipment (PCB/FPC) were up YoY. Although demand for vapor deposition equipment has slowed since 2H FY03/18, demand for equipment for PCB/FPC manufacturing equipment remained robust, contributing to segment earnings. In steppers for semiconductor packages, a business in the spotlight of late, the company shipped one system in Q1, and expects to receive orders for one or two units in Q2.

Sales of semiconductor devices for tablets had been weak due to inventory adjustments amongst other factors, while automobile-related sales had been on the rise, with these trends appearing to have continued in Q1. Sales of devices for tablets picked up during Q1, and it appears that automobile-related sales continue to rise thus far in Q2. It's noteworthy that strategic efforts to strengthen the company's position in the market have been successful.

OP: Steady growth across the segments

Operating profit increased 25.4% YoY, or by JPY225mn to JPY1.1bn. Each segment has grown profits and improved its operating margin. Sales growth in the Electronic and Electric Equipment and in Industrial Chemicals appears to have resulted in a steady profits uplift. Driven mostly by decreases in personnel and depreciation expenses, SG&A expenses declined by 1.4% (JPY50mn) YoY, albeit partly because of a high base for YoY comparison. This represented stronger cost control than that called for in full-year forecast (for a JPY1.1bn increase in SG&A expenses), and SR believes the company is well on track in terms of reaching its 1H operating profit target (JPY1.9bn).

Q2 outlook

As indicated above, in semiconductor devices, sales for automobile were upbeat in Q1 and are expected to remain the same in Q2, with sales for the consumer electronics and industrial electronics industries also remaining firm, and sales of devices for tablets recovering. In the Electronic and Electric Equipment segment, the company expects vapor deposition equipment sales to continue declining in Q2, but thinks this will be offset by growth in PCB/FPC manufacturing equipment. It also anticipates orders for one or two steppers for semiconductor packages. In the Industrial Chemicals segment, sales of petrochemical materials are expected to sustain the same trend as in Q1 and the company also expects continued buoyancy in sales of base materials for cosmetics, despite production capacity bottlenecks. SR thinks there will be no notable changes in the earnings structure, with no one-time factors likely to elevate SG&A expenses and extraordinary losses.

Electronic Devices and Components

Electronic Devices and Components: Sales down 13.4%, and OP up JPY33mn. Sales impacted by fall-off in large scale projects in FY03/18. In addition to robust performance of components for automobiles, sales of components for consumer and industrial application were firm

Sales were JPY25.6bn (-13.4% YoY), with segment operating profit up 7.6% to JPY465mn (JPY432 in FY03/18). Sales of automotive components remained strong owing to the progress made in the Advanced Driver Assistance Systems (ADAS) and electric powertrain systems, backed by firm demand from the start of the year. Sales of industrial equipment-related components remained favorable on strong demand from overseas capital investment. Performance in consumer equipment and home electronic appliances appears to have been robust.

The decline in sales YoY reflected a) an absence of the large-scale low-margin project (just over JPY4.0bn) which was recorded in Q1 FY03/18, and b) softness in the tablet sector due to inventory adjustment. Excluding the impact of the large-scale project, sales were up more than 4% YoY. Sales of devices for tablets apparently are recovering in Q2, and it seems the company also is steadily implementing initiatives to strengthen packaged sales of automotive equipment and with to add value.

Electronic and Electric Equipment

Electronic and Electric Equipment: Sales up 9.2%, OP up JPY186mn. Investment in equipment for PCB/FPC centering on Taiwan contributed to sales expansion of the company's manufacturing equipment

Sales were JPY5.5bn (+9.2% YoY), with segment operating profit of JPY392mn (+90.3% or +JPY186mn YoY). Sales continued to be boosted by additional investment in PCB/FPC manufacturing equipment for next-generation smartphones centered on the Taiwan subsidiary. This offset the downward trend in demand for vapor deposition equipment for lens coating used in smartphones, mainly at the Shanghai subsidiary (in decline since Q3).

Hakuto offers a full lineup of PCB lithographic exposure equipment, running the gamut from steppers for semiconductor packaging to direct imaging devices and equipment for PCB/FPC manufacturing. In Q1, sales apparently were brisk by and large. Over the full year the company aims to sell six steppers for semiconductor packaging; it sold one unit in Q1 and expects to receive orders for another one or two units in Q2. In light of robust demand, Hakuto expects sales to remain firm also in direct imaging devices and equipment for PCB/FPC manufacturing in Q2.

Sales of vapor deposition equipment for lens coating are expected to continue losing momentum from Q2 onward, partly in reflection of dwindling profitability. However, this was already priced in the initial company forecasts and expected to be compensated by higher sales of PBC lithographic exposure equipment. Therefore, it appears to be of no great concern to the company.

Industrial Chemicals

Sales were JPY2.7bn (+10.2% YoY) and segment operating profit was JPY267mn (+23.6% YoY). In the industrial chemicals segment, sales of catalysts and polymerization inhibitors remained robust reflecting solid demand in the petrochemical industry. Sales of cosmetics base materials remained firm. In paper and pulp manufacturing, against a backdrop of harsh market environment resulting from a worldwide cutback on use of resources, sales of papermaking chemicals were sluggish.

For base materials for cosmetics, Hakuto has struggled to grow sales because of insufficient production capacity. By the end of FY03/19, though, it plans to expand capacity by 1.5x, the effects of which should be felt from FY03/20. Sales of proprietary products seem to remain at the same level as the year prior.

From a profit perspective, the OPM is improving in tandem with change in the product mix, and this trend is seen continuing in Q2 onward. OPM apparently shows steady progress on a year-on-year basis and versus target.

Other

Sales were JPY174mn (+1.3% YoY) and segment operating profit was JPY9mn (+57.3% YoY). The segment engages in management of the company’s operations and logistics. It also acts as an agency for insurance companies.

Other information

History

The company was founded in November 1953 as an importer and seller of raw quartz, needed to manufacture quartz oscillators used in electronics. In 1957, the company began importing and selling quartz processing equipment and measurement instruments to meet customer needs. To provide maintenance for this equipment, the company embarked on building its in-house technical expertise. This is the origin of the company's evolution into a technology-driven trading company specializing in electronics. This trading business grew rapidly from the mid-1960s onward as Japan's electronics industry expanded quickly. Hakuto also expanded its business areas and launched overseas operations.

Founder Shigeo Takayama decided to reduce the company's dependence on the electronics sector, and in 1960 commenced sales of measuring instruments for the petroleum industry with the aim of building a stable earning structure. In 1963, the company established Hakuto Chemical Co Ltd to manufacture industrial chemicals, sell these products domestically, and provide engineering services. This was the starting point for their industrial chemicals business of today. Hakuto Chemical subsequently began importing and selling domestically products from Nalco Chemical Co (US). Nalco is a leader in the US market in such products as anticorrosion agents and water treatment additives. Hakuto also launched technical services related to this business.

The name Hakuto is derived from a combination of the old Japanese name for Brazil, a country that imports quartz, and the first part of the word Tokyo.

November 1953	Shigeo Takayama founded the company in Tokyo with capital of JPY5mn.
August 1963	Established Hakuto Co Ltd. in Nagoya city, Aichi Prefecture.
November 1973	Hakuto Enterprises Ltd established in Hong Kong.
January 1974	Established Hakuto Taiwan Ltd.
December 1975	Hakuto Chemical and Nalco Chemical formed a capital and technical alliance.
November 1977	Hakuto Singapore Pte Ltd established in Singapore.
April 1984	Terminated alliance with Nalco.
June 1989	Established Hakuto (Thailand) Ltd.
April 1991	Acquired Hakuto Chemical Co., Ltd.
March 1995	IPO on the Japanese OTC market.
December 1995	Established Hakuto Enterprises (Shanghai) Ltd.
February 1999	Debut on TSE second section.
March 2000	Debut on TSE first section.
October 2007	Acquired Microtek Inc. as a wholly owned subsidiary.
July 2011	Fully acquired Adixen Japan Inc. (merged into parent in February 2012).
December 2011	Acquired the Japanese paper chemicals division of BASF.
August 2012	Established joint venture Lufs Co Ltd.
June 2014	Transferred all shares in wholly owned subsidiary Fuyo Chemical Industries to Aquas Corporation.
April 2016	Acquired the projection aligner business of Topcon Technohouse Corporation, a wholly owned subsidiary of Topcon Corporation
January 2017	Absorbed Microtek Inc.

News and topics

April 2019

On **April 26, 2019,** the company announced revisions to its FY03/19 earnings forecasts.

Revised forecasts for full-year FY03/19

- Sales: JPY140.1bn (previous forecast: JPY148.0bn)
- Operating profit: JPY3.6bn (JPY4.5bn)
- Recurring profit: JPY3.6bn (JPY4.7bn)
- Net income*: JPY2.5bn (JPY3.4bn)
- EPS: JPY118.45 (JPY162.95)

* Net income attributable to parent company shareholders

Reasons for the revisions

Sales are expected to fall short of previous forecast due to sluggish demand in the Chinese market for electronic parts used in home electric appliances and a slowdown in the sales of electronic/electric equipment owing to lower investment levels, mainly in smartphone-related manufacturing facilities. On the profit front, factors behind the downward revisions include a drop in operating profit due to lower sales, decline in recurring profit mainly from the recording of foreign exchange losses, and lower earnings at overseas subsidiaries that drove up income tax rates to a higher-than-expected level. As a result, operating profit, recurring profit, and net income attributable to parent company shareholders are expected to undershoot previous estimates by 19.1%, 23.8%, and 27.4%, respectively.

March 2018

On **March 30, 2018**, the company announced an upward revision to its full-year FY03/18 earnings forecasts and a dividend increase.

Revision to earnings

As reasons for upward revision, the company pointed out 1) Sales: in the Electronic Devices and Components segment, semiconductor sales for automotive and industrial equipment-related components were robust, and in the Electronic and Electric Equipment segment, sales of vacuum equipment and PCB equipment increased in Asia on the back of active smartphone-related investments, and 2) Profits: higher sales and booking of extraordinary gains such as a gain on sales of investment securities.

Year-end dividend increase

Following the earnings revision, Hakuto increased year-end dividend to JPY26 (annual dividend of JPY46), by adding a special dividend of JPY6 to the previously planned dividend of JPY20.

Forecast revisions

Quarterly performance	FY03/16				FY03/17				FY03/18				FY03/16	FY03/17	FY03/18	FY03/18	
(JPYmn)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Est. Q4	Cons.	Cons.	Est.	Est.	Diff.
Total sales	30,215	29,744	29,145	27,192	26,439	28,052	38,098	35,010	37,007	34,818	34,716	31,459	116,296	127,599	138,000	134,000	+4,000
Electronic Devices and Components	23,191	23,703	22,274	18,930	19,055	21,477	29,935	28,087	29,538	26,505	27,151		88,098	98,554	-	102,500	
Devices	15,778	16,589	15,447	13,372	13,339	13,384	18,040	17,378	17,840	18,693	19,200		61,186	62,141	-	65,484	
Components	7,413	7,117	6,823	5,560	5,716	8,094	11,895	10,707	11,699	7,811	8,000		26,913	36,412	-	37,016	
General electronic components	6,242	5,610	5,294	3,656	4,103	6,203	9,792	8,521	9,816	5,721			20,802	28,619	-	27,419	
Optical components	1,171	1,507	1,529	1,904	1,613	1,891	2,103	2,186	1,883	2,091			6,111	7,793	-	9,597	
Electronic and Electric Equipment	4,465	3,716	4,364	5,932	4,919	4,100	5,633	4,539	5,034	5,772	4,875		18,477	19,191	-	21,293	
Industrial Chemicals	2,552	2,325	2,495	2,322	2,460	2,473	2,523	2,372	2,431	2,537	2,678		9,694	9,828	-	10,185	
Other	178	177	186	166	174	173	169	160	171	170	174		707	676	-	22	
Eliminations	-174	-175	-175	-158	-169	-171	-163	-149	-168	-166	-162		-682	-652			
YoY	1.0%	-11.7%	-16.5%	-16.4%	-12.5%	-5.7%	30.7%	28.8%	40.0%	24.1%	-8.9%	-10.1%	-11.3%	9.7%	8.2%	5.0%	
Electronic Devices and Components	-1.8%	-1.3%	-18.0%	-22.8%	-17.8%	-9.4%	34.4%	48.4%	55.0%	23.4%	-9.3%		-11.3%	11.9%		4.0%	
Devices	0.7%	6.1%	-12.8%	-20.3%	-15.5%	-19.3%	16.8%	30.0%	33.7%	39.7%	6.4%		-7.0%	1.6%		5.4%	
Components	-6.7%	-15.1%	-27.7%	-28.1%	-22.9%	13.7%	74.3%	92.6%	104.7%	-3.5%	-32.7%		-19.7%	35.3%		1.7%	
General electronic components	-1.4%	-21.3%	-32.6%	-40.4%	-34.3%	10.6%	85.0%	133.1%	139.2%	-7.8%	-		-24.2%	37.6%		-4.2%	
Optical components	-27.6%	20.8%	-2.9%	18.5%	37.7%	25.5%	37.5%	14.8%	16.7%	10.6%	-		1.1%	27.5%		23.1%	
Electronic and Electric Equipment	23.8%	-50.3%	-20.2%	2.4%	10.2%	10.3%	29.1%	-23.5%	2.3%	40.8%	-13.5%		-17.3%	3.9%		11.0%	
Industrial Chemicals	-4.5%	4.7%	9.0%	4.8%	-3.6%	6.4%	1.1%	2.2%	-1.2%	2.6%	6.1%		3.1%	1.4%		3.6%	
Other	-2.7%	-2.2%	6.3%	-2.4%	-2.2%	-2.3%	-9.1%	-3.6%	-1.7%	-1.7%	3.0%		-0.3%	-4.4%			
Operating profit	1,156	716	652	382	254	413	882	520	887	1,025	996	492	2,906	2,069	3,400	3,200	+200
Electronic Devices and Components	710	435	347	-340	-204	-26	416	261	432	335	495		1,152	447			
Electronic and Electric Equipment	212	134	137	535	185	181	353	85	206	411	223		1,018	804			
Industrial Chemicals	179	103	150	155	241	207	186	233	216	215	275		587	867			
Other	6	8	14	-2	4	9	9	-3	6	6	11		26	19			
YoY	56.4%	-47.4%	-39.0%	-66.4%	-78.0%	-42.3%	35.3%	36.1%	249.2%	148.2%	12.9%	-5.4%	-32.5%	-28.8%	64.3%	54.7%	
Electronic Devices and Components	7.4%	-36.3%	-64.1%	-	-	-	19.9%	-	-	-	19.0%		-60.8%	-61.2%			
Electronic and Electric Equipment	-	-77.1%	251.3%	29.2%	-12.7%	35.1%	157.7%	-84.1%	11.4%	127.1%	-36.8%		14.5%	-21.0%			
Industrial Chemicals	-15.2%	-1.9%	94.8%	210.0%	34.6%	101.0%	24.0%	50.3%	-10.4%	3.9%	47.8%		32.5%	47.7%			
Other	-25.0%	-38.5%	600.0%	-	-33.3%	12.5%	-35.7%	-	50.0%	-33.3%	22.2%		30.0%	-26.9%			
OPM	3.8%	2.4%	2.2%	1.4%	1.0%	1.5%	2.3%	1.5%	2.4%	2.9%	2.9%	1.6%	2.5%	1.6%	2.5%	2.4%	+0.1pp
Electronic Devices and Components	3.1%	1.8%	1.6%	-1.8%	-1.1%	-0.1%	1.4%	0.9%	1.5%	1.3%	1.8%		1.3%	0.5%			
Electronic and Electric Equipment	4.7%	3.6%	3.1%	9.0%	3.8%	4.4%	6.3%	1.9%	4.1%	7.1%	4.6%		5.5%	4.2%			
Industrial Chemicals	7.0%	4.4%	6.0%	6.7%	9.8%	8.4%	7.4%	9.8%	8.9%	8.5%	10.3%		6.1%	8.8%			
Other	3.4%	4.5%	7.5%	-1.2%	2.3%	5.2%	5.3%	-1.9%	3.5%	3.5%	6.3%		3.7%	2.8%			
Recurring profit	1,219	688	622	344	407	357	803	422	1,071	1,014	968	447	2,873	1,989	3,500	3,300	+200
YoY	41.9%	-50.0%	-46.4%	-70.4%	-66.6%	-48.1%	29.1%	22.7%	163.1%	184.0%	20.5%	5.9%	-36.9%	-30.8%	76.0%	65.9%	
RPM	4.0%	2.3%	2.1%	1.3%	1.5%	1.3%	2.1%	1.2%	2.9%	2.9%	2.8%	1.4%	2.5%	1.6%	2.5%	2.5%	+0.1pp
Net income attrib. to parent company shareholders	832	544	431	227	291	221	468	923	853	729	1,286	332	2,034	1,903	3,200	2,400	+800
YoY	-8.9%	-39.4%	-38.8%	-74.2%	-65.0%	-59.4%	8.6%	306.6%	193.1%	229.9%	174.8%	-64.0%	-40.1%	-6.4%	68.2%	26.1%	
Net margin	2.8%	1.8%	1.5%	0.8%	1.1%	0.8%	1.2%	2.6%	2.3%	2.1%	3.7%	1.1%	1.7%	1.5%	2.3%	1.8%	+0.5pp

Source: Shared Research based on company data

Top management

Ryusaburo Sugimoto (born 1954) is the president. He joined Hakuto after graduating from the engineering faculty of Aoyama Gakuin University in April 1978. He was appointed general manager of the electronics business in April 2001, and in June 2005 he was appointed director of the company with responsibility for electronic devices. He also headed the sales management department. In June 2007, he became a managing director, and in June 2008 a senior managing director. He was appointed president of the company in April 2009.

Having joined soon after graduation from university, Sugimoto was a long-serving member of the company. Sugimoto says he gained appreciation of Hakuto's strength as a total entity. He says this strength is derived from an atmosphere that encourages frank exchange of opinions among staff despite differences between businesses. According to Sugimoto, the employee turnover rate is just 3%, much lower than its peers. This corporate culture of openness is one of the company's key strengths.

Employees

Business segments	No. of employees	YoY
Electronic Devices and Components	610	-7
Electronic and Electric Equipment	267	-3
Industrial Chemicals	137	-6
Other	93	+3
Corporate	136	-23
Total	1,243	-36

Source: Shared Research based on company data (as of March 31, 2019)

Dividends and shareholder benefits

The company considers return of profits to shareholders an important management policy. Because of this, the target dividend payout ratio is between 30% and 50% .

Major shareholders

Top shareholders	Shares held ('000)	Shareholding ratio
TAKAYAMA INTERNATIONAL EDUCATION FOUNDATION	4,226.2	20.56%
Japan Trustee Services Bank, Ltd.	2,234.2	10.87%
Ichiro Takayama	1,058.9	5.15%
Ken Takayama	1,058.9	5.15%
Ryutaro Takayama	1,058.8	5.15%
The Master Trust Bank of Japan, Ltd.	881.0	4.29%
J.P. Morgan Bank Luxembourg S.A. 380578 (Standing proxy: Mizuho Bank, Ltd.)	682.8	3.32%
Hakuto Employees Shareholding Association	401.2	1.95%
RE FUND 107-CLIENT AC (Standing proxy: Citibank N.A. Tokyo Branch)	383.9	1.87%
DFA INTL SMALL CAP VALUE PORTFOLIO (Standing proxy: Citibank N.A. Tokyo Branch)	379.2	1.84%
SUM	12,365.2	60.16%

Source: Shared Research based on company data (as of March 31, 2019)

Other

Role of a trading company specializing in semiconductors

Main functions of semiconductor trading companies: sales intermediation, development cooperation, financing, and inventory/delivery. Sales intermediation encompasses the sale of semiconductor products to client firms based on current technological and market trends. Previously this served as the primary role of semiconductor trading companies. However, in order to stand out from competitors, the company has increasing focused on the remaining three functions.

- **Development cooperation** provides support to product development at client firms. In many cases, there is some level of customization involved when clients make use of semiconductors. In order to reduce the burden placed on the client when customizing components, highly trained staff with extensive product knowledge are dispatched to client firms, and provide support for circuit design and development.
- **Financing** serves to provide a buffer between the debt collection period of the manufacturer and the debt repayment period of the client. Particularly when dealing internationally, the semiconductor trading company will advance necessary funds to fill the gap between short debt collection periods of the manufacturer and longer debt repayment periods of the client.
- **Inventory/delivery** describes the process that facilitates stable supply to the client firm: a semiconductor trading company will hold inventory in order to minimize the gap between the semiconductor manufacturer's production cycle and the client firm's demand period.

Without differentiation via these functions, the only way to compete is through lower pricing. Therefore, each semiconductor trading company takes the above factors into consideration to form varying differentiation strategies.

Glossary

- **Sales engineer (SE):** Salespeople who possess specialized knowledge regarding products and services. The position is midway between a technical and a sales position. Sales engineers may also be referred to as technical sales staff. When selling products and services, such as semiconductors and software to corporate customers, technical commentary and support is required to aid the customer in understanding product features. Understanding and responding to technical demands from the customer is also essential. As a result, employees in this position often build up experience as engineers, and then move into sales.

- **Design activities:** Sales activities that promote the use of products to customers before product specifications have been finalized. Competing with competitors after final specifications on customer products have been decided can often lead to a bidding war, so stepping in at an early stage in the purchasing process to propose solutions to a customer's product development needs can be advantageous.
- **Field application engineer (FAE):** Sales staff with technical expertise, primarily in the semiconductor industry. After assessing semiconductors and electronic components necessary for the finished product envisioned by manufacturers, FAEs procure and, if required, customize the components from a global network of suppliers. The ability to participate in technical discussions with clients and identify companies and engineers with a high degree of expertise is required. Although FAEs are often grouped together with SEs, FAEs need a greater level of technical knowledge, as they are an integral member of a client's development team.
- **Field Programmable Gate Array (FPGA):** Programmable LSIs which allow simulation of microprocessor and ASIC designs. Although slower and more expensive than dedicated LSIs, they are still significantly faster than simulating designs via software.
- **Large Scale Integration (LSI):** Semiconductor integrated circuits (IC) which have between 1,000 and 100,000 transistors. Also used interchangeably with IC. For a short period after its introduction in the 1970s, the term was used to differentiate between rudimentary ICs with relatively few transistors and the new generation, which had a number of transistors that were several orders of magnitude greater. Recently there is less need for such distinctions, and much like the term IC, it is used to refer to semiconductor integrated circuits in general.
- **Original Equipment Manufacturer (OEM):** The process of manufacturing products intended for branding by another company, or by the manufacturer itself.

Profile

Company	Head office
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+81-3-3225-8910	Tokyo Stock Exchange 1st Section
Established	**Exchange listing**
November 7, 1953	March 14, 1995
Website	**Financial year-end**
https://www.hakuto.co.jp/english/	March
IR contact	**IR web**
https://www.hakuto.co.jp/english/contact/	https://www.hakuto.co.jp/english/irinfo/

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Hamee Corp.
Happinet Corporation
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MedPeer,Inc.
Mercuria Investment Co., Ltd.
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