



Gamecard-Joyco Holdings / 6249

COVERAGE INITIATED ON: 2011.07.11

LAST UPDATE: 2018.12.25

Shared Research Inc. has produced this report by request from the company discussed in the report. The aim is to provide an “owner’s manual” to investors. We at Shared Research Inc. make every effort to provide an accurate, objective, and neutral analysis. In order to highlight any biases, we clearly attribute our data and findings. We will always present opinions from company management as such. Our views are ours where stated. We do not try to convince or influence, only inform. We appreciate your suggestions and feedback. Write to us at sr_inquiries@sharedresearch.jp or find us on Bloomberg.



Research Coverage Report by Shared Research Inc.

INDEX

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.

Key financial data	3
Recent updates	4
Highlights	4
Trends and outlook	5
Business	14
Business description	14
Business model	14
Earnings structure	17
Strengths and weaknesses	20
Market and value chain	21
Industry regulations	22
Historical earnings results	26
Other information	32
History	32
News and topics	33
Major shareholders	35
Company profile	36

Key financial data

Income statement (JPYmn)	FY03/10 Par.	FY03/11 Par.	FY03/12 Cons.	FY03/13 Cons.	FY03/14 Cons.	FY03/15 Cons.	FY03/16 Cons.	FY03/17 Cons.	FY03/18 Cons.	FY03/19 Est.
Total sales	32,834	37,005	43,575	39,545	34,192	25,741	23,885	20,405	16,928	15,000
YoY	6.0%	12.7%	-	-9.2%	-13.5%	-24.7%	-7.2%	-14.6%	-17.0%	-11.4%
Gross profit	9,660	11,199	13,093	11,884	10,980	9,665	8,413	8,250	7,871	
YoY	-6.4%	15.9%	-	-9.2%	-7.6%	-12.0%	-13.0%	-1.9%	-4.6%	
GPM	29.4%	30.3%	30.0%	30.1%	32.1%	37.5%	35.2%	40.4%	46.5%	
Operating profit	1,566	4,322	4,459	2,668	1,764	816	-1,440	1,919	3,596	2,000
YoY	-41.4%	176.0%	-	-40.2%	-33.9%	-53.7%	-	-	87.4%	-44.4%
OPM	4.8%	11.7%	10.2%	6.7%	5.2%	3.2%	-6.0%	9.4%	21.2%	13.3%
Recurring profit	1,508	4,208	4,543	2,692	1,849	836	-1,383	1,945	3,594	2,000
YoY	-44.4%	179.0%	-	-40.7%	-31.3%	54.7%	-	-	84.8%	-44.4%
RPM	4.6%	11.4%	10.4%	6.8%	5.4%	3.2%	-5.8%	9.5%	21.2%	13.3%
Net income	918	2,338	4,573	1,598	900	293	-2,117	27	2,318	1,400
YoY	-59.3%	154.7%	-	-65.1%	-43.7%	-67.4%	-	-	-	-39.6%
Net margin	2.8%	6.3%	10.5%	4.0%	2.6%	1.1%	-8.9%	0.1%	13.7%	9.3%
Per share data (split-adjusted)										
Shares issued (year-end; '000)	11,413	11,413	14,263	14,263	14,263	14,263	14,263	14,263	14,263	
EPS	80.4	204.9	320.6	112.1	63.2	20.5	-148.5	2.0	162.6	98.2
EPS (fully diluted)	-	-	-	-	-	-	-	-	-	
Dividend per share	50.0	50.0	60.0	60.0	60.0	60.0	60.0	30.0	35.0	35.0
Book value per share	2,838.8	2,991.8	2,881.7	2,930.5	2,933.2	2,893.7	2,684.3	2,654.0	2,771.4	
Balance sheet (JPYmn)										
Cash and cash equivalents	18,071	22,642	24,848	26,731	32,009	25,020	25,529	23,475	26,000	
Total current assets	36,273	41,670	51,055	51,567	56,522	45,284	43,934	40,015	40,038	
Tangible fixed assets	-2,190	2,005	2,369	2,120	2,193	1,486	776	469	373	
Intangible fixed assets	6,540	5,506	4,636	3,509	2,624	2,896	2,226	3,188	2,619	
Investments and other assets	7,628	6,991	7,921	8,313	3,315	9,413	7,844	6,975	6,480	
Total assets	52,431	56,173	65,983	65,510	64,655	59,081	54,781	50,648	49,511	
Accounts payable	3,320	3,453	4,423	3,675	3,040	2,211	2,402	2,019	1,334	
Short-term debt	-	-	-	-	-	-	-	-	-	
Unused card balance	4,323	3,578	3,308	2,770	2,660	2,591	2,530	2,335	2,143	
Total current liabilities	11,927	12,237	13,905	13,183	13,448	10,107	10,363	7,932	6,188	
Long-term debt	-	-	-	-	-	-	-	-	-	
Total fixed liabilities	8,104	9,790	10,977	10,528	9,370	7,702	6,132	4,862	3,795	
Total liabilities	20,032	22,028	24,882	23,712	22,819	17,809	16,496	12,795	9,983	
Net assets	32,399	34,145	41,101	41,798	41,835	41,272	38,230	37,830	39,506	
Total interest-bearing debt	-	-	-	-	-	-	-	-	-	
Statement of cash flows (JPYmn)										
Cash flows from operating activities	2,615	5,082	4,266	5,109	4,631	3,844	1,828	2,264	3,466	
Cash flows from investing activities	-4,319	77	-13,950	1,133	-1,146	-5,046	-841	1,381	-6,008	
Cash flows from financing activities	-1,504	-1,639	-1,998	-2,360	-2,194	-1,799	-1,476	-699	-828	
Financial ratios										
ROA (RP-based)	2.9%	7.7%	7.4%	4.1%	2.8%	1.4%	-2.4%	3.7%	7.2%	
ROE	2.8%	7.0%	11.1%	3.9%	2.2%	0.7%	-5.3%	0.1%	6.0%	
Equity ratio	61.8%	60.8%	62.3%	63.8%	64.7%	69.9%	69.8%	74.7%	79.8%	

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Note: Figures prior to FY03/12 are for Nippon Game Card.

Recent updates

Highlights

On **December 25, 2018**, Shared Research updated the report following interviews with Gamecard-Joyco Holdings, Inc.

On **November 8, 2018**, the company announced earnings results for 1H FY03/19; see the results section for details.

On **the same day**, the company announced revisions to its earnings forecasts.

Revised forecast for FY03/19

- ▷ Sales: JPY15.0bn (versus previous forecast of JPY14.2bn)
- ▷ Operating profit: JPY2.0bn (JPY1.2bn)
- ▷ Recurring profit: JPY2.0bn (JPY1.2bn)
- ▷ Net income*: JPY1.4bn (JPY800mn)
- ▷ EPS: JPY98.16 (JPY56.09)

*Net income attributable to parent company shareholders

Reason for revision

The company has continuously striven to streamline its operation with the theme of “completion of structural reform and maximization of its effects” as a core policy since FY03/18, and promoted aggressive sales activities. As a result, sales are expected to exceed initial forecasts.

At the same time, operating profit, recurring profit, and net income attributable to parent company shareholders are expected to exceed initial forecasts as a result of some development plans relating to the development of products in line with revised regulations (Regulations Partially Amending the Ordinance for Enforcement of the Act on Control and Improvement of Amusement Business, etc.) shifting to the next fiscal year or later.

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

Trends and outlook

Quarterly trends and results

Cumulative performance (JPYmn)	FY03/18				FY03/19				FY03/19	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	% of FY	FY Est.
Sales	4,451	8,557	13,117	16,928	4,121	8,466			56.4%	15,000
YoY	-6.2%	-12.2%	-16.2%	-17.0%	-7.4%	-1.1%				-11.4%
Gross profit	2,082	4,112	6,159	7,871	1,949	3,868				
YoY	-4.6%	-5.3%	-6.9%	-4.6%	-6.4%	-5.9%				
GPM	46.8%	48.1%	47.0%	46.5%	47.3%	45.7%				
SG&A expenses	1,131	2,181	3,228	4,274	988	2,141				
YoY	-24.7%	-29.1%	-35.5%	-32.5%	-12.6%	-1.8%				
SG&A ratio	25.4%	25.5%	24.6%	25.2%	24.0%	25.3%				
Operating profit	950	1,931	2,931	3,596	960	1,726			86.3%	2,000
YoY	39.7%	52.8%	81.9%	87.4%	1.1%	-10.6%				-44.4%
OPM	21.3%	22.6%	22.3%	21.2%	23.3%	20.4%				13.3%
Recurring profit	958	1,927	2,927	3,594	963	1,727			86.3%	2,000
YoY	37.8%	50.9%	79.4%	84.8%	0.5%	-10.4%				-44.4%
RPM	21.5%	22.5%	22.3%	21.2%	23.4%	20.4%				13.3%
Net income	694	1,399	1,990	2,318	693	1,177			84.0%	1,400
YoY	81.2%	76.9%	92.8%	-	-0.1%	-15.9%				-39.6%
Net margin	15.6%	16.3%	15.2%	13.7%	16.8%	13.9%				9.3%
Quarterly performance (JPYmn)	FY03/18				FY03/19					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Sales	4,451	4,106	4,560	3,811	4,121	4,345				
YoY	-6.2%	-17.8%	-22.9%	-19.7%	-7.4%	5.8%				
Gross profit	2,082	2,030	2,047	1,712	1,949	1,919				
YoY	-4.6%	-5.9%	-10.1%	4.8%	-6.4%	-5.5%				
GPM	46.8%	49.4%	44.9%	44.9%	47.3%	44.2%				
SG&A expenses	1,131	1,050	1,047	1,046	988	1,153				
YoY	-24.7%	-33.3%	-45.8%	-21.1%	-12.6%	9.8%				
SG&A ratio	25.4%	25.6%	23.0%	27.4%	24.0%	26.5%				
Operating profit	950	981	1,000	665	960	765				
YoY	39.7%	68.0%	188.2%	115.9%	1.1%	-22.0%				
OPM	21.3%	23.9%	21.9%	17.4%	23.3%	17.6%				
Recurring profit	958	969	1,000	667	963	763				
YoY	37.8%	66.5%	181.7%	113.1%	0.5%	-21.3%				
RPM	21.5%	23.6%	21.9%	17.5%	23.4%	17.6%				
Net income	694	705	591	328	693	483				
YoY	81.2%	72.8%	145.2%	-	-0.1%	-31.5%				
Net margin	15.6%	17.2%	13.0%	8.6%	16.8%	11.1%				

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Note: Company forecasts are the most recent figures.

Performance by product type (cumulative)

Cumulative (JPYmn)	FY03/18				FY03/19			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Sales	4,451	8,557	13,117	16,928	4,121	8,466		
YoY	-6.2%	-12.2%	-16.2%	-17.0%	-7.4%	-1.1%		
Equipment sales	1,564	2,862	4,634	5,732	1,478	3,186		
YoY	-3.9%	-19.6%	-27.4%	-29.8%	-5.5%	11.3%		
Card sales	820	1,609	2,403	3,170	730	1,485		
YoY	-11.2%	-11.8%	-12.7%	-12.2%	-11.0%	-7.7%		
System-usage fees	1,951	3,867	5,745	7,584	1,793	3,552		
YoY	-6.2%	-6.4%	-6.7%	-6.9%	-8.1%	-8.1%		
Others	115	218	333	440	118	241		
YoY	0.9%	-4.0%	-11.2%	-8.1%	2.6%	10.6%		
Gross profit	2,082	4,112	6,159	7,871	1,949	3,868		
YoY	-4.6%	-5.3%	-6.9%	-4.6%	-6.4%	-5.9%		
GPM	46.8%	48.1%	47.0%	46.5%	47.3%	45.7%		
Equipment sales	239	457	725	703	235	443		
YoY	-3.6%	-4.8%	-15.0%	4.5%	-1.7%	-3.1%		
GPM	15.3%	16.0%	15.6%	12.3%	15.9%	13.9%		
Card sales	523	1,042	1,533	2,029	472	961		
YoY	-13.4%	-13.6%	-12.4%	-10.3%	-9.8%	-7.8%		
GPM	63.8%	64.8%	63.8%	64.0%	64.6%	64.7%		
System-usage fees	1,289	2,560	3,815	5,022	1,200	2,378		
YoY	-0.6%	-1.1%	-2.0%	-2.8%	-6.9%	-7.1%		
GPM	66.1%	66.2%	66.4%	66.2%	66.9%	67.0%		
Others	31	52	84	116	41	83		
SG&A expenses	1,131	2,181	3,228	4,274	988	2,141		
YoY	-24.7%	-29.1%	-35.5%	-32.5%	-12.6%	-1.8%		
SG&A ratio	25.4%	25.5%	24.6%	25.2%	24.0%	25.3%		
Personnel expenses	416	852	1,230	1,611	362	789		
R&D expenses	82	155	273	393	94	281		
Operating profit	950	1,931	2,931	3,596	960	1,726		
YoY	39.7%	52.8%	81.9%	87.4%	1.1%	-10.6%		
OPM	21.3%	22.6%	22.3%	21.2%	23.3%	20.4%		
Quarterly (JPYmn)	FY03/18				FY03/19			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Sales	4,451	4,106	4,560	3,811	4,121	4,345		
YoY	-6.2%	-17.8%	-22.9%	-19.7%	-7.4%	5.8%		
Equipment sales	1,564	1,298	1,772	1,098	1,478	1,708		
YoY	-3.9%	-32.9%	-37.1%	-38.6%	-5.5%	31.6%		
Card sales	820	789	794	767	730	754		
YoY	-11.2%	-12.5%	-14.3%	-10.5%	-11.0%	-4.4%		
System-usage fees	1,951	1,916	1,878	1,839	1,793	1,759		
YoY	-6.2%	-6.5%	-7.2%	-7.7%	-8.1%	-8.2%		
Others	115	103	115	107	118	123		
Gross profit	2,082	2,030	2,047	1,712	1,949	1,919		
YoY	-4.6%	-5.9%	-10.1%	4.8%	-6.4%	-5.5%		
GPM	46.8%	49.4%	44.9%	44.9%	47.3%	44.2%		
Equipment sales	239	218	268	-22	235	208		
YoY	-3.6%	-6.0%	-28.2%	-	-1.7%	-4.6%		
GPM	15.3%	16.8%	15.1%	-	15.9%	12.2%		
Card sales	523	519	491	496	472	489		
YoY	-13.4%	-13.8%	-9.7%	-2.9%	-9.8%	-5.8%		
GPM	63.8%	65.8%	61.8%	64.7%	64.6%	64.9%		
System-Usage Fees	1,289	1,271	1,255	1,207	1,200	1,178		
YoY	-0.6%	-1.5%	-3.7%	-5.6%	-6.9%	-7.3%		
GPM	66.1%	66.3%	66.8%	65.6%	66.9%	67.0%		
Others	31	21	32	32	41	42		
SG&A expenses	1,131	1,050	1,047	1,046	988	1,153		
YoY	-24.7%	-33.3%	-45.8%	-21.1%	-12.6%	9.8%		
SG&A ratio	25.4%	25.6%	23.0%	27.4%	24.0%	26.5%		
Personnel	416	436	378	381	362	426		
R&D expenses	82	73	118	120	94	187		
Operating profit	950	981	1,000	665	960	765		
YoY	39.7%	68.0%	188.2%	115.9%	1.1%	-22.0%		
OPM	21.3%	23.9%	21.9%	17.4%	23.3%	17.6%		

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Earnings-related metrics (cumulative)

Cumulative	FY03/18				FY03/19			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
No. of equipment shipped ('000)	12.0	20.8	33.6	43.6	11.2	25.8		
YoY	-5.3%	-29.2%	-38.3%	-38.3%	-6.7%	23.7%		
No. of member stores	3,889	3,826	3,778	3,674	3,612	3,543		
YoY change	-219	-240	-242	-283	-277	-283		
YoY	-5.3%	-5.9%	-6.0%	-7.2%	-7.1%	-7.4%		
QoQ change	-68	-63	-48	-104	-62	-69		
QoQ	-1.7%	-1.6%	-1.3%	-2.8%	-1.7%	-1.9%		
Quarterly	FY03/18				FY03/19			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
No. of equipment shipped ('000)	12.0	8.8	12.8	10.0	11.2	14.6		
YoY	-5.3%	-47.3%	-49.0%	-38.6%	-6.7%	65.1%		

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

1H FY03/19 results

Consolidated results for 1H FY03/19 were as follows:

- ▷ Sales: JPY8.5bn (-1.1% YoY)
- ▷ Operating profit: JPY1.7bn (-10.6% YoY)
- ▷ Recurring profit: JPY1.7bn (-10.4% YoY)
- ▷ Net income*: JPY1.2bn (-15.9% YoY)

*Net income refers to net income attributable to parent company shareholders.

Pachinko hall operators that comprise the company's primary customer base, were impacted by the revised regulations (Regulations Partially Amending the Ordinance for Enforcement of the Act on Control and Improvement of Amusement Business, etc.) enforced in February 2018 and development of the Basic Bill on Gambling Addiction Countermeasures. The number of people playing pachinko continued to decline as sources of entertainment diversified with the proliferation of the internet and smartphones, causing the operating environment to remain difficult. Meanwhile, measures responding to the social need to curb gambling addiction are expected, with the establishment of operations with low-priced balls and the spread of machines that suppress the gambling element in order to conform to revised regulations (Regulations Partially Amending the Ordinance for Enforcement of the Act on Control and Improvement of Amusement Business, etc.).

Gamecard-Joyco group strove to streamline its operation with the theme of "completion of structural reform and maximization of its effects" as a core policy. The company promoted marketing activity, planned to maintain and grow the share of member halls, strengthened relationships with distributors, and promoted replacements at existing member halls. In terms of R&D, in order to revitalize the industry, the company simultaneously proceeded with development of products to conform to new regulations and curb gambling addiction, and with planning and development to offer a continuous and stable service. As a result, although the operating environment was difficult, sales remained similar to the level of FY03/18. Profit declined due to a fall in GPM to 45.7% (-2.4pp YoY).

Versus full-year FY03/19 company forecasts, 1H sales reached 56.4% (1H FY03/18 sales reached 50.5% of full-year FY03/18 results), operating profit 86.3% (53.7%), recurring profit 86.3% (53.6%), and net income attributable to parent company shareholders 84.0% (60.4%). The company announced an upward revision to its FY03/19 full-year forecast in November 2018 but 1H performance in profit was high compared to revised projections. For 2H, Gamecard-Joyco Holdings Inc. predicts an overall drop in sales, particularly in equipment sales, as well as concentrated recording of R&D expenses.

Sales breakdown

- Equipment sales rose 11.3% YoY to JPY3.2bn on an increase in equipment unit sales to 25,786 units (+23.7% YoY). According to the company, investment demand for peripheral devices in pachinko halls rose in 1H due to growing expectations for gaming machines compliant with new regulations. Demand for conversion to more efficient machines, such as ball-counting

systems, also increased due to labor shortages. In addition, the company actively strengthened its relationships with distributors to maintain or increase its member hall share and actively rolled out machine replacement promotion measures at member halls. These efforts resulted in higher equipment unit sales.

- ▀ Card sales were JPY1.5bn (-7.7% YoY), reflecting lower information management fees accompanying a drop in the total value of cards issued, and lower media fees caused by a drop in the number of cards sold. The fall in the total value of cards issued was attributable to a decline in the number of member halls to 3,543 (-283 or -7.4% YoY). The share of member halls also fell to 42.5% (43.3% at end-FY03/18). Acquisition of new member halls outpaced member hall loss due to closings or other reasons. In addition to the decline in the number of member halls, a drop in average spend due to the spread of operations with low-priced balls resulted in a drop in the total value of cards issued.
- ▀ System-usage fee revenue fell 8.1% YoY to JPY3.6bn due to the drop in the number of member halls noted above.
- ▀ Others (equipment installation and maintenance) posted sales of JPY241mn (+10.6% YoY).

Gross profit declined 5.9% YoY to JPY3.9bn. GPM also fell 2.4pp YoY to 45.7%. Gross profit dropped for all product types, excluding those in others (equipment installation and maintenance), and GPM also decreased because equipment sales, which have a relatively low GPM took up a larger share of overall sales.

- ▀ Gross profit for equipment sales was JPY443mn (-3.1% YoY), and GPM was 13.9% (-2.1pp YoY).
- ▀ Gross profit for card sales was JPY961mn (-7.8% YoY), and GPM was 64.7% (even YoY).
- ▀ Gross profit for system-usage fees was JPY2.4bn (-7.1% YoY), and GPM was 66.9% (+0.7pp YoY).

SG&A expenses totaled JPY2.1bn (-1.9% YoY), of which personnel expenses were JPY789mn (-7.4% YoY) and R&D expenses were JPY281mn (+81.3% YoY). R&D expenses increased due to progress in the development of products equipped with addiction prevention features and compliant with new regulations, as well as product development and other measures geared toward providing stable services.

As a result, operating profit, recurring profit, and net income attributable to parent company shareholders fell YoY.

For details on previous quarterly and annual results, please refer to the Historical earnings results section.

Full-year company forecasts

(JPYmn)	FY03/18			FY03/19		
	1H Act.	2H Act.	FY Act.	1H Act.	2H Est.	FY Est.
Sales	8,557	8,371	16,928	8,466	6,534	15,000
YoY	-12.2%	-21.5%	-17.0%	-1.1%	-21.9%	-11.4%
Cost of sales	4,444	4,613	9,057	4,599	3,401	8,000
Gross profit	4,112	3,759	7,871	3,867	3,133	7,000
YoY	-5.3%	-3.9%	-4.6%	-6.0%	-16.7%	-11.1%
GPM	48.1%	44.9%	46.5%	45.7%	47.9%	46.7%
SG&A expenses	2,181	2,093	4,274	2,140	2,860	5,000
SG&A ratio	25.5%	25.0%	25.2%	25.3%	43.8%	33.3%
Operating profit	1,931	1,665	3,596	1,726	274	2,000
YoY	52.8%	154.2%	87.4%	-10.6%	-83.5%	-44.4%
OPM	22.6%	19.9%	21.2%	20.4%	4.2%	13.3%
Recurring profit	1,927	1,667	3,594	1,727	273	2,000
YoY	50.9%	149.6%	84.8%	-10.4%	-83.6%	-44.4%
RPM	22.5%	19.9%	21.2%	20.4%	4.2%	13.3%
Net income	1,399	919	2,318	1,177	223	1,400
YoY	76.9%	-	-	-15.9%	-75.7%	-39.6%

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Note: "-" indicates that the year-on-year ratio exceeds 1000%.

Details of company forecasts

(JPYmn)	FY03/18	FY03/19
	FY Act.	FY Est.
Equipment sales (units)	43,593	43,670
YoY	-38.3%	0.2%
No. of member stores	3,674	3,375
YoY	-7.2%	-8.1%
Sales	16,928	15,000
YoY	-17.0%	-11.4%
Equipment sales	5,732	5,065
YoY	-29.8%	-11.6%
Card sales	3,170	2,782
YoY	-12.2%	-12.2%
System-usage fees	7,584	6,690
YoY	-6.9%	-11.8%
Others	440	462
Gross profit	7,871	7,000
YoY	-4.6%	-11.1%
GPM	46.5%	46.7%
Equipment sales	703	607
YoY	4.5%	-13.7%
GPM	12.3%	12.0%
Card sales	2,029	1,754
YoY	-10.3%	-13.6%
GPM	64.0%	63.0%
System-usage fees	5,022	4,497
YoY	-2.8%	-10.5%
GPM	66.2%	67.2%
Others	116	143
SG&A expenses	4,274	5,000
YoY	-32.5%	17.0%
SG&A ratio	25.2%	33.3%
R&D expenses	393	1,053
YoY	-56.6%	167.9%
R&D ratio	2.3%	7.0%
SG&A excl. R&D	3,881	3,947
YoY	-28.5%	1.7%
Operating profit	3,596	2,000
YoY	87.4%	-44.4%

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

FY03/19 forecasts

Gamecard-Joyco group announced revisions to its earnings forecasts for FY03/19 in November 2018. The revised forecast calls for sales of JPY15.0bn (-11.4% YoY), operating profit of JPY2.0bn (-44.4% YoY), recurring profit of JPY2.0bn (-44.4% YoY), and net income attributable to parent company shareholders of JPY1.4bn (-39.6% YoY).

Compared to initial forecasts, the company revised sales, operating profit, and recurring profit upward by JPY800mn and net income attributable to parent company shareholders up by JPY600mn.

The company has continuously striven to streamline its operation with the theme of “completion of structural reform and maximization of its effects” as a core policy since FY03/18, and promoted aggressive sales activities. As a result, sales are expected to exceed initial forecasts.

At the same time, operating profit, recurring profit, and net income attributable to parent company shareholders are expected to exceed initial forecasts as a result of some development plans relating to the development of products in line with revised regulations (Regulations Partially Amending the Ordinance for Enforcement of the Act on Control and Improvement of Amusement Business, etc.) shifting to the next fiscal year or later.

The market environment for pachinko halls, which make up the company’s principal customer base, is likely to remain subdued and under pressure from social trends. As a result, pachinko hall’s operators’ willingness to invest in peripheral equipment will stay constrained due to a decline in the number of pachinko halls, a decrease in average spend, and tighter regulations. The company expects these factors weigh on its sales in FY03/19.

Amid such market environment, the company plans to maintain and grow share of member halls using its system, and to promote aggressive marketing activities to secure future business opportunities. Specifically, it plans to implement measures to strengthen relationships with distributors, actively promote equipment replacements, and carry out aggressive equipment sales leveraging its strong financial base.

- Further deepen relationships with distributors and strengthen sales
- Actively promote replacements: the company intends to maintain its share by encouraging distributors to replace old systems with new ones, such as replacing outdated magnetic cards with IC cards and introducing ball-counting systems.

Prepaid cards: Since 2000, contactless IC chip-embedded cards have superseded one-time use magnetic cards as the industry standard.

- Aggressive equipment sales activity leveraging the company’s strong financial base: in the market environment in which only a limited number of new pachinko halls can be opened, the company intends to maintain equipment unit sales at FY03/18 level.

The company forecasts higher R&D expenses as it thinks FY03/19 is the period to invest in R&D activities aimed at assessing the social climate and responding to the industry’s need for measures to curb gambling addiction as well as revitalizing the industry. Based on this anticipated rise in R&D spending the company expects sales and operating profit to decline in FY03/19.

Underlying the forecast is the company’s plan to maintain equipment unit sales more or less even YoY at 43,670 units (+0.2% YoY) with aggressive marketing activities. The company forecasts a decline in the number of member halls to 3,375 (-8.1% YoY). The projected rate of decline in the number of halls for FY03/19 is greater than the average annual rate of decline of 5.7% seen in the past five years.

The company expects lower equipment sales despite its forecast for even equipment unit sales YoY because of a drop in unit sales price. It also expects lower card sales caused by declines in the number of member halls and information management fee revenue reflecting a drop in card spend accompanying an increase in the number of machines offering low-priced balls. The company also forecasts lower system-usage fees as well on the drop in the number of member halls.

The company forecasts gross profit of JPY7.0bn (-11.1% YoY) and GPM of 46.7% (flat YoY). Gross profit for equipment sales is expected to decline significantly due to a fall in unit sales price among other factors. GPM for card sales and system-usage fees are also expected to fall on lower sales.

SG&A expenses are forecasted to rise 17.0% YoY to JPY5.0bn, largely driven by an expected increase in R&D expenses to JPY1.1bn (+167.9% YoY). R&D expenses related to controlled machines are expected to rise. Excluding the anticipated increase in R&D expenses, SG&A expenses are to remain flat YoY at JPY3.9bn.

Dividends

Based on its efforts to maintain a healthy financial position, the company plans to pay an annual dividend of JPY35 per share (interim dividend of JPY17.5 and year-end dividend of JPY17.5; annual dividend of JPY35 per share in FY03/18).

Outlook

Gamecard-Joyco Holdings' medium-term financial performance is primarily driven by:

- ▷ Installed pachinko and pachislot equipment base and pachinko hall sales;
- ▷ Total number of pachinko halls (itself dependent on competition among halls and market contraction);
- ▷ Market share of halls using its systems
- ▷ R&D progress

Costs including personnel expenses declined from FY03/18 onward following structural reform and introduction of a voluntary retirement program in FY03/17. In addition, Shared Research believes that regulatory amendment that took effect in February 2018 will pave the way for the introduction of "controlled machines", and accordingly see prospects of replacement demand for card-reading units (devices from which game balls are borrowed) over the medium term.

Market size and total pachinko hall count

Market size (pachinko hall sales) and total number of pachinko halls are external factors that the company cannot directly control. The operating environment continued to be harsh in FY03/18 (see the Market and value chain section for details).

Market share of member halls

Thanks to its merger with JOYCO SYSTEMS Corp. the company was able to capture a majority share of the market for prepaid cards used at pachinko and pachislot halls. The number of member halls is trending down due to new market entrant Daikoku Denki (TSE1: 6430) gaining market share.

Number of member halls, market share

	Dec. 2008	Dec. 2009	Dec. 2010	Dec. 2011	Dec. 2012	Dec. 2013	Dec. 2014	Dec. 2015	Dec. 2016	Dec. 2017
Number of member halls	5,626	5,451	5,429	5,047	4,974	4,836	4,529	4,272	4,020	3,778
YoY	-	-3.1%	-0.4%	-7.0%	-1.4%	-2.8%	-6.3%	-5.7%	-5.9%	-6.0%
Market share	54.7%	53.3%	53.3%	52.1%	51.7%	50.9%	48.7%	46.7%	45.1%	43.6%

Source: Shared Research based on data from Prepaid System Association

R&D expenses

In response to the ongoing decline in sales that began in FY03/13, the company increased R&D spending steadily through FY03/16, developing new features for its G[∞]WIN'Z series, next-generation systems, and attempting to create new business areas. One major R&D project was the "inter-industry cooperation service". The company had been hoping to establish the service, which was built around an electronic money service, but after a review of potential profitability and the return on investment, the company decided it would be difficult to continue and halted development in FY03/16. Due to the additional cost of cancelling this project, the company's R&D spending swelled to JPY3.9bn in FY03/16.

R&D spending declined sharply to JPY906mn in FY03/17. The decline stemmed mainly from the dropout of expenditures related to the canceled project in FY03/16 and being more focused and selective in its R&D investments. In FY03/18, R&D expenses further dropped to JPY393mn. In FY03/19, the company plans to expand R&D spending to JPY1.1bn to cover the increased costs involved in R&D related to controlled machines.

R&D expenses

	FY03/10	FY03/11	FY03/12	FY03/13	FY03/14	FY03/15	FY03/16	FY03/17	FY03/18	FY03/19
(JPYmn)	Par.	Par.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Est.
Sales	32,834	37,005	43,575	39,545	34,192	25,741	23,885	20,405	16,928	15,000
R&D expenses	1,733	672	1,820	2,724	2,978	3,146	3,931	906	393	1,053
R&D expenses as % of sales	5.3%	1.8%	4.2%	6.9%	8.7%	12.2%	16.5%	4.4%	2.3%	7.0%

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Note: Figures prior to FY03/12 are for Nippon Game Card.

Implementation of structural reforms in FY03/17 and expense reduction in FY03/18 onward

The company carried out structural reforms to improve operating efficiency in FY03/17. The main initiatives of the structural reforms were the relocation of the head office (consolidation of offices) and the implementation of a voluntary retirement

program. These initiatives resulted in a decrease in the company's SG&A expenses excluding R&D spending by JPY1.5bn YoY (-28.5%) to JPY3.9bn in FY03/18.

Replacement demand for card-reading units driven by "controlled machines"

Our understanding at Shared Research is that the regulatory amendment scheduled to take effect in February 2018 will pave the way for the introduction of "controlled machines" (see the Market and value chain section for details). Unlike conventional machines, "controlled machines" adopt a structure that removes physical interaction between the players and the game balls, and such machines therefore need to be equipped with a new card-reading unit when introducing "controlled machines". This requirement may drive replacement demand for card-reading units (devices from which game balls are borrowed) over the medium term.

Regulatory amendment in February 2018 to pave the way for introduction of "controlled machines"

In the partial amendment to the Ordinance for Enforcement of the Act on Control and Improvement of Amusement Businesses and the Regulations Concerning Authorization and Model Approval for Amusement Machines (promulgated in September 2017, slated to take effect in February 2018), a machine equipped with a device that displays the number of game balls (i.e., a "controlled machine") is added as a new gaming machine standard. Shared Research believes the amendment will pave the way for the introduction of "controlled machines," which in turn may drive replacement demand for card-reading units (devices from which game balls are borrowed).

Differences between conventional and "controlled machines"

When using conventional machines, players borrow game balls from a card-reader unit (physical game balls are dispensed externally), which are then loaded and shot in the machine by operating a handle. If a game ball enters the prize-winning chucker (scoring hole), prize balls are dispensed externally from the machine. "Controlled machines," on the other hand, adopt a structure in which there is no physical interaction between the players and the game balls. Our understanding at Shared Research is that instead of dispensing the game balls externally, game balls are managed through an electromagnetic system.

In other words, the process of borrowing game balls via a card-reading unit is the same as for conventional machines, but game balls are no longer dispensed externally and the number of borrowed game balls corresponding to the purchased amount is indicated using an electromagnetic system. If the player wins prize balls, these are displayed as an increase in the total number of game balls.

Advantages of "controlled machines" over conventional machines

Shared Research understands that "controlled machines" offer several advantages over conventional machines such as a reduction in gambling addiction, prevention of fraud, enhanced freedom in machine layout, and cost reductions for pachinko halls.

- ▷ Managing the number of game balls using an electromagnetic system makes it possible to caution players against excessive spending, which should contribute to a reduction in gambling addiction.
- ▷ The adoption of a structure that removes physical interaction between the players and the game balls should support fraud prevention.
- ▷ Compared with the conventional mechanism that re-uses game balls across a number of machines using a supply device, "controlled machines" re-use game balls in a single machine, eliminating the need for a supply device. This allows pachinko halls to have greater freedom in machine layout and lower costs.

Business

Business description

Gamecard-Joyco Holdings Inc., a holding company founded in April 2011, operates a prepaid-card system business for pachinko machines and it is the market leader in terms of number of members (pachinko halls). Nippon Game Card and JOYCO SYSTEMS Corp. are both 100% subsidiaries.

Business model

Nippon Game Card provides third-party issuer prepaid-card systems to pachinko halls (hereafter halls). JOYCO SYSTEMS provides house-issuer card payment systems for halls. As of the end of March 2018, there were 3,674 halls using JOYCO SYSTEMS's card payment systems (market share of 43.3%).

Prepaid-card system and pachinko and pachislot machines

Most pachinko machines are card reader (CR) models. CR models rely on prepaid cards, and players obtain pachinko balls directly from the pachinko machine using their card.

There are two ways to play a CR model pachinko machine.

- The first is when players purchase a prepaid card from a card-vending terminal.
- The second, and predominant, way is to insert money directly into a card-reading unit attached to a pachinko machine, which issues a prepaid IC card on the spot with the monetary information recorded on the IC chip, and balls are then dispensed based on that information.
- Customers can play on any machine with a card-reading unit installed.
- When done playing, a refund can be obtained using the same card from a separate card-balance refund terminal. The company supplies all components of both systems, including equipment and cards themselves.

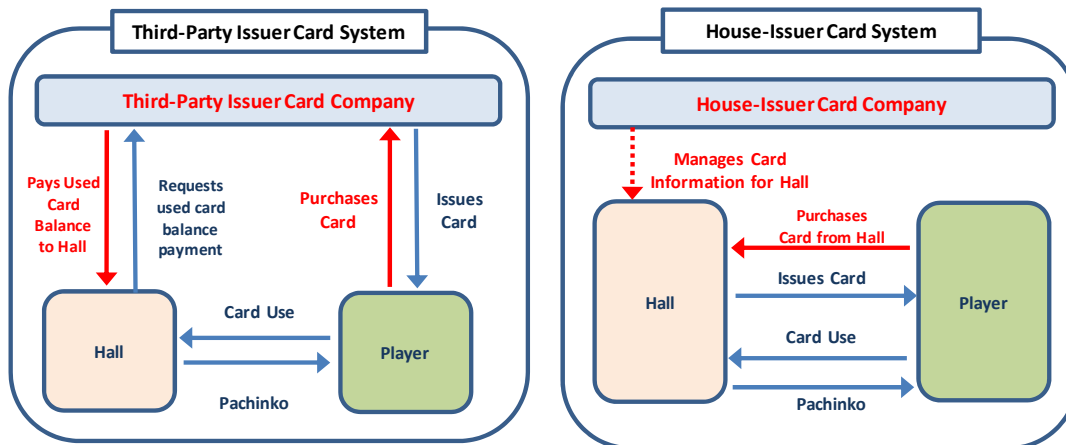
While CR model pachislot machines do not exist, there are a growing number of halls who install token-dispensing units for pachislot machines that allow use of the same prepaid-card system (and therefore the same card by individual players) for both pachinko and pachislot machines in the same hall.

Third-party issued card system vs. house-issued card system

There are two types of prepaid-card systems:

- **Third-party issuer system:** here the card company (i.e., the "third party"), is responsible for payment settlement between the hall and player.
- **House-issuer system (proprietary issuance):** the company offering the card system merely manages the information stored on cards. The hall operator issues cards and settles payments with players directly.

As of May 2018, Nippon Game Card was the only company in the industry operating a third-party issuer system. On the other hand, JOYCO offers a house-issuer system.



Source: Shared Research based on company data

The advantages of the third-party issuer system compared to the house-issuer system are as follows:

- Complete accounting transparency:** all payments to the hall are made through the card company.
- Superior consumer protection:** even if a hall goes out of business, the card company will pay the remaining balance to card holders (when done playing, most players turn remaining balance in their cards into cash at a card-balance refund terminal installed at pachinko halls within the same day).

The disadvantage of a third-party issuer system is higher development and running costs of the system. This is due to card companies being responsible for settlements so it has to ensure the security and reliability of the system, which increases the costs compared to house-issuer systems. Shared Research estimates the costs for third-party issuer systems are about 30% to 40% higher than house-issuer systems. Apart from this, Shared Research understands that functionally both types of systems are similar.

Relevant regulations

While the pachinko prepaid-card industry itself is not directly subject to any laws or regulations the company’s clients, halls, are governed by numerous regulations (Law on Control and Improvement of Amusement Businesses, National Public Safety Commission's Rules, Prefectural Ordinances). In order to actually use a card-reading unit it is necessary to acquire permission from and notify the authorities. Consequently, in the event that any of the various laws and regulations governing pachinko halls are revised, the company’s business may be affected when selling and installing card units to halls.

Finally, in accordance with the Settlement of Funds Act (enacted on April 1, 2010; previously known as Act on Regulation, etc. of Advanced Payment Certificates) Nippon Game Card is registered with the Kanto Regional Financial Bureau as a “third-party issuer”. This regulation requires the company to deposit over 50% of the unused face value on its cards for card balance insurance purposes.

Main product

B∞LEX

Released in November 2009, B∞LEX had become the company’s mainstay product. The device can be easily attached to existing company products, additional functionality (e.g. ball-counting systems) can be added at any time, and similarly, ball-counting systems to each pachinko machine can be easily removed. It is a full-color display.

Amidst the challenging market environment, halls have taken to cost cutting as a means to boost profits, such as through reducing staff headcount and paring back on installation costs. This means that to sell well, prepaid-card systems too must contribute to reducing operating costs and enhancing customer satisfaction. Furthermore, proliferation of low-price pachinko (e.g. “one-yen pachinko” where each ball is loaned out to players at one yen as opposed to the conventional four-yen) created demand for measures to prevent usage of low cost balls at four-yen machines at halls that install both types on its premises.

Ball-counting systems made by the company are a good example of a solution addressing both the halls' needs to cut costs and the issue of controlling the ball flow. Ball-counting systems are devices installed onto card-reading units connected to individual pachinko machines that measure the number of dispensed balls.

In the past, players put dispensed balls into boxes at the end of play, and pachinko hall staff carried these boxes to and poured into an automated counting machine (known as a Jet Counter). However, a box full of balls is heavy and the staff needs to carry it for counting, particularly difficult and time consuming task when large winnings are involved. Winning players also need new empty boxes, further increasing burden on personnel and driving up labor costs.

The ball-counting system emerged as a solution to this problem. The company was late in developing such a system compared to competitors, but the arrival in November 2009 of the B∞LEX line allowed its card-reading units to be equipped with ball-counting systems. B∞LEX's ease of use as well as its functional flexibility allowing installation of the ball-counting units at any time, received high user acclaim. Furthermore, pachinko halls could reduce the number of staff onsite by roughly one-third to one-half if operators installed ball-counting systems at their halls. Also, the overall working environment would improve, as the need to carry heavy boxes of balls (i.e., winnings) is eliminated.

G∞WIN'Z

In March 2015, Gamecard-Joyco launched G∞WIN'Z, the successor to B∞LEX. It is the company's mainstay product as of May 2018. In addition to the features of B∞LEX, pachinko hall operators can select whether to use G∞WIN'Z with card subtraction or ball subtraction system machines (different methods of passing on consumption tax to customers). G∞WIN'Z also features a full-color 5-inch LC screen that can display and transmit original movies and still images, and transmit promotional movies for amusement machines. It also has a removable nozzle for dispensing balls into the trays of the amusement machines.

Two methods of collecting consumption tax: Shared Research understands that thus far ball and token lending charges included tax, with hall operators shouldering the tax burden. But new and renovated stores are increasingly installing equipment with systems designed to handle the consumption tax hike of April 2014. The **card subtraction system** maintains the same quantity of balls and tokens and subtracts the cost—plus the consumption tax—from the amount loaded on the user's prepaid card. By contrast, the **ball subtraction system** keeps the cost the same, but reduces the amount of balls or tokens to compensate for consumption tax. The disadvantage of the card subtraction system is that prepaid card balances become too granular (units of a single yen) for the player to use the entire balance.

G∞WIN'Z

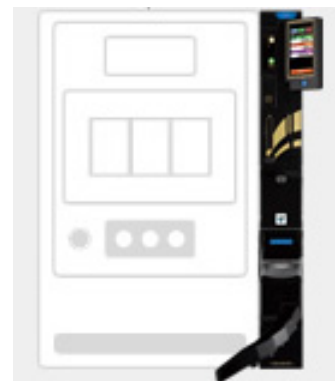


Source: Company data

(Pachinko) unit installation



(Pachislot) token dispenser installation

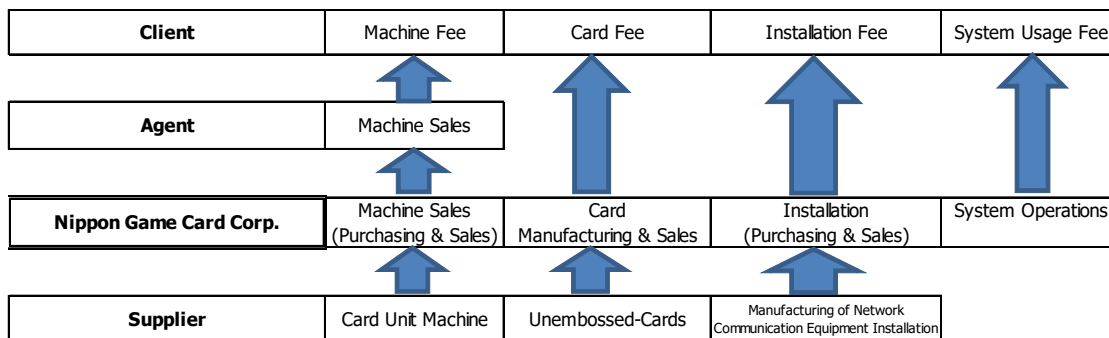


Earnings structure

The company's revenues comprise of four main components:

- ▷ Equipment sales
- ▷ Card sales
- ▷ System-usage fee revenue
- ▷ Other revenues (such as, equipment installation and maintenance)

Shared Research thinks the company's business resembles that of a mobile network operator. The company's equipment sales roughly correspond to handset sales by mobile network operators while card sales are comparable to network operators' usage-based tariffs, such as call rates and packet usage fees, while system-usage fees mirror network operators' basic monthly fees.



Source: Shared Research based on company data

Note: Unembossed-cards refer to prepaid cards yet to be encoded with the required information.

Equipment sales (33.9% of total sales in FY03/18; 8.9% of GPM)

The company sells, via distributors, card systems, token dispensers, and card-balance refund terminals to halls.

Card systems: Devices located between (CR model) pachinko machines. They dispense balls and are necessary to calculate card cash balances.
 Token dispensers: Devices that dispense pachislot tokens.
 Card-balance refund terminals: Devices that calculate card balances after play is finished and refund any remaining balances to players.

Card systems and token dispensers, which are the company's main product, are procured from Mamiya-OP Co. (TSE1: 7991), International Card System Co. (a subsidiary of Sankyo Co. [TSE1: 6417]) and other companies.

According to the company, the standard replacement cycle for equipment in pachinko halls is roughly five to ten years, with additional capex beyond the replacement cycle driven by equipment upgrades as new functionality comes into the market (e.g., new ball-counting systems etc.).

Card sales (18.7% of total sales in FY03/17; 25.8% of GPM)

The company collects two sets of fees from card sales. The first is a "media fee" it receives from halls for selling prepaid cards to them. The second is a handling commission, or an "information management fee," from the hall operator for account settlements of players' card balances; this fee is determined by the amount spent by players on their cards. The majority of card sales come from information management fees.

Prepaid cards are information recording media used to manage pachinko hall sales (ball and token fees). Since 2000 contactless IC cards have superseded one-time use magnetic cards as the industry standard.

The Corporation Tax Act stipulates that after four years any unused balances on issued cards purchased by players should be booked as income. Such income represents a part of card sales. Both unused balances and corresponding income have been

declining as the industry moved from magnetic card to IC card use. This is because more players using IC cards tend to cash out their unused balances compared to players using magnetic cards.

System-usage fees (44.8% of total sales in FY03/18; 63.8% of GPM)

The company collects a recurring system-usage fee from member halls based on the number of prepaid card systems installed.

The company's prepaid-card system is based on a design by NTT Data Corp. (TSE1: 9613) and system modifications, such as improvements and addition of new functions, are outsourced to NTT Data. NTT Data also handles the collection of card usage information and data processing.

Others (equipment installation and maintenance)

Equipment installation (card-reading units etc.) and maintenance is conducted by the company's distributors, such as SANKYO, based on contracts with halls. Installation of network communication equipment for prepaid-card systems (known as a "T-BOX") is outsourced to separate contractors, and the company then invoices halls for the installation cost.

A T-BOX (Terminal Box) is a data-collection unit used in the prepaid-card systems the company provides to halls. The T-BOX collates sales information and other data from the installed card-reading units and token-dispensing units within a hall. This information is then transmitted to a data center, which consolidates all the data for management of halls.

Earnings structure

(JPY mn)	FY03/09	FY03/10	FY03/11	FY03/12	FY03/13	FY03/14	FY03/15	FY03/16	FY03/17	FY03/18
	Par.	Par.	Par.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Sales	30,965	32,834	37,005	43,575	39,545	34,192	25,741	23,885	20,405	16,928
YoY	-14.8%	6.0%	12.7%	-	-9.2%	-13.5%	-24.7%	-7.2%	-14.6%	-17.0%
Equipment sales	13,620	16,650	21,336	25,978	22,295	18,506	11,395	10,654	8,167	5,732
YoY	-15.2%	22.2%	28.1%	-	-14.2%	-17.0%	-38.4%	-6.5%	-23.3%	-29.8%
% of sales	44.0%	50.7%	57.7%	59.6%	56.4%	54.1%	44.3%	44.6%	40.0%	33.9%
Card sales	5,252	4,865	4,797	5,530	5,587	4,854	4,229	3,957	3,609	3,170
YoY	-14.1%	-7.4%	-1.4%	-	1.0%	-13.1%	-12.9%	-6.4%	-8.8%	-12.2%
% of sales	17.0%	14.8%	13.0%	12.7%	14.1%	14.2%	16.4%	16.6%	17.7%	18.7%
System-usage fees	11,533	10,793	10,421	11,581	11,230	10,409	9,612	8,808	8,148	7,584
YoY	-11.2%	-6.4%	-3.4%	-	-3.0%	-7.3%	-7.7%	-8.4%	-7.5%	-6.9%
% of sales	37.2%	32.9%	28.2%	26.6%	28.4%	30.4%	37.3%	36.9%	39.9%	44.8%
Others	558	524	450	485	432	422	503	465	479	440
Gross profit	10,322	9,660	11,199	13,093	11,884	10,980	9,665	8,413	8,250	7,871
YoY	-16.3%	-6.4%	15.9%	-	-9.2%	-7.6%	-12.0%	-13.0%	-1.9%	-4.6%
GPM	33.3%	29.4%	30.3%	30.0%	30.1%	32.1%	37.5%	35.2%	40.4%	46.5%
Equipment sales	1,634	1,904	3,333	3,757	2,569	2,356	1,187	554	673	703
YoY	-8.5%	16.5%	75.1%	-	-31.6%	-8.3%	-49.6%	-53.3%	21.5%	4.5%
YoY	12.0%	11.4%	15.6%	14.5%	11.5%	12.7%	10.4%	5.2%	8.2%	12.3%
% of gross profit	15.8%	19.7%	29.8%	28.7%	21.6%	21.5%	12.3%	6.6%	8.2%	8.9%
Card sales	3,426	2,971	2,828	3,199	3,285	2,952	2,811	2,468	2,261	2,029
YoY	-19.4%	-13.3%	-4.8%	-	2.7%	-10.1%	-4.8%	-12.2%	-8.4%	-10.3%
YoY	65.2%	61.1%	59.0%	57.8%	58.8%	60.8%	66.5%	62.4%	62.6%	64.0%
% of gross profit	33.2%	30.8%	25.3%	24.4%	27.6%	26.9%	29.1%	29.3%	27.4%	25.8%
System-usage fees	5,473	5,044	5,213	6,261	6,028	5,600	5,523	5,340	5,169	5,022
YoY	-10.5%	-7.8%	3.4%	-	-3.7%	-7.1%	-1.4%	-3.3%	-3.2%	-2.8%
YoY	47.5%	46.7%	50.0%	54.1%	53.7%	53.8%	57.5%	60.6%	63.4%	66.2%
% of gross profit	53.0%	52.2%	46.5%	47.8%	50.7%	51.0%	57.1%	63.5%	62.7%	63.8%
Others	-211	-259	-175	-125	0	71	143	50	145	116
SG&A expenses	7,648	8,093	6,877	8,633	9,216	9,216	8,848	9,854	6,331	4,274
SG&A-to-sales ratio	24.7%	24.6%	18.6%	19.8%	23.3%	27.0%	34.4%	41.3%	31.0%	25.2%
Personnel expenses	1,932	1,749	1,818	2,206	2,228	2,278	2,164	2,163	2,139	1,611
R&D expenses	561	1,733	672	1,820	2,724	2,978	3,146	3,931	906	393
Operating profit	2,674	1,566	4,322	4,459	2,668	1,764	816	-1,440	1,919	3,596
YoY	-45.0%	-41.4%	176.0%	-	-40.2%	-33.9%	-53.7%	-	-	87.4%
OPM	8.6%	4.8%	11.7%	10.2%	6.7%	5.2%	3.2%	-6.0%	9.4%	21.2%

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Looking at the company's sources of revenues, card sales and system-usage fees command high gross profit margins. In card sales, the majority of gross profit comes from information management fees (handling commissions for account settlements of card

balances). The gross profit margin for card sales generally exceeds 60%. Given that for information management fees the gross profit margin is 100%, it is possible to further infer that sales of prepaid cards (booked as a “media fee”) are relatively unprofitable for the company.

Gross profit margin for system-usage fees tends to exceed 60%, with this part of the business contributing over 60% to the overall gross profit.

In contrast, in FY03/18 the GPM for equipment sales were only 12.3%, lower than other income sources. Even though equipment sales comprises 33.9% of the company’s overall sales it accounted for only 8.9% of gross profit. Shared Research believes that the impact on profits of a decline in equipment unit sales will be limited and the company is likely to generate a steady stream of income from information management and system-usage fees.

Strengths and weaknesses

Strengths

- ▶ **Leading company within the industry.** The company has the largest market share both in terms of number of halls using its systems and the overall card settlement value. Shared Research thinks this gives the company an advantage in identifying customer needs and factoring these needs into new product development ahead of the competition.
- ▶ **Pachinko/pachislot manufacturers as major shareholders.** The company's major shareholders are leading pachinko/pachislot machine manufacturers, such as SANKYO Co. (TSE1: 6417), Sammy Inc. (a subsidiary of Sega Sammy Holdings Inc. (TSE1: 6460)), and Heiwa Corp. (TSE1: 6412). For a company that develops critical ancillary features for pachinko machine manufacturers, such as prepaid-card systems and card-reading units, these capital ties provide it with an advantageous position in co-operating with pachinko/pachislot machine manufacturers
- ▶ **Specialization in prepaid-card systems.** Unlike its competitors, who also deal with other peripheral devices (such as prize exchange systems, membership systems and call lights) for both pachinko and pachislot machines, the company specializes purely in prepaid-card systems. This means it can collaborate with other leading companies in other areas who produce different types of peripheral devices. If new halls were opening up systematically, this could allow companies offering a one-stop shop model bundling a variety of peripheral pachinko devices together plenty of scope to increase market share, however, this is not the case. Instead, demand is currently driven by upgrades of existing facilities and even then equipment tends to be upgraded in piece-meal fashion. Nippon Game Card's cross-compatibility with other peripheral device makers' products in this environment may be thus seen as advantageous.

Weaknesses

- ▶ **Shrinking market.** The pachinko market is continuing to shrink, and there are no signs of this trend reversing. As the dominant player within the industry the company is easily affected by market trends.
- ▶ **Single source of income.** The company's core market is shrinking and while the company could theoretically move into other businesses to grow, it is currently focused on the core business making its earnings highly susceptible to the vagaries of the pachinko market.
- ▶ **Regulated industry.** The company's client base of halls is strictly regulated by laws such as the Law on Control and Improvement of Amusement Businesses. By extension, the company's financial performance is also affected by such regulations.

Market and value chain

Market overview

As for the company's earnings, trends in the installed pachinko machine base affect its Equipment Sales segment; revenues for card sales (essentially, information management fees or handling commissions for account settlements of card balances) are affected by halls' sales trends; while hall numbers are the swing factor for system-usage fees. Therefore, when looking at the company's earnings structure it is necessary to focus on the earnings environment and competitive pressure among halls, in addition to trends in the overall size of the pachinko market. For example, if the market continues to move toward large halls combined with a lower overall hall count, this will have a negative impact on system-usage fees for the company.

The Japan Productivity Center estimated the total domestic leisure market at JPY69.9tn (+0.2% YoY) in fiscal 2017 (source: White Paper on Leisure 2018). Pachinko/pachislot market (total lending charge of pachinko balls) was estimated at JPY19.5tn (-4.3% YoY). The pachinko/pachislot market has created a large presence to account for around 28% of the overall leisure market.

Industry trend

Shared Research focuses on the following indicators to gauge the state of the pachinko/pachislot industry.

Key indicators for pachinko/pachislot industry

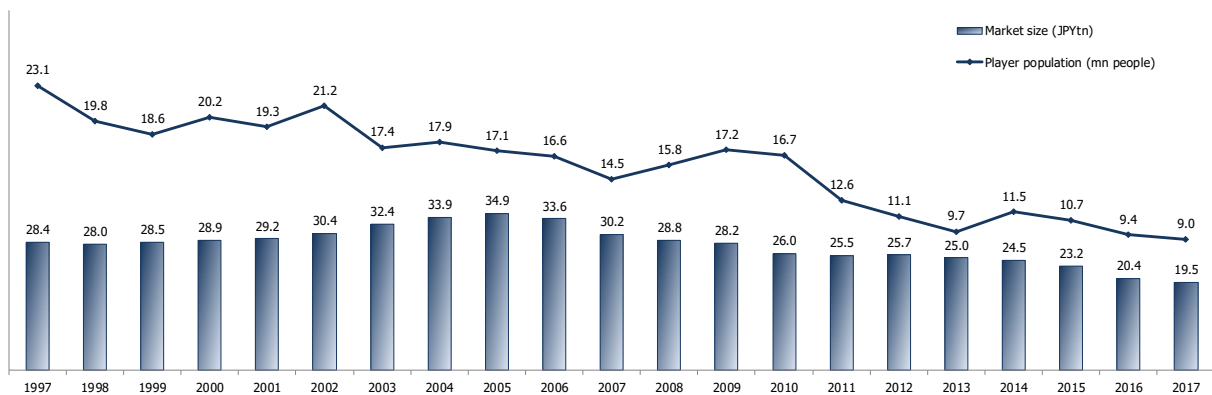
Indicator	Key figures	CAGR	Reference
Number of players	9.0mn (2017)	-4.7% (past 10 years)	In a long-term downtrend
Pachinko/pachislot market size	JPY19.5tn (2017)	-4.3% (past 10 years)	Declining since 2005 along with game-playing population
Number of pachinko halls	10,596 (2017)	-2.5% (past 10 years)	Shrinking with pachinko/pachislot market Average number of machines installed per hall rising
Number of machines installed	4.43mn (2017)	-0.4% (past 10 years)	In a mild downtrend

Source: Shared Research based on various sources
 Note: replacement rate = number of machines sold ÷ number of machines installed

Downward trend in player population and declining number of pachinko halls

The pachinko industry has been experiencing a gradual long-term decline in the player base and market size. The player base fell to 9.0mn in 2017 compared to 29.0mn in 1995. Until 2005, the market size grew despite a shrinking player population as average annual spend per player was growing. The market size (total lending charge of pachinko balls) peaked in 2005 at JPY34.9tn, and fell to JPY19.5tn in 2017.

Pachinko players and market size



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Player population (mn people)	23.1	19.8	18.6	20.2	19.3	21.2	17.4	17.9	17.1	16.6	14.5	15.8	17.2	16.7	12.6	11.1	9.7	11.5	10.7	9.4	9.0
Market size (JPYtn)	28.4	28.0	28.5	28.9	29.2	30.4	32.4	33.9	34.9	33.6	30.2	28.8	28.2	26.0	25.5	25.7	25.0	24.5	23.2	20.4	19.5

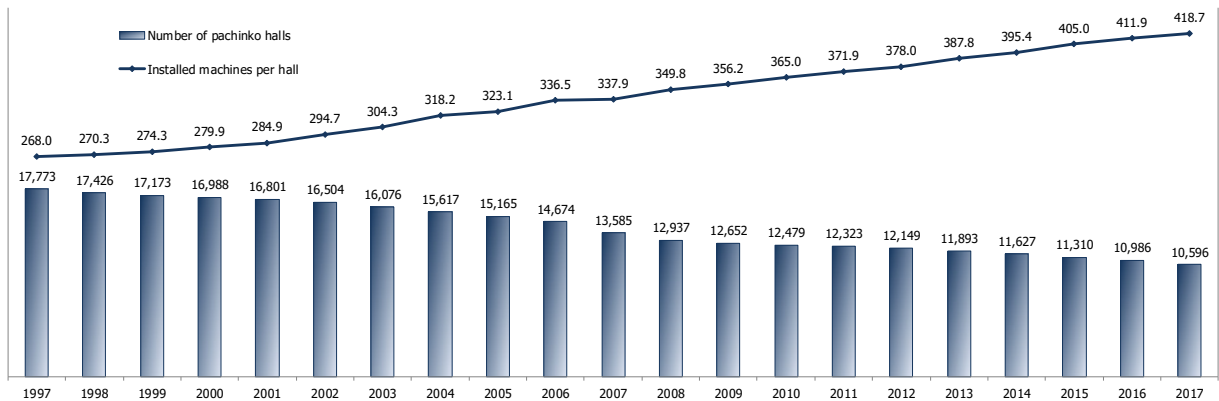
Source: Shared Research based on White Paper on Leisure

Diverging trends among halls

The number of pachinko halls declined to 10,596 in 2017 from 17,773 in 1997 (source: National Police Agency). However, despite the growing downward trend in the number of pachinko halls, the number of installed machines has remained generally unchanged at 4.43mn in 2017 and 4.73mn in 1997. On the other hand, hall sizes have become larger, increasing to an average of 419 installed machines per hall in 2017 from 268 machines in 1997.

A decrease in the amount of cash flow available for new investments has forced some smaller operators to sell or shut operations, while larger chains appear to be gaining scale, highlighting continued polarization of the market.

Number of pachinko halls and installed pachinko machines per hall



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of pachinko halls	17,773	17,426	17,173	16,988	16,801	16,504	16,076	15,617	15,165	14,674	13,585	12,937	12,652	12,479	12,323	12,149	11,893	11,627	11,310	10,986	10,596
Installed machines per hall	268.0	270.3	274.3	279.9	284.9	294.7	304.3	318.2	323.1	336.5	337.9	349.8	356.2	365.0	371.9	378.0	387.8	395.4	405.0	411.9	418.7

Source: Shared Research based on National Police Agency

Industry regulations

Current gaming machine regulations that may affect the company's earnings are as follows.

The industry association implemented voluntary regulations for pachinko machines in November 2015 and on pachislot machines in December 2015. Further voluntary regulations were introduced for pachislot machines in October 2017. In February 2018, following the passage of the Bill for the Promotion of Integrated Resort Facilities as a measure to curb gambling addiction, a partial amendment to the Ordinance for Enforcement of the Act on Control and Improvement of Amusement Businesses and the Regulations Concerning Authorization and Model Approval for Amusement Machines was enforced. The proposed amendment includes a change in the number of pachinko balls released per play.

Effect of measures to curb the gambling nature of pachinko machines

In an effort to reduce the attraction of pachinko as a form of gambling and restore it as a form of entertainment, the pachinko machine manufacturers association (the Japan Game Machine Industry Association) agreed to change the lower limit of the pachinko machine jackpot probability range (the chance of "winning big") to 1/320 (from 1/400 as of May 2015). Effective November 2015, this self-imposed regulatory change meant that game machine manufacturers would no longer be able to sell and newly install extremely competitive "max-type" machines (jackpot probability of 1/370–1/399 but with bigger winnings) that were the mainstay at pachinko halls prior to October 2015.

From May 2016, the Game Machine Industry Association also voluntarily introduced a lower maximum occurrence of a game feature called "probability fluctuation" (the jackpot rate after a successful a jackpot) from around 80% to 65%.

This latest self-regulatory move was precipitated by pachinko halls increasingly installing "max-type" machines (reached more than 40% of all machines in pachinko halls at one point) to meet demand from hard-core pachinko players. As max-machines

pushed up the average cost of playing pachinko, the number of players declined. The industry sought to tighten standards to reduce the addictive gambling aspect of pachinko, with the hope of bringing back more players into pachinko halls.

Impact of voluntary industry restrictions on pachislot machines

In September 2014, the Security Communication Association changed its testing methodology for pachislot machines. Previously, pachislot machines had to register a minimum payout rate of 55% (at least 11 out of 20 tokens inserted) during a random test run. The new standard called for the same minimum payout rate while testing under a play mode set for the lowest possible payout rate. That same month, the pachislot machine manufacturers association (the Japan Game Machine Industry Association) adopted a new standard that would prohibit penalty features from irregular pressing of machines and also mandated that machine makers switch to motherboards with AT/ART functionality.

Prior to this change, pachislot machines incorporated a main circuit board and a sub board, both of which controlled the payout rate of game tokens. Effective December 2015, the new industry standard requires the sub-board program that controls game token discharge to be incorporated into the main circuit board.

AT Machine: An abbreviation of Assist Time, an AT Machine is a type of pachislot machine. During regular play, even if the user selects the winning icons, they do not match up on the screen because of the push-order rule. However, when the AT function is installed, if the machine selects the AT mode, a display screen on the pachislot machine will indicate the order of the buttons to press to match up the icons on the screen, allowing the user to increase their coins.

ART Machine: An abbreviation of Assist Replay Time, an ART Machine is a type of pachislot machine. When this function is installed, if the machine enters ART mode, the odds of a replay increase, allowing the user to continue playing without using up coins.

In June 2016, Liaison Conference of Pachislot Machine Manufacturers explained that they would implement voluntary regulations, which limit ART functions for pachislot machines installed after October 2017, and classified pachislot machines that comply with these voluntary regulations as 5.9 models. New units of the current 5.5 machine models can only be installed up to the end of September 2017.

Shared Research understands that for 5.9 models there will be two sections related to the indicated navigation function (such as the push-order): a regular section, which will prohibit the ART mode, and a section in which the ART mode is allowed. Machines randomly select the transition from the regular to the ART mode, and the ART mode section will limit the total amount of tokens released to 3,000 by ending the game after a maximum of 1,500 games. The chance of the ART mode being selected is limited to under 70%.

Partial amendment to the Ordinance for Enforcement of the Act on Control and Improvement of Amusement Businesses and the Regulations Concerning Authorization and Model Approval for Amusement Machines

In September 2017, the NPA promulgated a partial amendment to the Ordinance for Enforcement of the Act on Control and Improvement of Amusement Businesses and the Regulations Concerning Authorization and Model Approval for Amusement Machines, which was brought into effect in February 2018.

The proposed amendment, which aims to reduce the addiction of pachinko as a form of gambling, limits the game ball-releasing capacity of amusement machines as well as the maximum number of game balls released per jackpot. It also introduces a “settings” feature for pachinko machines.

Tightening regulations on the number of balls released

The proposed amendment newly stipulates a rule, which curbs the ball-releasing capacity of amusement machines over a set playing span of four hours. Under this rule, the total number of game balls released during a four-hour play must be less than 1.5 times the total number of game balls shot by the player. Existing technical specifications and standards for one hour and 10 hours will also be tightened to the same degree so that the total number of game balls released may be reduced to about 2/3 of the current level. For pachislot machines, a new regulation similar to that of pachinko machines also for a four-hour playing span (1,600 shots in the case of pachislot machines) will be put in place.

Regulations on the number of game balls released per jackpot

For pachinko machines, the maximum number of game balls released per jackpot will be reduced from the current upper limit of 2,400 to 1,500. For pachislot machines, the maximum number of game tokens will be reduced from 480 to 300.

Addition of gaming machine specifications that allow easy access to information on game balls released

Gaming machine specifications that allow easy access to information on game balls released will be set with an aim to prevent excessively heightened addiction.

The Definitions of Terms Used in Technical Standards section of Appended Table 2 of the Regulations Concerning the Certification of Gaming Machines and Model Inspections, Etc., included in the partial amendment to the Ordinance for Enforcement of the Act on Control and Improvement of Amusement Businesses and the Regulations Concerning Authorization and Model Approval for Amusement Machines (promulgated in September 2017), added the definition for Game Ball Number Display Device as “a device installed in gaming machines that adopt a structure that removes physical interaction between players and game balls, and in which the total number of balls that can be shot by a player is recorded using an electromagnetic system and can be displayed accordingly.” This definition refers to “controlled machines”.

Addition of managers' operations

Pachinko hall managers will be required to provide information to customers and take other necessary measures to prevent customers' excessive game playing.

Introduction of a “settings” feature to pachinko machines

For more flexibility, up to six pachinko machine settings defining jackpot probabilities will be allowed as in the case with pachislot machines.

As a transitional measure, amusement machines certified under the current regulations and those belonging to the same model type as the tested and approved models can remain in operation at pachinko halls for a period of three years from the initial date launched as outlined in the supplementary provisions.

The deadline for submission of public comments was August 8, 2017 and the amendment was slated to be enforced effective February 1, 2018.

Barriers to entry

Barriers to entry are extremely high given that the company operates in an oligopolistic market and its client base of pachinko halls is subject to strict regulations, such as the Law on Control and Improvement of Amusement Businesses.

Competitive environment

Number of member halls using prepaid-card systems and market share

As of end-March 2018, 8,491 halls (8,830 halls as of end-March 2017) used prepaid-card systems, representing 80% of the total 10,596 halls in Japan (as of end-December 2017; 10,986 halls at end-December 2016). The penetration rate for prepaid-card systems among halls has not changed much.

Halls using prepaid-card systems and market share

	FY03/16	FY03/17	FY03/18
Halls using prepaid-card systems	9,044	8,830	8,491
Nippon Game Card and JOYCO SYSTEMS	4,184	3,957	3,674
Market share	46.3%	44.8%	43.3%
Glory Nasca	2,098	2,076	2,044
Market share	23.2%	23.5%	24.1%
Mars Engineering	2,051	2,011	1,948
Market share	22.7%	22.8%	22.9%
Daikoku Denki	527	616	679
Market share	5.8%	7.0%	8.0%
Universal Entertainment	163	141	115
Market share	1.8%	1.6%	1.4%
OIZUMI	21	29	31
Market share	0.2%	0.3%	0.4%
Total number of halls	11,310	10,986	10,596

Source: Shared Research based on data from the company and Zennichiyuren
 Note: Total number of halls represent the number at end-December of each year.

The pachinko prepaid-card industry is an oligopoly dominated by three companies: Gamecard-Joyco Holdings, GLORY NASCA Ltd. (a subsidiary of Glory Ltd. (TSE 6457) created from an April 2011 merger with Creation Card Co.), and Mars Engineering Corp. (TSE 6419).

Based on sales as of the end of March 2018, the company had 43.3% market share of halls using its prepaid-card system, making it easily the largest company in the space. GLORY NASCA followed with 24.1%, and Mars Engineering had 22.9%.

The main difference between Nippon Game Card and its competitors is the company's business model is based on a third-party issuer card system, while the other two provide predominantly house-issuer card systems. (JOYCO SYSTEMS actually sells house-issuer card system but for the company as a whole third-party issuer card systems are the dominant system). Additionally, the other two companies sell equipment used outside of the pachinko and pachislot space, whereas Nippon Game Card specializes purely in providing pachinko pre-paid card systems.

Please refer to the Business section for a detailed explanation on the differences between third-party issuer and house-issuer card systems. It is hard to judge whether Nippon Game Card's strategy of solely focusing on prepaid-card systems and collaborating with other companies for peripheral devices (for example, Daikoku Denki Co. [TSE1: 6430]) is superior to providing clients with other peripheral devices, as GLORY NASCA Ltd. and Mars Engineering do. Some halls, such as top-tier hall DYNAM (operates 405 halls nationwide as of end-January 2018), exclusively use Mars Engineering's systems, leaving no room for Nippon Game Card or other peripheral device manufacturers. Nonetheless, not all halls rely solely on one equipment maker, as DYNAM does. Moreover, GLORY NASCA and Mars Engineering's market shares for peripheral devices are not particularly dominant. Thus, focusing on its core business and partnering with other dominant specialist companies does have its advantages.

After 2012, Daikoku Denki, which has a high market share in computer systems used in pachinko and pachislot halls, entered the prepaid-card systems market. Despite being a latecomer to the market, Daikoku Denki has steadily built up its following, and as of the end of FY03/18, had 679 member halls for an 8.0% market share. Daikoku Denki, like Mars Engineering, appears to be retaining clients by providing them with other peripheral devices.

Historical earnings results

Q1 FY03/19 results

▷ Sales:	JPY4.1bn (-7.4% YoY)
▷ Operating profit:	JPY960mn (+1.1% YoY)
▷ Recurring profit:	JPY963mn (+0.5% YoY)
▷ Net income*:	JPY693mn (-0.1% YoY)

*Net income refers to net income attributable to parent company shareholders.

For pachinko hall operators that comprise the company's primary customer base, the operating environment remained difficult. Fewer people are playing pachinko since the sources of entertainment are diversifying and operations with low-priced balls are becoming the norm. Additionally, there is uncertainty over the impact of the revised regulations (Regulations Partially Amending the Ordinance for Enforcement of the Act on Control and Improvement of Amusement Business, etc.) enforced in February 2018 and development of the Basic Bill on Gambling Addiction Countermeasures.

Gamecard-Joyco group continued to provide ideas useful to revitalize the industry and to operate pachinko halls, swiftly and precisely understanding the social needs as well as the needs of pachinko hall operators and pachinko fans. The company continuously strove to streamline its operation with the theme of "completion of structural reform and maximization of its effects" as a core policy. As a result, sales declined on lower number of equipment unit sales and member halls, but all profit items under operating profit remained flat YoY owing to a drop in SG&A expenses.

Versus full-year FY03/19 company forecasts, Q1 sales reached 29.0% (Q1 FY03/18 sales reached 26.3% of full-year FY03/18 results), operating profit 80.0% (26.4%), recurring profit 80.3% (26.7%), and net income attributable to parent company shareholders 86.6% (29.9%). Q1 results had high progress rates versus plan as unit prices of equipment were in line with expectations and majority of R&D expenses were expected to be booked in 2H.

Sales breakdown

- ▶ Equipment sales declined 5.5% YoY to JPY1.5bn on a drop in equipment unit sales to 11,208 units (-6.7% YoY). Amid uncertainties accompanying the revised regulations involving amusement business enacted in February 2018, investment interests in peripheral equipment of pachinko halls have dwindled, leading to a limited number of hall openings. As only a few new pachinko halls opened, equipment unit sales primarily came from replacement demand at existing member stores.
- ▶ Card sales were JPY730mn (-11.0% YoY), reflecting lower information management fees accompanying a drop in the total value of cards issued, and lower media fees caused by a drop in the number of cards sold. The fall in the total value of cards issued was attributable to a decline in the number of member halls to 3,612 (-277 or -7.1% YoY). In addition to the decline in the number of member halls, a drop in average spend due to the spread of operations with low-priced balls resulted in a drop in the total value of cards issued.
- ▶ System-usage fee revenue fell 8.1% YoY to JPY1.8bn due to the drop in the number of member halls noted above.
- ▶ Others (equipment installation and maintenance) posted sales of JPY118mn (+2.6% YoY).

Gross profit declined 6.4% YoY to JPY1.9bn. However, GPM improved 0.5pp YoY to 47.3%. Gross profit fell for all products except for others, but GPM rose.

- ▶ Gross profit for equipment sales was JPY235mn (-1.7% YoY), and GPM was 15.9% (+0.6pp YoY). Equipment sales mainly came from replacement demands at existing member halls.
- ▶ Gross profit for card sales was JPY472mn (-9.8% YoY), and GPM was 64.7% (+0.9pp YoY).
- ▶ Gross profit for system-usage fees was JPY1.2bn (-6.9% YoY), and GPM was 66.9% (+0.9pp YoY). The GPM rose as usage of equipment for updates and booking of expenses was postponed.

SG&A expenses totaled JPY988mn (-12.6% YoY), of which personnel expenses were JPY362 (-13.0% YoY) and R&D expenses were JPY94mn (+14.6% YoY).

As a result, operating profit, recurring profit, and net income attributable to parent company shareholders were flat YoY.

Full-year FY03/18 results

- ▷ Sales: JPY16.9bn (-17.0% YoY)
- ▷ Operating profit: JPY3.6bn (+87.4% YoY)
- ▷ Recurring profit: JPY3.6bn (+84.8% YoY)
- ▷ Net income*: JPY2.3bn (net income of JPY27mn in FY03/17)

*Net income refers to net income attributable to parent company shareholders.

Among the pachinko hall operators that comprise the company's primary customer base, there are still some medium-sized and large chain operators that are looking to maintain or even improve their competitive position by opening up more pachinko halls in and around Japan's major cities, especially in the Kanto and Kinki regions. For the most part, however, the number of pachinko halls continues to decline as operators remain under pressure from 1) tighter regulations on machines offering high potential payouts; 2) a loss of players to other forms of entertainment following the spread of smartphones mobile gaming; and 3) a drop in average spend stemming from an increase in the number of hall operators offering low-priced balls.

To cope with the increasing harsh operating environment, the Gamecard-Joyco Group has completed major structural reforms and is now looking to maximize the benefits of those reforms with the help of 1) a streamlined business structure with more selective and concentrated product and service lines; 2) a stronger financial position with real-time management of inventory and accounts receivable; and 3) streamlined operations with a focus on efficiency and speed. As a result, all profit items under operating profit exceeded FY03/17 results.

Sales breakdown

- ▷ Equipment sales declined to JPY5.7bn (-29.8% YoY) on a drop in equipment unit sales to 43,593 units (-38.3%). As only a few new pachinko halls opened, equipment unit sales primarily came from replacement demand for existing member stores.
- ▷ Card sales declined to JPY3.2bn (-12.2%), reflecting lower information management fees accompanying a drop in the total value of cards issued, and lower media fees caused by a drop in the number of cards sold. The fall in the total value of cards issued was attributable to a decline in the number of member halls to 3,674 (down 283, -7.2%). According to the company, the number of cancelled memberships (including closures of existing members) exceeded that of newly acquired member halls. In addition to a decline in the number of member halls, continued sluggish performance of four-yen pachinko and a decline in average spend due to reduced operation hours among other factors resulted in a drop in the total value of cards issued.
- ▷ System-usage fee revenue declined to JPY7.6bn (-6.9%) due to the drop in the number of member halls noted above.
- ▷ Other revenues declined to JPY440mn (-8.1%).

Gross profit declined to JPY7.9bn (-4.6% YoY) overall. However, the GPM improved 6.1pp YoY to 46.5%. Gross profit fell for all products except for equipment sales, but the decline in gross profit for system-usage fees (which account for about 60% of total gross profit) was negligible.

- ▷ Gross profit for equipment sales was JPY703mn (+4.5% YoY) and the GPM was 12.3% (+4.1pp).
- ▷ Gross profit for card sales was JPY2.0bn (-10.3% YoY) and the GPM was 64.0% (+1.4pp).
- ▷ Gross profit for system-usage fees was JPY5.0bn (-2.8% YoY) and the GPM was 66.2% (+2.8pp). The GPM rose because of lower costs, which mainly reflected leased equipment entering re-lease periods.

SG&A expenses totaled JPY4.3bn (-32.5% YoY), of which personnel expenses were JPY1.6bn (-24.7%) and R&D expenses were JPY393mn (-56.6%). Personnel expenses fell due to the voluntary retirement (86 retirees) in FY03/17. R&D spending was down because the company had to push back development work. Following new regulations governing the amusement industry, it now had to review the details and specifics of changes that must be made to the "controlled machines" it has been developing and to measures to reduce compulsive gambling.

As a result, operating profit, recurring profit, and net income attributable to parent company shareholders rose significantly YoY.

Q3 FY03/18 results

- ▷ Sales: JPY13.1bn (-16.2% YoY)
- ▷ Operating profit: JPY2.9bn (+81.9% YoY)
- ▷ Recurring profit: JPY2.9bn (+79.4% YoY)
- ▷ Net income*: JPY2.0bn (+92.8% YoY)

*Net income refers to net income attributable to parent company shareholders.

Gamecard-Joyco announced revisions to its FY03/18 forecasts when it announced its Q3 earnings results. Versus the revised company forecasts, Q3 FY03/17 sales accounted for 79.0% (76.8% in Q3 FY03/17 versus full-year result), operating profit 86.2% (83.9%), recurring profit 88.7% (83.9%), and net income attributable to parent company shareholders 90.5% (JPY1.0bn in Q3 FY03/17 versus full-year result of JPY27mn). Q3 progress toward full-year targets was robust for sales and profits even after the revisions.

Among the pachinko hall operators that comprise the company's primary customer base, there are still some medium-sized and large chain operators that are looking to maintain or even improve their competitive position by opening up more pachinko halls in and around Japan's major cities, especially in the Kanto and Kinki regions. For the most part, however, the number of pachinko halls continues to decline as operators remain under pressure from 1) tighter regulations on machines offering high potential payouts; 2) a loss of players to other forms of entertainment following the spread of smartphones mobile gaming; and 3) a drop in average spend stemming from an increase in the number of hall operators offering low-priced balls.

To cope with the increasing harsh operating environment, the Gamecard-Joyco Group has completed major structural reforms and is now looking to maximize the benefits of those reforms with the help of 1) a streamlined business structure with more selective and concentrated product and service lines; 2) a stronger financial position with real-time management of inventory and accounts receivable; and 3) streamlined operations with a focus on efficiency and speed.

Sales breakdown:

- ▷ Equipment sales declined to JPY4.6bn (-27.4% YoY) on a drop in equipment unit sales to 33,605 units (-38.3%). As only a few new pachinko halls opened, equipment unit sales primarily came from replacement demand for existing member stores.
- ▷ Card sales declined to JPY2.4bn (-12.7%), reflecting lower information management fees accompanying a drop in the total value of cards issued, and lower media fees caused by a drop in the number of cards sold. The fall in the total value of cards issued was attributable to a decline in the number of member halls to 3,778 (down 242, -6.0%). The company acquired approximately 40 new member gaming halls, while roughly 220 cancelled their memberships (including closures of existing members), keeping the total number of member halls in a downtrend. In addition to a decline in the number of card systems installed (1.7mn units, -4.1% YoY) due to fewer existing member stores, a drop in average spend stemming from an increase in the number of machines offering low-priced balls caused a drop in the total value of cards issued.
- ▷ System-usage fee revenue declined to JPY5.7bn (-6.7%) due to the drop in the number of member halls noted above.
- ▷ Other revenues declined to JPY333mn (-11.2%).

Gross profit declined to JPY6.2bn (-6.9% YoY) overall. However, the GPM improved 4.8pp YoY to 47.0%. Gross profit fell for all products, but the decline in gross profit for system-usage fees (which account for about 60% of total gross profit) was negligible.

- ▷ Gross profit for equipment sales was JPY725mn (-15.0% YoY) and the GPM was 15.6% (+2.2pp).
- ▷ Gross profit for card sales was JPY1.5bn (-12.4% YoY) and the GPM was flat YoY of 63.8%.
- ▷ Gross profit for system-usage fees was JPY3.8bn (-2.0% YoY) and the GPM was 66.4% (+3.2pp). The GPM rose because of lower costs, which mainly reflected leased equipment entering re-lease periods.

SG&A expenses totaled JPY3.2bn (-35.5% YoY), of which personnel expenses were JPY1.2bn (-26.8%), R&D expenses were JPY273mn (-64.8%). Personnel expenses fell due to the voluntary retirement (86 retirees) in FY03/17. R&D spending was down because the company had to push back development work. Following new regulations governing the amusement industry, it now had to review the details and specifics of changes that must be made to the "controlled machines" it has been developing and to measures to reduce compulsive gambling.

As a result, operating profit, recurring profit, and net income attributable to parent company shareholders rose significantly YoY.

FY03/17 results

Sales:	JPY20.4bn (-14.6% YoY)
Operating profit:	JPY1.9bn (operating loss of JPY1.4bn in FY03/16)
Recurring profit:	JPY1.9bn (recurring loss of JPY1.4bn in FY03/16)
Net income*:	JPY27mn (net loss of JPY2.1bn in FY03/16)

*Net income refers to net income attributable to parent company shareholders.

The pachinko business environment remains more difficult than ever before: Fewer people are playing pachinko since the sources of entertainment are diversifying, operations with low-priced balls are becoming the norm, new industry regulations and the removal of machines that feed gambling addictions, and the issue of shifting to new standard machines. Further, additional gaming machine regulations are expected going forward as part of measures to deal with addiction. In such a difficult environment, pachinko halls are working to lower costs of operations, and have a cautious stance when making capex decisions, such as new store openings and remodeling existing stores. Capex for new peripheral equipment, the company's area of operations, was dull.

Sales broken down by product category were as follows.

- Equipment sales were JPY8.2bn (-23.3% YoY). At first the company worked to win new member halls especially for its mainstay product G∞WIN'Z and also focused its sales activities on adding more card systems and token dispensers and replacing systems with ball-counting systems for existing member gaming halls. As such, the number of machines sold dropped to 70,696 units (-36.0% YoY), breaking down into 39,999 pachinko card systems (-42.7%) and 31,297 pachislot token dispensers (-25.1%). Equipment sales declined less in value terms than in volume terms, because unit prices were up YoY.
- Card sales were JPY3.6bn (-8.8% YoY). Media fees were down, because information management fees declined due to a 13.0% fall in the total value of cards issued (usage value: JPY9.1tn) and 9.9% decline in card sales volume to 3,390,000.
- Income from system-usage fees totaled JPY8.1bn (-7.5% YoY), because the number of member gaming halls decreased by 227 (-5.4%) to 3,957 and the unit system-usage fee fell. The company acquired 63 new member gaming halls (38 fewer than in FY03/16) while 290 cancelled their memberships (70 fewer than in FY03/16) for a net decrease of 227 halls.
- Other income was JPY479mn (+3.0% YoY)

Gross profit was sustained at a slight fall finishing at JPY8.3bn (-1.9% YoY) overall. It increased YoY in the equipment sales and other categories, but declined on card sales and system-usage fees. However, GPM improved 5.2pp YoY to 40.4%. Gross profit broken down by product category as follows.

- ▀ Equipment sales gross profit was JPY673mn (+21.5% YoY) and GPM improved 3.0pp to 8.2%. Gross profit was up YoY despite a 23.3% decline in equipment sales. The company determined that given the scarcity of new hall openings, it could not increase equipment unit sales if it relied too heavily on sales to new halls. Thus it made sales efforts that focused on adding new equipment and replacing ball-counting systems at existing member halls, and GPM rose as a result.
- ▀ Card sales gross profit was JPY2.3bn (-8.4% YoY) and GPM was 62.6% (+0.2pp).
- ▀ System-usage fee gross profit was JPY5.2bn (-3.2% YoY) and GPM was 63.4% (+2.8pp). GPM went up because of lower system-usage costs as a result of renewing data centers.

SG&A expenses totaled JPY6.3bn (-35.8% YoY), of which R&D expenses were JPY906mn (-77.0%) and depreciation was JPY485mn (-23.4%). R&D spending fell as a result of a selective approach to items for development and revamping the organizational structure. The decrease in depreciation was mainly for molds. Sales-related expenses also fell as a result of lower equipment unit sales.

As a result, profits from operating profit down saw significant YoY upside.

The company also initiated structural reforms to turn the business structure into one that can be competitive and profitable, even amid a harsh market environment. As part of that, the company consolidated the head offices of group companies, and aiming to further enhance its corporate structure, implementing a voluntary retirement program in order to build a personnel structure appropriate for its scale of business.

FY03/16 results

- ▷ Sales: JPY23.9bn (-7.2% YoY)
- ▷ Operating loss: JPY1.4bn (operating profit of JPY816mn in FY03/15)
- ▷ Recurring loss: JPY1.4bn (recurring profit of JPY836mn in FY03/15)
- ▷ Net loss*: JPY2.1bn (net income of JPY293mn in FY03/15)

*Net loss refers to net loss attributable to parent company shareholders.

The company announced revisions to its earnings forecasts on April 26, and results were mostly in line with the revised forecasts.

The business environment remains difficult, as the popularity of pachinko and pachislots decline with more available sources of entertainment, low-price pachinko becoming the norm, and the increased burden of the consumption tax hike due to the failure to pass on the tax hike to customers. Pachinko halls are increasingly cutting costs and lowering prices, and continue to have a cautious stance when making capex decisions, such as new store openings and remodeling existing stores. Capex for new peripheral equipment was especially dull.

To pass on the burden of the consumption tax hike to customers, the company adopted both the card subtraction system and ball subtraction system and worked to expand sales by updating its G∞WIN'Z product—a five-inch LC screen that provides information such as a user guide and displays visual content for the game machines (launched in March 2015 for pachinko-use and December 2015 for pachislot-use).

Machine unit sales were up YoY. Still, sales and gross profit were down YoY for all products, as the company was unable to escape the shrinking market from a decline in member stores as pachinko halls closed and went out of business, and as price competition drove prices down.

Sales by product type were as follows:

- ▀ Equipment sales declined 6.5% YoY to JPY10.7bn. While the company was able to increase unit sales with the help of a new G∞WIN'Z model designed to pass along the consumption tax, the declining number of new pachinko hall openings and the shrinking number of pachinko halls replacing equipment led to intense price competition among equipment makers and the resulting decline in unit prices offset the impact of higher unit sales. Total unit sales rose 6.9% YoY to 110,533 units. By

equipment type, sales of pachinko card units rose 19.1% to 68,732, of which 41,596 (+0.7%) were units with ball-counting systems; sales of pachislot token dispensers declined 8.6% to 41,801, of which 9,836 (+5.2%) were units with token-counting systems.

- ▀ Card sales declined 6.4% YoY to JPY4.0bn as data management fees fell along with the decline in the value of cards issued (i.e., the amount used by the player), which fell 8.0% YoY to JPY10.5tn.
- ▀ System-usage fee revenue declined 8.4% YoY to JPY8.8bn, hurt by both falling unit prices and a drop in the number of member halls. At the end of the term, the company reported 4,184 member halls, down 259 (5.8%) from a year earlier. During the year, the company signed up 101 new halls (8 more than in FY03/15) but this was offset by the cancellation of contracts with 360 existing member halls (62 fewer than in FY03/15) for a net decline of 259 halls.
- ▀ Other revenues fell 7.6% YoY to JPY465mn.

On the earnings front, gross profit was down across all product lines, including equipment, leaving the GPM down 2.3pp at 35.2% and gross profit down 13.0% YoY at JPY8.4bn. By product type:

- ▀ The gross profit on equipment sales fell 53.3% YoY to JPY554mn as unit prices suffered amid intense price competition, pushing the gross margin on equipment sales down 5.2pp to 5.2%.
- ▀ The gross profit on card sales declined 12.2% YoY to JPY2.5bn as the gross margin declined 4.1pp to 62.4%. The decline in the gross margin reflected both a drop in the value of cards issued, which meant less revenue from high-margin data fees, and a decline in unit prices.
- ▀ The gross profit from system-usage fees declined 3.3% YoY to JPY5.3bn, though the gross margin actually rose 3.1pp to 60.6% as system-usage costs declined following the upgrade of the company's data center.

SG&A expenses rose 11.4% YoY to JPY9.9bn as R&D expenses jumped 25.0% YoY to JPY3.9bn. Part of the sizeable increase in R&D spending stemmed from added cost of winding down development of an "inter-industry cooperation service." The company had been hoping to establish the service, which was built around an electronic money service, but after a review of potential profitability and the return on investment that was prompted by significant changes in the business environment compared to the beginning of the project, the company decided it would be difficult to continue and halted development.

The drop in gross profit combined with the jump in SG&A expenses led to losses at the operating and recurring profit levels, and losses at the net profit level were further inflated by JPY515mn due to the write-down of fixed assets (including assets related to the company's legacy magnetic card systems) and a partial write-down of the company's deferred tax assets.

Other information

History

Nippon Game Card

Early period (1989 to 1994)

At the time of Nippon Game Card's establishment in Osaka in August, 1989, pachinko halls were under the spotlight for tax evasion, fraud and other issues. As part of a drive to clean up the pachinko industry's image the industry regulator, the National Police Agency, decided to introduce prepaid-card systems which enabled card companies to monitor pachinko hall sales in order to increase hall operator transparency.

Based on this, three main companies - all with capital ties to Japan's leading trading houses - were established to develop and implement the prepaid-card initiative:

- ▷ Nihon Leisure Card System K.K. - established in 1988, largest initial shareholder was Mitsubishi Corp. (TSE 8058)
- ▷ Nippon Game Card - established in 1989, largest initial shareholder was Sumitomo Corp. (TSE 8053)
- ▷ Nihon Advanced Card System K.K. - established in 1995, largest initial shareholder was Mitsui & Co. (TSE 8031)

From 1993 onward the company grew rapidly as CR model (prepaid-card system) pachinko machines proliferated.

Turmoil (1995 to 2001)

By 1996 the pachinko industry had become plagued by card counterfeiting. The company had to focus on prevention of counterfeiting while combating the growing fallout from it. At the same time, numerous new market entrants had appeared, offering house-issuer card systems with lower running costs – Mars Engineering Corp. (entering the market in 1999), JOYCO SYSTEMS Corp. (see section below), Seta Corp. (which entered the market in 2000 and is now known as Universal Entertainment Corp. (JASDAQ: 6425)), as well as Nasca Corp. and Creation Card Information System Co. (both of whom entered the market in 1998), which have since merged to form Glory Nasca Ltd.

Rebuilding (2001 onward)

In 2001, pachinko/pachislot machine manufacturer SANKYO Co. replaced Sumitomo Corp. as the company's largest shareholder. The company used this change as an opportunity to refocus its business on meeting pachinko halls' business needs. The company also merged with former third-party card issuer competitors Nihon Advanced Card System in October 2003, and with Nihon Leisure Card System in April 2008. In April 2006, the company listed on the JASDAQ Securities Exchange (now merged with the Tokyo Stock Exchange).

JOYCO SYSTEMS Corp.

JOYCO SYSTEMS Corp. was established in March 2001. Unlike Nippon Game Card, it provides house-issuer prepaid-card systems. Relatively cheap maintenance costs of its system initially allowed it to grow market share among halls in the prepaid-card market. However, as a late industry entrant the company faced a shrinking market early on, slowing its momentum. It then fell behind competitors in launching new products resulting in a decline in the number of halls using its system.

Gamecard-Joyco Holdings, Inc.

On April 1, 2011, Nippon Game Card and JOYCO SYSTEMS merged and established a joint holding company "Gamecard-Joyco Holdings, Inc." through a share transfer.

News and topics

February 2018

On **February 8, 2018**, the company announced revisions to its forecast for full-year FY03/18 results.

Revised forecast for FY03/18 sales and earnings

- ▷ Sales: JPY16.6bn (versus previous forecast of JPY16.6bn)
- ▷ Operating profit: JPY3.4bn (JPY2.2bn)
- ▷ Recurring profit: JPY3.3bn (JPY2.2bn)
- ▷ Net income*: JPY2.2bn (JPY1.4bn)
- ▷ EPS: JPY154.25 (JPY98.16)

*Net income attributable to parent company shareholders

Reason for revision

Explaining the upward revision, the company said that after the implementation of the new regulations governing the amusement industry on February 1, 2018, pachinko hall operators have to start mixing machines that conform with the new regulations with the old machines that are currently on their floors, and that it hopes to develop models that conform with the new regulations and are popular with pachinko hall owners and pachinko players. The company added that it advanced structural reforms that had started in the previous fiscal year and, having now completed those reforms, it was working to maximize the benefits of those reforms with low cost operations, allowing it to reduce cost of sales and SG&A expenses. With regard to the new R&D work, the company said it still needs to work out the details of the changes that must be made to the "controlled machines" it has been developing as well as how to conform to the new regulations aimed at reducing compulsive gambling, but that the detailed development work has now been pushed out into next year. And, as a result, the company now expects operating profit, recurring profit, and net income attributable to parent company shareholders to finish FY03/18 above its initial forecast.

May 2017

On **May 24, 2017**, the company announced a change in representative directors.

At the Board of Directors meeting held on the same day, the company resolved a change in representative directors. The change will be officially put to effect upon resolution at the ordinary general shareholders meeting scheduled for June 22, 2017.

Change in representative director (effective June 22, 2017)

Name	New position	Former position
Hotaka Makita	Representative Director, President	Auditor (outside member of Audit & Supervisory Board of the company)

Resignation (effective June 22, 2017)

Name	New position	Former position
Yasuhiko Ishibashi	Resigning	Representative Director, Chairman of the Board and President

April 2017

On **April 6, 2017**, the company announced a revision to its full-year FY03/17 earnings forecasts.

FY03/17 full-year forecasts

- ▷ Sales: JPY20.5bn (previous forecast: JPY20.0bn)
- ▷ Operating profit: JPY1.9bn (JPY2.0bn)

- ▷ Recurring profit: JPY1.9bn (JPY2.0bn)
- ▷ Net income*: JPY100mn (JPY1.0bn)

*Net income attributable to parent company shareholders

Reason for revision

The company expects operating profit and recurring profit to be lower than the forecasts announced on February 2, 2017, as a result of an increase in CoGS following changes in inventory asset evaluations. It also expects net income attributable to parent company shareholders to be lower as a result of the booking of a JPY850mn reserve (extraordinary loss) related to its voluntary retirement program (86 employees) and a JPY440mn impairment loss (extraordinary loss) on fixed assets.

February 2017

On **February 2, 2017**, the company announced a revision to its full-year FY03/17 earnings forecasts.

FY03/17 full-year forecasts

- ▷ Sales: JPY20.0bn (previous forecast: JPY21.8bn)
- ▷ Operating profit: JPY2.0bn (JPY170mn)
- ▷ Recurring profit: JPY2.0bn (JPY170mn)
- ▷ Net income*: JPY1.0bn (loss of JPY60mn)

*Net income attributable to parent company shareholders

Reason for revision

Capital expenditure of pachinko halls has been low due to stricter gaming machine regulations. As such, the company has had difficulty maintaining the same level of equipment unit sales as in FY03/16. The continually dwindling number of pachinko halls has led to sales forecasts which are lower than initial targets. While sales are lower, the company expects to achieve a gross profit and greatly exceed initial profit targets despite harsh market environments. Another cause of higher profit targets is controlled SG&A expenses as the company narrows down development items and partially reforms its development system.

On the same day, the company announced that it was soliciting applicants for voluntary retirement (see below for details). The company plans to book expenses stemming from provision of retirement benefits as extraordinary losses in the FY03/17 financial statements. However, the company has not incorporated these expenses into the revised earnings forecast because the number of retirees is undetermined at this point in time.

On **the same day**, the company announced that it was soliciting applicants for voluntary retirement and reducing executive remuneration.

From FY03/17, the company has been engaged in structural reforms to improve business efficiency. As part of this initiative, the company decided to solicit applicants for voluntary retirement with the objective of designing a more appropriate organizational structure and securing profits.

Overview of solicitation of applicants for voluntary retirement

- ▷ Target companies: Gamecard-Joyco Holdings, Inc. and its subsidiaries
- ▷ Target personnel: Full-time employees aged 30–59 (as of April 30, 2017)
- ▷ Scale: Approximately 80 employees
- ▷ Solicitation period: March 1, 2017 to March 17, 2017 (planned)
- ▷ Retirement date: April 30, 2017 (planned)

- ▷ Benefits: Payment of company-initiated retirement and special retirement benefits, compensation for any remaining paid leave, and job assistance by an outplacement consulting firm

Reduction in executive compensation

The company has been reducing compensation for board members since April 2016. However, as the company has solicited applicants for voluntary retirement, it has decided to further reduce board member compensation in order to clarify executive responsibilities. The company's full-time corporate auditors and subsidiary auditors have also volunteered to return a portion of their auditor compensation. Reductions will be effective from February 2017 and continue for the time being.

Details of the reduction in compensation for board members

Gamecard-Joyco Holdings, Inc.

- ▷ Representative Director: Down 30% (previously 15%)
- ▷ Director: Down 20% (previously 10%)

Nippon Game Card and JOYCO SYSTEMS Corp.

- ▷ Representative Director: Down 20% (previously 10%)
- ▷ Executive Officer: Down 10% (previously 5%)

Details of voluntary return of auditor compensation

Gamecard-Joyco Holdings, Inc.

- ▷ Full-time corporate auditor: Down 5%

Nippon Game Card and JOYCO SYSTEMS Corp.

- ▷ Auditor: Down 5%

Major shareholders

Top shareholders	Shares held ('000)	Shareholding ratio
SANKYO CO., LTD.	2,131	14.94%
DATA-ART, Inc.	632	4.43%
Heiwa Corporation	612	4.29%
Kyoraku Sangyo Co., Ltd.	611	4.29%
Sammy Inc.	611	4.29%
Daiichi Co., Ltd.	611	4.29%
Newgin Group	611	4.29%
Fujishoji Co., Ltd.	611	4.29%
SAXA, Inc.	510	3.57%
Sansei R&D Co., Ltd.	463	3.24%
SANYO BUSSAN K.K.	463	3.24%
Daito Giken, Inc.	463	3.24%
Takao Co., Ltd.	463	3.24%
Takeya Co., Ltd.	463	3.24%
Toyomaru Industry Co., Ltd.	463	3.24%
SUM	9,723	68.17%

Source: Shared Research based on company data
As of March 31, 2018

Company profile

Company Name	Head Office
Gamecard-Joyco Holdings, Inc.	Sakura Park Building 2-14-22 Ueno Taito-ku Tokyo, Japan 110-0005
Phone	Listed On
+81-3-6803-0301	JASDAQ Standard
Established	Exchange Listing
April 1, 2011	April 1, 2011
Website	Fiscal Year-End
http://www.gamecard-joyco.co.jp/index.html	March
IR Contact	IR Web
Investor Relations & General Affairs Division	http://www.gamecard-joyco.co.jp/ir/
IR Mail	IR Phone
-	+81-3-5812-7595

We offer corporate clients comprehensive report coverage, a service that allows them to better inform investors and other stakeholders by presenting a continuously updated third-party view of business fundamentals, independent of investment biases. Shared Research can be found on the web at <http://www.sharedresearch.jp>.

Current Client Coverage of Shared Research Inc.

Accordia Golf Trust	FRONTEO, Inc.	ONWARD HOLDINGS CO.,LTD.
Adastria Co., Ltd.	Fujita Kanko Inc.	PARIS MIKI HOLDINGS Inc.
ADJUVANT COSME JAPAN CO., LTD.	FURYU CORPORATION	PIGEON CORPORATION
Aeon Delight Co., Ltd.	Gamecard-Joyco Holdings, Inc.	RACCOON HOLDINGS, Inc.
Aeon Fantasy Co., Ltd.	GCA Corporation	RESORTTRUST, INC.
Ai Holdings Corporation	Grandy House Corporation	ROUND ONE Corporation
AnGes Inc.	Hakuto Co., Ltd.	RVH Inc.
Anicom Holdings, Inc.	Happinet Corporation	RYOHIN KEIKAKU CO., LTD.
Anritsu Corporation	Harmonic Drive Systems Inc.	SanBio Company Limited
Apaman Co., Ltd.	HOUSEDO Co., Ltd.	SANIX INCORPORATED
Arealink Co.,Ltd.	IDOM Inc.	Sanrio Company, Ltd.
Artspark Holdings Inc.	IGNIS LTD.	SATO HOLDINGS CORPORATION
AS ONE CORPORATION	Inabata & Co., Ltd.	SBS Holdings, Inc.
Ateam Inc.	Infocom Corporation	Seikagaku Corporation
Aucfan Co., Ltd.	Infomart Corporation	Seria Co.,Ltd.
AVANT CORPORATION	Intelligent Wave, Inc.	SHIP HEALTHCARE HOLDINGS, INC.
Axell Corporation	istyle Inc.	SIGMAXYZ Inc.
Azbil Corporation	Itochu Enex Co., Ltd.	SMS Co., Ltd.
AZIA CO., LTD.	JSB Co., Ltd.	Snow Peak, Inc.
BEENOS Inc.	JTEC Corporation	Solasia Pharma K.K.
Bell-Park Co., Ltd.	J Trust Co., Ltd	SOURCENEXT Corporation
Benefit One Inc.	Japan Best Rescue System Co., Ltd.	Star Mica Co., Ltd.
B-lot Co.,Ltd.	JINS Inc.	Strike Co., Ltd.
Canon Marketing Japan Inc.	JP-HOLDINGS, INC.	SymBio Pharmaceuticals Limited
Carna Biosciences, Inc.	KAMEDA SEIKA CO., LTD.	Synchro Food Co., Ltd.
CERES INC.	Kenedix, Inc.	TAIYO HOLDINGS CO., LTD.
Chiyoda Co., Ltd.	KFC Holdings Japan, Ltd.	Takashimaya Company, Limited
Chugoku Marine Paints, Ltd.	KI-Star Real Estate Co., Ltd.	Take and Give Needs Co., Ltd.
cocokara fine Inc.	Kumiai Chemical Industry Co., Ltd.	Takihyo Co., Ltd.
COMSYS Holdings Corporation	Lasertec Corporation	TAMAGAWA HOLDINGS CO., LTD.
CRE, Inc.	LUCKLAND CO., LTD.	TEAR Corporation
CREEK & RIVER Co., Ltd.	MATSUI SECURITIES CO., LTD.	Tenpo Innovation Inc.
Daiseki Co., Ltd.	Medical System Network Co., Ltd.	3-D Matrix, Ltd.
DIC Corporation	MEDINET Co., Ltd.	TKC Corporation
Digital Arts Inc.	Milbon Co., Ltd.	TOKAI Holdings Corporation
Digital Garage Inc.	MIRAIT Holdings Corporation	Tri-Stage Inc.
DIGITAL HEARTS HOLDINGS Co., Ltd	Monex Goup Inc.	VISION INC.
Don Quijote Holdings Co., Ltd.	NAGASE & CO., LTD	VISIONARY HOLDINGS CO., LTD.
Dream Incubator Inc.	NAIGAI TRANS LINE LTD.	VOYAGE GROUP, INC.
EARTH CHEMICAL CO., LTD.	NanoCarrier Co., Ltd.	WirelessGate, Inc.
Elecom Co., Ltd.	Net One Systems Co.,Ltd.	YELLOW HAT LTD.
Emergency Assistance Japan Co., Ltd.	Nichi-Iko Pharmaceutical Co., Ltd.	YOSHINOYA HOLDINGS CO., LTD.
en-Japan Inc.	Nihon Denkei Co., Ltd.	YUMESHIN HOLDINGS CO., LTD.
euglena Co., Ltd.	NIPPON PARKING DEVELOPMENT Co., Ltd.	Yume no Machi Souzou Iinkai Co., Ltd.
Evolable Asia Corp.	Nisshinbo Holdings Inc.	Yushiro Chemical Industry Co., Ltd.
Ferrotec Holdings Corporation	NS TOOL CO., LTD.	ZAPPALLAS, INC.
FIELDS CORPORATION	NTT URBAN DEVELOPMENT CORPORATION	
Financial Products Group Co., Ltd.	Oki Electric Industry Co., Ltd	
FreeBit Co., Ltd.	ONO SOKKI Co., Ltd.	

Attention: If you would like to see companies you invest in on this list, ask them to become our client, or sponsor a report yourself.

Disclaimer: This document is provided for informational purposes only. No investment opinion or advice is provided, intended, or solicited. Shared Research Inc. offers no warranty, either expressed or implied, regarding the veracity of data or interpretations of data included in this report. We shall not be held responsible for any damage caused by the use of this report. The copyright of this report and the rights regarding the creation and exploitation of the derivative work of this and other Shared Research Reports belong to Shared Research. This report may be reproduced or modified for personal use; distribution, transfer, or other uses of this report are strictly prohibited and a violation of the copyright of this report. Our officers and employees may currently, or in the future, have a position in securities of the companies mentioned in this report, which may affect this report's objectivity.

Japanese Financial Instruments and Exchange Law (FIEL) Disclaimer: The report has been prepared by Shared Research under a contract with the company described in this report ("the company"). Opinions and views presented are ours where so stated. Such opinions and views attributed to the company are interpretations made by Shared Research. We represent that if this report is deemed to include an opinion by us that could influence investment decisions in the company, such opinion may be in exchange for consideration or promise of consideration from the company to Shared Research.

Contact Details

Shared Research Inc.
 3-31-12 Sendagi Bunkyo-ku Tokyo, Japan
 URL: <https://sharedresearch.jp>
 Phone: +81 (0)3 5834-8787
 Email: info@sharedresearch.jp