



## Gamecard-Joyco Holdings / 6249

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COVERAGE INITIATED ON: 2011.07.11

LAST UPDATE: 2017.11.09

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## Key financial data

Income statement (JPYmn)	FY03/10 Par.	FY03/11 Par.	FY03/12 Con.	FY03/13 Con.	FY03/14 Con.	FY03/15 Con.	FY03/16 Con.	FY03/17 Con.	FY03/18 Est.
<b>Total sales</b>	<b>32,834</b>	<b>37,005</b>	<b>43,575</b>	<b>39,545</b>	<b>34,192</b>	<b>25,741</b>	<b>23,885</b>	<b>20,405</b>	<b>16,600</b>
YoY	6.0%	12.7%	-	-9.2%	-13.5%	-24.7%	-7.2%	-14.6%	-18.6%
<b>Gross profit</b>	<b>9,660</b>	<b>11,199</b>	<b>13,093</b>	<b>11,884</b>	<b>10,980</b>	<b>9,665</b>	<b>8,413</b>	<b>8,250</b>	
YoY	-6.4%	15.9%	-	-9.2%	-7.6%	-12.0%	-13.0%	-1.9%	
GPM	29.4%	30.3%	30.0%	30.1%	32.1%	37.5%	35.2%	40.4%	
<b>Operating profit</b>	<b>1,566</b>	<b>4,322</b>	<b>4,459</b>	<b>2,668</b>	<b>1,764</b>	<b>816</b>	<b>-1,440</b>	<b>1,919</b>	<b>2,200</b>
YoY	-41.4%	176.0%	-	-40.2%	-33.9%	-53.7%	-	-	14.6%
OPM	4.8%	11.7%	10.2%	6.7%	5.2%	3.2%	-6.0%	9.4%	13.3%
<b>Recurring profit</b>	<b>1,508</b>	<b>4,208</b>	<b>4,543</b>	<b>2,692</b>	<b>1,849</b>	<b>836</b>	<b>-1,383</b>	<b>1,945</b>	<b>2,200</b>
YoY	-44.4%	179.0%	-	-40.7%	-31.3%	54.7%	-	-	13.1%
RPM	4.6%	11.4%	10.4%	6.8%	5.4%	3.2%	-5.8%	9.5%	13.3%
<b>Net income</b>	<b>918</b>	<b>2,338</b>	<b>4,573</b>	<b>1,598</b>	<b>900</b>	<b>293</b>	<b>-2,117</b>	<b>27</b>	<b>1,400</b>
YoY	-59.3%	154.7%	-	-65.1%	-43.7%	67.5%	-	-	-
Net margin	2.8%	6.3%	10.5%	4.0%	2.6%	1.1%	-8.9%	0.1%	8.4%
<b>Per share data (split-adjusted)</b>									
Shares issued ('000, year end)	11,413	11,413	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	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
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	
<b>Balance sheet (JPYmn)</b>									
Cash and cash equivalents	18,071	22,642	24,848	26,731	32,009	25,020	25,529	23,475	
<b>Total current assets</b>	<b>36,273</b>	<b>41,670</b>	<b>51,055</b>	<b>51,567</b>	<b>56,522</b>	<b>45,284</b>	<b>43,934</b>	<b>40,015</b>	
Tangible fixed assets	-2,190	2,005	2,369	2,120	2,193	1,486	776	469	
Intangible fixed assets	6,540	5,506	4,636	3,509	2,624	2,896	2,226	3,188	
Investment and other assets	7,628	6,991	7,921	8,313	3,315	9,413	7,844	6,975	
<b>Total assets</b>	<b>52,431</b>	<b>56,173</b>	<b>65,983</b>	<b>65,510</b>	<b>64,655</b>	<b>59,081</b>	<b>54,781</b>	<b>50,648</b>	
Accounts payable	3,320	3,453	4,423	3,675	3,040	2,211	2,402	2,019	
Short-term debt	-	-	-	-	-	-	-	-	
Unused card balance	4,323	3,578	3,308	2,770	2,660	2,591	2,530	2,335	
<b>Total current liabilities</b>	<b>11,927</b>	<b>12,237</b>	<b>13,905</b>	<b>13,183</b>	<b>13,448</b>	<b>10,107</b>	<b>10,363</b>	<b>7,932</b>	
Long-term debt	-	-	-	-	-	-	-	-	
<b>Total fixed liabilities</b>	<b>8,104</b>	<b>9,790</b>	<b>10,977</b>	<b>10,528</b>	<b>9,370</b>	<b>7,702</b>	<b>6,132</b>	<b>4,862</b>	
<b>Total liabilities</b>	<b>20,032</b>	<b>22,028</b>	<b>24,882</b>	<b>23,712</b>	<b>22,819</b>	<b>17,809</b>	<b>16,496</b>	<b>12,795</b>	
<b>Net assets</b>	<b>32,399</b>	<b>34,145</b>	<b>41,101</b>	<b>41,798</b>	<b>41,835</b>	<b>41,272</b>	<b>38,230</b>	<b>37,830</b>	
Total interest-bearing debt	-	-	-	-	-	-	-	-	
<b>Statement of cash flows (JPYmn)</b>									
Cash flows from operating activities	2,615	5,082	4,266	5,109	4,631	3,844	1,828	2,264	
Cash flows from investing activities	-4,319	77	-13,950	1,133	-1,146	-5,046	-841	1,381	
Cash flows from financing activities	-1,504	-1,639	-1,998	-2,360	-2,194	-1,799	-1,476	-699	
<b>Financial ratios</b>									
ROA (RP-based)	2.9%	7.7%	7.4%	4.1%	2.8%	1.4%	-2.4%	3.7%	
ROE	2.8%	7.0%	11.1%	3.9%	2.2%	0.7%	-5.3%	0.1%	
Equity ratio	61.8%	60.8%	62.3%	63.8%	64.7%	69.9%	69.8%	74.7%	

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.

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## Recent updates

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### Highlights

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On **November 9, 2017**, Gamecard-Joyco Holdings, Inc. announced its 1H FY03/18 earnings results; see the results section for details.

On **October 12, 2017**, Shared Research updated the report following interviews with the company

**For corporate releases and developments more than three months old, please refer to the News and topics section.**

## Trends and outlook

### Quarterly trends and results

Cumulative performance (JPYmn)	FY03/17				FY03/18				FY03/18	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	% of FY	FY Est.
Sales	4,747	9,745	15,661	20,405	4,451	8,557			51.5%	16,600
YoY	-23.9%	-22.7%	-16.6%	-14.6%	-6.2%	-12.2%				-18.6%
Gross profit	2,182	4,340	6,616	8,250	2,082	4,112				
YoY	-3.9%	-1.6%	0.3%	-1.9%	-4.6%	-5.3%				
GPM	46.0%	44.5%	42.2%	40.4%	46.8%	48.1%				
SG&A expenses	1,501	3,075	5,005	6,331	1,131	2,181				
YoY	-18.8%	-22.6%	-30.9%	-35.8%	-24.7%	-29.1%				
SG&A-to-sales ratio	31.6%	31.6%	32.0%	31.0%	25.4%	25.5%				
Operating profit	680	1,264	1,611	1,919	950	1,931			87.8%	2,200
YoY	61.5%	186.8%	-	-	39.7%	52.8%				14.6%
OPM	14.3%	13.0%	27.2%	40.5%	21.3%	22.6%				13.3%
Recurring profit	695	1,277	1,632	1,945	958	1,927			87.6%	2,200
YoY	59.8%	172.0%	-	-	37.8%	50.9%				13.1%
RPM	14.6%	13.1%	27.6%	41.0%	21.5%	22.5%				13.3%
Net income	383	791	1,032	27	694	1,399			99.9%	1,400
YoY	52.0%	237.9%	-	-	81.2%	76.9%				-
Net margin	8.1%	8.1%	17.4%	0.6%	15.6%	16.3%				8.4%
Quarterly performance (JPYmn)	FY03/17				FY03/18					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Sales	4,747	4,998	5,916	4,744	4,451	4,106				
YoY	-23.9%	-21.6%	-4.3%	-6.9%	-6.2%	-17.8%				
Gross profit	2,182	2,158	2,276	1,634	2,082	2,030				
YoY	-3.9%	0.7%	4.1%	-10.0%	-4.6%	-5.9%				
GPM	46.0%	43.2%	38.5%	34.4%	46.8%	49.4%				
SG&A expenses	1,501	1,574	1,930	1,326	1,131	1,050				
YoY	-18.8%	-25.8%	-41.0%	-49.2%	-24.7%	-33.3%				
SG&A-to-sales ratio	31.6%	31.5%	32.6%	28.0%	25.4%	25.6%				
Operating profit	680	584	347	308	950	981				
YoY	61.5%	2820.0%	-	-	39.7%	68.0%				
OPM	14.3%	11.7%	5.9%	6.5%	21.3%	23.9%				
Recurring profit	695	582	355	313	958	969				
YoY	59.8%	1611.8%	-	-	37.8%	66.5%				
RPM	14.6%	11.6%	6.0%	6.6%	21.5%	23.6%				
Net income	383	408	241	-1,005	694	705				
YoY	52.0%	-	-	-	81.2%	72.8%				
Net margin	8.1%	8.2%	4.1%	-	15.6%	17.2%				

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 segment (cumulative)

Cumulative (JPYmn)	FY03/17				FY03/18			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Sales</b>	<b>4,747</b>	<b>9,745</b>	<b>15,661</b>	<b>20,405</b>	<b>4,451</b>	<b>8,557</b>		
YoY	-23.9%	-22.7%	-16.6%	-14.6%	-6.2%	-12.2%		
Equipment sales	1,627	3,560	6,379	8,167	1,564	2,862		
YoY	-42.8%	-39.4%	-26.8%	-23.3%	-3.9%	-19.6%		
Card sales	923	1,825	2,752	3,609	820	1,609		
YoY	-7.8%	-9.0%	-9.2%	-8.8%	-11.2%	-11.8%		
System-usage fees	2,081	4,131	6,155	8,148	1,951	3,867		
YoY	-8.1%	-8.0%	-7.7%	-7.5%	-6.2%	-6.4%		
Others	114	227	375	479	115	218		
YoY	-6.6%	-4.9%	-0.5%	3.0%	0.9%	-4.9%		
<b>Gross profit</b>	<b>2,182</b>	<b>4,340</b>	<b>6,616</b>	<b>8,250</b>	<b>2,082</b>	<b>4,112</b>		
YoY	-3.9%	-1.6%	0.3%	-1.9%	-4.6%	-5.3%		
GPM	46.0%	44.5%	42.2%	40.4%	46.8%	48.1%		
Equipment sales	248	480	853	673	239			
YoY	-2.0%	20.6%	39.4%	21.5%	-3.6%			
GPM	15.2%	13.5%	13.4%	8.2%	15.3%			
Card sales	604	1,206	1,750	2,261	523			
YoY	-5.6%	-5.9%	-7.2%	-8.4%	-13.4%			
GPM	65.4%	66.1%	63.6%	62.6%	63.8%			
System-usage fees	1,297	2,588	3,891	5,169	1,289			
YoY	-4.0%	-4.1%	-3.6%	-3.2%	-0.6%			
GPM	62.3%	62.6%	63.2%	63.4%	66.1%			
Others	32	64	121	145	31			
<b>SG&amp;A expenses</b>	<b>1,501</b>	<b>3,075</b>	<b>5,005</b>	<b>6,331</b>	<b>1,131</b>	<b>2,181</b>		
YoY	-18.8%	-22.6%	-30.9%	-35.8%	-24.7%	-29.1%		
SG&A-to-sales ratio	31.6%	31.6%	32.0%	31.0%	25.4%	25.5%		
Personnel expenses	551	1,135	1,681	2,139	416			
R&D expenses	189	433	776	906	82			
<b>Operating profit</b>	<b>680</b>	<b>1,264</b>	<b>1,611</b>	<b>1,919</b>	<b>950</b>	<b>1,931</b>		
YoY	61.5%	186.6%	-	-	39.7%	52.8%		
OPM	14.3%	13.0%	10.3%	9.4%	21.3%	22.6%		

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 (JPYmn)	FY03/17				FY03/18			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
No. of equipment shipped ('000)	12.7	29.4	54.4	70.7	12.0			
YoY	-56.2%	-51.7%	-39.5%	-36.0%	-5.3%			
Pachinko card systems	6.1	14.8	27.6	39.4	7.3			
YoY	-69.6%	-61.9%	-52.0%	-42.7%	19.9%			
Pachislot token dispensers	6.6	14.7	26.8	31.3	4.7			
YoY	-26.5%	-33.9%	-17.4%	-25.1%	-28.5%			
No. of member stores	4,108	4,066	4,020	3,957	3,889			
YoY	-6.3%	-5.8%	-5.9%	-5.4%	-5.3%			
Units installed ('000)	1,758	1,746	1,737	1,715	1,696			
YoY	-3.1%	-3.8%	-4.2%	-3.9%	-3.5%			

Source: Shared Research based on company data

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

## 1H FY03/18 results

- ▷ Sales: JPY8.6bn (-12.2% YoY)
- ▷ Operating profit: JPY1.9bn (+52.7%)
- ▷ Recurring profit: JPY1.9bn (+50.8%)
- ▷ Net income\*: JPY1.4bn (+76.8%)

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

The future of the pachinko business remains opaque. Fewer people are playing pachinko since the sources of entertainment are diversifying, operations with low-priced balls are becoming the norm, and countermeasures to compulsive gambling are being adopted after passage of the Act Concerning Promotion of Development of Integrated Resort Areas (IR Promotion Act) in December 2016, with the promulgation of partial amendments 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.

By determining the various needs of pachinko halls in a timely manner and responding flexibly, the company was able to secure gross profit at about the same level as in 1H FY03/17. In addition, by keeping SG&A expenses such as personnel and rent under control through structural reforms, there were YoY increases in net assets and profits from the operating profit line down.

### Sales breakdown:

- ▷ Equipment sales: JPY2.9bn (-19.6% YoY)
- ▷ Card sales: JPY1.6bn (-11.9%)
- ▷ System-usage fee sales: JPY3.9bn (-6.4%)
- ▷ Other sales: JPY218mn (+4.1%)

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

## Full-year company forecasts

FY03/18 forecasts (JPYmn)	FY03/17			FY03/18		
	1H Act.	2H Act.	FY Act.	1H Act.	2H Est.	FY Est.
<b>Sales</b>	<b>9,745</b>	<b>10,660</b>	<b>20,405</b>	<b>8,557</b>	<b>8,043</b>	<b>16,600</b>
YoY	-22.7%	-5.5%	-14.6%	-12.2%	-24.5%	-18.6%
Cost of sales	5,404	6,751	12,155	4,444		
<b>Gross profit</b>	<b>4,340</b>	<b>3,910</b>	<b>8,250</b>	<b>4,112</b>		
YoY	-1.6%	-2.3%	-1.9%	-5.3%		
GPM	44.5%	36.7%	40.4%	48.1%		
SG&A expenses	3,075	5,256	8,331	2,181		
SG&A-to-sales ratio	31.6%	49.3%	40.8%	25.5%		
<b>Operating profit</b>	<b>1,264</b>	<b>655</b>	<b>1,919</b>	<b>1,931</b>	<b>269</b>	<b>2,200</b>
YoY	186.6%	-	-	52.8%	-	14.6%
OPM	13.0%	6.1%	9.4%	22.6%	3.3%	13.3%
<b>Recurring profit</b>	<b>1,277</b>	<b>668</b>	<b>1,945</b>	<b>1,927</b>	<b>273</b>	<b>2,200</b>
YoY	172.3%	-	-	50.9%	-	13.1%
RPM	13.1%	6.3%	9.5%	22.5%	3.4%	13.3%
<b>Net income</b>	<b>791</b>	<b>-764</b>	<b>27</b>	<b>1,399</b>	<b>1</b>	<b>1,400</b>
YoY	238.0%	-	-	16.3%	-	-

Source: Shared Research based on company data

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

### Breakdown of company forecast

(JPYmn)	FY03/17			FY03/18		
	1H Act.	2H Act.	FY Act.	1H Act.	2H Est.	FY Est.
<b>Sales</b>	<b>9,745</b>	<b>10,660</b>	<b>20,405</b>	<b>8,557</b>	<b>8,043</b>	<b>16,600</b>
YoY	-22.7%	-5.5%	-14.6%	-12.2%	-24.5%	-18.6%
Equipment sales	3,560	4,607	8,167	2,862	2,768	5,630
YoY	-39.4%	-3.7%	-23.3%	-19.6%	-39.9%	-31.1%
Card sales	1,825	1,784	3,609	1,609	1,421	3,030
YoY	-9.0%	-8.6%	-8.8%	-11.8%	-20.3%	-16.0%
System-usage fees	4,131	4,017	8,148	3,867	3,533	7,400
YoY	-8.0%	-6.9%	-7.5%	-6.4%	-12.0%	-9.2%
Others	227	252	479	218	322	540
<b>Gross profit</b>	<b>4,340</b>	<b>3,910</b>	<b>8,250</b>	<b>4,112</b>	<b>3,188</b>	<b>7,300</b>
YoY	-1.6%	-2.3%	-1.9%	-5.3%	-18.5%	-11.5%
GPM	44.5%	36.7%	40.4%	48.1%	39.6%	44.0%
<b>SG&amp;A expenses</b>	<b>3,075</b>	<b>3,256</b>	<b>6,331</b>	<b>2,181</b>	<b>2,919</b>	<b>5,100</b>
YoY	-22.6%	-44.7%	-35.8%	-29.1%	-10.4%	-19.4%
SG&A-to-sales ratio	31.6%	30.5%	31.0%	25.5%	36.3%	30.7%
R&D expenses	433	473	906			1,456
YoY	-54.6%	-84.1%	-77.0%			60.7%
R&D-to-sales ratio	4.4%	4.4%	4.4%			8.8%
SG&A excl. R&D	2,642	2,783	5,425			3,644
<b>Operating profit</b>	<b>1,264</b>	<b>655</b>	<b>1,919</b>	<b>1,931</b>	<b>269</b>	<b>2,200</b>
YoY	186.6%	-	-	52.7%	-58.9%	14.6%

Source: Shared Research based on company data

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

### Assumptions underlying company's FY03/18 forecasts

Business conditions for pachinko halls, the company's main clients, are expected to remain severe into FY03/18, with unit prices expected to fall. The decline in pachinko halls has also resulted in a shrinking market, and gaming machine regulations have been tightened. As such, pachinko halls will likely continue to retain their cautious stance toward making capex decisions, limiting their investment in peripheral equipment. It expects a drop in sales and gross profit to be difficult to avoid.

Amid such a harsh environment, the group plans to keep and expand market share by stimulating demand through comprehensive proposal-based sales, including proposing the introduction of additional services, such as switching to ball-counting units and an information distribution service. At the same time, while carrying out various measures in an effort to revitalize the pachinko and pachislot industry, such as pushing forward with R&D activities, it also plans to work to reduce SG&A



expenses by cutting costs and streamlining operations. Further, the company is expecting a significant reduction in personnel expenses starting in FY03/18 due to the voluntary retirement program carried out in FY03/17.

### Company forecasts for FY03/18:

- ▷ Sales: JPY16.6bn (-18.6% YoY)
- ▷ Operating profit: JPY2.2bn (+14.6%)
- ▷ Recurring profit: JPY2.2bn (+13.1%)
- ▷ Net income\*: JPY1.4bn (roughly 52x the FY03/17 figure)

\*Refers to net income attributable to parent company shareholders.

Assumptions for the main indicators affecting the company's earnings are equipment unit sales of 52,000 units (-26.4% YoY), 3,660 member halls (-7.5%), and 3,091,000 card sales (-8.8%).

The company is not increasing volume at a time when few new pachinko halls are opening. Thus the company expects equipment unit sales to turn down in line with capex cuts by pachinko halls in a shrinking market. The number of member halls has been falling at average rate of 4.6% per year in the past five years. We expect the number of member halls to decline faster in FY03/18. We also assume a decline in card sales volume based on fewer member halls and contraction trend of the pachinko market in general.

We also expect lower equipment sales value due to lower volume and sales prices, a decline in card sales stemming from a decrease in revenue from information management fees caused by lower card sales volume and value of cards issued, and a fall in system-usage fees associated with fewer member halls.

We forecast gross profit of JPY7.3bn (-11.5% YoY) due to lower sales, although we expect a 3.6pp improvement in the GP margin to 44.0% due to a smaller share of relatively low-margin equipment sales and increased share of system-usage fees.

The company targets SG&A expenses of JPY5.1bn (-19.4% YoY), but plans to increase R&D expenses to JPY1.5bn (+60.7%). Although the company pared R&D spending to JPY906mn in FY03/17 (-77% YoY), it decided to increase it in FY03/18 to develop products and services that help pachinko halls lower their operating costs in the medium term, create new businesses, and comply with the requirement for managed machines. The company assumes SG&A expenses excluding R&D costs of JPY3.6bn (-32.8% YoY), assuming lower personnel expenses after combining offices and offering a voluntary retirement program that attracted 86 applicants in FY03/17.

### Dividends

In order to maintain a healthy financial position, the company forecasts a FY03/18 annual dividend of JPY35 per share (interim dividend of JPY15, year-end dividend of JPY20; FY03/17 annual dividend was JPY30).

## 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 and the creation of new business areas

The company expects a sharp decline in personnel expenses from FY03/18 onward after offering a voluntary retirement program in FY03/17.

### Market size and total pachinko hall count

The first and second points listed above are external factors that the company cannot directly control. The operating environment continued to be extremely harsh in FY03/17 (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. 2010	Dec. 2011	Dec. 2012	Dec. 2013	Dec. 2014	Dec. 2015	Dec. 2016
Member halls	5,429	5,047	4,974	4,836	4,529	4,272	4,020
YoY	-0.4%	-7.0%	-1.4%	-2.8%	-6.3%	-5.7%	-5.9%
Market share	53.3%	52.1%	51.7%	50.9%	48.7%	46.7%	45.1%

Source: Shared Research based on data from Community Safety Bureau (National Police Agency), Prepaid System Association

### Establishing new areas of business

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 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 in FY03/16. Due to the additional cost of cancelling this project, the company's R&D budget 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 spending.

The company plans to increase R&D spending to JPY1.5bn in FY03/18 for the development of new equipment and services that will help pachinko hall operators lower operating costs, create new business areas, and comply with the requirement for managed machines.

#### Trends in R&D spending

R&D expenses (JPYmn)	FY03/10	FY03/11	FY03/12	FY03/13	FY03/14	FY03/15	FY03/16	FY03/17	FY03/18
	Par.	Par.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Est.
Sales	32,834	37,005	43,575	39,545	34,192	25,741	23,885	20,405	16,600
R&D expenses	1,733	672	1,820	2,724	2,978	3,146	3,931	906	1,456
R&D expenses as % of sales	5.3%	1.8%	4.2%	6.9%	8.7%	12.2%	16.5%	4.4%	8.8%

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.

## 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. We project that these initiatives will result in a decrease in the company's expenses from FY03/18. The company expects SG&A expenses excluding R&D spending of JPY3.6bn (-32.8% or -JPY1.8bn YoY) in FY03/18.

### Consolidation of offices

In December 2016, the company consolidated the location of the head offices of three group companies, from which it expects to be able to cut office expenses and improve operational efficiency. As relocation expenses will be incurred in FY03/17, the company expects to start seeing an impact from the cost cuts from FY03/18.

### Solicitation for voluntary retirement

The company implemented a voluntary retirement program with a target of about 80 employees, soliciting applicants in March 2017 with retirement effective from April 2017. The program attracted 86 applicants.

## Business

### Business description

Gamecard-Joyco Holdings Inc., a holding company founded in April 2011, operates a prepaid-card 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).

As of the end of March 2017, there were 3,671 halls using Nippon Game Card's prepaid-card systems (market share of 41.6%); JOYCO SYSTEMS provides house-issuer card payment systems for halls. As of the end of March 2017, there were 286 halls using JOYCO SYSTEMS's card payment systems (market share of 3.2%).

### Prepaid card system and pachinko and pachislot machines

Pachinko machines can be divided into:

- ▶ **Cash-only models:** these are conventional pachinko machines; players obtain pachinko balls from a separate ball dispenser.
- ▶ **CR (Card Reader) models:** rely on prepaid cards; players obtain pachinko balls directly from the pachinko machine using their card.

As of May 2017, the majority of pachinko machines installed in halls were CR models.

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.

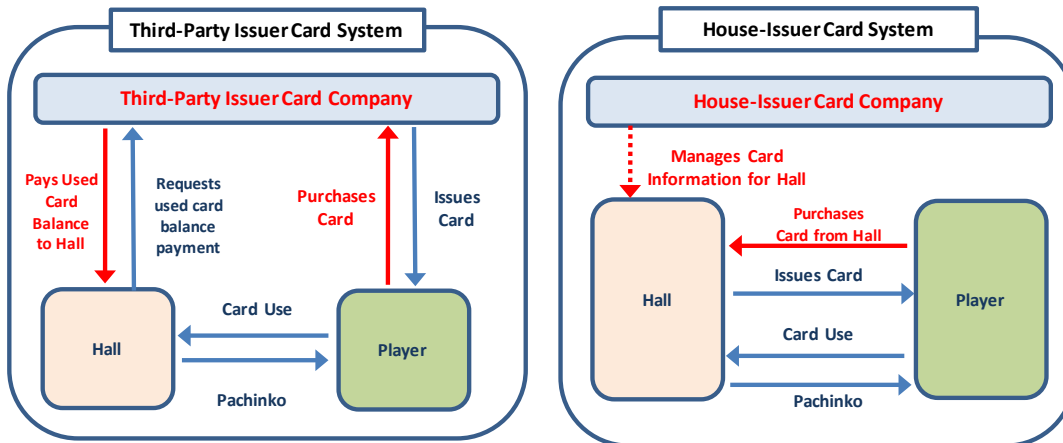
While CR model pachislot machines do not exist, there are a growing number of halls who install Token Dispensing units for pachislot machines that allow use of the same prepaid-card system (and therefore the same card by individual players) for both pachinko and pachislot machines in the same hall. However, the penetration of the pachislot market is low compared to pachinko. This means that trends in the pachinko machine market have a greater effect on the company compared to pachislot market trends.

### 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 card company merely manages the information stored on cards. The hall operator settles payments with players directly.

As of May 2017, Nippon Game Card was the only company in the industry operating a third-party issuer system. On the other hand, JOYCO operates 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.

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, dispensed balls were put into boxes and at the end of play these boxes were carried over, 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 carried heavy boxes of balls (i.e., winnings) is eliminated.

## G∞WIN'Z

In March 2015, GCJ launched G∞WIN'Z, the successor to B∞LEX. 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.

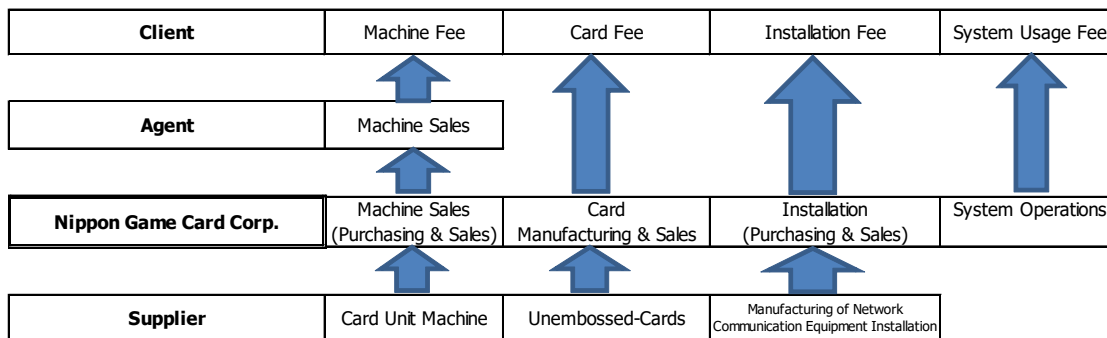
Two methods of collecting consumption tax: Shared Research understands that thus far ball and token lending charges included tax, with hall operators shouldering the tax burden. But new and renovated stores are increasingly installing equipment with systems designed to handle the consumption tax hike 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.

## 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 (40.0% of total sales in FY03/17; 8.2% 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 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 (17.7% of total sales in FY03/17; 62.6% 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 value of cards issued was JPY9.1tn (-13.0% YoY) in FY03/17, with the majority of sales coming 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 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 (39.9% of total sales in FY03/17; 63.4% GPM)

The company collects a recurring system usage fee from member halls based on the number of card systems installed. There were 1.7mn card systems installed in FY03/17 (-3.9% YoY).

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

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

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 FY03/17 the GPM for Equipment Sales was only 8.2%, lower than other income sources. Even though Equipment Sales comprises 40.0% of the company's overall sales it accounted for only 8.2% 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 JPY72.2tn (-1.0% YoY) in fiscal 2015 (source: White Paper on Leisure 2016). Pachinko/pachislot market (total lending charge of pachinko balls) was estimated at JPY23.2tn (-5.2%). The pachinko/pachislot market has created a large presence to account for around 32.1% of the overall leisure market.

The market as measured by sales for pachinko halls was JPY23.2tn. Of that amount, JPY19.8tn was returned to players in prizes. The remaining JPY3.4tn became gross profit for pachinko halls. Operators invested about JPY1.0tn into the purchase of new machines and replacements.

### Industry trend

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

#### Key indicators for pachinko/pachislot industry

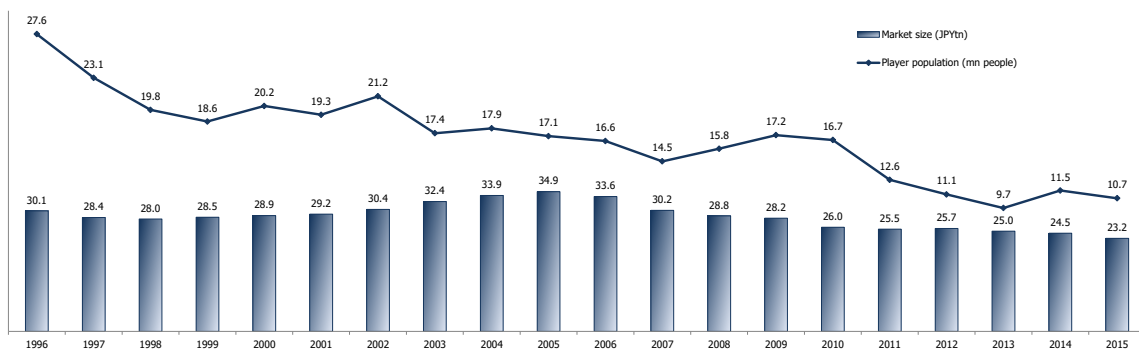
Indicator	Key figures	Growth rate	Reference
Player base	10.7mn (2015)	-4.6% annual average (past 10 years)	Long-term downtrend
Pachinko/pachislot market size	JPY23.2tn (2015)	-4.0% annual average (past 10 years)	Declining since 2005 along with game-playing population
Pachinko hall numbers	10,986 (2016)	-2.9% annual average (past 10 years)	Shrinking with pachinko/pachislot market Average number of machines installed per hall rising
Number of machines installed	4.52mn (2016)	-0.9% annual average (past 10 years)	In a 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

As of May 2017, the pachinko industry has been experiencing a gradual long-term decline in the player base and market size. The player base fell to 10.7mn in 2015 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 JPY23.2tn in 2015.

#### Pachinko players and market size



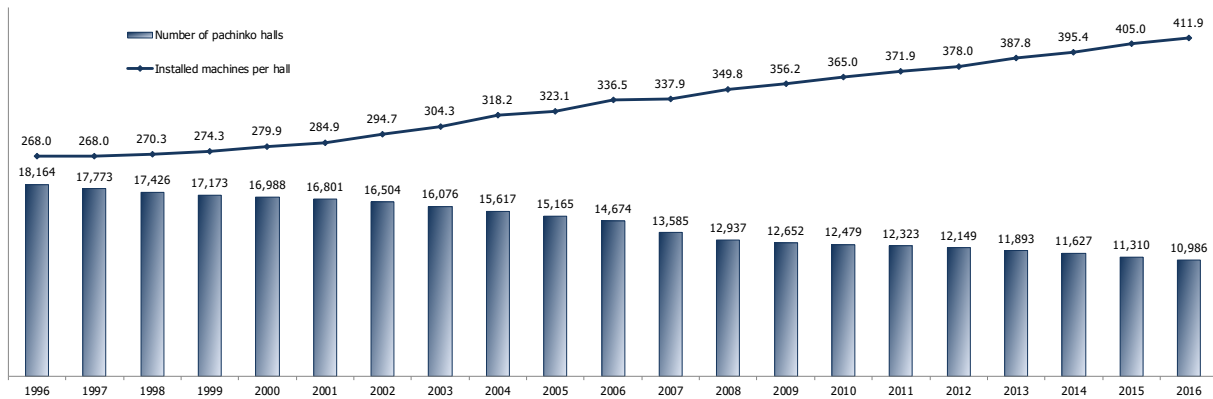
Source: Shared Research based on White Paper on Leisure

## Diverging trends among halls

The number of pachinko halls declined to 10,986 in 2016 from 18,224 in 1995 (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 4.52mn in 2016 and 4.52mn in 1995. On the other hand, hall sizes have become larger, increasing to an average of 411 installed machines per hall in 2016 from 261 machines in 1995.

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



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of pachinko halls	18,164	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
Installed machines per hall	268.0	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

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 planned for pachislot machines in October 2017. In July 2017, following the passage of the Bill for the Promotion of Integrated Resort Facilities as a measure to curb gambling addiction, the National Police Agency (NPA) collected public comments before formalizing 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. 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 extremely competitive "max-type" machines (jackpot probability of 1/370–1/399 but with bigger winnings) that were the mainstay at pachinko parlors 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 parlors increasingly installing “max-type” machines (reached more than 40% of all machines in pachinko parlors 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 parlors.

### 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%.

### Inviting public comments on proposed amendment including changes to number of game balls released

In July 2017, the NPA began inviting public comments prior to formalizing 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. The proposed amendment includes a change in the number of pachinko balls released per play.

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.

#### 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 parlors 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.

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## Barriers to entry

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

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## Competitive environment

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

As of end-December 2016, 8,917 halls (9,140 halls as of end-December 2015) used prepaid-card systems, representing 81% of the total 10,986 halls in Japan (11,310 halls). The penetration rate for prepaid-card systems among halls has not changed much.

**Halls using Prepaid-Card Systems and Market Share**

	Dec. 2008	Dec. 2009	Dec. 2010	Dec. 2011	Dec. 2012	Dec. 2013	Dec. 2014	Dec. 2015	Dec. 2016
<b>Nippon Game Card and JOYCO SYSTEMS</b>	<b>5,626</b>	<b>5,451</b>	<b>5,429</b>	<b>5,047</b>	<b>4,974</b>	<b>4,836</b>	<b>4,529</b>	<b>4,272</b>	<b>4,020</b>
Market share	54.7%	53.3%	53.3%	52.1%	51.7%	50.9%	48.7%	46.7%	45.1%
<b>Nippon Game Card</b>	<b>4,443</b>	<b>4,287</b>	<b>4,326</b>	<b>4,272</b>	<b>4,277</b>	<b>4,247</b>	<b>4,058</b>	<b>3,883</b>	<b>3,713</b>
Market share	43.2%	41.9%	42.5%	44.1%	44.4%	44.7%	43.6%	42.5%	41.6%
<b>JOYCO SYSTEMS</b>	<b>1,183</b>	<b>1,164</b>	<b>1,103</b>	<b>775</b>	<b>697</b>	<b>589</b>	<b>471</b>	<b>389</b>	<b>307</b>
Market share	11.5%	11.4%	10.8%	8.0%	7.2%	6.2%	5.1%	4.3%	3.4%
<b>Glory group</b>	<b>2,395</b>	<b>2,390</b>	<b>2,346</b>	-	-	-	-	-	-
Market share	23.3%	23.4%	23.0%	-	-	-	-	-	-
<b>Creation Card</b>	<b>1,196</b>	<b>1,094</b>	<b>1,015</b>	-	-	-	-	-	-
Market share	11.6%	10.7%	10.0%	-	-	-	-	-	-
<b>Glory Nasca</b>	<b>1,199</b>	<b>1,296</b>	<b>1,331</b>	<b>2,252</b>	<b>2,209</b>	<b>2,180</b>	<b>2,147</b>	<b>2,113</b>	<b>2,091</b>
Market share	11.7%	12.7%	13.1%	23.2%	22.9%	22.9%	23.1%	23.1%	23.4%
<b>Mars Engineering</b>	<b>1,919</b>	<b>2,049</b>	<b>2,090</b>	<b>2,109</b>	<b>2,094</b>	<b>2,066</b>	<b>2,065</b>	<b>2,062</b>	<b>2,028</b>
Market share	18.7%	20.0%	20.5%	21.8%	21.7%	21.7%	22.2%	22.6%	22.7%
<b>Universal Entertainment</b>	<b>341</b>	<b>335</b>	<b>316</b>	<b>282</b>	<b>263</b>	<b>222</b>	<b>180</b>	<b>171</b>	<b>147</b>
Market share	3.3%	3.3%	3.1%	2.9%	2.7%	2.3%	1.9%	1.9%	1.6%
<b>Daikoku Denki</b>	-	-	-	-	<b>89</b>	<b>198</b>	<b>369</b>	<b>502</b>	<b>603</b>
Market share	-	-	-	-	0.9%	2.1%	4.0%	5.5%	6.8%
<b>OIZUMI</b>	-	-	-	-	-	<b>4</b>	<b>15</b>	<b>21</b>	<b>28</b>
Market share	-	-	-	-	-	0.0%	0.2%	0.2%	0.3%
<b>Halls using prepaid-card systems</b>	<b>10,281</b>	<b>10,225</b>	<b>10,181</b>	<b>9,690</b>	<b>9,629</b>	<b>9,506</b>	<b>9,305</b>	<b>9,140</b>	<b>8,917</b>
<b>Total number of halls</b>	<b>12,937</b>	<b>12,652</b>	<b>12,479</b>	<b>12,323</b>	<b>12,149</b>	<b>11,893</b>	<b>11,627</b>	<b>11,310</b>	<b>10,986</b>

Source: Shared Research based on data from Community Safety Bureau and Prepaid System Association

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 December 2016, Nippon Game Card had 41.6% market share of halls using its prepaid-card system and JOYCO SYSTEMS 3.4%, or a combined 45.1% market share making it easily the largest company in the space: GLORY NASCA followed with 23.4%, and Mars Engineering had 22.7%.

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 Gamecard-Joyco Holdings 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, 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 FY03/17, had 616 member halls for a 7.0% market share. Daikoku Denki, like Mars Engineering, appears to be retaining clients by providing them with other peripheral devices.

## Strategy

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The market where the company is doing business is not expected to grow drastically, so the company and rivals are competing for a limited market share. The company looks to provide product lineups that meet market needs to develop its brand into one that has the trust of pachinko halls and fans.

The company has a large market share in the prepaid-card business. It intends to secure stable revenue from the large share and ease investment burdens by improvement of operational efficiency and cost synergy. It also plans to use its management resources effectively to create new core businesses and aims to strengthen corporate structure for long-term sustainable growth.



## Historical earnings results

### Q1 FY03/18 results

▷ Sales:	JPY4.5bn (-6.2% YoY)
▷ Operating profit:	JPY950mn (+39.7%)
▷ Recurring profit:	JPY958mn (+37.8%)
▷ Net income*:	JPY694mn (+81.2%)

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

Versus FY03/18 company forecasts, Q1 sales accounted for 26.8% (23.3% Q1 FY03/17), operating profit 43.2% (35.4%), recurring profit 43.5% (35.7%), and net income attributable to parent company shareholders 49.6% (JPY383mn in Q1 FY03/17 vs. JPY27mn full-year forecast).

The future of the pachinko business remains opaque: Fewer people are playing pachinko since the sources of entertainment are diversifying, operations with low-priced balls are becoming the norm, and countermeasures to reduce gambling addiction are being considered after the Act Concerning Promotion of Development of Integrated Resort Areas (IR Promotion Act) was passed in December 2016 (see the Market and value chain section).

By determining the various needs of pachinko halls in a timely manner and responding flexibly, the company was able to secure gross profit at about the same level as in Q1 FY03/17. In addition, by keeping SG&A expenses under control through structural reforms focusing on the relocation of the head office (consolidation of offices) and the implementation of a voluntary retirement program, profits from operating profit down saw significant YoY upside.

Sales broken down by product category were as follows.

- ▀ Equipment sales were JPY1.6bn (-3.9% YoY). Equipment sales declined along with a decline in the number of machines sold. The number of machines sold dropped to 12,016 units (-5.3% YoY), breaking down into 7,296 pachinko card systems (+19.9%) and 4,720 pachislot token dispensers (-28.5%).
- ▀ Card sales were JPY820mn (-11.2% YoY). Information management fees declined due to a fall in the total value of cards issued, and media fees were down due to a drop in the number of cards sold. The total value of cards issued declined from a fall in the number of member halls to 3,889 (-219 YoY; -5.3%) and standardization of operations with low-priced balls at pachinko halls.
- ▀ Income from system-usage fees totaled JPY2.0bn (-6.2% YoY) due to the aforementioned decrease in the number of member halls.
- ▀ Other income was JPY115mn (+0.9% YoY)

Gross profit declined to JPY2.1bn (-4.6% YoY) overall. However, the GPM improved 0.8pp YoY to 46.8%. Gross profit fell for all products, but the company limited the decline by curtailing discount sales stemming from excessive price competition.

- ▀ Gross profit for equipment sales was JPY239mn (-3.6% YoY) and the GPM improved 0.1pp to 15.3%. The company maintained GPM by conducting sales activities mainly at existing member halls, where there is less demand for new equipment.
- ▀ Gross profit for card sales was JPY523mn (-13.4% YoY) and the GPM was 63.8% (-1.6pp). The GPM fell due to a drop in revenue from information management fees within card sales.
- ▀ Gross profit for system-usage fees was JPY1.3bn (-0.6% YoY) and the GPM was 66.1% (+3.8pp). The GPM rose because of lower costs including lease fees.

SG&A expenses totaled JPY1.1bn (-24.7% YoY), of which personnel expenses were JPY416mn (-24.5%), R&D expenses were JPY82mn (-56.6%), and depreciation was JPY117mn (+19.4%). Personnel expenses fell due to the solicitation of applicants for

voluntary retirement (86 retirees) in FY03/17. R&D spending was down as a result of narrowing down the number of items under development and reviewing the development structure. Depreciation rose due to upgrading the core IT system in October 2016. There was a fall in amortization of goodwill from when Nippon Game Card made Nihon Leisure Card System its subsidiary in April 2008.

As a result, operating profit, recurring profit, and net income rose significantly YoY.

### FY03/17 results

Sales:	JPY20.4bn (-14.6% YoY)
Operating profit:	JPY1.9bn (versus a loss of JPY1.4bn in FY03/16)
Recurring profit:	JPY1.9bn (versus a loss of JPY1.4bn in FY03/16)
Net income*:	JPY27mn (versus a 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 as a result of curbing discounts on sales to member gaming halls, where there is less price competition.
- 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.

### Q3 FY03/17 results

- ▷ Sales: JPY15.7bn (-16.6% YoY)
- ▷ Operating profit: JPY1.6bn (versus a loss of JPY644mn in Q3 FY03/16)
- ▷ Recurring profit: JPY1.6bn (versus a loss of JPY600mn in Q3 FY03/16)
- ▷ Net income\*: JPY1.0bn (versus a loss of JPY612mn in Q3 FY03/16)

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

The pachinko business environment remains difficult: Fewer people are playing pachinko since the sources of entertainment are diversifying, operations with low-priced balls are becoming the norm, companies must respond to the consumption tax hike, and new industry regulations require the removal of machines that feed gambling addictions. In such an 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 by product type were as follows:

Equipment unit sales dropped significantly YoY. The market shrank as pachinko halls closed and went out of business, and the spend per card also declined. This caused sales for all products to drop YoY.

- Equipment sales dropped 26.8% YoY to JPY6.4bn. At first, the company planned to keep equipment unit sales on par with FY03/16, especially for its mainstay product G∞WIN'Z, but market conditions were tougher than expected. 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 card systems and token dispensing units and replacing ball-counting systems at existing member halls. As a result, equipment unit sales were 54,442 units (-39.5% YoY). By equipment type, the company sold 27,622 pachinko card units (-52.0% YoY) and 26,820 pachislot token dispensing units (-17.4% YoY).
- Card sales declined 9.2% YoY to JPY2.8bn. The value of cards issued (amount used by players) fell 12.3% YoY to JPY7.0tn and information management fees also dropped. In addition, media fees declined as the number of cards sold fell.
- System usage fee revenue fell 7.7% YoY to JPY6.2bn due to the number of member halls falling to 4,020 (-252 halls, -5.9% YoY) and lower unit prices of system usage fees. There were 51 new member halls (31 fewer YoY) and 215 contract cancellations (38 fewer stores YoY), for a net decline of 164 member halls from the end of FY03/16.
- Other income fell 0.5% YoY to JPY375mn.

Gross profit was up YoY for equipment and other income, but down YoY for card sales and system usage fee revenue, resulting in a 0.3% YoY overall increase in gross profit to JPY6.6bn. However, GPM was up 7.1pp YoY to 42.2%. By product type, gross profit was as follows:

- Gross profit from equipment sales increased 39.4% YoY to JPY853mn. GPM was up 6.4pp YoY to 13.4%. Equipment sales dropped 26.8% YoY but gross profit increased. 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 card systems and token dispensing units and replacing ball-counting systems at existing member halls. As a result, GPM from equipment sales increased YoY.

- ▶ Gross profit from card sales declined 7.2% YoY to JPY1.8bn and GPM rose 1.4pp to 63.6%. The increase in GPM reflected a drop in relatively low-margin media fees accompanying sales of prepaid cards.
- ▶ Gross profit from system usage fee revenue declined 3.6% YoY to JPY3.9bn and GPM rose 2.7pp to 63.2%. GPM rose as system usage costs declined following the upgrade of the company's data center.

SG&A expenses declined 30.9% YoY to JPY5.0bn, of which R&D expenses were down 72.1% YoY to JPY776mn and depreciation costs were down 26.9% YoY to JPY348mn. The company reduced R&D expenses by section and concentration of development, and it also cut depreciation costs including mold depreciation costs. Furthermore, sales-related expenses dropped in line with lower unit sales of equipment.

As a result of the above, the company stopped cutting prices past a certain point and worked on generating profits, resulting in gross profit slightly increasing YoY. The company also focused on cutting overall SG&A expenses, in particular minimizing R&D costs through narrowing development items and reassessing its development framework. As a result, profits from operating profit down saw significant YoY upside.

### FY03/16 results

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

\*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 to 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.

## FY03/15 results

- ▷ Sales: JPY25.7bn (-24.7% YoY)
- ▷ Operating profit: JPY816mn (-53.7% YoY)
- ▷ Recurring profit: JPY836mn (-54.7% YoY)
- ▷ Net income\*: JPY293mn (-67.5% YoY)

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

The business environment remains difficult for pachinko halls, the company's main clients. The population of players is declining, and revenues are falling due to the entrenchment of low-price pachinko. Although the impact of the consumption tax hike on the operation of pachinko halls has been limited, pachinko halls have faced downward pressure on revenues owing to a failure to pass on the tax hike to customers.

Pachinko halls are increasingly cutting costs, and are cautious when making capex decisions such as new store openings and remodeling existing stores. This is especially true for new peripheral equipment purchases—many pachinko hall operators held out to see whether to adopt the card subtraction system or the ball subtraction system to pass on the consumption tax hike to customers, resulting in limited renewal capex demand (see below for information on the different methods of collecting consumption tax). Orders were sluggish, and mostly concentrated on systems for passing on the consumption tax to customers. GCJ was preparing to be able to respond to orders for both types of system, but its launch of a ball subtraction system was delayed until later than June 2014, meaning it struggled to win orders.

Unit sales of equipment were down YoY, resulting in lower revenues. Card sales and system usage fees also declined as competition drove prices down and the number of member stores fell as pachinko halls closed and went out of business in the face of difficult market conditions. As a result, overall sales and profits declined.

## Equipment

▷ Sales: JPY11.4bn (-38.4% YoY)

Unit sales fell in line with fewer pachinko hall openings and renovations. The company won 93 new stores (-120 YoY). The company also promoted the card subtraction system to pass on the consumption tax hike to customers, but the ball/token subtraction system prevailed in the market as a whole. It introduced a token dispenser using the token subtraction system in June 2014, and a card unit using the ball subtraction system in September 2014, but it still lost market share because it was slower than competitors to introduce these products.

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.

The company sold 103,433 units (-41.6% YoY), broken down as follows:

- ▷ Pachinko card units: 57,717 (-47.7% YoY)
- ▷ Units with ball-counting systems: 41,300 (-42.8% YoY)
- ▷ Pachislot token dispensing units: 45,716 (-31.5% YoY)
- ▷ Units with token-counting systems: 9,349 (+6.3% YoY).

The number of stores using the company's ball/token counting systems increased to 1,805 at the end of March 2015, from 1,623 at the end of March 2014.

## Cards

▷ Sales: JPY4.2bn (-12.9% YoY)

The number of cards sold was down YoY. The total value of all cards issued was JPY11.3tn (-6.4% YoY), so information management fees also fell.

## System usage fees

▷ Sales: JPY9.6bn (-7.7% YoY)

Sales fell from a year earlier because of a decline in member halls and average system usage fee per customer. The total number of member stores was 4,443, compared with 4,772 at the end of March 2014. Nippon Game Card had 3,993 member stores, down from 4,205 the previous year. JOYCO SYSTEMS had 450 member stores, down from 567. Member stores declined as pachinko operators closed or went out of business, leading to 422 contract cancellations. The number of new stores was 93. As a result, Gamecard-Joyco's market share by member stores fell to 48.3% at the end of March 2015, down from 50.6% at the end of March 2014.

## Other

▷ Sales: JPY503mn (+19.4% YoY)

Gross profit declined by JPY1.3bn from a year earlier to JPY9.7bn. The breakdown: gross profit from equipment sales (-JPY1.2bn); gross profit from card sales (-JPY141mn); gross profit from system usage fees (-JPY76mn). GPM from equipment sales was negatively affected by declining unit sales and increased competition, which reduced the margin by 2.3pp to 10.4%. Gross profit from card sales did not decline as much as card sales because the cost of issuing cards also declined. As a result, GPM on card sales increased 5.7pp to 66.5%. A decline in system usage fees also had limited impact on gross profit as costs declined with a renewal to the company's data center. GPM on system usage fees thus increased 3.7pp to 57.5%.

SG&A expenses fell by JPY368mn YoY because advertising and sales promotion expenses declined with the fall in unit sales, although R&D spending rose by JPY168mn to JPY3.1bn.

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## Other information

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### History

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#### 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

### 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 refers to 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 an 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 refers to 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 that profits will greatly exceed initial targets due to achieving a gross profit as it puts an end to selling at a loss, caused by excessive price competition.

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%

## May 2016

On **May 12, 2016**, the company announced full-year earnings results for FY03/16, as well as its year-end dividends forecast and a reduction in compensation for board members.

### Year-end dividend forecast

The company decided to retain its dividends forecast of JPY30 (annual dividend of JPY60) that it had set at the beginning of FY03/16.

The company expects to book a loss in FY03/17 for the second year in a row, and has taken this into consideration for its year-end dividend forecast for FY03/17. In order to maintain its financial health, it has decided to pay a yearly dividend of JPY30 (interim dividend of JPY0, year-end dividend of JPY30) for FY03/17.

### Reduction in executive compensation

Given its FY03/16 results and its FY03/17 forecast, the company decided to reduce compensation for board members in order to clarify executive responsibilities. The reduction was enacted from April 2016 to the present.

Details of the reduction in compensation for board members

- ▷ Representative Director: Down 15%
- ▷ Director: Down 10%
- ▷ Executive officer: Down 5%

## April 2016

On **April 26, 2016**, the company announced forecast revisions, the booking of an extraordinary loss, and reversal of a portion of deferred tax assets.

FY03/16 earnings forecasts (figures in parentheses are previous forecasts)

- ▷ Sales: JPY23.8bn (JPY23.1bn)
- ▷ Operating loss: JPY1.4bn (JPY1.4bn)
- ▷ Recurring loss: JPY1.4bn (JPY1.4bn)
- ▷ Net loss: JPY2.1bn (JPY1.3bn)

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

Reasons for revisions

Sales are expected to be largely in line with company's February 10, 2016 earnings forecasts. However, the net loss is likely to be wider than the initial estimate because of the booking of an extraordinary loss and the reversal of a portion of deferred tax assets.

Details regarding the extraordinary loss

This loss stems from an expected impairment charge of JPY476mn on the book value write down of the recoverable amount of certain fixed assets owned by two subsidiaries. The subsidiaries have seen a sharp decline in the recoverable amount for the assets and a fall in profitability.

Details regarding the partial reversal of deferred tax assets

Based on recent earnings and expected earnings at the two subsidiaries, the company reevaluated the recoverability of its deferred tax assets and decided to reverse a portion of those assets. It plans to book deferred income taxes of JPY170mn.

## February 2016

On **February 10, 2016**, the company revised its full-year FY03/16 earnings forecasts.

## Major shareholders

Top shareholders	Stake
SANKYO CO., LTD.	14.94%
DATA-ART, Inc.	4.43%
Heiwa Corporation	4.29%
Kyoraku Sangyo Co., Ltd.	4.29%
Sammy Inc.	4.29%
Daiichi Co., Ltd.	4.29%
Newgin Group	4.29%
Fujishoji Co., Ltd.	4.29%
SAXA, Inc.	3.57%
Sansei R&D Co., Ltd.	3.24%
SANYO BUSSAN K.K.	3.24%
DAITO GIKEN, Inc.	3.24%
TAKAO Co., Ltd.	3.24%
TAKEYA K.K.	3.24%
Toyomaru industry Co., Ltd.	3.24%

Source: Shared Research based on company data  
As of March 31, 2017

## Company profile

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

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ADJUVANT COSME JAPAN CO., LTD.	FRONTEO, Inc.	ONWARD HOLDINGS CO.,LTD.
Aeon Delight Co., Ltd.	Fujita Kanko Inc.	PARIS MIKI HOLDINGS Inc.
Ai Holdings Corporation	FURYU CORPORATION	PIGEON CORPORATION
AnGes Inc.	Gamecard-Joyco Holdings, Inc.	RACCOON CO., LTD.
Anicom Holdings, Inc.	GCA Corporation	RESORTTRUST, INC.
Anritsu Corporation	Grandy House Corporation	ROUND ONE Corporation
Apamanshop Holdings Co., Ltd.	Hakuto Co., Ltd.	RVH Inc.
Arealink Co.,Ltd.	Happinet Corporation	RYOHIN KEIKAKU CO., LTD.
Artspark Holdings Inc.	Harmonic Drive Systems Inc.	SanBio Company Limited
AS ONE CORPORATION	Hearts United Group Co., Ltd.	SANIX INCORPORATED
Ateam Inc.	IDOM Inc.	Sanrio Company, Ltd.
Aucfan Co., Ltd.	IGNIS LTD.	SATO HOLDINGS CORPORATION
Axell Corporation	Inabata & Co., Ltd.	SBS Holdings, Inc.
Azbil Corporation	Infomart Corporation	Seria Co.,Ltd.
Bell-Park Co., Ltd.	Intelligent Wave, Inc.	SHIP HEALTHCARE HOLDINGS, INC.
Benefit One Inc.	istyle Inc.	SMS Co., Ltd.
Canon Marketing Japan Inc.	Itochu Enex Co., Ltd.	Snow Peak, Inc.
Carna Biosciences, Inc.	J Trust Co., Ltd	SOURCENEXT Corporation
CERES INC.	Japan Best Rescue System Co., Ltd.	Star Mica Co., Ltd.
Chiyoda Co., Ltd.	JINS Inc.	SymBio Pharmaceuticals Limited
Chugoku Marine Paints, Ltd.	KAMEDA SEIKA CO., LTD.	Takashimaya Company, Limited
cocokara fine Inc.	Kenedix, Inc.	Takihyo Co., Ltd.
COMSYS Holdings Corporation	KFC Holdings Japan, Ltd.	TAMAGAWA HOLDINGS CO., LTD.
CRE, Inc.	LAC Co., Ltd.	TEAR Corporation
CREEK & RIVER Co., Ltd.	Lasertec Corporation	3-D Matrix, Ltd.
Daiseki Co., Ltd.	MATSUI SECURITIES CO., LTD.	TKC Corporation
DIC Corporation	MEDINET Co., Ltd.	TOKAI Holdings Corporation
Digital Arts Inc.	Milbon Co., Ltd.	Tri-Stage Inc.
Digital Garage Inc.	MIRAIT Holdings Corporation	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.	YUMESHIN HOLDINGS CO., LTD.
en-Japan Inc.	NIPPON PARKING DEVELOPMENT Co., Ltd.	Yushiro Chemical Industry Co., Ltd.
euglena Co., Ltd.	Nisshinbo Holdings Inc.	ZAPPALLAS, INC.
Ferrotec Holdings Corporation	NS TOOL CO., LTD.	

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## Contact Details

### Shared Research Inc.

3-31-12 Sendagi Bunkyo-ku Tokyo, Japan

<http://www.sharedresearch.jp>

Phone: +81 (0)3 5834-8787

Email: [info@sharedresearch.jp](mailto:info@sharedresearch.jp)