

Asia Pacific Gaming

Takeaways from our corporate day. Cautious on VIP outlook. Diversify to mass-market and non-Chinese

Asia Leisure Explore>



In addition to Macau operators (see our Jan 11 report here), we also invited 4 other Asia gaming operators and junkets, including Paradise, Naga Corp, Suncity Group and its 80%-owned subsidiary Summit Ascent, to join our Gaming Corporate Day on Jan 8, 2021. In South Korea, although monthly GGR run-rate showed little improvement amid continued border closure, Paradise said that their business is able to break even on EBITDA at the current GGR run-rate and is hopeful to see resumption of travels in coming months. Naga Corp in Cambodia said its GGR recovery is sustaining the momentum in 3Q20 (i.e., VIP rolling/mass drop/slot handle back to 93%/71%/100% of pre-closure level) and reiterate their commitment to investing in Naga Phase 3 and a US\$350mn non-gaming resort in Siem Reap, located 500 meters south of the outer restricted zone surrounding Angkor Wat. In Vladivostok, Tigre de Cristal operated by Summit Ascent saw solid pickup in local gaming demand which helped to turn around its EBITDA in 2H20. Overall, all operators acknowledge that the VIP gaming market could be impacted by tightened capital controls by the Chinese government and are looking for ways to diversify their exposure either to mass-market/non-gaming segments and/or to players from other origins (e.g., Korea, ASEAN). We maintain our Neutral rating on Naga Corp and Paradise and prefer Kangwon Land within our Korea coverage universe. We also like Macau gaming stocks and Genting Malaysia.

Paradise Co. (034230.KQ, Neutral)

With the border of South Korea remaining closed and the resurgence of new COVID-19 cases during the winter, Paradise's monthly GGR showed little improvement and one of its properties located in Seoul, Walker Hill casino, experienced a third-round of business suspension in Dec-2020. On a positive note, company guided that at the current GGR run-rate of W20bn per month, it is able to break even on EBITDA. Depending on the virus situation, they are hopeful to see gradual volume increase driven by players from Japan and other markets, while

Simon Cheung, CFA

+852-2978-6102 simon.cheung@gs.com Goldman Sachs (Asia) L.L.C.

Alpha Wang +852-2978-1984 | alpha.wang@gs.com Goldman Sachs (Asia) L.L.C.

Carrie Jiang +852-2978-7391 | carrie.jiang@gs.com Goldman Sachs (Asia) L.L.C.

Goldman Sachs does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. For Reg AC certification and other important disclosures, see the Disclosure Appendix, or go to www.gs.com/research/hedge.html. Analysts employed by non-US affiliates are not registered/qualified as research analysts with FINRA in the U.S.

acknowledging that the Chinese government is discouraging players to gamble overseas (see our Oct 5 report). Factoring in the latest GGR trend and ongoing travel restrictions, we revise our FY20-22E adjusted EBITDA forecasts by -26% to 6% and our 12-month target price changes to KRW15,300 (from KRW15,800). Maintain Neutral on less visibility of GGR recovery and heavy reliance on the return of foreign players. Prefer Kangwon Land (Buy) within our Korea gaming coverage universe.

- EBITDA breakeven at current GGR run-rate helped by additional labor cost savings With an average monthly GGR of KRW18bn in 3Q20 (-74% yoy), Paradise was close to EBITDA breakeven and posted a small EBITDA loss of -KRW5bn. Its monthly data show that its 4Q20 GGR has picked up to an average of KRW25bn in 4Q20 (-66% yoy), helped by seasonal strength and better win rate in Dec (KRW41bn, vs. KRW20/8bn in Oct/Nov). At the current run rate, the group said it should be able to achieve EBITDA break even, although we note that additional overhead costs incurred at year-end typically have dragged its 4Q EBITDA performance historically. We model -KWR20bn EBITDA loss in 4Q20, adding up to -KWR12bn EBITDA loss in FY20E. Having reduced its costs over the last 1-2 quarters, the company does not see much scope for incremental cost savings in coming quarters.
- Further GGR recovery hinges on border reopening. Target more Japanese players to make up for likely shallower Chinese recovery Given the recent resurgence of COVID-19 cases in Seoul and correspondingly the closure of Walker Hill casino from Nov 24-29, and Dec 15-Jan 3 (26 days in total), management believes it will take some time for the COVID situation to get controlled and that a full normalization of travel demand may not come through until 2H21. For now, all of its GGR comes from Korea locals with foreign passports, which historically account for ~20% of overall business volume. In addition, as flagged in our prior report (Oct 5), with China's capital control and discouraging players from visiting overseas, they are mindful that Chinese VIP players may not fully recover back to prior level, and hence target to attract more Japanese players to make up for the difference. In the past, 40% of Paradise's VIP GGR came from Japanese players, for example.
- Close to cash break even. No imminent liquidity issues As mentioned above, Paradise expects to achieve EBITDA breakeven at the current monthly run-rate. Given limited interest expenses and maintenance capex, we believe the company is not far from turning cash breakeven either. The company also does not see any liquidity issues, and believes it can tap the debt market when necessary, considering the low current interest rates and its solid AA- credit rating (noting it can borrow up to KRW300bn with its land as collateral).

12-month TP: KRW15,300 (SOTP-based). Key risks: (1) Prolonged China-Korea geopolitical tensions affecting Chinese visitation; (2) Better-/worse-than-expected ramp-up on Paradise City, first IR in Korea, opened in April 2017; (3) Later-/earlier-than-expected materialization of Japan's gaming market.

Naga Corp Ltd. (3918.HK, Neutral)

After the 3-month casino closure in 2Q20, Naga Corp resumed its operations from July

Goldman Sachs Asia Pacific Gaming

8, 2020 and have seen solid GGR recovery led by mass-market (i.e. VIP rolling/mass drop/slot handle in 3Q20 back to 93%/71%/100% of pre-closure level). Management is mindful of potential impact from China's ongoing capital controls and places more emphasis on growing its mass-market and non-gaming businesses. In the longer run, other than the scheduled launch of Naga 3 by the end of 2025 (for which the majority of capex will only be incurred in 2024-25), the company has recently secured the approval by the Cambodia government to develop another non-gaming project in Siem Reap, located 500 meters south of the outer restricted zone surrounding Angkor Wat. The site is 75 hectares in size with a 50-year lease term, which aims to better promote the tourism industry of Cambodia and allow the company to cross-sell their casino in town. While we are pleased to see solid recovery of its mass-market volume supported by gaming demand of expatriates, we stay Neutral on valuation and its high exposure to the volatile Chinese VIP segment.

- GGR recovery sustained into 4Q20. Stable mass-market volume trend As mentioned in our previous note (Oct 5), Cambodia and other regional markets have experienced pent-up demand in initial months shortly after reopening. In 3Q20, for example, its mass market drop has recovered back to 93% of pre-closure level, supported by the large expatriate community in Phnom Penh city. For VIP, its pace lags back to 71% of pre-COVID level. We believe further recovery relies on the return of overseas VIP players especially from adjacent Malaysia and Singapore. As the viral situation was somewhat under control in Cambodia (on average less than 10 new cases per day in recent months), management commented its GGR trend continued to recover gradually in 4Q20. More non-gaming space has been converted for gaming use to cope with the social distancing requirements. For example, the Garden Buffet Restaurant at Naga 1 has been refurbished into an Electronic Table Gaming zone.
- Focus on mass-market and non-gaming segments in light of the VIP challenges When asked about the potential impact of China's capital control on the VIP segment, management believes it would be more felt by the junkets and said that they hope to make it up by putting more emphasis on growing the mass-market segment. Its recent announcement to build a US\$350mn resort (including hotels, water theme park, MICE facilities etc.) near Angkor, if executed well, should help Naga to beef up its database for cross-selling with its casino properties, although it is questionable whether such investment would be return dilutive vs. its gaming amenities.
- Naga 3 still targets completion by end-FY25. Only US\$200mn budgeted capex for FY21-22E In relation to the updated plan on Naga 3, the company commented that the plan remains unchanged and the project has broken ground in 4Q20, with various studies and tests (soil, wind tunnel etc.) ongoing. In terms of capex spending timeline, they said the majority of total budgeted US\$3.5bn capex would only be incurred in FY24-25E and guided US\$200mn in FY21-22E, well covered by its EBITDA (US\$562/648mn in FY21/22E).

12-month TP: HK\$10.60 (SOTP-based). Key risks: (1) Faster-/slower-than-expected ramp-up of Naga2; (2) Faster-/slower-than-expected addition of flights from China.

Suncity Group (1383.HK, Not Covered)

With newsflow on China's ongoing tightened capital control and greater scrutiny on Chinese gamblers playing overseas, investors have raised concern that Asia's VIP gaming market will take much time to recover, with some arguing that VIP GGR may never go back to 2019 levels. Suncity acknowledges such challenges and so far have only seen their rolling volume back to ~20% of pre-COVID19 levels in Macau, for example, saying that most of its players find it quite troublesome to return (e.g., suspension of self-serviced kiosk for IVS applications, nucleic test requirements). This said, they have no intention to change their strategies of expanding into overseas markets in the next 2-3 years, i.e., building their own IRs across Asia outside of Macau. They have delayed the grand opening of the Vietnam casino, Hoiana, till 2H21, but continue to operate Tigre de Cristal in Vladivostok and the construction work at Westside casino in Manila.

- VIP business remains soft across Asia Consistent with our cautious view on the VIP segment (see Oct 5, Sept 6 reports), Suncity commented that the pace of VIP recovery has so far been behind expectation. In response to the soft market conditions, it has decided to close down VIP rooms in Australia, Korea and selective in Macau (i.e., Parisian). VIP GGR in Macau only recovered to c.20% of pre-COVID19 level in December, lagging behind the overall GGR recovery pace of -66% yoy for the market. Pre-booking for the CNY holiday by its VIP customers are also relatively light. Overall, the group is taking the view that the Asia VIP gaming market will take time and only recover gradually.
- Diversify their junket exposure by investing in their own IRs The group already started to contemplate diversifying away from its junket business model during the market downturn in 2014-15. A few years ago, they articulated a strategy to build their own IRs across six Asian countries, where they see attraction and can bring their customers over, leveraging on its established player database. In Vietnam, after the soft launch in Jun 2020, its flagship IR Hoiana is seeing minimum business volume, as the casino is not legally allowed to serve local players and inbound travelers remain muted with various travel restrictions still in place. In Vladivostok, the company budgets to spend US\$200mn for Phase III upgrade of Tigre de Cristal. In the Philippines, the Westside City project will cost US\$1.2bn and is expected to be completed in 2023. Altogether, the group would operate 680 gaming tables, 4,000+ hotel rooms, and 3,800+ slot machines by 2024 across all properties in Asia.
- Also diversifying its customer base from China to Korea Management believes Koreans' gaming demand is underserved and targets to growing its customer base there, as a way to diversify its exposure from Chinese gamblers. For instance, despite a one-single property 5 hour drive away from the city of Seoul, Kangwon Land contributes over half of Korea's gaming revenue. Given the proximity between Vladivostok and South Korea (~2-hour flight), they believe Tigre de Cristal should be able to capture such underserved Koreans' gambling demand. Indeed, it already has quite a sizeable customer database of ~10k Korean players (vs. 180k players in total). When asked about how to better satisfy the needs of this group of customers, Suncity said Korean players generally prefer more space and a separated table to gamble on their own.

Summit Ascent Holdings (0102.HK, Not Covered)

Summit Ascent, which operates Tigre de Cristal in Vladisotok, is 80% controlled by Suncity Group. Local Russian gaming demand has recovered fairly quickly in recent months and the property managed to achieve positive EBITDA in 2H20 (vs. -US\$3mn in 1H20). Once the border is re-opened, the company will focus its marketing efforts to attract more players from China, Korea, Japan and potentially Southeast Asia (targeted to contribute 70% of its GGR) by leveraging Suncity's strong customer database. Based on the existing plan, the property will house 350 hotel rooms, 300 slots, 75 tables (20 direct VIP, 20 junket VIP, 35 mass) when Phase 2 is opened in 2023E. They are hopeful that the property will generate over US\$200mn EBITDA.

As opposed to relying on Suncity to bring in VIP players and pay them high junket commission, Summit Ascent will adopt a direct VIP model to approach and extend credits to its players on its own, using Suncity's customer database. While this would allow the company to preserve more profit without having to pay junket commission, it would also mean Summit Ascent has to bear credit risk on its own. Management believes it is manageable given its limited VIP exposure initially. Overall, they believe US\$200mn EBITDA is achievable in the longer run.

Exhibit 1: Summary of Paradise financials

Cast of goods sold (\$38,8) 0.0 0.0 0.0 Accounts receivable 37,6 15.0 15.0 15.0 SSAA (\$7.7) 0.0	Profit model (W bn)	12/19	12/20E	12/21E	12/22E	Balance sheet (W bn)	12/19	12/20E	12/21E	12/22
Cact of goods soled (88.88) 0.0 0.0 0.0 0.0 Accounts recovable 37.6 15.0 15.0 15.0 SSGAA (87.7) 0.0 Intermetry 6.2 3.3 5.1 16.0 SSGAA (87.7) 0.0 Intermetry 6.2 3.3 5.1 16.0 SSGAA (87.7) 0.0 Intermetry 6.2 3.3 5.1 16.0 SSGAA (87.7) 0.0 1.0 - Intermetry 6.2 3.3 5.1 16.0 SSGAA (87.7) 0.0 Intermetry 6.2 3.3 5.1 16.0 SSGAA (87.7) 0.0 Intermetry 6.2 2.2 12.0 SSGAA (87.7) 0.0 Intermetry 6.2 2.2 12.0 SSGAA (87.7) 0.0 Intermetry 6.2 2.2 12.0 SSGAA (10.9) 0.0 Intermetry 6.2 2.2	Total revenue	979.4	474.8	729.4	983.0	Cash & equivalents	221.6	373.5	451.2	612.
SGSAN (877) 0.0										15.
Page										6.
College						•				216
Description 162,0 11,5 107,2 21,8 Net PPRE 2,436,4 2,786 2,320,0 2,285 Description 2,00 107,4 (101,5)										851
Depreciation & amortization (1109)		162 9								
EBIT										
Interest income	The state of the s			٠,						
Internet pepares (2.2 b) (5.2 c) (5.0			٠, ,							
Income (100s) from uncons. subs. 11.5 8.0 8.0 8.0 8.0 8.0 Merchant payable (100s) 118.6 1						_				
Others	The state of the s		(50.5)			Total assets	3,470.4	3,414.3	3,320.0	3,324
Pretax profits							50.0	440.0	440.0	
March Marc										
Minorities 8.5 5.1 9.9 (14.0) Total current liabilities 62.4 697.1										
Note 1.00					, ,					
Nel income prpreferred dividends 15.0 (6.6.6) (19.4) 43.8 Other long-term liabilities 40.7.6 407.6 4	Minorities	8.5	55.1	9.9	(14.0)					
Preferred dividends Total long-term liabilities 1,233,7 1,233,7 1,33,						_				
Net income (pre-exceptionale) 15.0 (66.6) (19.4) 43.8 The Post-lax exceptionals 15.0 (66.6) (19.4) 43.8 The Post-lax exceptional 15.0 (66.6) (19.4) 43.8 The Post-lax exceptional	Net income pre-preferred dividends	15.0	(65.6)	(19.4)	43.8	Other long-term liabilities				407
Post-Lax exceptionals	Preferred dividends					Total long-term liabilities	1,233.7	1,233.7	1,183.7	1,133
Net income 15.0 (65.6) (19.4) 43.8 Preferred shares - - - - -	Net income (pre-exceptionals)	15.0	(65.6)	(19.4)	43.8	Total liabilities	1,866.2	1,930.8	1,880.8	1,830
Total common equity	Post-tax exceptionals									
EPS (basic, pore-except) (W) 176	Net income	15.0	(65.6)	(19.4)	43.8	Preferred shares				
EPS (diluted, post-except) (W) 176 (770) (228) 515 FS (diluted, post-except) (W) 176 (770) (228) 515 FS (diluted, post-except) (W) 176 (770) (228) 515 Total liabilities & equity 3,470,4 3,414,3 3,326,0 3,324 DPS (W) 100 0 106 106 DW deed payout ratio (%) 56.9 0.0 0 (46.4) 20.5 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow yield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 3,470,4 325.8 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 30 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 17,11 (538.4) 70.4 325.8 FORCH (%) 8.3 4.3 7.7 11 EVPS (W) 1,11 (37) (0.6) 14,10 (0.6)						Total common equity	1,266.3	1,200.7	1,172.2	1,207
EPS (diluted, post-except) (W) 176 (770) (228) 515 FS (diluted, post-except) (W) 176 (770) (228) 515 FS (diluted, post-except) (W) 176 (770) (228) 515 Total liabilities & equity 3,470,4 3,414,3 3,326,0 3,324 DPS (W) 100 0 106 106 DW deed payout ratio (%) 56.9 0.0 0 (46.4) 20.5 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow yield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 39 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 3,470,4 325.8 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 30 8.8 8.5 13.6 EVPS (W) 14,865 14,095 13,761 14,1 Fere cash flow gield (%) 17,11 (538.4) 70.4 325.8 FORCH (%) 8.3 4.3 7.7 11 EVPS (W) 1,11 (37) (0.6) 14,10 (0.6)	EPS (basic, pre-except) (W)	176	(770)	(228)	515	Minority interest	337.9	282.8	272.9	286
DPS (W) 100 0 106 106 106 107 107 107 108 108 109 109 109 109 109 109 109 109 109 109		176	(770)	(228)	515					
DPS (W) 100 0 106 10	EPS (diluted, post-except) (W)	176	(770)	(228)	515	Total liabilities & equity	3,470.4	3,414.3	3,326.0	3,324
Dividend payout railo (%) 6.9 0.0 (46.4) 20.5 BVPS (W) 14,865 14,095 13,761 14,15 Free cash flow yield (%) 3.9 8.8 8.5 13.6						, ,				
Free cash flow yield (%) 3.9 8.8 8.5 13.6	• ,					BVPS (W)	14.865	14.095	13.761	14.1
Sales growth							.,,	,		,.
Sales growth	Growth & margins (%)	12/19	12/20F	12/21F	12/22F	Ratios	12/19	12/20F	12/21F	12/22
EBIT for growth 118.6 (107.1) 1,028.8 97.6 ROE (%) 1.2 (5.3) (1.6) 3 (1.6) 3 (1.6) 1.2										
EBIT growth 171.1 (538.4) 98.4 NM ROA (%) 0.5 (1.9) (0.6) 1.1 (1.9) (1.6) 1.1 (1.7)										
Net income growth 171.1 (538.4) 70.4 325.8 ROACE (%) 1.1 (3.7) 0.2 44 EPS growth 171.1 (538.4) 70.4 325.8 Inventory days 2.8 NM								, ,	. ,	
EPS growth 171.1 (538.4) 70.4 325.8 Inventory days 2.8 NM NM NM A Gross margin 14.3 100.0 100.0 100.0 100.0 Receivables days 12.4 20.2 7.5 EBITOM margin 16.6 (2.4) 14.7 21.5 Pagable days 37.7 NM NM NM EBITOM margin 5.3 (25.0) (0.3) 10.8 Net debVequity (%) 55.9 50.2 42.7 22.5 Interest cover - EBIT (X) 1.1 NM	_								. ,	
Gross margin 14.3 100.0 100.0 100.0 100.0 EBITDA margin 16.6 (2.4) 14.7 21.5 Payable days 37.7 NM	_									
EBITDA margin 16.6 (2.4) 14.7 21.5 Payable days 37.7 NM	_									
EBIT margin 5.3 (25.0) (0.3) 10.8 Net debt/equity (%) 55.9 50.2 42.7 27 interest cover - EBIT (X) 1.1 NM NM 2 Cash flow statement (W bn) 12/19 12/20E 12/21E 12/22E 12/2E 12/22E 12/2E 12/22E 12/2E 12/22E 12/22E 12/22E 12/22E 12/22E 12/22E 12/22E 12/22E 12/2E 12/22E 12						•				
Interest cover - EBIT (X)										
Cash flow statement (W bn) 12/19 12/20E 12/21E 12/22E Valuation 12/19 12/22E Valuation 12/19 12/20E 12/21E 12/22E Valuatio	EBIT margin	5.3	(25.0)	(0.3)	10.8		55.9	50.2	42 7	27
Net income pre-preferred dividends 15.0 (65.6) (19.4) 43.8 D&A add-back 110.9 107.4 109.1 105.6 P/E (analyst) (X) 101.3 NM NM 30 Minorities interests add-back (8.5) (55.1) (9.9) 14.0 P/B (X) 1.2 1.1 1.1 1.1 NM 20.7 56 Other operating cash flow 95.9 98.7 98.7 98.7 EV/GCI (X) 1.0 0.9 0.8 0.6 Cash flow from operations 156.8 181.9 176.6 260.3 Dividend yield (%) Capital expenditures (84.9) (40.0) (40.0) (40.0) Acquisitions Divestitures Cash flow from investments (222.5) (40.0) (40.0) (40.0) Dividends paid (common & pref) (8.5) 0.0 (9.0) (50.0) Common stock issuance (repurchase) Cash flow from financing 80.2 0.0 (59.0) Total cash flow 105.4 151.9 77.6 161.3 Note: Last actual year may include reported and estimated data.						Interest cover - FRIT (X)	1.1			2
D&A add-back 110.9 107.4 109.1 105.6 Minorities interests add-back (8.5) (55.1) (9.9) 14.0 P/B (X) 1.2 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1						Interest cover - EBIT (X)	1.1	NM		2
Minorities interests add-back (8.5) (55.1) (9.9) 14.0 Net (inc)/dec working capital (56.5) 96.6 (1.8) (1.8) EV/EBITDA (X) 16.9 NM 20.7 Second Cash flow 95.9 98.7 98.7 98.7 98.7 EV/GCI (X) 1.0 0.9 0.8 Cash flow from operations 156.8 181.9 176.6 260.3 Dividend yield (%) 0.6 0.0 0.7 Capital expenditures (84.9) (40.0) (40.0) (40.0) (40.0) Acquisitions	` '							NM	NM	
Net (inc)/dec working capital (56.5) 96.6 (1.8) (1.8) (1.8) (1.8) (20.7) (56.5) 96.6 (1.8)	Net income pre-preferred dividends	15.0	(65.6)	(19.4)	43.8	Valuation	12/19	NM 12/20E	NM 12/21E	12/22
Other operating cash flow 95.9 98.7 98.7 98.7 98.7 EV/GCI (X) 1.0 0.9 0.8 Cash flow from operations 156.8 181.9 176.6 260.3 Dividend yield (%) 0.6 0.0 0.7 Capital expenditures (84.9) (40.0) (40.0) (40.0) (40.0) Acquisitions	Net income pre-preferred dividends D&A add-back	15.0 110.9	(65.6) 107.4	(19.4) 109.1	43.8 105.6	Valuation P/E (analyst) (X)	12/19 101.3	NM 12/20E	NM 12/21E NM	12/22
Capital expenditures (84.9) (40.0) (40.0) (40.0) (40.0) Acquisitions	Net income pre-preferred dividends D&A add-back Minorities interests add-back	15.0 110.9	(65.6) 107.4 (55.1)	(19.4) 109.1 (9.9)	43.8 105.6	Valuation P/E (analyst) (X) P/B (X)	12/19 101.3 1.2	NM 12/20E NM 1.1	NM 12/21E NM 1.1	12/22 30 1
Capital expenditures (84.9) (40.0) (40.0) (40.0) (40.0) Acquisitions Divestitures (137.6) Cash flow from investments (222.5) (40.0) (40.0) (40.0) Dividends paid (common & pref) (8.5) 0.0 (9.0) (9.0) (40.0) Dividends paid (common & pref) (8.5) 0.0 (50.0) (50.0) Common stock issuance (repurchase) Other financing cash flows (18.7) 0.0 Cash flow from financing 80.2 0.0 (59.0) (59.0) Total cash flow 14.5 151.9 77.6 161.3 Note: Last actual year may include reported and estimated data.	Net income pre-preferred dividends D&A add-back Minorities interests add-back	15.0 110.9 (8.5)	(65.6) 107.4 (55.1)	(19.4) 109.1 (9.9)	43.8 105.6 14.0	Valuation P/E (analyst) (X) P/B (X)	12/19 101.3 1.2	NM 12/20E NM 1.1	NM 12/21E NM 1.1	12/2
Acquisitions	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital	15.0 110.9 (8.5) (56.5)	(65.6) 107.4 (55.1) 96.6	(19.4) 109.1 (9.9) (1.8)	43.8 105.6 14.0 (1.8)	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X)	12/19 101.3 1.2 16.9	NM 12/20E NM 1.1 NM	NM 12/21E NM 1.1 20.7	30
Acquisitions	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow	15.0 110.9 (8.5) (56.5) 95.9	(65.6) 107.4 (55.1) 96.6 98.7	(19.4) 109.1 (9.9) (1.8) 98.7	43.8 105.6 14.0 (1.8) 98.7	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	30
Divestitures	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations	15.0 110.9 (8.5) (56.5) 95.9 156.8	(65.6) 107.4 (55.1) 96.6 98.7 181.9	(19.4) 109.1 (9.9) (1.8) 98.7 176.6	43.8 105.6 14.0 (1.8) 98.7 260.3	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	30
Others (137.6)	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations Capital expenditures	15.0 110.9 (8.5) (56.5) 95.9 156.8	(65.6) 107.4 (55.1) 96.6 98.7 181.9	(19.4) 109.1 (9.9) (1.8) 98.7 176.6	43.8 105.6 14.0 (1.8) 98.7 260.3	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	12/2
Cash flow from investments (222.5) (40.0) (40.0) (40.0) Dividends paid (common & pref) (8.5) 0.0 (9.0) (9.0) Inc/(dec) in debt 107.4 0.0 (50.0) (50.0) Common stock issuance (repurchase) Other financing cash flows (18.7) 0.0 Cash flow from financing 80.2 0.0 (59.0) Total cash flow 14.5 151.9 77.6 161.3 Note: Last actual year may include reported and estimated data.	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations Capital expenditures Acquisitions	15.0 110.9 (8.5) (56.5) 95.9 156.8 (84.9)	(65.6) 107.4 (55.1) 96.6 98.7 181.9	(19.4) 109.1 (9.9) (1.8) 98.7 176.6 (40.0)	43.8 105.6 14.0 (1.8) 98.7 260.3 (40.0)	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	12/23 30 1
Inc/(dec) in debt 107.4 0.0 (\$0.0) (\$0.0) Common stock issuance (repurchase) Other financing cash flows (18.7) 0.0 Cash flow from financing 80.2 0.0 (59.0) (59.0) Total cash flow 14.5 151.9 77.6 161.3 Note: Last actual year may include reported and estimated data.	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations Capital expenditures Acquisitions Divestitures	15.0 110.9 (8.5) (56.5) 95.9 156.8 (84.9)	(65.6) 107.4 (55.1) 96.6 98.7 181.9 (40.0)	(19.4) 109.1 (9.9) (1.8) 98.7 176.6 (40.0)	43.8 105.6 14.0 (1.8) 98.7 260.3 (40.0)	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	30
Inc/(dec) in debt 107.4 0.0 (50.0) (50.0) Common stock issuance (repurchase) Other financing cash flows (18.7) 0.0 Cash flow from financing 80.2 0.0 (59.0) (59.0) Total cash flow 14.5 151.9 77.6 161.3 Note: Last actual year may include reported and estimated data.	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations Capital expenditures Acquisitions Divestitures Others	15.0 110.9 (8.5) (56.5) 95.9 156.8 (84.9)	(65.6) 107.4 (55.1) 96.6 98.7 181.9 (40.0)	(19.4) 109.1 (9.9) (1.8) 98.7 176.6 (40.0)	43.8 105.6 14.0 (1.8) 98.7 260.3 (40.0)	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	12/23 30 1
Common stock issuance (repurchase) -	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations Capital expenditures Acquisitions Divestitures Others Cash flow from investments	15.0 110.9 (8.5) (56.5) 95.9 156.8 (84.9) (137.6) (222.5)	(65.6) 107.4 (55.1) 96.6 98.7 181.9 (40.0)	(19.4) 109.1 (9.9) (1.8) 98.7 176.6 (40.0)	43.8 105.6 14.0 (1.8) 98.7 260.3 (40.0)	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	30
Other financing cash flows (18.7) 0.0 - Cash flow from financing 80.2 0.0 (59.0) (59.0) Total cash flow 14.5 151.9 77.6 161.3 Note: Last actual year may include reported and estimated data.	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations Capital expenditures Acquisitions Divestitures Others Cash flow from investments Dividends paid (common & pref)	15.0 110.9 (8.5) (56.5) 95.9 156.8 (84.9) (137.6) (222.5)	(65.6) 107.4 (55.1) 96.6 98.7 181.9 (40.0) (40.0)	(19.4) 109.1 (9.9) (1.8) 98.7 176.6 (40.0) (40.0) (9.0)	43.8 105.6 14.0 (1.8) 98.7 260.3 (40.0) (40.0)	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	30
Cash flow from financing 80.2 0.0 (59.0) (59.0) Total cash flow 14.5 151.9 77.6 161.3 Note: Last actual year may include reported and estimated data.	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations Capital expenditures Acquisitions Divestitures Others Cash flow from investments Dividends paid (common & pref) Inc/(dec) in debt	15.0 110.9 (8.5) (56.5) 95.9 156.8 (84.9) (137.6) (222.5)	(65.6) 107.4 (55.1) 96.6 98.7 181.9 (40.0) (40.0) 0.0	(19.4) 109.1 (9.9) (1.8) 98.7 176.6 (40.0) (40.0) (9.0) (50.0)	43.8 105.6 14.0 (1.8) 98.7 260.3 (40.0) (40.0) (9.0) (50.0)	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	12/23 30 1
Total cash flow 14.5 151.9 77.6 161.3 Note: Last actual year may include reported and estimated data.	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations Capital expenditures Acquisitions Divestitures Others Cash flow from investments Dividends paid (common & pref) Inc/(dec) in debt Common stock issuance (repurchase)	15.0 110.9 (8.5) (56.5) 95.9 156.8 (84.9) (137.6) (222.5) (8.5) 107.4	(65.6) 107.4 (55.1) 96.6 98.7 181.9 (40.0) (40.0) 0.0	(19.4) 109.1 (9.9) (1.8) 98.7 176.6 (40.0) (40.0) (9.0) (50.0)	43.8 105.6 14.0 (1.8) 98.7 260.3 (40.0) (40.0) (9.0) (50.0)	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	30
,,,,,	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations Capital expenditures Acquisitions Divestitures Others Cash flow from investments Dividends paid (common & pref) Inc/(dec) in debt Common stock issuance (repurchase) Other financing cash flows	15.0 110.9 (8.5) (56.5) 95.9 156.8 (84.9) (137.6) (222.5) (8.5) 107.4 (18.7)	(65.6) 107.4 (55.1) 96.6 98.7 181.9 (40.0) (40.0) 0.0 0.0	(19.4) 109.1 (9.9) (1.8) 98.7 176.6 (40.0) (40.0) (9.0) (50.0)	43.8 105.6 14.0 (1.8) 98.7 260.3 (40.0) (40.0) (9.0) (50.0)	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X)	12/19 101.3 1.2 16.9 1.0	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	30
	Net income pre-preferred dividends D&A add-back Minorities interests add-back Net (inc)/dec working capital Other operating cash flow Cash flow from operations Capital expenditures Acquisitions Divestitures Others Cash flow from investments Dividends paid (common & pref) Inc/(dec) in debt Common stock issuance (repurchase) Other financing cash flows Cash flow from financing	15.0 110.9 (8.5) (56.5) 95.9 156.8 (84.9) (137.6) (222.5) (8.5) 107.4 (18.7) 80.2	(65.6) 107.4 (55.1) 96.6 98.7 181.9 (40.0) (40.0) 0.0 0.0	(19.4) 109.1 (9.9) (1.8) 98.7 176.6 (40.0) (40.0) (9.0) (50.0) (59.0)	43.8 105.6 14.0 (1.8) 98.7 260.3 (40.0) (40.0) (9.0) (50.0) (59.0)	Valuation P/E (analyst) (X) P/B (X) EV/EBITDA (X) EV/GCI (X) Dividend yield (%)	12/19 101.3 1.2 16.9 1.0 0.6	NM 12/20E NM 1.1 NM 0.9	NM 12/21E NM 1.1 20.7 0.8	30

Source: Company data, Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

I, Simon Cheung, CFA, hereby certify that all of the views expressed in this report accurately reflect my personal views about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Unless otherwise stated, the individuals listed on the cover page of this report are analysts in Goldman Sachs' Global Investment Research division.

GS Factor Profile

The Goldman Sachs Factor Profile provides investment context for a stock by comparing key attributes to the market (i.e. our coverage universe) and its sector peers. The four key attributes depicted are: Growth, Financial Returns, Multiple (e.g. valuation) and Integrated (a composite of Growth, Financial Returns and Multiple). Growth, Financial Returns and Multiple are calculated by using normalized ranks for specific metrics for each stock. The normalized ranks for the metrics are then averaged and converted into percentiles for the relevant attribute. The precise calculation of each metric may vary depending on the fiscal year, industry and region, but the standard approach is as follows:

Growth is based on a stock's forward-looking sales growth, EBITDA growth and EPS growth (for financial stocks, only EPS and sales growth), with a higher percentile indicating a higher growth company. **Financial Returns** is based on a stock's forward-looking ROE, ROCE and CROCI (for financial stocks, only ROE), with a higher percentile indicating a company with higher financial returns. **Multiple** is based on a stock's forward-looking P/E, P/B, price/dividend (P/D), EV/EBITDA, EV/FCF and EV/Debt Adjusted Cash Flow (DACF) (for financial stocks, only P/E, P/B and P/D), with a higher percentile indicating a stock trading at a higher multiple. The **Integrated** percentile is calculated as the average of the Growth percentile, Financial Returns percentile and (100% - Multiple percentile).

Financial Returns and Multiple use the Goldman Sachs analyst forecasts at the fiscal year-end at least three quarters in the future. Growth uses inputs for the fiscal year at least seven quarters in the future compared with the year at least three quarters in the future (on a per-share basis for all metrics).

For a more detailed description of how we calculate the GS Factor Profile, please contact your GS representative.

M&A Rank

Across our global coverage, we examine stocks using an M&A framework, considering both qualitative factors and quantitative factors (which may vary across sectors and regions) to incorporate the potential that certain companies could be acquired. We then assign a M&A rank as a means of scoring companies under our rated coverage from 1 to 3, with 1 representing high (30%-50%) probability of the company becoming an acquisition target, 2 representing medium (15%-30%) probability and 3 representing low (0%-15%) probability. For companies ranked 1 or 2, in line with our standard departmental guidelines we incorporate an M&A component into our target price. M&A rank of 3 is considered immaterial and therefore does not factor into our price target, and may or may not be discussed in research.

Quantum

Quantum is Goldman Sachs' proprietary database providing access to detailed financial statement histories, forecasts and ratios. It can be used for in-depth analysis of a single company, or to make comparisons between companies in different sectors and markets.

Disclosures

Rating and pricing information

Kangwon Land (Buy, W24,000), Nagacorp Ltd. (Neutral, HK\$9.92) and Paradise Co. (Neutral, W15,600)

The rating(s) for Nagacorp Ltd. and Paradise Co. is/are relative to the other companies in its/their coverage universe:

Bloomberry Resorts Corp., China Tourism Group Duty Free, Galaxy Entertainment Group, Genting Berhad, Genting Malaysia Bhd, Genting Singapore Ltd., Grand Korea Leisure Co., Kangwon Land, MGM China, Melco International Development, Melco Resorts & Entertainment Ltd., Nagacorp Ltd., Paradise Co., SJM Holdings, Sands China, Songcheng Performance, Wynn Macau

Company-specific regulatory disclosures

The following disclosures relate to relationships between The Goldman Sachs Group, Inc. (with its affiliates, "Goldman Sachs") and companies covered by the Global Investment Research Division of Goldman Sachs and referred to in this research.

Goldman Sachs had a non-securities services client relationship during the past 12 months with: Nagacorp Ltd. (HK\$9.73) and Paradise Co. (W15,250)

Goldman Sachs makes a market in the securities or derivatives thereof: Paradise Co. (W15,250)

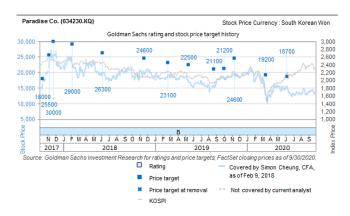
Distribution of ratings/investment banking relationships

Goldman Sachs Investment Research global Equity coverage universe

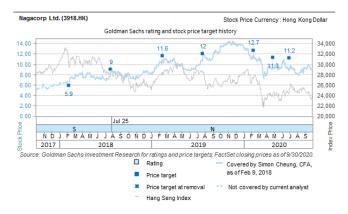
	Rating Distribution				Investment Banking Relationships			
	Buy	Hold	Sell		Buy	Hold	Sell	
Global	49%	35%	16%	•	64%	57%	54%	

As of October 1, 2020, Goldman Sachs Global Investment Research had investment ratings on 3,122 equity securities. Goldman Sachs assigns stocks as Buys and Sells on various regional Investment Lists; stocks not so assigned are deemed Neutral. Such assignments equate to Buy, Hold and Sell for the purposes of the above disclosure required by the FINRA Rules. See 'Ratings, Coverage universe and related definitions' below. The Investment Banking Relationships chart reflects the percentage of subject companies within each rating category for whom Goldman Sachs has provided investment banking services within the previous twelve months.

Price target and rating history chart(s)



The price targets shown should be considered in the context of all prior published Goldman Sachs research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets.



The price targets shown should be considered in the context of all prior published Goldman Sachs research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets.

Target price history table(s)

Paradise Co. (034230.KQ)

Date of report Target price (W) 04-Oct-20 15 800 07-Jun-20 18 700 16-Mar-20 19,200 12-Nov-19 24,600 04-Oct-19 21.200 24-Aug-19 21,100 15-May-19 22.500 21-Feb-19 23,100

Regulatory disclosures

Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; for equity securities, market making and/or specialist role. Goldman Sachs trades or may trade as a principal in debt securities (or in related derivatives) of issuers discussed in this report.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage. **Analyst compensation:** Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy generally prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director or advisor of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman Sachs & Co. LLC and therefore may not be subject to FINRA Rule 2241 or FINRA Rule 2242 restrictions on communications with subject company, public appearances and trading securities held by the analysts.

Distribution of ratings: See the distribution of ratings disclosure above. **Price chart:** See the price chart, with changes of ratings and price targets in prior periods, above, or, if electronic format or if with respect to multiple companies which are the subject of this report, on the Goldman Sachs website at https://www.gs.com/research/hedge.html.

Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. Australia: Goldman Sachs Australia Pty Ltd and its affiliates are not authorised deposit-taking institutions (as that term is defined in the Banking Act 1959 (Cth)) in Australia and do not provide banking services, nor carry on a banking business, in Australia. This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act, unless otherwise agreed by Goldman Sachs. In producing research reports, members of the Global Investment Research Division of Goldman Sachs Australia may attend site visits and other meetings hosted by the companies and other entities which are the subject of its research reports. In some instances the costs of such site visits or meetings may be met in part or in whole by the issuers concerned if Goldman Sachs Australia considers it is appropriate and reasonable in the specific circumstances relating to the site visit or meeting. To the extent that the contents of this document contains any financial product advice, it is general advice only and has been prepared by Goldman Sachs without taking into account a client's objectives, financial situation or needs. A client should, before acting on any such advice, consider the appropriateness of the advice having regard to the client's own objectives, financial situation and needs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests and a copy of Goldman Sachs' Australian Sell-Side Research Independence Policy Statement are available at: https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html. Brazil: Disclosure information in relation to CVM Instruction 598 is available at https://www.gs.com/worldwide/brazil/area/gir/index.html. Where applicable, the Brazil-registered analyst primarily responsible for the content of this research report, as defined in Article 20 of CVM Instruction 598, is the first author named at the beginning of this report, unless indicated otherwise at the end of the text. Canada: Goldman Sachs Canada Inc. is an affiliate of The Goldman Sachs Group Inc. and therefore is included in the company specific disclosures relating to Goldman Sachs (as defined above). Goldman Sachs Canada Inc. has approved of, and agreed to take responsibility for, this research report in Canada if and to the extent that Goldman Sachs Canada Inc. disseminates this research report to its clients. Hong Kong: Further information on the securities of covered companies referred to in this research

Goldman Sachs Asia Pacific Gaming

may be obtained on request from Goldman Sachs (Asia) L.L.C. **India:** Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited, Research Analyst - SEBI Registration Number INH000001493, 951-A Rational House, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India, Corporate Identity Number U74140MH2006FTC160634, Phone +91 22 6616 9000, Fax +91 22 6616 9001. Goldman Sachs may beneficially own 1% or more of the securities (as such term is defined in clause 2 (h) the Indian Securities Contracts (Regulation) Act, 1956) of the subject company or companies referred to in this research report. Japan: See below. Korea: This research, and any access to it, is intended only for "professional investors" within the meaning of the Financial Services and Capital Markets Act, unless otherwise agreed by Goldman Sachs. Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. New Zealand: Goldman Sachs New Zealand Limited and its affiliates are neither "registered banks" nor "deposit takers" (as defined in the Reserve Bank of New Zealand Act 1989) in New Zealand. This research, and any access to it, is intended for "wholesale clients" (as defined in the Financial Advisers Act 2008) unless otherwise agreed by Goldman Sachs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests is available at: https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html. Russia: Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. Research reports do not constitute a personalized investment recommendation as defined in Russian laws and regulations, are not addressed to a specific client, and are prepared without analyzing the financial circumstances, investment profiles or risk profiles of clients. Goldman Sachs assumes no responsibility for any investment decisions that may be taken by a client or any other person based on this research report. Singapore: Goldman Sachs (Singapore) Pte. (Company Number: 198602165W), which is regulated by the Monetary Authority of Singapore, accepts legal responsibility for this research, and should be contacted with respect to any matters arising from, or in connection with, this research. Taiwan: This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. United Kingdom: Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Conduct Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

European Union and United Kingdom: Disclosure information in relation to Article 6 (2) of the European Commission Delegated Regulation (EU) (2016/958) supplementing Regulation (EU) No 596/2014 of the European Parliament and of the Council (including as that Delegated Regulation is implemented into United Kingdom domestic law and regulation following the United Kingdom's departure from the European Union and the European Economic Area) with regard to regulatory technical standards for the technical arrangements for objective presentation of investment recommendations or other information recommending or suggesting an investment strategy and for disclosure of particular interests or indications of conflicts of interest is available at https://www.gs.com/disclosures/europeanpolicy.html which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

Japan: Goldman Sachs Japan Co., Ltd. is a Financial Instrument Dealer registered with the Kanto Financial Bureau under registration number Kinsho 69, and a member of Japan Securities Dealers Association, Financial Futures Association of Japan and Type II Financial Instruments Firms Association. Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

Ratings, coverage universe and related definitions

Buy (B), Neutral (N), Sell (S) -Analysts recommend stocks as Buys or Sells for inclusion on various regional Investment Lists. Being assigned a Buy or Sell on an Investment List is determined by a stock's total return potential relative to its coverage universe. Any stock not assigned as a Buy or a Sell on an Investment List with an active rating (i.e., a stock that is not Rating Suspended, Not Rated, Coverage Suspended or Not Covered), is deemed Neutral. Each region's Investment Review Committee manages Regional Conviction lists, which represent investment recommendations focused on the size of the total return potential and/or the likelihood of the realization of the return across their respective areas of coverage. The addition or removal of stocks from such Conviction lists do not represent a change in the analysts' investment rating for such stocks.

Total return potential represents the upside or downside differential between the current share price and the price target, including all paid or anticipated dividends, expected during the time horizon associated with the price target. Price targets are required for all covered stocks. The total return potential, price target and associated time horizon are stated in each report adding or reiterating an Investment List membership.

Coverage Universe: A list of all stocks in each coverage universe is available by primary analyst, stock and coverage universe at https://www.gs.com/research/hedge.html.

Not Rated (NR). The investment rating and target price have been removed pursuant to Goldman Sachs policy when Goldman Sachs is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances. Rating Suspended (RS). Goldman Sachs Research has suspended the investment rating and price target for this stock, because there is not a sufficient fundamental basis for determining, or there are legal, regulatory or policy constraints around publishing, an investment rating or target. The previous investment rating and price target, if any, are no longer in effect for this stock and should not be relied upon. Coverage Suspended (CS). Goldman Sachs has suspended coverage of this company. Not Covered (NC). Goldman Sachs does not cover this company. Not Available or Not Applicable (NA). The information is not available for display or is not applicable. Not Meaningful (NM). The information is not meaningful and is therefore excluded.

Global product; distributing entities

The Global Investment Research Division of Goldman Sachs produces and distributes research products for clients of Goldman Sachs on a global basis. Analysts based in Goldman Sachs offices around the world produce research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy. This research is disseminated in Australia by Goldman Sachs Australia Pty Ltd (ABN 21 006 797 897); in Brazil by Goldman Sachs do Brasil Corretora de Títulos e Valores Mobiliários S.A.; Ombudsman Goldman Sachs Brazil: 0800 727 5764 and / or ouvidoriagoldmansachs@gs.com. Available Weekdays (except holidays), from 9am to 6pm. Ouvidoria Goldman Sachs Brasil: 0800 727 5764 e/ou ouvidoriagoldmansachs@gs.com. Horário de funcionamento: segunda-feira à sexta-feira (exceto feriados), das 9h às 18h; in Canada by either Goldman Sachs Canada Inc. or Goldman Sachs & Co. LLC; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs New Zealand Limited; in Russia by OOO Goldman Sachs & Co. LLC. Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman Sachs & Co. LLC. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom and European Union.

European Union: Goldman Sachs International authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority, has approved this research in connection with its distribution in the European Union and United Kingdom.

Effective from the date of the United Kingdom's departure from the European Union and the European Economic Area ("Brexit Day") the following information with respect to distributing entities will apply:

Goldman Sachs International ("GSI"), authorised by the Prudential Regulation Authority ("PRA") and regulated by the Financial Conduct Authority ("FCA") and the PRA, has approved this research in connection with its distribution in the United Kingdom.

Goldman Sachs Asia Pacific Gaming

European Economic Area: GSI, authorised by the PRA and regulated by the FCA and the PRA, disseminates research in the following jurisdictions within the European Economic Area: the Grand Duchy of Luxembourg, Italy, the Kingdom of Belgium, the Kingdom of Denmark, the Kingdom of Norway, the Republic of Finland and the Republic of Ireland; GS -Succursale de Paris (Paris branch) which, from Brexit Day, will be authorised by the French Autorité de contrôle prudentiel et de resolution ("ACPR") and regulated by the Autorité de contrôle prudentiel et de resolution and the Autorité des marches financiers ("AMF") disseminates research in France; GSI - Sucursal en España (Madrid branch) authorized in Spain by the Comisión Nacional del Mercado de Valores disseminates research in the Kingdom of Spain; GSI - Sweden Bankfilial (Stockholm branch) is authorized by the SFSA as a "third country branch" in accordance with Chapter 4, Section 4 of the Swedish Securities and Market Act (Sw. lag (2007:528) om värdepappersmarknaden) disseminates research in the Kingdom of Sweden; Goldman Sachs Bank Europe SE ("GSBE") is a credit institution incorporated in Germany and, within the Single Supervisory Mechanism, subject to direct prudential supervision by the European Central Bank and in other respects supervised by German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) and Deutsche Bundesbank and disseminates research in the Federal Republic of Germany and those jurisdictions within the European Economic Area where GSI is not authorised to disseminate research and additionally, GSBE, Copenhagen Branch filial af GSBE, Tyksland, supervised by the Danish Financial Authority disseminates research in the Kingdom of Denmark; GSBE - Sucursal en España (Madrid branch) subject (to a limited extent) to local supervision by the Bank of Spain disseminates research in the Kingdom of Spain; GSBE - Succursale Italia (Milan branch) to the relevant applicable extent, subject to local supervision by the Bank of Italy (Banca d'Italia) and the Italian Companies and Exchange Commission (Commissione Nazionale per le Società e la Borsa "Consob") disseminates reséarch in Italy; GSBE - Succursale de Paris (Paris branch), supervised by the AMF and by the ACPR disseminates research in France; and GSBE - Sweden Bankfilial (Stockholm branch), to a limited extent, subject to local supervision by the Swedish Financial Supervisory Authority (Finansinpektionen) disseminates research in the Kingdom of Sweden.

General disclosures

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. The information, opinions, estimates and forecasts contained herein are as of the date hereof and are subject to change without prior notification. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by our Global Investment Research Division. Goldman Sachs & Co. LLC, the United States broker dealer, is a member of SIPC (https://www.sipc.org).

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and principal trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, principal trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

The analysts named in this report may have from time to time discussed with our clients, including Goldman Sachs salespersons and traders, or may discuss in this report, trading strategies that reference catalysts or events that may have a near-term impact on the market price of the equity securities discussed in this report, which impact may be directionally counter to the analyst's published price target expectations for such stocks. Any such trading strategies are distinct from and do not affect the analyst's fundamental equity rating for such stocks, which rating reflects a stock's return potential relative to its coverage universe as described herein.

We and our affiliates, officers, directors, and employees, excluding equity and credit analysts, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research.

The views attributed to third party presenters at Goldman Sachs arranged conferences, including individuals from other parts of Goldman Sachs, do not necessarily reflect those of Global Investment Research and are not an official view of Goldman Sachs.

Any third party referenced herein, including any salespeople, traders and other professionals or members of their household, may have positions in the products mentioned that are inconsistent with the views expressed by analysts named in this report.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options and futures disclosure documents which are available from Goldman Sachs sales representatives or at https://www.theocc.com/about/publications/character-risks.jsp and

https://www.fiadocumentation.org/fia/regulatory-disclosures_1/fia-uniform-futures-and-options-on-futures-risk-disclosures-booklet-pdf-version-2018.

Transaction costs may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

Differing Levels of Service provided by Global Investment Research: The level and types of services provided to you by the Global Investment Research division of GS may vary as compared to that provided to internal and other external clients of GS, depending on various factors including your individual preferences as to the frequency and manner of receiving communication, your risk profile and investment focus and perspective (e.g., marketwide, sector specific, long term, short term), the size and scope of your overall client relationship with GS, and legal and regulatory constraints. As an example, certain clients may request to receive notifications when research on specific securities is published, and certain clients may request that specific data underlying analysts' fundamental analysis available on our internal client websites be delivered to them electronically through data feeds or otherwise. No change to an analyst's fundamental research views (e.g., ratings, price targets, or material changes to earnings estimates for equity securities), will be communicated to any client prior to inclusion of such information in a research report broadly disseminated through electronic publication to our internal client websites or through other means, as necessary, to all clients who are entitled to receive such reports.

All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client websites. Not all research content is redistributed to our clients or available to third-party aggregators, nor is Goldman Sachs responsible for the redistribution of our research by third party aggregators. For research, models or other data related to one or more securities, markets or asset classes (including related services) that may be available to you, please contact your GS representative or go to https://research.gs.com.

Disclosure information is also available at https://www.gs.com/research/hedge.html or from Research Compliance, 200 West Street, New York, NY 10282.

© 2021 Goldman Sachs.

No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written

consent of The Goldman Sachs Group, Inc.