

Sea Limited

4Q: Largely in-line; positive commentary: Execution is key

Reiterate Rating: NEUTRAL | PO: 55.00 USD | Price: 51.05 USD

Shopee adj EBITDA losses narrow, positive commentary

While Sea's 4Q EBIT/net income missed ours & consensus est. we note that mgmt. commentary for 2024 was positive with bullish stance on both e-com and gaming biz. **2024 commentary:** 1) Mgmt. expects Shopee 2024 GMV growth likely to in high teens range & adj. EBITDA to turn positive in 2H24; 2) Free Fire is likely to grow double-digits yoy for user base and bookings; 3) 2024 would be another profitable year overall. **Result highlights:** Shopee GMV in 4Q came in at \$23.1bn (+15% qoq), largely in-line with est. of \$23.4 bn. Shopee take rates were stable at 11.2%. E-com adj EBITDA loss came in lower at -\$225mn (3Q: -\$347mn) vs BofAe \$326mn losses. 4Q gaming revenue was 15% below BofAe. Adj. EBIT was loss at \$56.5mn vs BofAe \$29mn profit due to higher S&M costs, +5% qoq. Given lower than expected competition in mkt, we increase our FY24-26 EPS by 18-31% (on low base). We roll forward our SOTP to 2025. We value gaming biz at 5X EBITDA & e-com EV/GMV of 0.17X (vs 0.15X previously) to factor better than expected e-com outlook. Reiterate Neutral on balanced risk-reward.

Shopee looking to maintain market share gains

1) Shopee's 3 operational priorities: improve service quality (logistics' delivery speed, consistency, customer service etc). keeping product listings price competitive, deepen/broaden engagement on content ecosystem & better integrate live streaming with shopping ecosystem; 2) Unit economics of live streaming have improved sequentially but the biz takes investments for growth, In L-T, mgmt. expects live streaming profitability like marketplace platform. Live streaming e-com biz started with lower AOV & will look at convergence going ahead; 3) Per mgmt., Shopee has made meaningful gains in market share and have solidified share. The company would intend to maintain this market share in 2024; 4) Per mgmt., Garena has done well in enhancing/optimizing game experience for players – introduced fresh & highly localized content to Free Fire. Mgmt. is seeing improved user acquisition & retention trends at Free Fire; 5) Garena is not a single franchise platform and mgmt. is focused on building future pipelines in terms of expanding portfolio of genres and type of content; 6) Live streaming was 15% of physical order volume in Dec'23 and a higher percentage for Indonesia region;

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
Net Income (Adjusted - mn)	(1,399)	242	959	1,843	2,892
EPS	(2.97)	0.270	1.58	3.17	5.05
EPS Change (YoY)	24.9%	NM	486.7%	99.9%	59.3%
Dividend / Share	0	0	0	0	0
Free Cash Flow / Share	(3.12)	2.76	1.44	3.81	4.48
Valuation (Dec)					
P/E	NM	189.02x	32.22x	16.11x	10.11x
EV / EBITDA*	NM	36.85x	18.09x	10.06x	6.45x
Free Cash Flow Yield*	-5.93%	5.42%	2.81%	7.47%	8.78%
For full definitions of <i>IQ</i> method SM measures, see page 10.					

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Refer to important disclosures on page 11 to 13. Analyst Certification on page 7. Price Objective Basis/Risk on page 7.

04 March 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	46.00	55.00
2024E EPS	1.29	1.58
2025E EPS	2.41	3.17
2026E EPS	NA	5.05

Sachin Salgaonkar >> Research Analyst BofAS India +91 22 6632 8667 sachin.salgaonkar@bofa.com

Sukriti Bansal >> Research Analyst Merrill Lynch (Singapore) sukriti.bansal@bofa.com

Shalav Saket, CFA >> Research Analyst BofAS India shalav.saket@bofa.com

Stock Data

Price	51.05 USD
Price Objective	55.00 USD
Date Established	4-Mar-2024
Investment Opinion	C-2-9
52-Week Range	34.35 USD-88.84 USD
Mrkt Val / Shares Out (mn)	28,492 USD / 558.1
Average Daily Value (mn)	316.59 USD
Free Float	11.0%
BofA Ticker / Exchange	SE / NYS
Bloomberg / Reuters	SE US / SE.N
ROE (2024E)	13.6%
Net Dbt to Eqty (Dec-2023A)	20.39%

S&M: Sales & marketing; GMV: Gross Merchandise Value; QAU: Quarterly Active Users; S&M: Selling & market; G&A: general & admin costs; DFS: Digital financial services; L-T: near term; ARPU: Average revenue per user

iQprofile[™]Sea Limited

Key Income Statement Data (Dec)	2022A	2023A	2024E	2025E	2026E
(US\$ Millions)					
Sales	12,450	13,064	15,687	18,627	21,755
Gross Profit	4,989	5,728	6,980	8,503	9,984
Sell General & Admin Expense	(5,025)	(4,442)	(5,036)	(5,432)	(5,341)
Operating Profit	(1,133)	225	910	1,995	3,524
Net Interest & Other Income	(322)	208	223	226	244
Associates	0	0	0	0	0
Pretax Income	(1,454)	432	1,133	2,221	3,768
Tax (expense) / Benefit	(168)	(261)	(240)	(444)	(942)
Net Income (Adjusted)	(1,399)	242	959	1,843	2,892
Average Fully Diluted Shares Outstanding	542	558	558	558	558
Key Cash Flow Statement Data					
Net Income	(1,611)	163	884	1,768	2,817
Depreciation & Amortization	454	449	463	474	325
Change in Working Capital	(1,083)	(1,151)	(169)	(133)	(1,067)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	1,185	2,618	272	609	1,010
Cash Flow from Operations	(1,056)	2,080	1,451	2,718	3,085
Capital Expenditure	(635)	(537)	(650)	(590)	(584)
(Acquisition) / Disposal of Investments	0	0	0	0	0
Other Cash Inflow / (Outflow)	(1,794)	(5,268)	263	267	285
Cash Flow from Investing	(2,429)	(5,804)	(387)	(323)	(299)
Shares Issue / (Repurchase)	0	0	0	0	C
Cost of Dividends Paid	0	0	0	0	C
Cash Flow from Financing	400	366	50	50	50
Free Cash Flow	(1,691)	1,543	801	2,128	2,501
Net Debt	(1,576)	1,366	302	(2,093)	(4,880)
Change in Net Debt	3,418	2,942	(1,064)	(2,395)	(2,786)
Key Balance Sheet Data					
Property, Plant & Equipment	2,346	2,224	1,505	1,591	1,814
Other Non-Current Assets	1,969	4,886	5,113	5,143	5,179
Trade Receivables	NA	NA	NA	NA	NA
Cash & Equivalents	6,030	2,811	3,925	6,370	9,206
Other Current Assets	6,658	8,963	8,524	8,263	9,656
Total Assets	17,003	18,883	19,068	21,368	25,856
Long-Term Debt	4,096	3,739	3,789	3,839	3,889
Other Non-Current Liabilities	191	307	131	1,002	2,293
Short-Term Debt	358	437	437	437	437
Other Current Liabilities Total Liabilities	6,577	7,731 12,216	7,124 11,482	6,730 12,009	7,056
	11,222 5,811	6,698	,	9,359	13,675 12,180
Total Equity Total Equity & Liabilities	17,033	18,913	7,586 19,068	21,368	25,856
	17,055	10,515	13,000	21,500	23,030
iQmethod SM - Bus Performance*	0.20/	2.60/	0.70/	1.4.20/	17.50/
Return On Capital Employed	-8.2%	2.6%	8.7%	14.2%	17.5%
Return On Equity	-21.3%	3.9%	13.6%	22.0%	27.1%
Operating Margin	-9.1% -5.5%	1.7% 5.2%	5.8%	10.7% 13.3%	16.2%
EBITDA Margin	-5.5%	3.2%	8.8%	13.3%	17.7%
iQmethod SM - Quality of Earnings*					
Cash Realization Ratio	NM	8.6x	1.5x	1.5x	1.1x
Asset Replacement Ratio	1.4x	1.2x	1.4x	1.2x	1.8x
Tax Rate (Reported)	NM	60.4%	21.2%	20.0%	25.0%
Net Debt-to-Equity Ratio	-27.1%	20.4%	4.0%	-22.4%	-40.1%
Interest Cover	-7.3x	NM	22.7x	49.3x	NM
Key Metrics					

^{*} For full definitions of *IQ*methodSM measures, see page 10.

Company Sector

Internet/e-Commerce

Company Description

Sea Limited is a mobile and PC gaming platform and developer (Garena) and an e-commerce marketplace operator (Shopee) in ASEAN, Taiwan and Brazil. Its first self-developed game, "Free Fire," has a global user base. Sea also runs a digital payments platform supporting the two businesses (SeaMoney). Sea Ltd is headquartered in Singapore and was founded in 2009.

Investment Rationale

We have a Neutral rating on Sea Limited. In our view, it is placed well in to ride e-com boom in SE Asia given increasingly dominant online marketplace (Shopee), while its expansion into Brazil offers further growth upside potential in LT. However, we see growth slowdown, high competition and expect lower GMV growth on e-com and continued slow down of Free Fire/overhang from lack of a new game. TikTok also poses competitive risks on e-com and Shopee seeks to defend its market leadership position

Stock Data

Price to Book Value 3.8x



2

Sea 4Q earnings & other takeaways

Exhibit 1: Sea 4Q results variance analysis

Miss on numbers but e-com adj. EBITDA losses lower

Sea Ltd - consolidated financials							
\$ mn	4Q22A	3Q23A	4Q23E	4Q23A	YoY	QoQ	A vs E
Digital entertainment	948.9	592.2	604.0	510.8	-46%	-14%	-15%
E-commerce	2,102.7	2,232.0	2,586.3	2,591.3	23%	16%	0%
Digital financial services & others	400.0	486.1	506.1	514.6	29%	6%	2%
Total Revenues	3,451.6	3,310.2	3,696.4	3,616.6	5%	9%	-2%
Cost of sales	(1,754.3)	(1,868.9)	(2,027.5)	(2,091.8)	19%	12%	3%
Digital entertainment	(242.5)	(177.1)	(182.1)	(161.4)	-33%	-9%	-11%
E-commerce & others	(1,511.8)	(1,691.8)	(1,845.5)	(1,930.5)	28%	14%	5%
Gross profit	1,697.3	1,441.3	1,668.8	1,524.8	-10%	6%	-9%
Digital entertainment	706.4	415.1	422.0	349.4	-51%	-16%	-17%
E-commerce & others	990.9	1,026.2	1,246.9	1,175.4	19%	15%	-6%
Sales & marketing expense	(473.6)	(918.0)	(955.8)	(967.4)	104%	5%	1%
G&A expense (incl depreciation)	(527.4)	(417.1)	(424.0)	(392.6)	-26%	-6%	-7%
R&D expense	(244.2)	(280.5)	(320.8)	(279.8)	15%	0%	-13%
Impairment of Goodwill	(177.7)	0.0	0.0	0.0	NM	NM	NM
Other operating income	68.5	46.6	60.9	58.5	-15%	26%	-4%
Operating income/(loss)	342.9	(127.7)	29.1	(56.5)	116%	56%	NM
Adj. Operating income/ (loss)	520.5	(127.7)	29.1	(56.5)	NM	56%	NM
Operating margin	10%	-4%	1%	-2%	-11.5 pps	2.3 pps	-2.3 pps
Interest income	54.3	88.0	92.0	90.9	67%	3%	-1%
Interest expense	(10.8)	(10.2)	(10.2)	(10.1)	NM	NM	NM
Investment gain / (net)	76.7	(16.6)	0.0	(41.7)	NM	NM	NM
Forex exchange gain /(loss)	(85.2)	(15.4)	8.5	(7.4)	NM	NM	NM
Profit/ (loss) before taxes	377.8	(81.8)	119.4	(24.9)	NM	-70%	NM
Taxes & minorities	45.0	(62.1)	(60.0)	(86.8)	NM	-40%	-45%
Net loss	422.8	(143.9)	59.4	(111.6)	NM	NM	NM
Non-controlling interests	4.0	(6.0)	(5.6)	1.9	NM	NM	NM
Net loss to shareholders	426.8	(149.9)	53.7	(109.7)	NM	NM	NM
Adjusted EBITDA	495.7	35.3	61.0	126.7	NM	259%	108%
Digital entertainment	258.2	234.0	227.5	217.4	-16%	-7%	-4%
E-commerce	196.1	(346.5)	(325.5)	(225.3)	NM	35%	31%
Digital financial services & others	41.3	147.8	159.0	134.6	NM	-9%	-15%
Key Performance Indicators							
Operating Metrics	4Q22A	3Q23A	4Q23E	4Q23A	YoY	QoQ	A vs E
Gaming							
Quarterly active users (m)	485.5	544.1	543.9	528.7	9%	-3%	-3%
Quarterly paying users (m)	43.6	40.5	40.2	39.7	-9%	-2%	-1%
as % of active users	9.0%	7.4%	7.4%	7.5%	-16%	0.1 pps	0.1 pps
Avg Revenue per user (US\$)	1.1	0.8	0.8	0.9	-23%	5%	3%
Avg Revenue per paying user (US\$)	12.5	11.1	11.3	11.5	-8%	4%	1%
E-commerce							
Gross GMV (US\$m)	18,000	20,100	23,426	23,100	28%	15%	-1%
Gross orders (m)	1,960	2,200	2,576	2,500	28%	14%	-3%
GMV/order (US\$m)	9.2	9.1	9.1	9.2	1%	1%	2%
Take-rate	11.7%	11.1%	11.0%	11.2%	-4%	0.1 pps	0.2 pps

Source: BofA Global Research estimates, company report

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Exhibit 2: Results variance vs BofA est. and visible alpha consensus

Net loss misses our/consensus estimates

Sea 4Q23 consol. results (\$ mn)	Actual	BofA est.	A vs E	Consensus	A vs C
Revenue	3,617	3,696	-2.2%	3,529	2.5%
- Digital entertainment	511	604	-15.4%	550	-7.2%
- E-commerce	2,591	2,586	0.2%	2,599	-0.3%
- Digital financial services & others	515	506	1.7%	380	35.5%
Gross profit	1,525	1,669	-8.6%	1,533	-0.5%
Gross profit margin	42.2%	45.1%	-3 pps	43.4%	-1.3 pps
Adj EBITDA	127	61	107.6%	56	124.7%
- Digital entertainment	217	228	-4.5%	232	-6.2%
- E-commerce	(225)	(325)	30.8%	(321)	29.8%
- Digital financial services & others	135	159	-15.3%	146	-7.5%
Adj. Operating income/ (loss)	(57)	29	NM	(203)	NM
Net loss to shareholders	(110)	54	NM	(181)	NM
KPI's	Actual	BofA est.	A vs E	Consensus	A vs C
e-com GMV (\$mn)	23,100	23,426	-1.4%	22,769	1.5%
Take-rate	11.2%	11.0%	0.2 pps	11.0%	0.2 pps
Gross orders (m)	2,500	2,576	-2.9%	2,433	2.8%
Gaming QAU (mn)	528.7	543.9	-2.8%	543.7	-2.8%
Gaming QPU (mn)	39.7	40.2	-1.3%	42.1	-5.6%

Source: BofA Global Research estimates, Visible Apha consensus, company report

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Results highlights:

Gaming biz revenues (-14% qoq) came in at \$511mn (15% lower than BofAe). E-com revenues were +16% qoq at \$2.6bn, in-line with BofAe. DFS & other segment biz revenue was +6% qoq at \$515mn. Gross profit was 9% lower than BofAe, led by 16% qoq lower gaming biz gross profit, partly offsetting +15% qoq gross profit at e-com & other biz. Adj. EBITDA came in ahead of our/consensus expectations at \$126.7mn, with e-com adj. EBITDA losses lower sequentially at \$225.3mn (3Q: \$346.5mn loss). Gaming biz adj EBITDA at \$217mn was 4% below our estimates. DFS & other biz' adj. EBITDA was lower at \$134.6mn (-9% qoq). Net loss came in at \$110mn, vs our estimate of \$54mn profit. ARPU of gaming was +4% qoq but quarterly paying users declined 2% qoq. Cash balance at 4Q-end was \$8.5bn (vs \$7.9bn in 3Q).

4Q conference call takeaways & other highlights from the earnings print

- Mgmt. highlighted that e-com in Indonesia across 4Q was good, trend in growth likely continued in 1Q. Mgmt. sees more stable competitive landscape overall. Shopee will focus on scale advantage, local leadership teams & integrations with DFS;
- Some adjustments maybe seen in take rates in specific categories or countries & there might be some fine-tuning over FY24. Mgmt. sees potential in ad side for take rate & sees a sizeable room to grow the ad take rates;
- The positive trends are continuing & Free Fire achieved 100mn peak DAUs:
- Shopee opened 5 new sorting centers & 385 new 1st & last mile hubs across Asia markets & extended logistics network to increase coverage. Platform logistics improved 12% yoy in 4Q partly driven by own logistics cost -20% yoy;
- Mgmt. is seeing good progress in delivery speed; >50% orders in Java were
 delivered in 2 days & will focus on speed & consistence in delivery of orders.
 Expanding next day delivery & introducing new features like return on spot in Indo &
 Vietnam leading to higher trust & increased product purchase frequency;
- e-com logistics network is one of the most efficient & is turning to be a strong moat per mgmt.
- Shopee Brazil contribution margin loss improved by 90% yoy led by improvement in user monetization & cost efficiency; Shopee achieved cost leadership in logistics to scale & this will be key to success in the mkt, per mgmt.;

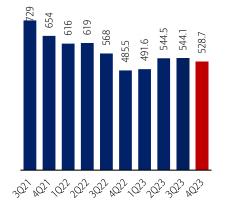


- Despite competition, Shopee, led by economic scale has benefited by both having a better monetization capability and also better cost efficiencies;
- Shopee's logistics coverage in Indonesia has been a lot larger than before. The cost
 has reduced significantly over past few quarters for shipping and quality has
 improved per mgmt. Per mgmt., having own logistics in the market, enables Shopee
 to offer differentiated services;
- Shopee has recently started the return on the spot for users, across Indonesia & Vietnam. They have also started a differentiated return services that would the user to ask for return any time during shipping process. Shopee can look to intersect the orders even if during the shipping, which is not offered by competitors per mgmt.;
- Shopee has strong integration with DFS biz and this enables lower cost of transactions, and increase conversions;
- Per mgmt., Shopee is the most price competitive platform in the market, and mgmt.
 would continue to focus to further drive service qualities, areas after-fulfillment like return of funds services, customer service quality etc.;
- SeaMoney has seen very healthy margin in the biz and the company will look to invest more to acquire new users to the platform. Mgmt. intends to have each acquired user acquired bring positive profit over time;
- In the DFS biz, mgmt. sees potential across digital banks and insurance as well. The
 company will look to further penetrate Shopee ecosystem through ShopeePay Later,
 which has a sizeable room to grow. Even in Indonesia, where it was launched first,
 mgmt. sees potential to further penetrate the user base. Outside Shopee
 ecosystem, mgmt. sees many users that they can onboard;
- As a self-developed game, Free Fire enjoys better margins and mgmt. remains
 focused on building better user experience, easy access, file download size, data
 requirements, introducing more engaging content, and strengthening eSports
 communities to further develop the game into a strong, evergreen franchise;
- Mgmt said that they are still making changes to Free Fire in India to best accommodate user's preference locally;
- As of Dec'23, consumer and SME loans principal outstanding was \$3.1bn (+27% yoy). This consists of \$2.5bn on-book and \$0.6bn off-book loans principal outstanding. Non-performing loans past >90 days as a % of consumer and SME loans on-book was 1.6%, stable qoq;
- For SeaMoney, 2023 was the first year of positive profit, primarily attributed to consumer and SME credit business. In 2024, mgmt. will continue to invest in user acquisition for credit business, both on and off Shopee platform as the company sees significant upside in markets. Mgmt. highlighted that as they scale, they would remain prudent on risk management.
- Sea recognized a gain on debt extinguishment of \$38.6mn in 4Q upon repurchase of \$244.5mn aggregate principal amount of the 0.25% convertible senior notes due 2026, for a cash consideration of \$204.6mn. As of Dec'23-end c. \$1.8bn aggregate principal amount of the 2026 CB remained outstanding;



Exhibit 3: Quarterly active users (mn)

Slight decline gog

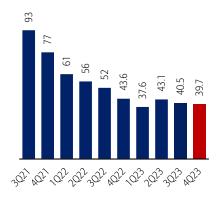


Source: Company report

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Exhibit 4: : Quarterly paying users (mn)

Slight decline seen qoq

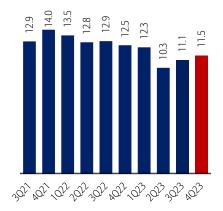


Source: Company report

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Exhibit 5: Average rev./paying user (US\$)

Marginal improvement seen sequentially

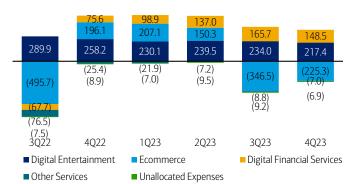


Source: Company report

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Exhibit 6: Total Adjusted EBITDA

Losses in e-com saw a reduction

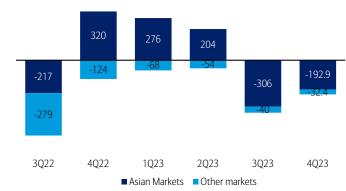


Source: Company report

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Exhibit 7: E-commerce Adjusted EBITDA

Asia Markets EBITDA loss continued but lower goq

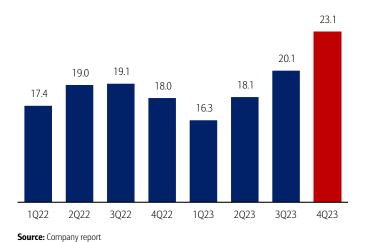


Source: Company report

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Exhibit 8: e-com GMV (\$bn)

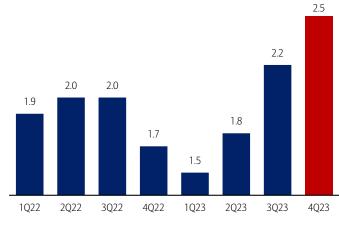
+15% qoq/+28% yoy growth seen in 4Q



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Exhibit 9: e-com gross orders (bn)

+14% qoq/+47% yoy growth seen in 4Q



Source: Company report

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Price objective basis & risk

Sea Limited (SE)

Our PO of USD55 is based on a sum-of-the-parts valuation. We value Garena's gaming business at USD10 per share or 5x 2025E EV/EBITDA, which is at a discount to global peers.

The Shopee business is valued at USD31 per share based on 0.17x 2025E EV/GMV and in our view fairly reflects Shopee's growth, dominant position but rising competition and optionality in Brazil.

We value its Digital Banking unit at 1x EV/IC given growth optionality, its SeaMoney digital payments business at 0.05x EV/TPV for 2025E, and Sea Capital PE fund at 1.2x EV/IC.

Upside risks: 1) faster-than-expected revenue growth with profitability, 2) good traction of more self-developed games

Downside risks: 1) continued higher losses, 2) higher competition in SE Asia e-commarkets, leading to slowing revenue growth

Analyst Certification

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APR - Internet, Media and Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
20.	Agora	API	API US	Daley Li, CFA
	AiHuiShou	RERE	RERE US	Joyce Ju
	Alibaba Group	BABA	BABA US	Joyce Ju
	Alibaba Group	BABAF	9988 HK	Joyce Ju
	Alibaba Health	ALBHF	241 HK	Miranda Zhuang, CFA
	Baidu.com	BIDU	BIDU US	Miranda Zhuang, CFA
	Baidu.com	BAIDF	9888 HK	Miranda Zhuang, CFA
	Bilibili	BILI	BILI US	Lei Zhang
	Bilibili	BLBLF	9626 HK	Lei Zhang
	CAR Group	CRSLF	CAR AU	Sriharsh Singh
	Chinasoft International	CFTLF	354 HK	Daley Li, CFA
	Cloud Music	XVWJF	9899 HK	Lei Zhang
	Com2uS Corp	XOYAF	078340 KS	Jeehoon Jeong, CFA
	DBAPPSecurity	XDBAF	688023 CH	Daley Li, CFA
	Delhivery	XDVLF	DELHIVER IN	Sachin Salgaonkar
	Dingdong	DDL	DDL US	Joyce Ju
	East Money	XEQTF	300059 CH	Michael Li
	Grab Holdings	GRAB	GRAB US	Sachin Salgaonkar
	Hello Group	MOMO	MOMO US	Lei Zhang
	Hundsun Technologies	XYTGF	600570 CH	Daley Li, CFA
	iOIYI	IQ	IQ US	Lei Zhang
	JD Health	JDHIF	6618 HK	Miranda Zhuang, CFA
	JD.com	JDHIF JD	JD US	-
	JD.com	JDCMF	9618 HK	Joyce Ju
	Kingdee International Software	KGDEF	268 HK	Joyce Ju
	ŭ .	KSFTF		Daley Li, CFA
	Kingsoft Corporation		3888 HK	Daley Li, CFA
	Kuaishou	KUASF	1024 HK	Lei Zhang
	Makemytrip Limited	MMYT	MMYT US	Sachin Salgaonkar
	Meituan NetEase	MPNGF NETTF	3690 HK	Lei Zhang
			9999 HK	Lei Zhang
	NetEase, Inc	NTES	NTES US	Lei Zhang
	Nine Entertainment Company	NNMTF	NEC AU	Ware Kuo
	Pinduoduo Inc.	PDD	PDD US	Joyce Ju
	Plan B Media PCL	XMKTF	PLANB TB	Thitithep Nophaket
	PT Bukalapak.com	BKLPF	BUKA IJ	Sachin Salgaonkar
	PVR-Inox Ltd	PVRLF	PVRINOX IN	Sachin Salgaonkar
	REA Group	RPGRF	REA AU	Sriharsh Singh
	Tencent Holdings	TCTZF	700 HK	Miranda Zhuang, CFA
	Tencent Music	TME	TME US	Lei Zhang
	Tencent Music	XWFWF	1698 HK	Lei Zhang
	Tongcheng Travel	TNGCF	780 HK	Janet Yang
	Trip.com Group	TCOM	TCOM US	Joyce Ju
	Trip.com Group	TRPCF	9961 HK	Joyce Ju
	TUHU Car	XTCRF	9690 HK	Miranda Zhuang, CFA
	Venustech	XVCGF	002439 CH	Daley Li, CFA
	Vipshop Holdings	VIPS	VIPS US	Joyce Ju
	Xero Limited	XROLF	XRO AU	Sriharsh Singh
	YY	YY	YY US	Lei Zhang

APR - Internet, Media and Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Zomato Limited	XMWRF	ZOMATO IN	Sachin Salgaonkar
EUTRAL				
	Autohome	ATHM	ATHM US	Miranda Zhuang, CFA
	Autohome	XXYZF	2518 HK	Miranda Zhuang, CFA
	Baozun	BZUN	BZUN US	Joyce Ju
	Glodon Company	XGCOF	002410 CH	Daley Li, CFA
	GoTo Group	GTOFF	GOTO IJ	Sachin Salgaonkar
	Huya	HUYA	HUYA US	Lei Zhang
	KE Holdings	BEKE	BEKE US	Miranda Zhuang, CFA
	KE Holdings	XSQRF	2423 HK	Miranda Zhuang, CFA
	Kingsoft Cloud	KC	KC US	Daley Li, CFA
	Kingsoft Cloud	KCLHF	3896 HK	Daley Li, CFA
	Nykaa	XQQGF	NYKAA IN	Sachin Salgaonkar
	PB Fintech	XPFXF	POLICYBZ IN	Sachin Salgaonkar
	Sea Limited	SE	SE US	Sachin Salgaonkar
	Seek Limited	SKLTF	SEK AU	Sriharsh Singh
	Seven West Media	WANHF	SWM AU	Ware Kuo
	The ONE Enterprise	XUFCF	ONEE TB	Thitithep Nophaket
	VGI Public Company Limited	XZQHF	VGLTB	Thitithep Nophaket
	Weimob	WEMXF	2013 HK	Daley Li, CFA
	WiseTech Global Limited	WTCHF	WTC AU	Ware Kuo
	XD Inc.	XDNCF	2400 HK	Lei Zhang
	Yonyou Network	XYNIF	600588 CH	Daley Li, CFA
	Tonyou Network	ATIVII	000300 CH	baley El, el A
NDERPERFORM				
	Appen Ltd	APPEF	APX AU	Ware Kuo
	BEC World	XBJHF	BEC TB	Thitithep Nophaket
	Douyu	DOYU	DOYU US	Lei Zhang
	Indiamart Intermesh Limited	XEITF	INMART IN	Sachin Salgaonkar
	Info Edge	IFOEF	INFOE IN	Sachin Salgaonkar
	Kingsoft Office	XBKOF	688111 CH	Daley Li, CFA
	Ming Yuan Cloud	XWTAF	909 HK	Daley Li, CFA
	NavInfo	XWLHF	002405 CH	Daley Li, CFA
	Ping An Healthcare and Technology	PANHF	1833 HK	Miranda Zhuang, CFA
	Qi An Xin	XQTDF	688561 CH	Daley Li, CFA
	Technology One Limited	THNOF	TNE AU	Ware Kuo
	ThunderSoft	XSTSF	300496 CH	Daley Li, CFA
	Weibo Corporation	WB	WB US	Miranda Zhuang, CFA
	Weibo Corporation	WEIBF	9898 HK	Miranda Zhuang, CFA
	Zee Entertainment Enterprises	XZETF	Z IN	Sachin Salgaonkar
	Zip Co Limited	ZIZTF	ZIP AU	Ware Kuo
vw	'			
/ **	AfreecaTV	WNTHE	067160 KC	Susial oa
		WNTHF	067160 KS	Susie Lee
	CJ ENM	CJHOF	035760 KS	Susie Lee
	Coupang	CPNG	CPNG US	Susie Lee
	Dada Nexus	DADA	DADA US	Lei Zhang
	HYBE	XBGOF	352820 KS	Susie Lee
	JYP Entertainment	ALNNF	035900 KS	Susie Lee
	Kakao Corp.	DAUCF	035720 KS	Susie Lee
	Kakao Games	XKKGF	293490 KS	Susie Lee
	Krafton	XKINF	259960 KS	Susie Lee
	Naver Corporation	NHNCF	035420 KS	Susie Lee
	NCSOFT	NCSCF	036570 KS	Susie Lee
	Netmarble	XLGHF	251270 KS	Susie Lee
	Paytm	XUXBF	PAYTM IN	Sachin Salgaonkar
	PearlAbyss Corp	XEPAF	263750 KS	Susie Lee
	YG Entertainment	XYEIF	122870 KS	Susie Lee



IQmethod[™] Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) \times (1 $-$ Tax Rate) + Goodwill Amortization	Total Assets — Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations — Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt - Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt + Other LT Liabilities	Sales

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

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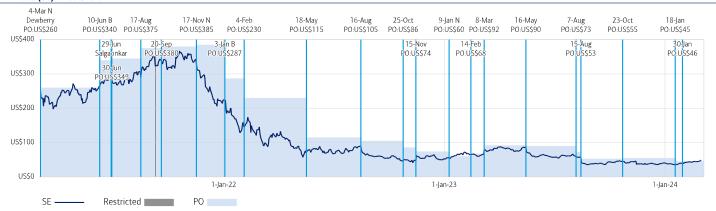
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Equity Investment Rating Distribution: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Inderperform	N/A	> 20%

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