

November 14, 2023

QUANTASING GROUP LTD.

(NasdaqGM: QSG)

Founded in 2019, Beijing-based QuantaSing Group Ltd. provides online learning services in the People's Republic of China. The company recently entered global markets through the acquisition of Kelly's Education, based in Hong Kong. The company's offerings include online courses in financial literacy, short-video production, and personal well-being, among others. QuantaSing also provides marketing, enterprise talent management, and e-commerce services to business customers.

COMPANY HIGHLIGHTS

- * QSG: A Leading Provider of Online Adult Education Services in China
- * QuantaSing is well positioned to capitalize on the growing interest in lifelong learning in China, where the online adult education market is still relatively undeveloped.
- * We like the company's focus on maintaining profitability while also launching new e-commerce businesses with strong growth potential.
- * As of June 30, 2023, QuantaSing had more than 94 million registered users, up 60% from the prior year and up more than 400% in just two years.
- * QuantaSing recently acquired Kelly's Education, which offers affordable online English classes for children, and which we expect to provide entry to global markets, including Hong Kong.
- * We believe that QuantaSing has the ability to boost adjusted net margins from a current 10% to approximately 20% over time.
- * Based on our EV/revenue analysis, we arrive at a fair value estimate for QSG of \$9 per ADS.

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KEY STATISTICS

Key Stock Statistics

Recent price (11/13/23)	\$2.31
Fair Value Estimate	\$9.00
52 week high/low	\$28.99-\$1.96
ADS outstanding (M)	58.7
Market cap (\$)	\$135.6
Dividend	NA
Yield	NA

Sector Overview

Sector	Consumer Discretionary
Sector % of S&P 500	10.6%

Financials (as of 6/30/23, RMB)

Cash & Mkt Securities (M)	934.1
Lease Liabilities (M)	93.9
Working Capital (M)	163.8
Current Ratio	1.2
Total Debt/Equity (%)	NM
Payout ratio	NA
Revenue (M)	3,081
Net Income (M)	NM
Net Margin	NM

Risk

Beta	NA
Inst. ownership	2%

Valuation

P/E forward EPS	4.4
Price/Sales (TTM)	0.3
Price/Book (TTM)	4.2

Top Holders

DCM Ventures Inc.
K2 Partners III LP
Quiming Weichuang VC Mgmt Ltd

Management

CEO/Founder/Chairman	Mr. Peng Li
CFO	Mr. Dong (Tim) Xie
CTO	Mr. Jinshan Li
Company website	https://ir.quantasing.com

PRICE CHART



COMPANY SPONSORED REPORT. SEE LAST PAGE FOR DISCLOSURES.

INVESTMENT THESIS

Founded in 2019, Beijing-based QuantaSing Group Ltd. is among the largest providers of online learning services in China. The company is focused on the adult market and operates under a range of brands, including QiNiu (mass-market financial learning), JiangZhen (lifelong personal learning), and QianChi (senior citizen interests).

In our view, QuantaSing is well positioned to capitalize on the growing interest in lifelong learning in China, where the online adult education market is still relatively undeveloped. According to a recent report from industry research provider Frost & Sullivan, fewer than 35% of adults in China were “financially literate” as of 2021, a much smaller percentage than in the United States (57%) or the United Kingdom (67%).

We believe that economic growth, increased urbanization, and rising disposable income in China will boost demand for continuing education, both personal and workplace-based. Frost & Sullivan expects the Chinese adult learning market to exceed \$150 billion by 2026, up from approximately \$90 billion in 2021 and implying compound annual growth of 12%, up from 10% during the previous five-year period. For personal interest learning, Frost & Sullivan projects even faster annual growth of 14% from 2022 to 2027. We note that QuantaSing focuses on older learners, who will account for a growing portion of the population in the coming decades.

We expect QuantaSing to leverage its platform infrastructure by entering new global markets. It recently established a presence in Hong Kong through the acquisition of Kelly’s Education, an online platform that offers affordable English language classes for children ages 3-15. The acquisition will allow QuantaSing to capitalize on the growth of Asia-Pacific education technology markets, which Grandview Research expects to grow at a compound annual rate of 16% between 2023 and 2030. We expect this growth to be driven in part by Chinese government efforts to increase demand for learning programs. These include the publication of “China’s Modernized Education 2035,” which outlines a national initiative to promote a culture of learning.

We note that the adult learning market in China is fragmented among a large number of players, and that some large companies, including JD.com, have exited the market after failing to profitably scale their businesses. However, QuantaSing has a leading market position based on revenue and a technology platform that is able to support large-scale courses. We see this as a competitive advantage. We also believe that QuantaSing can increase traffic to its platform by cross-promoting its offerings with those of other social media companies. It currently uses short video advertisements on platforms such as Douyin (Tik Tok) to attract new users.

As of June 30, 2023, QuantaSing had more than 94 million registered users, up 60% from the prior year and up more than 400% in just two years. For the year ended June 30 2023, the company reported revenue of 3,081 million RMB (approximately \$430 million), up more than 7% from the prior year, and a 10% increase in gross billings on its learning platform. Online learning accounted for 89% of total revenue (Enterprise Services contributed the balance), with financial literacy accounting for 69% and personal learning contributing 31%, which compares with 92% and 8% in the prior fiscal year.

Personal learning revenues increased by more than 340%, more than offsetting a decline from the financial literacy segment, which we attribute to conversion of free users to premium, paid status that was below the growth in registered users. These paid courses typically range from 1,980 RMB (approximately \$275) to 3,699 RMB (\$500). We expect the conversion rate to paid status to accelerate as the company invests in its course portfolio and infrastructure. We view the number of paid users as a lagging indicator of user engagement and like the recent course completion rate near 97%.

The company has thus far focused on financial literacy education, which, as noted above, is a relatively undeveloped market in China. According to Frost & Sullivan, QuantaSing’s financial literacy courses achieved a market share of approximately 37%, based on revenue, in 2021, only two years after their launch. The offering consists of free online courses delivered via livestreaming, and is geared toward novice learners who wish to acquire basic financial and investment knowledge.

QuantaSing uses a “dual-instructor” approach, in which a lead instructor lectures via livestreaming, and tutors provide additional instruction in smaller groups, supported by tools such as WeChat and video and audio messages. The company works to recruit lead instructors with strong presentation skills, which has enabled the company to simultaneously connect over 100,000 learners at a time, driving user engagement, maximizing course attendance, and fostering demand for users to advance to its premium courses.

Based on user feedback and market research, the company also launched other “personal learning” courses. In 2021, QuantaSing introduced courses in short video production, electronic keyboard, standing meditation, and painting, among others. These new offerings require minimal capital investment and, in our view, carry minimal executional risk.

QuantaSing has invested significantly in live streaming, pre-recording, and “intelligent-study” toolkits that have enabled

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PEER COMPARISON

Company	Ticker	Recent Price (\$)	52-Week High (\$)	52-Week Low (\$)	Mkt. Cap (\$MIL)	1-yr Price Change (%)	1-yr Rev Growth (%)	1 YR EPS Growth (%)	P/E Ratio	Beta	Yield (%)
QUANTASING GROUP LTD	NasdaqGS: QSG	2.31	28.99	1.96	136	NA	7	NM	NM	NA	NA
GAUTU TECHEDU INC	NYSE: GOTU	2.45	5.49	0.76	634	175	-62	NM	NM	-0.42	NA
NEW ORIENTAL EDUCATION	NYSE: EDU	69.51	69.97	24.58	11233	171	-4	NM	69.5	0.55	NA
UDEMY INC	NasdaqGS: UDMY	13.20	15.96	8.17	1989	-11	22	NM	NM	1.78	NA
DUOLINGO INC	NasdaqGS: DUOL	213.32	217.16	64.73	8887	190	47	NM	NM	0.33	NA

it to deliver content to large groups of users and increase user engagement. In addition, it is using artificial intelligence to help automate course delivery and reduce tutor workload.

The company's Enterprise Services offering, which saw an 85% increase in revenues for fiscal 2023, helps financial services firms, including security brokerage firms, insurance intermediaries, and fund intermediaries, to connect with QuantaSing users in order to promote their own businesses. For this service, QuantaSing receives a referral fee from these enterprise clients. The unit also provides HR firms with content for employee assessment and training programs, utilizing an intelligent online platform.

Most recently, QuantaSing recently announced a new e-commerce initiative that connects merchants to its user base through social media channels such as Kuaishou and Douyin (TikTok). This program is initially focusing on the fast-growing liquor industry. QuantaSing purchases liquor from distributors and then sells it to users on its platform. It reported a gross merchandise value of 13.3 million RMB (\$1.8 million) from liquor sales in August 2023. We expect this business, which requires minimal capital investment, to contribute to net margin expansion in 2024.

Lastly, we like the company's growing intellectual property portfolio, which includes six registered patents, 82 domain names, 228 copyrights (including 31 software copyrights), and 281 trademarks in China, all as of June 30, 2023.

RECENT DEVELOPMENTS

In January 2023, QuantaSing completed an initial public offering of 3.25 million American Depositary Shares ("ADSs"), each equivalent to three Class A ordinary shares. The offering price was \$12.50 per ADS, and yielded gross proceeds of \$40.6 million. The ADSs are listed on the Nasdaq under the ticker QSG. The ADSs have fallen more than 80% since the IPO, compared to an increase of 10% for the S&P 500 during the same period.

In September 2023, QuantaSing reported fourth-quarter and full-year results for FY23 (ended June 30). Fourth-quarter revenue rose 31.7% from the prior year, and full-year revenue rose 7.4%. Management also projected year-over-year revenue growth of 18%-23% in fiscal 1Q24.

In September 2023, QuantaSing acquired Kelly's Education, an online language-learning platform based in Hong Kong. Kelly's focuses on affordable online English education for children.

In September 2023, QuantaSing announced that its new e-commerce business generated gross merchandise value of 13.3 million RMB (\$1.8 million) in August 2023. As noted above, this business is initially focusing on the Chinese liquor market.

In September 2023, Frost & Sullivan's report on the adult learning market in China noted that QuantaSing was the largest company in the industry, by revenue, in 2022.

In June 2023, QuantaSing announced a share repurchase program. The company may repurchase up to US\$20 million of its ADSs over the 12-month period ending June 9, 2024.

EARNINGS & GROWTH ANALYSIS

For FY24 (ending June 30, 2024), we forecast revenue of 3,630 million RMB (\$508 million), implying growth of 18% from 3,081 million RMB (\$431 million) in FY23. For FY25, we project revenue

of 4,200 million RMB (\$588 million), which would represent 16% growth. We expect QuantaSing to focus on balancing revenue growth with prudent resource management as it expands its paid user base. We are encouraged by management's forecast of 18%-23% revenue growth in fiscal 1Q24.

While we see financial literacy courses as the company's primary revenue driver over the next few years, we like the increasing contribution of courses in other areas, as well as the new e-commerce and enterprise services offerings. Revenues from these businesses more than doubled from the prior year in fiscal 4Q23, and now account for more than 10% of overall revenue.

We expect QuantaSing to generate a gross margin of 88% in FY24 and FY25 as the revenue base expands and more users convert to paid status. The gross margin has been in the 86%-90% range over the past three years. We note that the online learning segment should provide a higher gross margin than the enterprise services business, given the former's scale and leverage of its technology resources.

The company's primary costs are sales and marketing costs, other customer acquisition costs, and employee compensation. We expect operating expenses to decline to 81% of revenue in FY24 and 78% in FY25, down from 91% in FY23.

We forecast earnings per share of 1.25 RMB in FY24 and 2.00 RMB in FY25, which translates to earnings per ADS of \$0.53 in FY24 and \$0.84 in FY25. We like the company's focus on maintaining profitability and on launching new businesses with strong growth potential. We believe that QuantaSing has the ability to boost adjusted net margins from a current 10% to approximately 20% over time, as its businesses mature and achieve economies of scale.

FINANCIAL STRENGTH & DIVIDEND

Our financial strength rating on QSG is Medium-High. In January 2023, QuantaSing completed an initial public offering of 3.25 million American Depositary Shares ("ADSs"), each equivalent to three Class A ordinary shares. The offering price was \$12.50 per ADS, and yielded gross proceeds of \$40.6 million. The ADSs are listed on the Nasdaq under the ticker QSG.

As of June 30, 2023, the company had 764 million RMB (\$105 million) in cash and equivalents on its balance sheet (934.1 million RMB, \$131 million) including short-term investments. Importantly, the company had no long-term debt. Its cash position compares favorably to its position at the end of the prior fiscal year of 266.4 million, this as a result of the proceeds raised from its initial public offering. The net working capital position was roughly 164 million RMB (\$22.6 million USD). The current ratio as of June 30 was 1.2, up from 0.8 at the end of FY22 and 0.5 at the end of FY21. We view the company's capitalization as strong given its relatively early stage of development.

QuantaSing recognizes course revenue over a contractual service period based on an estimated average learning period for paying learners. The average learning period varies by course, but is typically one to three months. Enrollment fees are collected and recorded on the balance sheet as advances from customers, and converted from contract liabilities to revenue over time. We also note that revenues in the second half of the fiscal year, which

ends in June, tend to be higher than in the first half due to lower marketing and promotional activity in the former period, ahead of the Chinese New Year

Operating cash flow has fluctuated over the past few years as QuantaSing has invested in and launched new products. For the fiscal year ended June 30, 2023, cash flow from operations was 235.6 million RMB (\$32.5 million USD), down from 272.6 million RMB. Both periods compare favorably to fiscal 2021 net cash generation of 79.4 million. We expect future product launches to leverage the company's existing infrastructure and to have a more modest impact on cash flow, which we expect to remain positive.

Net cash provided by investing activities for the fiscal year ended June 30, 2023 was 0.2 million RMB (\$28,000 USD), compared with net cash used of 108.6 million RMB in the prior year, attributable to purchase of various short-term investments related to wealth management products and loans provided to related parties.

Net cash provided by financing activities for the fiscal year ended June 30, 2023 was 247.7 million RMB (\$34.2 million USD), primarily due to net proceeds from the initial public offering, compared with 71.6 million RMB in the prior fiscal year period. This is primarily attributable to contribution from predecessor shareholders, subsidiaries and consolidated variable interest entities, and related loans from these parties.

In our view, QuantaSing is well positioned to invest in the broader buildout of its technology platform and in the marketing required to add new customers and convert them to paid status. We think that the IPO will strengthen the company's business development and partnership prospects, and help the company to gain support from the Chinese government.

We also believe QuantaSing's cash position will enable initiatives including M&A, as evidenced by the acquisition of Kelly's Education, as well as share repurchases. We note that the company's board authorized the repurchase of up to \$20 million in ADSs in June 2023, which it had not yet utilized as of June 30, 2023.

QuantaSing does not pay a dividend and is unlikely to pay one in the near term as it invests in the growth of the business.

MANAGEMENT

Peng Li is the company's founder, CEO, and chairman. Mr. Li has an established track record as an entrepreneur in the Chinese technology, education, and financial services sectors. Prior to QuantaSing, he founded Beijing Renjuren Network Technology and Qianpin Online Network Technology (Beijing). Earlier in his career, he held senior leadership positions at Beijing UCWEB Internet Technology, Baidu.com, and Beijing Jingyeda Technology.

QuantaSing is considered a "controlled company" under Nasdaq listing rules, as Mr. Li holds approximately 30% of the company's outstanding shares and more than 80% of its voting power. In all, the company's principal shareholders hold approximately 84% of the stock and have roughly 95% of the voting power.

The QuantaSing board has seven members, two of which are female. The board has two independent directors, one of whom chairs the company's audit committee.

RISKS

Investors in QuantaSing Group face a range of risks, including slower economic growth in China, increased scrutiny of Chinese stocks by international regulators, intense competition in a fragmented market, and the uncertainty of Chinese government support. The company must also attract new users and convert a portion of them from free introductory courses to paid status. In addition, the company must be able to expand its course offerings, recruit and retain high-quality teachers, and maintain its technological advantage over competitors.

COMPANY DESCRIPTION

Founded in 2019, Beijing-based QuantaSing Group Ltd. provides online learning services in the People's Republic of China. The company recently entered global markets through the acquisition of Kelly's Education, based in Hong Kong. The company's offerings include online courses in financial literacy, short-video production, and personal well-being, among others. QuantaSing also provides marketing, enterprise talent management, and e-commerce services to business customers.

VALUATION

QSG ADSs have fallen about 80% since the January 2023 IPO. We attribute this to several factors, including concerns about economic weakness in China and the accompanying depreciation of the yuan, the relatively slow conversion of free users to paid status, and the limited public float of QSG stock.

We also believe that the stock price has been hurt by Chinese government regulations that dampened investor interest in online education, following a period of venture investment in the sector. New regulations, enacted in 2021, effectively limited the time that K-12 students can spend on schoolwork for certain testing skills outside of the school setting, and viewed it as "economically discriminatory" for private companies to charge fees for children's courses due to the government ownership of schools.

QuantaSing's courses are primarily targeted for adults in China and, thus, we expect investor sentiment to improve over time. Looking ahead, we believe that QuantaSing is well positioned to expand its paid user base through new course offerings, to grow its enterprise services and e-commerce businesses, and to expand internationally. We also believe that it has the resources to make additional acquisitions. We also note that the recent acquisition of Kelly's Education, which does offer educational courses for children, operates in Hong Kong and is not subject to China regulations.

The QSG ADSs are currently trading at a trailing 12-month enterprise value/revenue multiple of just 0.1, well below the average for a peer group that includes online learning companies Gautu Techedu (GOTU), 0.3; New Oriental Education (EDU), 2.1; Udemy (UDMY), 1.3; and Duolingo (DUOL), 12.2. Excluding Duolingo, which we view as an outlier, the peer average multiple is 1.25. Based on QuantaSing's solid balance sheet and prospects for accelerated revenue growth and continued positive cash flow, we believe that the stock should trade in-line with the peer average.

Thus, applying an EV/revenue multiple of 1.25 to our FY24 revenue estimate of 3,630 million RMB (\$509 million), using a recent RMB to USD conversion rate of approximately 0.14. After

adjusting for current cash and a fully diluted share count of 176 million (approximately 58 million ADSs), we arrive at a fair value estimate of \$9 per ADS, well above current levels.

Steve Silver,
Argus Research Analyst

INCOME STATEMENT

Growth Analysis (\$MIL, RMB)	FY 2021	FY 2022	FY 2023	Q1 FY24E	Q2 FY24E	Q3 FY24E	Q4 FY24E	FY 2024E	Q1 FY25E	Q2 FY25E	Q3 FY25E	Q4 FY25E	FY 2025E
Revenue	1759.9	2868.0	3081.4	790.8	922.5	952.5	964.2	3630.0	901.5	1072.8	1105.0	1120.7	4200.0
Gross Profit	1581.0	2459.2	2689.9					3196.1					3698.2
SG&A	1795.3	2421.1	2583.7					2724.5					3027.3
R&D	116.3	273.5	219.8					216.8					250.7
Operating Income	-330.5	-220.0	-113.6					254.8					420.2
Adjusted EBITDA	NA	NA	NA	95.4	113.2	106.9	116.4	431.9	137.8	155.6	144.6	158.4	596.4
Interest Expense	0.4	0.4	5.3					4.0					4.0
Pretax Income	-315.0	-215.1	-87.0					274.8					438.7
Tax Rate (%)	NM	NM	NM					20.0					20.0
Net Income	-316.0	-233.4	-108.6	45.1	59.3	53.5	62.0	219.9	79.0	93.3	84.4	95.6	352.3
Diluted Shares	24.5	44.0	85.7					176.0					176.0
EPS (RMB)	-12.89	-5.3	-1.26	0.26	0.34	0.30	0.35	1.25	0.45	0.53	0.48	0.54	2.00
EPS (ADS, \$USD)	NA	NA	-0.51	0.11	0.14	0.13	0.15	0.53	0.19	0.22	0.20	0.23	0.84
Dividend	NA	NA	NA					NA					NA
Growth Rates (%)													
Revenue	NA	63	7					18					16
Operating Income	NA	NM	NM					NM					65%
Net Income	NA	NM	NM					NM					60%
EPS	NA	NM	NM					NM					58%
Valuation Analysis													
ADS Price (\$): High	NA	NA	28.99					NA					NA
ADS Price (\$): Low	NA	NA	1.96					NA					NA
PE: High	NA	NA	NA					NA					NA
PE: Low	NA	NA	NA					NA					NA
PS: High	NA	NA	NA					NA					NA
PS: Low	NA	NA	NA					NA					NA
Yield: High	NA	NA	NA					NA					NA
Yield: Low	NA	NA	NA					NA					NA
Financial & Risk Analysis (MIL, RMB)													
Cash & Securities	62.4	403.9	934.1					NA					NA
Working Capital	-298.4	-149.2	163.8					NA					NA
Current Ratio	0.5	0.8	1.2					NA					NA
LTDebt/Equity (%)	NM	NM	NM					NA					NA
Total Debt/Equity (%)	NM	NM	NM					NA					NA
Ratio Analysis													
Gross Profit Margin	90%	86%	87%					88%					88%
Operating Margin	NM	NA	NA					7%					10%
Net Margin	NM	NA	NA					6%					8%
Return on Assets (%)	NM	NA	NA					NA					NA
Return on Equity (%)	NM	NA	NA					NA					NA
Op Inc/Int Exp	NM	NM	NM					NM					NM
Div Payout	NA	NA	NA					NA					NA

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