

JOYY Inc. (YY US)

Moving into 2H23E recovery

JOYY delivered upbeat 4Q22 results, with rev -9% YoY (in line) and bottom line at US\$50mn (82% above consensus). 1Q23E rev guidance was 1% below consensus, on macro headwinds and soft seasonality. We forecast rev -9% YoY/-7% QoQ in 1Q23E (in which Bigo -5% QoQ), dragged by CNY & Ramadan disruptions and competition pressure. With rising paying users and Middle East stabilization, we expect Bigo to resume growth in 2H23E. Shopline's loss (US\$10mn per month in FY23E) might dilute short-term margin, but long-term margin improvement remains intact. We expect FY23/24E adj. NPM at 5.5%/6.5%, backed by narrowing loss of Hago & Shopline (Bigo OPM stable YoY in FY23E). To factor in soft 1Q23E and Bigo investment, we cut FY22-24E earnings by 3.4-9.6%, with new SOTP-based TP at US\$46.

- **Upbeat 4Q22 with cloudy guidance.** User metrics in 4Q22 trended well, as Bigo Live MAU sequentially increased by 14.3% to 36.8mn. Rev -8.9% YoY, in line with consensus, in which Bigo/All others -17.3%/46.7%. 1Q23E rev is guided between US\$552mn and US\$570mn, midpoint 1% below consensus for macro uncertainties and soft seasonality. Non-GAAP NP recorded at US\$50mn, 82% above consensus, mainly on disciplined S&M expenses offset by expenses on the annual gala and Shopline loss.
- **Waiting for 2H23E recovery.** CNY and Ramadan disruptions dampened 1Q23E momentum. We forecast rev -9% YoY/-7% QoQ in 1Q23E (in which BIGO -5% QoQ), with competition pressure in the Middle East and macro challenges. Headwinds may linger in 2Q23E, but rev drop range would narrow (forecasting Bigo +1% QoQ). We expect Bigo Live to resume growth in 2H23E (Bigo at LSD decline in FY23E), supported by rising paying users in European & US mkt and stabilization of the Middle East mkt. JOYY aims to further improve Bigo Live's penetration, expand user base and engagement via product innovation and innovative local operations.
- **Bigo OPM stable YoY in FY23E.** We expect 1Q23E adj. NP at US\$12mn, with margin diluted by Shopline loss and FX loss. JOYY might invest in Bigo Live to boost its momentum in FY23E, but expenses could be manageable (targeting non-GAAP OPM stable YoY). Likee achieved a breakeven in 2H22, and mgmt. targets to achieve user growth in FY23E while maintains profitability. Looking ahead, we expect adj. NPM of Group at 5.5%/6.5% in FY23/24E, with continuous cost discipline and narrowing loss of Shopline.
- **Maintain BUY.** We trimmed FY22E-24E earnings by 3.4-9.6% to reflect 1Q23E softness and Bigo investment. Our SOTP-based TP was correspondingly adjusted to US\$46, by assigning 6x FY23E P/E to Bigo Live.

Earnings Summary

| (YE 31 Dec) | FY21A | FY22 | FY23E | FY24E | FY25E |
|----------------------|-------|-------|--------|-------|-------|
| Revenue (US\$ mn) | 2,619 | 2,412 | 2,461 | 2,551 | 2,654 |
| YoY growth (%) | 36.5 | (7.9) | 2.0 | 3.7 | 4.1 |
| Net income (US\$ mn) | 109 | 199 | 136 | 167 | 203 |
| Adj. EPS (US\$) | 1.4 | 2.8 | 1.9 | 2.3 | 2.8 |
| YoY growth (%) | NA | 83.0 | (31.7) | 22.4 | 22.0 |
| Consensus EPS | NA | NA | 2.1 | 2.6 | 3.2 |
| P/E (x) | NA | 9.8 | 14.3 | 11.7 | 9.7 |
| P/S (x) | 1.5 | 0.8 | 0.8 | 0.8 | 0.7 |
| Yield (%) | 8.0 | 8.1 | 8.9 | 9.7 | 10.6 |

Source: Company data, Bloomberg, CMBIGM estimates

BUY (Maintain)

| | |
|---------------|-----------|
| Target Price | US\$46.0 |
| (Previous TP | US\$49.0) |
| Up/Downside | +70.0% |
| Current Price | US\$27.0 |

China Internet Sector

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Stock Data

| | |
|--------------------------|-------------|
| Mkt Cap (US\$ mn) | 2,016 |
| Avg 3 mths t/o (US\$ mn) | 22.86 |
| 52w High/Low (US\$) | 47.23/21.38 |
| Total Issued Shares (mn) | 55 |

Source: Bloomberg

Shareholding Structure

| | |
|--------------------|-------|
| T Rowe Price Group | 7.20% |
| BlackRock | 4.41% |
| Point 72 | 3.56% |

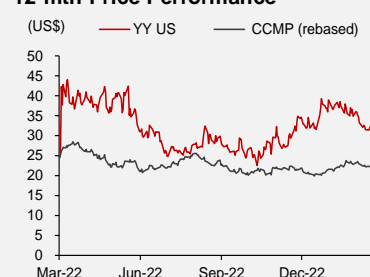
Source: Bloomberg

Share Performance

| | Absolute | Relative |
|-------|----------|----------|
| 1-mth | -18.4% | -14.1% |
| 3-mth | -17.1% | -17.1% |
| 6-mth | -4.9% | 4.8% |

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: PwC

Figure 1: 4Q22 financial review

| US\$ mn | 1Q21 | 2Q21 | 3Q21 | 4Q21 | 1Q22 | 2Q22 | 3Q22 | 4Q22 | QoQ | YoY | Consensus | Diff % | CMBI | Diff % |
|-------------------|--------|--------|-------|-------|-------|-------|--------|--------|-------|-------|-----------|--------|--------|--------|
| Revenue | 643 | 662 | 651 | 664 | 624 | 596 | 587 | 605 | 3.1% | -8.9% | 602 | 0% | 602 | 0% |
| Gross profit | 200 | 203 | 211 | 224 | 201 | 218 | 220 | 212 | -3.6% | -5.0% | 215 | -1% | 210 | 1% |
| Operating profit | (73) | (101) | 7 | 61 | 6 | 39 | 20 | (14) | NA | NA | 24 | NA | (73) | NA |
| Adj. net profit | (26) | (4) | 33 | 98 | 21 | 51 | 77 | 50 | NA | NA | 28 | 82% | 2 | 2041% |
| Adj. EPS (US\$) | (0.30) | (0.04) | 0.36 | 1.35 | 0.28 | 0.71 | 0.94 | 0.62 | NA | NA | 0.21 | 200% | 0.12 | 407% |
| Margin (%) | | | | | | | | | | | | | | |
| Gross margin | 31.1% | 30.7% | 32.4% | 33.7% | 32.2% | 36.6% | 37.5% | 35.1% | | | 35.7% | | 34.8% | |
| Operating margin | -11.4% | -15.3% | 1.1% | 9.1% | 1.0% | 6.5% | 3.4% | -2.3% | | | 4.0% | | -12.1% | |
| Adj. net margin | -4.0% | -0.5% | 5.1% | 14.7% | 3.3% | 8.6% | 13.1% | 8.3% | | | 4.6% | | 0.4% | |
| Growth (%) | | | | | | | | | | | | | | |
| Revenue (YoY) | 88.1% | 39.7% | 21.7% | 16.8% | -3.0% | -9.9% | -9.8% | -8.9% | | | -9.2% | | -7.0% | |
| Revenue (QoQ) | 13.1% | 2.9% | -1.7% | 2.0% | -6.0% | -4.4% | -1.6% | 3.1% | | | 2.7% | | 1.5% | |
| Operating profit | NA | NA | NA | NA | NA | NA | NA | NA | | | NA | | NA | |
| Adj. net profit | NA | NA | NA | NA | NA | NA | 131.5% | -48.4% | | | NA | | NA | |

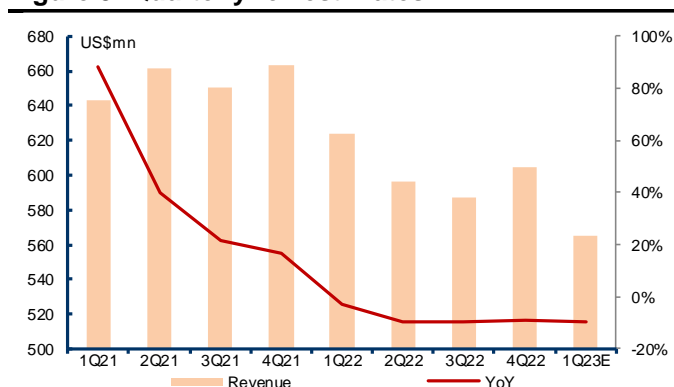
Source: Company data, Bloomberg, CMBIGM estimates

Figure 2: Revenue breakdown

| US\$ mn | 1Q21 | 2Q21 | 3Q21 | 4Q21 | 1Q22 | 2Q22 | 3Q22 | 4Q22 | QoQ | YoY |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|--------------|
| Total revenue | 643 | 662 | 651 | 664 | 624 | 596 | 587 | 605 | 3.1% | -8.9% |
| by segment | | | | | | | | | | |
| Live broadcasting | 614 | 630 | 612 | 621 | 590 | 565 | 543 | 527 | -2.8% | -15.1% |
| Others | 29 | 32 | 38 | 43 | 34 | 31 | 44 | 77 | 76.2% | 80.9% |
| by platform | | | | | | | | | | |
| Bigo | 581 | 598 | 569 | 576 | 535 | 503 | 483 | 476 | -1.4% | -17.3% |
| All other | 62 | 64 | 82 | 88 | 89 | 93 | 103 | 128 | 24.2% | 46.7% |

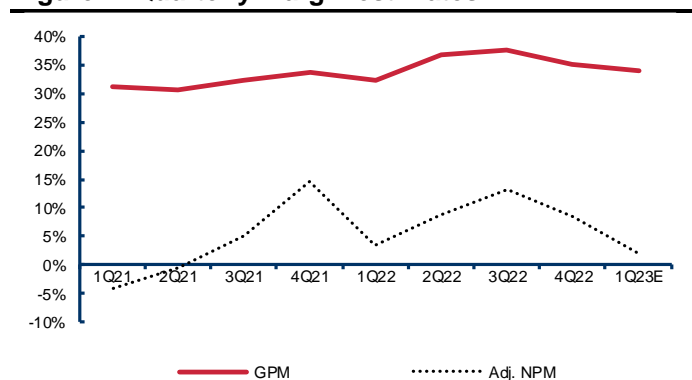
Source: Company data, CMBIGM estimates

Figure 3: Quarterly rev estimates



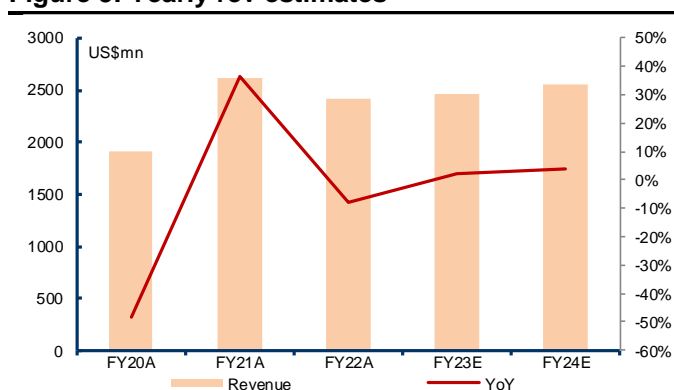
Source: Company data, CMBIGM estimates

Figure 4: Quarterly margin estimates



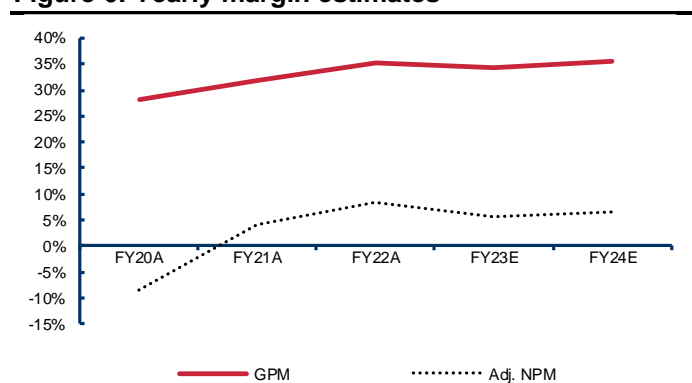
Source: Company data, CMBIGM estimates

Figure 5: Yearly rev estimates



Source: Company data, CMBIGM estimates

Figure 6: Yearly margin estimates



Source: Company data, CMBIGM estimates

We trimmed FY22E-24E earnings by 3.4-9.6% to reflect 1Q23E softness and Bigo investment. We expect Bigo Live to resume growth in 2H23E with Middle East stabilization. JOYY might invest in Bigo Live to boost its momentum in FY23E, but expenses could be manageable (forecasting non-GAAP OPM stable YoY). In the long run, we are positive on its better margin outlook, backed by narrowing loss of other biz.

Our SOTP-based TP was correspondingly adjusted from US\$49 to US\$46. The new TP was derived from: 1) YY Live: US\$1.9bn, based on proceeds from Baidu (for conservative estimates); 2) Huya: based on market cap; and 3) Bigo Live: US\$1.5bn, by assigning 6x FY23E P/E (multiple below industrial average for its slower growth and competition pressure).

Figure 7: CMBIGM estimates vs consensus

| US\$ mn, Dec-YE | CMBIGM | | | Consensus | | | Diff (%) | | |
|------------------|--------|-------|-------|-----------|-------|-------|----------|----------|----------|
| | FY23E | FY24E | FY25E | FY23E | FY24E | FY25E | FY23E | FY24E | FY25E |
| Revenue | 2,461 | 2,551 | 2,654 | 2,511 | 2,693 | 2,995 | -2.0% | -5.3% | -11.4% |
| Gross Profit | 846 | 909 | 952 | 889 | 967 | 1,079 | -4.9% | -6.0% | -11.8% |
| Operating Profit | 138 | 168 | 205 | 96 | 143 | 212 | 43.3% | 17.8% | -3.0% |
| Net profit | 136 | 167 | 203 | 167 | 198 | 250 | -18.5% | -15.7% | -18.6% |
| Adj. EPS (RMB) | 1.89 | 2.30 | 2.80 | 2.11 | 2.58 | 3.16 | -10.4% | -10.8% | -11.5% |
| Gross Margin | 34.4% | 35.7% | 35.8% | 35.4% | 35.9% | 36.0% | -1.0ppts | -0.2ppts | -0.2ppts |
| Operating Margin | 5.6% | 6.6% | 7.7% | 3.8% | 5.3% | 7.1% | +1.8ppts | +1.3ppts | +0.7ppts |
| Net Margin | 5.5% | 6.5% | 7.7% | 6.7% | 7.3% | 8.3% | -1.1ppts | -0.8ppts | -0.7ppts |

Source: CMBIGM estimates, Bloomberg

Figure 8: Earnings revision

| US\$ mn, Dec-YE | New | | | Old | | | Diff (%) | | |
|------------------|-------|-------|-------|-------|-------|-------|----------|----------|-------|
| | FY23E | FY24E | FY25E | FY23E | FY24E | FY25E | FY23E | FY24E | FY25E |
| Revenue | 2,461 | 2,551 | 2,654 | 2,461 | 2,527 | NA | 0.0% | 0.9% | NA |
| Gross Profit | 846 | 909 | 952 | 900 | 929 | NA | -6.0% | -2.2% | NA |
| Operating Profit | 138 | 168 | 205 | 154 | 176 | NA | -10.7% | -4.5% | NA |
| Net profit | 136 | 167 | 203 | 151 | 172 | NA | -9.6% | -3.4% | NA |
| Adj. EPS (RMB) | 1.89 | 2.30 | 2.80 | 2.09 | 2.38 | NA | -9.6% | -3.4% | NA |
| Gross Margin | 34.4% | 35.7% | 35.8% | 36.6% | 36.8% | NA | -2.2ppts | -1.1ppts | NA |
| Operating Margin | 5.6% | 6.6% | 7.7% | 6.3% | 7.0% | NA | -0.7ppts | -0.4ppts | NA |
| Net Margin | 5.5% | 6.5% | 7.7% | 6.1% | 6.8% | NA | -0.6ppts | -0.3ppts | NA |

Source: CMBIGM estimates

Figure 9: SOTP valuation

Figure 3: SOTP Valuation

| SOTP | | Metrics | | Multiple | Valuation | |
|--|--|---------|-----|--------------|--------------|-------|
| (US\$ mn) | Rev | Adj. NP | | Shareholding | Valuation | |
| YY Live | Based on US\$1.9bn from Baidu (transaction valuation of US\$3.6bn) | | | 100% | 1,900 | |
| Huya | Based on mkt cap | | | 18% | 162 | |
| Bigo Live | FY23E | 1,829 | 247 | 6x FY23E P/E | 100% | 1,481 |
| Total | | | | | 3,543 | |
| Net cash (less: US\$1.9bn received from Baidu) | | | | | 1,190 | |
| Holding discount | | | | | 30% | |
| Equity Value (US\$ mn) | | | | | 3,313 | |
| Target Price (US\$) | | | | | 46 | |

Source: Company data, CMBIGM estimates

Figure 10: Valuation comps

| Company | Ticker | Mkt cap (USD mn) | Currency | Price | CMBI Rating | CMBI TP | PE | | | PS | | |
|--------------------------|--------------|---------------------|------------|-----------|----------------|------------|-------------|-------------|-------------|------------|------------|------------|
| | | | | | | | FY23E | FY24E | FY25E | FY23E | FY24E | FY25E |
| JOYY | YY US | 1,919 | USD | 27 | BUY | 46 | 14.3 | 11.7 | 9.7 | 0.8 | 0.8 | 0.7 |
| Live Streaming | | | | | | | | | | | | |
| Hello Inc | MOMO US | 1,664 | USD | 8 | HOLD | 14 | 6.2 | 5.9 | 5.4 | 0.9 | 0.9 | 0.9 |
| Inke | 3700 HK | 252 | HKD | 1 | NA | NA | 5.8 | 6.5 | 5.4 | 0.2 | 0.2 | 0.2 |
| Douyu | DOYU US | 381 | USD | 1 | NA | NA | NA | NA | 25.1 | 0.4 | 0.4 | 0.4 |
| Huya | HUYA US | 924 | USD | 4 | BUY | 8 | NA | NA | 43.5 | 0.7 | 0.7 | 0.7 |
| Average | | | | | | | 6.0 | 6.2 | 5.4 | 0.5 | 0.6 | 0.5 |
| Pan-entertainment | | | | | | | | | | | | |
| TME | TME US | 12,922 | USD | 8 | BUY | 11 | 18.6 | 16.8 | 15.4 | 3.1 | 3.0 | 2.8 |
| iQIYI | IQ US | 6,618 | USD | 7 | BUY | 9 | 21.4 | 14.1 | 11.2 | 1.4 | 1.3 | 1.2 |
| China Literature | 772 HK | 4,334 | HKD | 34 | NA | NA | 22.8 | 19.3 | 16.8 | 3.8 | 3.4 | 3.1 |
| Bilibili | BILI US | 8,649 | USD | 21 | BUY | 30 | NA | NA | 48.7 | 2.3 | 2.0 | 1.7 |
| Kuaishou | 1024 HK | 28,373 | HKD | 51 | BUY | 94 | NA | NA | 20.9 | 2.1 | 1.8 | 1.5 |
| Zhihu | ZH US | 735 | USD | 1 | BUY | 2 | NA | NA | NA | 1.4 | 1.1 | 0.9 |
| Average | | | | | | | 20.9 | 16.7 | 16.1 | 2.4 | 2.1 | 1.9 |
| Average | | | | | | | 15.0 | 12.5 | 10.8 | 1.6 | 1.5 | 1.3 |

Source: Bloomberg, CMBIGM estimates

Financial Summary

Income statement

| YE 31 Dec (US\$ mn) | FY21A | FY22A | FY23E | FY24E | FY25E |
|-------------------------|---------|---------|---------|---------|---------|
| Revenue | 2,619 | 2,412 | 2,461 | 2,551 | 2,654 |
| Live broadcasting | 2,477 | 2,226 | 2,207 | 2,264 | 2,329 |
| Others | 142 | 186 | 254 | 287 | 325 |
| COGS | (1,781) | (1,559) | (1,615) | (1,641) | (1,703) |
| Gross profit | 838 | 852 | 846 | 909 | 952 |
| S&M | (280) | (262) | (280) | (287) | (295) |
| Admin. Exp. | (468) | (400) | (392) | (398) | (393) |
| R&D | (222) | (142) | (156) | (157) | (159) |
| Others | - | (15) | - | (0) | (0) |
| Operating profit | (107) | 51 | 36 | 67 | 104 |
| Financial income | 91 | 93 | 105 | 105 | 105 |
| Other income | 25 | 18 | 19 | (0) | (0) |
| Pre-tax income | (78) | 635 | 123 | 153 | 191 |
| Income tax | (26) | (35) | (34) | (34) | (35) |
| MI | 14 | 27 | - | - | - |
| Share of equity inv | (26) | (498) | - | - | - |
| Net profit | (90) | 119 | 89 | 119 | 156 |
| Adj. net profit | 109 | 199 | 136 | 167 | 203 |

Cash flow summary

| YE 31 Dec (US\$ mn) | FY21A | FY22A | FY23E | FY24E | FY25E |
|---------------------------|-------|-------|-------|-------|-------|
| Net income | (130) | 102 | 89 | 119 | 156 |
| D&A | 88 | 105 | 121 | 135 | 148 |
| Change in WC | (26) | (50) | (7) | (13) | (15) |
| Others | 2,081 | 735 | 185 | 199 | 173 |
| Operating CF | 2,013 | 892 | 387 | 439 | 462 |
| Capex | (158) | (163) | (168) | (173) | (178) |
| Associates | - | - | - | - | - |
| Others | (821) | (288) | (116) | (116) | (116) |
| Investing CF | (979) | (451) | (283) | (288) | (294) |
| Equity raised | - | - | - | - | - |
| Change of debts | - | - | - | - | - |
| Others | (724) | - | - | - | - |
| Financing CF | (724) | - | - | - | - |
| Net change in cash | 312 | 441 | 104 | 151 | 169 |
| Cash (beg of yr) | 1,756 | 2,068 | 2,509 | 2,613 | 2,764 |
| FX | - | - | - | - | - |
| Cash (end of yr) | 2,068 | 2,509 | 2,613 | 2,764 | 2,932 |

Balance sheet

| YE 31 Dec (US\$ mn) | FY21A | FY22A | FY23E | FY24E | FY25E |
|--------------------------------|-------|-------|-------|-------|-------|
| Non-current assets | 4,050 | 4,427 | 4,659 | 4,696 | 4,726 |
| Fixed asset | 365 | 343 | 575 | 613 | 642 |
| Long-term investments | 1,022 | 660 | 660 | 660 | 660 |
| Intangible assets | 312 | 398 | 398 | 398 | 398 |
| Others | 2,350 | 3,025 | 3,025 | 3,025 | 3,025 |
| Current assets | 5,070 | 4,645 | 5,699 | 5,863 | 6,047 |
| Cash | 2,134 | 1,518 | 2,613 | 2,764 | 2,932 |
| Deposit over 3 months | 1,604 | 2,361 | 2,361 | 2,361 | 2,361 |
| Account receivable | 114 | 118 | 120 | 125 | 130 |
| Others | 1,218 | 648 | 605 | 614 | 624 |
| Current liabilities | 2,512 | 3,072 | 3,102 | 3,146 | 3,164 |
| Borrowings | - | - | - | - | - |
| Account payable | 18 | 56 | 57 | 58 | 58 |
| Tax payable | 66 | 78 | 78 | 78 | 78 |
| Accrued expenses | 2,346 | 2,360 | 2,388 | 2,427 | 2,442 |
| Other | 82 | 578 | 579 | 583 | 586 |
| Non-current liabilities | 980 | 497 | 475 | 476 | 476 |
| Convertible debt | 924 | 401 | 401 | 401 | 401 |
| Other long-term liabilities | 56 | 96 | 74 | 75 | 75 |
| MI | 34 | 233 | 218 | 203 | 189 |
| Total net assets | 5,628 | 5,503 | 6,780 | 6,938 | 7,133 |
| Shareholders' equity | 5,594 | 5,270 | 6,067 | 6,239 | 6,449 |

Key ratios

| YE 31 Dec | FY21A | FY22A | FY23E | FY24E | FY25E |
|---------------------------|-------|-------|--------|--------|--------|
| Sales mix (%) | | | | | |
| Live broadcasting | 94.6 | 92.3 | 89.7 | 88.8 | 87.7 |
| Others | 5.4 | 7.7 | 10.3 | 11.2 | 12.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Growth rate (%) | | | | | |
| Revenue | 36.5 | (7.9) | 2.0 | 3.7 | 4.1 |
| Gross profit | 55.2 | 1.7 | (0.7) | 7.5 | 4.6 |
| EBIT | NA | NA | NA | 84.2 | 55.6 |
| Net profit | NA | 83.0 | (31.7) | 22.4 | 22.0 |
| P&L ratios (%) | | | | | |
| Operating margin | (4.1) | 2.1 | 1.5 | 2.6 | 3.9 |
| Pre-tax margin | (3.0) | 26.3 | 5.0 | 6.0 | 7.2 |
| Adj. net margin | 4.2 | 8.3 | 5.5 | 6.5 | 7.7 |
| Effective tax rate | 33.2 | (5.4) | (27.9) | (22.4) | (18.1) |
| Returns (%) | | | | | |
| ROE | 1.8 | 3.7 | 2.4 | 2.7 | 3.2 |
| ROA | 1.3 | 2.2 | 1.4 | 1.6 | 1.9 |
| Per share | | | | | |
| EPS (RMB) | (1.1) | 1.7 | 1.2 | 1.6 | 2.1 |
| DPS (RMB) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| BVPS (RMB) | 71.6 | 73.2 | 84.3 | 86.3 | 88.7 |

Source: Company data, CMBIGM estimates

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| | |
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