

# HUYA (HUYA US)

## Clear margin improvement

We expect Huya to deliver upbeat margin in 4Q22E, despite muted livestreaming disrupted by epidemic outbreak which is well priced in. We suggest to look beyond soft 1Q23E owing to weak seasonality & epidemic, and expect 2H23E livestreaming to resume positive growth, backed by: 1) a rebase after the regulatory change in livestreaming in June last year; 2) macro recovery after reopening; and 3) new blockbuster game launch. After rearrangement of LoL tournament licensing in Jan 2023, we are more positive on Huya's margin expansion ahead (forecasting narrowing loss in FY23E and group profit in FY24E). We expect license rearrangement to create annual COGS saving of RMB700-800mn in FY23-24E, despite less sublicensing rev. We lifted FY22E-24E adj. NPM by 0.3-1% to reflect better margin outlook (adj. NP raised by 85% in FY24E), with TP up to US\$7.6 (for both higher earnings and multiple with sector re-rating).

- Expecting 4Q22E with upbeat margin.** We expect Huya rev -25% YoY (vs. prior -24%), in which livestreaming momentum was disrupted by epidemic impact (rising cases to affect annual campaign operation and hosts engagement). We view topline as forgivable, and better margin outlook would support its stock price up. We forecast 4Q22E bottom line at -RMB481mn (with adj. NPM at -23%, vs. prior -RMB572mn), with better GPM and lower S&M with moderate campaign. User metrics were on track, in which MAU kept stable YoY and paying users remained stable QoQ in 4Q22E.
- Clear margin improvement ahead, with content cost optimization.** Looking into 2023E, we expect livestreaming rev -5% YoY (unchanged). After 1Q23E soft seasonality (forecasting -10% QoQ), we think 2H23E livestreaming might resume positive growth, backed by: 1) a rebase after the regulatory change; 2) macro recovery after reopening amid strong seasonality; and 3) new blockbuster game launch to boost user engagement. For the rearrangement of LoL tournament licensing in Jan 2023, license fee will reduce to RMB450mn in 3 years (vs. prior RMB2bn in 5 years), with expanding scope (World Championship and other smaller tournaments) but non-exclusive rights. We expect annual COGS saving of RMB700-800mn in FY23-24E (on tournament & content cost), despite sublicensing rev would decline around RMB500mn. As such, we are more positive on Huya's margin expansion ahead, forecasting its net loss narrowing to RMB164mn in FY23E and group profit in FY23E.
- Maintain BUY.** We lifted FY22E-24E adj. NPM by 0.3-1% to reflect better margin outlook (adj. NP by 85% in FY24E), despite 0-4% rev forecast cut. Our new DCF-based TP was US\$7.6 (implying 1.5x FY23E P/S, still below average).

### Earnings Summary

(YE 31 Dec)	FY20A	FY21A	FY22E	FY23E	FY 24E
Revenue (RMB mn)	10,914	11,351	9,223	8,429	8,831
YoY growth (%)	30.3	4.0	(18.8)	(8.6)	4.8
Adj. net income (RMB mn)	1,262	833	(316)	(164)	41
Adj. EPS (RMB)	5.29	3.45	(1.3)	(0.7)	0.16
YoY growth (%)	63.6	(34.8)	NA	NA	NA
Consensus EPS (RMB)	NA	NA	(1.6)	(0.5)	0.60
P/E (x)	7.9	12.2	NA	NA	261.4
P/S (x)	0.92	0.88	1.09	1.19	1.14
Yield (%)	0.0	0.0	0.0	0.0	0.0
ROE (%)	12.9	7.9	(3.1)	(1.6)	0.4
Net gearing (%)	Net cash	Net cash	Net cash	Net cash	Net cash

Source: Company data, Bloomberg, CMBIGM estimates

**BUY (Maintain)**

Target Price	US\$7.6
(Previous TP)	US\$4.0)
Up/Downside	+21.8%
Current Price	US\$6.24

### China Internet Sector

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### Stock Data

Mkt Cap (US\$ mn)	1,351
Avg 3 mths t/o (US\$ mn)	10.65
52w High/Low (US\$)	6.94/1.64
Total Issued Shares (mn)	89

Source: Bloomberg

### Shareholding Structure

Morgan Stanley	16.88%
Teachers Insurance & Annuity	8.68%
Asso of America	
UBS AG	6.85%

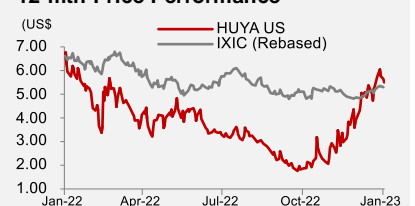
Source: Bloomberg

### Share Performance

	Absolute	Relative
1-mth	39.2%	27.9%
3-mth	194.1%	183.6%
6-mth	66.7%	81.2%

Source: Bloomberg

### 12-mth Price Performance



Source: Bloomberg

Auditor: Ernst & Young

**Figure 1: 4Q22E financial preview**

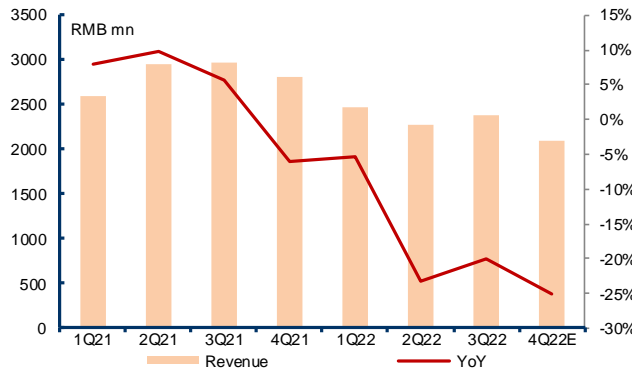
RMB mn	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22E	QoQ	YoY	Consensus	Diff %
Revenue	2,990	2,605	2,962	2,976	2,809	2,465	2,275	2,379	2,105	-12%	-25%	2,157	-2%
Gross profit	598	514	581	504	1	334	219	342	(302)	NA	NA	(317)	NA
Net profit	253	186	186	524	(313)	(3)	(19)	60	(529)	NA	NA	(559)	NA
Adj. net profit	306	266	250	180	(241.7)	47	6	106	(481)	NA	NA	(518)	NA
Adj. EPS (RMB)	1.27	1.10	1.04	0.75	(1.00)	0.19	0.02	0.44	(1.96)	NA	NA	(2.14)	NA
<b>Margin (%)</b>													
Gross margin	20.0%	19.7%	19.6%	16.9%	0.0%	13.5%	9.6%	14.4%	-14.3%				-14.7%
Operating margin	9.0%	9.3%	8.4%	5.2%	-13.8%	-0.1%	-2.5%	2.4%	-25.8%				-27.7%
Adj. net margin	10.2%	10.2%	8.4%	6.0%	-8.6%	1.9%	0.3%	4.5%	-22.9%				-24.0%
<b>Growth (%)</b>													
Revenue (YoY)	21.2%	8.0%	9.8%	5.7%	-6.1%	-5.4%	-23.2%	-20.1%	-25.1%				-23.2%
Revenue (QoQ)	6.2%	-12.9%	13.7%	0.4%	-5.6%	-12.3%	-7.7%	4.5%	-11.5%				-9.3%
Gross profit	24.2%	8.2%	1.1%	-18.8%	-99.8%	-35.1%	-62.3%	-32.1%	NA				NA
Adj. net profit	26.5%	0.3%	-24.4%	-50.2%	NA	-82.5%	-97.7%	-41.1%	NA				NA

Source: Company data, Bloomberg, CMBIGM estimates

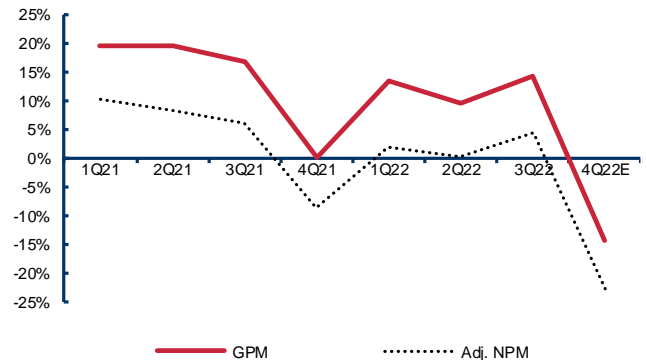
**Figure 2: 4Q22E revenue breakdown**

	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22E	QoQ	YoY
<b>Revenue (RMB mn)</b>	<b>2,990</b>	<b>2,605</b>	<b>2,962</b>	<b>2,976</b>	<b>2,809</b>	<b>2,465</b>	<b>2,275</b>	<b>2,379</b>	<b>2,105</b>	<b>-11.5%</b>	<b>-25.1%</b>
Live broadcasting	2,815	2,392	2,579	2,602	2,613	2,152	2,052	2,017	1,994	-1.1%	-23.7%
Others	175	213	383	374	196	313	223	361	110	-69.4%	-43.6%

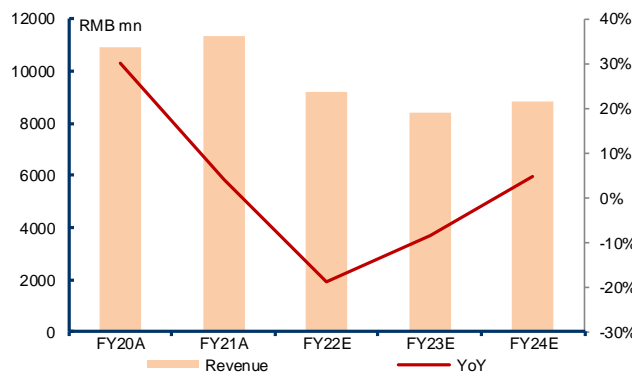
Source: Company data, CMBIGM estimates

**Figure 3: Quarterly rev estimates**

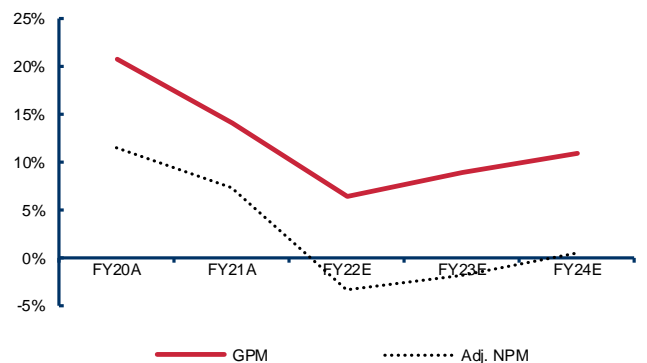
Source: Company data, CMBIGM estimates

**Figure 4: Quarterly margin estimates**

Source: Company data, CMBIGM estimates

**Figure 5: Annual rev estimates**

Source: Company data, CMBIGM estimates

**Figure 6: Annual margin estimates**

Source: Company data, CMBIGM estimates

We trimmed FY22E-24E rev by 0.5-4.2% to reflect sublicensing rev decline after license rearrangement. Livestreaming would see single digit decline in FY23E (unchanged), in our conservative estimates (assuming mild macro recovery and little contribution from new top games launched). We are more positive on Huya's margin improvement (backed by license rearrangement and potentially lower revenue sharing), and lift FY22E-24E adj. NPM by 0.3-1% to reflect better margin outlook (adj. NP by 85% in FY24E). Our DCF-based TP was correspondingly adjusted to US\$7.6, implying 1.5x FY23E P/S. The new TP was mainly driven by higher earnings forward (adj. NP by 85% in FY24E), thus leading to higher multiple (also benefiting from sector re-rating).

**Figure 7: CMBIGM estimates vs consensus**

RMB mn, Dec-YE	CMBIGM			Consensus			Diff (%)		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	9,223	8,429	8,831	9,257	8,968	9,508	-0.4%	-6.0%	-7.1%
Gross profit	593	754	972	561	768	1,133	5.7%	-1.8%	-14.2%
Operating profit	(546)	(384)	(157)	(661)	(464)	(163)	NA	NA	NA
Adj. net profit	(316)	(164)	41	(359)	(125)	159	NA	NA	-74.4%
EPS (RMB)	(1.30)	(0.67)	0.16	(1.57)	(0.46)	0.60	NA	NA	-73.1%
Gross margin	6.4%	8.9%	11.0%	6.1%	8.6%	11.9%	+0.4ppts	+0.4ppts	-0.9ppts
Operating margin	-5.9%	-4.6%	-1.8%	-7.1%	-5.2%	-1.7%	+1.2ppts	+0.6ppts	-0.1ppts
Net margin	-3.4%	-1.9%	0.5%	-3.9%	-1.4%	1.7%	+0.5ppts	-0.5ppts	-1.2ppts

Source: Company data, Bloomberg, CMBIGM estimates

**Figure 8: Earnings revision**

RMB mn, Dec-YE	CMBIGM			Old			Diff (%)		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	9,223	8,429	8,831	9,266	8,796	9,160	-0.5%	-4.2%	-3.6%
Gross profit	593	754	972	509	724	906	16.6%	4.2%	7.3%
Operating profit	(546)	(384)	(157)	(636)	(419)	(179)	NA	NA	NA
Adj. net profit	(316)	(164)	41	(406)	(199)	22	NA	NA	84.8%
EPS (RMB)	(1.30)	(0.67)	0.16	(1.68)	(0.81)	0.09	NA	NA	80.5%
Gross margin	6.4%	8.9%	11.0%	5.5%	8.2%	9.9%	+0.9ppts	+0.7ppts	+1.1ppts
Operating margin	-5.9%	-4.6%	-1.8%	-6.9%	-4.8%	-2.0%	+1.0ppts	+0.2ppts	+0.2ppts
Net margin	-3.4%	-1.9%	0.5%	-4.4%	-2.3%	0.2%	+1.0ppts	+0.4ppts	+0.3ppts

Source: Company data, CMBIGM estimates

**Figure 9: DCF valuation**

DCF valuation (RMB mn)										
	2023E	2024E	2025E	2026E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	(384)	(157)	(52)	43	121	189	241	285	332	381
Tax	0	(7)	(20)	(31)	(39)	(45)	(48)	(50)	(58)	(67)
D&A	137	151	166	182	200	220	242	267	293	323
Working capital	(130)	19	34	23	17	12	13	9	8	7
CAPEX	(63)	(66)	(69)	(73)	(77)	(80)	(84)	(89)	(93)	(98)
<b>FCF</b>	<b>(440)</b>	<b>(60)</b>	<b>59</b>	<b>145</b>	<b>223</b>	<b>296</b>	<b>364</b>	<b>421</b>	<b>481</b>	<b>546</b>
FCF Growth	NA	NA	NA	147%	54%	33%	23%	16%	14%	13%
Terminal Value										5,650
<b>PV (FCF+ Terminal Value)</b>	<b>(440)</b>	<b>(53)</b>	<b>46</b>	<b>101</b>	<b>137</b>	<b>161</b>	<b>175</b>	<b>180</b>	<b>182</b>	<b>2,071</b>

**Assumptions**

<b>WACC</b>	<b>12.95%</b>
Tax rate	20.0%
Risk free rate	3.6%
Cost of debt	0.0%
Beta	1.20
Market risk return	11.4%
Cost of equity	13.0%
Debt/Assets	0.0%
<b>Terminal growth rate</b>	<b>3.0%</b>

**Equity Value**

<b>PV</b>	<b>2,558</b>
minus: Net cash	(9,906)
minus: Minority Interest	0
Equity Value	12,464
Shares (mn)	244
<b>Target Price (US\$) based on DCF</b>	<b>7.6</b>

		WACC				
		11.0%	12.0%	13.0%	14.0%	15.0%
Growth	1.5%	7.9	7.7	7.4	7.3	7.1
	2.0%	8.0	7.7	7.5	7.3	7.1
	2.5%	8.1	7.8	7.6	7.3	7.2
	3.0%	8.2	7.9	<b>7.6</b>	7.4	7.2
	3.5%	8.4	8.0	7.7	7.4	7.2
	4.0%	8.5	8.1	7.8	7.5	7.3
4.5%	8.7	8.2	7.8	7.6	7.3	

Source: Company data, CMBIGM estimates

Figure 10: Peers valuation

Company	Ticker	Mkt cap (USD mn)	Currency	Price	CMBI Rating	CMBI TP	PE			PS			EV/EBIT			FY22-24 EPS
							FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	CAGR
<b>Huya</b>	<b>HUYA US</b>	<b>1,494</b>	<b>USD</b>	<b>6</b>	<b>BUY</b>	<b>7.6</b>	<b>NA</b>	<b>NA</b>	<b>261.4</b>	<b>1.1</b>	<b>1.2</b>	<b>1.1</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b>Game</b>																
Tencent	700 HK	475,390	HKD	390	BUY	382	27.3	22.5	19.1	5.8	5.2	4.7	20.4	18.1	16.1	19%
NetEase	NTES US	60,274	USD	92	BUY	112	18.2	17.4	15.6	4.2	3.9	0.5	16.0	14.6	1.9	8%
XD Inc.	2400 HK	1,774	HKD	29	NA	NA	NA	NA	33.6	3.6	2.7	2.2	NA	NA	32.5	NA
Average							22.7	19.9	17.4	4.5	3.9	2.4	18.2	16.4	16.9	14%
<b>Livestreaming &amp; VAS</b>																
Momo	MOMO US	2,225	USD	11	HOLD	14	8.2	7.8	7.2	1.2	1.2	1.1	5.3	4.6	4.3	7%
YY	YY US	2,693	USD	38	BUY	50	15.0	16.2	13.0	1.1	1.0	1.0	NA	NA	NA	9%
Bilibili	BILI US	10,760	USD	26	BUY	21	NA	NA	NA	3.3	2.7	2.3	NA	NA	NA	NA
Douyu	DOYU US	622	USD	2	NA	NA	NA	52.4	28.0	0.6	0.6	0.6	NA	NA	NA	126%
TME	TME US	15,222	USD	9	BUY	11	21.7	19.8	18.1	3.6	3.5	3.3	20.5	18.0	16.0	12%
Mango	300413 CH	9,387	CNY	34	NA	NA	30.6	25.9	22.3	4.4	3.9	3.4	26.6	22.0	19.1	18%
iQIYI	IQ US	6,928	USD	7	BUY	4	NA	34.1	20.1	1.6	1.5	1.4	59.4	30.9	20.8	185%
Average							18.9	17.4	16.1	2.3	2.1	1.9	17.5	14.9	15.0	12%
<b>Advertising</b>																
Baidu	BIDU US	52,610	USD	152	BUY	195	17.9	16.4	13.9	2.9	2.6	2.4	16.9	14.9	11.7	13%
Weibo	WB US	5,957	USD	25	BUY	20	12.2	11.2	10.5	3.2	3.2	2.9	11.1	10.3	9.0	10%
Average							15.1	13.8	12.2	3.0	2.9	2.7	14.0	12.6	10.4	11%
<b>Global entertainment</b>																
Facebook	META US	401,511	USD	153	NA	NA	17.5	15.0	12.8	3.3	3.0	2.6	14.1	11.8	9.5	10%
Netflix	NFLX US	161,211	USD	362	NA	NA	30.1	24.1	20.5	4.7	4.2	3.8	26.4	21.0	17.3	24%
Snapchat	SNAP US	16,398	USD	10	NA	NA	NA	57.2	25.0	3.4	3.0	2.5	NA	NA	65.4	55%
Average							23.8	19.5	16.6	3.8	3.4	3.0	20.3	16.4	13.4	30%
<b>Average</b>							<b>19.9</b>	<b>17.6</b>	<b>15.7</b>	<b>3.1</b>	<b>2.8</b>	<b>2.3</b>	<b>21.7</b>	<b>16.6</b>	<b>14.4</b>	<b>23%</b>

Source: Bloomberg, CMBIGM estimates

## Financial Summary

### Income statement

YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
<b>Revenues</b>	10,914	11,351	9,223	8,429	8,831
Live broadcasting	10,312	10,186	8,215	7,840	8,183
Others	603	1,165	1,008	589	647
<b>COGS</b>	(8,646)	(9,751)	(8,630)	(7,675)	(7,858)
<b>Gross profit</b>	2,268	1,600	593	754	972
<b>R&amp;D</b>	(734)	(819)	(683)	(658)	(644)
S&M	(558)	(760)	(448)	(468)	(490)
G&A	(445)	(327)	(278)	(262)	(256)
Other income	194	275	95	91	95
<b>Operating profit</b>	725	(30)	(721)	(544)	(325)
Fair value change	(8)	44	-	-	-
Interest income	313	247	260	220	205
Other income and expenses	2	(1)	-	-	0
<b>Pre-tax income</b>	1,033	260	(461)	(324)	(120)
Income Tax	(177)	(55)	(30)	-	(7)
Net profit	884	583	(491)	(324)	(127)
<b>Adj. net profit</b>	1,262	833	(316)	(164)	41

### Cash flow summary

YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
<b>Net income</b>	884	583	(491)	(324)	(127)
D&A	103	113	124	137	151
Change in WC	(162)	(160)	(438)	(130)	19
Others	415	(134)	175	160	168
<b>Operating CF</b>	1,240	403	(629)	(157)	211
Capex	(118)	(124)	(130)	(137)	(143)
Others	1,123	(2,377)	-	-	-
<b>Investing CF</b>	1,005	(2,501)	(130)	(137)	(143)
Issuance of preference shares	-	-	-	-	-
Issuance of common shares	-	-	-	-	-
Others	265	595	-	-	-
<b>Financing CF</b>	265	595	-	-	-
<b>Net change in cash</b>	2,510	(1,503)	(759)	(294)	67
Cash (beg of yr)	1,113	3,294	1,791	1,031	737
Fx effect	(166)	-	-	-	-
<b>Cash (end of yr)</b>	3,294	1,791	1,031	737	805

### Balance sheet

YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
<b>Non-current assets</b>	1,140	1,339	1,344	1,344	1,337
Property and equipment	95	80	69	54	35
Right-of-use assets	87	395	395	395	395
Intangible assets	63	84	100	115	127
Others	895	780	780	780	780
<b>Current assets</b>	11,271	11,916	11,140	10,840	10,911
Cash, and stricted cash	3,294	1,791	1,031	737	805
Accounts and notes receivables	71	88	72	65	68
Short-term deposits	5,975	8,352	8,352	8,352	8,352
Other current asset	1,931	1,686	1,686	1,686	1,686
<b>Current liabilities</b>	2,634	2,745	2,290	2,154	2,176
Accounts payables	10	13	11	10	10
Deferred revenue	399	460	460	460	460
Accruals	1,707	1,845	1,392	1,257	1,279
Others	517	427	427	427	427
<b>Non-current liabilities</b>	249	169	169	169	169
Lease liabilities	58	45	45	45	45
Deferred revenue	178	119	119	119	119
Deferred tax liabilities	13	5	5	5	5
<b>Shareholders' equity</b>	9,777	10,510	10,195	10,031	10,071

### Key ratios

YE 31 Dec	FY20A	FY21A	FY22E	FY23E	FY24E
<b>Sales mix (%)</b>					
Live broadcasting	94.5	89.7	89.1	93.0	92.7
Others	5.5	10.3	10.9	7.0	7.3
<b>Total</b>	100.0	100.0	100.0	100.0	100.0
<b>Growth rate (%)</b>					
Revenue	30.3	4.0	(18.8)	(8.6)	4.8
Gross profit	53.0	(29.4)	(62.9)	27.1	28.9
EBIT	177.4	(104.2)	NA	NA	NA
Adj. net profit	68.2	(34.0)	NA	NA	NA
<b>P&amp;L ratios (%)</b>					
Operating margin	6.6	(0.3)	(7.8)	(6.5)	(3.7)
Pre-tax margin	9.5	2.3	(5.0)	(3.8)	(1.4)
Adj. net margin	11.6	7.3	(3.4)	(1.9)	0.5
Effective tax rate	(17.1)	(21.3)	6.5	0.0	6.0
<b>Returns (%)</b>					
ROE	12.9	7.9	(3.1)	(1.6)	0.4
ROA	10.2	6.3	(2.5)	(1.3)	0.3
<b>Per share</b>					
EPS (RMB)	5.3	3.4	(1.3)	(0.7)	0.2
DPS (RMB)	-	-	-	-	-
BVPS (RMB)	41.0	43.5	41.5	40.2	39.7

Source: Company data, CMBIGM estimates

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