

Kingdee (268 HK)

Cloud on track with improved earnings quality

Kingdee's FY1H22 top-line beat but net loss widened due to GPM erosion given increase in implementation costs for large enterprise projects. For SME segment, robust growth in ARR (+46% YoY) and subscription contract liabilities (+56% YoY) implied a prominent SaaS outlook. For large enterprise segment, Kingdee continues to benefit from software localization but increase in R&D and implementation work will negatively impact short term margin. Maintain BUY.

- **FY1H22 top-line beat although net loss widened.** Kingdee delivered solid FY1H22 top-line with revenue growth of +17% YoY to RMB2.2bn. Cloud revenue grew at +35% YoY to RMB1,677mn (76% of revenue). ARR (+46% YoY) and subscription contract liabilities (+56% YoY) both suggested prominent SaaS outlook. License ERP revenue was down 18% YoY to RMB519mn (24% of revenue). However, net loss widened to RMB356 mn (vs. RMB248mn in FY1H21) mainly due to GPM erosion (-2.1 pts YoY to 60.6%) given increase in implementation costs for large enterprise projects.
- **Small and medium-sized enterprises: focus on cloud subscription.** Kingdee's core SaaS product Galaxy (for medium-size enterprises) achieved +53% YoY in subscription ARR (subscription accounted for 60% of Galaxy revenue) and OPM improved to 20%+. Small and micro finance cloud service revenue delivered robust growth of +74% YoY as Kingdee strengthened channel sales. Subscription model with recurring revenue will remain as Kingdee's strategy in expanding SME business. We expect Kingdee's FY22E cloud revenue to grow at +32% YoY to RMB3,632mn (74% of FY22E revenue).
- **Large enterprises: strong demand from software localization despite short-term margin drag.** Kingdee's Cosmic & Constellation (for large enterprises) revenue grew +78% YoY to RMB284mn, benefiting from software localization trend. However, expanding large enterprise segment induced higher implementation fee (project based) and R&D. In FY1H22, Kingdee increased R&D for Cloud Cosmic and Constellation by +19% YoY to RMB795mn. That said, we are positive to see a lower R&D capitalization rate to 31.3% (vs. FY1H21 34.2%) as it implies an improvement in earning equality.
- **Key beneficiary to local substitution, maintain BUY.** We largely maintain our FY21-24E revenue forecast but expect net loss to widen with lower GPM and higher R&D. Maintain BUY with new target price of HK\$23.83 (prior HK\$24.37), based on 11x FY23E EV/sales, in-line with its three-year mean.

Earnings Summary

(YE 31 Dec)	FY19	FY20	FY21E	FY22E	FY23E
Revenue (RMB mn)	3,356	4,174	4,906	5,931	7,091
YoY growth (%)	1%	24%	18%	21%	20%
Net profit (RMB mn)	(335)	(302)	(513)	(237)	32
EPS (RMB)	-0.10	-0.09	-0.15	-0.07	0.01
YoY growth (%)	-193%	-1%	64%	-55%	-113%
Consensus EPS (RMB)	-0.10	-0.09	-0.09	-0.04	0.04
EV/sales (x)	13.1	10.7	9.1	7.5	6.2
P/E (x)	n.a.	n.a.	n.a.	n.a.	n.a.
Dividend Yield (%)	0.00	0.00	0.00	0.00	0.00
ROE (%)	-4%	-4%	-7%	-3%	0%
Net debt to equity	net cash	net cash	net cash	net cash	net cash

Source: Company data, Bloomberg, CMBIGM estimates

BUY (Maintain)

Target Price	HK\$23.83
(Previous TP)	HK\$24.37
Up/Downside	+48.7%
Current Price	HK\$16.02

China Software & IT Services

Marley Ngan

(852) 3916 3719

marleyngan@cmbi.com.hk

Bowen Li

(852) 3761 8957

libowen@cmbi.com.hk

Stock Data

Mkt Cap (HK\$ mn)	55,668
Avg 3 mths t/o (HK\$ mn)	192.82
52w High/Low (HK\$)	29.20/ 11.82
Total Issued Shares (mn)	3,475

Source: Bloomberg

Shareholding Structure

Mr. Xu - Chairman	20.25%
JPMorgan Chase & Co.	14.01%

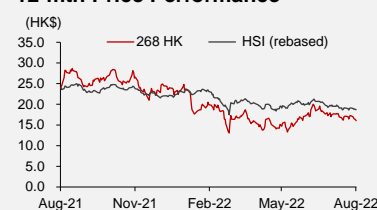
Source: HKEx

Share Performance

	Absolute	Relative
1-mth	-8.8%	-3.8%
3-mth	9.2%	14.1%
6-mth	-17.8%	1.2%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

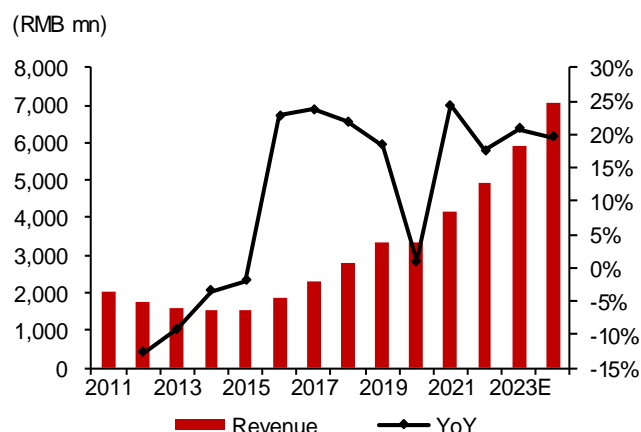
Auditor: PwC

Related Reports

1. China Software & IT Services "A mixed outlook for China Cloud amid rising US-China tension" – 4 Aug 2022 ([link](#))
2. China Software & IT Services "Higher visibility in SaaS along China cloud value chain" – 28 Jun 2022 ([link](#))
3. China Software & IT Services "Software localization to benefit China ERP" – 27 May 2022 ([link](#))

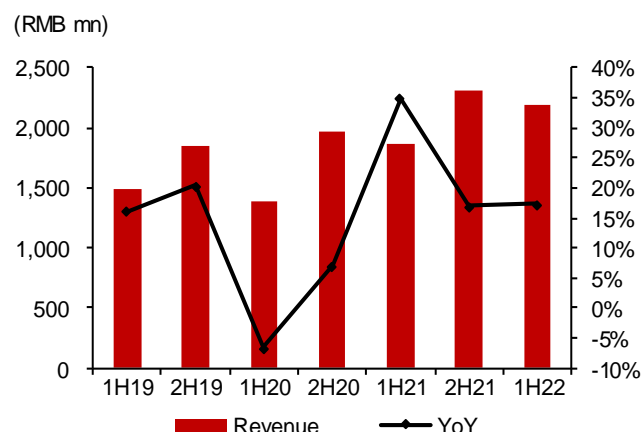
Focus Charts

Figure 1: Revenue and growth



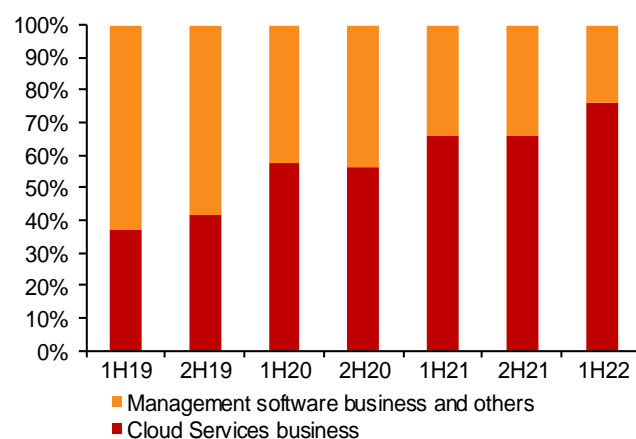
Source: Company data, CMBIGM estimates

Figure 2: Revenue and growth (semi-annual)



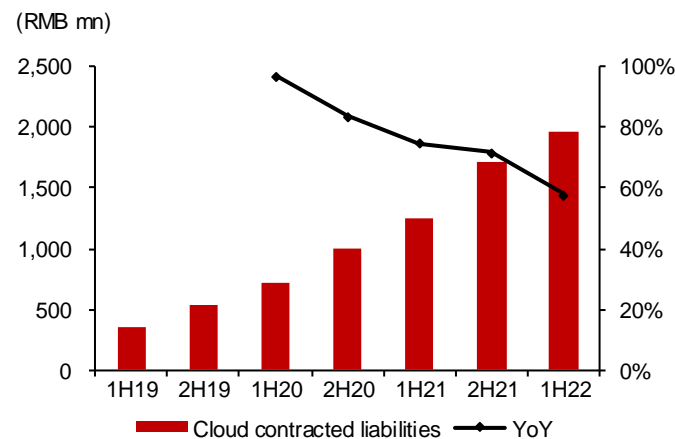
Source: Company data, CMBIGM estimates

Figure 3: Revenue mix



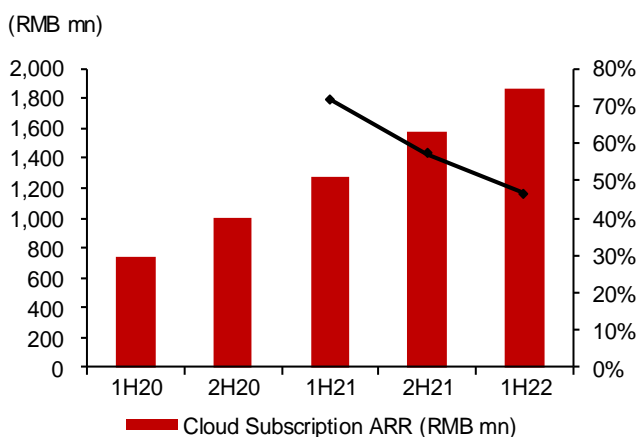
Source: Company data, CMBIGM estimates

Figure 4: Contracted liabilities



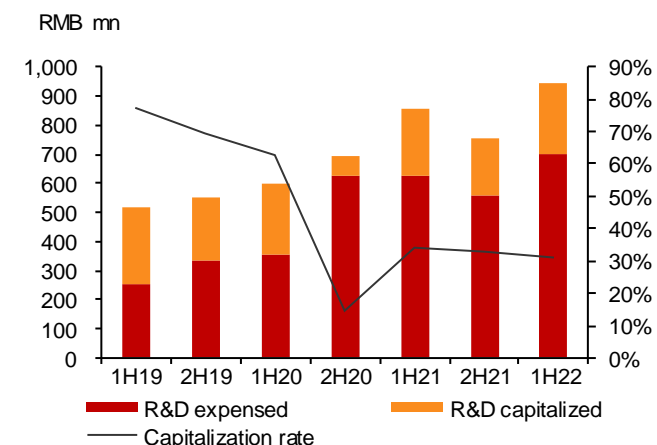
Source: Company data, CMBIGM estimates

Figure 5: Subscription ARR



Source: Company data, CMBIGM estimates

Figure 6: Decreasing R&D capitalization rate



Source: Company data, CMBIGM estimates

FY1H22 results review

- **Revenue** was RMB2,197mn (+17% YoY), beating our estimate by 6% and in-line with consensus. (*pre-announced revenue RMB2,153-2,247mn, +15-20% YoY*)
 - **Cloud:** Revenue was RMB1,677mn (+35% YoY) (*pre-announced cloud revenue was RMB1,610-1,734mn, +30-40% YoY*).
 - **ARR** was RMB1,860mn (+46% YoY). (*pre-announced ARR growth +45-48% YoY*)
 - **Subscription contract liabilities** was RMB1,572mn (+56% YoY)
 - Segment margin: -27.2% (+2.4 pts YoY)
 - **Management software:** Revenue was RMB519mn (-18% YoY)
 - Segment margin: 7.2% (-0.3 pts YoY)
- **Gross margin** was 60.6%, (-2.2 pct pts YoY), below our estimate by -4.1 pct pts but in-line with consensus. The decline is attributable to YoY increase in implementation costs from large enterprise projects.
- **Operating loss** was RMB651mn, missing our and consensus estimates.
 - **S&M** expense was RMB1,050mn (+18% YoY)
 - **G&A** expense was RMB234mn (+13% YoY)
 - **R&D** expense was RMB698mn (+12% YoY)
 - **R&D expenditure** was RMB795mn (+19% YoY), R&D capitalization rate was 31.3% (-2.9 pts YoY).
- **Net loss** was RMB356mn, in-line with our estimate by missed consensus. (*pre-announced net loss was RMB347.4-397.0mn*)

Figure 7: FY1H22 results review

268 HK RMB mn	1H21 Actual	2H21 Actual	1H22 Actual	YoY	HoH	1H22 CMBI	versus CMBI	1H22 Consensus	versus Consensus
Revenue	1,872	2,302	2,197	17%	-5%	2,069	6%	2,172	1%
Gross profit	1,174	1,459	1,331	13%	-9%	1,338	-1%	1,360	-2%
GPM	62.7%	63.4%	60.6%	-2.2 pct pts	-2.9 pct pts	64.7%	-4.1 pct pts	62.6%	0.2 pct pts
Operating profit	(546)	(212)	(651)	19%	207%	(570)	14%	(440)	48%
OPM	-29.2%	-9.2%	-29.6%	-0.5 pct pts	-20.5 pct pts	-27.6%	-2.1 pct pts	-20.2%	-0.5 pct pts
PBT	(325)	(57)	(402)	24%	605%	(400)	1%	(382)	5%
Net income	(248)	(54)	(356)	44%	557%	(349)	2%	(269)	33%
NPM	-13.3%	-2.4%	-16.2%	-3 pct pts	-13.9 pct pts	-16.9%	0.7 pct pts	-12.4%	-0.1 pct pts
EPS (RMB)	(0.07)	(0.02)	(0.10)	43%	557%	(0.10)	2%	(0.10)	5%

Source: Company data, CMBIGM

Cloud revenue breakdown and key operating metrics

- **Cloud Cosmic and Constellation (Large enterprise segment)**
 - Revenue was RMB284mn (+78% YoY)
 - Dollar retention: 100% (vs. >120% in FY21)
- **Cloud Galaxy (Medium enterprise segment)**
 - Revenue was RMB786mn (+16% YoY)
 - Dollar retention: 89% (vs. 99% in FY21 and 87% in FY1H21)
 - Subscription ARR growth: +53% YoY
 - OPM: 20%+
 - Subscription revenue as % of Galaxy revenue: 60%
- **Cloud Stellar & Jingdou (Small and Micro enterprise)**
 - Revenue was RMB380mn (+74% YoY)
 - Cloud Stellar dollar retention: 72% (vs. 86% in FY21)
 - Cloud Jingdou dollar retention: 69% (vs. 84% in FY21)

Figure 8: Revenue breakdown

RMB mn	1H20	2H20	1H21	2H21	1H22
Revenue breakdown					
Cloud Services	798	1,114	1,238	1,520	1,677
Cosmic & Constellation (苍穹&星瀚)	63	127	160	225	284
Galaxy (星空)	501	640	680	738	786
Others	235	347	398	557	607
Management software and others	589	855	634	782	519
License	206	241	255	218	175
Implementation and maintenance	383	614	379	564	344
Revenue YoY					
Cloud Services	45%	46%	55%	36%	35%
Management software and others	-37%	-21%	8%	-9%	-18%
Blended	-7%	7%	35%	17%	17%
Revenue mix					
Cloud Services	58%	57%	66%	66%	76%
Management software and others	42%	43%	34%	34%	24%

Source: Company data, CMBIGM estimates

Figure 9: Cloud metrics

RMB mn	1H20	2H20	1H21	2H21	1H22
Cloud revenue	798	1,114	1,238	1,520	1,677
...YoY	45%	46%	55%	36%	35%
Subscription ARR	740	1,000	1,270	1,570	1,860
...YoY			72%	57%	46%
Cloud Contract Liabilities	712	997	1,244	1,713	1,965
Subscription	552	825	1,008	1,358	1,572
...YoY	91%	96%	83%	65%	56%
Others	160	172	236	356	393

Source: Company data, CMBIGM estimates

Earnings revision

Figure 10: Earnings revision

RMB mn	2022E			2023E			2024E		
	New	Old	%Diff	New	Old	%Diff	New	Old	%Diff
Sales	4,906	4,927	-0%	5,931	6,050	-2%	7,091	7,218	-2%
Gross profit	3,011	3,100	-3%	3,761	3,869	-3%	4,530	4,663	-3%
OP Profit	-978	-769	27%	-616	-478	29%	-304	-107	184%
PBT	-586	-435	35%	-277	-150	85%	37	225	-84%
Net profit	-513	-380	35%	-237	-128	85%	32	193	-84%
EPS	-0.15	-0.11	35%	-0.07	-0.04	85%	0.01	0.06	-84%
Margins									
GM	61.4%	62.9%	-156 bps	63.4%	63.9%	-52 bps	63.9%	64.6%	-71 bps
OPM	-19.9%	-15.6%	-433 bps	-10.4%	-7.9%	-249 bps	-4.3%	-1.5%	-280 bps
PBT margin	-11.9%	-8.8%	-311 bps	-4.7%	-2.5%	-219 bps	0.5%	3.1%	-260 bps
Net margin	-10.5%	-7.7%	-275 bps	-4.0%	-2.1%	-187 bps	0.4%	2.7%	-222 bps

Source: Company data, CMBIGM

Figure 11: CMBI estimates vs consensus

RMB mn	2022			2023			2024		
	CMBI	Street	Diff	CMBI	Street	Diff	CMBI	Street	Diff
Sales	4,906	5,118	-4%	5,931	6,425	-8%	7,091	8,019	-12%
Gross profit	3,011	3,242	-7%	3,761	4,132	-9%	4,530	5,227	-13%
Operating profit	-978	-453	116%	-616	-213	190%	-304	142	-313%
Profit before tax	-586	-382	53%	-277	-168	65%	37	145	-75%
Core net profit	-513	-296	74%	-237	-115	105%	32	156	-80%
EPS	-0.15	-0.09	59%	-0.07	-0.04	70%	0.01	0.04	-75%
Margins									
GM	61.4%	63.3%	-198 bps	63.4%	64.3%	-89 bps	63.9%	65.2%	-129 bps
OPM	-19.9%	-8.9%	-1108 bps	-10.4%	-3.3%	-708 bps	-4.3%	1.8%	-606 bps
Profit before tax margin	-11.9%	-7.5%	-448 bps	-4.7%	-2.6%	-206 bps	0.5%	1.8%	-129 bps
Net margin	-10.5%	-5.8%	-469 bps	-4.0%	-1.8%	-219 bps	0.4%	1.9%	-150 bps

Source: Company data, CMBIGM

Operating model

Figure 12: Revenue breakdown

RMB mn	2019	2020	2021	2022E	2023E	2024E
Revenue breakdown						
Cloud Services business	1,314	1,912	2,758	3,632	4,720	5,941
Cosmic & Constellation	60	190	385	616	893	1,161
Galaxy	868	1,141	1,418	1,631	1,957	2,348
Others	386	581	955	1,385	1,870	2,431
ERP business	2,012	1,444	1,416	1,274	1,210	1,150
License	980	448	472	378	359	341
Implementation and maintenance	1,066	996	944	896	852	809
Revenue YoY						
Cloud Services business	55%	46%	44%	32%	30%	26%
ERP business	3%	-28%	-2%	-10%	-5%	-5%
Blended	18%	1%	24%	18%	21%	20%
Revenue mix						
Cloud Services business	39%	57%	66%	74%	80%	84%
ERP business	61%	43%	34%	26%	20%	16%

Source: Company data, CMBIGM

Figure 13: Operating model

RMB mn	2019	2020	2021	2022E	2023E	2024E
Revenues	3,326	3,356	4,174	4,906	5,931	7,091
Cost of sales	(922)	(1,147)	(1,541)	(1,895)	(2,169)	(2,560)
Gross Profit	2,403	2,209	2,634	3,011	3,761	4,530
Gross margin	72.3%	65.8%	63.1%	61.4%	63.4%	63.9%
R&D	(587)	(984)	(1,185)	(1,409)	(1,648)	(1,869)
SG&A	(1,760)	(1,839)	(2,207)	(2,580)	(2,730)	(2,964)
Operating Income	56	(614)	(758)	(978)	(616)	(304)
Operating margin	1.7%	-18.3%	-18.2%	-19.9%	-10.4%	-4.3%
Non-Operating Income	340	231	376	392	339	341
Profit Before Tax	396	(383)	(382)	(586)	(277)	37
Income tax (expense) gain	(30)	41	44	32	28	(4)
Minorities	(7)	(6)	(36)	(41)	(12)	2
Net Income to Shareholders	373	(335)	(302)	(513)	(237)	32
Net margin	11.2%	-10.0%	-7.2%	-10.5%	-4.0%	0.4%
Adj. net margin*	-3.2%	-19.4%	-17.4%	-20.7%	-13.5%	-8.6%
Core EPS (RMB)	0.12	(0.10)	(0.09)	(0.15)	(0.07)	0.01

Source: Company data, CMBIGM *Assuming all R&D are expensed

Figure 14: Semi-annual operating model

RMB mn	1H20	2H20	1H21	2H21	1H22	2H22E	1H23E	2H23E
Revenues	1,387	1,969	1,872	2,302	2,197	2,710	2,550	3,380
Gross Profit	890	1,319	1,174	1,459	1,331	1,680	1,594	2,168
Operating profit	(383)	(231)	(546)	(212)	(651)	(327)	(606)	(10)
Net profit (loss)	(224)	(111)	(248)	(54)	(356)	(157)	(358)	122
EPS (RMB)	(0.07)	(0.03)	(0.07)	(0.02)	(0.10)	(0.05)	(0.10)	0.03
Margins								
Gross margin	64.2%	67.0%	62.7%	63.4%	60.6%	62.0%	62.5%	64.1%
Operating margin	-27.6%	-11.7%	-29.2%	-9.2%	-29.6%	-12.1%	-23.8%	-0.3%
Net margin	-16.1%	-5.7%	-13.3%	-2.4%	-16.2%	-5.8%	-14.0%	3.6%
Growth (QoQ)								
Revenues	-25%	42%	-5%	23%	-5%	23%	-6%	33%
Gross Profit	-27%	48%	-11%	24%	-9%	26%	-5%	36%
Operating profit	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net profit (loss)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Growth (YoY)								
Revenues	-7%	7%	35%	17%	17%	18%	16%	25%
Gross Profit	-25%	8%	32%	11%	13%	15%	20%	29%
Operating profit	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net profit (loss)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: Company data, CMBIGM

Valuation

Kingdee (268 HK, BUY, TP HK\$23.83)

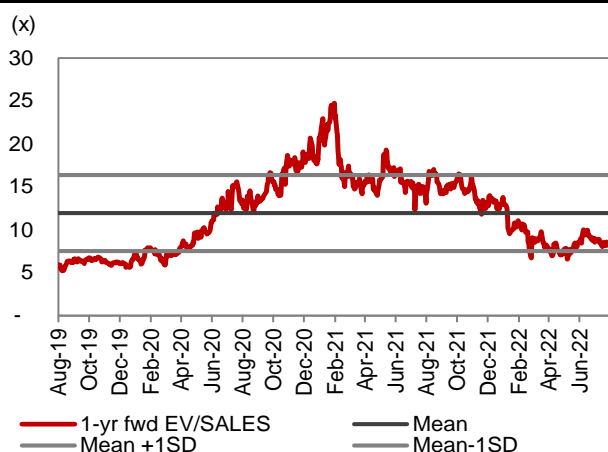
We maintain BUY on Kingdee with new target price of HK\$23.83 (prior HK\$24.37), based on unchanged 11.0x FY23E EV/sales, in-line with its three-year mean.

Figure 15: Kingdee peers valuation comparison

Company	Ticker	Rating	Market Cap (US\$ mn)	Price (LC)	TP (LC)	EV/sales (x)		FCF margin (%)		Sales CAGR FY21-24E	EPS CAGR FY21-24E
Kingdee	268 HK	BUY	7,095	16.02	23.83	9.1	7.5	-2%	1%	19%	n.a.
Yonyou	600588 CH	HOLD	10,279	20.39	19.81	6.5	5.2	0%	7%	19%	20%
Kingsoft Office	688111 CH	NR	11,519	170.12	N/A	17.1	13.0	33%	38%	30%	31%
SAP	SAP US	NR	113,588	92.46	N/A	4.1	3.8	11%	15%	9%	n.a.
Intuit	INTU US	NR	134,764	477.76	N/A	10.9	9.5	29%	30%	20%	29%
Xero	XRO AU	NR	9,193	88.80	N/A	13.7	10.8	-7%	2%	25%	70%
Workday	WDAY US	NR	43,919	173.13	N/A	8.2	6.8	26%	18%	20%	n.a.
ServiceNow	NOW US	NR	98,899	489.60	N/A	13.3	10.7	30%	31%	24%	115%
Salesforce	CRM US	NR	186,990	187.93	N/A	7.1	5.9	19%	21%	20%	9%
Mean						10.0	8.1	15%	18%	21%	45%
Median						9.1	7.5	19%	18%	20%	30%

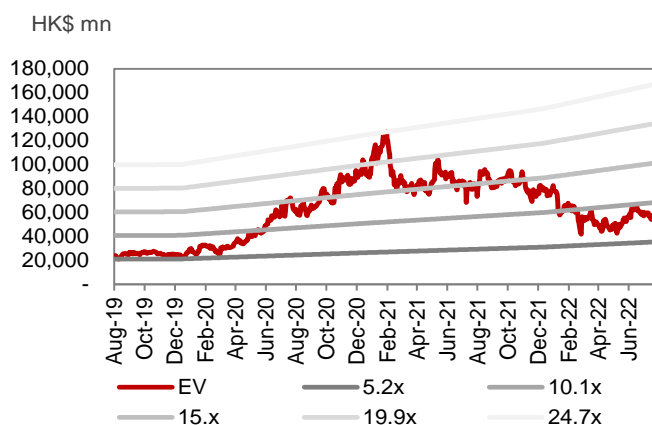
Source: Bloomberg, CMBIGM estimates

Figure 16: Kingdee 12M forward EV/sales chart



Source: Bloomberg, CMBIGM estimates

Figure 17: Kingdee 12M forward EV/sales band



Source: Bloomberg, CMBIGM estimates

Financial Summary

Income statement

YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
Revenue	3,356	4,174	4,906	5,931	7,091
Cost of sales	(1,147)	(1,541)	(1,895)	(2,169)	(2,560)
Gross profit	2,209	2,634	3,011	3,761	4,530
Selling exp	(1,425)	(1,741)	(2,039)	(2,149)	(2,337)
Admin exp	(414)	(466)	(541)	(581)	(628)
R&D exp	(984)	(1,185)	(1,409)	(1,648)	(1,869)
Other operating exp.	0	0	0	0	0
Operating profit	(614)	(758)	(978)	(616)	(304)
Finance income/ (costs)	36	76	66	63	69
Other non-op income/ (exp)	195	299	326	276	272
Pre-tax profit	(383)	(382)	(586)	(277)	37
Income tax expense	41	44	32	28	(4)
Minority interests	6	36	41	12	(2)
Net profit to shareholders	(335)	(302)	(513)	(237)	32

Cash flow summary

YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
Net profit	(383)	(382)	(586)	(277)	37
Depreciation/amortization	493	439	447	492	547
Change in working capital	364	560	657	635	740
Others	(1)	44	(38)	(51)	(87)
Net cash from operating	473	661	481	799	1,236
Capex	(353)	(772)	(589)	(712)	(851)
Others	(1,138)	(433)	70	79	83
Net cash from investing	(1,491)	(1,205)	(519)	(633)	(767)
Net borrowings	(80)	(120)	310	(28)	(12)
Dividend paid	(37)	0	0	0	0
New shares	2,091	0	0	0	0
Others	(9)	(24)	0	0	0
Net cash from financing	1,966	(144)	310	(28)	(12)
Net change in cash	948	(688)	272	139	457
Cash at beginning of the year	1,899	2,754	2,047	2,319	2,457
Exchange difference	(93)	(19)	0	0	0
Cash at the end of the year	2,754	2,047	2,319	2,457	2,914

Balance sheet

YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
Current assets	6,183	4,471	4,732	4,971	5,547
Cash & equivalents	2,754	2,047	2,319	2,457	2,914
Short-term bank deposits	1,236	370	370	370	370
Account receivables	334	392	426	516	616
Contract assets	357	323	377	352	351
Contract obtaining costs	142	248	150	180	193
Others	1,361	1,091	1,090	1,096	1,103
Non-current assets	4,539	6,616	6,758	6,977	7,281
PPE	746	1,045	1,086	1,144	1,220
Intangible assets	786	1,037	1,138	1,299	1,526
Investment properties	1,651	1,538	1,538	1,538	1,538
Other non-current assets	1,356	2,995	2,995	2,995	2,995
Total assets	10,722	11,087	11,490	11,948	12,827
Current liabilities	2,599	3,084	3,829	4,555	5,410
Trade and other payables	795	759	908	987	1,107
Contract liabilities	1,484	2,165	2,662	3,318	4,057
Borrowings	120	0	99	91	87
Others	200	160	160	160	160
Non-current liabilities	165	200	411	392	384
Borrowings	0	0	211	192	184
Trade and other payables	0	0	0	0	0
Other non-current liabilities	165	200	200	200	200
Total liabilities	2,764	3,284	4,241	4,948	5,794
Share capital	83	83	83	83	83
Capital surplus	5,053	5,149	5,149	5,149	5,149
Retained earnings	1,922	1,619	1,106	870	901
Other reserves	732	744	744	744	744
Minority interest	169	207	166	154	155
Total equity	7,958	7,803	7,249	7,000	7,033
Total liabilities and equity	10,722	11,087	11,490	11,948	12,827

Key ratios

YE 31 Dec	FY20A	FY21A	FY22E	FY23E	FY24E
Revenue mix					
Cloud Services	57%	66%	74%	80%	84%
Cosmic & Constellation	6%	9%	13%	15%	16%
Galaxy	34%	34%	33%	33%	33%
Others	17%	23%	28%	32%	34%
Management Software	43%	34%	26%	20%	16%
License	13%	11%	8%	6%	5%
Implementation & maintenance	30%	23%	18%	14%	11%
Growth (%)					
Revenue	1%	24%	18%	21%	20%
Operating profit	n.a.	n.a.	n.a.	n.a.	n.a.
Net profit	n.a.	n.a.	n.a.	n.a.	n.a.
Profit & loss ratio (%)					
Gross margin	66%	63%	61%	63%	64%
Operating margin	-18%	-18%	-20%	-10%	-4%
Net profit margin	-10%	-7%	-10%	-4%	0%
Balance sheet ratio					
Receivable turnover days	35	32	32	32	32
Payable turnover days	224	184	175	166	158
Current ratio (x)	2.38	1.45	1.24	1.09	1.03
Net debt to equity	net	net	net	net	net
Profitability (%)					
FCF margin	4%	-3%	-2%	1%	5%
ROE	-4%	-4%	-7%	-3%	0%
Per share data (RMB)					
Core EPS (RMB)	-0.10	-0.09	-0.15	-0.07	0.01
DPS (RMB)	0.00	0.00	0.00	0.00	0.00
BVPS (RMB)	2.40	2.38	2.09	2.02	2.03

Source: Company data, CMBIGM estimates

Disclosures & Disclaimers

Analyst Certification

The research analyst who is primary responsible for the content of this research report, in whole or in part, certifies that with respect to the securities or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about the subject securities or issuer; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific views expressed by that analyst in this report.

Besides, the analyst confirms that neither the analyst nor his/her associates (as defined in the code of conduct issued by The Hong Kong Securities and Futures Commission) (1) have dealt in or traded in the stock(s) covered in this research report within 30 calendar days prior to the date of issue of this report; (2) will deal in or trade in the stock(s) covered in this research report 3 business days after the date of issue of this report; (3) serve as an officer of any of the Hong Kong listed companies covered in this report; and (4) have any financial interests in the Hong Kong listed companies covered in this report.

CMBIGM Ratings

BUY	: Stock with potential return of over 15% over next 12 months
HOLD	: Stock with potential return of +15% to -10% over next 12 months
SELL	: Stock with potential loss of over 10% over next 12 months
NOT RATED	: Stock is not rated by CMBIGM

OUTPERFORM	: Industry expected to outperform the relevant broad market benchmark over next 12 months
MARKET-PERFORM	: Industry expected to perform in-line with the relevant broad market benchmark over next 12 months
UNDERPERFORM	: Industry expected to underperform the relevant broad market benchmark over next 12 months

CMB International Global Markets Limited

Address: 45/F, Champion Tower, 3 Garden Road, Hong Kong, Tel: (852) 3900 0888 Fax: (852) 3900 0800

CMB International Global Markets Limited ("CMBIGM") is a wholly owned subsidiary of CMB International Capital Corporation Limited (a wholly owned subsidiary of China Merchants Bank)

Important Disclosures

There are risks involved in transacting in any securities. The information contained in this report may not be suitable for the purposes of all investors. CMBIGM does not provide individually tailored investment advice. This report has been prepared without regard to the individual investment objectives, financial position or special requirements. Past performance has no indication of future performance, and actual events may differ materially from that which is contained in the report. The value of, and returns from, any investments are uncertain and are not guaranteed and may fluctuate as a result of their dependence on the performance of underlying assets or other variable market factors. CMBIGM recommends that investors should independently evaluate particular investments and strategies, and encourages investors to consult with a professional financial advisor in order to make their own investment decisions.

This report or any information contained herein, have been prepared by the CMBIGM, solely for the purpose of supplying information to the clients of CMBIGM or its affiliate(s) to whom it is distributed. This report is not and should not be construed as an offer or solicitation to buy or sell any security or any interest in securities or enter into any transaction. Neither CMBIGM nor any of its affiliates, shareholders, agents, consultants, directors, officers or employees shall be liable for any loss, damage or expense whatsoever, whether direct or consequential, incurred in relying on the information contained in this report. Anyone making use of the information contained in this report does so entirely at their own risk.

The information and contents contained in this report are based on the analyses and interpretations of information believed to be publicly available and reliable. CMBIGM has exerted every effort in its capacity to ensure, but not to guarantee, their accuracy, completeness, timeliness or correctness. CMBIGM provides the information, advices and forecasts on an "AS IS" basis. The information and contents are subject to change without notice. CMBIGM may issue other publications having information and/or conclusions different from this report. These publications reflect different assumption, point-of-view and analytical methods when compiling. CMBIGM may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

CMBIGM may have a position, make markets or act as principal or engage in transactions in securities of companies referred to in this report for itself and/or on behalf of its clients from time to time. Investors should assume that CMBIGM does or seeks to have investment banking or other business relationships with the companies in this report. As a result, recipients should be aware that CMBIGM may have a conflict of interest that could affect the objectivity of this report and CMBIGM will not assume any responsibility in respect thereof. This report is for the use of intended recipients only and this publication, may not be reproduced, reprinted, sold, redistributed or published in whole or in part for any purpose without prior written consent of CMBIGM.

Additional information on recommended securities is available upon request.

For recipients of this document in the United Kingdom

This report has been provided only to persons (I) falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended from time to time) ("The Order") or (II) are persons falling within Article 49(2) (a) to (d) ("High Net Worth Companies, Unincorporated Associations, etc.") of the Order, and may not be provided to any other person without the prior written consent of CMBIGM.

For recipients of this document in the United States

CMBIGM is not a registered broker-dealer in the United States. As a result, CMBIGM is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. The research analyst who is primary responsible for the content of this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority ("FINRA"). The analyst is not subject to applicable restrictions under FINRA Rules intended to ensure that the analyst is not affected by potential conflicts of interest that could bear upon the reliability of the research report. This report is intended for distribution in the United States solely to "major US institutional investors", as defined in Rule 15a-6 under the US Securities Exchange Act of 1934, as amended, and may not be furnished to any other person in the United States. Each major US institutional investor that receives a copy of this report by its acceptance hereof represents and agrees that it shall not distribute or provide this report to any other person. Any U.S. recipient of this report wishing to effect any transaction to buy or sell securities based on the information provided in this report should do so only through a U.S.-registered broker-dealer.

For recipients of this document in Singapore

This report is distributed in Singapore by CMBI (Singapore) Pte. Limited (CMBISG) (Company Regn. No. 201731928D), an Exempt Financial Adviser as defined in the Financial Advisers Act (Cap. 110) of Singapore and regulated by the Monetary Authority of Singapore. CMBISG may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the report is distributed in Singapore to a person who is not an Accredited Investor, Expert Investor or an Institutional Investor, as defined in the Securities and Futures Act (Cap. 289) of Singapore, CMBISG accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact CMBISG at +65 6350 4400 for matters arising from, or in connection with the report.