

Ping An (2318 HK)

Channel reform is close to the finish line

Ping An's OPAT grew 4.3% YoY to RMB85bn in 1H22, meeting 54% of our FY22E forecast. Life new business momentum marginally improved in 2Q22, in spite of the headwinds from COVID restrictions. Excluding the negative EV assumption changes over surrender and expenses, VNB declined 20% YoY in 1H22, translating into around 10% YoY decrease in 2Q22, substantially narrowing from the 25% YoY drop in 1Q22. The risk exposure to real estate sector remained under control, as the insurer recorded zero default event in 1H22. Ping An's channel reform is close to the finish line, and we expect the VNB growth to turn positive in 4Q22 or 1Q23. Reiterate BUY.

- **Agency reform is close to the finish line.** Entering the final year of its three-year channel reform, Ping An's digital agency reform has covered 65% of its business outlets as of end-1H22. And the early pilots launched in late 2020/mid-2021 delivered strong VNB growth of +13%/+20% YoY in 2Q22, while the more recent pilots started in late 2021 and Mar 2022 also reported positive data points in agency activity and productivity. We expect the reform will extend to the rest 35% outlets in 2H22, and estimate the insurer's overall VNB momentum will turn positive in 4Q22 or 1Q23.
- **Investment exposure to real estate sector was down 0.3pts HoH to 5.2%.** Among the insurer's RMB223bn investment in real estate sector, 52% are rental-generating investment properties, and only less than 10% are in property stocks. As Ping An saw no default event from its real estate investment in 1H22, we think the risk for extra massive impairment is low.
- **NPAT may benefit from IFRS17 in 2023.** As the new accounting rules of IFRS 17 is set to be implemented in 2023, the management guided that reserve catch-up due to interest rate changes could be amortized under IFRS 17 instead of immediately through P&L, which may narrow the gap between OPAT and NPAT. And with the sound capital position, the management is confident to maintain a progressive dividend policy.
- **Valuation.** Ping An-H is trading at 0.5x P/EV FY22E and 0.8x P/BV FY22E with operating ROE of 20%, at a historical trough valuation. We believe the worst is over and expect the recovery of new business growth will support the company's share price performance.

Earnings Summary

(YE 31 Dec)	FY20A	FY21A	FY22E	FY23E	FY24E
Net profit (RMB mn)	143,099	101,618	100,652	128,729	147,605
EPS (Reported)(RMB)	8.10	5.75	5.51	7.04	8.07
YoY growth (%)	(3.7)	(29.0)	(4.2)	27.9	14.7
VNB/share (RMB)	2.71	2.07	1.61	1.85	2.05
YoY growth (%)	(34.7)	(23.6)	(22.2)	14.6	11.1
Group embedded value / share (RMB)	72.65	76.34	82.04	91.36	101.69
Combined ratio (%)	99.2	98.0	98.0	98.0	98.0
P/B (x)	0.9	0.9	0.8	0.7	0.7
P/Embedded value (x)	0.5	0.5	0.5	0.4	0.4
Dividend yield (%)	6.0	6.4	5.8	7.4	8.5
ROE (%)	18.2	12.1	11.0	12.9	14.2

Source: Company data, Bloomberg, CMBIGM estimates

BUY (Maintain)

Target Price	HK\$75.55
(Previous TP)	HK\$75.55)
Up/Downside	71.5%
Current Price	HK\$44.05

China Insurance

Gigi Chen, CFA

(852) 3916 3739

gigichen@cmbi.com.hk

Nika Ma

(852) 3900 0805

nikama@cmbi.com.hk

Stock Data

Mkt Cap (HK\$ mn)	328,084.4
Avg 3 mths t/o (HK\$ mn)	48.3
52w High/Low (HK\$)	69.30/42.95
Total Issued Shares (mn)	7448.0

Source: FactSet

Shareholding Structure

Charoen Pokphand Group	6.8%
Shenzhen Investment Holdings	5.3%

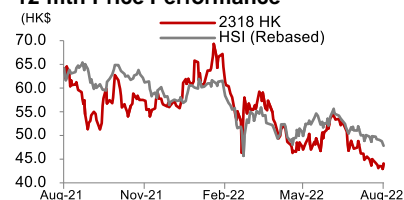
Source: HKEx

Share Performance

	Absolute	Relative
1-mth	-7.0%	-0.5%
3-mth	-6.3%	-2.2%
6-mth	-28.2%	-12.4%

Source: FactSet

12-mth Price Performance



Source: FactSet

Auditor: Ernst & Young

Recent Reports:

1. China Insurance Sector – FY21 results preview ([link](#))
2. China Insurance – P&C growth rebound; Life slow momentum into 1Q22; Prefer P&C over life insurance in 1H22 ([link](#))
3. Ping An – Agency reform well on track – Mar 21, 2022 ([link](#))
4. Ping An – Stabilizing agency scale – Apr 29, 2022 ([link](#))

Ping An 1H22 results overview

- Ping An reported 4.3% growth of group OPAT, meeting 54% of our FY22E forecast. 2Q22 OPAT growth was primarily dragged by 1) a 68% YoY decline of AMC OPAT, possibly owing to impairment booked in other AMC business; and 2) a 45% YoY decrease of technology OPAT due to COVID restrictions.
- Net profit rebounded in 2Q22, bringing 1H22 profit growth to 4% from the 24% YoY decline in 1Q22, mostly thanks to 1) better investment return amid A-share rally in 2Q, and 2) fair value recovery of Lufax CB in 2Q22 vs RMB4.6bn revaluation losses in 2Q21.
- VNB declined 28.5% YoY to RMB19.6bn in 1H22, reaching 66% of our FY22E forecast. We notice 2Q22 VNB decline narrowed to 17% YoY from the 33.7% YoY drop in 1Q22, indicating marginal improvement. Excluding the negative EV assumption changes over surrender and expenses, VNB declined 20% YoY in 1H22, translating into around 10% YoY decrease in 2Q22, substantially narrowing from the 25% YoY drop in 1Q22. Agent productivity on VNB basis further improved by 27% YoY, while agent headcount remained largely stable in 2Q22 with only 3% QoQ decrease amid COVID outbreaks, signalling positive progress on agency reform.
- P&C combined ratio increased 1.4ppt YoY to 97.3%, in line with industry average COR (97.3%) in 1H22. The deterioration of underwriting margin was mainly from underwriting losses of credit guarantee insurance (COR +25pts YoY) and liability insurance (COR +6pts YoY) in 1H22, which offset the 3pts improvement in auto COR. 1H22 P&C premium growth was slightly above the industry growth of 9.4%, due to outperforming auto and A&H growth.
- Bank profit increased 26%, driven by 1) 10% growth of non-interest income, 2) lower cost-income ratio, and 3) lower impairment from investment assets. NIM narrowed by 7bps YoY, better than industry average. NPL ratio remained stable at 1.02%, while special mention loan ratio improved by 10bps HoH to 1.32%. Provision coverage ratio edged up 1.6pts.
- Ping An declared RMB0.92 interim dividend per share, up 4.5% YoY, as the payout ratio based on OPAT remained largely stable.
- Solvency position remained solid with core solvency margin of group/life/P&C at 179%/138%/173% at end-1H22. Under a stress test, if 1) interest rate decreases by 50bps or 2) equity prices decline by 10%, the core solvency of group/P&C will stand above 160%, while life core solvency will stay above 110%.

Figure 1. Ping An: 1H22 results at a glance

(RMBmn)	1H21	1H22	YoY chg	2Q21	2Q22	YoY chg
Net profit attribute to shareholders	58,005	60,273	3.9%	30,782	39,615	28.7%
Reserve catch-up	(5,892)	(10,953)				
OPAT attribute to shareholders	81,836	85,340	4.3%	42,716	42,293	-1.0%
Life insurance	49,495	58,398	18.0%	24,228	29,346	21.1%
P&C insurance	10,741	8,343	-22.3%	5,645	5,340	-5.4%
Bank	10,191	12,802	25.6%	4,319	5,354	24.0%
AMC	8,008	4,400	-45.1%	5,728	1,821	-68.2%
Technology	6,236	4,909	-21.3%	3,903	2,164	-44.6%
Others	(2,835)	(3,512)	23.9%	(1,107)	(1,732)	56.5%
Operating ROE	21.0	20.4	(0.6) ppt			
Life insurance	35.0	35.8	0.8 ppt			
P&C insurance	20.0	14.2	(5.8) ppt			
Bank	10.7	12.2	1.5 ppt			
AMC	15.0	8.0	(7.0) ppt			
Technology	11.8	8.8	(3.0) ppt			
Group EV	1,377,953	1,441,261	4.6%			
Net investment yield (%)	3.8	3.9	0.1 ppt			
Total investment yield (%)	3.5	3.1	(0.4) ppt			
Comprehensive investment yield (%)	3.6	3.0	(0.6) ppt			
Total investment assets	3,787,025	4,270,779	12.8%			
Total investment income	66,054	60,285	-8.7%	42,147	60,285	43.0%
# of individual customers (mn)	223.1	225.2	1%	-	-	
Avg. # of contracts per customer (mn)	2.76	2.95	7%			
# of cross-selling customers (mn)	86.3	92.3	7%	-	-	
% of cross-selling customers	38.7	41.0	2.3 ppt	-	-	

Source: Company data, Bloomberg, CMBIGM estimates

Figure 2. Ping An Life - 1H22 results

(RMB mn)	1H21	1H22	YoY chg	2Q21	2Q22	YoY chg
VNB	27,387	19,573	-28.5%	8,407	6,984	-16.9%
FYP	87,641	76,132	-13.1%	27,114	24,929	-8.1%
VNB margin (FYP)	31.2%	25.7%	(5.5) ppt	31.0%	28.0%	(3.0) ppt
VNB margin (FYP APE)	37.4%	30.8%	(6.6) ppt			
Life EV	863,585	906,619	5%	-	-	
Residual margin	968,212	924,726	-4.5%	-	-	
Surrender rate (%)	1.19	1.16	(0.0) ppt	-	-	
Surrender	26,154	28,410	8.6%	13,047	13,551	3.9%
# of agents (mn)	0.88	0.52	-41%	0.88	0.52	-41%
Activity rate (%)	43.9	55.4	11.5 ppt			
Agent income (RMB per month)	5,889	7,957	35%			
Reported agent productivity (VNB/agent)	25,185	31,958	27%			
Agent productivity (FYP/month/agent)	11,345	17,677	56%	-	-	
Agent productivity (VNB/month/agent)	4,152	4,894	18%	-	-	
FYP by distribution						
Agent	64,720	59,363	-8%	-	-	
Bancassurance	4,600	6,674	45%	-	-	
Group & Others	25,878	21,899	-15%	-	-	
Total FYP	95,198	87,936	-8%	-	-	
Total FYP APE	66,123	58,772	-11%	-	-	
VNB breakdown						
Retail business	27,081	19,356	-29%	-	-	
Agency	23,684	16,434	-31%	-	-	
Long-term protection	9,326	3,880	-58%	-	-	
Protection & Saving hybrid (long-PPP)	5,965	4,530	-24%	-	-	
Protection & Saving hybrid (short-PPP)	6,356	5,928	-7%	-	-	
Short-term	2,036	2,096	3%	-	-	
Tele, internet and others	2,475	1,861	-25%	-	-	
Bancassurance	923	1,060	15%	-	-	
Group business	306	217	-29%	-	-	
VNB margin (FYP basis)						
Retail business	41.1	32.6	(8.5) ppt			
Agency	44.9	36.7	(8.2) ppt			
Long-term protection	100.8	93.6	(7.2) ppt			
Protection & Saving hybrid (long-PPP)	55.8	47.4	(8.4) ppt			
Protection & Saving hybrid (short-PPP)	21.0	20.8	(0.2) ppt			
Short-term	78.1	83.5	5.4 ppt			
Tele, internet and others	28.4	23.1	(5.3) ppt			
Bancassurance	20.6	16.3	(4.3) ppt			
Group business	1.4	1.3	(0.1) ppt			
Agent productivity (FYP/month/agent)	15,363	22,670	48%	-	-	

Source: Company data, Bloomberg, CMBIGM estimates

Figure 3. Ping An P&C - 1H22 results

(RMB mn)	1H21	1H22	YoY chg	2Q21	2Q22	YoY chg
Combined ratio (%)	95.9	97.3	1.4 ppt	-	-	-
Expense ratio (%)	29.0	28.2	(0.8) ppt			
Loss ratio (%)	66.9	69.1	2.2 ppt			
Premium income	133,313	146,792	10%	67,138	73,774	10%
Auto	89,015	95,502	7%	46,377	48,419	4%
Non-auto	44,298	51,290	16%	20,761	25,355	22%
Underwriting profit	5,210	3,673	-30%	-	-	
Auto combined ratio (%)	97.4	94.4	(3.0) ppt	-	-	
Non-auto combined ratio (%)	92.7	103.4	10.7 ppt	-	-	

Source: Company data, Bloomberg, CMBIGM estimates

Figure 4. Ping An Bank - 1H22 results

(RMB mn)	1H21	1H22	YoY chg	2Q21	2Q22	YoY chg
NIM (%)	2.83	2.76	(0.07) ppt			
Cost to Income ratio (%)	27.4	26.5	(0.9) ppt	-		
NPL ratio (%)	1.08	1.02	(0.06) ppt	1.08	1.02	(0.06) ppt
Special mention ratio (%)	0.96	1.32	0.36 ppt	0.96	1.32	0.36 ppt
Broad NPL ratio (%)	2.04	2.34	0.30 ppt	2.04	2.34	0.30 ppt
Credit cost (annualized)	1.84	1.93	0.09 ppt			
Provision coverage ratio (%)	259.5	290.1	30.5 ppt	259.5	290.1	30.5 ppt
60 days overdue coverage ratio (%)	306.1	327.2	21.1 ppt	306.1	327.2	21.1 ppt
Core T1 (>7.5%)	8.49	8.53	0.04 ppt	8.49	8.53	0.04 ppt
T1 (>8.5%)	10.58	10.39	(0.19) ppt	10.58	10.39	(0.19) ppt
Capital adequacy ratio (>10.5%)	12.58	13.09	0.51 ppt	12.58	13.09	0.51 ppt

Source: Company data, Bloomberg, CMBIGM estimates

Financial Summary

INCOME STATEMENT	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec (RMB mn)						
Total income	1,273,091	1,321,418	1,287,675	1,250,273	1,349,089	1,432,406
Premiums written (gross)	795,064	797,880	760,843	758,964	789,764	830,422
Premiums earned (net)	748,779	757,599	739,933	734,528	764,237	803,491
Investment income	201,738	225,046	203,513	161,850	199,893	209,810
Realized gains (losses)	238,993	257,109	270,871	283,198	310,434	340,390
Other operating income	83,581	81,664	73,358	70,698	74,525	78,716
Losses	(1,088,352)	(1,133,654)	(1,148,095)	(1,086,440)	(1,150,098)	(1,209,373)
Selling	(578,313)	(614,751)	(618,662)	(581,996)	(597,648)	(607,176)
Other selling	(177,164)	(181,166)	(177,061)	(167,901)	(181,841)	(200,025)
Underwriting & commissions	(125,336)	(114,237)	(90,651)	(109,316)	(113,686)	(119,479)
Other operating expense	(207,539)	(223,500)	(261,721)	(227,227)	(256,923)	(282,693)
Operating income before interest expense	184,739	187,764	139,580	163,833	198,991	223,034
Pretax income	184,739	187,764	139,580	163,833	198,991	223,034
Income taxes	(20,374)	(28,405)	(17,778)	(37,651)	(42,483)	(43,928)
Consolidated net income	164,365	159,359	121,802	126,182	156,508	179,106
Minority interest	(14,958)	(16,260)	(20,184)	(25,531)	(27,779)	(31,501)
Net income	149,407	143,099	101,618	100,652	128,729	147,605
Net income available to common	149,407	143,099	101,618	100,652	128,729	147,605

BALANCE SHEET	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec (RMB mn)						
Assets						
Cash & short-term investments	508,706	587,391	584,995	637,102	695,261	759,797
Investments	204,135	267,819	284,061	312,467	343,714	378,085
Total fixed income securities investment	3,496,829	4,133,300	4,253,940	4,468,077	4,693,411	4,922,575
Total equity securities investment	721,602	795,812	878,204	922,412	968,931	1,016,240
Real estate assets	86,819	89,671	135,799	142,618	149,788	157,166
Mortgage	18,957	37,661	30,957	30,957	30,957	30,957
Other investments	2,240,396	2,599,510	2,980,975	3,428,121	3,942,339	4,533,690
Premium balance receivables	146,250	167,281	142,688	160,907	181,699	205,442
Net property	259,272	292,738	320,954	337,110	354,112	371,402
Deferred tax assets	50,301	61,901	65,360	68,628	72,059	75,662
Intangible assets	63,333	64,290	68,462	75,308	82,839	91,123
Other assets	426,329	430,496	395,631	454,976	523,222	601,705
Total assets	8,222,929	9,527,870	10,142,026	11,038,683	12,038,331	13,143,845
Liabilities & shareholders' equity						
Insurance policy liabilities	2,669,673	3,040,041	3,334,193	3,531,707	3,805,676	4,078,357
Insurance reserves	1,718,201	1,994,341	2,252,472	2,481,387	2,708,693	2,929,813
Unearned premiums	158,680	177,041	170,420	160,462	149,654	137,889
Policy claims	98,147	109,943	118,926	130,819	143,900	158,291
Other insurance liabilities	690,277	754,453	788,220	754,261	797,934	846,046
ST debt & curr. portion LT debt	3,456,788	3,979,189	3,962,221	4,454,861	5,009,953	5,635,503
Deferred tax liabilities	22,282	19,267	13,605	14,285	15,000	15,749
Other liabilities	1,221,816	1,501,468	1,754,284	1,874,185	1,939,041	2,025,510
Total liabilities	7,370,559	8,539,965	9,064,303	9,875,038	10,769,671	11,755,120
Common stock/ordinary capital	18,280	18,280	18,280	18,280	18,280	18,280
Retained earnings	433,971	522,004	569,834	630,225	707,463	796,026
Equity reserves	220,910	222,276	224,291	224,291	224,291	224,291
Total shareholders' equity	673,161	762,560	812,405	872,796	950,034	1,038,597
Minority interest	179,209	225,345	265,318	290,849	318,627	350,129
Total equity	852,370	987,905	1,077,723	1,163,645	1,268,661	1,388,725
Total liabilities & shareholders' equity	8,222,929	9,527,870	10,142,026	11,038,683	12,038,331	13,143,845

PER SHARE DATA	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec						
DPS	2.10	2.27	2.44	2.20	2.82	3.23
EPS (Reported)	8.41	8.10	5.75	5.51	7.04	8.07
Group embedded value/share (HK\$)	65.67	72.65	76.34	82.04	91.36	101.69
VNB/share (HK\$)	4.15	2.71	2.07	1.61	1.85	2.05
No. of shares basic	18,280	18,280	18,280	18,280	18,280	18,280
PROFITABILITY	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec						
Return on equity (ROE)	24.3%	19.9%	12.9%	11.9%	14.1%	14.8%
Return on asset (ROA)	1.9%	1.6%	1.0%	1.0%	1.1%	1.2%
Return on life embedded Value	76.6%	(7.4%)	(37.2%)	(35.3%)	51.9%	25.8%
VNB margin (FYP APE basis)	56.0%	47.6%	37.2%	31.0%	33.0%	34.0%
Combined ratio	96.4%	99.2%	98.0%	98.0%	98.0%	98.0%
Loss ratio	57.3%	60.5%	67.1%	67.1%	67.1%	67.1%
Expense ratio	39.1%	38.6%	30.9%	30.9%	30.9%	30.9%
VALUATION	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec						
P/E	9.3	9.2	10.8	7.0	5.5	4.8
P/B	2.1	1.8	1.4	0.8	0.7	0.7
Div yield (%)	2.7	3.0	3.9	5.7	7.3	8.4
Div payout (%)	25.0	28.0	42.5	40.0	40.0	40.0

Source: Company data, CMBIGM estimates. Note: The calculation of net cash includes financial assets.

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 CMBIS 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.