

China Software & IT Services

Implications of setting up state-owned cloud

Tianjin gov't is reportedly asking SOEs to migrate from public cloud to state-owned private cloud platform. We think state gov't will still rely on third party cloud vendors to provide the underlying infrastructure and technology. The impact to China public cloud market is small that only 7% is related to gov't cloud. We maintain our view on [public cloud landscape change](#) as we see non-internet cloud companies gaining market share. Prefer Chinasoft.

- SOEs to move from public cloud to state-owned private cloud.** On 27 Aug, [Reuters](#) reported that Tianjin gov't has asked SOEs to move cloud systems deployed on public cloud to the state-owned private cloud. Also, SOEs cannot sign or renew contract with public cloud platforms. All migration should be completed before 30 Sep 2022. In fact, Tianjin is not the first province setting up state-owned cloud. Seeing increasing demand from SOEs in cloud, Sichuan gov't has launched first state-owned cloud in Apr 2021. The state-owned cloud is a private cloud dedicated for SOEs in Sichuan province. We believe this policy aims to accelerate SOEs moving to cloud environment but this does not mean the state gov't is trying to be a stand-alone cloud provider. Instead, Sichuan gov't will partner with China Telecom to co-manage the cloud platform and the underlying cloud technology is provided by Ali Cloud.
- Public cloud market for SOEs was relatively small.** According to IDC, China gov't cloud market size was RMB27.1bn in FY20, of which 30% (RMB8.1bn) was deployed on public cloud. We roughly estimate that it only accounted for 7% of the China public cloud market (market size: RMB125bn in FY20). We think this state-owned cloud plan has limited impact to the overall public cloud market. Public cloud key customers are still internet companies that have higher demand in storage/ computing/ CDN services. As mentioned above, state gov't does not have the cloud technology and it still relies on third parties to deliver cloud infrastructure (IDC/ servers, etc.) and operating/ maintenance services. For the cloud infrastructure, Huawei (32%) and Inspur (25%) are the key providers in FY20. For the cloud service, market is more fragmented with Inspur, China Telecom, China Mobile and Huawei each having >10% of shares in FY20.
- Prefer cloud names that their customers have lower regulatory risk.** For cloud-related companies under our coverage, we prefer Chinasoft over GDS/ Kingsoft Cloud. We continue to like Chinasoft for its Huawei cloud exposure (51% of FY1H21 revenue related to Huawei, +22% YoY). For GDS, its key customers are Ali/ Tencent (46.3% in FY2Q21 revenue) although the Company won first order from SOE - CEC in FY1H21. For Kingsoft Cloud, it is relatively neutral and its enterprise business growth was still robust at +153% YoY in FY2Q21 (29% of revenue).

Valuation Table

Company	Ticker	Mkt Cap (US\$ mn)	Price (LC)	TP (LC)	EV/sales FY21E	P/E FY21E	ROE FY21E	Sales CAGR FY20-23E
Chinasoft	354 HK	4,910	13.16	17.53	1.7	24.3	13%	24%
Kingsoft Cloud	KC US	6,463	28.89	43.86	3.8	n.a.	n.a.	42%
GDS	GDS US	9,569	51.20	74.74	10.2	n.a.	n.a.	31%
GDS	9698 HK	9,840	51.25	72.38	10.4	n.a.	n.a.	31%

Source: Bloomberg, CMBIS estimates

OUTPERFORM
(Maintain)

China Software & IT Services

Marley Ngan

(852) 3916 3719

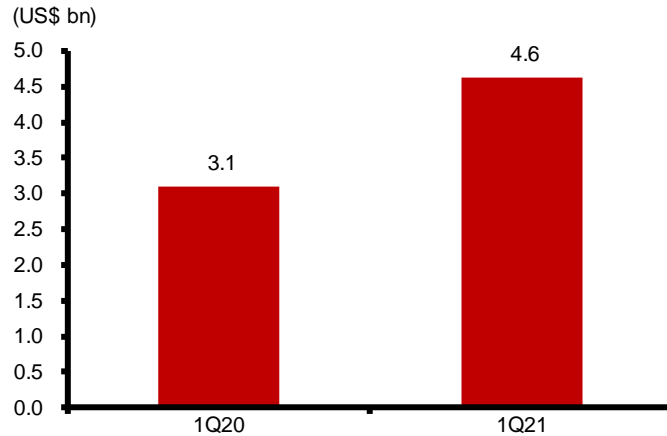
marleyngan@cmbi.com.hk

Related Report

"China cloud landscape changing" – 11 Aug 2021

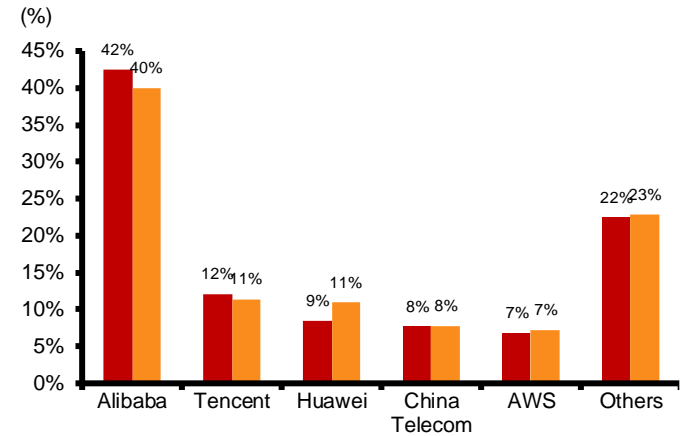
Focus Charts

Figure 1: China IaaS + PaaS market (1Q21)



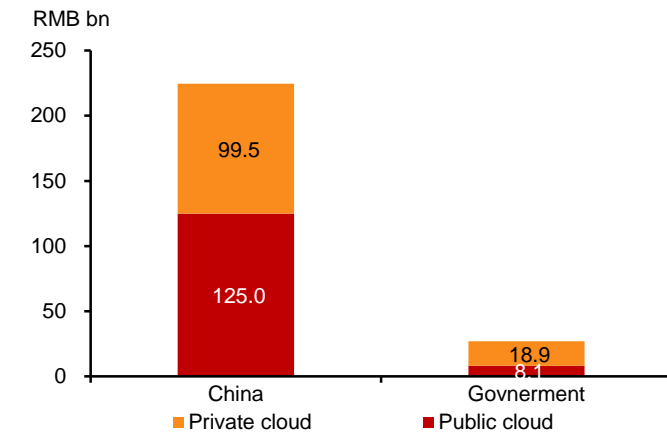
Source: IDC, CMBIS

Figure 2: China IaaS + PaaS market share (1Q21)



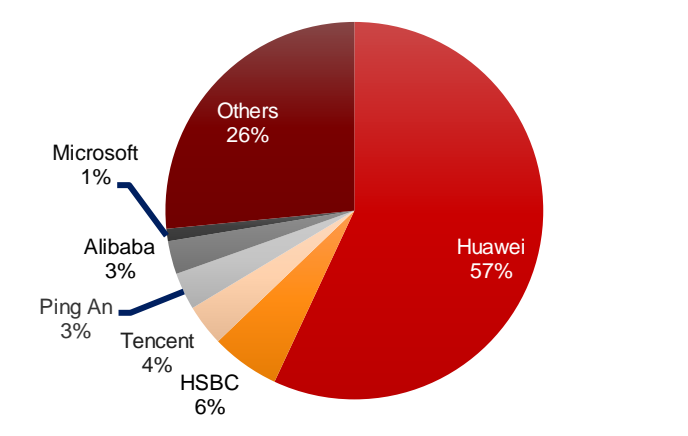
Source: IDC, CMBIS

Figure 3: Gov't public cloud size is relatively small



Source: IDC, CMBIS estimates

Figure 4: Chinasoft customer breakdown (FY20)



Source: Company data, CMBIS estimates

Figure 5: GDS wins CEC as new customer in 1H21



Notes:
1. Exclude customers which GDS is not allowed to disclose.
2. Azure China is operated by a subsidiary of 21Vianet.
3. AWS Ningxia region is operated by NHCCO and AWS Beijing region is operated by Sinnet.

Source: Company data, CMBIS

Figure 6: Alibaba/Tencent: 47% of GDS

By Revenue (1)

End User	% Of 2Q21 Total Net Revenue
Customer 1	23.2%
Customer 2	23.1%
Customer 3	8.1%
Customer 4	6.3%
Customer 5	4.2%

Source: Company data, CMBIS

SOE to move from public cloud to state-owned private cloud

Building state-owned government cloud

On 27 Aug, [Reuters](#) reported that Tianjin government has asked SOEs to migrate cloud systems deployed on public cloud to the state-owned private cloud. Also, SOEs cannot sign or renew contract with third party public cloud platforms. All migration should be completed no later than 30 Sep 2022.

Figure 7: Tianjin is reported to be asking SOEs to move public cloud systems state-owned private cloud platform

各市管企业及所属企业原则上不再新建、升级或扩容数据中心（机房），不再新购服务器、存储设备等硬件资源。

（二）分类推进系统上云

按照市国资委《关于依托“国资云”加快推进企业数字化转型工作的通知》要求，为加快推进国企信息系统上云工作实施落地，为满足各企业实际需求，国资云公司提供多元化上云方案，满足企业个性化需求，保障不同类型信息系统顺利上云。

1. 已建信息系统

（1）各企业已经部署在第三方公有云平台（如：“华为云”、“阿里云”、“腾讯云”、“沃云”、“天翼云”、“移动云”等）的信息系统，租约到期日起2个月内全部迁移至国资云，原则上最迟应于2022年9月30日前全部迁移至国资云。

即日起，各企业不得再与第三方公有云平台新签、续签云资源租用合同。

（2）各企业部署在非第三方公有云平台但以互联网方式提供服务的信息系统，应于2022年9月30日前全部迁移至“国资云”。

Source: 163.com

Cloud technology still provided by traditoinal cloud vendors

Tianjin is not the first province setting up state-owned cloud. Sichuan government is the first in China and launched the state-owned cloud in Apr 2021. Seeing increasing demand for SOEs in cloud services, the state-owned cloud is a special private cloud created for SOEs. Sichuan government and China Telecom will co-operate the platform while the underlying technology is provided by Ali Cloud.

Figure 8: Sichuan State-owned Cloud background

四川国资云简介

四川国资云是省内国资企业专属行业云，其建设的目的是依托云平台促进国资企业数字化转型应用示范和数据共享，探索全省国资国企数字化转型，协同创新的最优路径。2020年11月，四川省国资委将“四川国资云”正式授权给四川省能源投资集团下属四川省数字产业有限责任公司负责平台的建设和运营。同时，四川能投和四川电信在四川国资云运营上达成战略合作，形成了联合运营的创新模式，保证对川内所有省、市属国企的落地服务。

国企的数字化转型具有普遍的共性，四川国资云作为四川国企上云的官方推荐平台，采用全球领先的阿里云计算技术方案，一期建设2500核vcpu、6800G内存、1000T存储及20G互联网出口带宽，除了提供专业的计算和存储资源基础云服务，将通过行业云生态的发展，并通过PAAS中台技术平台以及SAAS化应用超市部署降低企业信息化应用成本，解决国企管理决策、生产经营中的数字化需求，促进应用示范、数据共享，助力万企上云和数字化转型。

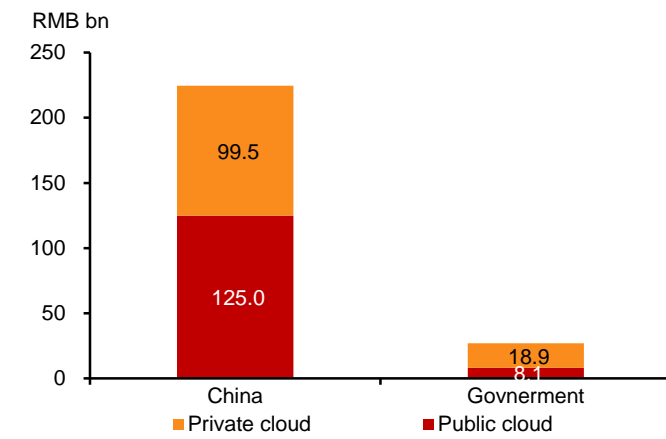
Source: scgzcloud.com

China government cloud market

SOEs prefers private cloud even before the state-owned cloud policy

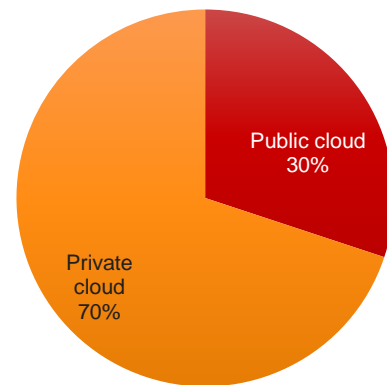
According to IDC, China gov't cloud market size was RMB27.1bn in FY20, of which 30% (RMB8.1bn) was deployed on public cloud. We estimate that in the China public cloud market with a size of RMB125bn in FY20, only 7% is related to gov't public cloud. We think the state-owned cloud plan has limited impact to public cloud vendors whose key customers are internet companies that have higher demand in storage/ computing/ CDN services.

Figure 9: China gov't public cloud accounted for 7% of China cloud market in FY20



Source: IDC, CMBIS

Figure 10: China gov't public cloud accounted for 30% of China gov't cloud market in FY20

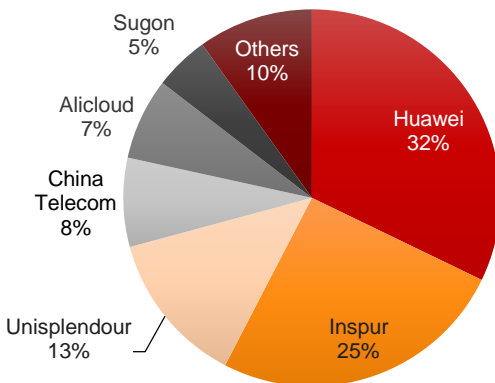


Source: IDC, CMBIS

Huawei, China Telecom, Inspur are potential beneficiaries

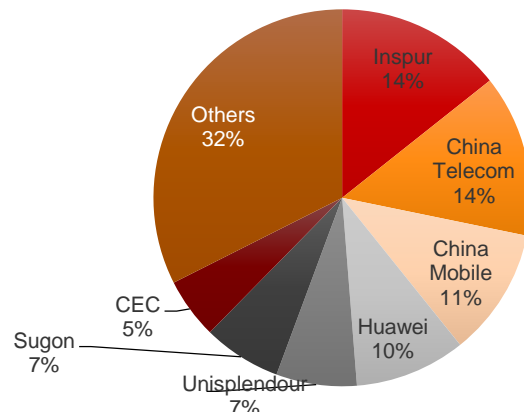
As state gov't does not have the cloud technology, it still relies on third parties to deliver cloud infrastructure (IDC/ servers, etc.) and operating/ maintenance services. For the cloud infrastructure, Huawei (32%) and Inspur (25%) are the key providers in FY20. For the gov't cloud service providers, the market is more fragmented. Inspur (600756 CH), China Telecom (728 HK), China Mobile (941 HK) and Huawei each has >10% of shares in FY20.

Figure 11: China gov't cloud infrastructure market share (FY20)



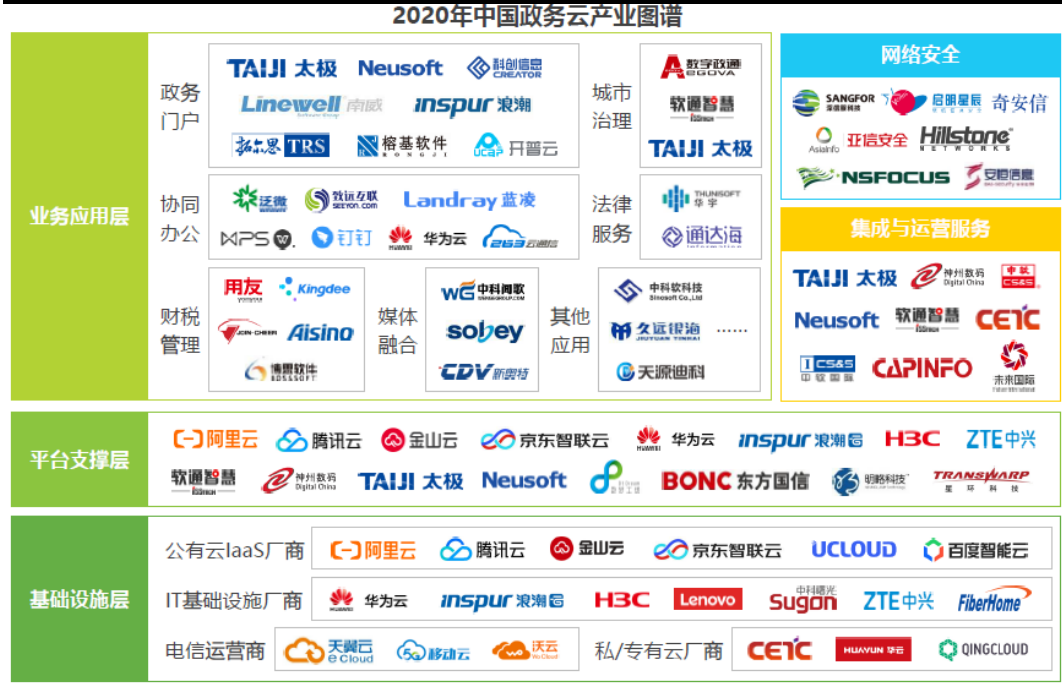
Source: IDC, CMBIS

Figure 12: China gov't cloud operators market share (FY20)



Source: IDC, CMBIS

Figure 13: China gov't cloud supply chain



Source: iResearch

Stock implications under our coverage

Chinasoft (354 HK, BUY, TP HK\$17.53)

Chinasoft is a key partner to Huawei. Apart from traditional IT outsourcing, it provides managed cloud services (migration, configuration, maintenance etc.) for enterprises which use Huawei Cloud. We estimate Huawei (including Huawei, Honor and Huawei Cloud) accounted for 51% of Chinasoft FY1H21 revenue and is growing at 22% YoY despite tech war impact to Huawei. We think Huawei Cloud will continue to gain share from internet cloud service providers and Chinasoft will be a key beneficiary.

GDS (GDS US/ 9698 HK, BUY, TP US\$74.74/ HK\$72.38)

GDS provides IDC services to cloud vendors. Its key customers Alibaba and Tencent accounted for 46.3% of FY2Q21 revenue. GDS started to penetrate SOE clients in FY1H21 with new customer win – CEC. CEC has 5% share in China gov't cloud operator market in FY20. We think GDS near term growth visibility is high as given high capacity commitment. However, the cloud landscape change may affect GDS expansion schedule going forward.

Kingsoft Cloud (KC US, BUY, TP US\$43.86)

Kingsoft Cloud (KC) is a relatively neutral cloud service providers, unlike Alibaba/ Tencent that run platform business and possess users' information. They face higher regulatory risks than KC. KC enterprise cloud business delivered robust growth of +153% YoY in FY2Q21 (29% of revenue). The enterprise cloud business mainly covers financial, healthcare and public service sectors. We think the impact from promoting state-owned cloud is not significant to KC.

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.

CMBIS or its affiliate(s) have investment banking relationship with the issuers covered in this report in preceding 12 months.

CMBIS 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 CMBIS

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 Securities Limited

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

CMB International Securities Limited ("CMBIS") 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. CMBIS 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. CMBIS 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 CMBIS, solely for the purpose of supplying information to the clients of CMBIS 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 CMBIS 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. CMBIS has exerted every effort in its capacity to ensure, but not to guarantee, their accuracy, completeness, timeliness or correctness. CMBIS provides the information, advices and forecasts on an "AS IS" basis. The information and contents are subject to change without notice. CMBIS 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. CMBIS may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

CMBIS 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 CMBIS 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 CMBIS 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 CMBIS.

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 CMBIS.

For recipients of this document in the United States

CMBIS is not a registered broker-dealer in the United States. As a result, CMBIS 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.