



Weekly Market View

Has a recession started?

→ The message from the US corporate sector appears to be in sync with the economic data – the US economy is getting closer to a recession. As the US Q1 earnings season gets going, consensus estimates point to a second straight quarter of y/y earnings contraction. This also rhymes with the signal from the bond market, which is flagging a recession later this year.

→ History shows government bonds handily outperform equities during a recession, but equities are not yet pricing a recession and the consensus is still upbeat on US earnings in H2. Thus, we see further downsides in equities as earnings estimates are cut further.

→ Even a widely expected Fed rate pause after May, followed by rate cuts in H2, are unlikely to prevent a drawdown. Given this, we would continue to use this year's rally in risk assets to move to a more defensive position, focussing on income-generating assets.



What should we expect from US Q1 earnings season?

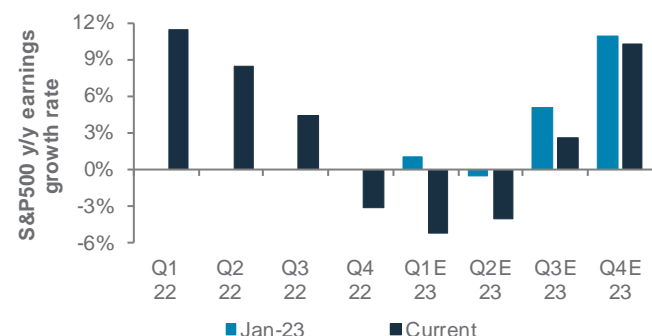
What is the outlook for the US 10-year government bond yield after it broke below key support levels?

What is the outlook for the Singapore Dollar and Singapore REITs?

Charts of the week: US earnings recession has likely started

The downturn in US corporate earnings, which mirrors the broader economy, argues for a defensive investment stance

S&P500 index earnings and current estimates for 2023 vs. Jan



Source: Refinitiv, Standard Chartered; ^as per National Bureau of Economic Research (excludes 2020 COVID recession); *after recession starts

12m returns for US stocks and bonds after a recession starts

Yield curve most inverted	Yield curve turned positive	US recession start date^	12-month fwd returns of US equities*	12-month fwd returns of US bonds*
May-81	Jul-82	Jul-81	-16.2%	13.3%
Mar-89	Mar-90	Jul-90	5.6%	10.6%
Apr-00	Jan-01	Mar-01	-8.8%	7.0%
Nov-06	Jun-07	Dec-07	-39.5%	1.7%
Mar-23	?	?	?	?
Average			-14.7%	8.2%

Editorial

Has a recession started?

The message from the US corporate sector appears to be in sync with the economic data – the US economy is getting closer to a recession. As the US Q1 earnings season gets going, consensus estimates point to a second straight quarter of y/y earnings contraction. This also rhymes with the signal from the bond market, which is flagging a recession later this year. Equities and corporate bonds are not pricing a recession yet, which raises downside risks for these assets. Even a widely expected Fed rate pause after May, followed by rate cuts in H2, are unlikely to prevent a drawdown. Given this, we would continue to use this year's rally in risk assets to move to a more defensive position, focussing on income-generating assets.

The consensus has downgraded US Q1 earnings estimates to -5.2% y/y, from +1.0% at the start of the year. This follows a 3.2% y/y contraction in Q4 22. The earnings deterioration corroborates with macro data – almost all our US recession indicators, except those for the job market, have been flashing red in recent months (business confidence indicators, or PMIs, are likely to confirm this trend next week). The US job market is also starting to slow, as seen in falling temporary employment, lesser number of hours worked, falling job openings and rising jobless claims. The latest payrolls data (236,000 jobs added in March vs 326,000 in February), while still robust, was mainly lifted by leisure, hospitality and healthcare employment, while the number of permanent job losers rose to the highest since 2020. If the slowdown in the broader economy continues, especially as banks tighten lending conditions following last month's turmoil, we are likely to see rising unemployment (which typically coincides with the start of a recession) in H2.

The US bond market is suggesting a similar timeline for a recession. Tracking the past four recessions (see the table above), a recession started between 2-16 months after the US 10-year vs. 2-year bond yield curve became the most inverted.

The yield curve then rebounded (the so-called bull steepening) as the 2-year yield fell more sharply than the 10-year yield as the bond market started pricing in Fed rate cuts. The yield curve sustainably turned positive again (the 2-year yield fell below the 10-year yield) typically 2-6 months before a recession started. The above gives us a framework for timing a recession: the US yield curve became most inverted in March. If that low was indeed the extreme for this cycle, it raises the prospects of a recession by the end of this year, perhaps even as soon as Q2.

Why is this important? Government bonds handily outperform equities during a recession, but equities are not yet pricing a recession and the consensus is still upbeat on US earnings in H2. Thus, we see further downsides in equities as earnings estimates are cut further. Equities sometimes perform well once the Fed pauses, but history shows that only happens when there is no recession. In the current scenario, we believe the Fed *wants* to induce a mild recession to cool inflation. Hence, it is likely to hike rates once more in May, by 25bps, especially after core consumer inflation accelerated to 5.6% y/y in March.

Investment implications: Against this backdrop, we would use the rally in risk assets to rebalance to Developed Market government bonds and (overwhelmingly Investment Grade) Asian USD corporate bonds. The US 10-year Treasury yield has strong resistance around 3.5% and 3.6%; we see these as good levels to lock in longer-maturity bond yields. Within equities, we would rebalance to Asia ex-Japan. Data this week showed China's credit growth is picking up, while cooling inflation provides an opportunity for authorities to stimulate further (watch the March activity data next week). Meanwhile, the USD is likely to see further downside. We are bullish on the EUR on a 1-month horizon as the ECB considers a 50bps rate hike in May, while the Fed debates whether to hike at all, with several policymakers calling for a pause at the March meeting.

— Rajat Bhattacharya

The weekly macro balance sheet

Our weekly net assessment: On balance, we see the past week's data and policy as neutral for risk assets in the near term.

(+) factors: Strong US job market, slowing headline inflation

(-) factors: Hawkish Fed, bearish IMF growth outlook, geopolitical risk

	Positive for risk assets	Negative for risk assets
Macro data	<ul style="list-style-type: none"> US job market added more-than-expected jobs at 236k, with unemployment slipping to 3.5%; average hourly earnings growth moderated US headline consumer inflation rose less than expected by 5% y/y, core rose 5.6% y/y as expected. US producer prices fell more than expected m/m Euro area Sentix investor confidence recovered more than expected China total social financing rose for a second month China exports surged unexpectedly by 14.8% y/y 	<ul style="list-style-type: none"> Euro area retail sales fell as expected by -0.8% m/m China consumer inflation rose 0.7% y/y, the slowest since Sep 2021; producer prices declined for the sixth month in a row, highlighting building deflationary pressures US initial jobless claims rose more than expected
	<p>Our assessment: Positive – Resilient US job market, slowing headline inflation, strong China credit growth</p>	

Policy developments	<ul style="list-style-type: none"> The new BoJ Governor Ueda kept policy unchanged for now US Treasury Secretary Yellen downplayed banking woes 	<ul style="list-style-type: none"> Some Fed officials called for more hikes while some asked for prudence and patience Fed staff forecasts in the latest meeting minutes pointed to a mild recession this year IMF cuts global growth forecast to 2.8%, the weakest since 1990, as financial risks rose
	<p>Our assessment: Negative – Hawkish Fed officials, bearish Fed and IMF forecasts</p>	

Other developments	<ul style="list-style-type: none"> China's military conducted three days of military drills around Taiwan
<p>Our assessment: Negative – Geopolitical tensions</p>	

US underlying inflation pressures remain elevated despite a sharp decline in the headline rate, sustaining the prospects of a Fed rate hike in May

US headline and core inflation



Source: Bloomberg; Standard Chartered

Euro area investor confidence improved marginally, but domestic demand remained weak

Euro area Sentix Investor Confidence and retail sales



Source: Bloomberg; Standard Chartered

China's credit growth has picked up in recent months as the central bank eased monetary policy by lowering bank reserve requirements

China's total social financing and M2 money supply



Source: Bloomberg; Standard Chartered

Top client questions

Q What should we expect from the US Q1 earnings season?

S&P500 Q1 FY23 earnings are expected to fall 5.2% y/y, according to Refinitiv estimates. This compares with expectations of a 1.0% rise at the start of January 2023. This will mark the second consecutive quarter of earnings decline, ie, technically an “earnings recession”, while profit margins are expected to fall. A cocktail of still-elevated inflation and slowing growth has created a challenging environment for companies.

Only four out of eleven S&P500 index sectors are expected to show positive earnings growth. They are consumer discretionary, industrials, energy and financials.

Therefore, we continue to take a defensive sectoral stance on US markets, preferring consumer staples, healthcare and utilities sectors. Historically, they have shown the least earnings volatility even during recessions, compared to other sectors.

In terms of technicals, the S&P500 index has been benefitting from expectations of a potential pause in Fed rate hikes. It has been rebounding and has broken above the important resistance at 4,100. However, we do see strong resistance ahead at 4,300, and we maintain our neutral view on US equities.

— Daniel Lam, Head, Equity Strategy

Q What is the outlook for US 10-year yield after it broke below its key daily moving averages?

Since the start of March, the US 10-year government bond yield has been making lower highs and lower lows, while breaking below its 50-day and 200-day moving averages, as the market refocused on downside risks to economic growth. The 10-year fell to as low as 3.25% in April, before retracing above 3.40% in the last few days. It now faces a key resistance around 3.52%, followed by 3.64%. On the downside, we see near-term supports at around 3.39% and 3.25%.

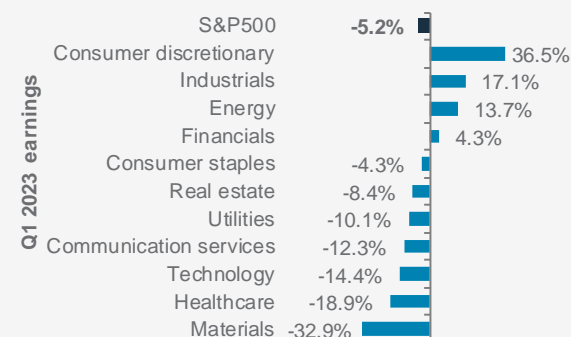
From a fundamental perspective, we expect the pullback in 10-year yield to continue in the near term, given that (1) the Fed remains hawkish in its rhetoric and is likely to deliver one last hike at its meeting in May; (2) A simple fair-value model based on the Fed funds rate, 10-year inflation expectations and real potential GDP growth, currently provides a reading of 3.88% for the 10-year yield.

Having said that, we would note that credit spreads (yield premiums over Treasuries) have widened modestly across many income sub-asset classes, including bonds. This has helped offset some of the decline in government bond yields; for example, our preferred Asian bonds are now offering an all-in yield of 6.29%, not far from a month ago. Hence, we believe the window to add to income assets remains open, despite the move lower in US government bond yields.

— Zhong Liang Han, CFA, Investment Strategist

US Q1 23 earnings are expected to fall by 5.2% y/y, the second consecutive quarter of earnings decline

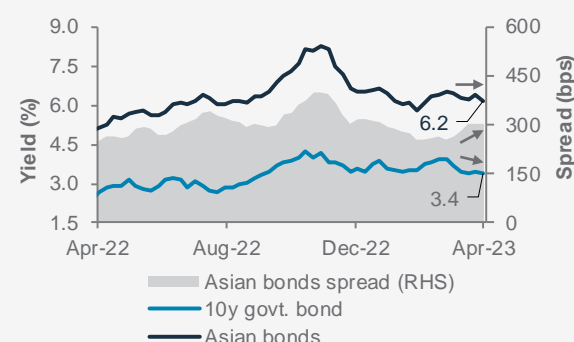
Consensus estimates for S&P500 index earnings growth in Q1 23, by sectors



Source: Refinitiv, Standard Chartered

In Asia, widening of corporate bond yield premiums has offset some of the decline in US government bond yields

US 10-year government bond yield, Asian bond yield and their yield premium over US government bonds



Source: Bloomberg, Standard Chartered

Top client questions (cont'd)

Q What is your outlook on the Singapore REITs sector?

Singapore REITs faced multiple challenges from the COVID-19 pandemic, with lockdowns affecting retail, hospitality and industrial assets and work-from-home impacting office assets. On the other hand, the e-commerce boom saw logistic assets in demand. While some forces are temporary, others have a more lasting impact. In addition, rising interest rates and bond yields have been a headwind for property valuations and interest costs (REITs usually have significant amounts of debt).

Interest rates in Singapore typically track those of the US, where we expect another 25bps of rate hike before the Fed pauses. When that happens and bond yields subsequently fall, we believe the headwind of rising rates could turn into a tailwind of lower rates for Singapore REITs.

Meanwhile, we see the major Singapore REITs as being relatively well managed, with rental growth and cost control generally able to offset cost inflation and higher interest costs. An economic recovery should continue, supporting hospitality and industrial assets, while structural growth is likely to support data centre and logistic assets. In Singapore, limited new supply of Grade A offices is supportive of the market as it continues to digest work-from-home trends. We believe the outlook will ultimately brighten once interest rate cuts and lower bond yields are in sight.

— **Fook Hien Yap**, Senior Investment Strategist

Q What is the short- and long-term outlook for the SGD?

The Monetary Authority of Singapore (MAS, Singapore's central bank) kept its monetary policy unchanged, bringing its tightening cycle to a pause, joining several other central banks who have paused monetary tightening amid global growth concerns. The move comes as a mild surprise as 12 out of 22 economists surveyed by Bloomberg were expecting modest tightening.

The pause comes as the latest data showed that Singapore's economy contracted more than expected in Q1 2023. The central bank cited heightened risks to global growth and said that the effects of prior tightening moves were still working their way through the economy and should help dampen inflation (which continues to hover around 14-year highs) going forward.

The MAS decision has effectively brought forward the expected pause in policy tightening. The muted rise in USD/SGD following the decision suggests investor positioning was relatively neutral heading into the meeting. In the near-term, USD/SGD could potentially test the 1.3365-1.3370 resistance zone. However, our 12-month expectation of 1.30 for USD/SGD remains unchanged and we would use any bounce towards 1.3460 as an opportunity to sell USD/SGD.

— **Abhilash Narayan**, Senior Investment Strategist

Singapore REITs have been underperforming the broader market since 2021 due to rising bond yields. We expect bond yields to fall by end 2023, which should improve the outlook for the REITs

Performance of S&P Singapore REIT index relative to the Straits Times index (rebased to 100=13-Apr-2018) and Singapore 10-year government bond yield



Source: Bloomberg, Standard Chartered

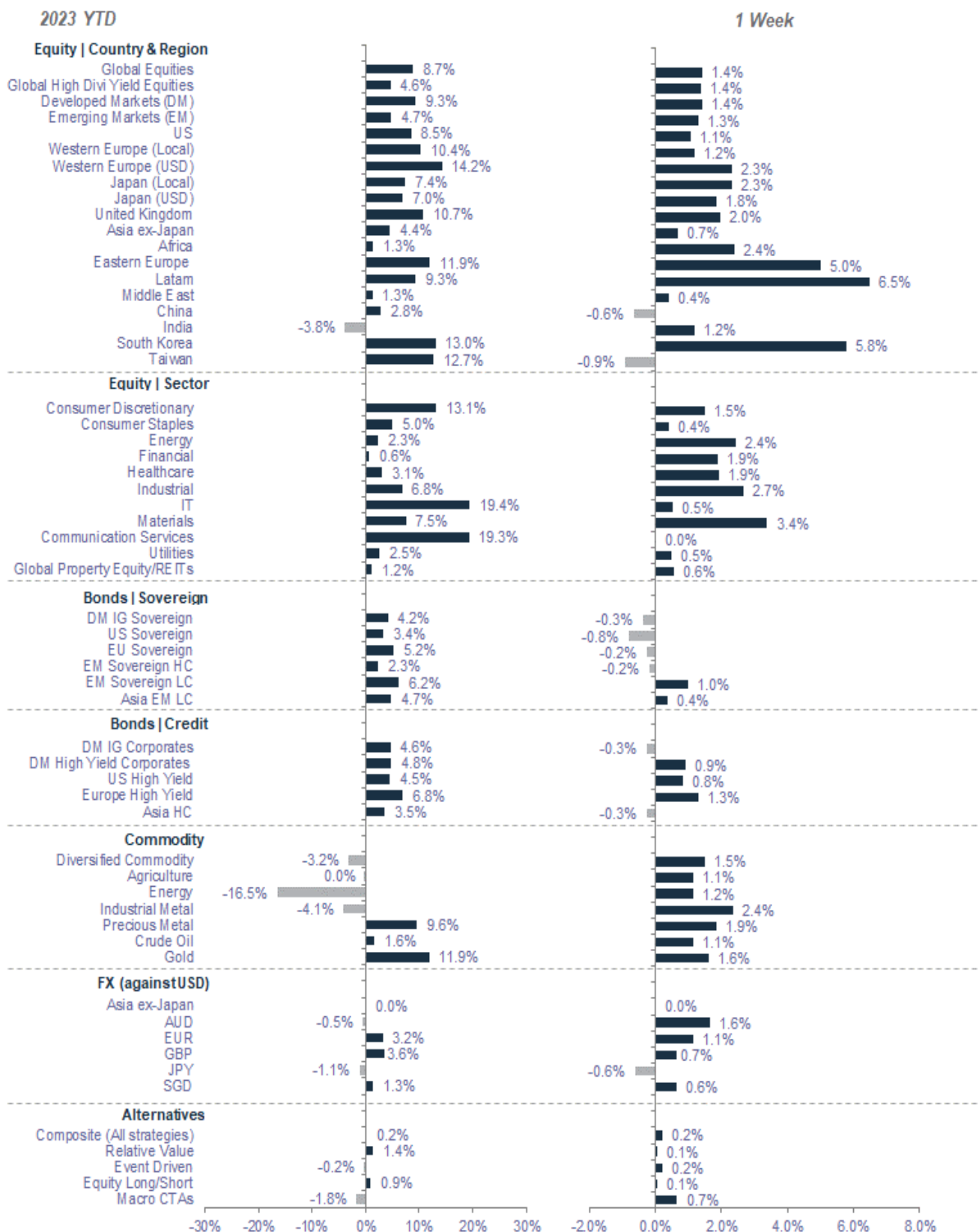
The MAS's surprise pause in policy this week signals a likely end to the current monetary tightening cycle, as the central bank focuses on balancing elevated inflation with growth risks

Summary of MAS policy decisions since October 2021

Date	Slope	Width	Centre
23-Apr	No change	No change	No change
22-Oct	No change	No change	Recentred upward
22-Jul	No change	No change	Recentred upward
22-Apr	Increased	No change	Recentred upward
22-Jan	Increased	No change	No change
21-Oct	Increased	No change	No change

Source: Bloomberg, Standard Chartered

Market performance summary *



Sources: MSCI, JP Morgan, Barclays Capital, Citigroup, Dow Jones, HFRX, FTSE, Bloomberg, Standard Chartered

*Performance in USD terms unless otherwise stated, 2023 YTD performance from 31 December 2022 to 13 April 2023; 1-week period: 06 April 2023 to 13 April 2023

Our 12-month asset class views at a glance

Asset class	
Equities	▼
Euro area	◆
US	◆
UK	▼
Asia ex-Japan	▲
Japan	◆
Other EM	◆
Bonds (Credit)	◆
Asia USD	▲
Corp DM HY	▼
Govt EM USD	◆
Corp DM IG	◆
Bonds (Govt)	▲
Govt EM Local	◆
Govt DM IG	▲
Preferred Sectors	
US Healthcare	▲
US Staples	▲
US Utilities	▲
Europe Utilities	▲
China Discretionary	▲
China Comm. Services	▲
China Technology	▲
China Industrials	▲
Alternatives	◆
Gold	▲

Source: Standard Chartered Global Investment Committee

Legend: ▲ Most preferred | ▼ Less preferred | ◆ Core holding

Next resistance for the US 10-year bond yield is at 3.46%

Technical indicators for key markets as of 13 April close

Index	Spot	1st support	1st resistance
S&P 500	4,146	4,110	4,164
STOXX 50	4,363	4,343	4,373
FTSE 100	7,843	7,805	7,863
Nikkei 225	28,465	27,832	28,784
Shanghai Comp	3,333	3,320	3,339
Hang Seng	20,380	20,298	20,474
MSCI Asia ex-Japan	645	643	647
MSCI EM	997	990	1,000
WTI (Spot)	86.3	84.6	87.7
Gold	2,045	2,009	2,063
UST 10y Yield	3.44	3.41	3.46

Source: Bloomberg, Standard Chartered

Note: These short-term technical levels are based on models and may differ from a more qualitative analysis provided in other pages

Economic and market calendar

Event Next week		Period	Expected	Prior
MON	US	Empire Manufacturing	Apr	-16.8 -24.6
	CH	GDP SA q/q	1Q	2.1% 0.0%
TUE	CH	Industrial Production y/y	Mar	4.0% -
	CH	Retail Sales y/y	Mar	7.0% -
	CH	Fixed Assets Ex Rural YTD y/y	Mar	5.7% 5.5%
	UK	ILO Unemployment Rate 3mths	Feb	- 3.7%
	EC	ZEW Survey Expectations	Apr	- 10.0
WED	US	Housing Starts	Mar	1400k 1450k
	UK	CPI y/y	Mar	- 10.4%
THU	UK	CPI Core y/y	Mar	- 6.2%
	US	Leading Index	Mar	-0.4% -0.3%
FRI/SAT	EC	Consumer Confidence	Apr P	- -19.2
	EC	ECB Meeting Minutes	Mar	
	US	Federal Reserve Beige Book		
	UK	Retail Sales Ex Auto Fuel y/y	Mar	- -3.3%
	EC	S&P Global Eurozone Manufacturing PMI	Apr P	- 47.3
	EC	S&P Global Eurozone Services PMI	Apr P	- 55.0
	UK	S&P Global/CIPS UK Manufacturing PMI	Apr P	- 47.9
	UK	S&P Global/CIPS UK Services PMI	Apr P	- 52.9
	US	S&P Global US Manufacturing PMI	Apr P	- 49.2
	US	S&P Global US Services PMI	Apr P	- 52.6
	US	World Bank Spring Meeting		

Source: Bloomberg, Standard Chartered

Prior data are for the preceding period unless otherwise indicated. Data are % change on previous period unless otherwise indicated

P - preliminary data, F - final data, sa - seasonally adjusted, y/y - year-on-year, m/m - month-on-month

Investor diversity remains healthy across asset classes

Our proprietary market diversity indicators as of 13 April

Level 1	Diversity	1-month trend	Fractal dimension
Global Bonds	●	→	1.68
Global Equities	●	→	1.63
Gold	●	↓	1.42
Equity			
MSCI US	●	→	1.64
MSCI Europe	●	↑	1.48
MSCI AC AXJ	●	↑	1.72
Fixed Income			
DM Corp Bond	●	↑	1.68
DM High Yield	●	↑	1.94
EM USD	●	↑	1.99
EM Local	●	↑	1.50
Asia USD	●	↑	1.79
Currencies			
EUR/USD	●	↑	1.67

Source: Bloomberg, Standard Chartered; Fractal dimensions below 1.25 indicate extremely low market diversity/high risk of a reversal

Legend: ● High | ● Low to mid | ○ Critically low

Disclosures

This document is confidential and may also be privileged. If you are not the intended recipient, please destroy all copies and notify the sender immediately. This document is being distributed for general information only and is subject to the relevant disclaimers available at our Standard Chartered website under Regulatory disclosures. It is not and does not constitute research material, independent research, an offer, recommendation or solicitation to enter into any transaction or adopt any hedging, trading or investment strategy, in relation to any securities or other financial instruments. This document is for general evaluation only. It does not take into account the specific investment objectives, financial situation or particular needs of any particular person or class of persons and it has not been prepared for any particular person or class of persons. You should not rely on any contents of this document in making any investment decisions. Before making any investment, you should carefully read the relevant offering documents and seek independent legal, tax and regulatory advice. In particular, we recommend you to seek advice regarding the suitability of the investment product, taking into account your specific investment objectives, financial situation or particular needs, before you make a commitment to purchase the investment product. Opinions, projections and estimates are solely those of SCB at the date of this document and subject to change without notice. Past performance is not indicative of future results and no representation or warranty is made regarding future performance. Any forecast contained herein as to likely future movements in rates or prices or likely future events or occurrences constitutes an opinion only and is not indicative of actual future movements in rates or prices or actual future events or occurrences (as the case may be). This document must not be forwarded or otherwise made available to any other person without the express written consent of the Standard Chartered Group (as defined below). Standard Chartered Bank is incorporated in England with limited liability by Royal Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Chartered Bank is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority. Standard Chartered PLC, the ultimate parent company of Standard Chartered Bank, together with its subsidiaries and affiliates (including each branch or representative office), form the Standard Chartered Group. Standard Chartered Private Bank is the private banking division of Standard Chartered. Private banking activities may be carried out internationally by different legal entities and affiliates within the Standard Chartered Group (each an "SC Group Entity") according to local regulatory requirements. Not all products and services are provided by all branches, subsidiaries and affiliates within the Standard Chartered Group. Some of the SC Group Entities only act as representatives of Standard Chartered Private Bank and may not be able to offer products and services or offer advice to clients. ESG data has been provided by Morningstar and Sustainalytics. Refer to the Morningstar website under Sustainable Investing and the Sustainalytics website under ESG Risk Ratings for more information. The information is as at the date of publication based on data provided and may be subject to change.

Copyright © 2023, Accounting Research & Analytics, LLC d/b/a CFRA (and its affiliates, as applicable). Reproduction of content provided by CFRA in any form is prohibited except with the prior written permission of CFRA. CFRA content is not investment advice and a reference to or observation concerning a security or investment provided in the CFRA SERVICES is not a recommendation to buy, sell or hold such investment or security or make any other investment decisions. The CFRA content contains opinions of CFRA based upon publicly-available information that CFRA believes to be reliable and the opinions are subject to change without notice. This analysis has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While CFRA exercised due care in compiling this analysis, CFRA, ITS THIRD-PARTY SUPPLIERS, AND ALL RELATED ENTITIES SPECIFICALLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, to the full extent permitted by law, regarding the accuracy, completeness, or usefulness of this information and assumes no liability with respect to the consequences of relying on this information for investment or other purposes. No content provided by CFRA (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of CFRA, and such content shall not be used for any unlawful or unauthorized purposes. CFRA and any third-party providers, as well as their directors, officers, shareholders, employees or agents do not guarantee the accuracy, completeness, timeliness or availability of such content. In no event shall CFRA, its affiliates, or their third-party suppliers be liable for any direct, indirect, special, or consequential damages, costs, expenses, legal fees, or losses (including lost income or lost profit and opportunity costs) in connection with a subscriber's, subscriber's customer's, or other's use of CFRA's content.

Market Abuse Regulation (MAR) Disclaimer

Banking activities may be carried out internationally by different branches, subsidiaries and affiliates within the Standard Chartered Group according to local regulatory requirements. Opinions may contain outright "buy", "sell", "hold" or other opinions. The time horizon of this opinion is dependent on prevailing market conditions and there is no planned frequency for updates to the opinion.

This opinion is not independent of Standard Chartered Group's trading strategies or positions. Standard Chartered Group and/or its affiliates or its respective officers, directors, employee benefit programmes or employees, including persons involved in the preparation or issuance of this document may at any time, to the extent permitted by applicable law and/or regulation, be long or short any securities or financial instruments referred to in this document or have material interest in any such securities or related investments. Therefore, it is possible, and you should assume, that Standard Chartered Group has a material interest in one or more of the financial instruments mentioned herein. Please refer to our Standard Chartered website under Regulatory disclosures for more detailed disclosures, including past opinions/ recommendations in the last 12 months and conflict of interests, as well as disclaimers. A covering strategist may have a financial interest in the debt or equity securities of this company/issuer. This document must not be forwarded or otherwise made available to any other person without the express written consent of Standard Chartered Group.

Country/Market Specific Disclosures

Botswana: This document is being distributed in Botswana by, and is attributable to, Standard Chartered Bank Botswana Limited which is a financial institution licensed under the Section 6 of the Banking Act CAP 46:04 and is listed in the Botswana Stock Exchange. **Brunei Darussalam:** This document is being distributed in Brunei Darussalam by, and is attributable to, Standard Chartered Bank (Brunei Branch) | Registration Number RFC/61 and Standard Chartered Securities (B) Sdn Bhd | Registration Number RC20001003. Standard Chartered Bank is incorporated in England with limited liability by Royal Charter 1853 Reference Number ZC18 and Standard Chartered Securities (B) Sdn Bhd, which is a limited liability company registered with the Registry of Companies with Registration Number RC20001003 and licensed by Brunei Darussalam Central Bank as a Capital Markets Service License Holder with License Number AMBD/R/CMU/S3-CL and authorised to conduct Islamic investment business through an Islamic window. **China Mainland:** This document is being distributed in China by, and is attributable to, Standard Chartered Bank (China) Limited which is mainly regulated by China Banking and Insurance Regulatory Commission (CBIRC), State Administration of Foreign Exchange (SAFE), and People's Bank of China (PBOC). **Hong Kong:** In Hong Kong, this document, except for any portion advising on or facilitating any decision on futures contracts trading, is distributed by Standard Chartered Bank (Hong Kong) Limited ("SCBHK"), a subsidiary of Standard Chartered PLC. SCBHK has its registered address at 32/F, Standard Chartered Bank Building, 4-4A Des Voeux Road Central, Hong Kong and is regulated by the Hong Kong Monetary Authority and registered with the Securities and Futures Commission ("SFC") to carry on Type 1 (dealing in securities), Type 4 (advising on securities), Type 6 (advising on corporate finance) and Type 9 (asset management) regulated activity under the Securities and Futures Ordinance (Cap. 571) ("SFO") (CE No. AJI614). The contents of this document have not been reviewed by any regulatory authority in Hong Kong and you are advised to exercise caution in relation to any offer set out herein. If you are in doubt about any of the contents of this document, you should obtain independent professional advice. Any product named herein may not be offered or sold in Hong Kong by means of any document at any time other than to "professional investors" as defined in the SFO and any rules made under that ordinance. In addition, this document may not be issued or possessed for the purposes of issue, whether in Hong Kong or elsewhere, and any interests may not be disposed of, to any person unless such person is outside Hong Kong or is a "professional investor" as defined in the SFO and any rules made under that ordinance, or as otherwise may be permitted by that ordinance. In Hong Kong, Standard Chartered Private Bank is the private banking division of Standard Chartered Bank (Hong Kong) Limited, a subsidiary of Standard Chartered PLC. **Ghana:** Standard Chartered Bank Ghana Limited accepts no liability and will not be liable for any loss or damage arising directly or indirectly (including special, incidental or consequential loss or damage) from your use of these documents. Past performance is not indicative of future results and no representation or warranty is made regarding future performance. You should seek advice from a financial adviser on the suitability of an investment for you, taking into account these factors before making a commitment to invest in an investment. To unsubscribe from receiving further updates, please send an email to feedback.ghana@sc.com. Please do not reply to this email. Call our Priority Banking on 0302610750 for any questions or service queries. You are advised not to send any confidential and/or important information to the Bank via e-mail, as the Bank makes no representations or warranties as to the security or accuracy of any information transmitted via e-mail. The Bank shall not be responsible for any loss or damage suffered by you arising from your decision to use e-mail to communicate with the Bank. **India:** This document is being distributed in India by Standard Chartered Bank in its capacity as a distributor of mutual funds and referrer of any other third party financial products. Standard Chartered Bank does not offer any 'Investment Advice' as defined in the Securities and Exchange Board of India (Investment Advisers) Regulations, 2013 or otherwise. Services/products related securities business offered by Standard Chartered Bank are not intended for any person, who is a resident of any jurisdiction, the laws of which imposes prohibition on soliciting the securities business in that jurisdiction without going through the registration requirements and/or prohibit the use of any information contained in this document. **Indonesia:** This document is being distributed in Indonesia by Standard Chartered Bank, Indonesia branch, which is a financial institution licensed, registered and supervised by Otoritas Jasa Keuangan (Financial Service Authority). **Jersey:** In Jersey, Standard Chartered Private Bank is the Registered Business Name of the Jersey

Branch of Standard Chartered Bank. The Jersey Branch of Standard Chartered Bank is regulated by the Jersey Financial Services Commission. Copies of the latest audited accounts of Standard Chartered Bank are available from its principal place of business in Jersey: PO Box 80, 15 Castle Street, St Helier, Jersey JE4 8PT. Standard Chartered Bank is incorporated in England with limited liability by Royal Charter in 1853 Reference Number ZC 18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Chartered Bank is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority. The Jersey Branch of Standard Chartered Bank is also an authorised financial services provider under license number 44946 issued by the Financial Sector Conduct Authority of the Republic of South Africa. Jersey is not part of the United Kingdom and all business transacted with Standard Chartered Bank, Jersey Branch and other SC Group Entity outside of the United Kingdom, are not subject to some or any of the investor protection and compensation schemes available under United Kingdom law. **Kenya:** This document is being distributed in Kenya by, and is attributable to Standard Chartered Bank Kenya Limited. Investment Products and Services are distributed by Standard Chartered Investment Services Limited, a wholly owned subsidiary of Standard Chartered Bank Kenya Limited (Standard Chartered Bank/the Bank) that is licensed by the Capital Markets Authority as a Fund Manager. Standard Chartered Bank Kenya Limited is regulated by the Central Bank of Kenya. **Malaysia:** This document is being distributed in Malaysia by Standard Chartered Bank Malaysia Berhad. Recipients in Malaysia should contact Standard Chartered Bank Malaysia Berhad in relation to any matters arising from, or in connection with, this document. **Nigeria:** This document is being distributed in Nigeria by Standard Chartered Bank Nigeria Limited ("the Bank"), a bank duly licensed and regulated by the Central Bank of Nigeria. The Bank accepts no liability for any loss or damage arising directly or indirectly (including special, incidental or consequential loss or damage) from your use of these documents. You should seek advice from a financial adviser on the suitability of an investment for you, taking into account these factors before making a commitment to invest in an investment. To unsubscribe from receiving further updates, please send an email to clientcare.ng@sc.com requesting to be removed from our mailing list. Please do not reply to this email. Call our Priority Banking on 01-2772514 for any questions or service queries. The Bank shall not be responsible for any loss or damage arising from your decision to send confidential and/or important information to the Bank via e-mail, as the Bank makes no representations or warranties as to the security or accuracy of any information transmitted via e-mail. **Pakistan:** This document is being distributed in Pakistan by, and attributable to Standard Chartered Bank (Pakistan) Limited having its registered office at PO Box 5556, I.I Chundrigar Road Karachi, which is a banking company registered with State Bank of Pakistan under Banking Companies Ordinance 1962 and is also having license issued by Securities & Exchange Commission of Pakistan for Security Advisors. Standard Chartered Bank (Pakistan) Limited acts as a distributor of mutual funds and referrer of other third-party financial products. **Singapore:** This document is being distributed in Singapore by, and is attributable to, Standard Chartered Bank (Singapore) Limited (Registration No. 201224747C/ GST Group Registration No. MR-8500053-0, "SCBSL"). Recipients in Singapore should contact SCBSL in relation to any matters arising from, or in connection with, this document. SCBSL is an indirect wholly owned subsidiary of Standard Chartered Bank and is licensed to conduct banking business in Singapore under the Singapore Banking Act, 1970. Standard Chartered Private Bank is the private banking division of SCBSL. IN RELATION TO ANY SECURITY OR SECURITIES-BASED DERIVATIVES CONTRACT REFERRED TO IN THIS DOCUMENT, THIS DOCUMENT, TOGETHER WITH THE ISSUER DOCUMENTATION, SHALL BE DEEMED AN INFORMATION MEMORANDUM (AS DEFINED IN SECTION 275 OF THE SECURITIES AND FUTURES ACT, 2001 ("SFA")). THIS DOCUMENT IS INTENDED FOR DISTRIBUTION TO ACCREDITED INVESTORS, AS DEFINED IN SECTION 4A(1)(a) OF THE SFA, OR ON THE BASIS THAT THE SECURITY OR SECURITIES-BASED DERIVATIVES CONTRACT MAY ONLY BE ACQUIRED AT A CONSIDERATION OF NOT LESS THAN S\$200,000 (OR ITS EQUIVALENT IN A FOREIGN CURRENCY) FOR EACH TRANSACTION. Further, in relation to any security or securities-based derivatives contract, neither this document nor the Issuer Documentation has been registered as a prospectus with the Monetary Authority of Singapore under the SFA. Accordingly, this document and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the product may not be circulated or distributed, nor may the product be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons other than a relevant person pursuant to section 275(1) of the SFA, or any person pursuant to section 275(1A) of the SFA, and in accordance with the conditions specified in section 275 of the SFA, or pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. In relation to any collective investment schemes referred to in this document, this document is for general information purposes only and is not an offering document or prospectus (as defined in the SFA). This document is not, nor is it intended to be (i) an offer or solicitation of an offer to buy or sell any capital markets product; or (ii) an advertisement of an offer or intended offer of any capital markets product. **Deposit Insurance Scheme:** Singapore dollar deposits of non-bank depositors are insured by the Singapore Deposit Insurance Corporation, for up to S\$75,000 in aggregate per depositor per Scheme member by law. Foreign currency deposits, dual currency investments, structured deposits and other investment products are not insured. This advertisement has not been reviewed by the Monetary Authority of Singapore. **Taiwan:** Standard Chartered Bank ("SCB") or Standard Chartered Bank (Taiwan) Limited

("SCB (Taiwan)") may be involved in the financial instruments contained herein or other related financial instruments. The author of this document may have discussed the information contained herein with other employees or agents of SCB or SCB (Taiwan). The author and the above-mentioned employees of SCB or SCB (Taiwan) may have taken related actions in respect of the information involved (including communication with customers of SCB or SCB (Taiwan) as to the information contained herein). The opinions contained in this document may change, or differ from the opinions of employees of SCB or SCB (Taiwan). SCB and SCB (Taiwan) will not provide any notice of any changes to or differences between the above-mentioned opinions. This document may cover companies with which SCB or SCB (Taiwan) seeks to do business at times and issuers of financial instruments. Therefore, investors should understand that the information contained herein may serve as specific purposes as a result of conflict of interests of SCB or SCB (Taiwan). SCB, SCB (Taiwan), the employees (including those who have discussions with the author) or customers of SCB or SCB (Taiwan) may have an interest in the products, related financial instruments or related derivative financial products contained herein; invest in those products at various prices and on different market conditions; have different or conflicting interests in those products. The potential impacts include market makers' related activities, such as dealing, investment, acting as agents, or performing financial or consulting services in relation to any of the products referred to in this document. **UAE:** DIFC - Standard Chartered Bank is incorporated in England with limited liability by Royal Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Chartered Bank is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority. Standard Chartered Bank, Dubai International Financial Centre having its offices at Dubai International Financial Centre, Building 1, Gate Precinct, P.O. Box 999, Dubai, UAE is a branch of Standard Chartered Bank and is regulated by the Dubai Financial Services Authority ("DFSA"). This document is intended for use only by Professional Clients and is not directed at Retail Clients as defined by the DFSA Rulebook. In the DIFC we are authorised to provide financial services only to clients who qualify as Professional Clients and Market Counterparties and not to Retail Clients. As a Professional Client you will not be given the higher retail client protection and compensation rights and if you use your right to be classified as a Retail Client we will be unable to provide financial services and products to you as we do not hold the required license to undertake such activities. For Islamic transactions, we are acting under the supervision of our Shariah Supervisory Committee. Relevant information on our Shariah Supervisory Committee is currently available on the Standard Chartered Bank website in the Islamic banking section For residents of the UAE – Standard Chartered Bank UAE does not provide financial analysis or consultation services in or into the UAE within the meaning of UAE Securities and Commodities Authority Decision No. 48/r of 2008 concerning financial consultation and financial analysis. **Uganda:** Our Investment products and services are distributed by Standard Chartered Bank Uganda Limited, which is licensed by the Capital Markets Authority as an investment adviser. **United Kingdom:** Standard Chartered Bank is incorporated in England with limited liability by Royal Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Chartered Bank is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority. Standard Chartered Bank (trading as Standard Chartered Private Bank) is an authorised financial services provider (license number 45747) in terms of the South African Financial Advisory and Intermediary Services Act, 2002. **Vietnam:** This document is being distributed in Vietnam by, and is attributable to, Standard Chartered Bank (Vietnam) Limited which is mainly regulated by State Bank of Vietnam (SBV). Recipients in Vietnam should contact Standard Chartered Bank (Vietnam) Limited for any queries regarding any content of this document. **Zambia:** This document is distributed by Standard Chartered Bank Zambia Plc, a company incorporated in Zambia and registered as a commercial bank and licensed by the Bank of Zambia under the Banking and Financial Services Act Chapter 387 of the Laws of Zambia.