MARKET PULSE

MACRO VIEWS

CHINA: China's economy has cooled dramatically on 1) a fading boost from reopening, 2) a shift from inventory building to destocking, 3) a slowdown in housing, and 4) weak external demand. In light of favorable policy support, a growth improvement in 2H 2023 seems likely, but further targeted stimulus may be needed to shore up the property sector.

DM GROWTH: In the Euro area, we believe real GDP growth will be positive, but below trend, due to high energy prices, tight bank lending standards, and weakening survey data. Conversely, in the US, real GDP will remain above potential on the back of a reduced drag from monetary tightening and real disposable income growth, in our view.

MONETARY EASING: GIR's base case is that the FOMC begins reducing the federal funds rate by 25 bps per quarter beginning in 2Q 2024. However, given 1) above potential GDP, 2) an unemployment rate near a 50-year low, and 3) easing financial conditions, we believe the Fed has the ability to stay patient for longer. Stimulating an already-strong economy by cutting too soon may be viewed as an unnecessary risk.

LABOR: Labor data has recently been telling two different stories. Following a streak of 14-consecutive beats, US nonfarm payrolls growth has slowed notably in the last three months while the unemployment rate increased three tenths of a percentage point in August. On the other hand, growth in average hourly earnings remained firm at 4.3% year-over-year. Despite the mixed signals, we continue to anticipate a gradual and healthy relaxation in labor demand, driven by a reduction in job openings versus an increase in layoffs.

MARKET VIEWS

US RATES: We believe improved growth sentiment has contributed to a more durable re-steepening of the US Treasury yield curve while other contributors to higher long-end yields, such as large expected issuance and BoJ policy spillovers, may be slightly overstated. As such, we believe market-implied long-run neutral rates need to reprice higher before the yield curve normalizes from its inverted state on a sustained basis.

SMALL CAPS: In our view, US small-cap equities are attractive. For one, profitable companies in the Russell 2000 Index trade at an unusually steep discount relative to peers in the S&P 500 Index. Second, small caps tend to outperform large caps when inflation falls from high levels, as the former enjoys a greater easing of pressure in negotiating with suppliers and pricing with consumers. Finally, we believe alpha potential is high in the small-cap universe, as there is an average of just 6 sell-side analysts covering each stock in the Russell 2000 (vs. 22 for the S&P 500).

CREDIT: There is an idea that "zombie firms," barely viable companies, have survived only because of the recent zero interest rate environment and are soon set to fail due to now higher rates. Certainly, some issuers are highly exposed to refinancing risk. However, we think concern may be overstated: according to GIR's screening, US zombie net debt remains relatively small, represented by just 2% of public credit issuers.

DURATION: Despite the appeal of duration late cycle, a large portion of assets remain in cash. We espouse another angle of duration extension: given today's higher yields, return asymmetry in longer-duration bonds has dramatically improved. This asymmetry suggests that bonds are punished less today by rising rates, and more importantly, that they are rewarded more by falling rates, a more likely scenario in our view.

ASSET CLASS OUTLOOK[1]

Less Favorable — More Favorable

EQUITIES	Shorter Term	Longer Term
US Equities	Less Favorable	More Favorable
European Equities		More Favorable
Japanese Equities	More Favorable	More Favorable
Emerging Market (EM) Equities	More Favorable	More Favorable
RATES		
US Government Fixed Income	More Favorable	More Favorable
DM Government Fixed Income		More Favorable
EM Debt Local	More Favorable	
Municipal Bonds	More Favorable	More Favorable
CREDIT		
US Investment Grade		
US High Yield		
Euro Area Corporates		
Asia High Yield		More Favorable
EM Debt Hard		
REAL ASSETS		
Oil		
Copper	More Favorable	More Favorable
Gold		
Global Real Estate	More Favorable	
CURRENCIES		
US Dollar		Less Favorable
Euro		More Favorable
British Pound		
Japanese Yen		
Chinese Renminbi		More Favorable

ASSET CLASS FORECASTS[2]

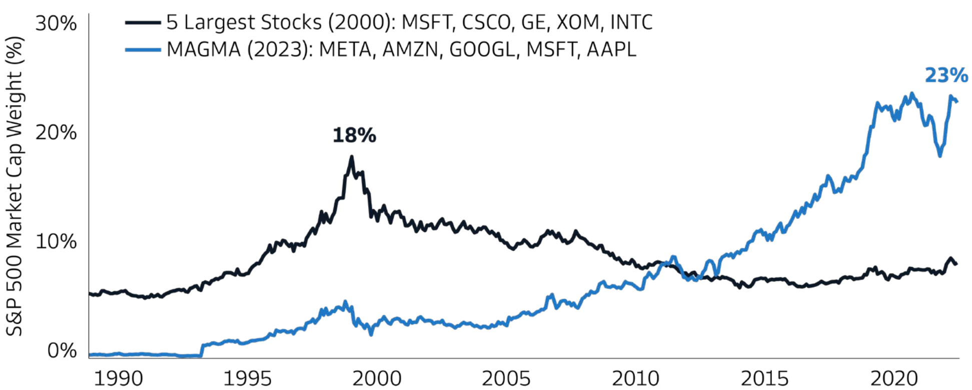
	Current	3m	12m	% Δ to 12m
S&P 500 ($)	4516	4500	4700	4.1
STOXX Europe (€)	458	470	500	9.1
MSCI Asia-Pacific Ex-Japan ($)	509	505	555	9.1
TOPIX (¥)	2350	2200	2500	6.4
10-Year Treasury	4.2	3.9	3.8	-44 bp
10-Year Bund	2.5	2.8	2.3	-22 bp
10-Year JGB	0.6	0.7	0.7	7 bp
Euro (€/$)	1.08	1.07	1.12	3.8
Pound (£/$)	1.26	1.24	1.33	5.9
Yen ($/¥)	146	150	150	2.6
Brent Crude Oil ($/bbl)	88.6	86	93	5.0
London Gold ($/troy oz)	1939	2050	2050	5.7

Source: GS Global Investment Research (GIR) and GS Asset Management. As of August 2023. "We" refers to GS Asset Management. The Macro and Market Views expressed may differ from those of GIR and other divisions of Goldman Sachs and its affiliates. See page 4 for additional disclosures. The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. **Past performance does not guarantee future results, which may vary.**

Picking and Choosing

Elevated concentration and full valuations remain top-of-mind concerns for many US large-cap equity investors. Optimism around the AI revolution has been supportive of a handful of leading beneficiaries powering the entire index higher, thus leaving multiples exposed to potential earnings disappointments. With that said, we believe attractive opportunities exist beneath the surface of common US indices as stock performance has been increasingly driven by company-specific dynamics, rather than macro factors.

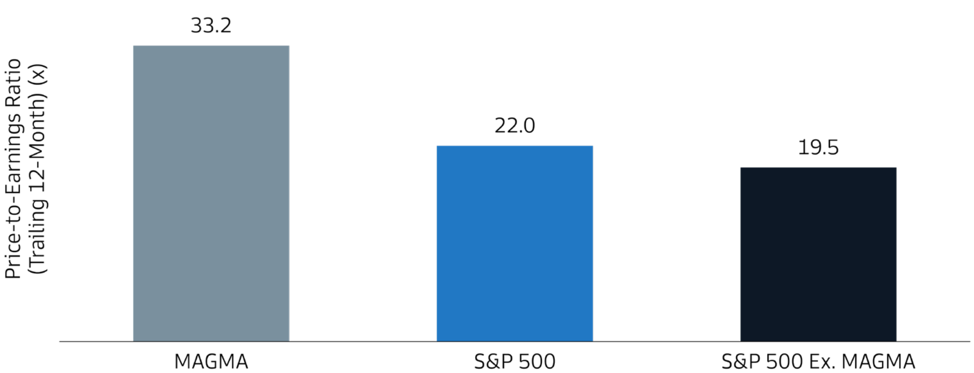
CONCENTRATING ON CONCENTRATION



The S&P 500's year-to-date rally has been led by technology behemoths at the top of the index. Specifically, five of the largest companies by market cap (MAGMA) have returned 52% while the remaining 495 index constituents have delivered just 10%. As a result of this performance imbalance, the weight of the index has shifted further in favor of the largest stocks, with these five names collectively accounting for roughly one quarter of the index.

Source: Bloomberg and Goldman Sachs Asset Management.

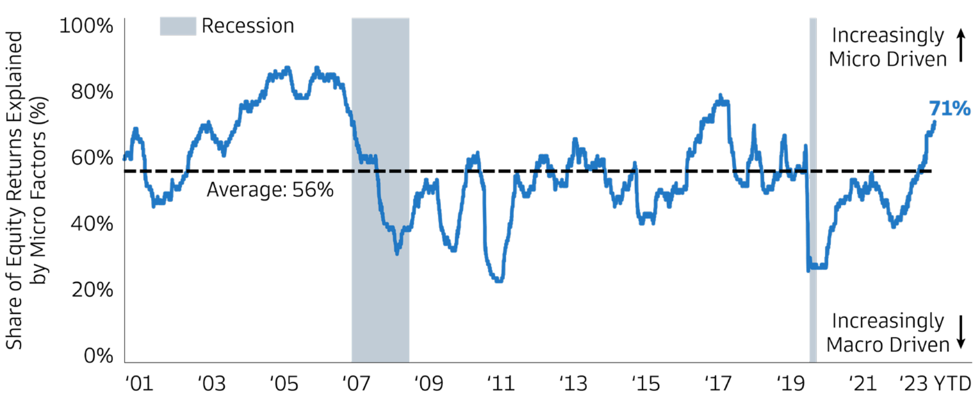
NOT BREAKING THE BANK



Along with an increasingly concentrated market has come a more expensive one, with the S&P 500 now trading at a 22.0x trailing price-to-earnings (P/E) multiple. Fortunately for investors shopping for discounts, some of the highest prices are found in only a handful of companies today. While five of the largest names trade at a P/E of 33.2x, the rest of the market commands only a 19.5x multiple, with potentially even less expensive opportunities at the single-stock level.

Source: Bloomberg and Goldman Sachs Asset Management.

MICRO-SCOPE



Among S&P 500 constituents, returns have been increasingly micro-driven as company-specific factors now explain 71% of the median stock's performance, up from 41% a year ago. Such periods historically have been fertile grounds for company-specific alpha-generation. As forward index returns may be governed by already full valuations, we believe investors can generate more reliable alpha through precise stock selection over sector, style, and size tilts.

Source: Goldman Sachs GIR and Goldman Sachs Asset Management.

Top Section Notes: Source: Bloomberg and Goldman Sachs Asset Management. As of August 25, 2023. Middle Section Notes: Source: Bloomberg and Goldman Sachs Asset Management. As of August 28, 2023. Bottom Section notes: Source: Goldman Sachs Global Investment Research and Goldman Sachs Asset Management. As of July 31, 2023. Micro-driven factors refer to company-specific sources of risk and return rather than macro-driven factors such as market beta, sector beta, size, and valuation. Any reference to a specific company or security does not constitute a recommendation to buy, sell, hold or directly invest in the company or its securities. It should not be assumed that investment decisions made in the future will be profitable or will equal the performance of the securities discussed in this document. Please see additional disclosures at the end of this document. **Past performance does not guarantee future results, which may vary.**

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1. Asset Class Outlook for equities, credits, sovereigns, real assets, and currencies are informed by Goldman Sachs Asset Management, Goldman Sachs Global Investment Research, and Goldman Sachs Investment Strategy Group views. The views expressed herein are as of May 2023 and subject to change in the future. “Shorter Term” view refers to less than 6 months. “Longer Term” view refers to 1–5 years. Individual portfolio management teams for Goldman Sachs Asset Management may have views and opinions and/or make investment decisions that, in certain instances, may not always be consistent with the views and opinions expressed herein.
2. Price targets of major asset classes are provided by Goldman Sachs Global Investment Research. Source: “Global equities gained 2.5%; Japan outperformed” – 09/04/2023.

Page 1 Definitions

DM refers to developed markets

Real GDP refers to gross domestic product adjusted for inflation

GIR refers to Goldman Sachs Global Investment Research

FOMC refers to the Federal Open Market Committee

Fed refers to the Federal Reserve

BoJ refers to the Bank of Japan

Alpha refers to risk-adjusted returns in excess of a benchmark

Zombie firms refers to companies with weak balance sheets and de minimis growth prospects

Duration is a measure of a security's price sensitivity to changes in interest rates

Page 2 Definitions

AI refers to artificial intelligence

Full valuations is subjective terminology describing elevated S&P 500 valuation relative to its own history.

Top Section Notes: Chart shows the market capitalization of 5 mega-cap companies in the S&P 500 Index as a percent of the total market capitalization of the Index. “MAGMA” is an acronym that refers to those five mega-cap companies (META, AMZN, GOOGL, MSFT, and AAPL).

Middle Section Notes: Chart shows the trailing twelve-month price-to-earnings ratio of META, AMZN, GOOGL, MSFT, and AAPL collectively, the S&P 500, and the S&P 500 excluding META, AMZN, GOOGL, MSFT, and AAPL. Price-to-earnings ratio is a valuation metric comparing the price of a security, or collection of securities, to the earnings per share generated by that security, or collection of securities.

Bottom Section Notes: Chart shows the share of the median S&P 500 stock's trailing 6-month return explained by micro-driven factors. Alpha refers to returns in excess of the benchmark return. Full valuations is subjective terminology describing elevated S&P 500 valuation relative to its own history.

Glossary

The MSCI AC Asia Pacific ex Japan Index captures large and mid cap representation across 4 of 5 Developed Markets countries and 8 Emerging Markets countries in the Asia Pacific region.

The S&P 500 Index is the Standard & Poor’s 500 Composite Stock Prices Index of 500 stocks, an unmanaged index of common stock prices. The index figures do not reflect any deduction for fees, expenses or taxes. It is not possible to invest directly in an unmanaged index.

The STOXX Europe 600 Index is derived from the STOXX Europe Total Market Index (TMI) and is a subset of the STOXX Global 1800 Index.

The Tokyo Price Index (TOPIX) is a metric for stock prices on the Tokyo Stock Exchange (TSE). A capitalization-weighted index, TOPIX lists all firms that have been determined to be part of the "first section" of the TSE.

The Russell 2000 Index measures the performance of the small-cap segment of the US equity universe.

Indices are unmanaged. The figures for the index reflect the reinvestment of all income or dividends, but do not reflect the deduction of any fees or expenses which would reduce returns. Investors cannot invest directly in indices.

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