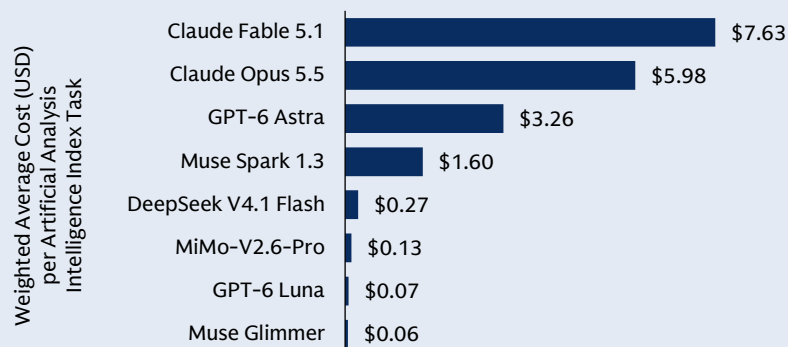


Chart of the Week: Falling Costs, Rising Adoption



Source: Artificial Analysis and GS Asset Management. As of September 23, 2026

Artificial Intelligence

Facing competition from Chinese open-source alternatives, leading US AI companies have started to unveil new, cheaper AI models. In particular, Meta's Muse Glimmer and Open AI's GPT-6 Luna have significantly lower costs than the frontier models, even undercutting some of the new open-source Chinese models, such as Xiaomi's MiMo-V2.6-Pro. Notably, we are seeing early signs that declining costs are driving increased AI spending, demonstrating how AI companies may sustain strong earnings growth even if margins come under pressure.

SAS Market Strategy

Market Summary

Global Equities: US equities rose early in the week as Meta's new AI agent, Muse, fueled a rally in semiconductor and mega-cap tech stocks. They gave back some of their gains after a hotter-than-expected PMI print and hawkish Fed commentary, but the S&P 500 still ended the week up 1.23%. European equities were volatile, initially supported by tech and bank stocks before losing ground as yields rose. The STOXX 600 still ended the week up 0.54%. South Korea's KOSPI ended a shortened three-day week up 2.71% after semiconductor exports reached a record high during the first 20 days of September, rising 259% year-over-year to \$34.1 billion.

Fixed Income: US Treasury yields surged last week as strong US economic data and elevated oil prices reignited inflation fears. A weak 5-year US Treasury auction added to the selling pressure, with the 10-Year yield hitting 5.225% on Thursday, its highest level since 2007. The 2-Year and 10-Year yields ended up at 4.85% and 5.16%, respectively. The 10-Year German Bund yield hit its highest level since 2009 during the week as the market priced in further ECB tightening, ending at 3.60%.

Commodities: Oil prices were mixed last week, with Brent Crude rising but WTI falling. Brent rose sharply after Houthi missiles targeted the Saudi export hub of Yanbu, before falling back on Friday on reports of possible US-Iran talks to reopen the Strait of Hormuz, ending at \$104.32/bbl. WTI fell as President Trump raised the possibility of a ban on US diesel exports. It ended down at \$92.41/bbl. Gold prices slid as higher US yields and a stronger dollar diminished its appeal, ending the week down at \$4,285/oz.

FX: The US dollar index rose by 0.75% last week, hitting its highest level in nearly two months as it benefited from the hawkish shift in monetary policy expectations. The dollar strengthened against both the euro and the yen, with EUR/USD and USD/JPY ending the week at \$1.1391 and ¥157.28, respectively.

Economic Summary

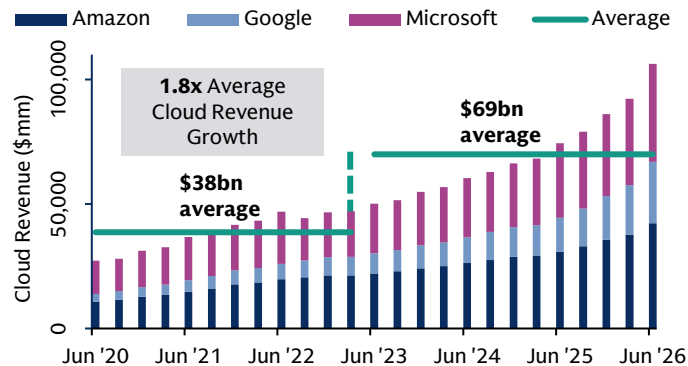
Geopolitics: Tensions in the Middle East flared up again last week. Houthi forces captured the Yemeni port of Mokha and began targeting Saudi tankers at Bab el-Mandeb, while an Iranian strike on a vessel in Hormuz killed one crew member. President Trump then threatened to "annihilate" Iran if a peace deal is not achieved, while Iran warned that it would open a "new front" in the war in the Red Sea. However, on Friday, Iran proposed a 7-day plan to reopen the Strait of Hormuz and resume talks on a broader peace agreement. With US diesel prices above \$6.50/gallon, President Trump floated a 90-day ban on diesel exports to help ease prices, although the White House later ruled out a flat ban.

China: President Trump and President Xi met at the White House on Thursday after the US and China announced an extension to their trade truce. President Trump said they had made "tremendous strides" on trade and called it a great meeting but gave few details. Both leaders stressed the importance of talks on AI, although there was no breakthrough on Iran.

Activity: The US S&P Global Composite PMI increased from 56.0 in August to 58.4 in September, its highest level in more than five years. Services PMI came in at 58.7, a 59-month high, and Manufacturing PMI at 57.0, a 52-month high. The Euro Area Composite PMI rose from 52.0 in August to a 41-month high of 53.1 in September, having been expected to decline to 51.7. AI capex and European defense spending continue to support manufacturing, while Services PMI also jumped from 51.6 to 53.0. The UK Composite PMI, by contrast, fell from 52.5 in August to a three-month low of 51.7 in September, and Japan's Composite PMI fell from 53.5 to 52.5, its lowest level since May. Euro Area consumer confidence fell from -15.5 in August to -16.5 in September, below expectations of a -16.0 reading.

Labor: US initial jobless claims fell by 1k to 197k in the week ended September 19, slightly below consensus expectations of 201k.

Accelerating Cloud Growth Suggests Early Returns On AI Investment



Source: Goldman Sachs Asset Management, Bloomberg, Company Reports. As of June 30, 2026.

The AI Flywheel: Circular Hype or Durable Demand?

The market has been riding an AI wave, but one key question stands out: Is AI creating lasting economic value, or are capital flows simply circulating within the value chain? We explore four important questions we believe investors should be asking today.

Is the AI boom just a "closed loop" of tech giants trading cash?

The Fear: Critics point to "circular financing," a loop where a massive cloud provider invests millions into an AI startup, and that startup immediately hands money back to buy cloud computing power. It looks like growth, but no actual value is created.

The Reality: While the financing may look a bit circular at times, there is genuine external demand.

1. Non-tech enterprises (spanning healthcare, finance, and retail) are actively reallocating their core operational budgets to integrate AI.
2. Companies are moving past the "experimental" phase. AI platforms are seeing rapid growth because businesses are deploying them into daily, revenue-generating workflows.

Who is driving on this multi-billion-dollar "digital highway"?

The Fear: Tech giants are spending unprecedented amounts of capital (capex) building data centers and buying chips. But is anyone actually using them to make or save money?

The Reality: Yes, and the productivity gains are measurable. Rather than speculative use cases, many businesses are realizing immediate economic utility:

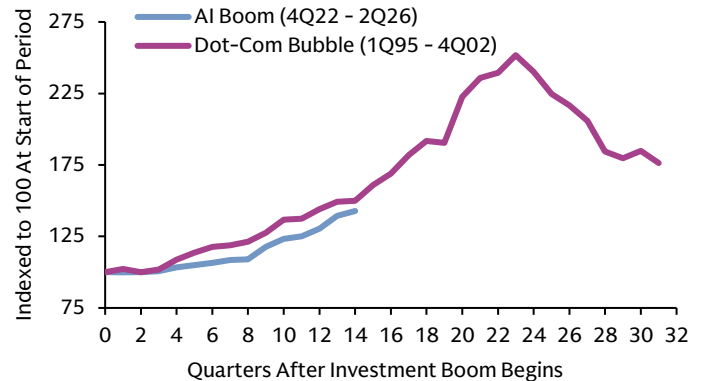
1. Software Development: Automating code generation to ship products faster.
2. Customer Experience: Deploying sophisticated, automated support agents that aim to resolve complex issues instantly.
3. Knowledge Management: Synthesizing datasets in seconds.

These early enterprise deployments are yielding tangible operation cost savings, proving that demand is driven by utility, not hype.

For our take on AI Capex from a Fixed Income perspective, read our latest [Fixed Income Outlook 4Q 2026](#).

Source: Goldman Sachs Asset Management. As of September 21, 2026. Diversification does not protect an investor from market risk and does not ensure a profit. The portfolio risk management process includes an effort to monitor and manage risk, but does not imply low risk. 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.

History Suggests More Room to Grow



Source: FRED and Goldman Sachs Asset Management. As of June 30, 2026.

Will the massive capex spend drive tech giants into a cash crisis?

The Fear: The sheer scale of the current capex super-cycle has many investors worried that hyperscalers will run free-cash-flow (FCF) negative and damage their valuations.

The Reality: We believe the risk of systemic cash flow insolvency is low.

- The tech giants funding the AI build-out possess highly profitable legacy businesses (like search engines, e-commerce, and enterprise SaaS) that generate massive, steady cash cushions.
- To rigorously evaluate this risk, our investment team actively stress-tests hyperscaler balance sheets and the ROI of AI spend by tracking cloud backlog growth, software seat expansion, and budget reallocation.

If the GPU bottleneck is easing, where is investment value moving?

The Fear: A transition away from GPU-centric spending may undermine the AI investment thesis.

The Reality: The potential opportunity is migrating along the supply chain. As AI models grow more complex, the physical bottlenecks have shifted from just GPUs to memory capacity and optical networking as well.

- High-Bandwidth Memory (HBM) is essential for feeding data to advanced processors.
- Connecting thousands of chips inside a data center requires ultra-fast optical solutions.

By looking beyond individual chipmakers, we believe investors may find durable and diversified entry points across the hardware stack.

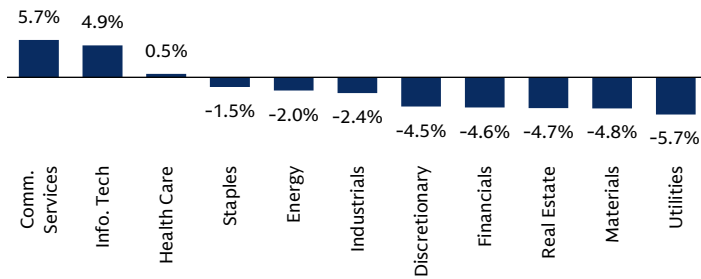
The Bottom Line

The AI flywheel is no longer spinning on hype alone. While the infrastructure buildout is still ongoing, real-world enterprise adoption and demand is rising to meet the supply. We believe the AI investment cycle will remain durable as AI moves from the testing phase to become a business necessity.

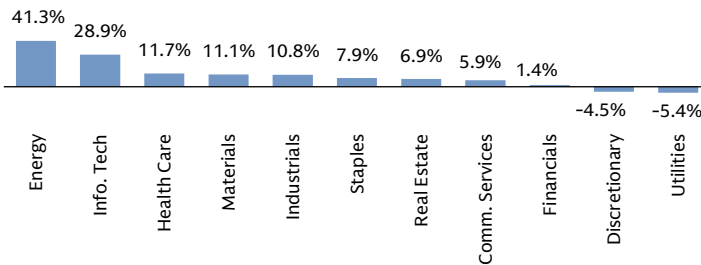
Market Watch

S&P 500 Index Sector Returns

Month-To-Date

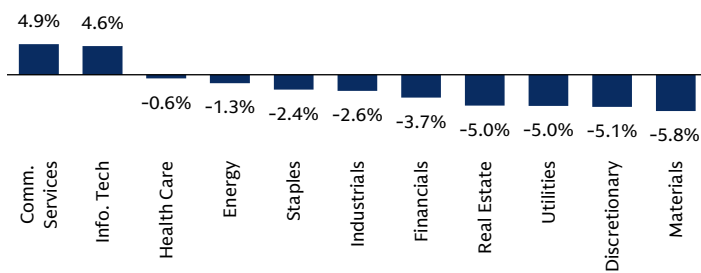


Year-To-Date

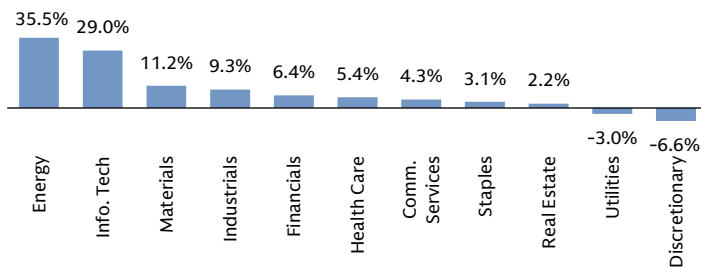


MSCI World Index Sector Returns

Month-To-Date



Year-To-Date



Economic Watch

September 28 (Mon)

September 29 (Tue)

JOLTS Job Openings
(Cons: 7.225M, Prior: 7.271M)
China Composite PMI
(Prior: 49.5)

September 30 (Wed)

US PCE YoY
(Cons: 3.7%, Prior: 3.7%)
US Q2 GDP QoQ
(Cons: 1.5%, Prior: 1.5%)
UK Q2 GDP YoY
(Cons: 1.2%, Prior: 0.9%)

October 1 (Thu)

US ISM Manufacturing PMI
(Cons: 55.0, Prior: 54.6)
US Initial Jobless Claims
(Cons: 200k, Prior: 197k)

October 2 (Fri)

US Unemployment Rate
(Cons: 4.1%, Prior: 4.1%)
US Nonfarm Payrolls
(Cons: 90k, Prior: 162k)

Critical Future Events

FOMC Meeting – Oct 28
ECB Meeting – Oct 29
BOJ Meeting – Oct 30
BOE Meeting – Nov 5

Source: MSCI, Bloomberg, and Goldman Sachs Asset Management. As of September 26, 2026. For style performance, Large, Mid, and Small for US Equity refer to the Russell 1000, Russell Midcap, and Russell 2000 indices, respectively. Value refers to companies with lower price-to-book ratios and lower expected growth values, and Growth refers to higher price-to-book ratios and higher forecasted growth values. For US Fixed Income, Government, Corporate, and High Yield refer to the Bloomberg Treasury, Bloomberg Corporate Credit, and Bloomberg High Yield indices, respectively. Short, Intermediate, and Long refer to the Short, Intermediate, and Long segments of their respective curves. For European Fixed Income, Government, Corporate, and High Yield refer to the Bloomberg Euro Treasury Index, the Bloomberg Euro Corporate Index, and the Bloomberg Euro High Yield Index, respectively. Quality returns refers to the credit quality of asset classes ranging from Government, highest quality, to High Yield, lowest quality. Since August 24, 2021, the Barclays indices are branded "Bloomberg indices". Please see end disclosures for footnotes. Past performance does not guarantee future results, which may vary.

Style Performance

US Equity Size & Style Returns

	Month-to-Date			Year-to-Date		
	Value	Core	Growth	Value	Core	Growth
Large	-1.65%	0.49%	2.91%	19.68%	12.72%	6.71%
Medium	-3.64%	-2.89%	-0.67%	15.53%	12.25%	1.79%
Small	-3.56%	-4.02%	-4.47%	17.56%	14.33%	11.33%

MSCI World Size & Style Returns

	Month-to-Date			Year-to-Date		
	Value	Core	Growth	Value	Core	Growth
Large	-0.29%	0.24%	0.74%	16.32%	12.57%	9.24%
Medium	-3.34%	-2.85%	-2.00%	8.96%	8.03%	6.57%
Small	-3.07%	-3.15%	-3.22%	10.43%	12.37%	14.49%

US Fixed Income Maturity and Quality Returns

	Month-to-Date			Year-to-Date		
	Short	Intermed.	Long	Short	Intermed.	Long
Government	-0.57%	-2.12%	-3.46%	0.46%	-3.02%	-6.13%
Corporate	-0.59%	-2.09%	-3.08%	1.03%	-2.38%	-5.12%
High Yield	-0.93%	-2.36%	-3.89%	1.94%	0.19%	-2.91%

European Fixed Income Maturity and Quality Returns

	Month-to-Date			Year-to-Date		
	Short	Intermed.	Long	Short	Intermed.	Long
Government	-0.54%	-2.11%	-3.18%	-0.25%	-2.96%	-5.87%
Corporate	-0.55%	-2.04%	-2.65%	0.29%	-2.15%	-3.96%
High Yield	-1.50%			0.61%		

Index Returns

	1 Week	MTD	QTD	YTD
Equities				
S&P 500	1.23%	0.84%	3.52%	14.07%
NASDAQ Composite	2.07%	2.71%	3.40%	16.98%
DJ Industrial Average	0.28%	-2.38%	-0.57%	9.13%
S&P 400	-0.04%	-2.88%	-5.05%	11.41%
Russell 2000	-0.79%	-3.92%	-5.88%	15.47%
S&P 500 Equal Weight	-0.19%	-3.37%	-0.39%	11.68%
STOXX Europe 50 (€)	1.16%	-1.74%	-0.13%	11.55%
STOXX Europe 600 (€)	0.54%	-1.83%	-0.07%	10.87%
MSCI EAFE Small Cap	-0.14%	-2.54%	3.19%	11.46%
FTSE 100 (£)	0.35%	-1.14%	2.66%	10.44%
FTSE MIB (€)	0.70%	-1.34%	0.70%	19.02%
CAC 40 (€)	0.35%	-2.89%	-3.62%	1.90%
DAX (€)	0.41%	-3.24%	1.65%	3.75%
SWISS MKT (CHF)	1.17%	-2.25%	-1.61%	8.35%
TOPIX (¥)	0.92%	-0.67%	3.38%	22.61%
Nifty 50	-0.88%	-3.90%	-2.68%	-10.35%
Hang Seng (HKD)	-0.97%	-4.13%	8.17%	-1.80%
MSCI World	0.91%	-0.09%	3.06%	13.32%
MSCI China Free	-0.39%	-4.51%	2.73%	-15.19%
MSCI EAFE	0.20%	-2.48%	1.45%	11.50%
MSCI EM	1.29%	0.94%	1.20%	25.50%
MSCI Brazil (BRL)	-0.99%	2.31%	7.38%	11.91%
MSCI India (INR)	-1.08%	-4.01%	-2.15%	-7.13%
Fixed Income				
Bloomberg US Aggregate	-0.82%	-1.98%	-2.88%	-2.28%
Bloomberg Global Aggregate	-0.76%	-1.98%	-2.07%	-2.27%
Bloomberg Euro Aggregate	-0.95%	-3.64%	-3.99%	-5.32%
Bloomberg US High Yield	-0.92%	-1.84%	-1.14%	0.80%
Bloomberg Euro High Yield (€)	-0.53%	-1.50%	-1.24%	0.61%
Bloomberg Muni Aggregate	-1.81%	-3.82%	-5.82%	-3.63%
Bloomberg TIPS	-0.77%	-2.21%	-2.88%	-1.78%
JPM EMBI Gbl. Divers.	-1.34%	-2.33%	-2.87%	0.36%
JPM GBI-EM Gbl. Divers.	-0.87%	-1.79%	-0.61%	0.89%
Other				
DJ US Real Estate	-1.38%	-4.92%	-4.41%	5.31%
S&P GSCI	-1.46%	5.77%	26.28%	56.69%
Alerian MLP	-4.15%	-5.99%	4.46%	23.77%
VIX	0.41%	-0.34%	-9.60%	-0.54%
US Dollar Index	0.75%	1.55%	-0.21%	2.69%
Bitcoin	3.46%	6.43%	43.14%	-3.91%

	9/25/2026	8/31/2026	6/30/2026	12/31/2025
Commodities				
WTI Oil (\$/barrel)	\$92.41	\$85.76	\$69.50	\$57.42
Brent Oil	\$104.32	\$90.49	\$72.92	\$60.85
Gold (\$/oz)	\$4,284.81	\$4,437.38	\$4,008.02	\$4,319.37
Natural Gas (\$/mmBtu)	\$3.20	\$2.94	\$3.28	\$3.69
Currencies				
Euro (\$/€)	1.1391	1.1618	1.1422	1.1746
Pound (\$/£)	1.3247	1.3549	1.3262	1.3475
Japanese Yen (¥/\$)	157.28	159.74	162.55	156.71
Swiss Franc (CHF/€)	0.9436	0.9391	0.9232	0.9307
Chinese Yuan Renminbi (CNY/\$)	6.7129	6.7197	6.787	6.9880

Rates & Spreads

	9/25/2026	8/31/2026	6/30/2026	12/31/2025
Rates				
Fed Funds Effective Rate	3.88%	3.63%	3.63%	3.64%
ECB Depo Rate	2.50%	2.25%	2.25%	2.00%
US Treasuries 2-Year	4.85%	4.34%	4.17%	3.47%
US Treasuries 10-Year	5.16%	4.75%	4.47%	4.17%
US Treasury 2-10 Slope	0.31%	0.41%	0.29%	0.69%
German Bunds 2-Year	3.27%	2.93%	2.52%	2.12%
German Bunds 10-Year	3.60%	3.32%	2.86%	2.85%
Japanese Govt Bonds 10-Year	3.07%	2.94%	2.67%	2.06%
UK Gilts 10-Year	5.37%	5.06%	4.76%	4.48%
Swiss Govt Bonds 10-Year	0.64%	0.42%	0.27%	0.28%
French OATs 10-Year	4.69%	4.18%	3.65%	3.56%
Italian BTPs 10-Year	4.51%	4.15%	3.63%	3.55%
Chinese Govt Bonds 10-Year	1.67%	1.69%	1.73%	1.84%
Spreads				
US HY Corp. Spread (bps)	294	261	270	266
US IG Corp. Spread (bps)	80	78	74	78
EUR HY Corp. Spread (bps)	300	277	284	281
EUR IG Corp. Spread (bps)	87	80	80	79
EMD Spread (bps)	236	235	235	253

Global Equity Valuations

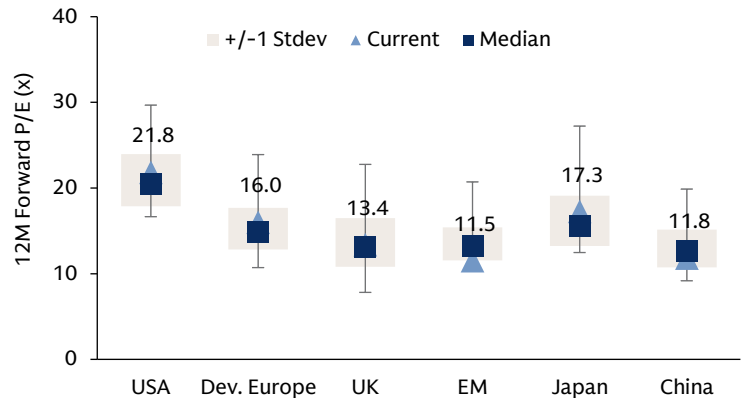


Chart Source: Goldman Sachs Asset Management and Bloomberg as of close of trading on August 31, 2026. Chart data shows next 12-month P/E ratio from January 2016 to the current period. 12m forward P/E(x) refers to price-to-earnings ratio for the next 12 months, which is a valuation measure applied to respective broad equity indices. Please see additional disclosures at the end of this presentation.

Weekly Market Recap Notes:

All data is denominated in USD unless noted otherwise.

Source: MSCI and Goldman Sachs Asset Management. **Past performance does not guarantee future results, which may vary.** Please see end disclosures for footnotes.

IMPORTANT INFORMATION

Page 1 Chart of the Week Notes: Source: Artificial Analysis and Goldman Sachs Asset Management. As of September 23, 2026. Chart shows the weighted average cost (USD) per Artificial Analysis Intelligence Index task for a wide range of AI models. 'We' refers to Goldman Sachs Asset Management. For Illustrative Purposes Only. Please see additional disclosures at the end of this presentation.

Page 1 Market Summary Notes: "PMI" refers to Purchasing Managers' Index. "Fed" refers to Federal Reserve. "WTI" refers to West Texas Intermediate crude oil, a common US benchmark for oil prices. "Brent" refers to a global benchmark for oil prices worldwide. "Bbl" refers to barrel. "Oz" refers to ounce. "FX" refers to foreign exchange. "Hawkish" refers to restrictive monetary policy. "USD" refers to the US dollar. "EUR" refers to the euro. "JPY" refers to the Japanese yen.

Page 1 Economic Summary Notes: "PMI" refers to Purchasing Managers' Index.

Page 2 Fundamental Equity Insights Notes: "Return on investment (ROI)" is a performance metric used to evaluate the profitability of an investment. "GPU-centric" refers to focusing almost exclusively on the purchase, deployment, and optimization of Graphics Processing Units (GPUs) as the primary drivers of AI development.

Page 3 Style Performance Notes: For US Fixed Income, Government, Corporate, and High Yield refer to the Bloomberg US Treasury, the Bloomberg US Corporate Credit, and the Bloomberg US High Yield indices, respectively. For European Fixed Income, Government, Corporate, and High Yield refer to the Bloomberg Euro Treasury Index, the Bloomberg Euro Corporate Index, and the Bloomberg Euro High Yield Index, respectively. Short, Intermediate, and Long refer to the Short, Intermediate, and Long segments of their respective curves. Quality returns refers to the credit quality of asset classes ranging from Government, highest quality, to High Yield, lowest quality. Since August 24, 2016, the Barclays indices are co-branded "Bloomberg Barclays indices".

Page 3 Economic Watch Notes: "PMI" refers to Purchasing Managers' Index. "PCE" refers to Personal Consumption Expenditures. "YoY" refers to year-over-year. "GDP" refers to Gross Domestic Product. "QoQ" refers to quarter-over-quarter. "CPI" refers to Consumer Price Index. "FOMC" refers to Federal Open Market Committee. "ECB" refers to European Central Bank. "BoE" refers to Bank of England. "BoJ" refers to Bank of Japan.

Page 4 Global Equity Valuations Chart Notes: Earnings are forward looking Bloomberg estimates of operating earnings per share over the next four quarters, which may exclude one-time extraordinary gains and losses. Please see index disclosures for additional definitions on the indices.

USA is represented by the MSCI USA Index, Dev. Europe is represented by MSCI Europe Index, Germany is represented by MSCI Germany Index, France is represented by MSCI France Index, UK is represented by MSCI UK Index, EM is represented by MSCI EM Index, Japan is represented by MSCI Japan Index, Hong Kong is represented by MSCI Hong Kong Index, China is represented by MSCI China Index, Global Dev. is represented by MSCI World Index.

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Equity investments are subject to market risk, which means that the value of the securities in which it invests may go up or down in response to the prospects of individual companies, particular sectors and/or general economic conditions. Different investment styles (e.g., "growth" and "value") tend to shift in and out of favor, and, at times, the strategy may underperform other strategies that invest in similar asset classes. The market capitalization of a company may also involve greater risks (e.g. "small" or "mid" cap companies) than those associated with larger, more established companies and may be subject to more abrupt or erratic price movements, in addition to lower liquidity.

Bonds are subject to interest rate, price and credit risks. Prices tend to be inversely affected by changes in interest rates. Unlike stocks and bonds, US Treasuries securities are guaranteed as to payment of principal and interest if held to maturity. Investments in fixed income securities are subject to the risks associated with debt securities generally, including credit, liquidity, interest rate, prepayment and extension risk. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. The value of securities with variable and floating interest rates are generally less sensitive to interest rate changes than securities with fixed interest rates. Variable and floating rate securities may decline in value if interest rates do not move as expected. Conversely, variable and floating rate securities will not generally rise in value if market interest rates decline. Credit risk is the risk that an issuer will default on payments of interest and principal. Credit risk is higher when investing in high yield bonds, also known as junk bonds. Prepayment risk is the risk that the issuer of a security may pay off principal more quickly than originally anticipated. Extension risk is the risk that the issuer of a security may pay off principal more slowly than originally anticipated. All fixed income investments may be worth less than their original cost upon redemption or maturity.

International securities may be more volatile and less liquid and are subject to the risks of adverse economic or political developments. International securities are subject to greater risk of loss as a result of, but not limited to, the following: inadequate regulations, volatile securities markets, adverse exchange rates, and social, political, military, regulatory, economic or environmental developments, or natural disasters.

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The currency market affords investors a substantial degree of leverage. This leverage presents the potential for substantial profits but also entails a high degree of risk including the risk that losses may be similarly substantial. Such transactions are considered suitable only for investors who are experienced in transactions of that kind. Currency fluctuations will also affect the value of an investment.

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Index Benchmarks

Equities: 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 **NASDAQ Composite Index** is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market, and Capital Market. The **Dow Jones Industrial Average Index** is a price-weighted average of 30 actively traded blue-chip stocks. The **S&P 400 Index** measures the performance of the mid-range sector of the US stock market. The **Russell 2000 Index** is an unmanaged index of common stock prices that measures the performance of the 2000 smallest companies in the Russell 3000 Index. The **S&P 500 Equal Weight Index** includes the same constituents as the capitalization weighted S&P 500, but each company is allocated a fixed weight. **Euro Stoxx 50 Index**, Europe's leading Blue-chip index for the Eurozone, provides a Blue-chip representation of supersector leaders in the Eurozone. 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. With a fixed number of 600 components, the STOXX Europe 600 Index represents large, mid and small capitalization companies across 18 countries of the European region. The **Financial Times Stock Exchange (FTSE) 100 Index** is an index of the 100 companies listed on the London Stock Exchange with the highest market capitalization. **FTSE MIB Index** is composed of 40 Italian equities and seeks to replicate the broad sector weights of the Italian stock market. **CAC 40 Index** is composed of the 40 largest equities listed in France. **SWISS Market Index** is composed of the largest and most liquid stocks traded on the Geneva, Zurich, and Basel Stock Exchanges. The **Japan TOPIX Index** is a capitalization-weighted index of the largest companies and corporations that are found in the First Section of the Tokyo Stock Exchange. The **NIFTY 50 Index** tracks the behavior of blue chip companies, the largest and most liquid Indian securities domiciled in India and listed on the NSE.

The **Hang Seng Composite Index** covers about 95% of the total market capitalization of companies listed on the Main Board of the Hong Kong Stock Exchange. The **MSCI World Index** is a broad global equity index that represents large and mid-cap equity performance across 23 developed markets countries. It covers approximately 85% of the free float-adjusted market capitalization in each country. The **MSCI China Index** captures large and mid cap representation across China H shares, B shares, Red chips, P chips and foreign listings (e.g. ADRs). With 461 constituents, the index covers about 85% of this China equity universe. Currently, the index also includes Large Cap A shares represented at 5% of their free float adjusted market capitalization. The **MSCI EAFE Index** is a free-float weighted equity index, which covers developed markets countries in Europe, Australasia, Israel, and the Far East. The **MSCI Emerging Markets (EM) Index** is a free float-adjusted market capitalization index that captures large and midcap representation across 24 Emerging Markets (EM) countries. The **MSCI Brazil Index** covers about 85% of the total market capitalization of the Brazilian equity universe. The **MSCI India Index** covers about 85% of the total market capitalization of the Indian equity universe. The **CBOE Volatility Index (VIX)** is a leading measure of market expectations of near-term volatility conveyed by S&P 500 Index option prices. **Fixed Income:** The **Bloomberg US Aggregate Bond Index** represents an unmanaged diversified portfolio of fixed-income securities, including US Treasuries, investment-grade corporate bonds, and mortgage-backed and asset-backed securities. The **Bloomberg Global Aggregate Bond Index** is a flagship measure of global investment grade debt from a multitude local currency markets, including treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers. The **Bloomberg US High-Yield Index** covers the USD-denominated, non-investment grade, fixed-rate, taxable corporate bond market. The **Bloomberg US Aggregate Municipal Bond Index** is an unmanaged broad-based total return index composed of approximately 8,000 investment grade, fixed rate, and tax-exempt issues, with a remaining maturity of at least one year. The **J.P. Morgan Emerging Markets Bond Index (EMBI Global Index)** is an unmanaged market capitalization Index that tracks total returns for USD-denominated debt instruments issued by emerging market sovereign and quasi-sovereign issuers. The **J.P. Morgan Government Bond Index-Emerging Markets Global Diversified (GBI-EM Global Index)** is a market capitalization Index that tracks the performance of local currency debt issued by emerging market governments. **Bloomberg Euro Aggregate Index** refers to the Bloomberg EuroAgg Index. The index measures the market of investment grade, euro-denominated, fixed-rate bond market, including treasuries, government-related, corporate and securitized issues. Inclusion is based on currency denomination of a bond and not country of risk of the issuer. **Bloomberg Euro High Yield Index** refers to the Bloomberg Euro High Yield 3% Issuer Capped Index. The index measures a universe of non-investment grade, fixed-rate corporate bonds denominated in USD. Inclusion is based on the currency of issue, and not the domicile of the issuer. The index excludes emerging market debt. **Other:** The **S&P GSCI Commodity Index** is a composite index of commodity sector returns, representing an unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities. It is not possible to invest in an unmanaged index. **Commodities:** **WTI Oil** refers to West Texas Intermediate (WTI) Crude Oil, a land-locked crude, delivered via pipeline into Cushing, Oklahoma. **Brent Oil** refers to Brent crude oil, a waterborne crude oil produced in the North Sea. **Currencies:** **Euro (\$/€)** refers to the Euro's exchange rate with the Dollar. **Pound (\$/£)** refers to the British Pound's exchange rate with the US Dollar. **Japanese Yen (¥/\$)** refers to the US Dollar's exchange rate with the Japanese Yen. **Swiss Franc (CHF/€)** refers to the Euro's exchange rate with the Swiss Franc. **Chinese Yuan Renminbi (CNY/\$)** refers to the US Dollar's exchange rate with the Chinese Yuan Renminbi. **Rates:** The **2-Year Treasury** is a US Treasury debt obligation that has a maturity of 2 years. The **10-Year Treasury** is a US Treasury debt obligation that has a maturity of 10 years. The **2-10 Treasury Slope** is the difference between the 10-Year Treasury and the 2-Year Treasury. The **German Bunds 2-Year** is a German debt obligation that has a maturity of 2 years. The **German Bunds 10-Year** is a German debt obligation that has a maturity of 10 years. The **Japanese Govt Bonds 2-Year** is a Japanese debt obligation that has a maturity of 2 years. The **Japanese Govt Bonds 10-Year** is a Japanese debt obligation that has a maturity of 10 years. The **UK Gilts 10-Year** is a UK debt obligation that has a maturity of 10 years. The **Swiss Govt Bonds 10-Year** is a Swiss debt obligation that has a maturity of 10 years. The **French OATs 10-Year** is a French debt obligation that has a maturity of 10 years. The **Italian BTPs 10-Year** is an Italian debt obligation that has a maturity of 10 years. The **Spanish Bonos 10-Year** is a Spanish debt obligation that has a maturity of 10 years. **Spreads:** **High Yield (HY) Corporate Spread** is the Bloomberg US Corporate High Yield Average Option Adjusted Spread (OAS), which measures the spread between the US Treasury yield curve and the Bloomberg US Corporate High Yield curve. The **Investment Grade (IG) Corporate Spread** is the Bloomberg US Aggregate Corporate Average OAS, which measures the spread between the US Treasury yield curve and the Bloomberg US Corporate Average curve. The **EMD Spread** is the J.P. Morgan EMBI Global Diversified Sovereign Spread, which measures the spread between the US Treasury yield curve and the J.P. Morgan EMBI Global Diversified Sovereign curve.

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