



MARKET SUMMARIES

NOVEMBER 2021



Table of Contents

- Domestic Equity Market Summary 2
- International Equity Market Summary 3
- Public Real Estate Market Summary 5
- Private Real Estate Market Summary 6
- Private Equity Market Summary 6
- Hedge Fund Market Summary 7
- Private Infrastructure Market Summary 9
- Fixed Income Market Summary 9

DOMESTIC EQUITY MARKET SUMMARY

The S&P 500 Growth was the only major index to finish positive for the month while the S&P 500 Value sustained the largest decline. On a year-to-date basis, the S&P 500 Growth index continued to be the top performer and the S&P 500 Value continued to trail major indices.

U.S initial jobless claims are now at multi-year lows as pandemic stimulus programs conclude and mobility continues to increase. With regard to the global supply chain, container ships docked at the Port of Los Angeles ended the month at 50 versus the high of 80 seen earlier this year as port congestion eases. Transportation remains a pressure point for consumers as wholesale used vehicle prices continue to reach new records after posting a 5% rise for the month.

In terms of the S&P 500 sector performance, Information Technology was the best-performing, beating the Consumer Discretionary sector for the month. Financials, Communication Services and Energy were the worst-performing sectors for the month.

About 42% of the S&P 500 reported third quarter earnings. Roughly 4% of companies reported a positive sales surprise, with 8% surprising on earnings. All sectors reported positive sales surprises for the month, led by Energy. Communication Services and Energy posted the highest earnings surprise with Financials and Utilities sectors posting a negative surprise on earnings.

In terms of S&P 500 stocks, semiconductor and mass merchant stocks posted the strongest returns. Qualcomm, Advanced Micro Devices, Nvidia, Xilinx and Dollar Tree were the five best performers, up 24% to 36%.

Table 1: U.S. Equity Index Total Returns

Index	Close	November 2021 (%)	Calendar Year to Date (%)
S&P 500 Large Cap	4,567.0	-0.7	23.2
S&P 500 Growth	3,297.4	1.4	28.8
S&P 500 Value	1,449.3	-3.3	16.7
S&P 400 Mid Cap	2,708.7	-3.0	18.7
S&P 600 Small Cap	1,343.2	-2.3	21.3
S&P 500 Large Cap	4,567.0	-0.7	23.2

Table 1: S&P 500 US Economic Sector Index Total Returns

Sector	November 2021 (%)	Calendar Year to Date (%)
Communication Services	-5.2	18.6
Consumer Discretionary	2.0	24.7
Consumer Staples	-1.1	7.6
Energy	-5.1	50.0
Financials	-5.7	30.7
Health Care	-3.0	15.7
Industrials	-3.5	15.0
Information Technology	4.3	30.1
Materials	-0.5	18.3
Real Estate	-0.9	32.6
Utilities	-1.7	7.3

INTERNATIONAL EQUITY MARKET SUMMARY

International stock markets, as measured by the MSCI ACWI ex U.S. Index, declined (-4.5%), after rising in October (2.4%) and declining in September (-3.2%). Equity markets dropped worldwide as concern about the Omicron variant of the COVID-19 virus caused a pullback. Returns were negative across all sectors, as Info Tech (-0.7%) and Communication Services (-2.3%) led the index. Energy (-8.4%) and Financials (-6.8%) were the greatest detractors of performance.

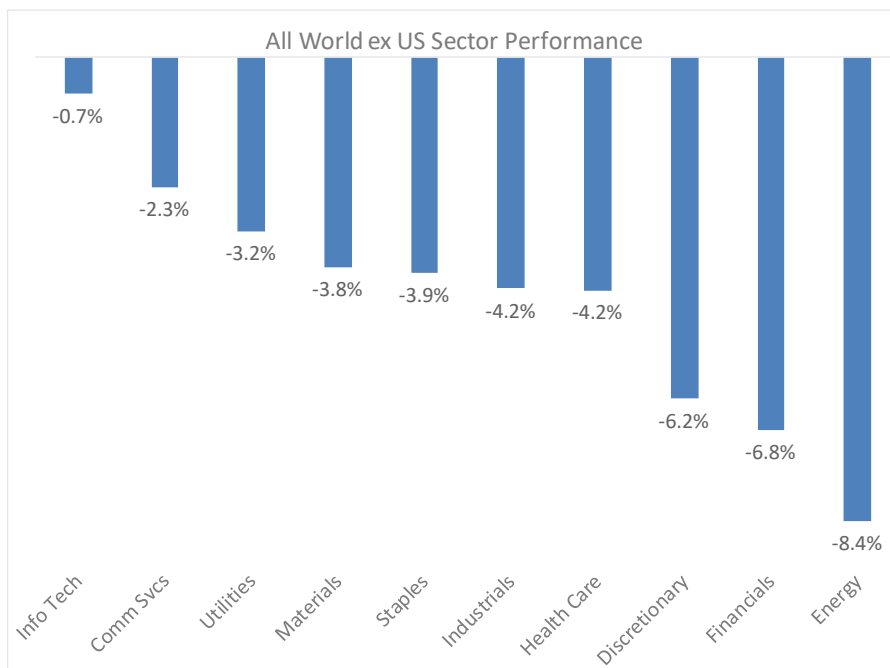
MSCI EAFE performance lagged the broader international index in November (-4.7%) after leading the group in October (2.5%) and September (-2.8%). Europe and Developed Asia returns were back in negative territory, reversing last month's bounce, with negative returns across all sectors. Communication Services was the best-performing sector as risk averse investors favored higher dividend yields. Energy was the worst performer on concerns Omicron would impact oil demand. Returns were also negative across all countries, with defensive Switzerland the best-performing country, while tourism-dependent Spain was the worst performer.

MSCI Emerging Markets performance led the broader international index in November (-4.1%) after lagging the group in October (1.0%) and September (-4.0%). Emerging Market stocks slipped back into negative territory this month. Info Tech was the only sector with positive performance. Discretionary fell back to the worst performer after being the best performer last month. From a country standpoint, Taiwan was the only one with positive performance due to its sizable tech industry. Turkey was the worst-performing country due to monetary and currency concerns, with energy-exposed Russia not far behind.

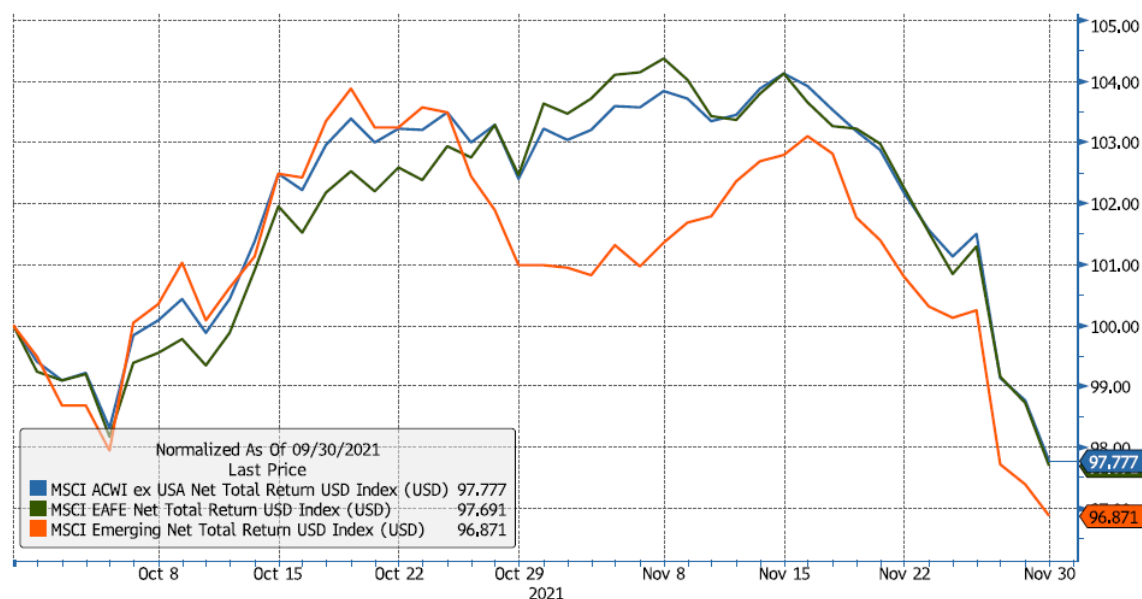
Table 3: Global Equity Index Total Returns

Index	Monthly (USD) (%)	Year to Date (%)
MSCI ACWI ex U.S.	-4.5%	3.5%
MSCI EAFE	-4.7%	5.8%
MSCI Emerging Markets	-4.1%	-4.3%

The chart below shows sector returns for the MSCI ACWI ex U.S. index in November, with Info Tech (-0.7%) and Communication Services (-2.3%) the top-performing sectors, and Energy (-8.4%) and Financials (-6.8%) the lowest.



NDUEACWZ Index (MSCI ACWI ex USA Net Total Return USD Index)
 NDDUEAFE Index (MSCI EAFE Net Total Return USD Index)
 NDUEEGF Index (MSCI Emerging Net Total Return USD Index)



The chart above shows the performance of the MSCI ACWI ex U.S. (-2.2%), MSCI EAFE (-2.3%) and MSCI Emerging Markets (-3.1%) indices for October and November.

PUBLIC REAL ESTATE MARKET SUMMARY

The global real estate securities market as measured by the FTSE EPRA / NAREIT Developed Index was down 2.2%. ERS' composite Internal Public Real Estate portfolio was down 1.9%, outperforming its benchmark by 33 basis points.

The Domestic REIT portfolio was down 0.39%, outperforming its benchmark, the FTSE EPRA/NAREIT U.S. Index (-0.69%), by 31 basis points. On the domestic side, strong stock selection in the Diversified, Industrial and Office subsectors added positive attribution, which was partly offset by weak stock selection in the Health Care and Retail subsectors. Notably, overweight positions in the Industrial subsector and underweight positions in the Health Care subsector also contributed to performance. The International REIT portfolio was down 3.99%, outperforming its benchmark, the FTSE EPRA/NAREIT Dev ex U.S. Index (-4.40%), by 41 basis points. Stock selection in Continental Europe, the U.K. and Australia added the most value, partly offset by weak stock selection in Japan and Hong Kong.

Table 4: Changes in REIT Portfolio Asset Value

Portfolio	Month Ending November (%)			Fiscal Year to Date (%)		
	Index	Portfolio	Difference	Index	Portfolio	Difference
Global REIT	(2.19)	(1.86)	0.33	(2.26)	(0.96)	1.30
International REIT	(4.40)	(3.99)	0.41	(6.77)	(6.34)	0.43
Domestic REIT	(0.69)	(0.39)	0.31	0.95	2.99	2.04

PRIVATE REAL ESTATE MARKET SUMMARY

Table five shows the changes in the Private Real Estate portfolio's net asset value for the month and fiscal year-to-date. The monthly and fiscal-year-to date increases are mainly due to the net capital called and appreciation of the portfolio investments.

Table 5: Changes in Private Real Estate Portfolio Net Asset Value

	November 31, 2021	October 31, 2021	Monthly Change (%)	Fiscal Year Change (%)
Net Asset Value (in billions)	\$3.218	\$3.085	4.3%	10.4%

Table 6: Capital Calls and Distributions

	November 2021	Fiscal Year to Date	Inception
Calls	(\$66) million	(\$269) million	(\$4.9) billion
Distributions	\$36 million	\$131 million	\$3.6 billion
Net (Called)/Distributions	(\$30 million)	(\$138 million)	(\$1.3) billion

The commitment target for Fiscal Year 2022 is \$350 million, with an upper range of \$700 million. To date, ERS has closed on two investments for a total of \$75 million of commitments, 21.4% of the fiscal year target allocation. The ERS Private Real Estate portfolio represents 9.1% of the overall System's assets, which slightly exceeds the 9% target but remains within the policy allocation range.

PRIVATE EQUITY MARKET SUMMARY

ERS Private Equity did not close on any new investments. Private Equity's target commitments for Fiscal Year 2022 are \$800 million with a range of \$600 million to \$1.0 billion. As of November 30, the net asset value of the Private Equity portfolio was \$6.51 billion, or 18.3% of the System's assets.

From program inception through November 30, ERS has closed on 125 funds and 71 co-investments with commitments totaling \$11.1 billion (adjusted for currency exchange rates). In addition, ERS holds LP Advisory Committee seats on 79 active funds and four fund LP Advisory Observer seats.

Table 7: ERS Private Equity – Deals Closed During Fiscal Year 2022

Deal #	Fund Name	Fiscal Year	Geography / Strategy	Commitment (Local Currency)	Commitment (USD) ⁽¹⁾
1	TPG Growth V, LP	2022	Global - Growth	\$50,000,000	\$50,000,000

Deal #	Fund Name	Fiscal Year	Geography / Strategy	Commitment (Local Currency)	Commitment (USD) ⁽¹⁾
2	Co-Investment # 71	2022	Europe - Buyout	€ 14,000,000	\$16,429,000
3	Baring Asia VIII, LP	2022	Asia - Buyout	\$50,000,000	\$50,000,000
Total					\$116,429,000

Footnotes:

(1) Foreign exchange rates as of 11/30/2021

EURO / USD: 1.1290

HEDGE FUND MARKET SUMMARY

The Absolute Return portfolio generated an estimated return of -0.30% for the month. Please note that this return is still preliminary as several of the managers have less liquid holdings. The target return of 90-day T-bills plus 350 basis points returned +0.28% over the same period. For the fiscal year, the Absolute Return portfolio generated an estimated return of +0.78%, while the 90-day T-bills plus 350 basis points has returned an estimated +0.87%. The portfolio's secondary benchmark, the HFRI Fund of Funds Diversified, returned -1.57% for November and +0.04% for the fiscal year.

Overall, it was a challenging month and most asset classes underperformed. Risk sentiment turned risk-off, leading investors to seek refuge in safe-haven assets. During the month, inflationary fears in the U.S. were in the headlines. Furthermore, at the end of the month there was news of a new SARS-CoV-2 strain (Omicron). The World Health Organization designated the new Omicron strain as concerning. This led to a volatile market as investors digested the news. Toward the beginning of the month, the U.S. Federal Reserve decided to initiate tapering of its monthly Treasury purchases by \$20 billion and its monthly mortgage-backed securities purchases by \$5 billion. At the end of the month, U.S. President Biden decided to reappoint U.S. Federal Reserve Chairman Powell to another term.

Within Chinese markets, there was elevated volatility due to regulatory concerns around the Chinese government clamping down on data privacy. For instance, during the month Chinese authorities demanded that Didi Global delist from the New York Stock Exchange. There were additional geopolitical concerns as Russia began sending troops to its border with Ukraine, which caused some to fear that there may be an imminent invasion. Given the low risk appetite during the month, government bonds outperformed. For the month, the S&P 500 and the Dow Jones returned -0.69% and -3.50%, respectively. The FTSE 100 index and the EuroStoxx50 returned -2.17% and -4.30%, respectively. The Hang Seng and the MSCI EM Index closed November -7.42% and -4.07%, respectively.

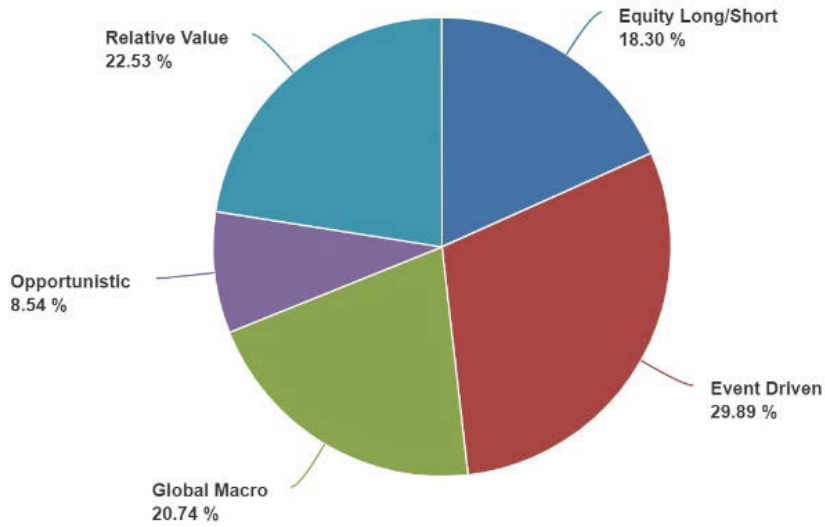
The ERS Absolute Return portfolio slightly detracted during the month. However, year-to-date the portfolio continues to exhibit strong performance. Performance was mixed across the portfolio's managers. In terms of attribution, the three largest contributors were two global macro managers and an opportunistic manager. The largest detractors during the month included two equity long/short managers and a global macro manager. Much of the negative performance occurred during the last week in November as equity markets declined with the flattening of the U.S. yield curve.

The graphs below indicate current and historical strategy positioning of the Absolute Return portfolio as of October 2021 month-end. The five strategies (and current positioning) include relative value (22.53%), event-driven (29.89%), global macro (20.74%), equity long/short (18.30%) and opportunistic (8.54%). The ERS Hedge Fund team is focused on maintaining its current portfolio exposures.

Current Strategy Exposure

Strategy Exposures - Hedge Funds - Allocation, %

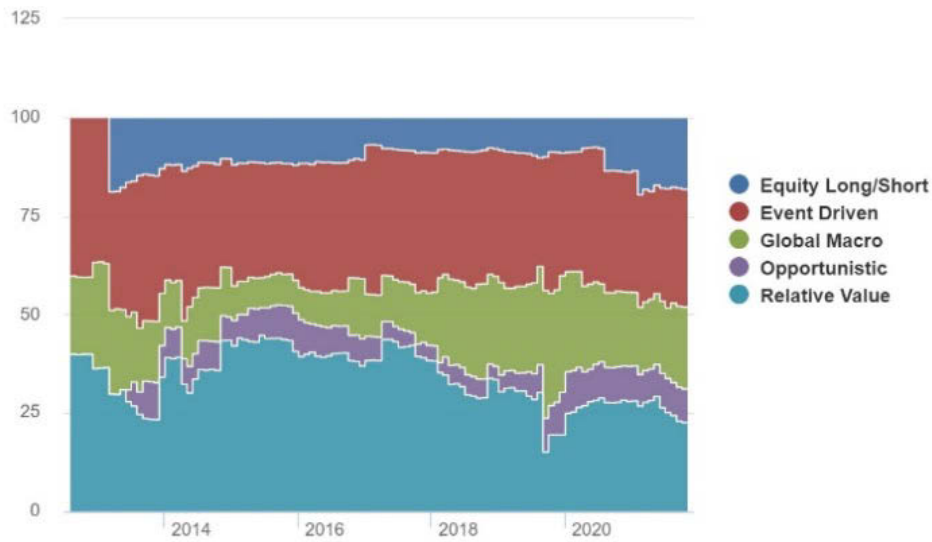
October-2021



Historical Strategy Exposure

Strategy Exposures - Hedge Funds - Allocation, %

August-2012 to October-2021



PRIVATE INFRASTRUCTURE MARKET SUMMARY

ERS Private Infrastructure did not close on any new transactions. ERS Private Infrastructure's target commitments for Fiscal Year 2022 are \$450 million with a range of \$315 million to \$585 million.

Since inception, Private Infrastructure has closed on 27 co-investments and 21 funds with commitments totaling \$2.56 billion (adjusted for currency exchange rates). ERS holds an LP Advisory Committee seat on 20 funds and an observer seat on one fund. As of November 30, the net asset value of the Infrastructure portfolio was \$1.56 billion, or 4.4% of the System's assets.

FIXED INCOME MARKET SUMMARY

The U.S. economy continues to expand, but the robust expansion we have seen in prior months appears to be moderating. Companies continue to find it difficult to hire new employees, which continues to feed into broader supply chain disruption and inflation. The Federal Reserve has begun shifting its tone from the position that these issues are just transitory, which has led to concerns that they could taper mortgage purchases and raise rates more quickly. The more hawkish tone coming out of the Fed, coupled with fears of the new COVID-19 Omicron variant, led to increased market volatility and led risk markets generally lower for the month.

Treasury yields declined while the yield curve flattened; the 10-year Treasury yield declined 10 basis points to 1.45% while the yield spread between 2-year and 10-year Treasuries decreased from 106 basis points to 88 basis points month-over-month. Given the flattening of the Treasury curve, long duration Treasuries outperformed shorter duration. The U.S. Treasury Index returned 0.69% while the Intermediate Treasury Index returned -0.31%. Investment Grade Corporate bonds returned 0.31% while High Yield and Emerging Markets returned -1.16% and -1.48% respectively.

Table 8: Index Returns

	Total Return November 2021 (%)	Total Return Calendar Year to Date (%)
Intermediate Credit	-0.65	-1.13
Intermediate Treasury	-0.31	-1.46
U.S. Treasury	0.69	-1.82
U.S. Agency	-0.27	-1.01
U.S. Investment Grade Corporate	0.31	-0.96
Securitized	-0.30	-0.95
U.S. Corporate High Yield	-1.16	3.32
U.S. TIPS	0.89	5.62
Emerging Markets	-1.48	-2.60

- **Labor:** The economy added 210,000 jobs during the month, missing expectations of 550,000 jobs added. The unemployment rate decreased from 4.6% to 4.2%. While the number of jobs added missed expectations, market participants focused on the positive trend of declining unemployment and increased labor force participation.

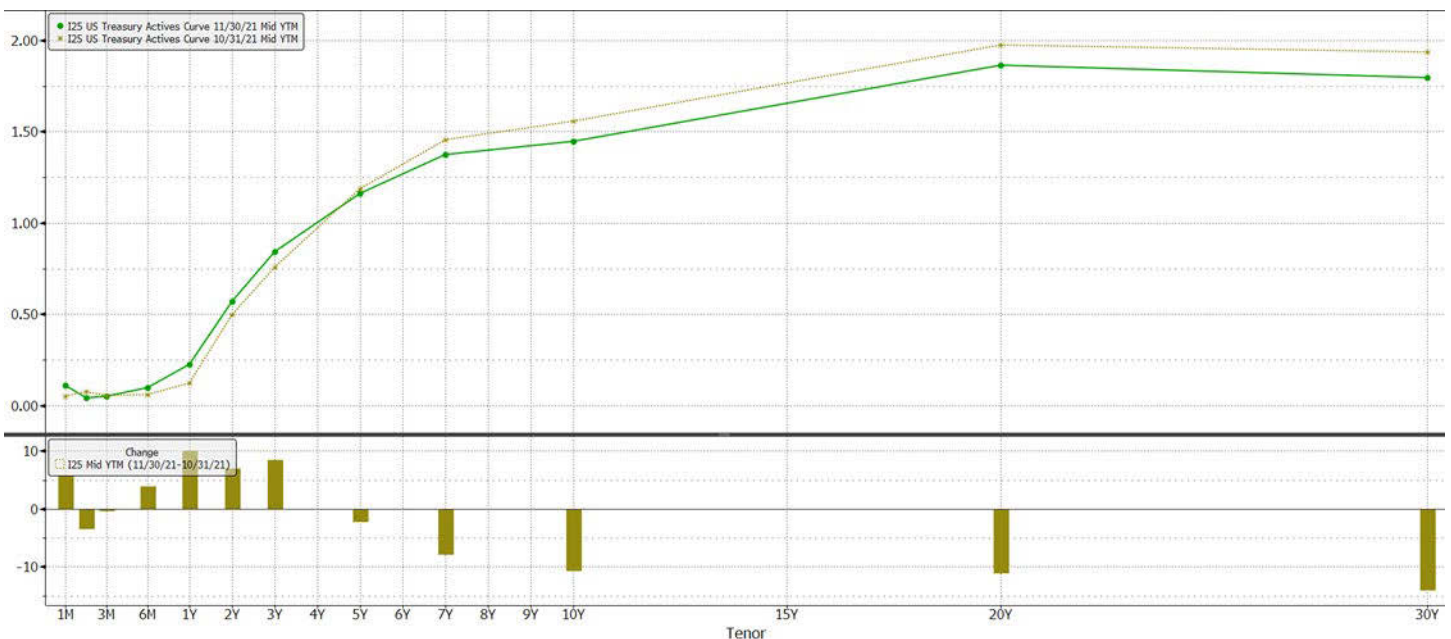
- **Inflation:** The Federal Reserve's preferred measure of inflation, Core PCE, increased from 3.6% to 4.1% year-over-year. Core PCE remains above the Fed's target of 2%; officials are no longer classifying inflation as transitory and are beginning to accept the reality of potentially longer sustained inflation.
- **Housing:** Existing home sales increased 0.8% month-over-month while new homes sales increased 0.4%. Low inventories have led to all-time high prices in many markets and continue to constrain sales. Builders also continue to face shortages of materials and labor.
- **Durable Goods:** Durable goods orders declined 0.5% month-over-month. This figure was influenced by weaker aircraft orders. Labor and supply chain constraints continue to limit the ability of producers to meet order demand.

2s-10s U.S. Government Yield Spread



The yield spread between 10-year and 2-year Treasuries decreased from 106 basis points to 88 basis points.

U.S. Government Yield Curve



The chart above shows the current shape of the yield curve versus one month ago.