QUANTITATIVE ASSET MANAGEMENT, LLC
Investment & Advisory Services

January 15, 2019

Quarter Ending December 31, 2018

Year-to-Date Performance	Last Full Qtr.	YTD	Index Close
Dow Jones Industrial Average	-11.83%	-5.63%	23,327.46
NASDAQ Composite Price	-17.54%	-3.88%	6,635.28
Standard & Poor's Averages	-13.97%	-6.24%	2,506.85

Dear Clients,

Heading into the 3rd quarter of 2018, it appeared the equity markets were headed for another strong year. Much like the weather, all of that changed in the 4th quarter, as equity markets quickly reversed course and came under significant and relentless selling pressure. For the first time since 2007-2008, investors witnessed a market correction of more than 10%, putting an end to its historic "bull market" run.

2018 will go down as one of the worst "investment" years on record when looking across all asset classes. In dollar terms, 93% of all assets classes (stocks, bonds, currency, etc.) finished the year with a negative rate of return. This was the highest percentage on record based on data going back to 1901, even eclipsing the 84% during the Great Depression years. One of the only asset classes that finished the year with a positive rate of return was cash. Needless to say, there was nowhere to hide. To put this performance into perspective, in 2017, only 1% of assets finished with a negative total return in dollar terms, one being the Philippines' bond market.

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Howard Marks was recently quoted as saying, "the rout in the U.S. shares in the 4th quarter of last year was an example of how sentiment can suddenly shift from excessive optimism to excessive pessimism, even though fundamentals didn't change." At QAM, we believe the broad-based fundamentals have not drastically changed. The Federal Reserve has been gradually raising interest rates from rock-bottom levels, which supports the theme of continued economic

strengthening. Unemployment levels continue to be at all-time lows and company balance sheets are as strong as they have ever been. Any continued volatility will most likely be driven by headline news events. Long-term performance will be led by companies with earnings and cashflow.

Passive funds, index investors, and high-frequency traders are not buying and selling because they have a fundamental view of a company's prospects. This investment philosophy will always subject the market to short-term fluctuations and volatility. As we learned over the last three weeks, markets will correct, but eventually they will get back to normalized valuations. To summarize, we would like to leave you with a quote from an article on CNBC.com, "The average return in the S&P over the last 20 years was 8.6%. But if you were out of the market for just 10 of the best trading days during the period, your returns would have been only 2.5%".

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Jeffrey L. Farni

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QUANTITATIVE ASSET MANAGEMENT, LLC
Investment & Advisory Services

January 15, 2019

Quarter Ending December 31, 2018

Year-to-Date Performance	Last Full Qtr.	YTD	Index Close
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NASDAQ Composite Price	-17.54%	-3.88%	6,635.28
Standard & Poor's Averages	-13.97%	-6.24%	2,506.85

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Quantitative Asset Management, LLC
Investment & Advisory Services

January 15, 2019

Quarter Ending December 31, 2018

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NASDAQ Composite Price	-17.54%	-3.88%	6,635.28
Standard & Poor's Averages	-13.97%	-6.24%	2,506.85

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Sincerely,

Jeffrey L. Farni

John Farni

Quantitative Asset Management, LLC
Investment & Advisory Services

January 15, 2019

Quarter Ending December 31, 2018

Year-to-Date Performance	Last Full Qtr.	YTD	Index Close
Dow Jones Industrial Average	-11.83%	-5.63%	23,327.46
NASDAQ Composite Price	-17.54%	-3.88%	6,635.28
Standard & Poor's Averages	-13.97%	-6.24%	2,506.85

Dear Clients,

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Jeffrey L. Farni

John Farni

Quantitative Asset Management, LLC
Investment & Advisory Services

January 15, 2019

Quarter Ending December 31, 2018

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QUANTITATIVE ASSET MANAGEMENT, LLC
Investment & Advisory Services

January 15, 2019

Quarter Ending December 31, 2018

Year-to-Date Performance	Last Full Qtr.	YTD	Index Close
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NASDAQ Composite Price	-17.54%	-3.88%	6,635.28
Standard & Poor's Averages	-13.97%	-6.24%	2,506.85

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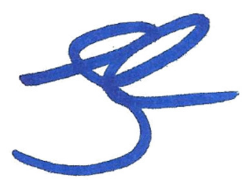

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Quantitative Asset Management, LLC
Investment & Advisory Services

January 15, 2019

Quarter Ending December 31, 2018

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NASDAQ Composite Price	-17.54%	-3.88%	6,635.28
Standard & Poor's Averages	-13.97%	-6.24%	2,506.85

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Sincerely,

Jeffrey L. Farni

John Farni

Quantitative Asset Management, LLC
Investment & Advisory Services

January 15, 2019

Quarter Ending December 31, 2018

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NASDAQ Composite Price	-17.54%	-3.88%	6,635.28
Standard & Poor's Averages	-13.97%	-6.24%	2,506.85

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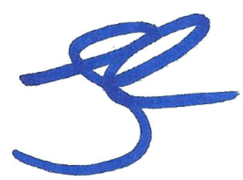

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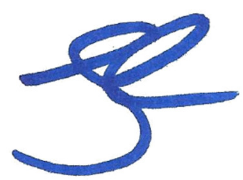

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Quantitative Asset Management, LLC
Investment & Advisory Services

January 15, 2019

Quarter Ending December 31, 2018

Year-to-Date Performance	Last Full Qtr.	YTD	Index Close
Dow Jones Industrial Average	-11.83%	-5.63%	23,327.46
NASDAQ Composite Price	-17.54%	-3.88%	6,635.28
Standard & Poor's Averages	-13.97%	-6.24%	2,506.85

Dear Clients,

Heading into the 3rd quarter of 2018, it appeared the equity markets were headed for another strong year. Much like the weather, all of that changed in the 4th quarter, as equity markets quickly reversed course and came under significant and relentless selling pressure. For the first time since 2007-2008, investors witnessed a market correction of more than 10%, putting an end to its historic "bull market" run.

2018 will go down as one of the worst "investment" years on record when looking across all asset classes. In dollar terms, 93% of all assets classes (stocks, bonds, currency, etc.) finished the year with a negative rate of return. This was the highest percentage on record based on data going back to 1901, even eclipsing the 84% during the Great Depression years. One of the only asset classes that finished the year with a positive rate of return was cash. Needless to say, there was nowhere to hide. To put this performance into perspective, in 2017, only 1% of assets finished with a negative total return in dollar terms, one being the Philippines' bond market.

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Using the Great Depression as a reference point probably sets off some alarm bells; however, when put in context, we feel the investment markets sold off well below fundamental valuations. Today's markets are dominated by computer trading programs and algorithms. According to the Wall Street Journal, "Roughly 85% of all trading is on autopilot – controlled by machines, models or passive investing formulas, creating an unprecedented trading herd that moves in unison and is blazingly fast." When adding year-end tax loss selling to the equation, markets were in freefall and things were not going to change until the computerized models were done selling. To give you an idea of how quickly markets can move and change, I want to pass along an article headline from the first 2 weeks of 2019: **"Stocks best start to a year since 2003"**.

Howard Marks was recently quoted as saying, "the rout in the U.S. shares in the 4th quarter of last year was an example of how sentiment can suddenly shift from excessive optimism to excessive pessimism, even though fundamentals didn't change." At QAM, we believe the broad-based fundamentals have not drastically changed. The Federal Reserve has been gradually raising interest rates from rock-bottom levels, which supports the theme of continued economic

strengthening. Unemployment levels continue to be at all-time lows and company balance sheets are as strong as they have ever been. Any continued volatility will most likely be driven by headline news events. Long-term performance will be led by companies with earnings and cashflow.

Passive funds, index investors, and high-frequency traders are not buying and selling because they have a fundamental view of a company's prospects. This investment philosophy will always subject the market to short-term fluctuations and volatility. As we learned over the last three weeks, markets will correct, but eventually they will get back to normalized valuations. To summarize, we would like to leave you with a quote from an article on CNBC.com, "The average return in the S&P over the last 20 years was 8.6%. But if you were out of the market for just 10 of the best trading days during the period, your returns would have been only 2.5%".

Sincerely,

Jeffrey L. Farni

John Farni