# First Quarter 2019 Bond Market Review and Outlook 

# "Fed Minutes: Officials See Little Need to Change Rates This Year" headline from <br> The Wall Street Journal April 10, 2019 

| Annua |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |  |
| $\begin{array}{\|c\|c} \hline \text { S8P } \\ 500 \\ 33.3 \% \end{array}$ | $\begin{aligned} & \text { CCMP } \\ & 402 \% \end{aligned}$ | CCMP | REITs | $\begin{aligned} & \text { EETs } s \\ & 89 \% \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & \text { B.7\% } \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ 55.8 \% \end{gathered}$ | $\begin{aligned} & \text { REITs } \\ & \text { 316\% } \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Equity } \\ & 34.3 \% \end{aligned}$ | $\begin{aligned} & \text { REITs } \\ & 35 . \mathrm{Fs} \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ \text { 39.7\% } \end{gathered}$ | $\begin{aligned} & \text { us } \\ & \text { Govt } \\ & \text { 4.0\% } \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ 78.9 \% \end{gathered}$ | $\begin{aligned} & \text { REITs } \\ & 27.9 \% \end{aligned}$ | $\begin{gathered} \text { Munis } \\ 112 \% \end{gathered}$ |  | $\begin{aligned} & \text { CCMP } \\ & 402 \% \end{aligned}$ | $\begin{aligned} & \text { REITs } \\ & 2800 \mathrm{c} \end{aligned}$ | $\begin{aligned} & \begin{array}{l} \text { Prefs } \\ 7.5 \% \end{array} \end{aligned}$ | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & 213 \% \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equily } \\ 378 \% \end{gathered}$ |  |
| $\begin{array}{\|c\|c} \text { Mid } \\ \text { Cap } \\ \text { Cap } \\ 322 \% \end{array}$ | $\begin{gathered} \text { Ssp } \\ 500 \\ 28.5 \% \end{gathered}$ | $\begin{array}{\|l\|} \hline \text { EM } \\ \text { Equity } \\ \text { 67.\%\% } \end{array}$ | $\begin{aligned} & \text { Mid } \\ & \text { Cap } \\ & 7.5 \% \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & \text { D.7\% } \end{aligned}$ | $\begin{aligned} & \text { us } \\ & \text { Govt } \\ & \text { Hen } \end{aligned}$ | CCMP $508 \%$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ 260 \% \end{gathered}$ | $\begin{aligned} & \text { Mid } \\ & \text { Cap } \\ & \text { C.6\% } \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Equity } \\ & \text { Eq25\% } \end{aligned}$ | $\begin{gathered} \text { CCMP } \\ \text { D.7\% } \end{gathered}$ | $\begin{gathered} \text { Miges } \\ 8.3 \% \end{gathered}$ | $\begin{array}{\|l\|l} \hline \text { High } \\ \text { yield } \\ 57.5 \% \end{array}$ | $\begin{aligned} & \text { Russel } \\ & 2000 \\ & 268 \% \end{aligned}$ | $\begin{aligned} & \text { us } \\ & \text { Govt } \\ & 9.8 \% \end{aligned}$ | $\begin{array}{\|c\|c\|} \hline \text { EM } \\ \text { Equity } \\ \text { B.6\% } \end{array}$ | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & 388 \% \end{aligned}$ | $\begin{aligned} & \text { Prefs } \\ & 5.4 \% \end{aligned}$ | $\underset{7.06}{\operatorname{ccmp}}$ | $\begin{array}{r} \mathrm{Mid} \\ \mathrm{Cap} \\ 20.7 \% \\ \hline \end{array}$ | cmp |  |
| $\begin{aligned} & \text { Russell } \\ & 2000 \\ & 224 \% \end{aligned}$ | $\begin{aligned} & \text { Mid } \\ & \text { Cap } \\ & . \quad . \% \end{aligned}$ | $\begin{aligned} & \text { Conv } \\ & 36.0 \% \end{aligned}$ | $\begin{gathered} \text { Munis } \\ \nabla . \% \% \end{gathered}$ | $\begin{gathered} \text { Prefs } \\ 98 \% \end{gathered}$ | $\begin{aligned} & \text { Munis } \\ & \text { D.7\% } \end{aligned}$ | $\begin{aligned} & \text { Rusself } \\ & 2000 \\ & 47.3 \% \end{aligned}$ | $\begin{aligned} & \text { Russell } \\ & \text { 2000 } \\ & 8.3 \% \end{aligned}$ | $\begin{aligned} & \text { ReITs } \\ & \text { 22\% } \end{aligned}$ | Russell 2000 83\% | $\begin{aligned} & \text { us } \\ & \text { Govt } \\ & 9.86 \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 17 \% \end{aligned}$ | $\begin{aligned} & \text { Loans } \\ & 52.5 \% \end{aligned}$ | $\begin{gathered} \text { Mid } \\ \text { Cap } \\ 26.6 \% \end{gathered}$ | $\begin{gathered} \text { REITs } \\ 83 \% \end{gathered}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & \text { B3\% } \end{aligned}$ | $\begin{gathered} \text { Mid } \\ \text { Cap } \\ \text { C35\% } \end{gathered}$ | $\underset{\text { H: }}{\substack{\text { c.MP }}}$ | $\begin{aligned} & \text { Munis } \\ & 36 \% \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { High } \\ \text { rield } \\ \nabla 7.5 \% \\ \hline \end{array}$ | $\begin{aligned} & \text { S8P } \\ & 500 \\ & 218 \% \end{aligned}$ |  |
| $\left\lvert\, \begin{array}{\|c\|c\|} \text { ccmp } \\ 2222 \% \end{array}\right.$ | Conv 22\% | $\begin{gathered} \text { EM } \\ \text { Sov } \\ \text { 23.6\% } \end{gathered}$ | $\begin{aligned} & \text { Prefs } \\ & \text { 82\% } \end{aligned}$ | $\begin{gathered} \text { Miges } \\ 8 . \% 6 \end{gathered}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & \text { D2\% } \end{aligned}$ | $\begin{gathered} \text { RETs } \\ 37 . \% 6 \end{gathered}$ | $\begin{aligned} & \text { Mid } \\ & \text { Cap } \\ & \text { C.5\% } \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & \text { ROOW } \end{aligned}$ | $\begin{aligned} & 58 p \\ & 500 \\ & 5.8 \% \end{aligned}$ | $\begin{aligned} & \text { Mid } \\ & \text { Cap } \\ & 80 \% \end{aligned}$ | $\begin{gathered} \text { Munis } \\ 4.0 \% \end{gathered}$ | $\begin{aligned} & \text { Conv } \\ & 456 \% \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ \text { E2\% } \end{gathered}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & 8.2 \% \end{aligned}$ | $\begin{aligned} & \text { Mid } \\ & \text { Cap } \\ & \nabla . B \% \end{aligned}$ | $\begin{gathered} \text { ssp } \\ 500 \\ 324 \% \end{gathered}$ | $\begin{aligned} & \text { ssp } \\ & 500 \\ & 37 \% \end{aligned}$ | ${ }_{\text {ReITs }}^{\text {28\% }}$ | $\begin{aligned} & \text { Ssp } \\ & 500 \\ & 200 \end{aligned}$ | $\begin{aligned} & \text { Mid } \\ & \text { Cap } \\ & \text { E2\% } \end{aligned}$ | LS |
| $\begin{array}{\|l\|l\|l\|} \text { REITs } \\ 20.3 \% \end{array}$ | Govt $00 \%$ | $\begin{aligned} & \text { Rusself } \\ & 2000 \\ & 213 \% \end{aligned}$ | $\begin{aligned} & \text { som } \\ & \text { s. } 4 \% \end{aligned}$ | $\begin{aligned} & \text { Corp } \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & 94 \% \end{aligned}$ | $\begin{gathered} \text { Mid } \\ \text { Cap } \\ \text { C5.6\% } \end{gathered}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & \text { H18\% } \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & 5.7 \% \end{aligned}$ | ${ }_{\text {Conv }}$ | $\begin{gathered} \text { Miges } \\ 7.0 \% \end{gathered}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & -68 \% \\ & \hline \end{aligned}$ | $\underset{453 \%}{\text { CCMP }}$ | $\underset{\mathbf{B . N D}}{\text { COMP }}$ | $\begin{gathered} \text { High } \\ \text { Grade } \\ 7.5 \% \\ \hline \end{gathered}$ | $\underset{\nabla 7 \%}{\operatorname{ccmp}}$ | $\begin{aligned} & \text { Conv } \\ & 266 \% \end{aligned}$ | $\begin{aligned} & \text { Conv } \\ & \text { 0\% } \end{aligned}$ | $\begin{gathered} \text { Miges } \\ 15 \% \end{gathered}$ | Conv 119\% | Conv |  |
| $\begin{aligned} & \text { Conv } \\ & 5.5 \% \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & 8.7 \% \end{aligned}$ | $\begin{aligned} & \text { S8P } \\ & 500 \\ & 210 \% \end{aligned}$ | $\begin{aligned} & \text { US } \\ & \text { Govt } \\ & \text { BA\% } \end{aligned}$ | $\begin{aligned} & \text { Us } \\ & \text { Govt } \\ & 6.7 \% \end{aligned}$ | $\begin{aligned} & \text { Miges } \\ & 9.4 \% \end{aligned}$ | $\begin{aligned} & \text { spr } \\ & 500 \\ & 28.7 \% \end{aligned}$ | $\begin{array}{r} \text { S8P } \\ 500 \\ 0.9 \% \\ \hline \end{array}$ | $\begin{gathered} \text { Loans } \\ 5.3 \% \end{gathered}$ | $\begin{aligned} & \text { High } \\ & \text { Yield } \\ & \text { H18\% } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \end{aligned}$ $6.4 \%$ | $\begin{gathered} \mathrm{EM} \\ \mathrm{Sov} \\ \text {-D2\% } \end{gathered}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & \text { Con } \end{aligned}$ | $\begin{aligned} & \text { Conv } \\ & 5.7 \end{aligned}$ | $\begin{gathered} \text { Miges } \\ 6.5 \% \end{gathered}$ | Russel 2000 <br> 5.4\% | $\begin{array}{\|l\|} \hline \begin{array}{l} \text { High } \\ \text { Yeid } \\ 7, A \% \\ \hline \end{array}{ }^{2} \\ \hline \end{array}$ | $\left\lvert\, \begin{gathered} \text { Munis } \\ 988 \end{gathered}\right.$ | $\begin{aligned} & \text { ssp } \\ & \text { soo } \\ & 14 \% \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ \text { U7\% } \end{gathered}$ | Russell 2000 14.6\% |  |
| $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & \text { S.No } \end{aligned}$ | ${ }_{7}^{\text {Mlges }}$ | $\begin{aligned} & \text { Mid } \\ & \text { Cap } \\ & M .7 \% \end{aligned}$ | Mtges n13\% | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & 4.8 \% \end{aligned}$ | $\begin{aligned} & \text { Prefs } \\ & 77 \% \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Yield } \end{aligned}$ $28 . \%$ | $\begin{aligned} & \begin{array}{l} \text { High } \\ \text { Yield } \\ \text { 0.9\% } \end{array} . \end{aligned}$ | $\begin{aligned} & \text { ssp } \\ & 500 \\ & 4.9 \% \end{aligned}$ | $\begin{gathered} \text { CCMP } \\ \text { D.9\% } \end{gathered}$ | $\begin{aligned} & \text { ssp } \\ & 500 \\ & 56 \% \end{aligned}$ | $\begin{gathered} \mathrm{EM} \\ \text { Corp } \\ \text { CTS\% } \end{gathered}$ | $\left.\begin{gathered} \text { Mid } \\ \text { Cap } \\ 373 K \end{gathered} \right\rvert\,$ | $\begin{aligned} & \text { High h } \\ & \text { Yield } \\ & 52 \% \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Yield } \\ & 4.4 \% \end{aligned}$ | $\begin{aligned} & 588 \\ & 500 \\ & 80 \% \\ & \hline \end{aligned}$ | Loans $5.4 \%$ | $\begin{aligned} & \text { Mid } \\ & \text { Cap } \\ & 97 \% \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & \text { i3\% } \end{aligned}$ | Loans | Prefs D.6\% | Com |
| $\begin{array}{\|l\|} \hline \begin{array}{l} \text { High } \\ \text { Yield } \\ \text { B3\% } \\ \hline \end{array} \\ \hline \end{array}$ | Munis | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & \text { Cor } \end{aligned}$ | $\begin{aligned} & \mathrm{EM} \\ & \text { Corp } \\ & 9.8 \% \end{aligned}$ | High <br> Yield <br> Yield <br> 4.5\% | $\begin{gathered} \text { REIT } \\ 388 \end{gathered}$ | $\begin{gathered} \text { EM } \\ \text { Sov } \\ 27.6 \% \end{gathered}$ | $\begin{gathered} \text { CCMP } \\ \text { D.3\% } \end{gathered}$ | $\begin{aligned} & \text { Russel } \\ & 2000 \\ & 4.5 \% \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & \text { D.6\% } \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 4.8 \% \end{aligned}$ | $\begin{aligned} & \text { Prefs } \\ & -252 \% \end{aligned}$ | $\begin{aligned} & \text { REITs } \\ & 280 \% \end{aligned}$ | $\begin{aligned} & 58 p \\ & 500 \\ & 5.5 \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & 4.2 \% \end{aligned}$ | $\begin{array}{\|l\|} \hline \begin{array}{l} \text { High } \\ \text { yield } \\ 5.6 \% \\ \hline \end{array}{ }^{2} \\ \hline \end{array}$ | $\left\lvert\, \begin{gathered} \text { REITs } \\ 29 \% \end{gathered}\right.$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & 75 \% \end{aligned}$ | $\begin{aligned} & \text { Us } \\ & \text { Govt } \\ & \text { obs } \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & 9.8 \% \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & \text { D.OW } \end{aligned}$ | High Grade -228 |
| $\begin{aligned} & \text { Munis } \\ & 0.9 \% \end{aligned}$ | $\begin{aligned} & \text { Profs } \\ & 6.7 \% \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 4.7 \% \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Garde } \\ & 9.85 \end{aligned}$ | $\begin{gathered} \text { Munis } \\ 4.5 \% \end{gathered}$ | $\begin{aligned} & \text { Loans } \\ & \text { 26\% } \end{aligned}$ | $\begin{aligned} & \text { Conv } \\ & \text { 23.0\% } \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & 8.9 \% \end{aligned}$ | $\begin{gathered} \text { Munis } \\ 3.9 \% \end{gathered}$ | $\begin{aligned} & \text { Mid } \\ & \text { Cap } \\ & \text { Com } \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & 4.6 \% \end{aligned}$ | $\begin{array}{\|c\|} \hline \text { High } \\ \text { Yield } \\ -26.4 \% \end{array}$ | $\int_{272 \%}^{\text {EM }} \begin{gathered} \text { Sov } \\ \hline \end{gathered}$ | $\begin{aligned} & \begin{array}{l} \text { reets } \\ \\ \hline \end{array} . \end{aligned}$ | $\begin{aligned} & \text { Prets } \\ & 4.58 \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Corp } \\ \text { E5\% } \end{gathered}$ | Cash 0.0\% | $\begin{aligned} & \mathrm{EM} \\ & \text { Sov } \\ & 73 \% \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & 0.5 \% \end{aligned}$ | EM Sov 9.5\% | RETs ${ }_{\text {R }}^{\text {R\% }}$ | gh |
| $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & \text { D.A\% } \end{aligned}$ | $\begin{aligned} & \text { Loans } \\ & \text { 5.6\% } \end{aligned}$ | Loans 4. $\%$ | Cash 6.0\% | $\begin{aligned} & \text { Cash } \\ & 4.56 \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 17 \% \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & M .5 \% \end{aligned}$ | $\begin{aligned} & \text { Conv } \\ & 83 \% \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 3.0 \% \end{aligned}$ | $\begin{gathered} \text { Profs } \\ 8 . \% \end{gathered}$ | $\begin{aligned} & \mathrm{EM} \\ & \text { Copp } \\ & 4.4 \% \end{aligned}$ | $\begin{aligned} & \text { Loans } \\ & -29.3 \% \end{aligned}$ | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & 27.55 \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & \text { R.BK } \end{aligned}$ | $\begin{aligned} & 58 p \\ & 500 \\ & 2 \pi \end{aligned}$ | $\begin{aligned} & \text { Conv } \\ & \text { B6\% } \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & -13 \% \end{aligned}$ | Miges <br> $6 \%$ | $\begin{aligned} & \text { Loans } \\ & 0.50 \end{aligned}$ | $\underset{90 \%}{\text { ccMP }}$ | High <br> Yeid <br> $75 \%$ |  |
| $\begin{aligned} & \text { Profs } \\ & 0.0 \% \end{aligned}$ | $\begin{gathered} \text { Cash } \\ 5 . \% \end{gathered}$ | High Yield Nesh <br> 2.5\% | $\begin{array}{\|c\|c} \text { Loans } \\ 5 . \% \% \end{array}$ | $\begin{gathered} \text { Loans } \\ 3.3 \% \end{gathered}$ | $\begin{array}{l\|} \hline \text { High } \\ \text { Yeld } \\ -19 \% \\ \hline \end{array}$ | $\left\lvert\, \begin{gathered} \text { Loans } \\ 9.8 \% \end{gathered}\right.$ | $\begin{gathered} \text { Munis } \\ 5.5 \% \end{gathered}$ | $\begin{aligned} & \text { US } \\ & \text { Govt } \\ & 288 \end{aligned}$ | $\begin{aligned} & \text { Loans } \\ & 69 \% \end{aligned}$ | $\begin{aligned} & \text { Conv } \\ & 3.9 \% \end{aligned}$ | $\begin{aligned} & \text { Conv } \\ & -29.4 \% \end{aligned}$ | $\begin{gathered} 888 \\ 500 \\ 264 \% \end{gathered}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & \text { 2.5\% } \end{aligned}$ | $\begin{gathered} \text { Loans } \\ \text { 15\% } \end{gathered}$ | $\begin{aligned} & \text { Prots } \\ & 3.6 \% \end{aligned}$ | Mtges <br> $-14 \%$ | $\begin{aligned} & \text { Us } \\ & \text { Govt } \\ & 6.05 \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 0.0 \% \end{aligned}$ | $\begin{gathered} \text { REIIs } \\ 8.6 \% \end{gathered}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & 733 \end{aligned}$ |  |
| $\begin{gathered} \text { us } \\ \text { Govt } \\ 9.6 \end{gathered}$ | $\begin{aligned} & \hline \text { High } \\ & \text { Yield } \\ & 3.0 \% \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Mtges } \\ 16 \% \end{gathered}$ | $\begin{gathered} \text { Russell } \\ 2000 \\ 3.1 \% \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & 25 \% \end{aligned}$ | $\begin{gathered} \text { Conv } \\ -1.56 \end{gathered}$ | $\begin{aligned} & \text { Prefs } \\ & 9.9 \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & 5.4 \% \end{aligned}$ | $\begin{aligned} & \hline \begin{array}{l} \text { High } \\ \text { Yield } \\ \text { 2.7\% } \\ \hline \end{array}{ }^{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & 6.6 \% \end{aligned}$ | $\begin{gathered} \text { Munis } \\ 33 \% \end{gathered}$ | $\begin{gathered} \text { Russell } \\ 2000 \\ -33.8 \% \end{gathered}$ |  | $\begin{aligned} & \text { Loans } \\ & \text { DAN } \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 0.5 \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & \text { D.AK } \end{aligned}$ | $\begin{gathered} \text { High } \\ \text { Grade } \\ -15 \% \end{gathered}$ | $\left.\begin{array}{\|} \text { Russel } \\ 2000 \\ 49 \% \end{array} \right\rvert\,$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & -0.0 \% \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & 6.0 \% \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & 6.5 \% \end{aligned}$ |  |
| $\begin{array}{\|c} \text { Miges } \\ 93 \% \end{array}$ | $\begin{aligned} & \text { Rusself } \\ & 2000 \\ & -2.5 \% \end{aligned}$ | $\left.\begin{array}{c\|} \hline \text { High } \\ \text { Grade } \\ \text { - } 19 \% \end{array} \right\rvert\,$ | $\begin{aligned} & \hline \text { High } \\ & \text { Yield } \\ & -5.75 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Mid } \\ \text { Cap } \\ -0.0 \% \\ \hline \end{gathered}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ -59 \% \end{gathered}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & 8.3 \% \end{aligned}$ | $\begin{aligned} & \text { Loans } \\ & 533 \end{aligned}$ | $\begin{gathered} \text { Mtges } \\ 2.6 \% \end{gathered}$ | $\begin{gathered} \text { Mtges } \\ 53 \% \end{gathered}$ | $\begin{aligned} & \text { Yeid } \\ & 22 \% \end{aligned}$ | $\left[\begin{array}{c} \mathrm{mid} \\ \mathrm{Cap} \\ -362 \% \end{array}\right.$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & \text { g. } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { High } \\ & \text { Grade } \\ & 9.5 \% \end{aligned}$ | $\underset{-0.8 \%}{\substack{\text { c.MP }}}$ | $\begin{aligned} & \text { Loans } \\ & 98 \% \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ -23 \% \\ \hline \end{gathered}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & \text { Cor } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Conv } \\ & -12 \% \end{aligned}$ | $\begin{aligned} & \text { Prefs } \\ & 233 \end{aligned}$ | $\begin{gathered} M u n i s \\ 5.4 \% \\ \hline \end{gathered}$ | Ssp |
| $\left\lvert\, \begin{array}{\|c\|c\|c\|} \hline \text { Loans } \\ 75 \% \end{array}\right.$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & -5.3 \% \end{aligned}$ | $\begin{aligned} & \text { US } \\ & \text { Govt } \\ & -24 \% \end{aligned}$ | $\begin{aligned} & \text { Conv } \\ & -7.7 \% \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equily } \\ -2.4 \% \end{gathered}$ | $\begin{gathered} \text { Mid } \\ \text { Cap } \\ \text { C.W.W. } \end{gathered}$ | $\begin{aligned} & \text { Munis } \\ & 62 \% \end{aligned}$ | $\begin{gathered} \text { Prets } \\ 5 . \% 5 \end{gathered}$ | $\begin{gathered} \text { CCMP } \\ 2 . \% \end{gathered}$ | $\begin{gathered} \text { Munis } \\ 5.0 \% \end{gathered}$ | $\begin{aligned} & \text { Loans } \\ & \text { 20\% } \end{aligned}$ | $\begin{gathered} \text { Ssp } \\ 500 \\ 37.06 \end{gathered}$ | $\begin{gathered} \text { Munis } \\ \text { W.5\% } \end{gathered}$ | $\begin{aligned} & \text { US } \\ & \text { Govt } \\ & 59 \% \end{aligned}$ | $\begin{gathered} \text { Mr } \\ \text { Cap } \\ -17 \% \end{gathered}$ | $\begin{gathered} \text { Munis } \\ 73 \% \end{gathered}$ | $\begin{aligned} & \text { Munis } \\ & -299 \end{aligned}$ | $\begin{aligned} & \hline \begin{array}{l} \text { High } \\ \text { Yield } \\ 25 \% \end{array} \\ & \hline \end{aligned}$ | $\int_{\text {Mid }}^{\text {Map }} \begin{gathered} \text { Cap } \end{gathered}$ | $\underset{\substack{\text { Miges } \\ 17 \%}}{ }$ | Loans | EM Sov |
| $\begin{aligned} & \text { Cash } \\ & 53 \% \end{aligned}$ | $\begin{aligned} & \text { REITs } \\ & -7.5 \% \end{aligned}$ | $\begin{aligned} & \text { Profs } \\ & 4.4 . \end{aligned}$ | $\begin{gathered} 58 p \\ 500 \\ -9.70 \end{gathered}$ | $\begin{aligned} & \text { Conv } \\ & -29 \% \end{aligned}$ | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & -20.5 \% \end{aligned}$ | $\begin{gathered} \text { Mtges } \\ 3.3 \% \end{gathered}$ | ${ }^{\text {Migos }}$ | $\begin{aligned} & \text { Grade } \\ & 20 \% \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 4.8 \% \end{aligned}$ | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & -16 \% \end{aligned}$ | $\begin{aligned} & \text { REIs } \\ & .37 .7 \% \end{aligned}$ | Miges 588 | $\begin{gathered} \text { Mtges } \\ \text { 57\% } \end{gathered}$ | $\begin{gathered} \text { conv } \\ -388 \end{gathered}$ | $\begin{gathered} \text { Miges } \\ 26 \% \end{gathered}$ | $\begin{aligned} & \text { US } \\ & \text { Govt } \\ & \hline \mathbf{3} 3 \% \end{aligned}$ | $\begin{gathered} \text { Loans } \\ \text { 18\% } \end{gathered}$ | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & 4.4 \% \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Us } \\ \text { Govi } \\ \text { 155 } \end{gathered}$ | $\underset{\text { Mlges }}{24 \%}$ |  |
| $\begin{array}{\|c\|c\|} \hline \text { EM } \\ \text { Equity } \\ \text {-H6\% } \end{array}$ | $\begin{aligned} & \text { EM } \\ & \text { Equity } \\ & -260 \% \end{aligned}$ | $\begin{aligned} & \text { REIs } \\ & -4.6 \% \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ -30.7 \% \end{gathered}$ | $\begin{aligned} & \text { Ssp } \\ & 500 \\ & -119 \% \end{aligned}$ | $\begin{aligned} & \text { Ssp } \\ & 500 \\ & -22 . \pi 6 \end{aligned}$ | $\begin{aligned} & \text { Us } \\ & \text { Govt } \\ & 23 \% \end{aligned}$ | $\begin{aligned} & \text { Us } \\ & \text { Govt } \\ & 3.5 \% \end{aligned}$ | $\begin{aligned} & \text { Prefs } \\ & \end{aligned}$ | $\begin{aligned} & \text { Grade } \\ & 4.4 \% \end{aligned}$ | $\begin{aligned} & \text { Profs } \\ & -113 \% \end{aligned}$ | $\begin{aligned} & \text { CCMP } \\ & 40.0 \% \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 0.50 \end{aligned}$ | $\begin{aligned} & \text { Munis } \\ & 23 \% \end{aligned}$ | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & 42 \% \end{aligned}$ | $\begin{aligned} & \text { us } \\ & \text { covt } \\ & \text { ont } \end{aligned}$ | $\begin{aligned} & \text { Profs } \\ & -3.7 \% \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 0.0 \% \end{aligned}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { High } \\ \text { Yeid } \\ -4.6 \% \\ \hline \end{array}{ }^{2} \\ \hline \end{array}$ | $\left\lvert\, \begin{gathered} \text { Munis } \\ 0.4 \% \end{gathered}\right.$ | $\begin{aligned} & \text { US } \\ & \text { Govi } \\ & 24 \% \end{aligned}$ | M |
| $\begin{gathered} \text { EM } \\ \text { Corp } \\ \text { na } \end{gathered}$ | $\begin{aligned} & \text { EM } \\ & \text { Corp } \\ & \text { na } \end{aligned}$ | $\begin{gathered} \text { Munis } \\ -6.3 \% \end{gathered}$ | $\underset{-392 \%}{\text { CCMP }}$ | $\begin{aligned} & \text { CCMP } \\ & -20.8 \% \end{aligned}$ | $\begin{gathered} \text { ccmp } \\ -312 \% \end{gathered}$ | $\begin{aligned} & \text { Cash } \\ & 1 \% \end{aligned}$ | $\begin{gathered} \text { Cash } \\ 13 \% \end{gathered}$ | $\begin{aligned} & \text { Conv } \\ & -2 \% \end{aligned}$ | $\begin{aligned} & \text { US } \\ & \text { Govt } \\ & 3 . \% \text { m } \end{aligned}$ | $\begin{aligned} & \text { REITs } \\ & -5.7 \% \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ .53 .2 \% \end{gathered}$ | $\begin{aligned} & \text { us } \\ & \text { Govt } \\ & -37 \% \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & 0.56 \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ -82 \% \end{gathered}$ | $\begin{aligned} & \text { Cash } \\ & 0.5 \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Sov } \\ & -58 \% \end{aligned}$ | $\begin{aligned} & \text { EM } \\ & \text { Equily } \\ & -20 \% \end{aligned}$ | $\begin{gathered} \text { EM } \\ \text { Equity } \\ \text {-M.6\% } \end{gathered}$ | Cash | Cash | Equity |
| Source: Credisights, ICE BotAML, S8P/LSTA, Bloomberg. EM Equity is USD M SCI Emerging Market hdex, Mid Cap is S8P Mid Cap 400 index, CCMP = NA SDAQ EM Sov is USD EM Sovereign e= BBB index. EM Corp is USD EM Corporate Plus index Cash $=0-3$ US Treasury Bill index. REITs= FTSE NARETT equity REIT index data as of Mar 3120 . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Yields* on 03/3 I/2019 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CAM Broad Market (corporate core plus) Strategy (6.9 year maturity; 5.5 duration) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4.02 |  |
| CAM Investment Grade (100\% corporate bonds) Strategy (7.3 year maturity; 6.0 duration) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CAM High-Yield Strategy (only BB \& B rated purchased) (6.4 year maturity; 4.4 duration) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5.3 |  |
| CAM Short Duration Strategy (3.5 year maturity; 2.5 duration; 50\% IG \& 50\% HY) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3.83 |  |
| CAM Short Duration Investment Grade Strategy (3.1 year maturity; 2.9 duration) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2.86\% |  |
| Tax Equivalent Muni GO Bond (7 year, 1.94\%) Bloomberg Barclays Institutional Index (Yield to right is after $40 \%$ tax equivalency and 3 -point retail price markup for small buys under \$1 M) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. Treasury** (10 year maturity) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2.4 |  |
| U.S. Treasury*** (5 year maturity) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2.23\% |  |
| U.S. Treasury** (2 year maturity) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2.26\% |  |
| * The lower of yield to maturity or yield to worst call date ** Source: Bloomberg Barclays |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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Please join the team at CAM in welcoming Erin Daugherty, CFA. Erin joins our group of seven credit analysts/traders. She has a wealth of bond market experience having worked at Moody's for five years, AllianceBernstein for seven years and, most recently, Ohio National. We are very fortunate to have Erin on our team.

The outlook for interest rates has steadily evolved over the first quarter. Now the Fed is unanimous in their outlook with all members voting to maintain the current level of interest rates (source: Federal Reserve board press release $3 / 20 / 19$ ). Furthermore, the minutes infer that the members have an aversion to increasing interest rates further, because of the increasing risks to the U.S. economy from slowing global growth and lower inflation, that surprised Fed officials.

The markets share the benign interest rate outlook and go further by signaling a possible decline in rates. The anticipation for lower rates down the road was reflected by the inversion of the Treasury yield curve experienced a few weeks ago. Today, April 17, the curve is essentially flat with the 3-month T-Bill yielding 2.43\%, the 5 -year Note yielding $2.40 \%$ and the
(Continued on page 3)

## CAM's Key Strategic Elements

- Bottom-up credit analysis determines value and risk.
- Primary objective is preservation of capital.
- Larger, more liquid issues preferred.
- Target is always intermediate maturity.
- No interest rate forecasting.
- All clients benefit from institutional trading platform and multifirm competitive bids and offers.

CAM returns are after CAM's average management fee \& all transaction costs but before any broker, custody or consulting fees.

CAM Broad Market Strategy—Net
I/3 high yield, $2 / 3$ investment grade
CAM High Yield "Upper Tier" Strategy-Net only purchase $B B$ and $B$; no purchases of CCC \& lower Lipper High Yield Mutual Funds Average

CAM Investment Grade Strategy—Net
100\% corporate bonds
Lipper A-rated Bond Funds Average
CAM Short Duration Strategy-Net
I/2 investment grade, $I / 2$ high yield
CAM Short Duration Investment Grade Strategy-Net I00\% corporate bonds

## Relative Performance Review 03/31/2019

CAM's Investment Grade Strategy ("IG") produced a gross total return of $4.95 \%$ in the quarter ended March 31, 2019, compared to $5.14 \%$ for the Bloomberg Barclays U.S. Corporate Index. IG underperformed the index in QI due to the relative outperformance of the "BBB-rated credit subsector. IG's investment policy caps BBB-rated bonds at $30 \%$. The index weighting for BBB-rated bonds currently approximates $50 \%$. The 12 -month return for the CAM IG strategy was $6.10 \%$ compared to the index return of $4.94 \%$. The 12 -month performance exceeded the index as BBB-rated corporate bonds did not meaningfully outperform relative to A-rated corporate bonds. IG has underperformed versus the Index over longer periods, again from the general outperformance of the BBB-rated cohort.

The High Yield Strategy ("HY") delivered a gross total return of $7.22 \%$ in QI
returned $7.26 \%$. The HY 12-month return was $5.52 \%$ while the Bloomberg Barclays High Yield Index returned 5.93\%. HY approximated the Index return for the quarter despite not having any exposure to "CCC" and lower credit subsectors of the Index, which outperformed the Index as a whole. HY is always underweight these low credit subsectors believing their credit profiles and price volatility are inappropriate for many investors. HY trailed in the 12 -month period in part because of the outperformance of the lowest rated HY credit subsector and our longer duration, which also is a function of not owning the lowest rated subsectors.

Our Broad Market Strategy ("BM") - a 67\%-33\% blend of IG-HY bonds - produced a gross total return of $5.61 \%$ for the quarter ended March 31 compared to $5.86 \%$ for the Bloomberg Barclays blended Index. It is important to note that our BM strategy achieves its $B B B$ average credit quality via a barbell strategy of higher and lower rated securities. Our underperformance for the quarter was s

| Total <br> Return <br> (\%) | Annualized Returns (\%) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| IQ '19 | I- <br> YEAR | $3-$ <br> YEARS | $5-$ <br> YEARS | I0-YEARS |
| 5.54 | 5.50 | 3.48 | 2.83 | 6.43 |
| 7.13 | 5.17 | 5.17 | 1.73 | 7.40 |
| 7.21 | 4.69 | 7.05 | 3.43 | 9.43 |
| 4.89 | 5.85 | 2.74 | 3.35 | 6.01 |
| 4.88 | 4.84 | 3.26 | 3.62 | 5.61 |
| 3.52 | 4.36 | 3.61 | 1.10 | 5.20 |
| 2.60 | 4.19 | 1.76 | 2.15 | 4.78 | relive relative outperformance of the longer component of the Index.

The Short Duration Investment Grade Strategy (SD-IG) outperformed in the quarter ended March 31, 2019 compared to its Index, the Bloomberg Barclays U.S. Credit I-5 Index. SD-IG returned 2.66\% compared with the Index's $2.39 \%$. Over a 12 month period, SD-IG delivered $4.43 \%$ versus an Index return of $4.27 \%$. The outperformance for both periods is due to our underweight position in the "BBB" credit subsector relative to the Index.

| Bloomberg Barclays Bond Indices Returns vs. CAM Gross (annualized \%) |  |  |
| :---: | :---: | :---: |
| Periods ended 03/31/2019 | 10-yrs | 20-yrs |
| U.S. Aggregate | 3.76 | 4.73 |
| U.S. Corporate | 6.66 | 5.54 |
| CAM Investment Grade Strategy | 6.28 | 5.59 |

## Better Asset Allocation Might Result from More Exacting Analysis

The chart to the right shows that BB rated bonds returned approximately $45 \%$ of S\&P 500 stocks for the 5 -year period, $60 \%$ over 10 years, and exceeded the returns of the S\&P 500 over the last 20 -years. Lower rated CCC bonds have underperformed the S\&P 500 for the 5 -year period, while the lowest rated (CC \& D) have produced negative returns. Both BB and B rated bonds outperformed the Bloomberg Barclays US Aggregate Index for all periods.
The chart also indicates that $C C C$ rated securities underperformed $B B$ rated and $B$ rated bonds for the 20 -year period. For the shorter 10 -year period, the lower credit CCC cohort outperformed. Not shown in the table is the pronounced and extreme volatility that has characterized the CCC sector. For example, during 2008, when the High Yield Index was down 26\%, CCC rated bonds were down 44\%, and during 2009, the Index was up $58 \%$ while CCC bonds were up $91 \%$. In each calendar year since 1997, CCC rated bonds ranked either best or worst in Credit Sights Annual Excess Return Rankings for US corporate credit tiers, a trend that continued in 4Q18. The CCC longer term results were achieved with significantly more volatility than the Index.
Finally, not only have BB rated bonds outperformed the S\&P 500 for the 20-year period, but they have done so with about half the volatility of that Index (lbbotson), suggesting that better credit quality high yield bonds deserve consideration as a core holding in an investor's portfolio allocation.

| Total Return of High-Yield Bonds by Credit Quality (periods ended $03 / 31 / 2019$ ) Source: Credit Suisse First Boston (annualized \%) |  |  |  |
| :---: | :---: | :---: | :---: |
| High-Yield Bond Sectors | 5-years | 10-years | 20-years |
| BB-rated bonds | 4.97 | 9.05 | 7.65 |
| B-rated bonds | 3.74 | 9.73 | 6.52 |
| CCC-rated bonds | 4.58 | 15.18 | 6.35 |
| CC \& D-rated bonds | -12.40 | 3.72 | -5.23 |
| Performance of Other Asset Classes (periods ended 03/31/2019) Source: Bloomberg Barclays \& Lipper |  |  |  |
| S \& P 500 Stocks | 10.91 | 15.86 | 6.02 |
| Bloomberg Barclays U.S. <br> Aggregate | 2.74 | 3.76 | 4.73 |

Absolute spreads for all credit subsectors have tightened versus long-term averages but are still well above the
decade lows. The March 31 spread levels (indicated at decade lows. The March 31 spread levels (indicated at the right) enhance the value of corporate bonds versus U.S. Treasuries. The 10 -year U.S. Treasury ended QI at 2.41\% compared to recent year-ends: $2.69 \%$ (2018) and 2.41\% (2017). With the U.S. Treasury yield curve flatter then it was a year ago, and indications that inflation remains muted, we have seen stronger demand for bonds than in Q4 2018.
*1981-2018 Average
**1987-2018 Average


Source: CredilSights, ICE BotAML indexes data through 03/31200
(Excess return = the total retum of the asset class minus the total return of a duration matched basket of government securties. Essentially the ercess return metrics remove the yeidd curve piece of the return picture. In its basic form,it is mainly a function of coupon differentials and spread changes).

## (Continued from page I)

10 -year bond yielding $2.59 \%$. The flat curve is leading some investors into short duration and short maturity investments.

But the corporate bond markets still offer a much steeper yield curve, rewarding investors in longer maturities with higher yields. In fact, extending maturities in the Corporate Bond Market offers investors significantly higher yields. Arated corporates offer a yield pickup of 80 basis points moving from 6-month to 10 -year maturi-
ties. The yield pickup increases as we move lower in credit quality. For the same extension, BBB-rated corporates deliver a 115 basis point pickup; BB-rated corporates deliver a 222 basis point pickup and B-rated bonds deliver a 282 basis point pickup (Source: Bloomberg ). So a $\$ 1,000,000$ portfolio of BB rated 10-year bonds would provide an additional $\$ 22,200$ in interest income each year over a 6-month maturity BBrated portfolio at the rates shown above.

The pickup is more pronounced if the investor moves from a 6-month A-rated bond yielding
$2.69 \%$ to a BB-rated 10-year bond yielding $5.62 \%$. The interest income more than doubles.

Since interest rate forecasting is a form of market timing, it should be understood that it is as difficult as trying to time the stock market for investment actions. As such, many professionals argue for a core allocation to major market sectors (e.g. equities and fixed income) that changes little from year to year.

The opportunity cost of being wrong on fixed income/bond investments is significant, given the dynamics of interest compounding. After the market crash in late 2008, the investor who went to cash suffered mounting opportunity cost as the years elapse (see the return quilt on page 1). Low interest rates in the ensuing 7 -years led some to remain in very short duration (or maturity) securities or cash. Choosing cash over high grade and high yield bonds was expensive, even for just a few years. Over 4years, the cumulative total return on cash was $0.40 \%$ (\$4,006 for a $\$ 1,000,000$ investment), while the high grade bond total return was $55.69 \%$ ( $\$ 556,856$ for a $\$ 1,000,000$ investment) and the high yield bond total return was $118.97 \%$ ( $\$ 1,189,734$ for a $\$ 1,000,000$ investment).

Please note the high grade index in the return quilt is the Bank of America Merrill Lynch Investment Grade U.S. Corporate Bond Index with an average maturity of 10.46 years and a modified duration of 7.09 . The high yield index in the return quilt is the Bank of America Merrill Lynch Cash Pay High Yield Bond Index with
(Continued on page 4)

Footnotes and disclosure Cincinnati Asset Management, Inc., ("CAM") an independent privately held corporation established in I989, is registered with the United States Securiconsist of all discretionary portfolios under management, including all securities and cash held in the portfolios, and have been appropriately weighted for the size of the account. All accounts are included after they are substantially invested.
Returns are calculated monthly in U.S. dollars and include reinvestment of dividends and interest. Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Past performance is no guarantee of future results.
When compared to mutual funds' performance, CAM results are after deduction of all transaction costs and CAM advisory fees. CAM advisory fees used are the composite averages. Accounts managed through brokerage firm programs usually will include additional fees. "Net of fees" herein refers only to CAM's management fee. Returns audited annually. Most recent audit available upon request.
Mutual fund averages and S\&P 500, as published quarterly in Barron's as supplied by Lipper Analytics.
The indices and information shown for comparative purposes are based on or derived from information generally available to the public from sources believed to be reliable. No representation is made to its accuracy or completeness.
High yield bonds may not be suitable investments for all individuals. Before investing a thorough reading of all materials and consultation with an independent third party financial consultant may be appropriate. Fixed Income securities may be sensitive to changes in prevailing interest rates. When rates rise the value generally declines. For example, a bond's price drops as interest rates rise. For a depository institution, there is also risk that spread income will suffer because of a change in interest rates. The Indices are referred to for informational purposes only and the composition of the Index is different from the composition of the accounts included in the performance shown above. Index returns do not reflect the deduction of fees, trading costs or other expenses.
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(Continued from page 3)
an average maturity of 5.79 years and an modified duration of 3.71 (source: Bloomberg $3 / 31 / 19$ )

When the bond market did suffer from rising rates in 2013 (the 5th year in our example above), the investor in high grade bonds gave back $1.5 \%$, reducing his cumulative total return by $\$ 23,352$ to $\$ 533,504$. This compares to the investment in cash, which returned 0\% in 2013, holding the cumulative total return at $\$ 4,006$. The much higher compounding of interest in the longer maturity high grade investment provided a comfortable "cushion" for the impact of the rise in interest rates.

Also of interest is the completely different behavior of the high yield market from that of the high grade market. The difference in total returns for 2013, a period of rising interest rates, was a eye-catching $8.9 \%$ in return. This points out the benefit of diversifying a bond portfolio across the credit quality spectrum to include both high yield and high grade bonds.

More recent performance is similar. Cash was the top performer in 2018 providing a return of $1.8 \%$ compared to the high grade corporate return of $-2.2 \%$ and the high yield bond return of $-2.3 \%$. A group of investors seeking "protection" from interest rate increases remained in cash in 2019's first quarter and ended up underperforming for the entire period of 2018 and the first quarter of 2019 when the cash total return was $0.6 \%$, while high grade corporates delivered $5.0 \%$ and high yield bonds delivered $7.4 \%$. So, over the 15month period from $1 / 1 / 2018$, cash provided investors with a total return of $2.41 \%$, high grade corporates generated $2.69 \%$ and high yield corporates generated $4.93 \%$.

## Sharpe Ratios (risk \& reward relative value) Inception-QI 2019

CAM Investment Grade Strategy 0.43 Bloomberg Barclays U.S. Corp Bonds 0.40
CAM High Yield Strategy 0.54
Bloomberg Barclays High Yield Corp Bonds 0.51
CAM Short Duration 0.52
Bloomberg Barclays Weighted Benchmark (I/2 Interm. HY \& I/2 U.S. Interm. Credit I-5) 0.65
CAM Short Duration IG Strategy I. 26 Bloomberg Barclays U.S. Interm. Credit 1-5 Yr I. 36
CAM Broad Market Strategy 0.79
Bloomberg Barclays Weighted Benchmark (2/3 Corporate and I/3 High Yield) 0.79

An important objective for all Cincinnati Asset Management investment strategies is to deliver superior risk-weighted returns. A quantitative indication of our success is the Sharpe Ratio that calculates total return per unit of risk. The data on the left indicate we have been largely successful. Sharpe Ratios of the Investment Grade and High Yield Strategies exceeded their respective benchmarks by approximately $8 \%$ and $6 \%$, respectively. The Short Duration Strategy's Sharpe Ratio trailed its benchmark's ratio by 20\%, and Short Duration Investment Grade trailed its benchmark by 7\%. The Broad Market Strategy produced a Sharpe Ratio equal to the benchmark's ratio.

To properly cover the recent past, we'll consider the period from 2015, a down year for both high yield and high grade bonds, through the first quarter of 2019. The results are in the same order. Cash is the lowest of the three, delivering a total return of just $3.44 \%$, while high grade bonds delivered a total return of $15.23 \%$ and high yield bonds delivered a total return of $26.44 \%$.

We believe the historical experience supports the thesis that an intermediate maturity (i.e. about 7 to 10-years) bond portfolio with a portion dedicated to high yield bonds provides the investor with the better return than cash or very short maturity portfolios or pure high grade bond portfolios. Attempting to "time" interest rate moves has usually resulted in significant underperformance.

## Macro Considerations and Outlook

U.S consumer spending lagged projections by economists and inflation eased in the most recent report by the Commerce Department. This follows a soft 4th quarter growth rate of just 2.5\% and January's light 0.7\% increase in spending. For inflation, the Fed's preferred price gauge, tied to consumption rose a mod-
est $1.4 \%$ from a year earlier in January (source: Bloomberg 4/1/19).

While oil prices have risen in response to coordinated Saudi and Russian efforts to reign in production and Trump's planned total ban on Iranian oil, natural gas prices have fallen. This is important to consumers and industries, since natural gas accounts for about $35 \%$ of electric generating fuel across the USA.

The International Monetary Fund cut its outlook for global economic expansion to the least since the 2009 financial crisis. Growth is now forecasted to be $3.3 \%$, a downward revision from $3.5 \%$ in its January forecast. The forecast for 2020 is growth of $3.6 \%$. Furthermore, the IMF does not anticipate a recession in the near term.

Most economists see modest growth, and low inflation. The health of the US economy is reflected in the unemployment report where jobless claims recently fell to a 50 -year low (source: Wall Street Journal 4/18/19).


