



# By the Numbers

1. **THE BACK END** - The highest closing value during the year for the S&P 500 has occurred in the final 4 months of the year (i.e., September-December) in 12 of the last 15 years, 80% of the time. The S&P 500 consists of 500 stocks chosen for market size, liquidity and industry group representation. It is a market value weighted index with each stock's weight in the index proportionate to its market value (source: BTN Research).
2. **INCREASING COSTS** – Inflation (using the “consumer price index”) advanced +2.95% on a year-over-year basis ending 7/31/18, inflation’s largest annual increase since December 2011. The consumer price index (CPI) is a measure of inflation compiled by the US Bureau of Labor Studies (source: Department of Labor).
3. **SENSITIVE** - The “duration” of the current 2.875% coupon, 30-year Treasury bond was 19.651 “years” as of 8/17/18, i.e., if interest rates go up just 14.6 basis points on the 30-year bond, the resulting 2.875% price decline would offset the bond’s 2.875% coupon over a 1-year time horizon. Duration is a measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates (source: Ryan ALM).
4. **MORE THAN SIXFOLD** - Foreigners have increased their holdings of US Treasury securities from \$1 trillion in 2000 to more than \$6.2 trillion in 2018 (source: St. Louis Federal Reserve Bank).
5. **THE RISK** - The average interest rate paid by the government on its interest-bearing debt was 2.457% as of 7/31/18. The average interest rate paid on our interest-bearing debt was 4.382% as of 7/31/08 (10 years earlier) or 1.9 percentage points higher. Every 1 percentage point increase in the cost of debt on our nation’s \$15.6 trillion of publicly held debt is equal to \$156 billion of annual interest expense (source: Treasury Department).
6. **COST OF BORROWING A LOT** - In June 2018, the Congressional Budget Office projected that by the year 2048 (i.e., 30 years from now) the US government will spend as much money servicing its national debt as it will spend that year on the nation’s Social Security program. Today, our nation’s net interest cost is just 33% of our Social Security outlays (source: Congressional Budget Office).
7. **BIG UP, BIG DOWN** - In the last 10 years, the largest increase of the yield on the 10-year Treasury note during any quarter was 0.85 percentage points in the 4th quarter 2016. In the last 10 years, the largest decrease of the yield on the 10-year Treasury note during any quarter was 1.60 percentage points in the 4th quarter 2008 (source: Treasury Department).
8. **ONE PERCENT HIGHER** - Borrowing \$100,000 on a 30-year fixed rate mortgage at 4.53% (today’s national average) requires a monthly “principal and interest” payment of \$508.47. Borrowing \$100,000 on a 30-year fixed rate mortgage at 5.53% requires a monthly “principal and interest” payment of \$569.67 (source: BTN Research).
9. **WE OWE NOTHING** - 3 out of every 8 homeowners (38%) in the USA own their home free-and-clear of any debt, i.e., 29.7 million debt-free homeowners out of 77.9 million total homeowners (source: Census Bureau).
10. **WHERE THEIR ECONOMY CAN GROW** - Personal consumption by American consumers represents 70% of the US economy. Personal consumption by Chinese consumers represents just 39% of the Chinese economy (source: Business Week).
11. **WHO NEEDS A MALL?** - Less than 10% of annual retail spending in the United States is completed as an online purchase, less than half of the 23% of retail spending done online by Chinese consumers (source: Bloomberg).
12. **GREEN ACRES** - The average “farm real estate value” is \$3,140 an acre in 2018, including land and buildings, an increase of +3.8% per year over the last 10 years (source: Department of Agriculture).
13. **THEY CUT, WE INCREASED** - The 14-members of OPEC agreed on 11/30/16 to slash production by 1.2 million barrels a day, along with additional cuts of 600,000 barrels a day from non-OPEC member countries, a combined reduction of 1.8 million barrels a day. US oil producers have responded to OPEC’s action by increasing their field production of crude oil from 8.699 million barrels a day as of 11/25/16 to 10.900 million barrels a day as of Friday 8/10/18, an increase of +2.2 million barrels a day (source: Department of Energy).
14. **SOARING COLLEGE COSTS** - 44 million Americans owe \$1.41 trillion in student loan debt as of 6/30/18, a +139% increase (up +\$820 billion) in just the last 10 years (source: Federal Reserve Bank of New York).
15. **BLEW IT** – The Miami Marlins had an 9-run lead going into the bottom of the 4th inning of their 7/05/18 game vs. the Washington Nationals yet lost the game by 2 runs, the worst collapse during the current 2018 regular season for games played through Thursday 8/16/18 (source: Major League Baseball).

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