

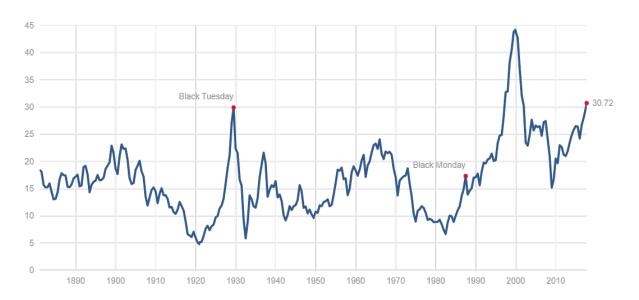


## Party Like It's 1999!?

The Dow Jones Industrial Average keeps setting record highs, unemployment is low, the Federal Reserve is cautiously raising interest rates, and the U.S. stock market has significantly outperformed international stock markets over the past eight years. All of these things are true today, and all of these things were true in 1999. But, as value investors, the single most important similarity between now and 1999 is the valuation level of the market. Across multiple metrics, the U.S. market has only been this overvalued three times in history: 1929, 1998-2000, and 2017. Now that I have your attention, but before you panic, let's take this opportunity to look closely at what these valuations are telling us, and how we can use that data to construct a prudent portfolio despite the challenging conditions.

Nobel Laureate, Robert Shiller developed one of the most respected market valuation metrics, called the Cyclically Adjusted Price to Earnings Ratio, or CAPE Ratio for short. He used this ratio to correctly predict the demise of the tech bubble in his book, *Irrational Exuberance*, and the CAPE Ratio came to be known more commonly as the Shiller PE Ratio. There is a significant difference between the PE ratio commonly mentioned in the financial media and the Shiller PE. The common PE ratio used in the media is calculated by dividing the current price of the stock

or index by its trailing 12 months of earnings. This produces a valuation ratio that is directly influenced by cyclical profit margins which rise and fall with the business cycle. This cyclicality severely reduces the long-term predictive power of the common PE ratio. Fortunately, the Shiller PE removes the cyclicity of the business cycle by dividing the current price by the average inflation-adjusted earnings of the previous 10 years. This calculation smooths out the variability found in the business cycle, allowing for a more stable estimate of the true value of the market. The chart below shows a graph of the Shiller PE over the past 133 years:



**Current Shiller PE Ratio:** 30.72 +0.04 (0.12%)

**Mean:** 16.78 **Median:** 16.12

Min: 4.78 (Dec 1920)
Max: 44.19 (Dec 1999)
http://www.multpl.com/shiller-pe/

Although it is impossible to know exactly what fair value is, we generally assume that the median valuation ratio of the last 133 years is a reasonable estimate of fair value given half of the time the ratio is above that level (overvalued) and half of the time the ratio is below that level (undervalued). So, we can use the median Shiller PE of 16.12 as areference point for fair value. As of September 28<sup>th</sup>, the current Shiller PE is 30.72, which is 90% higher than fair value. Or put another way, the S&P 500 would have to drop by 47.5% to return to fair value.

How can we use this data to inform our investment decisions? Fortunately, there is a strong long-term relationship between the starting Shiller PE and the subsequent 10-year return. As shown in the table below, we see that when starting Shiller PEs are grouped into quintiles, the subsequent 10-year returns are inversely proportional to the starting PE.

Returns by P/E Quintile	
P/E Ratio Quintile (1= Lowest, 5= Highest)	Return (Median Annualized Total Return Subsequent 10 Years)
1	15.7%
2	12.9%
3	9.9%
4	7.8%
5	4.3%

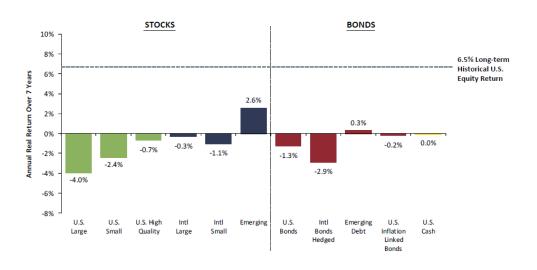
Source: Ned Davis Research

The current Shiller PE of 30.72 stands firmly in the top 2% of history, so it is safe to estimate that the return in the next ten years will likely be 4.3% annualized or lower. But the good news is that we are not confined to only investing in the U.S. stock market. While the U.S. stands out as the most overvalued market in the world, European and emerging markets are more reasonably valued. The average Shiller PE of developed markets in Europe is 17.8 which is only slightly overvalued compared to 16.12. Even better than Europe, are the emerging markets which stand at 15.6 which is slightly undervalued. And if we extend our analysis to the basket of emerging market value stocks, we find they have a Shiller PE of 12.8.

Now that we have located some regions of the world that are not frightfully overvalued, how can we use the current valuation ratios to calculate a reasonable estimate of future returns? For this, the work of Jeremy Grantham and his firm, Grantham, Mayo, Van Otterloo (GMO) is perhaps the best in the industry. Grantham has found the long-run real growth of the market is about 6.5%. The difference between what we observe and this growth rate is almost entirely explained by the expansion and contraction of valuation ratios.

While there are no facts in the future, Grantham makes the central tendency guess that markets will not stay indefinitely over or under valued. Rather, he assumes they will revert to their historical average valuation ratio. The main uncertainty is how long this mean reversion will take. Like the nuclear strong force, current human emotions rapidly move the market over short time frames of seconds to months. On the other hand, valuations are more like gravity, which is a much weaker force. It always wins in the end, but may take years to revert to the mean. Grantham has found that using a 7-year reversion yields a 91% predictive power. The chart below shows the expected annualized real return over the next 7 years, assuming that all asset classes revert to their long-run average by the end of the 7-year period.

As of August 31, 2017



Source: GMO

"The chart represents local, real return forecasts for several asset classes and not for any GMO fund or strategy. These forecasts are forward-looking statements based upon the reasonable beliefs of GMO and are not a guarantee of future performance. Forward-looking statements speak only as of the date they are made, and GMO assumes no duty to and does not undertake to update forward-looking statements. Forward-looking statements are subject to numerous assumptions, risks, and undertainties, which change over time. Actual results may differ materially from those anticipated in forward-looking statements. U.S. inflation is assumed to mean revert to long-term inflation of 2.2% over 15 years.

Proprietary information - not for distribution. Copyright © 2017 by GMO LLC. All rights reserved.

Source: https://www.gmo.com/

If the equity markets were currently fairly valued, their expected return bar would reach the dotted blue line at 6.5%. Since every major equity market currently has an expected return below the line, the first takeaway is that we should be more cautious than usual. For example, if you are a moderate investor who would usually invest in a standard 60/40 stock/bond portfolio, currently it would be prudent to reduce your equity exposure to 45 or even 35 percent. The second major takeaway is that within your equity allocation, which might normally be 80% U.S., 15% International, and 5% emerging markets, it would be prudent to significantly underweight the U.S., moderately overweight international, and significantly overweight emerging markets. While emerging markets offer the lowest valuation, and hence the highest expected return, they also carry the highest standard deviation and highest geopolitical risk. Therefore, we prudently overweight emerging markets. In the spring newsletter, we will examine how to appropriately allocate our bond exposure around the world.

To answer the question posed in the title, "Yes, it's time to party like it's 1999." But our version of partying is to celebrate that, just like in 1999, there remain undervalued regions in the world where we can prudently put equity assets to work. We are pleased our strategic overweighting to emerging market value stocks has rewarded clients over the last year, as they strongly outperformed both U.S. and developed international stocks. The valuation differential between U.S. and emerging stocks is so great that we expect to continue to invest in this profitable spread for many years to come. We remain vigilant, following our valuation data and moving accordingly as new data arrives.

Best,

Thomas M. Denkenberger

Sankala Group LLC

T: (720) 549-3355



Thomas M. Vanfænberger

Sankala Group LLC's communications should not be considered by any client or prospective client as a solicitation or recommendation to affect any transactions in securities. Any direct communication by Sankala Group LLC with a client or prospective client will be carried out by a representative that is either registered with or qualifies for an exemption or exclusion from registration in the state where the prospective client resides. Sankala Group LLC does not make any representations or warranties as to the accuracy, timeliness, suitability, completeness, or relevance of any information presented in this communication, or by any unaffiliated third party. All such information is provided solely for illustrative purposes.

Different types of investments involve various degrees of risk, and there can be no assurance that the performance of any specific investment or investment strategy, including those undertaken or recommended by Sankala Group LLC, will be profitable or equal any historical performance level. All investments carry some risk of partial or complete capital loss. No client or prospective client should assume that this communication serves as a substitute for personalized advice from Sankala Group LLC, or from another investment professional. Sankala Group LLC is neither an attorney nor an accountant, and no portion of the communication should be interpreted as legal, accounting or tax advice.

As a condition of receiving this communication, each client and prospective client agrees to release and holds harmless Sankala Group LLC and its employees and agents from any and all adverse outcomes resulting from any of his/her/its actions which are independent of receipt of personalized individual advice from Sankala Group LLC.