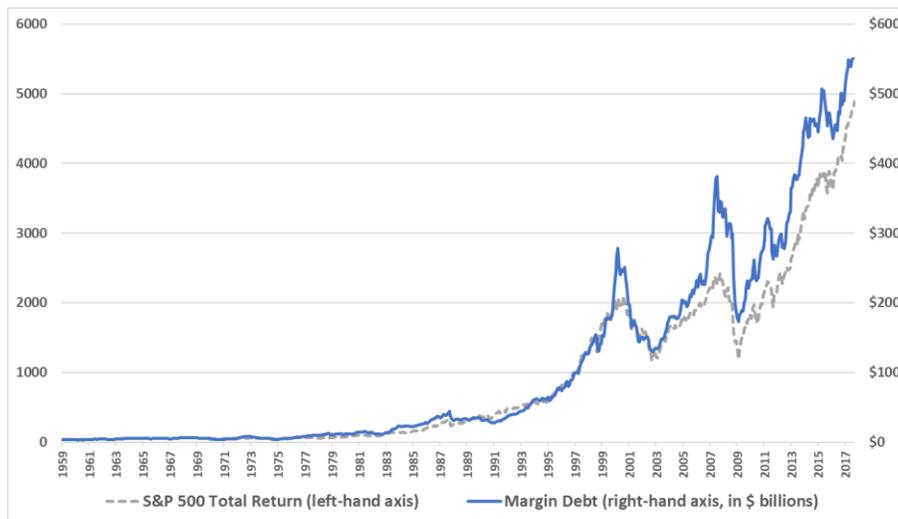


## America's Level of Margin Debt Can Be Scary

As of the time of this writing, we are all getting ready to celebrate our spooky sides at Halloween, and the S&P 500 index is on track to post yet another winning month. That would make it the 12th consecutive positive month, meaning the index has increased in a stunning 19 out of the last 20 months. As far as we are aware, this is the strongest month-to-month performance of the U.S. stock market in at least the last couple of generations. There was one other time in 1994-96 when the S&P increased 10 consecutive months and posted gains in 18 out of 19 months, but the current streak clearly bests that one. In addition to its other stock market index brethren, such as the Dow Jones Industrial Average and the Russell 3000, the S&P 500 is currently trading close to its all-time high.

Do you know what other market metric has lately been on a tear and currently stands near its all-time high? Margin debt. When economists first started keeping tabs on the margin debt of U.S. investors back in the 1950s and 60s, the aggregate level of margin debt for the country as a whole was generally about \$5 billion. Its most recent reading of about \$550 billion is therefore about an 11,000% increase, which sounds kind of astounding until you realize that works out to just about 10% per year on average.

And, wouldn't you know it, the increase for the S&P 500 index over that time span is nearly identical: an increase of about 11,000% which works out to about 10% per year on average:



source: St. Louis Fed, Marketwatch

The solid blue line and the dotted gray line on that chart seem to move in just about lock-step with each other, which leads to the obvious question of which line is the chicken and which line is the egg? Does one lead to the other? Or, in more economic terms, do these two data points have a causal or an incidental relationship?

### **Anything Times Zero is Zero**

But first, perhaps we should take one step back and make sure we're all on the same page with what the term "margin" means. To quote from our March 2014 article:



*“What exactly is margin? It simply means borrowing money to invest. Let’s say you only have \$100,000 to buy a particular stock, but you’d really like to invest \$500,000 in it. You simply call up your broker, ask to borrow \$400,000, and then put the full \$500,000 to work. If the stock goes up, it’s great. You simply pay back the \$400,000 to the broker, but the return on your investment is multiplied by 5, because you had 5x as much money invested. If the stock in question went up by 40%, then your return (ignoring the interest cost of the \$400,000 loan) would have been \$200,000. A \$200,000 return on a capital base of \$100,000 is, to use the technical financial term, really good.*

*But what if the investment doesn’t go up 40%? What if it goes down 20% instead? Well, that’s a horse of a different color. Now you’re completely wiped out, because a 20% loss on \$500,000 is exactly equal to how much money you started with: \$100,000.”*

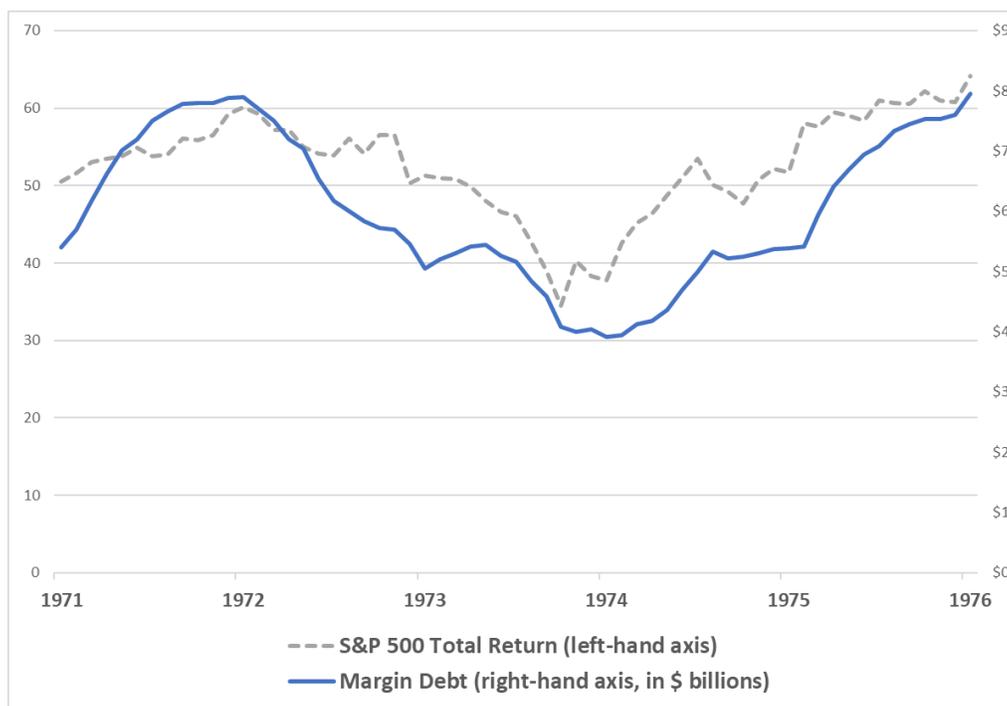
Based on that information, why in the world would any investor use margin? Sure, the upside is great. But boy, that downside can really bite you. To quote Warren Buffett on the matter:

“Leverage is the only way a smart guy can go broke ... [If] you do smart things, you eventually get very rich. If you do smart things and use leverage and [then] you do one wrong thing along the way, it could wipe you out, because anything times zero is zero.”

### Zooming In Is Not Helpful

But back to our question of the chicken and the egg ... er, that is, the market and the margin. Let’s look a little more closely at some of the past market declines to see if we can glean anything useful from what we know about the margin debt at those times.

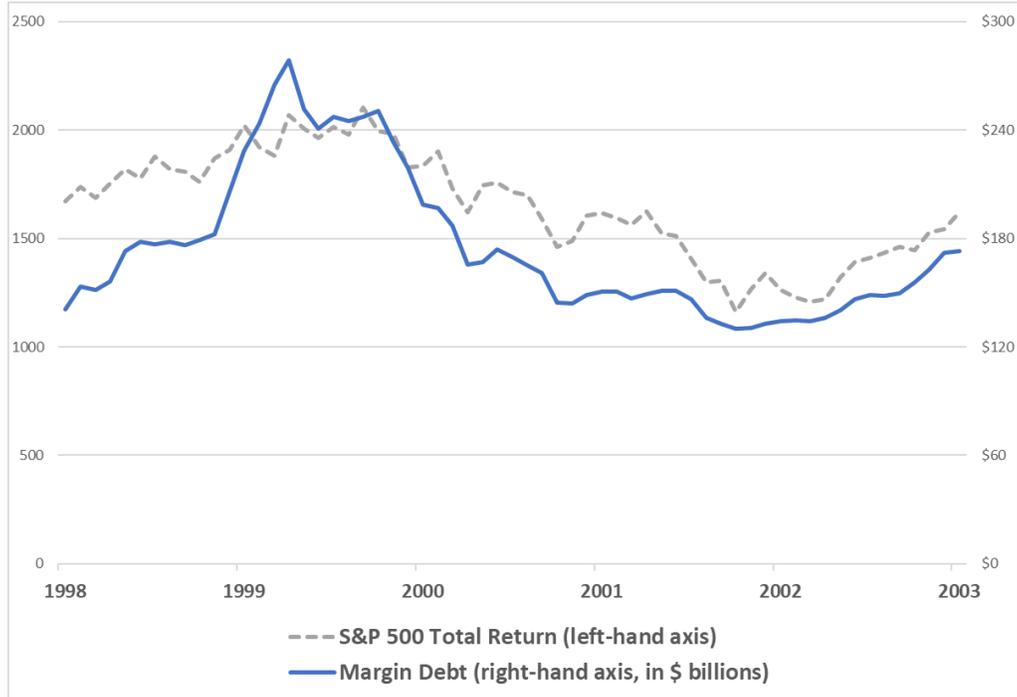
First we’ll look at the market collapse of 1973-74:



source: St. Louis Fed, Marketwatch



And here is the bursting of the Dot Com bubble at the beginning of the century:



source: St. Louis Fed, Marketwatch

We could look at other declines as well, but they'd all tell pretty much the same story: yes, margin debt and the stock market move up and down together, but it's nearly impossible to tell which is causing the other or if they're inextricably intertwined in some sort of economic feedback loop.

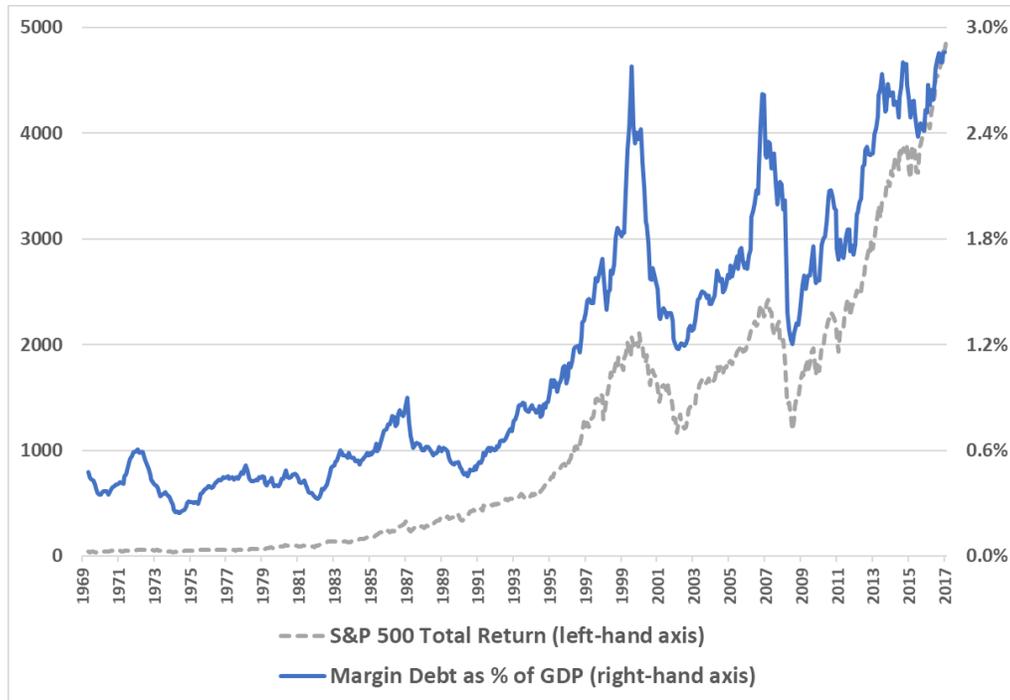
### Bring In the Economists

But what if we were to look at the level of margin debt within the context of the size of the American economy? That is, what if instead of considering the absolute dollars of margin debt involved, we compared the size of the margin debt to the country's GDP? Would that give us any further insights?

Usually margin debt averages out to be about 1% of the overall size of the American economy. For instance, in late 1995 margin debt stood at around \$75 billion. Compared to the U.S. GDP at the time of \$7.8 trillion, that meant that margin debt represented 0.96% of our economic pie. That level is a little lower than the average reading of 1.13% and a little higher than the median of 0.82%.

If we chart this figure of margin-debt-as-a-percentage-of-GDP and compare it to the stock market as a whole, this is what we see:





source: St. Louis Fed, Marketwatch

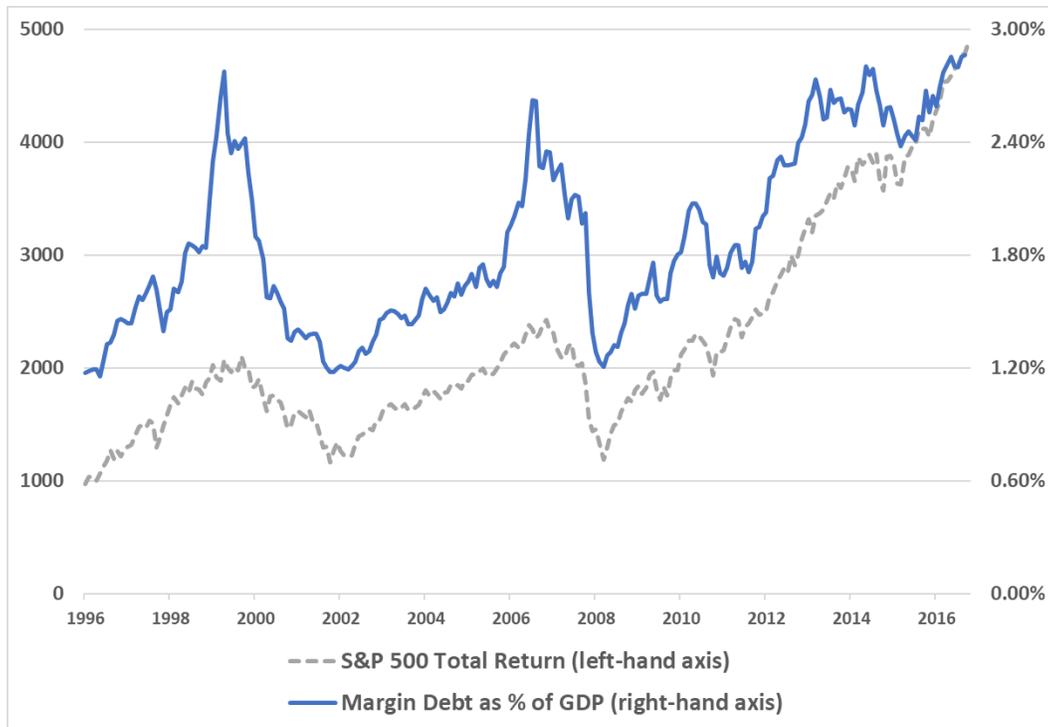
It seems like there are two distinct eras in this graph: the first, going through the mid-1990s, has margin debt at around 0.5% or 1.0% of GDP, while the second era seems to generally fluctuate between 1.2% and 3.0%.

### Conclusion: Proceed, But With Caution

If we zoom in just on that second era, this is where things start to get a little scarier. We see that there are three spikes on the graph. The first is when margin debt represented 2.78% of GDP, which occurred in March 2000. The second spike happened in July 2007 at 2.62%. If we didn't all instinctively know what happened to the American stock market after those two points, the graph lays it out in gray and blue: it went down. A lot.

From March 2000 through September 2002, the S&P 500 index returned -44%. From July 2007 through February 2009, it fared even worse: -48%.





source: St. Louis Fed, Marketwatch

The current reading on the margin-debt-to-GDP indicator is the highest it's ever been at 2.86%. Will we see another stock market collapse like we did in 2000 and 2007? Or is this the dawn of a new, third era of risk-taking, in which the margin-debt-to-GDP level will re-set to a new higher level? No one can answer those questions with any reasonable degree of certainty right now. Only the benefit of hindsight will tell us which was the correct answer. In which case, we believe the best course of action is the one laid out recently by super-investor Howard Marks. In fact, if you have been paying attention to any of our writing over the last year, you've probably heard us repeat this mantra several times. But it bears repeating again: "Proceed, but with caution."

FELIPE

Felipe Garcia, CFA  
Chief Investment Officer  
INKWELL CAPITAL LLC

Aaron

Aaron Byrd, CFA  
President  
INKWELL CAPITAL LLC

