SPECIAL REPORT

INTRODUCING THE DOOM INDEX!

ROGUE ECONOMICS

Introducing the Doom Index!

The idea behind the Doom Index is to try to measure the tension in the economic system… and get a better idea of when the rubber band is going to snap. In other words, it's a way to tell when a stock market crash is likely to happen.

Every three months, our research team crunches the numbers across the following set of U.S. financial and economic indicators:

1. **Bank Loan Growth –** This data is taken directly from Federal Reserve Economic Data (FRED). It tracks the growth of commercial and industrial loans in the U.S. on a quarterly basis.

   The level of bank lending gives us an idea about the health of the economy. The more money folks borrow, the more they spend. When bank lending growth is strong, it's a sign the economy is doing well. When it's weak, it's a sign the economy is slowing down.

   We award one Doom Point whenever total credit growth falls below 2%. We award two Doom Points whenever credit growth goes negative.

2. **Corporate Bond Downgrades –** These numbers come directly from Bloomberg. We track the number of corporate bond downgrades relative to the number of upgrades each quarter. Companies sell bonds to raise money. And investors closely watch the creditworthiness of these bonds. That's because the value of the bond is based on the ability of the company that issued it to pay interest every year… and then have enough money to pay off the loan when it comes due.

   That's where the credit rating agencies – Standard & Poor's, Moody's, and Fitch – come in. If they believe default risk is falling, they upgrade a bond. If they see an increased likelihood of default, they downgrade it.

   We award one Doom Point whenever downgrades exceed upgrades.

3. **Junk Bonds –** Junk bonds are the bonds the ratings agencies believe carry the highest default risk. We track the iShares iBoxx $ High Yield Corporate Bond ETF (HYG). HYG trades in line with junk bonds, so it is a metric to quickly gauge what is taking place in the credit markets. HYG also tends to be an excellent leading indicator for the stock market.

   We award one Doom Point whenever HYG trades down for the quarter.

4. **Shiller P/E Ratio –** The first stock market valuation ratio we follow is the Shiller P/E ratio. Also called the cyclically adjusted price-to-earnings (or CAPE) ratio, it looks at the price of stocks relative to their average earnings, adjusted for inflation, over the past 10 years. This allows us to "smooth" out the year-to-year swings in earnings to get a better "big picture" view of where valuations are at.

   And according to Nobel prize-winning economist Robert Shiller, this gives us a better picture of value than we get from just looking at stock prices compared with one year's earnings.

We award one Doom Point whenever the Shiller P/E ratio tops 24.

5. **The Buffett Ratio –** This is named after billionaire investor Warren Buffett. That's because he says it's "probably the best single measure of where valuations stand at any given moment."

   This indicator compares the market value of all U.S. stocks relative to annual GDP. That tells us how much stocks are worth relative to the size of the economy. A reading above 1 tells us stocks are overvalued.

   We award one Doom Point whenever the Buffett ratio tops 100.

6. **Tobin's q Ratio –** The final stock market valuation ratio we follow is called the Tobin's q ratio. This is named after Nobel Prize-winning economist James Tobin. It compares the market value of 5,000 publicly traded companies in the U.S. to the replacement costs of their assets in the private market. Then it looks at where the stock price is relative to those replacement costs.

   In a perfect world, it shouldn't cost you much more than its replacement cost to buy a business in the stock market. According to Tobin, the more extreme that premium, the more overvalued the stock market is. The long-term average over the last 70 years for Tobin's q is 0.87.

   We award one Doom Point whenever the Tobin's q ratio tops 1.

7. **Margin Debt Outstanding –** This data comes from the Financial Industry Regulatory Authority (FINRA). It tells us how much borrowed money investors are using.

   When an investor "buys on margin," he borrows money from his broker to leverage his profits. The more stock prices go up, the more excited investors get… and the more they start to buy on the margin to leverage their gains. It's a pretty good contrarian indicator.

   We award one Doom Point whenever margin debt exceeds 2%. We award two Doom Points whenever margin debt exceeds 3%. That has only happened once in the past 20 years – in 2008.

8. **Investor Sentiment –** This reading comes from the American Association of Individual Investors (AAII). It captures the sentiment of individual investors towards the stock market over the next six months. We view this as a contrary indicator. Stocks tend to fall when investors get too bullish.

   We award one Doom Point whenever investor sentiment tops 45%.

9. **The ISM Manufacturing Index –** This index, compiled by the Institute for Supply Management (ISM), monitors employment, production, inventories, new orders, and supplier deliveries based on ongoing surveys of more than 300 manufacturing firms. This index is a terrific gauge of economic activity. A reading below 50 represents a contraction in the economy. A reading above 50 represents expansion.

   Our research shows that when the ISM Manufacturing Index dips below 45, it's game over for the economy.

   We award one Doom Point whenever the reading falls below 50.

10. **U.S. Railcar Utilization –** This indicator comes from Bloomberg. We use this as a proxy for the amount of goods moving throughout the economy. When the economy slows, the movement of goods shipped also slows.

    We award one Doom Point whenever railcar utilization falls.

11. **Total Nonfarm Payroll –** This comes directly from the U.S. Bureau of Labor Statistics (BLS). We track this on a quarterly basis, but the data shows very little volatility. Wages tend to rise steadily. But when they fall, they keep falling for an extended period of time.

We award one Doom Point whenever wages fall.

12. **U.S. Building Permits –** These numbers come directly from the U.S. Department of Housing and Urban Development. The number of new building permits tells how much residential real estate construction is taking place. So it gives us a pulse on the real estate market – an important component of the overall economy.

    We award one Doom Point whenever the number of new building permits issued falls by 2% on a quarterly basis. We award two Doom Points whenever it falls by 7%.

Doom Index Readings and What They Mean

The overall reading for the Doom Index is the total number of Doom Points we've awarded. The maximum total reading is 15.

And here's how we interpret the readings:

- Between 1 and 5 Doom Points signals the all-clear. That's a great time to up your exposure to stocks.
- A reading between 6 and 7 means the Doom Index is heating up and caution on stocks is warranted. This is not an extreme reading. But it does mean keeping a sharper eye out for trouble.
- Whenever we get a reading between 8 and 9, we raise the "Crash Alert" flag. In other words, we think it's time to start preparing for bad times ahead.
- Finally, a reading of 10 or more means doom is upon us.

DOOM INDEX READINGS	
1-5	CALM WATERS – SMOOTH SAILING AHEAD
6-7	THE DOOM INDEX IS HEATING UP – TAKE CAUTION
8-9	RAISE THE CRASH ALERT FLAG
10+	DOOM IS UPON US!

The Doom Index to Date

The Doom Index is a fairly basic system, but it does a good job of signaling coming danger. Have a look at the chart on the following page, which tracks the Doom Index readings and the S&P 500 over the last couple of decades…

The Doom Index started heating up in the second quarter of 2000, telling investors to take caution. This warning signal coincided with the S&P 500 topping out in March 2000.

The index then hit 8 [the red bars on the chart below signify a reading of 8 or above] in Q4 2000, signaling it was time to raise the crash alert flag. The S&P went on to fall 41% over the next two years.

In Q3 2002, the Doom Index flashed the "all clear" signal – 5 – just as the S&P 500 bottomed in October 2002. The S&P 500 then gained 92% over the next five years (not including dividends).

The Doom Index remained in calm waters until Q3 2006, when things started to get choppy again.

We raised the crash alert flag once again when the Doom Index hit 8 in Q3 2007. This warning once again proved prescient – the S&P 500 topped out in October 2007.

The crash alert flag stayed up for the next three quarters as the S&P 500 traded consistently lower.

In Q3 2008, the index hit 11, signaling doom was upon us. It would stay at this level for the next two quarters as stocks continued to fall. From when we raised the crash alert flag in Q3 2007, stocks went on to fall 56%.

The Doom Index had started to cool off by Q2 2009. And by Q4 2009, it had dropped to 5, signaling the "all clear" once more. The S&P went up 203% over the next decade.

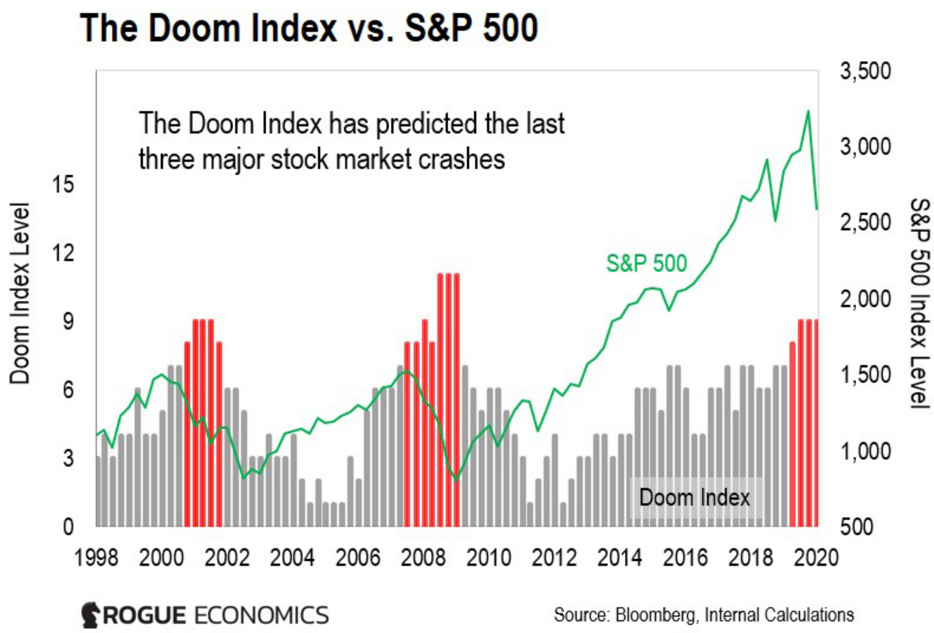
Then, in Q2 2019, the index moved up to 8. So we raised our crash alert flag.

And by Q3 2019, the reading had increased to 9, where it stayed for the next three quarters.

The Doom Index was telling us the U.S. economy was on shaky ground. But the markets were telling us a different story. The S&P 500 had by now gained 400% from its 2009 lows and seemed almost unstoppable.

But in February 2020, a "black swan" event – the coronavirus pandemic – sent markets all around the world tumbling.

With the crash alert flag flying high above the Doom Index headquarters, markets topped out on February 19, 2020. The S&P 500 fell a staggering 34% over the next month, its fastest such drop in history.



To sum up: The Doom Index doesn't perfectly time stock market tops and bottoms. But it does a good job of warning us when a crash is approaching.

If you had gotten out of stocks when we raised the crash alert flag in Q4 2000, Q3 2007, and Q2 2019, you would have avoided the worst effects of the 2000-2001, 2007-2008, and 2020 stock market crashes.