Nassim Taleb on the Anti-Fragile Portfolio and the Benefits of Taking Risks
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by Ben Huebscher

If this year's Investment Management Consultants Association conference had a mascot, it would be the phoenix. The recurring theme was: As we recover from the most recent financial crisis, how can we learn from the mistakes to best prepare for the future?

Nassim Taleb tackled this very question in his latest book, Antifragile: Things That Gain From Disorder, which built off his previous works and applies the lessons learned to today's biggest challenges. At the conference, Taleb examined how small doses of volatility can help systems handle larger disruptors in the future.

Taleb, a professor at NYU's Polytechnic Institute and former derivatives trader, shared his theories along with concrete examples and practical advice. He said that financial advisors can best prepare their clients for an uncertain future by balancing a portfolio with zero-risk, inflation-hedged investments and a diverse variety of high-risk, high-reward investments.

The opposite of fragile

In his first book, Fooled by Randomness, Taleb analyzed how humans are unable to appreciate the benefits of unpredictability and instead seek out stability, which is unproductive. Next, he explored how institutions are shaped by high-impact rare events (e.g., the recent collapse of the financial system's effects on the economy), in his book The Black Swan: The Impact of the Highly Improbable.

What makes something fragile? Taleb confessed to the audience that the answer eluded him throughout his 21-year career as an options trader. Then one morning as he drank his coffee, it dawned on him that the delicate porcelain cup in his hand was "like an option." What he meant was that both entities were ill-prepared for volatility. The options he was trading were as fragile as porcelain, ready to fall apart when first exposed to stress.

Taleb was left to wonder: what does it mean for something to be the opposite of fragile — antifragile? No word exists to express this quality, and the concept is hard to grasp. To help the audience understand, he gave the example of packages. We write "Handle With Care" on a box with fragile contents, despite the expectation that all packages be handled similarly. But no one would ever write
"Sturdy — I don't really care" on a shipment.

Taleb explained that for something to truly be antifragile, it would have to be exposed to volatility and emerge better prepared to handle inevitable volatility in the future. As an example, he commended the airline industry for being "capable of converting disorder, error, mistakes, variability into fuel for improvement." Every plane crash is painstakingly analyzed in order to divine how to best prevent similar accidents from occurring in the future.

Mistaking cats for washing machines

In one chapter in Antifragile, "The Cat and the Washing Machine" (a deliberately obtuse title intended to handicap book reviewers), Taleb explained that it is all too common in economics to incorrectly treat organic and inorganic entities the same way. Economists mistake cats (organic entities) for washing machines (engineered objects).

Organic entities must be subjected to stressors to decrease their fragility. To become stronger, for example, humans repeatedly expose themselves to the stress of lifting weights.

Engineered objects do not possess this property. Subjecting engineered objects to stress breaks them. If you pour water on your computer, it stops working.

Taleb accused former Federal Reserve Chairman Alan Greenspan of mistaking the economy for an inorganic system, which doomed his policies to fail. He attempted to stabilize the economy by removing all stressors, Taleb said, inadvertently leaving it ill-prepared to handle crises in the future. Just as a forest ranger must allow small fires to run their course in order to prevent big ones from getting out of control, so too must a economist learn to appreciate small fluctuations in the markets that minimize the effects of catastrophic failures.

Calculating fragility

Citing a research paper he coauthored with the International Monetary Fund, Taleb presented his formula for calculating relative fragility. If linearly exposed to increasing stress, a fragile entity experiences exponentially increasing harm. Conversely, an antifragile entity experiences increasing harm linearly.

Risk can therefore be calculated by performing three sequential stress tests. If larger amounts of damage are inflicted each time, "you are in trouble."

Six principles of antifragility

Taleb then detailed six lessons to be learned from his research:

1. Profit from turmoil: Businesses do not succeed by hunkering down in bunkers when faced with unfavorable circumstances. They must face uncertainty with an eye for profit. As Taleb put it, when "you see wind coming, you put up a windmill." Taleb encouraged advisors to invest in
companies that understand this.

2. Embrace trial and error: Don't be afraid to make mistakes. Good businesses are not afraid to try new things, but great businesses seek out opportunities where there is equal profit potential in both successes and failures. This is exemplified by the pharmaceutical industry, where the majority of medication is discovered accidentally through a process of trial and error. Applying this to portfolio construction, Taleb suggested advisors "need even more diversification." Fewer than 400 of the 12,000 publicly traded companies account for roughly half of long-term returns. A more diverse portfolio is more likely to be invested in those elite companies.

3. Time decreases fragility: Unlike perishable objects, whose life expectancy decreases over time, abstract ideas grow stronger with age. "If a company has been around for 20 years then it will be around for 20 more years, if it is doing the same thing of course," Taleb said. "If a book has been in print for 100 years, another 100 years. If a religion has been in print for 3,000 years, another 3,000 years."

4. Improvement through removal: It is nearly impossible to correctly predict the exact companies in which to invest, but one can often identify which companies aren't good investments. Taleb recommended identifying and removing bad investments rather than futilely searching for the good ones.

5. The 20% zero-risk, 80% high-risk portfolio: Noting that advisors will find this principal the most applicable to their field, Taleb detailed his strategy for robust portfolio construction. Rather than selecting an array of medium-risk investments, portfolios should include a small selection of zero-risk investments and allot the remainder to the most diverse selection possible of small high-risk, high-reward investments. Taleb defined zero-risk investments as hedged for inflation and expressed frustration with those who view Treasury bills as safe investments.

6. Skin in the game: Taleb stressed that the party responsible for an investment's success must be invested in it themselves. He cited a passage from Hammurabi's Code that condemns an architect to death if a house he has built collapses and kills the owner. Taleb called this his "best risk-management rule," noting that it outperforms the other five.

Taleb's portfolio

Abiding by his own "skin in the game" rule, Taleb detailed some of his personal investments for the audience. He said his portfolio includes gold, silver, commodities, Treasury bills, euros, income properties and stocks.

Taleb explained that he reluctantly includes euros and other foreign currencies in his portfolio to hedge against what he sees as the U.S. government's lack of concern for the ever-growing deficit. He doesn't see the U.S. changing its fiscal course anytime soon.

Despite his bleak outlook, Taleb remains confident in his strategy. By accepting the natural fluctuations in the economy and seeking out investments that benefit from them, it is possible to construct a more antifragile portfolio, he said.

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