Acorn
Global Investments

Systematic Trading

Diversification Done Right

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Systematic Trading

In 2008, investors learned a hard lesson about diversification as equity, bond and real estate prices plunged, buyers vanished, and financial markets buckled.

For many investors, diversification failed.

The lesson of 2008 is clear: relying on diversification across multiple managers, index funds and ETFs that invest in *similar* markets does not work. Proponents of diversification can talk all they want about style differences, geographical diversification, risk management or reduced fee benefits. However, if the end result is investments in bonds, equities or real estate, chances are that they are going to perform much like other investments in bonds, equities or real estate.

The good news is that *meaningful* diversification is possible. To diversify effectively, an investor must consider alternatives to the same old ways of investing in the same old markets. One of these alternatives is systematic trading.

A Distinct Alternative

Figure 1 – Barclay Systematic Index versus S&P 500

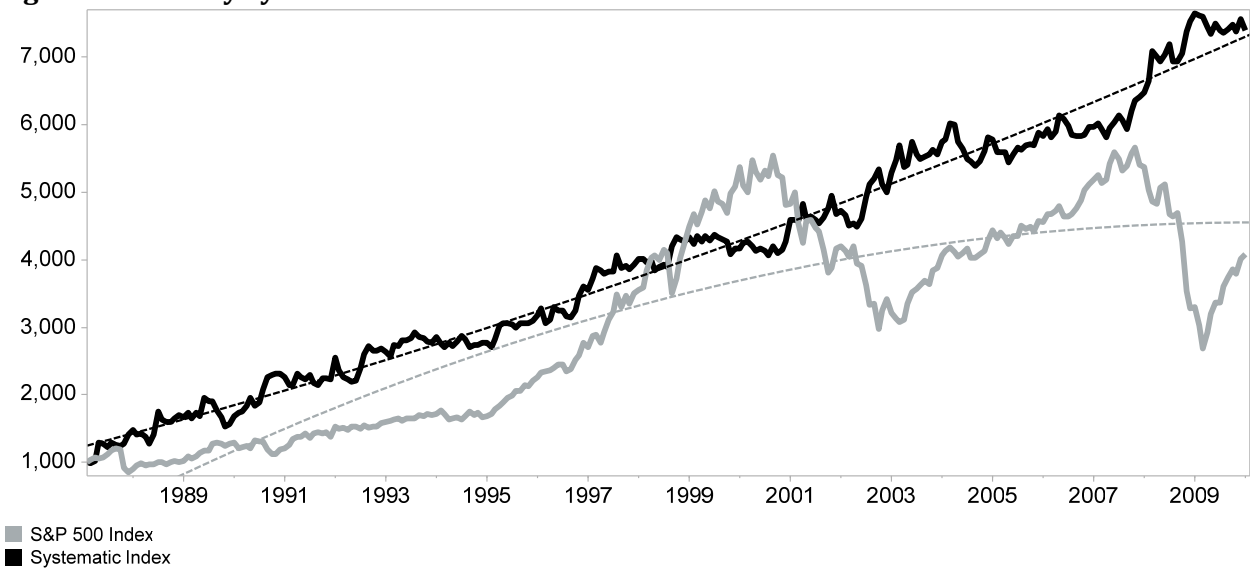


Figure 1 compares the Barclay Systematic Traders Index to the S&P 500 for the 22-year period from January 1987 to December 2009. Barclay has been tracking this management style for nearly three decades. While the Barclay Index certainly has its share of up and down periods, it is clear that the index is doing something different. That's because most systematic traders use a *different* way of investing in *different* markets.

A Different Way – Adapt to Price, Avoid Distraction

Trends are everywhere - weather, sports, fashion, food, entertainment, health, science and politics. Some trends are long, some are short. They come and they go as they always have and always will. Life and business both thrive on identifying, following and serving trends.

Market prices for metals, currencies, energies or bonds are no different. Over any given time horizon, prices go up, down or sideways. It is no more complex than that.

Complications often appear when one tries to figure out why a market may be trending. The need for answers is easily served by an endless line of newscasters, forecasters, prognosticators and gurus all competing for attention. This external noise is often combined with internal noise created by the hope, fear, greed and despair that everyone feels from time to time; which, ultimately is no more than a distraction from the stark reality of the trend in price.

Systematic traders design systems that focus on staying in alignment with the underlying trend. Because these systems are focused on prices only, they can be applied to an exceptionally large variety of markets as price is the one thing that all markets have in common.

When it comes to risk management, systematic traders also focus on price rather than noise. Every day, every position has an exit price. If that price is hit, the position is exited.

Systematic trading is different than most traditional investment approaches. Yet, it has very much in common with how success is achieved in life and business by adhering to simple rules that have stood the test of time:

- Adapt to the environment as best you can.
- Have an exit strategy for when you are wrong.
- Be responsible with your resources.

Different Markets – Real Goods, Liquid Markets

Systematic strategies provide direct exposure to the real goods of the underlying economy. Goods that have a liquid market made up of producers, processors and end users. Goods like train cars of unleaded gasoline for daily transportation, bushels of corn needed by food producers and cattle farmers, bales of cotton for textile manufacturers, copper required for construction, and currencies to facilitate global trade and commerce. The majority of these markets are actively traded every day on the world's futures and stock exchanges.

Using highly liquid markets gives systematic traders a distinct advantage. They allow these traders to eliminate exposure rather than try to hedge it. This is an important feature. Eliminating exposure simply...eliminates exposure. Hedging can often increase exposure and is a distant second-place option for most systematic traders.

The "What Have You Done For Me Lately?" Syndrome

So, making an investment in a systematic trading strategy sounds like an interesting alternative. It is certainly unique when compared to traditional investments. But, what has it done lately?

Not much.

Figure 2 – 2009 Returns

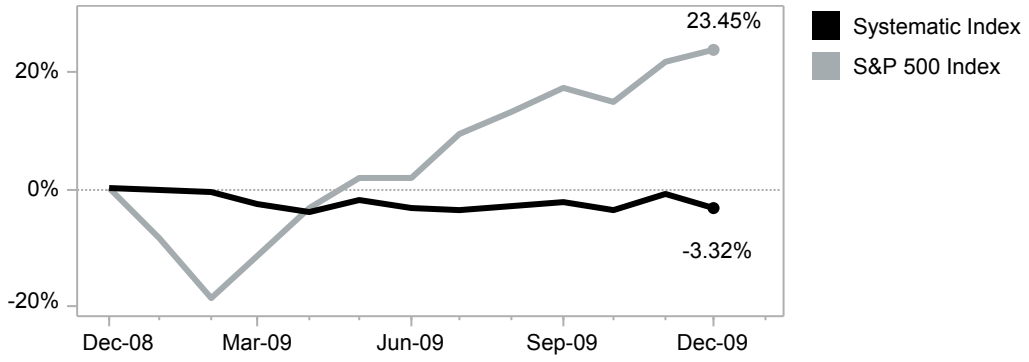


Figure 2 illustrates the 2009 performance of the index relative to the S&P 500.

The common reaction of most investors when they see performance like this is to politely pass on the opportunity. This is the "What Have You Done for Me Lately?" syndrome. Academics prefer to call it "Myopic Loss Aversion". The founding fathers of Behavioural Finance, Amos Tversky and Daniel Kahneman, produced a fascinating collection of research outlining the challenges and biases that can occur when human nature collides with decisions about money.

The fact is that investing in a strategy when recent performance is negative relative to other strategies has been shown to be very challenging for all but the most rational of investors. Near-term losses are very influential and will simply cause many investors to lose sight of the big picture.

How can an investor handle this challenge? The answer is to recognize that human nature and investment cycles do not operate on the same schedule. One to two years of sideways or negative returns can feel like an eternity. Meanwhile, a similar timeline is considered short-term for the investment itself. A significant advantage is available to those who can simply take a step back to rationally observe gains and losses in the context of the big picture.

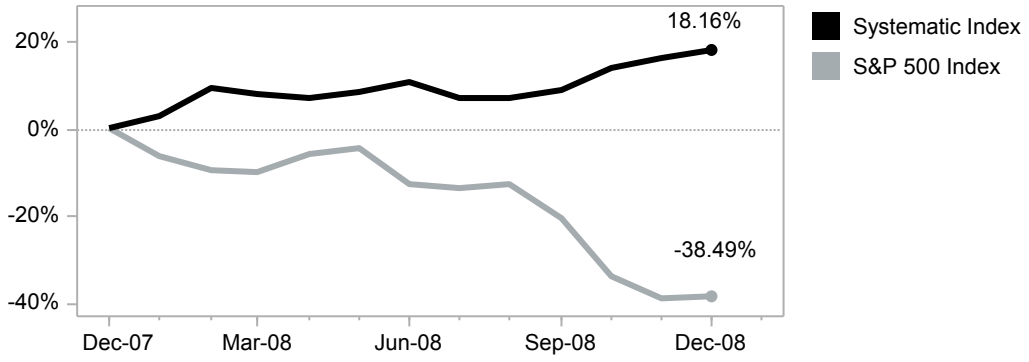
The Big Picture

The purpose of the following section is to take that step back to rationally observe the gains, losses and portfolio benefit to be expected with an investment in a systematic trading strategy.

The Big Picture - Gains

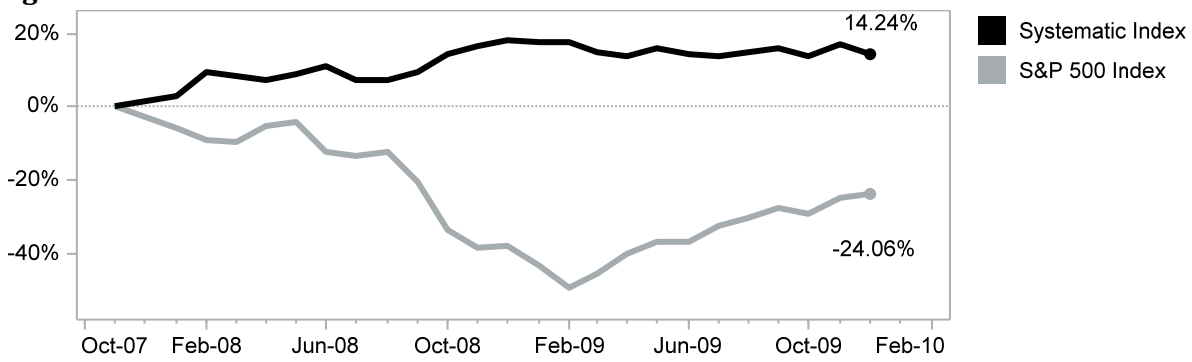
First, start by taking just one step back and looking at 2008. Figure 3 on the following page illustrates the 2008 performance of the Systematic Index relative to the S&P 500.

Figure 3 – 2008 Returns



That looks better. How about the last two years combined? Figure 4 illustrates the result:

Figure 4 – 2008 and 2009 - Who is better off?

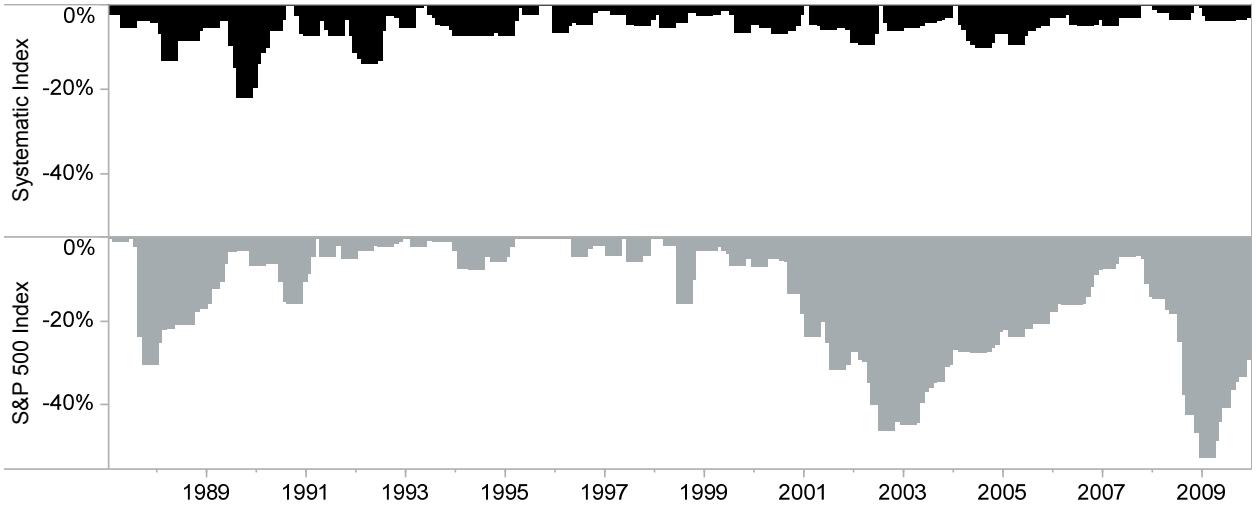


The "What Have You Done for Me Lately" syndrome is already starting to loosen its grip as both return and risk are observed over a slightly longer-term time horizon. After two years, those invested in equities now have about 76 cents in their pocket for every dollar invested, which feels a lot better than the 47 cents in the depths of the crisis in February 2009. Meanwhile, in a less dramatic fashion, those invested in the systematic index have about 1 dollar and 14 cents for every dollar invested. When this is combined with an examination of the long-term performance in Figure 1, it is clear that systematic trading is alive and well, and that 2009 is entirely consistent with the history of the strategy.

The Big Picture - Losses

What is most interesting about the graph in Figure 1 is that it not only shows that the strategy provides a distinctly different return stream, but upon closer inspection, it also indicates an entirely different risk profile. Systematic trading incorporates a strict exit discipline on every position on a daily basis. Regardless of a systematic trader's conviction on any given position, *this exit discipline always comes first*. In order to take a closer look at risk and losses, it is useful to examine the drawdown chart in Figure 5. Drawdown measures losses by the percentage decline from the most recent historical peak in prices.

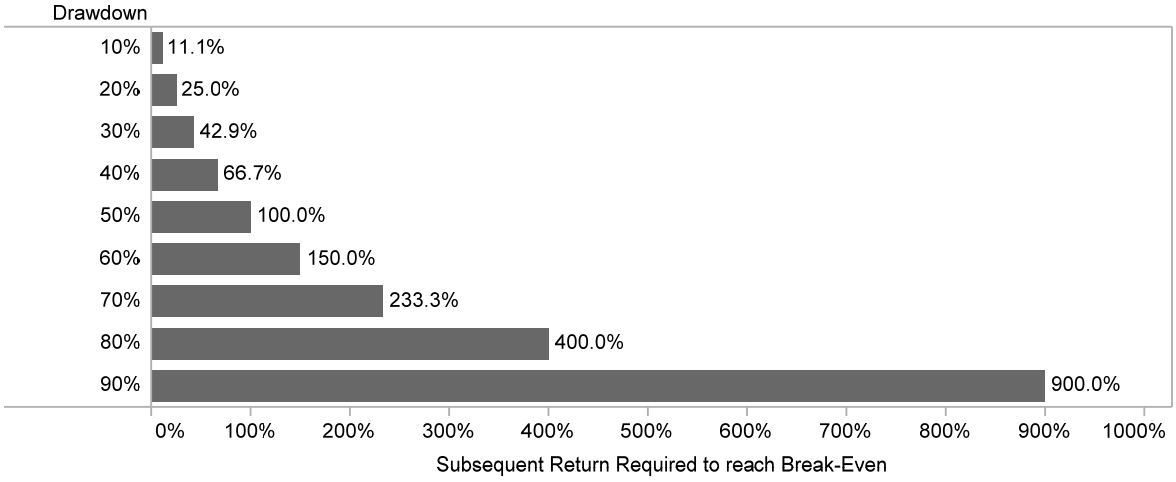
Figure 5 – Evidence of Risk Management



Notice the difference between the strategies with regards to both the depth and length of drawdowns. The declines in the S&P 500 are significantly deeper and last much longer than those of the Systematic Index. While the Systematic Index will see drawdowns of greater than 20%, the disciplined nature of the risk management processes can provide investors with comfort that when uncertainty and emotions are running high, risk is being managed.

When evaluating losses on a historical basis, it is important to consider the depth of losses. Smaller drawdowns are much easier to recover from than larger ones. As drawdowns get deeper, the returns required to recover losses grow exponentially, as shown in Figure 6:

Figure 6 – Risk and Required Subsequent Returns

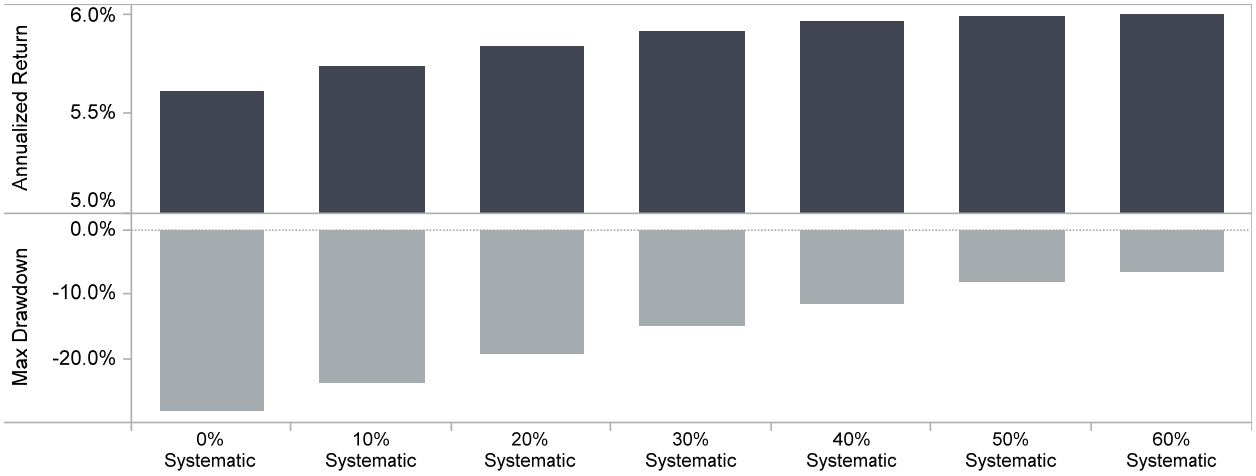


Drawdowns greater than about 35% start to require subsequent returns that can only be generated by either taking a large amount of risk, or by waiting a very long time. Limiting drawdowns is a key consideration in the design of most systematic trading strategies.

The Big Picture - Portfolio Benefit

Big picture gains and losses are two important dimensions to understand. The third dimension that must be considered is the benefit a strategy can bring to a portfolio. Institutional investors have long experienced the benefits of adding systematic trading strategies to their portfolios. Figure 7 illustrates how the maximum drawdown of a portfolio, split evenly between the S&P 500 and the Dow Jones Corporate Bond Index (Jan 97 – Dec 09), is reduced as allocations to systematic trading increase.

Figure 7 – Systematic Trading Reduces Portfolio Risk



Having a big picture perspective on historical gains, losses and the portfolio benefit of a strategy allows an investor to act on opportunities, while others fall into the "What Have You Done for Me Lately" trap.

Acting on Opportunity

The average annual return of the Barclay Systematic Traders Index since January 1987 is 8.3%. Through experience and a quick glance at history, there appears to be an advantage to investing when recent risk adjusted performance has been low. Let's take a look.

Figure 8 – Graph of 12-month Rolling Return divided by Drawdown

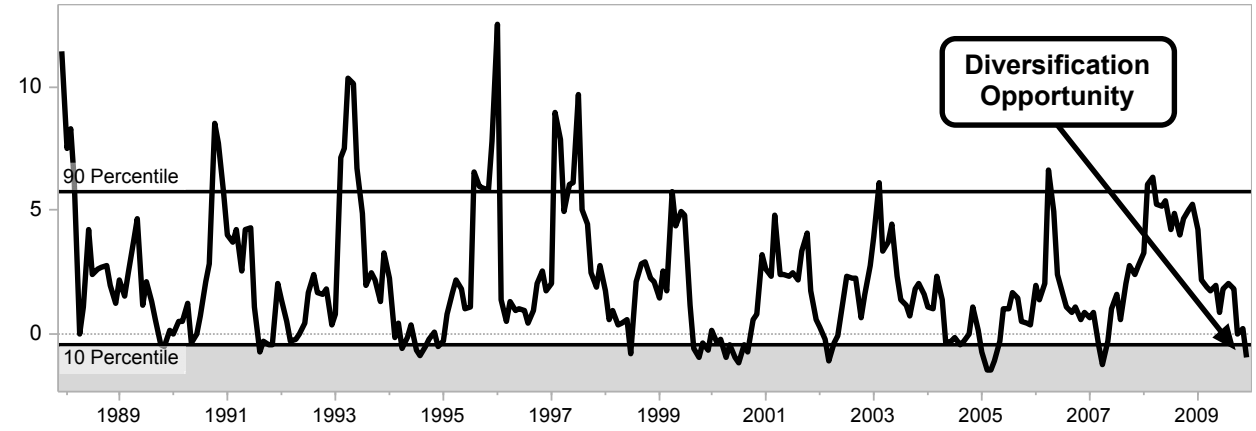
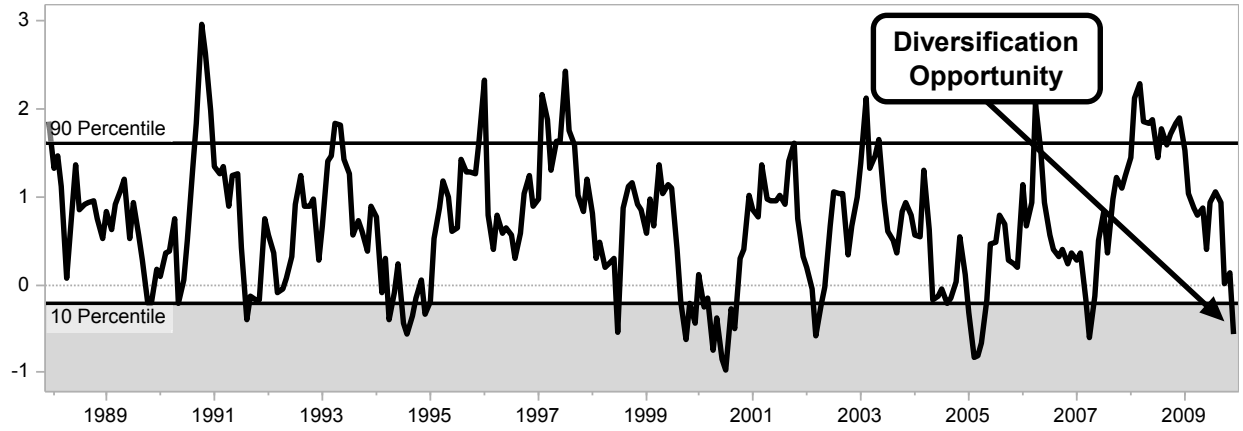


Figure 8 presents the rolling 12-month return to 12-month drawdown ratio. When the ratio drops below the 10th percentile level (the bottom 10% of all observations) investors are generally frustrated by the performance relative to the drawdown over the last 12 months. However, the average return over the next 12 months is 12.6%. This is a full 4.3% above the 8.3% average return.

Similarly, Figure 9 shows the rolling 12-month return to 12-month standard deviation ratio. When this ratio drops below the 10th percentile level, the average return over the next 12 months is 14.4%. This is 6.1% above the 8.3% average return.

Figure 9 – Graph of 12-month Rolling Return divided by Volatility



Diversification Done Right

Many investors who considered themselves adequately diversified were caught off guard in 2008 and early 2009. Since then, governments everywhere have been taking desperate measures to revive markets. In our opinion, this manufactured liquidity provides investors with a limited opportunity to reduce exposure to investments with potential liquidity issues while adding investments that provide a real diversification benefit.

Systematic trading strategies clearly provide a distinct and liquid alternative for investors. They earn solid returns while managing risk, and they add an essential diversification benefit to a portfolio.

There is an opportunity *right now* to invest in systematic trading because recent returns have made many investors lose sight of the big picture.

Acorn Global Investments is an alternative investment manager that specializes in using systematic trading strategies to deliver strong returns and diversification benefits to accredited investors and institutions. For further insights into the recommended allocation of alternatives to your portfolio in today's environment, please contact us at service@acorn.ca or 905-257-0773.

About Acorn

Acorn Global Investments is an alternative investment manager committed to being an essential holding in the portfolios of high-net-worth clients and institutions by delivering strong returns and diversification benefits with a proven alternative approach.

Acorn applies highly disciplined, adaptable and proven strategies to a liquid portfolio of exchange traded instruments, including futures and exchange traded funds, diversified by geography, sectors, instruments, systems, frequencies and trade direction. The combination of this adaptive approach and significant diversification provides clients with an alternative investment to diversify their holdings in equities, bonds or real estate.

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