

Markets have mood swings too

The SAD effect on stocks

Can markets suffer from depression, just like people do? The surprising answer is yes, according to researchers at the University of Toronto's Rotman School of Management.

Professor Lisa Kramer and her colleagues discovered that annual market downturns worldwide coincide with the onset of SAD, or seasonal affective disorder, a type of depression that usually occurs in the fall and winter, when there's less daylight.

Wealth Advisor spoke with Professor Kramer about her findings.

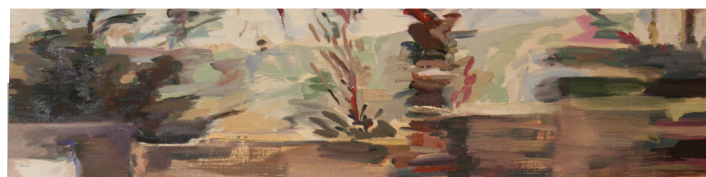
Can you outline what you uncovered about moods and markets?

Extensive clinical research on SAD¹ has shown that millions of individuals all over the globe experience increased risk aversion when the hours of daylight shrink in the fall. As the days lengthen in the winter and spring, they become more tolerant of risk. Our research is the first to show there is direct evidence of SAD-related investing behaviour by individual investors.

How can an individual investor's mood impact market behaviour?

When masses of people become less tolerant of financial risk as fall sets in, the overall appetite for risk becomes lower and returns on financial securities can respond. We observe in the fall months equity returns are lower and when we start turning to winter and spring, the returns rebound.

The interesting thing about these findings is the effects appear to be more dramatic at more extreme latitudes. Financial markets in countries like Sweden, for example, have larger swings in their seasonal returns. In the southern hemisphere, countries where the seasons are six months out of synch, so are the seasonal patterns. When we look at safe securities like government bonds, we find an opposite seasonal pattern: during the seasons when risky securities have high returns, government securities have low returns. We factored in other influences like past performance and advertising; the results were the same.



What the research uncovered

A hypothetical investor split her portfolio equally between investments at northern and southern points on the globe - the Swedish and Australian equity markets.

ALLOCATION	50/50 split in the equity index for Sweden and Australia, with no movement in or out of these markets	Pro-SAD portfolio strategy: reallocate 100% twice a year, buying once into Swedish stock index in Swedish fall (when stock prices there are low); then shifting holdings into Australian stock index in Australian fall (when Australian stock prices are typically low).	Anti-SAD portfolio strategy: reallocate 100% twice a year, in Swedish spring buying into Swedish stock index (when stock prices there are high); then shifting into Australian stock index in Australian spring (when Australian stock prices are typically high).
AVERAGE ANNUAL RETURN OVER 20 YEARS, BEGINNING IN EARLY 1980s	13.2%	21.1%	5.2%

In fact, I would conjecture that it's not a coincidence that historically so many financial market crashes happened in the month of October. Not to say that seasonal depression causes market crashes, but rather when economic news is very poor at that time of year, the natural inclination of investors is to react more negatively.

Is there a direct causal connection?

We can't prove a causal connection, but we can say the evidence is consistent with what we are hypothesizing.

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| If we extrapolate, would you say as the daylight increases, people become more risk tolerant and there's a better chance the markets will start to move up?

When daylight is becoming more abundant, moods tend to become more cheery. I think that does lend buoyancy to the market. Will that cause a recovery in the market? Based on our research, it is a helpful influence.

| Do you agree that the big questions underpinning any market recovery relate to the economy?

Yes, fundamentals are key. If the fundamentals don't cooperate, then we're going to be in this situation for some time to come.

"It's not a coincidence that historically so many financial market crashes happened in the month of October."

| How should investors use your findings?

My research tells us when a financial crisis happens in the fall, it's exacerbated by our emotional state. Studies in psychology have shown that depressed individuals, such as those afflicted with SAD, experience heightened risk aversion. That's something to keep in mind; you don't want to do anything drastic any time, but particularly when you're already predisposed to feel more risk averse.

| So the market downturn, coupled with the SAD phenomenon, creates a potent mix for some investors?

Exactly. Feelings of panic at a time like this are completely natural. We're all told about diversification and sensible

financial planning and holding for the long term. Yet we have these urges when the market plummets to do something very impulsive and we're made to feel that that's wrong. I think it's very natural, but sometimes what comes naturally is not in our best financial interest.

The natural inclination for investors right now is to want to sell everything and to shift holdings completely into cash, which is what a lot of people are doing.

Some sage investors actually recommend doing the exact opposite. I'm thinking of Warren Buffett, who says when people act fearful, he tries to act greedy. Statistics aren't able to guarantee that markets won't decline further than they already have, but if investors lock in capital losses at very low prices by converting their holdings into cash, they'll likely miss out on some of the gains as the market turns up.

| Do you agree that if investors' time horizons are longer than five years, they don't need to be immediately concerned about the markets?

Yes, that is right. Somebody who has the luxury of several more years in the workforce, or who doesn't need to touch their investments, really shouldn't be panicking right now because there are still years left to recover. History tells us those who plan for the long term are rewarded.

I think information is power: the more investors understand about behavioural finance², the better they understand the inclinations they have when it comes to making financial decisions.

During tumultuous times like these – or anytime – it's a good idea to carefully consider your next move and seek advice from people who can guide you through sound financial planning. Contact your BMO Harris Private Banking client advisor.

¹ Healthy Ontario "http://www.healthyontario.com/FeatureDetails.aspx?feature_id=4025" / ¹ Psychology Today "<http://www.psychologytoday.com/conditions/sad.html>"

² Behavioural finance combines economics and psychology to explain how and why investors act, and how their behaviour affects market prices and returns.



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