FIRST QUADRANT

The Change of Seasons: Market Cycles and "Game of Thrones"

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ED PETERS
Partner, Investments

> "OH MY SWEET SUMMER CHILD, WHAT DO YOU KNOW ABOUT FEAR? FEAR IS FOR THE WINTER, WHEN THE SNOWS FALL A HUNDRED FEET DEEP."
> - OLD NAN, GAME OF THRONES

Game of Thrones, whether you know it as the popular fantasy novels or the HBO TV series, likely conjures up dragons, magic and medieval politics. But what really lends the series its evocative, distinguishing ambience?

When the story starts, summer has been going on for nine years, and winters (when they come) can last for a generation. The changing of the seasons is so unpredictable that a group of scholars, referred to as "maesters," declare the official changing of seasons and send these proclamations out to the rest of the world using white ravens as messengers. No one knows why the seasons act this way which is why they are unpredictable. But it is this very irregularity in the weather that drives much of Thrones' action, and also creates much of its singular allure.

So what does this have to do with markets?

In the real world, weather is periodic and follows a regular cycle. A calendar is all we need to prepare for seasonal change. The markets, however, do not follow a calendar. Like the weather of Thrones, market cycles are irregular, or "non-periodic" – we do not know for sure when the market cycle has changed until well after the fact. Unfortunately, there are no maesters for the market cycle.

This uncertainty is even worse for the business cycle. Most countries do have their own set of maesters to declare the beginning and ending of recessions. In the US, the National Bureau of Economic Research (NBER) has that honor. Their announcements are not timely enough, however, to help us prepare for the change. For example, they announced on December 1, 2008 that the Great Recession began in December of 2007 – a full year earlier. Likewise on September 1, 2010, they announced that the Great Recession had ended over a year before, in June of 2009. Unfortunately, our maesters don't consider it their job to warn us of the change in the cycle, but to let us know, officially, after it happened. And since the market cycle and the business cycle are related, the NBER is not very helpful to investment strategies.

There are a few things we can borrow from the medieval maesters of Thrones, however. Like us, they have only an inkling as to what causes the cycle to turn. There are various theories, but no definitive conclusions on which one is right. Each theory has some predictive power, but none work anywhere near 100%. So, the maesters of

Past performance is no guarantee of future results. Potential for profit is accompanied by possibility of loss.

Thrones "read" the weather. That is, they look for signs, or leading indicators and conditional factors, so they can warn of winter before the snow is 100 feet deep.

While the books and HBO series are silent on these signs (admittedly, a group of maesters discussing the weather is not as exciting as battles and dragons), we can examine our own weather to see what might have been used. Leading indicators could have been phenomena like birds flying south or leaves turning colors. Conditional elements would be the average temperature and the length of the days. When a number of these signs coincided, they could say, "Winter is coming." And when enough signals agreed, the Grand Maester could then declare "Winter is here. Release the white ravens." The maesters do not know how severe the winter will be, just that the conditions are right for it to begin.

Likewise, there are number of conditions and risks which lead to bear and bull markets. Often they are tied to the business cycle, but sometimes it's the stock market itself or the financial system. And sometimes another set of maesters, central bankers, cause economic downturns when monetary policy becomes too restrictive.

The build-up of just one type of risk is not enough for a bear market or recession. For instance, an earnings-induced stock market correction is not enough to cause a full bear market if the economy is still expanding. Likewise, a manufacturing recession would not develop into a full-blown economic recession if earnings continue growing and monetary conditions were supportive. Instead, markets tend to be resilient to shocks in these environments. But if a number of these elements grow weak, and risks exist in several areas, the markets become fragile. They would not be able to bounce back from a shock, but instead might break under the pressure.

First Quadrant's Market Risk Indicator (the "MRI") is designed with these concepts in mind. It is a set of conditional factors and leading indicators to measure the current market environment. These indicators come from the stock and credit markets, the macro economy, and the financial system. When most of the indicators are strong, we can say that markets are resilient. When enough turn negative, we can say that markets are beginning to weaken. And when a confluence of high risk factors occurs, we can declare markets fragile, with shocks likely to be taken badly.

Like the maesters in Thrones, the MRI does not predict how severe the fragile state will be, or what type of fragile market we will experience. Rather, the MRI informs us that the market has become sensitive, or susceptible, to shocks. The MRI cannot tell us the number or severity of the snowstorms that occur in winter, but it does tell us when it is winter, the season when snowstorms are more likely to occur. In these times, we feel it is still best to prepare and become defensive.

Currently the MRI is signaling none of this. In fact, all the factors in the MRI are signaling a continuation of the resilient market conditions we have had for many years. A good deal of anxiety among many market maesters has been caused by the fact that the current bull market is the second-longest in recorded history. But, as in Thrones, the market does not follow a calendar.

While we know a fragile market will come, the time is not yet here. This does not mean that the market will not go down. Corrections of up to 10% are common even when markets are in the resilient state, but the markets tend to bounce back. Nor does it mean that market gains will be large. But it does suggest the risk of significant loss is quite small.

This also does not mean the market would be resilient to an exogenous shock like a large natural disaster, or a geopolitical event such as war. Like house fires, however, investors can hedge against these types of shocks if they are willing to pay for the cost of insurance.

When the MRI does reach critical levels, we will release our own white ravens and send out the appropriate warning. For now, we can enjoy the market summer even if we can still expect to experience some stormy days. For the markets, winter is not coming, yet.

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FIRST QUADRANT, L.P. | 800 E. COLORADO BLVD. SUITE 900, PASADENA, CALIFORNIA 91101
MARKETING SERVICES INFO@FIRSTQUADRANT.COM | OFFICE 626 683 4223 | WEB FIRSTQUADRANT.COM

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