



Third Party Research

January 20, 2017

High AMO Says Rates Should Stay Low

eResearch Corporation is pleased to provide a weekly commentary, authored by Tom McClellan, entitled "The McClellan Chart-In-Focus", which is a free technical analysis article published each week.

In this article, Mr. McClellan analyzes the relationship between climate change and long-term interest rates.

The article is reproduced below, beginning on the next page, or you can use this link to go to the article directly:

http://www.mccoscillator.com/learning_center/weekly_chart/high_amo_says_rates_should_stay_low/

You can also visit the McClellan Financial Publications Home Page at the link below. This is a subscription service, and there are two publications which can be subscribed for: (1) **The McClellan Market Report**; and (2) **The Daily Edition**.

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Director of Research

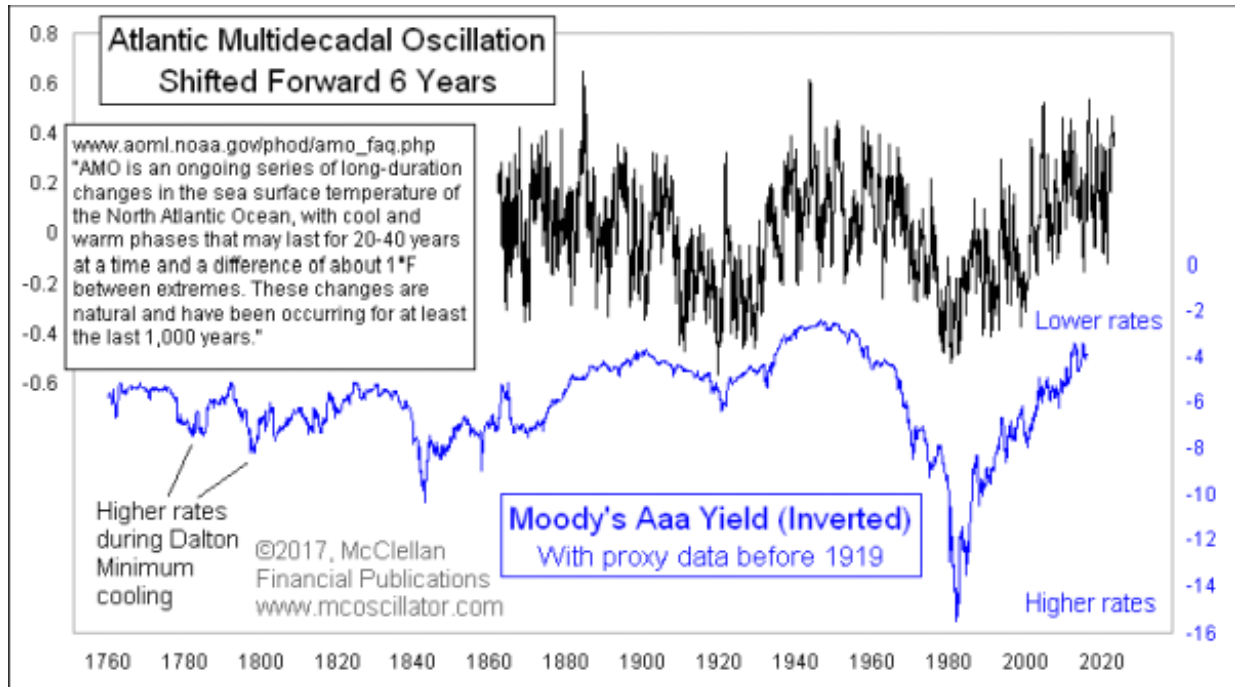
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January 19, 2017

The McClellan Chart-In-Focus

by Tom McClellan (bio at end)

The Atlantic Multi-decadal Oscillation (AMO) is a bit of data that climate researchers use in their modeling of global climate change. It turns out that it has interesting messages for us about the long-term trends in interest rates.

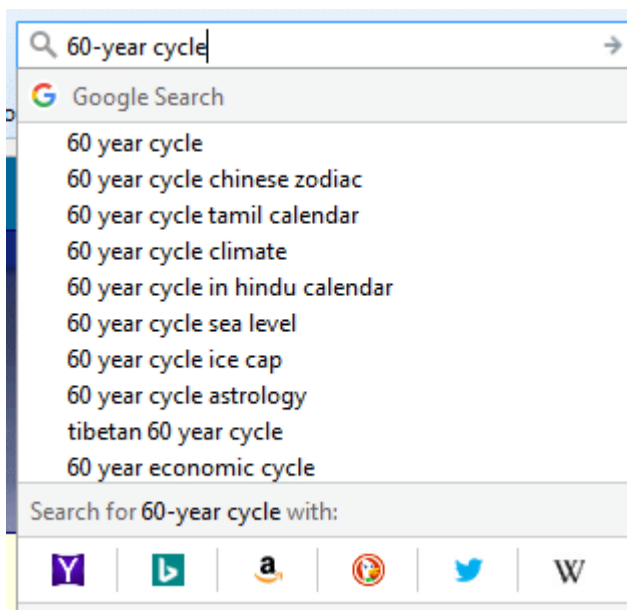


I will spare you all of the details of the AMO's computation, but you can download the data yourself [at NOAA's web site](http://www.aoml.noaa.gov/phod/amo_faq.php), and read more about it at [this page](#).

What we can see in the chart above is that there does seem to be a relationship between interest rates and global temperatures as modeled by the AMO. The data on AMO only go back to 1856, so we cannot yet see this relationship through multiple iterations of the 60-year cycle. To help illustrate this correlation better, I have offset the AMO data forward by 6 years. Why there is that 6-year lag is not something I can answer.

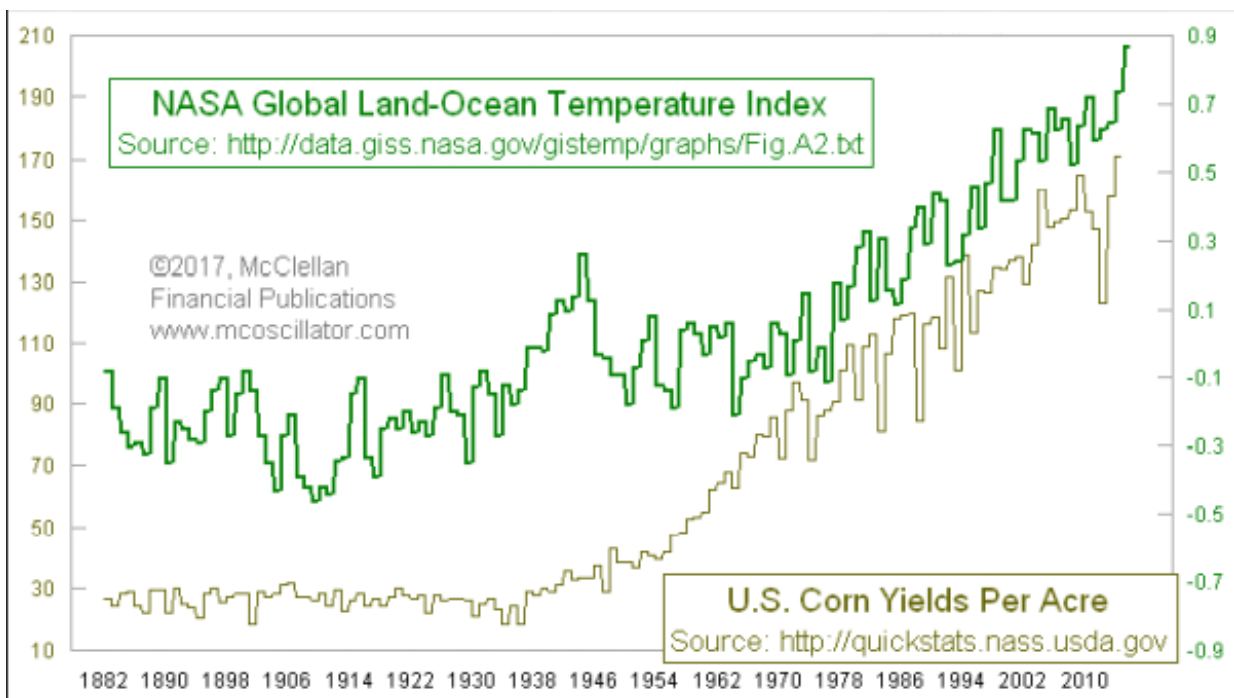
Climate scientists have long known that there is a 60-70 year cycle in global temperatures and other related data, and bond market analysts have long known about the [60-year cycle in interest rates](#). But these two groups of experts rarely talk to each other, nor do they look up this period's other usages throughout the ages.

A quick Google search shows lots of other 60-year periods of interest to people.

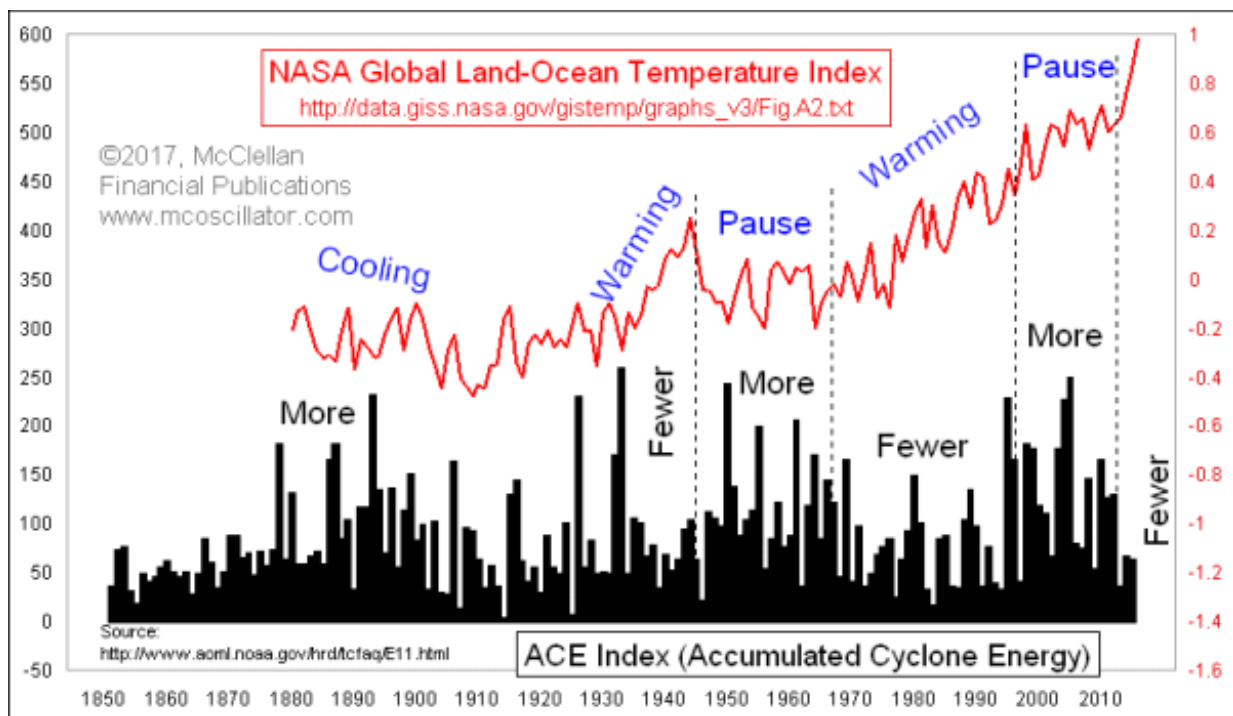


BW: Another well-known cycle indicator is the Kondratiev Wave. With this, the period of a wave ranges from forty to sixty years, and the [cycles](#) consist of alternating intervals between high sectoral [growth](#) and intervals of relatively slow growth. For more on this cycle, go [here](#).

My understanding is that the basis for the relationship between temperatures and interest rates lies in agriculture. Warmer global temperatures are better for crop production, lengthening growing seasons, and reducing drought length and severity.

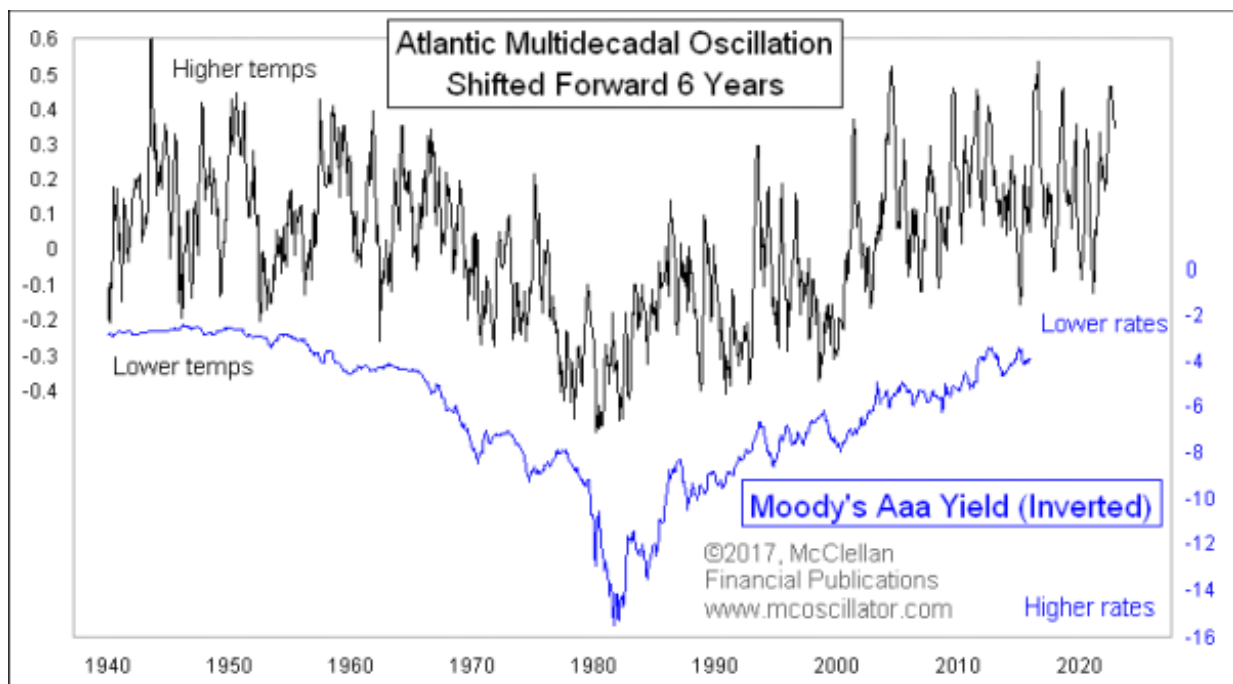


Warming periods also seem to **reduce** the number and severity of hurricanes and other “extreme” weather events (contrary to what VP Al Gore has told you).



Having better crop yields means lower food prices, which flows through into other commodities and then, generally, to the prices of almost everything. When cooling brings poorer crop yields, that leads to higher food prices, and inflation generally. That eventually affects interest rates as bond holders adjust their interest rate demands and expectations to reflect the changing inflation picture.

Readers should understand that this is only true for the really long-term trend in interest rates. There are other factors which act in the bond market on much shorter time-scales, and so measures of global temperature changes like AMO are not all that useful as a timing tool. Here is a zoomed-in look at just the last few decades of the relationship between the AMO and interest rates.



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This chart still uses the 6-year forward offset of the AMO data. There is a lot more noise versus trend strength in the AMO data versus in interest rates, although when meaningful trends develop in the AMO, they usually show up 6 years later in interest rates.

This point about temperatures and interest rates being related is important now because we have not really seen the cyclical downturn in the AMO which is due according to that 60-year cycle. Perhaps that is the effect of human influence on the climate system. Perhaps it is a reflection of natural factors. Ask me in about 50 years and I will give you a more precise answer!!!

Irrespective of the cause(s) of temperatures remaining aloft, the resulting expectation is that interest rates should remain low (high on this chart's inverted scaling). The next big peak for interest rates is due in 2040 according to the 60-year cycle, but seeing global temperatures stay high should mean that we will not have to see bonds make a start toward that 2040 peak for a while. Perhaps both will work extra hard to make up for lost time as 2040 gets closer. High temperatures should mean low rates for a sustained period over the next few years, which will assuredly puzzle the Fed and classical economists who do not understand the real relationship between climate and the economy.

Tom McClellan

Editor, *The McClellan Market Report*

BW: Information on Tom McClellan and *The McClellan Market Report* and *The Daily Edition* follows on the ensuing page.

ABOUT THE AUTHOR



Tom McClellan

Tom McClellan has done extensive analytical spreadsheet development for the stock and commodities markets, including the synthesizing of the four-year Presidential Cycle Pattern. He has fine-tuned the rules for inter-relationships between financial markets to provide leading indications for important market and economic data.

Tom is a graduate of the U.S. Military Academy at West Point, where he studied aerospace engineering, and he served as an Army helicopter pilot for 11 years. He began his own study of market technical analysis while still in the Army, and discovered ways to expand the use of certain indicators to forecast future market turning points.

Tom views the movements of prices in the financial market through the eyes of an engineer, which allows him to focus on what the data really say rather than interpreting events according to the same "conventional wisdom" used by other analysts.

In 1993, he left the Army to join his father in pursuing a new career doing this type of analysis. Tom and his Father spent the next two years refining their analysis techniques and laying groundwork.

In April 1995 they launched their newsletter, The McClellan Market Report, an 8-page report covering the stock, bond, and gold markets, which is published twice a month. They utilize the unique indicators they have developed to present their view of the market's structure as well as their forecasts for future trend direction and the timing of turning points.

A [Daily Edition](#) was added in February 1998 to give subscribers daily updates on their indicators and also provide market position indications for stocks, bonds, and gold. Their subscribers range from individual investors to professional fund managers. Tom serves as editor of both publications, and runs the newsletter business from its location in Lakewood, WA.

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