

## **Receding Moon, Slowing Earth**

Take a good look at the Moon tonight, because tomorrow it will be farther away from the Earth. Tomorrow the Moon's orbit will be roughly four one-thousandths of an inch further out than it is today; next year at this time, it will have drifted away about 1.48 inches, moving into space about as fast as our fingernails grow.

The rate of retreat to today's 239,000 orbit has not been precisely constant for the approximately 4.5 billion years since a Mars-sized object crashed into Earth, sending a chunk of our planet into space to coalesce into the object we see in the sky today. Right after the collision, the moon was retreating at a rapid pace of 8.2 inches a year, and the drift has fluctuated based on major geological changes on Earth, most notably the formation and melting of glaciers that affects the oceans which change the Earth's tug on the Moon.

A new video shows how the Moon's appearance in the sky has changed over 4.5 billion years, and it is pretty remarkable. You can see here: <a href="https://www.businessinsider.com/video-moon-drifts-away-earth-4-billion-years-2019-9">https://www.businessinsider.com/video-moon-drifts-away-earth-4-billion-years-2019-9</a> how the Moon was once a huge part of the sky, 24 times bigger than it appears today.

Interestingly, the Moon's tugging away from the Earth also has the effect of slowing down the Earth's rotation, making the length of a day 1.8 milliseconds longer every century. 600 million years ago, a day on Earth was just 22 hours long.

## **Sources:**

https://www.businessinsider.com/video-moon-drifts-away-earth-4-billion-years-2019-9

 $\frac{https://www.discovermagazine.com/planet-earth/the-earths-rotation-is-gradually-slowing-down}{}$ 



If you have any questions about this article or want to discuss your family finances, investment portfolio, or financial planning advice, please call on me anytime at my number (215) 325-1595 or you can <u>click here to schedule a meeting</u>.

Please feel free to forward this article and offer to anyone you know who might have financial questions or need some unbiased advice. Most financial advice is sales advice. In stark contrast, we are fee-only (non-commissioned) fiduciary advisors. We just provide truthful, unbiased advice to our clients.

## About the advisor

Jeff Broadhurst is a wealth manager at Broadhurst Financial Advisors, Inc. He focuses on providing wealth management solutions to business owners and family stewards in the Philadelphia area. Together with his partners, he helps affluent clients address their five biggest concerns:

- 1. Preserving their wealth
- 2. Mitigating taxes
- 3. Taking care of their heirs
- 4. Ensuring their assets are not unjustly taken
- 5. Charitable giving.

## Schedule a Complimentary Call



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