INVESTING

Would You Rather Have $1 Million or a Penny That Doubles Daily for 30 Days?

Published Wed, Jan 23 2019 • 1:19 PM EST • Updated Fri, Jun 21 2019 • 10:37 AM EDT

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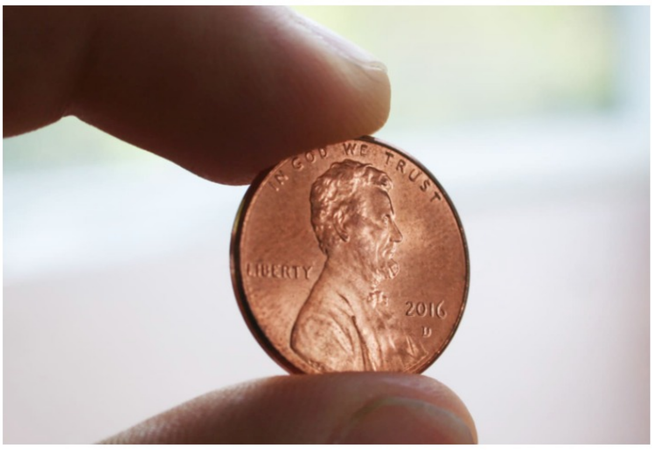

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At first glance, it's an easy choice: $1 million is a lot of money, and pennies aren't even worth the copper they're minted from. But if you pick the million dollar payout, you'd regret it.

Why?

On day 1, things are bleak: You've got one cent, and you're down $999,999.99. It's not even until day eight that you break $1. Half a month in, and you're still only in the $100 range. Now you're sweating, and if someone offered you $500,000 in exchange for your doubling penny, you might be tempted to take it.

But hold on, and the real magic happens in the last week of the month, when you go from a little more than $80,000 to ***$5 million***.

Day 1: $.01
Day 2: $.02
Day 3: $.04

Day 4: $.08
Day 5: $.16
Day 6: $.32
Day 7: $.64
Day 8: $1.28
Day 9: $2.56
Day 10: $5.12
Day 11: $10.24
Day 12: $20.48
Day 13: $40.96
Day 14: $81.92
Day 15: $163.84
Day 16: $327.68
Day 17: $655.36
Day 18: $1,310.72
Day 19: $2,621.44
Day 20: $5,242.88
Day 21: $10,485.76
Day 22: $20,971.52
Day 23: $41,943.04
Day 24: $83,886.08
Day 25: $167,772.16
Day 26: $335,544.32
Day 27: $671,088.64
Day 28: $1,342,177.28
Day 29: $2,684,354.56
Day 30: $5,368,709.12

In a world without magic pennies…who cares?

While the odds of getting 100-percent returns on ***anything*** are pretty slim (at least in the short term), there is a very real force at play that got that penny to more than $5.3 million in a month: compounding.

That's when the interest or returns on your money start earning interest or returns of their own, and so on. In other words, anything you earn on top of the original amount of money is added to the base and reflected in all future returns. Let's say you earn 10 percent on $100; that becomes $110. If you earn another 10 percent, your compounded return is $121, instead of just $120. Over time, those extra earnings add up.

We see compounding at work in both good and bad ways: It's the reason why interest adds up so quickly on our credit card balances ***and*** how we can grow our money significantly through investing.

How can I get some of that?

By giving it time. If you'd cut and run and traded your magic penny for $500,000 in the middle of the month—or even sometime in the final week—you would have missed out on the majority of gains you'd eventually have.

The same goes for investing in stocks. Though you are very unlikely to double your money overnight, and there may be times when you're down, the S&P 500-stock index has averaged nearly 10 percent annual returns over the past 90 years. That means money invested in an exchange-traded fund that tracks the index would have doubled in value about every 7.5 years. No magic required.