

\$1000 in n years	2%	5%	10%
1 year	980.39	952.38	909.09
2 years	961.17	907.03	826.45
5 years	905.73	783.53	620.92
10 years	820.35	613.91	385.54
30 years	552.07	231.38	57.31

  

Discount Factor	2%	5%	10%
1 year	98%	95%	91%
2 years	96%	91%	83%
5 years	91%	78%	62%
10 years	82%	61%	39%
30 years	55%	23%	6%

*Fig. 4 — Author's calculations*

Nobody wants to loan somebody \$1,000 of purchasing power today and only get \$385 back. The bond markets had typically relied on 2% inflation expectations, which would presumably be built into the interest rates determining the coupon, but with long-term inflation structurally increasing, there is no way this can be reflected in yields without sending them into double digits. Said simply, a lender would require an additional 10% return every year to offset each year's decay.

How does one estimate the increase in inflation? This is a pretty important exercise for a bond buyer (lender) and you would think that there were great models and tools to do so, but all we actually have is a statement from the Federal Reserve telling us to expect 2%, with some central bankers signalling an increase to 3% after the 2020 stimulus. A recent projection of the US Federal Deficit showed that it would grow to \$50 trillion in 2033 from \$25.7 trillion in 2023. That is a 7% annual increase. That is just annual spending and