

# S&P 500 Comparison

1.556  
1.56  
1.579  
1.611  
1.63  
1.689  
1.712  
1.73  
1.75  
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The following chart shows two portfolios with identical starting balances, identical average annual return, and identical withdrawals. The difference in the balance at the bottom of the chart shows clearly the flaw in the investment model attempting to invest for growth while drawing an income.

**Initial Investment** \$ 500,000.00  
**Investment 2 % Assumption** 4.00%  
**Annual Cash Flow** \$ 20,000.00  
**Years Deferred** -

Source: [https://ycharts.com/indicators/sp\\_500\\_monthly\\_return](https://ycharts.com/indicators/sp_500_monthly_return)

**Investment 1**

**Investment 2**

Date	Beg. Cash	S&P 500	Income	End Cash		Date	Beg. Cash	% Growth	Income	End Cash
01/2000	500,000.00	-5.09%	1,666.67	472,883.33		01/2000	500,000.00	0.33%	1,666.67	500,000.00
02/2000	472,883.33	-2.01%	1,666.67	461,711.71		02/2000	500,000.00	0.33%	1,666.67	500,000.00
03/2000	461,711.71	9.67%	1,666.67	504,692.57		03/2000	500,000.00	0.33%	1,666.67	500,000.00
04/2000	504,692.57	-3.08%	1,666.67	487,481.37		04/2000	500,000.00	0.33%	1,666.67	500,000.00
05/2000	487,481.37	-2.19%	1,666.67	475,138.86		05/2000	500,000.00	0.33%	1,666.67	500,000.00
06/2000	475,138.86	2.39%	1,666.67	484,828.01		06/2000	500,000.00	0.33%	1,666.67	500,000.00
07/2000	484,828.01	-1.63%	1,666.67	475,258.65		07/2000	500,000.00	0.33%	1,666.67	500,000.00
08/2000	475,258.65	6.07%	1,666.67	502,440.18		08/2000	500,000.00	0.33%	1,666.67	500,000.00
09/2000	502,440.18	-5.35%	1,666.67	473,892.97		09/2000	500,000.00	0.33%	1,666.67	500,000.00
10/2000	473,892.97	-0.50%	1,666.67	469,856.84		10/2000	500,000.00	0.33%	1,666.67	500,000.00
11/2000	469,856.84	-8.01%	1,666.67	430,554.64		11/2000	500,000.00	0.33%	1,666.67	500,000.00
12/2000	430,554.64	0.41%	1,666.67	430,653.24		12/2000	500,000.00	0.33%	1,666.67	500,000.00
01/2001	430,653.24	3.46%	1,666.67	445,553.85		01/2001	500,000.00	0.33%	1,666.67	500,000.00
02/2001	445,553.85	-9.23%	1,666.67	402,762.56		02/2001	500,000.00	0.33%	1,666.67	500,000.00
03/2001	402,762.56	-6.42%	1,666.67	375,238.54		03/2001	500,000.00	0.33%	1,666.67	500,000.00
04/2001	375,238.54	7.68%	1,666.67	402,390.19		04/2001	500,000.00	0.33%	1,666.67	500,000.00
05/2001	402,390.19	0.51%	1,666.67	402,775.71		05/2001	500,000.00	0.33%	1,666.67	500,000.00
06/2001	402,775.71	-2.50%	1,666.67	391,039.65		06/2001	500,000.00	0.33%	1,666.67	500,000.00
07/2001	391,039.65	-1.07%	1,666.67	385,188.86		07/2001	500,000.00	0.33%	1,666.67	500,000.00
08/2001	385,188.86	-6.41%	1,666.67	358,831.59		08/2001	500,000.00	0.33%	1,666.67	500,000.00
09/2001	358,831.59	-8.17%	1,666.67	327,848.38		09/2001	500,000.00	0.33%	1,666.67	500,000.00
10/2001	327,848.38	1.81%	1,666.67	332,115.77		10/2001	500,000.00	0.33%	1,666.67	500,000.00
11/2001	332,115.77	7.52%	1,666.67	355,424.21		11/2001	500,000.00	0.33%	1,666.67	500,000.00
12/2001	355,424.21	0.76%	1,666.67	356,458.77		12/2001	500,000.00	0.33%	1,666.67	500,000.00
01/2002	356,458.77	-1.56%	1,666.67	349,231.34		01/2002	500,000.00	0.33%	1,666.67	500,000.00
02/2002	349,231.34	-2.08%	1,666.67	340,300.67		02/2002	500,000.00	0.33%	1,666.67	500,000.00
03/2002	340,300.67	3.67%	1,666.67	351,123.03		03/2002	500,000.00	0.33%	1,666.67	500,000.00
04/2002	351,123.03	-6.14%	1,666.67	327,897.41		04/2002	500,000.00	0.33%	1,666.67	500,000.00
05/2002	327,897.41	-0.91%	1,666.67	323,246.88		05/2002	500,000.00	0.33%	1,666.67	500,000.00
06/2002	323,246.88	-7.25%	1,666.67	298,144.81		06/2002	500,000.00	0.33%	1,666.67	500,000.00
07/2002	298,144.81	-7.90%	1,666.67	272,924.71		07/2002	500,000.00	0.33%	1,666.67	500,000.00
08/2002	272,924.71	0.49%	1,666.67	272,595.37		08/2002	500,000.00	0.33%	1,666.67	500,000.00
09/2002	272,595.37	-11.00%	1,666.67	240,943.21		09/2002	500,000.00	0.33%	1,666.67	500,000.00

**Initial Investment** \$ 500,000.00  
**Investment 2 % Assumption** 4.00%  
**Annual Cash Flow** \$ 20,000.00  
**Years Deferred** -

Source: [https://ycharts.com/indicators/sp\\_500\\_monthly\\_return](https://ycharts.com/indicators/sp_500_monthly_return)

**Investment 1**

**Investment 2**

Date	Beg. Cash	S&P 500	Income	End Cash		Date	Beg. Cash	% Growth	Income	End Cash
10/2002	240,943.21	8.64%	1,666.67	260,094.04		10/2002	500,000.00	0.33%	1,666.67	500,000.00
11/2002	260,094.04	5.71%	1,666.67	273,278.74		11/2002	500,000.00	0.33%	1,666.67	500,000.00
12/2002	273,278.74	-6.03%	1,666.67	255,133.37		12/2002	500,000.00	0.33%	1,666.67	500,000.00
01/2003	255,133.37	-2.74%	1,666.67	246,476.05		01/2003	500,000.00	0.33%	1,666.67	500,000.00
02/2003	246,476.05	-1.70%	1,666.67	240,619.29		02/2003	500,000.00	0.33%	1,666.67	500,000.00
03/2003	240,619.29	0.84%	1,666.67	240,973.82		03/2003	500,000.00	0.33%	1,666.67	500,000.00
04/2003	240,973.82	8.10%	1,666.67	258,826.04		04/2003	500,000.00	0.33%	1,666.67	500,000.00
05/2003	258,826.04	5.09%	1,666.67	270,333.62		05/2003	500,000.00	0.33%	1,666.67	500,000.00
06/2003	270,333.62	1.13%	1,666.67	271,721.72		06/2003	500,000.00	0.33%	1,666.67	500,000.00
07/2003	271,721.72	1.62%	1,666.67	274,456.94		07/2003	500,000.00	0.33%	1,666.67	500,000.00
08/2003	274,456.94	1.79%	1,666.67	277,703.06		08/2003	500,000.00	0.33%	1,666.67	500,000.00
09/2003	277,703.06	-1.19%	1,666.67	272,731.72		09/2003	500,000.00	0.33%	1,666.67	500,000.00
10/2003	272,731.72	5.50%	1,666.67	286,065.30		10/2003	500,000.00	0.33%	1,666.67	500,000.00
11/2003	286,065.30	0.71%	1,666.67	286,429.70		11/2003	500,000.00	0.33%	1,666.67	500,000.00
12/2003	286,429.70	5.08%	1,666.67	299,313.66		12/2003	500,000.00	0.33%	1,666.67	500,000.00
01/2004	299,313.66	1.73%	1,666.67	302,825.12		01/2004	500,000.00	0.33%	1,666.67	500,000.00
02/2004	302,825.12	1.22%	1,666.67	304,852.92		02/2004	500,000.00	0.33%	1,666.67	500,000.00
03/2004	304,852.92	-1.64%	1,666.67	298,186.67		03/2004	500,000.00	0.33%	1,666.67	500,000.00
04/2004	298,186.67	-1.68%	1,666.67	291,510.46		04/2004	500,000.00	0.33%	1,666.67	500,000.00
05/2004	291,510.46	1.21%	1,666.67	293,371.07		05/2004	500,000.00	0.33%	1,666.67	500,000.00
06/2004	293,371.07	1.80%	1,666.67	296,985.09		06/2004	500,000.00	0.33%	1,666.67	500,000.00
07/2004	296,985.09	-3.43%	1,666.67	285,131.83		07/2004	500,000.00	0.33%	1,666.67	500,000.00
08/2004	285,131.83	0.23%	1,666.67	284,120.97		08/2004	500,000.00	0.33%	1,666.67	500,000.00
09/2004	284,120.97	0.94%	1,666.67	285,125.04		09/2004	500,000.00	0.33%	1,666.67	500,000.00
10/2004	285,125.04	1.40%	1,666.67	287,450.12		10/2004	500,000.00	0.33%	1,666.67	500,000.00
11/2004	287,450.12	3.86%	1,666.67	296,879.03		11/2004	500,000.00	0.33%	1,666.67	500,000.00
12/2004	296,879.03	3.25%	1,666.67	304,860.93		12/2004	500,000.00	0.33%	1,666.67	500,000.00
01/2005	304,860.93	-2.53%	1,666.67	295,481.28		01/2005	500,000.00	0.33%	1,666.67	500,000.00
02/2005	295,481.28	1.89%	1,666.67	299,399.21		02/2005	500,000.00	0.33%	1,666.67	500,000.00
03/2005	299,399.21	-1.91%	1,666.67	292,014.02		03/2005	500,000.00	0.33%	1,666.67	500,000.00
04/2005	292,014.02	-2.01%	1,666.67	284,477.87		04/2005	500,000.00	0.33%	1,666.67	500,000.00
05/2005	284,477.87	3.00%	1,666.67	291,345.54		05/2005	500,000.00	0.33%	1,666.67	500,000.00
06/2005	291,345.54	-0.01%	1,666.67	289,649.74		06/2005	500,000.00	0.33%	1,666.67	500,000.00

**Initial Investment** \$ 500,000.00  
**Investment 2 % Assumption** 4.00%  
**Annual Cash Flow** \$ 20,000.00  
**Years Deferred** -

Source: [https://ycharts.com/indicators/sp\\_500\\_monthly\\_return](https://ycharts.com/indicators/sp_500_monthly_return)

## Investment 1

## Investment 2

Date	Beg. Cash	S&P 500	Income	End Cash		Date	Beg. Cash	% Growth	Income	End Cash
07/2005	289,649.74	3.60%	1,666.67	298,410.46		07/2005	500,000.00	0.33%	1,666.67	500,000.00
08/2005	298,410.46	-1.12%	1,666.67	293,401.60		08/2005	500,000.00	0.33%	1,666.67	500,000.00
09/2005	293,401.60	0.69%	1,666.67	293,759.40		09/2005	500,000.00	0.33%	1,666.67	500,000.00
10/2005	293,759.40	-1.77%	1,666.67	286,893.20		10/2005	500,000.00	0.33%	1,666.67	500,000.00
11/2005	286,893.20	3.52%	1,666.67	295,325.17		11/2005	500,000.00	0.33%	1,666.67	500,000.00
12/2005	295,325.17	-0.09%	1,666.67	293,392.71		12/2005	500,000.00	0.33%	1,666.67	500,000.00
01/2006	293,392.71	2.55%	1,666.67	299,207.56		01/2006	500,000.00	0.33%	1,666.67	500,000.00
02/2006	299,207.56	0.05%	1,666.67	297,690.50		02/2006	500,000.00	0.33%	1,666.67	500,000.00
03/2006	297,690.50	1.11%	1,666.67	299,328.19		03/2006	500,000.00	0.33%	1,666.67	500,000.00
04/2006	299,328.19	1.22%	1,666.67	301,313.33		04/2006	500,000.00	0.33%	1,666.67	500,000.00
05/2006	301,313.33	-3.09%	1,666.67	290,336.08		05/2006	500,000.00	0.33%	1,666.67	500,000.00
06/2006	290,336.08	0.01%	1,666.67	288,698.45		06/2006	500,000.00	0.33%	1,666.67	500,000.00
07/2006	288,698.45	0.51%	1,666.67	288,504.14		07/2006	500,000.00	0.33%	1,666.67	500,000.00
08/2006	288,504.14	2.13%	1,666.67	292,982.62		08/2006	500,000.00	0.33%	1,666.67	500,000.00
09/2006	292,982.62	2.46%	1,666.67	298,523.32		09/2006	500,000.00	0.33%	1,666.67	500,000.00
10/2006	298,523.32	3.15%	1,666.67	306,260.14		10/2006	500,000.00	0.33%	1,666.67	500,000.00
11/2006	306,260.14	1.65%	1,666.67	309,646.77		11/2006	500,000.00	0.33%	1,666.67	500,000.00
12/2006	309,646.77	1.26%	1,666.67	311,881.65		12/2006	500,000.00	0.33%	1,666.67	500,000.00
01/2007	311,881.65	1.41%	1,666.67	314,612.51		01/2007	500,000.00	0.33%	1,666.67	500,000.00
02/2007	314,612.51	-2.18%	1,666.67	306,087.29		02/2007	500,000.00	0.33%	1,666.67	500,000.00
03/2007	306,087.29	1.00%	1,666.67	307,481.50		03/2007	500,000.00	0.33%	1,666.67	500,000.00
04/2007	307,481.50	4.33%	1,666.67	319,128.78		04/2007	500,000.00	0.33%	1,666.67	500,000.00
05/2007	319,128.78	3.26%	1,666.67	327,865.71		05/2007	500,000.00	0.33%	1,666.67	500,000.00
06/2007	327,865.71	-1.78%	1,666.67	320,363.04		06/2007	500,000.00	0.33%	1,666.67	500,000.00
07/2007	320,363.04	-3.20%	1,666.67	308,444.75		07/2007	500,000.00	0.33%	1,666.67	500,000.00
08/2007	308,444.75	1.29%	1,666.67	310,757.02		08/2007	500,000.00	0.33%	1,666.67	500,000.00
09/2007	310,757.02	3.58%	1,666.67	320,215.46		09/2007	500,000.00	0.33%	1,666.67	500,000.00
10/2007	320,215.46	1.48%	1,666.67	323,287.98		10/2007	500,000.00	0.33%	1,666.67	500,000.00
11/2007	323,287.98	-4.40%	1,666.67	307,396.64		11/2007	500,000.00	0.33%	1,666.67	500,000.00
12/2007	307,396.64	-0.86%	1,666.67	303,086.37		12/2007	500,000.00	0.33%	1,666.67	500,000.00
01/2008	303,086.37	-6.12%	1,666.67	282,870.81		01/2008	500,000.00	0.33%	1,666.67	500,000.00
02/2008	282,870.81	-3.48%	1,666.67	271,360.24		02/2008	500,000.00	0.33%	1,666.67	500,000.00
03/2008	271,360.24	-0.60%	1,666.67	268,065.41		03/2008	500,000.00	0.33%	1,666.67	500,000.00

**Initial Investment** \$ 500,000.00  
**Investment 2 % Assumption** 4.00%  
**Annual Cash Flow** \$ 20,000.00  
**Years Deferred** -

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**Investment 1**

**Investment 2**

Date	Beg. Cash	S&P 500	Income	End Cash		Date	Beg. Cash	% Growth	Income	End Cash
04/2008	268,065.41	4.75%	1,666.67	279,131.85		04/2008	500,000.00	0.33%	1,666.67	500,000.00
05/2008	279,131.85	1.07%	1,666.67	280,451.90		05/2008	500,000.00	0.33%	1,666.67	500,000.00
06/2008	280,451.90	-8.60%	1,666.67	254,666.37		06/2008	500,000.00	0.33%	1,666.67	500,000.00
07/2008	254,666.37	-0.99%	1,666.67	250,478.50		07/2008	500,000.00	0.33%	1,666.67	500,000.00
08/2008	250,478.50	1.22%	1,666.67	251,867.68		08/2008	500,000.00	0.33%	1,666.67	500,000.00
09/2008	251,867.68	-9.08%	1,666.67	227,331.42		09/2008	500,000.00	0.33%	1,666.67	500,000.00
10/2008	227,331.42	-16.94%	1,666.67	187,154.81		10/2008	500,000.00	0.33%	1,666.67	500,000.00
11/2008	187,154.81	-7.49%	1,666.67	171,470.25		11/2008	500,000.00	0.33%	1,666.67	500,000.00
12/2008	171,470.25	0.78%	1,666.67	171,141.05		12/2008	500,000.00	0.33%	1,666.67	500,000.00
01/2009	171,141.05	-8.57%	1,666.67	154,807.60		01/2009	500,000.00	0.33%	1,666.67	500,000.00
02/2009	154,807.60	-10.99%	1,666.67	136,127.58		02/2009	500,000.00	0.33%	1,666.67	500,000.00
03/2009	136,127.58	8.54%	1,666.67	146,086.21		03/2009	500,000.00	0.33%	1,666.67	500,000.00
04/2009	146,086.21	9.39%	1,666.67	158,137.03		04/2009	500,000.00	0.33%	1,666.67	500,000.00
05/2009	158,137.03	5.31%	1,666.67	164,867.44		05/2009	500,000.00	0.33%	1,666.67	500,000.00
06/2009	164,867.44	0.02%	1,666.67	163,233.75		06/2009	500,000.00	0.33%	1,666.67	500,000.00
07/2009	163,233.75	7.41%	1,666.67	173,662.70		07/2009	500,000.00	0.33%	1,666.67	500,000.00
08/2009	173,662.70	3.36%	1,666.67	177,831.10		08/2009	500,000.00	0.33%	1,666.67	500,000.00
09/2009	177,831.10	3.57%	1,666.67	182,513.01		09/2009	500,000.00	0.33%	1,666.67	500,000.00
10/2009	182,513.01	-1.98%	1,666.67	177,232.58		10/2009	500,000.00	0.33%	1,666.67	500,000.00
11/2009	177,232.58	5.74%	1,666.67	185,739.07		11/2009	500,000.00	0.33%	1,666.67	500,000.00
12/2009	185,739.07	1.78%	1,666.67	187,378.56		12/2009	500,000.00	0.33%	1,666.67	500,000.00
01/2010	187,378.56	-3.70%	1,666.67	178,778.88		01/2010	500,000.00	0.33%	1,666.67	500,000.00
02/2010	178,778.88	2.85%	1,666.67	182,207.41		02/2010	500,000.00	0.33%	1,666.67	500,000.00
03/2010	182,207.41	5.88%	1,666.67	191,254.54		03/2010	500,000.00	0.33%	1,666.67	500,000.00
04/2010	191,254.54	1.48%	1,666.67	192,418.44		04/2010	500,000.00	0.33%	1,666.67	500,000.00
05/2010	192,418.44	-8.20%	1,666.67	174,973.46		05/2010	500,000.00	0.33%	1,666.67	500,000.00
06/2010	174,973.46	-5.39%	1,666.67	163,875.73		06/2010	500,000.00	0.33%	1,666.67	500,000.00
07/2010	163,875.73	6.88%	1,666.67	173,483.71		07/2010	500,000.00	0.33%	1,666.67	500,000.00
08/2010	173,483.71	-4.74%	1,666.67	163,593.92		08/2010	500,000.00	0.33%	1,666.67	500,000.00
09/2010	163,593.92	8.76%	1,666.67	176,258.08		09/2010	500,000.00	0.33%	1,666.67	500,000.00
10/2010	176,258.08	3.69%	1,666.67	181,095.33		10/2010	500,000.00	0.33%	1,666.67	500,000.00
11/2010	181,095.33	-0.23%	1,666.67	179,012.15		11/2010	500,000.00	0.33%	1,666.67	500,000.00
12/2010	179,012.15	6.53%	1,666.67	189,034.97		12/2010	500,000.00	0.33%	1,666.67	500,000.00

**Initial Investment** \$ 500,000.00  
**Investment 2 % Assumption** 4.00%  
**Annual Cash Flow** \$ 20,000.00  
**Years Deferred** -

Source: [https://ycharts.com/indicators/sp\\_500\\_monthly\\_return](https://ycharts.com/indicators/sp_500_monthly_return)

## Investment 1

## Investment 2

Date	Beg. Cash	S&P 500	Income	End Cash		Date	Beg. Cash	% Growth	Income	End Cash
01/2011	189,034.97	2.26%	1,666.67	191,640.50		01/2011	500,000.00	0.33%	1,666.67	500,000.00
02/2011	191,640.50	3.20%	1,666.67	196,106.33		02/2011	500,000.00	0.33%	1,666.67	500,000.00
03/2011	196,106.33	-0.11%	1,666.67	194,223.94		03/2011	500,000.00	0.33%	1,666.67	500,000.00
04/2011	194,223.94	2.85%	1,666.67	198,092.66		04/2011	500,000.00	0.33%	1,666.67	500,000.00
05/2011	198,092.66	-1.35%	1,666.67	193,751.74		05/2011	500,000.00	0.33%	1,666.67	500,000.00
06/2011	193,751.74	-1.83%	1,666.67	188,539.42		06/2011	500,000.00	0.33%	1,666.67	500,000.00
07/2011	188,539.42	-2.15%	1,666.67	182,819.15		07/2011	500,000.00	0.33%	1,666.67	500,000.00
08/2011	182,819.15	-5.68%	1,666.67	170,768.36		08/2011	500,000.00	0.33%	1,666.67	500,000.00
09/2011	170,768.36	-7.18%	1,666.67	156,840.53		09/2011	500,000.00	0.33%	1,666.67	500,000.00
10/2011	156,840.53	10.77%	1,666.67	172,065.58		10/2011	500,000.00	0.33%	1,666.67	500,000.00
11/2011	172,065.58	-0.51%	1,666.67	169,521.38		11/2011	500,000.00	0.33%	1,666.67	500,000.00
12/2011	169,521.38	0.85%	1,666.67	169,295.65		12/2011	500,000.00	0.33%	1,666.67	500,000.00
01/2012	169,295.65	4.36%	1,666.67	175,010.27		01/2012	500,000.00	0.33%	1,666.67	500,000.00
02/2012	175,010.27	4.06%	1,666.67	180,449.02		02/2012	500,000.00	0.33%	1,666.67	500,000.00
03/2012	180,449.02	3.13%	1,666.67	184,430.41		03/2012	500,000.00	0.33%	1,666.67	500,000.00
04/2012	184,430.41	-0.75%	1,666.67	181,380.51		04/2012	500,000.00	0.33%	1,666.67	500,000.00
05/2012	181,380.51	-6.27%	1,666.67	168,341.29		05/2012	500,000.00	0.33%	1,666.67	500,000.00
06/2012	168,341.29	3.96%	1,666.67	173,340.94		06/2012	500,000.00	0.33%	1,666.67	500,000.00
07/2012	173,340.94	1.26%	1,666.67	173,858.37		07/2012	500,000.00	0.33%	1,666.67	500,000.00
08/2012	173,858.37	1.98%	1,666.67	175,634.10		08/2012	500,000.00	0.33%	1,666.67	500,000.00
09/2012	175,634.10	2.42%	1,666.67	178,217.77		09/2012	500,000.00	0.33%	1,666.67	500,000.00
10/2012	178,217.77	-1.98%	1,666.67	173,022.40		10/2012	500,000.00	0.33%	1,666.67	500,000.00
11/2012	173,022.40	0.28%	1,666.67	171,840.19		11/2012	500,000.00	0.33%	1,666.67	500,000.00
12/2012	171,840.19	0.71%	1,666.67	171,393.59		12/2012	500,000.00	0.33%	1,666.67	500,000.00
01/2013	171,393.59	5.04%	1,666.67	178,365.16		01/2013	500,000.00	0.33%	1,666.67	500,000.00
02/2013	178,365.16	1.11%	1,666.67	178,678.35		02/2013	500,000.00	0.33%	1,666.67	500,000.00
03/2013	178,678.35	3.60%	1,666.67	183,444.10		03/2013	500,000.00	0.33%	1,666.67	500,000.00
04/2013	183,444.10	1.81%	1,666.67	185,097.77		04/2013	500,000.00	0.33%	1,666.67	500,000.00
05/2013	185,097.77	2.08%	1,666.67	187,281.14		05/2013	500,000.00	0.33%	1,666.67	500,000.00
06/2013	187,281.14	-1.50%	1,666.67	182,805.26		06/2013	500,000.00	0.33%	1,666.67	500,000.00
07/2013	182,805.26	4.95%	1,666.67	190,187.45		07/2013	500,000.00	0.33%	1,666.67	500,000.00
08/2013	190,187.45	-3.13%	1,666.67	182,567.92		08/2013	500,000.00	0.33%	1,666.67	500,000.00
09/2013	182,567.92	2.97%	1,666.67	186,323.52		09/2013	500,000.00	0.33%	1,666.67	500,000.00

**Initial Investment** \$ 500,000.00  
**Investment 2 % Assumption** 4.00%  
**Annual Cash Flow** \$ 20,000.00  
**Years Deferred** -

Source: [https://ycharts.com/indicators/sp\\_500\\_monthly\\_return](https://ycharts.com/indicators/sp_500_monthly_return)

**Investment 1**

**Investment 2**

Date	Beg. Cash	S&P 500	Income	End Cash		Date	Beg. Cash	% Growth	Income	End Cash
10/2013	186,323.52	4.46%	1,666.67	192,966.88		10/2013	500,000.00	0.33%	1,666.67	500,000.00
11/2013	192,966.88	2.80%	1,666.67	196,703.28		11/2013	500,000.00	0.33%	1,666.67	500,000.00
12/2013	196,703.28	2.36%	1,666.67	199,678.81		12/2013	500,000.00	0.33%	1,666.67	500,000.00
1/2014	199,678.81	-3.56%	1,666.67	190,903.58		1/2014	500,000.00	0.33%	1,666.67	500,000.00
2/2014	190,903.58	4.31%	1,666.67	197,464.86		2/2014	500,000.00	0.33%	1,666.67	500,000.00
3/2014	197,464.86	0.69%	1,666.67	197,160.70		3/2014	500,000.00	0.33%	1,666.67	500,000.00
4/2014	197,160.70	0.62%	1,666.67	196,716.43		4/2014	500,000.00	0.33%	1,666.67	500,000.00
5/2014	196,716.43	2.10%	1,666.67	199,180.81		5/2014	500,000.00	0.33%	1,666.67	500,000.00
6/2014	199,180.81	1.91%	1,666.67	201,318.50		6/2014	500,000.00	0.33%	1,666.67	500,000.00
7/2014	201,318.50	-1.51%	1,666.67	196,611.92		7/2014	500,000.00	0.33%	1,666.67	500,000.00
8/2014	196,611.92	3.77%	1,666.67	202,357.52		8/2014	500,000.00	0.33%	1,666.67	500,000.00
9/2014	202,357.52	-1.55%	1,666.67	197,554.31		9/2014	500,000.00	0.33%	1,666.67	500,000.00
10/2014	197,554.31	2.32%	1,666.67	200,470.91		10/2014	500,000.00	0.33%	1,666.67	500,000.00
11/2014	200,470.91	2.45%	1,666.67	203,715.78		11/2014	500,000.00	0.33%	1,666.67	500,000.00
12/2014	203,715.78	-0.42%	1,666.67	201,193.51		12/2014	500,000.00	0.33%	1,666.67	500,000.00
1/2015	201,193.51	-3.10%	1,666.67	193,289.84		1/2015	500,000.00	0.33%	1,666.67	500,000.00
2/2015	193,289.84	5.49%	1,666.67	202,234.79		2/2015	500,000.00	0.33%	1,666.67	500,000.00
3/2015	202,234.79	-1.74%	1,666.67	197,049.23		3/2015	500,000.00	0.33%	1,666.67	500,000.00
4/2015	197,049.23	0.85%	1,666.67	197,057.49		4/2015	500,000.00	0.33%	1,666.67	500,000.00
5/2015	197,057.49	1.05%	1,666.67	197,459.92		5/2015	500,000.00	0.33%	1,666.67	500,000.00
6/2015	197,459.92	-2.10%	1,666.67	191,646.60		6/2015	500,000.00	0.33%	1,666.67	500,000.00
7/2015	191,646.60	1.97%	1,666.67	193,755.37		7/2015	500,000.00	0.33%	1,666.67	500,000.00
8/2015	193,755.37	-6.26%	1,666.67	179,959.62		8/2015	500,000.00	0.33%	1,666.67	500,000.00
9/2015	179,959.62	-2.64%	1,666.67	173,542.02		9/2015	500,000.00	0.33%	1,666.67	500,000.00
10/2015	173,542.02	8.30%	1,666.67	186,279.34		10/2015	500,000.00	0.33%	1,666.67	500,000.00
11/2015	186,279.34	0.05%	1,666.67	184,705.81		11/2015	500,000.00	0.33%	1,666.67	500,000.00
12/2015	184,705.81	-1.75%	1,666.67	179,806.79		12/2015	500,000.00	0.33%	1,666.67	500,000.00
1/2016	179,806.79	-5.07%	1,666.67	169,023.92		1/2016	500,000.00	0.33%	1,666.67	500,000.00
2/2016	169,023.92	-0.41%	1,666.67	166,664.25		2/2016	500,000.00	0.33%	1,666.67	500,000.00
3/2016	166,664.25	6.60%	1,666.67	175,997.43		3/2016	500,000.00	0.33%	1,666.67	500,000.00
4/2016	175,997.43	0.27%	1,666.67	174,805.96		4/2016	500,000.00	0.33%	1,666.67	500,000.00
5/2016	174,805.96	1.53%	1,666.67	175,813.82		5/2016	500,000.00	0.33%	1,666.67	500,000.00
6/2016	175,813.82	0.09%	1,666.67	174,305.39		6/2016	500,000.00	0.33%	1,666.67	500,000.00



**Initial Investment** \$ 500,000.00  
**Investment 2 % Assumption** 4.00%  
**Annual Cash Flow** \$ 20,000.00  
**Years Deferred** -

Source: [https://ycharts.com/indicators/sp\\_500\\_monthly\\_return](https://ycharts.com/indicators/sp_500_monthly_return)

## Investment 1

## Investment 2

Date	Beg. Cash	S&P 500	Income	End Cash
7/2016	174,305.39	3.56%	1,666.67	178,843.99
8/2016	178,843.99	-0.12%	1,666.67	176,962.71
9/2016	176,962.71	-0.12%	1,666.67	175,083.69
10/2016	175,083.69	-1.94%	1,666.67	170,020.40
11/2016	170,020.40	3.42%	1,666.67	174,168.43
12/2016	174,168.43	1.82%	1,666.67	175,671.63
1/2017	175,671.63	1.79%	1,666.67	177,149.48
2/2017	177,149.48	3.72%	1,666.67	182,072.78
3/2017	182,072.78	-0.04%	1,666.67	180,333.28
4/2017	180,333.28	0.91%	1,666.67	180,307.65
5/2017	180,307.65	1.16%	1,666.67	180,732.55
6/2017	180,732.55	0.48%	1,666.67	179,933.40
7/2017	179,933.40	1.93%	1,666.67	181,739.45
8/2017	181,739.45	0.05%	1,666.67	180,163.65
9/2017	180,163.65	1.93%	1,666.67	181,974.14
10/2017	181,974.14	2.22%	1,666.67	184,347.30
11/2017	184,347.30	2.81%	1,666.67	187,860.80
12/2017	187,860.80	0.98%	1,666.67	188,035.16
1/2018	188,035.16	5.62%	1,666.67	196,936.07
2/2018	196,936.07	-3.89%	1,666.67	187,608.59
3/2018	187,608.59	-2.69%	1,666.67	180,895.26
4/2018	180,895.26	0.27%	1,666.67	179,717.01
5/2018	179,717.01	2.16%	1,666.67	181,932.23
6/2018	181,932.23	0.48%	1,666.67	181,138.84
7/2018	181,138.84	3.60%	1,666.67	185,993.17
8/2018	185,993.17	3.03%	1,666.67	189,962.09
9/2018	189,962.09	0.43%	1,666.67	189,112.26
10/2018	189,112.26	-6.94%	1,666.67	174,321.21
11/2018	174,321.21	1.79%	1,666.67	175,774.89
12/2018	175,774.89	-9.18%	1,666.67	157,972.09
1/2019	157,972.09	7.87%	1,666.67	168,737.82
2/2019	168,737.82	2.97%	1,666.67	172,082.67
3/2019	172,082.67	1.79%	1,666.67	173,496.28

Date	Beg. Cash	% Growth	Income	End Cash
7/2016	500,000.00	0.33%	1,666.67	500,000.00
8/2016	500,000.00	0.33%	1,666.67	500,000.00
9/2016	500,000.00	0.33%	1,666.67	500,000.00
10/2016	500,000.00	0.33%	1,666.67	500,000.00
11/2016	500,000.00	0.33%	1,666.67	500,000.00
12/2016	500,000.00	0.33%	1,666.67	500,000.00
1/2017	500,000.00	0.33%	1,666.67	500,000.00
2/2017	500,000.00	0.33%	1,666.67	500,000.00
3/2017	500,000.00	0.33%	1,666.67	500,000.00
4/2017	500,000.00	0.33%	1,666.67	500,000.00
5/2017	500,000.00	0.33%	1,666.67	500,000.00
6/2017	500,000.00	0.33%	1,666.67	500,000.00
7/2017	500,000.00	0.33%	1,666.67	500,000.00
8/2017	500,000.00	0.33%	1,666.67	500,000.00
9/2017	500,000.00	0.33%	1,666.67	500,000.00
10/2017	500,000.00	0.33%	1,666.67	500,000.00
11/2017	500,000.00	0.33%	1,666.67	500,000.00
12/2017	500,000.00	0.33%	1,666.67	500,000.00
1/2018	500,000.00	0.33%	1,666.67	500,000.00
2/2018	500,000.00	0.33%	1,666.67	500,000.00
3/2018	500,000.00	0.33%	1,666.67	500,000.00
4/2018	500,000.00	0.33%	1,666.67	500,000.00
5/2018	500,000.00	0.33%	1,666.67	500,000.00
6/2018	500,000.00	0.33%	1,666.67	500,000.00
7/2018	500,000.00	0.33%	1,666.67	500,000.00
8/2018	500,000.00	0.33%	1,666.67	500,000.00
9/2018	500,000.00	0.33%	1,666.67	500,000.00
10/2018	500,000.00	0.33%	1,666.67	500,000.00
11/2018	500,000.00	0.33%	1,666.67	500,000.00
12/2018	500,000.00	0.33%	1,666.67	500,000.00
1/2019	500,000.00	0.33%	1,666.67	500,000.00
2/2019	500,000.00	0.33%	1,666.67	500,000.00
3/2019	500,000.00	0.33%	1,666.67	500,000.00

<b>Initial Investment</b>	\$ 500,000.00
<b>Investment 2 % Assumption</b>	4.00%
<b>Annual Cash Flow</b>	\$ 20,000.00
<b>Years Deferred</b>	-

Source: [https://ycharts.com/indicators/sp\\_500\\_monthly\\_return](https://ycharts.com/indicators/sp_500_monthly_return)

## Investment 1

## Investment 2

Date	Beg. Cash	S&P 500	Income	End Cash		Date	Beg. Cash	% Growth	Income	End Cash
4/2019	173,496.28	3.93%	1,666.67	178,648.02		4/2019	500,000.00	0.33%	1,666.67	500,000.00
5/2019	178,648.02	-6.58%	1,666.67	165,226.31		5/2019	500,000.00	0.33%	1,666.67	500,000.00
6/2019	165,226.31	6.89%	1,666.67	174,943.74		6/2019	500,000.00	0.33%	1,666.67	500,000.00