

### Example: Incremental Tax Cost from Capital Gains Distributions

**Key assumptions:** Initial \$10,000. 7% real return rate (very close to actual expected return rate).

Tax cost of 18%: that's what I pay from 15% cap gains rate + 3% state tax rate. I ignore the effect of inflation.

I do not display results for a retirement account. No taxes on growth (Roth or Traditional). After-tax return = pre-tax return = 7% for all years.

#### Case 1. All the 7% return is from price appreciation. No annual dividends or taxes until final sale.

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Invested at Beginning of Year	10,000	10,700	11,449	12,250	13,108	14,026	15,007	16,058	17,182	18,385
0% Dividends, Taxed in year	-	-	-	-	-	-	-	-	-	-
18% Tax paid in year	-	-	-	-	-	-	-	-	-	-
7% Gain from price appreciation	700	749	801	858	918	982	1,051	1,124	1,203	1,287
Net increase in value	700	749	801	858	918	982	1,051	1,124	1,203	1,287
Rate of increase	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Invested end of year	10,700	11,449	12,250	13,108	14,026	15,007	16,058	17,182	18,385	19,672
Cumulative Gain not taxed	700	1,449	2,250	3,108	4,026	5,007	6,058	7,182	8,385	9,672
18% Tax if sold at year end	126	261	405	559	725	901	1,090	1,293	1,509	1,741
Proceeds after tax	10,574	11,188	11,845	12,549	13,301	14,106	14,967	15,889	16,875	17,931
<b>CAGR:</b>	<b>5.74%</b>	<b>5.77%</b>	<b>5.81%</b>	<b>5.84%</b>	<b>5.87%</b>	<b>5.90%</b>	<b>5.93%</b>	<b>5.96%</b>	<b>5.99%</b>	<b>6.01%</b>

#### Base Case 2. The 7% return is 2% dividends and 5% price appreciation.

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Invested at Beginning of Year	10,000	10,664	11,372	12,127	12,932	13,791	14,707	15,683	16,725	17,835
2% Dividends, Taxed in year	200	213	227	243	259	276	294	314	334	357
18% Tax paid in year	36	38	41	44	47	50	53	56	60	64
5% Gain from price appreciation	500	533	569	606	647	690	735	784	836	892
Net Increase in value	664	708	755	805	859	916	977	1,041	1,111	1,184
Rate of increase	6.64%	6.64%	6.64%	6.64%	6.64%	6.64%	6.64%	6.64%	6.64%	6.64%
Invested end of year; proceeds if sold	10,664	11,372	12,127	12,932	13,791	14,707	15,683	16,725	17,835	19,020
Cumulative gain not taxed	500	1,033	1,602	2,208	2,855	3,544	4,280	5,064	5,900	6,792
18% Added tax if sold at year end	90	186	288	397	514	638	770	911	1,062	1,223
Proceeds after tax	10,574	11,186	11,839	12,535	13,277	14,069	14,913	15,813	16,773	17,797
<b>CAGR:</b>	<b>5.74%</b>	<b>5.76%</b>	<b>5.79%</b>	<b>5.81%</b>	<b>5.83%</b>	<b>5.85%</b>	<b>5.88%</b>	<b>5.90%</b>	<b>5.92%</b>	<b>5.93%</b>

#### Case 3. The 7% return is 2% dividends and 5% price appreciation. Added tax cost from 4% Cap Gains Distribution.

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Invested at Beginning of Year	10,000	10,592	11,219	11,883	12,587	13,332	14,121	14,957	15,843	16,780
2% Dividends, Taxed in year	200	212	224	238	252	267	282	299	317	336
18% Tax paid in year	36	38	40	43	45	48	51	54	57	60
4% Cap Gains Distributed	400	424	449	475	503	533	565	598	634	671
Added tax paid on Cap Gains Dist	72	76	81	86	91	96	102	108	114	121
5% Price appreciation	500	530	561	594	629	667	706	748	792	839
Net Increase in value	592	627	664	703	745	789	836	885	938	993
Rate of increase	5.92%	5.92%	5.92%	5.92%	5.92%	5.92%	5.92%	5.92%	5.92%	5.92%
Invested end of year; proceeds if sold	10,592	11,219	11,883	12,587	13,332	14,121	14,957	15,843	16,780	17,774
Cumulative gain not taxed	100	206	318	437	563	696	837	987	1,145	1,313
18% Added tax if sold at year end	18	37	57	79	101	125	151	178	206	236
Proceeds after tax	10,574	11,182	11,826	12,508	13,231	13,996	14,806	15,665	16,574	17,537
<b>CAGR:</b>	<b>5.74%</b>	<b>5.74%</b>	<b>5.75%</b>	<b>5.75%</b>	<b>5.76%</b>	<b>5.76%</b>	<b>5.77%</b>	<b>5.77%</b>	<b>5.77%</b>	<b>5.78%</b>