2023 CRESTMONT RESEARCH STOCK MARKET MATRIX

S&P 500 INDEX ONLY

NOMINAL RETURNS

Nominal Returns (not inflation adjusted), without dividends, transaction costs, or taxes

COMPONENTS	
Index	Included
Dividends	Not Included
Transaction Costs	Not Included
Taxes	Not Included (Deferred)
Inflation	Nominal (Not Inflation Adjusted)

FROM (rows) / TO (columns)

P/E	S&P500	Yr: 19	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
		TO P/E Ratio	19	23	22	18	16	19	19	13	13	15	14	14	14	12	11	11	12	9	6	7	5	5	8	8	8	10	12	16	22	28	21	15	8	11	12	13	19	18	14	16
		TO S&P 500 Index	6	8	8	7	7	9	10	8	8	10	9	9	10	9	8	8	9	8	8	9	8	7	8	9	9	11	13	15	20	26	21	14	7	9	10	11	15	15	11	12
18.6	6	1900		28	17	5	3	8	8	4	3	5	4	4	4	3	2	2	3	2	1	2	1	1	1	1	2	2	3	3	4	5	4	3	0	1	1	2	3	3	2	2
22.7	8	1901			7	-4	-3	3	4	0	0	3	2	2	2	1	0	0	1	1	0	1	0	-1	0	0	1	1	2	3	4	4	3	2	0	0	1	1	2	2	1	1
22.0	8	1902				-14	-8	2	3	-1	-1	2	1	1	1	0	0	0	1	0	-1	0	0	-1	0	0	0	1	2	2	3	4	3	2	-1	0	0	1	2	2	1	1
17.6	7	1903					-2	12	10	2	2	5	4	3	3	2	1	1	2	1	0	1	1	0	1	1	1	2	2	3	4	5	4	2	0	1	1	1	2	2	1	1
16.3	7	1904						27	17	4	2	7	5	4	4	2	1	2	2	1	0	1	1	0	1	1	1	2	3	3	4	5	4	2	0	1	1	1	2	2	1	2
19.3	9	1905							7	-7	-5	2	1	0	1	-1	-1	-1	0	0	-1	0	-1	-2	0	0	0	1	2	2	4	5	3	2	-1	0	0	1	2	2	1	1
18.7	10	1906								-19	-10	0	-1	-1	0	-2	-2	-2	0	-1	-2	-1	-1	-2	-1	-1	0	1	1	2	3	4	3	1	-1	0	0	0	2	2	1	1
13.4	8	1907									-1	11	6	4	4	1	0	1	2	1	0	1	0	-1	0	1	1	2	3	3	5	6	4	2	0	1	1	1	2	2	1	1
13.1	8	1908										25	10	6	5	2	0	1	2	1	0	1	0	-1	1	1	1	2	3	4	5	6	5	2	0	1	1	1	2	2	1	1
14.9	10	1909											-4	-2	-1	-3	-4	-3	0	-2	-3	-1	-2	-3	-1	-1	0	1	2	3	4	5	4	2	-1	0	0	0	2	2	1	1
13.5	9	1910												-1	1	-3	-4	-2	0	-1	-3	-1	-2	-3	-1	-1	0	1	2	3	4	6	4	2	-1	0	0	1	2	2	1	1
14.2	9	1911													3	-4	-5	-3	0	-1	-3	-1	-2	-3	-1	-1	0	1	2	3	5	6	4	2	-1	0	0	1	2	2	1	1
13.7	10	1912														-11	-9	-4	0	-2	-4	-1	-2	-4	-1	-1	0	1	2	3	5	6	4	2	-2	0	0	0	2	2	1	1
11.9	9	1913															-7	-1	4	0	-2	1	-1	-3	0	0	1	2	3	4	6	7	5	3	-1	0	1	1	3	3	1	1
11.1	8	1914																5	9	2	-1	2	0	-2	1	1	1	3	4	5	7	8	6	3	-1	1	1	1	3	3	2	2
11.5	8	1915																	14	1	-3	1	-1	-3	0	0	1	3	4	5	7	8	6	3	-1	0	1	1	3	3	1	2
12.0	9	1916																		-10	-11	-2	-4	-6	-2	-1	-1	2	3	4	6	8	6	2	-2	0	0	1	2	2	1	1
8.8	8	1917																			-11	2	-2	-5	0	0	1	3	4	6	8	10	7	3	-1	0	1	1	3	3	1	2
6.4	8	1918																				16	3	-3	3	3	3	6	7	8	10	12	9	5	-1	1	2	2	4	4	2	2
6.5	9	1919																					-9	-12	-1	-1	1	4	5	7	10	11	8	4	-2	0	1	1	3	3	1	2
5.3	8	1920																						-14	3	2	3	7	8	10	12	14	10	5	-1	1	2	2	4	4	2	2
5.4	7	1921																							23	12	10	13	13	14	16	18	13	7	0	2	3	3	6	5	3	3
7.5	8	1922																								2	4	10	11	13	15	18	12	6	-2	1	1	2	4	4	2	2
7.9	9	1923																									6	14	14	16	18	20	14	6	-2	0	1	2	5	4	2	2
8.4	9	1924																										23	18	19	22	24	15	6	-3	0	1	1	5	4	2	2
10.1	11	1925																											13	17	21	24	14	3	-7	-3	-1	-1	3	3	0	1
11.7	13	1926																												22	26	27	14	2	-9	-5	-3	-2	2	2	-1	0
15.9	15	1927																													30	30	11	-3	-15	-9	-6	-5	0	0	-3	-2
21.8	20	1928																														30	3	-12	-23	-15	-11	-9	-3	-3	-5	-4
27.6	26	1929																															-19	-28	-36	-23	-18	-14	-7	-6	-9	-7
21.5	21	1930																																-35	-43	-25	-17	-13	-5	-4	-7	-6
14.7	14	1931																																	-49	-19	-10	-6	3	2	-2	-2
8.1	7	1932																																		29	19	15	22	17	9	8
11.1	9	1933																																			10	9	20	15	5	5
12.2	10	1934																																				8	25	16	4	4
13.1	11	1935																																					46	21	3	3
19.3	15	1936																																						0	-14	-8
18.5	15	1937																																							-25	-12
13.9	11	1938																																								5
		S&P 500 Index Value	6	8	8	7	7	9	10	8	8	10	9	9	10	9	8	8	9	8	8	9	8	7	8	9	9	11	13	15	20	26	21	14	7	9	10	11	15	15	11	12
		S&P 500 Div Yield (%)	4	4	4	5	5	4	4	5	5	4	5	5	5	6	6	5	5	7	8	6	7	7	6	6	6	5	5	5	4	4	5	7	9	5	5	4	4	5	6	5
		CPI (Inflation %)	7	-2	6	1	0	1	3	6	-4	8	4	-8	7	3	1	1	8	17	18	15	16	-11	-6	2	0	2	1	-2	-2	0	-2	-9	-10	-5	3	2	1	4	-2	-1
		GDP (Nominal %)	4	13	3	6	5	9	8	3	-7	12	5	3	8	5	-6	6	27	20	26	11	13	-16	0	17	3	4	7	-1	1	7	-12	-16	-23	-4	17	11	14	10	-6	7
		GDP (Annualized %)						+5.3%										+10.0%										+3.0%										-1.1%				
		GDP (Real %)	2	12	2	3	4	9	4	-2	-5	12	0	3	6	4	-8	4	16	0	8	-3	-2	-4	7	14	3	2	6	1	2	7	-9	-6	-13	-1	11	9	13	5	-3	8
		GDP (Annualized %)						+3.9%										+2.9%										+3.4%										+1.0%				

Yr: 19	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
TO P/E Ratio	15	12	9	11	11	13	14	11	11	10	11	12	12	12	14	18	18	16	15	18	17	20	19	20	23	23	21	22	21	19	15	17	18	16	11	10	12	10	9	9
TO S&P 500 Index	11	10	9	12	12	15	17	15	16	15	18	22	24	25	30	40	47	44	46	57	56	66	62	70	81	88	85	92	98	98	83	98	109	107	83	86	102	98	96	103
1900	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1901	1	1	0	1	1	2	2	1	1	1	2	2	2	2	3	3	3	3	3	3	3	4	3	4	4	4	4	4	4	4	3	4	4	4	3	3	3	3	3	3
1902	1	0	0	1	1	1	2	1	1	1	2	2	2	2	2	3	3	3	3	3	3	4	3	4	4	4	4	4	4	4	3	4	4	4	3	3	3	3	3	3
1903	1	1	0	1	1	2	2	2	2	2	2	2	3	2	3	3	4	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4
1904	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1905	1	0	0	1	1	1	2	1	1	1	2	2	2	2	2	3	3	3	3	3	3	4	3	4	4	4	4	4	4	4	3	4	4	4	3	3	3	3	3	3
1906	0	0	0	0	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3	3	4	3	4	4	4	4	4	4	4	3	4	4	4	3	3	3	3	3	3
1907	1	1	0	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1908	1	1	0	1	1	2	2	2	2	2	2	2	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1909	0	0	0	0	1	1	2	1	1	1	2	2	2	2	3	3	3	3	3	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	3	3	3
1910	1	0	0	1	1	1	2	1	1	1	2	2	2	2	3	3	4	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4	3	4
1911	1	0	0	1	1	1	2	1	1	1	2	2	2	2	3	3	4	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1912	1	0	0	1	1	1	2	1	1	1	2	2	2	2	3	3	4	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1913	1	1	0	1	1	2	2	2	2	2	2	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	4	5	5	4	4	4	4	4	4	4	4	4	4	4
1914	1	1	0	1	2	2	2	2	2	2	2	3	3	3	3	4	4	4	4	4	4	5	4	5	5	5	5	5	5	5	4	5	5	5	4	4	4	4	4	4
1915	1	1	0	1	1	2	2	2	2	2	2	3	3	3	3	4	4	4	4	4	4	5	4	5	5	5	5	5	5	5	4	5	5	5	4	4	4	4	4	4
1916	1	0	0	1	1	2	2	2	2	1	2	2	3	3	3	4	4	4	4	4	4	4	4	4	5	5	4	5	5	5	4	4	4	4	4	4	4	4	4	4
1917	1	1	0	1	1	2	2	2	2	2	2	3	3	3	3	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	4	5	5	5	4	4	4	4	4	4
1918	2	1	1	2	2	3	3	2	2	2	3	3	4	3	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	5	4	4	4
1919	1	1	0	1	1	2	2	2	2	2	2	3	3	3	4	4	5	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4
1920	2	1	0	2	2	3	3	2	2	2	3	3	4	3	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	5	5	4	4
1921	3	2	1	2	3	3	4	3	3	3	3	4	4	4	5	5	6	5	5	6	6	6	6	6	6	6	6	6	6	6	5	5	6	5	5	5	5	5	5	5
1922	2	1	0	2	2	3	3	2	2	2	3	3	4	4	4	5	5	5	5	5	5	5	5	5	6	6	5	5	5	5	5	5	5	5	4	4	5	5	4	4
1923	1	1	0	1	2	3	3	2	2	2	3	3	4	4	4	5	5	5	5	5	5	6	5	5	6	6	5	6	6	5	5	5	5	5	5	5	5	5	4	5
1924	1	0	0	1	2	2	3	2	2	2	3	3	4	4	4	5	5	5	5	5	5	6	5	5	6	6	5	6	6	5	5	5	5	5	5	5	5	5	4	5
1925	0	-1	-1	0	1	2	2	1	1	1	2	3	3	3	3	4	5	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4
1926	-1	-2	-2	-1	0	1	2	1	1	1	2	2	3	3	3	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	4	5	5	5	4	4	4	4	4	4
1927	-3	-3	-4	-2	-1	0	1	0	0	0	1	2	2	2	2	4	4	4	4	4	4	4	4	4	5	5	4	5	5	5	4	4	4	4	4	4	4	4	4	4
1928	-5	-5	-6	-4	-3	-2	-1	-1	-1	-1	0	0	1	1	2	3	3	3	3	3	3	4	3	4	4	4	4	4	4	4	3	4	4	4	3	3	3	3	3	3
1929	-8	-8	-8	-6	-5	-3	-2	-3	-3	-3	-2	-1	0	0	1	2	2	2	2	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1930	-6	-7	-7	-5	-4	-2	-1	-2	-2	-2	-1	0	1	1	1	3	3	3	3	4	3	4	3	4	4	4	4	4	4	4	3	4	4	4	3	3	3	3	3	3
1931	-2	-3	-4	-1	-1	1	2	1	1	1	2	2	3	3	3	5	5	5	5	5	5	5	5	5	6	6	5	5	5	5	5	5	5	5	4	4	5	4	4	4
1932	6	4	2	5	5	6	7	5	5	5	6	6	7	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	6	6	6	6	6	6
1933	3	1	0	3	3	4	5	4	4	3	4	5	5	5	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	6	6	6	6	6	5	5
1934	2	0	-2	2	2	4	5	3	3	3	4	5	5	5	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7	6	5	5	6	5	5	5
1935	1	-1	-3	1	2	4	4	3	3	3	4	5	5	5	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7	6	5	5	6	5	5	5
1936	-8	-9	-9	-4	-3	0	1	0	0	0	1	2	3	3	4	5	6	5	5	6	5	6	6	6	6	6	6	6	6	6	5	5	6	5	5	5	5	5	4	5
1937	-11	-11	-11	-5	-3	0	1	0	0	0	1	3	3	3	4	6	6	5	5	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	5	5	5	5	5	5
1938	-2	-5	-7	0	1	4	5	3	3	3	4	5	6	5	6	8	8	7	7	8	7	8	7	7	8	8	7	7	7	7	6	7	7	7	6	6	6	6	5	5
1939	-9	-10	-10	-1	1	4	5	3	3	2	4	5	6	5	6	8	8	8	7	8	8	8	7	8	8	8	8	8	8	7	6	7	7	7	6	6	6	6	5	6
1940		-11	-11	1	3	7	8	5	4	4	5	7	7	6	7	9	9	9	8	9	8	9	8	8	9	9	8	8	8	8	7	7	7	7	6	6	6	6	6	6
1941			-12	8	8	11	12	8	7	6	7	9	9	8	9	11	11	10	10	10	10	10	9	9	10	10	9	9	9	9	8	8	8	8	7	7	7	7	6	6
1942				33	20	20	18	12	10	8	10	11	11	10	11	13	13	12	11	12	11	11	10	10	11	11	10	10	10	9	8	9	9	8	7	7	8	7	7	7
1943					8	15	14	7	6	5	7	9	9	8	9	11	11	10	10	11	10	10	9	9	10	10	9	9	9	9	8	8	8	8	7	6	7	7	6	6
1944						22	17	7	6	4	7	9	9	8	9	11	12	10	10	11	10	10	9	9	10	10	9	9	9	9	8	8	8	8	7	6	7	6	6	6
1945							13	0	1	0	4	7	7	6	8	10	11	9	9	10	9	10	9	9	9	9	9	9	8	8	7	7	8	7	6	6	6	6	6	6
1946								-11	-5	-4	2	5	6	5	7	10	11	9	9	10	9	9	8	9	9	9	8	8	8	8	7	7	7	7	6	6	6	6	6	6
1947									2	0	7	10	10	8	10	13	13	11	11	12	11	11	10	10	10	10	10	9	9	9	8	8	8	8	6	6	7	6	6	6
1948										-2	9	13	12	10	11	15	15	12	12	13	11	12	10	11	11	11	10	10	10	9	8	8	8	8	7	7	7	7	6	6
1949											21	21	17	13	14	18	17	14	13	14	13	13	11	11	12	12	11	11	10	10	8	9	9	8	7	7	7	7	7	7
1950												21	15	10	13	17	17	13	12	13	12	12	11	11	11	11	10	10	10	9	8	8	8	8	6	6	7	6	6	6
1951													10	5	10	16	16	12	11	13	11	11	10	10	10	10	9	9	9	9	7	8	8	7	6	6	6	6	6	6
1952														1	10	18	17	13	11	13	11	12	10	10	11	10	9	9	9	8	7	8	8	7	6	6	6	6	5	5
1953															20	28	24	16	13	15	12	13	11	11	11	11	10	10	10	9	7	8	8	8	6	6	6	6	6	6
1954																36	25	14	12	14	11	12	10	10	11	10	9	9	9	8	7	7	7	7	5	5	6	5	5	5
1955																	15	5	4	9	7	9	6	7	8	8	7	7	7	6	5	6	6	6	4	4	4	4	4	4
1956																		-5	0	7	5	7	5	6	7	7	6	6	6	6	4	5	5	5	3	3	4	4	3	4
1957																			4	14	8	11	7	8	9	9	8	8	7	7	5	6	6	6	4	4	4	4	4	4
1958																				24	10	13	8	9	10	10	8	8	8	7	5	6	6	6	4	4	4	4	4	4
1959																					-3	7	3	5	7	7	6	6	6	5	3	5	5	5	2	3	3	3	3	3
1960																						19	6	8	10	10	7	7	7	6	4	5	6	5	3	3	4	3	3	3
1961																							-6	3	7	7	5	6	6	5	3	4	5	4	2	2	3	2	2	2
1962																								12	14	12	8	8	8	7	4	5	6	5	2	3	4	3	3	3
1963																									16	12	7	7	7	6	3	4	5	4	2	2	3	2	2	2
1964																										8	2	4	5	4	0	3	4	3	0	1	2	1	1	2
1965																											-3	2	4	3	-1	2	3	3	-1	0	1	1	1	1
1966																												8	7	5	-1	3	4	3	0	0	2	1	1	1
1967																													7	3	-3	2	3	3	-1	-1	1	1	0	1
1968																														-1	-8	0	3	2	-3	-2	0	0	0	0
1969																															-15	0	4	2	-3	-2	1	0	0	1
1970																																18	15	9	0	1	3	2	2	2
1971																																	11	5	-6	-3	1	0	0	1
1972																																		-2	-13	-8	-2	-2	-2	-1
1973																																			-23	-10	-2	-2	-2	-1
1974																																				4	11	6	4	4
1975																																					18	7	4	5
1976																																						-4	-3	0
1977																																							-2	2
1978																																								7
S&P 500 Index Value	11	10	9	12	12	15	17	15	16	15	18	22	24	25	30	40	47	44	46	57	56	66	62	70	81	88	85	92	98	98	83	98	109	107	83	86	102	98	96	103
S&P 500 Div Yield (%)	6	7	7	5	5	4	4	5	6	7	7	7	6	6	5	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	4	3	3	3	4	4	4	4	5	5
CPI (Inflation %)	1	5	11	6	2	2	8	14	8	-1	1	8	2	1	1	0	1	3	3	1	2	1	1	1	1	2	3	3	4	5	6	4	3	6	11	9	6	7	8	11
GDP (Nominal %)	10	26	28	22	10	2	0	10	10	-1	10	16	6	6	0	9	6	5	2	8	4	4	7	6	7	8	10	6	9	8	5	9	10	11	8	9	11	11	13	12
GDP (Annualized %)						+11.3%										+6.7%										+6.9%										+9.9%				
GDP (Real %)	9	18	19	17	8	-1	-12	-1	4	-1	9	8	4	5	-1	7	2	2	-1	7	3	3	6	4	6	6	7	3	5	3	0	3	5	6	-1	0	5	5	6	3
GDP (Annualized %)						+5.6%										+4.2%										+4.5%										+3.2%				

Yr: 19	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	2000	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	FROM
P/E Ratio	9	8	7	10	9	11	13	16	14	17	16	18	20	21	20	23	26	31	36	42	42	32	26	24	26	26	26	27	21	17	21	22	21	23	25	26	26	30	31	29	30	37	31	29	
S&P 500 Index	119	128	120	160	160	187	236	287	266	323	335	376	416	452	460	542	670	873	1086	1327	1427	1194	994	965	1131	1207	1310	1477	1220	948	1140	1268	1379	1644	1931	2061	2095	2449	2746	2913	3218	4273	4099	4284	
1900	4	4	4	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	5	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	5	Rodin Completes 'The Thinker'
1901	3	4	3	4	4	4	4	4	4	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	First Electric Typewriter
1902	3	4	3	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	Navy Installs Radio
1903	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	5	Wright Bros Fly
1904	4	4	4	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	Crayola & Jell-O
1905	4	4	3	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	Pen Gets Pocket Clip
1906	3	4	3	4	4	4	4	4	4	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	S.F. Earthquake
1907	4	4	4	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	Photocopier Marketed
1908	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	Model T Introduced
1909	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	5	Chlorine In Drinking Water
1910	4	4	4	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	Electric Range Invented
1911	4	4	4	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	Sherman Anti-Trust Act; Airmail Begins
1912	4	4	4	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	Titanic Sinks; U.S. Radio Act
1913	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	5	5	6	6	6	6	5	5	5	5	5	5	6	6	5	6	6	6	6	6	6	6	Income Tax & Federal Reserve
1914	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	WWI Starts; First Transcon. Phone Call
1915	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	Americans Avg 40 Phone Calls A Year
1916	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	5	6	6	6	6	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	Keds & Electric Clock Invented
1917	4	4	4	5	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	US Enters WWI; Einstein Theorizes Lasers
1918	5	5	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	7	7	6	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	WWI Ends
1919	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	Prohibition; Shortwave Radio; Dial Phones
1920	5	5	4	5	5	5	5	5	5	6	5	6	6	6	6	6	6	6	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	Women's Right To Vote
1921	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	World Series On Radio; Quartz Crystals
1922	5	5	5	5	5	5	5	6	5	6	6	6	6	6	6	6	6	6	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	100,000 Radios Made In U.S.; 3 Frequencies
1923	5	5	5	5	5	5	5	6	5	6	6	6	6	6	6	6	6	6	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	6	6	500,000 Radios Made; Neon Signs
1924	5	5	5	5	5	5	5	6	5	6	6	6	6	6	6	6	6	6	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	6	6	2.5 Million Radios Made; Frozen Food Invented
1925	4	4	4	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	7	7	6	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	Commercial Picture Fax By Radio In U.S.
1926	4	4	4	5	4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	7	7	6	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	First Publicly Shown 'Talkie'
1927	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	2-Way Radio Phone: U.S. To London ($15/min)
1928	3	4	3	4	4	4	4	5	4	5	5	5	5	5	5	5	5	6	6	6	6	6	5	5	5	5	6	6	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	Teletype Machine; Test TV In 3 Homes
1929	3	3	3	3	3	4	4	4	4	4	4	4	4	5	5	5	5	5	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	Crash of '29; Car Radio
1930	4	4	3	4	4	4	4	5	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	5	6	6	6	6	5	5	5	5	5	5	6	6	5	6	6	6	6	6	6	6	Photo Flash Bulbs
1931	5	5	4	5	5	5	5	6	5	6	6	6	6	6	6	6	6	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	6	6	Radios In 40% Of Homes; Scotch Tape
1932	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	Radar; 8 mm Cameras; Electric Eye Scanner
1933	6	6	5	6	6	6	6	7	6	7	7	7	7	7	7	7	7	7	8	8	8	7	7	7	7	7	7	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	End of Prohibition; FM Radio; Wallboard
1934	6	6	5	6	6	6	6	7	6	7	6	7	7	7	7	7	7	7	8	8	8	7	7	7	7	7	7	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	Radios In 50% Of Homes; AP Wirephoto
1935	6	6	5	6	6	6	6	7	6	7	6	7	7	7	7	7	7	7	8	8	8	7	7	7	7	7	7	7	7	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	Social Security Act Passed
1936	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	6	7	7	7	7	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	BBC First TV Service, 3 Hours A Day
1937	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	6	7	7	7	7	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	Hindenburg Airship Crash
1938	6	6	5	6	6	6	7	7	6	7	7	7	7	7	7	7	7	8	8	8	8	8	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	National Minimum Wage Enacted
1939	6	6	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	WW II Begins; Regular TV In U.S.; Helicopter
1940	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	7	8	7	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	8	7	7	FM Radio; Radar; 1st Social Security Check
1941	7	7	6	7	7	7	7	8	7	8	7	8	8	8	8	8	8	8	9	9	9	8	8	8	8	8	8	8	7	7	7	7	7	7	8	7	7	8	8	8	8	8	8	8	Pearl Harbor Attack; 2-Way Police Radio
1942	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	8	8	8	8	8	8	8	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	U.S. Office Of Censorship Due To War
1943	7	7	6	7	7	7	7	8	7	8	7	8	8	8	8	8	8	8	9	9	9	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	Phone Line Repeaters Help Service
1944	6	6	6	7	7	7	7	8	7	8	7	8	8	8	7	8	8	8	9	9	9	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	D-Day, Normandy
1945	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	9	9	8	8	7	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	World War II Ends; FCC Sets VHF Channels
1946	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	9	9	8	8	7	7	7	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	8	7	7	ENIAC, 1st Computer; First Copy Machine Sold
1947	6	6	6	7	7	7	7	8	7	8	7	8	8	8	8	8	8	8	9	9	9	8	8	8	8	8	8	8	7	7	7	7	7	7	8	7	7	8	8	8	8	8	8	8	Transistor Invented; Microwave Oven
1948	7	7	6	7	7	7	7	8	7	8	8	8	8	8	8	8	8	9	9	9	9	9	8	8	8	8	8	8	8	7	7	7	7	7	8	8	7	8	8	8	8	8	8	8	Israel Established; RCA High Speed Fax
1949	7	7	6	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	8	8	8	8	8	8	8	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	NATO Established; Network TV In U.S.
1950	6	6	6	7	7	7	7	8	7	8	8	8	8	8	8	8	8	9	9	9	9	9	8	8	8	8	8	8	7	7	7	7	7	7	8	8	7	8	8	8	8	8	8	8	Korean War Begins; Credit Card Created
1951	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	8	8	8	9	9	9	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	Color TV; Modern Plastic Invented
1952	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	9	9	9	8	8	7	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	Phone Area Codes; EDVAC Computer
1953	6	6	6	6	6	7	7	7	7	7	7	7	8	8	7	8	8	8	9	9	9	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	8	7	8	8	8	8	Korean War Ends; Magnetic Core Memory
1954	5	6	5	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	9	9	9	8	8	7	8	8	8	8	7	6	7	7	7	7	7	7	7	7	7	7	7	8	8	7	TVs In 54% Of Homes; Transistor Radios
1955	4	5	4	5	5	5	6	6	6	6	6	6	6	7	6	7	7	8	8	8	8	8	7	7	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	Tests Begin On Digital Fiber Optics
1956	4	5	4	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	8	8	8	7	7	7	7	7	7	7	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	Transatlantic Phone Cable; The Pager
1957	4	5	4	5	5	5	6	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	7	7	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	Sputnik, First Satellite; EEC Formed
1958	4	5	4	5	5	5	6	7	6	6	6	7	7	7	7	7	7	8	8	9	9	8	7	7	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	Stereo LP Records; Data On Phone Lines
1959	4	4	3	4	4	5	5	6	5	6	6	6	6	6	6	6	7	7	8	8	8	7	7	7	7	7	7	7	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	COBOL; Microchip; Plain Paper Xerox
1960	4	4	4	5	4	5	6	6	6	6	6	6	6	7	6	7	7	8	8	8	8	8	7	7	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	90% Homes w/TVs; Laser; Weather Satellite
1961	3	3	3	4	4	4	5	6	5	6	6	6	6	6	6	6	7	7	8	8	8	7	7	7	7	7	7	7	6	6	6	6	6	6	7	7	6	7	7	7	7	7	7	7	Berlin Wall Built; IBM Selectric Typewriter
1962	4	4	3	5	4	5	6	6	6	6	6	6	7	7	6	7	7	8	8	9	9	8	7	7	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	Cuban Missile Crisis; Mariner II At Venus
1963	3	3	3	4	4	5	5	6	5	6	6	6	6	6	6	7	7	8	8	9	8	8	7	7	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	Kennedy Killed, Income Tax 91% To 70%
1964	2	3	2	4	3	4	5	6	5	6	6	6	6	6	6	6	7	7	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	6	7	7	6	7	7	7	7	7	7	7	Vietnam Begins; Home VCR
1965	2	2	2	3	3	4	5	6	5	6	5	6	6	6	6	6	7	7	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	6	7	7	6	7	7	7	7	7	7	7	First Minicomputer; Car Phones; Hypertext
1966	2	3	2	4	4	4	5	6	5	6	6	6	6	6	6	7	7	8	8	9	9	8	7	7	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	Dow @ 1,000; 8-Tracks In Cars; Fax Machine
1967	2	2	2	4	3	4	5	6	5	6	6	6	6	6	6	7	7	8	8	9	9	8	7	7	7	7	7	7	7	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	Floppy Disk; Cordless Phones; Dolby
1968	2	2	1	3	3	4	5	6	5	6	6	6	6	6	6	7	7	8	8	9	9	8	7	7	7	7	7	7	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	Intelsat Global Satellite Link; Intel 1KB RAM
1969	2	2	2	4	3	4	5	6	5	6	6	6	6	7	6	7	7	8	9	9	9	8	7	7	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7	7	8	7	7	Neil Armstrong Walks On Moon; ATMs
1970	4	4	3	5	5	6	7	8	7	7	7	7	8	8	7	8	8	9	10	10	10	9	8	8	8	8	8	8	7	6	7	7	7	7	7	7	7	7	8	8	8	8	8	8	Barcodes; First Internet Connections
1971	2	3	2	4	4	5	6	7	6	7	7	7	7	7	7	7	8	9	9	10	10	9	8	7	8	8	8	8	7	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	Microchip, Price Controls; Answering Machine
1972	1	2	1	4	3	4	6	7	6	7	6	7	7	7	7	7	8	9	9	10	10	9	8	7	8	8	8	8	7	6	6	6	7	7	7	7	7	7	7	7	7	8	8	7	Dow Closes Above 1,000; Pong; HBO
1973	1	2	1	4	4	5	6	7	6	7	7	7	7	7	7	8	8	9	10	10	10	9	8	8	8	8	8	8	7	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	U.S. Leaves Vietnam; International Internet
1974	6	6	5	8	7	8	9	10	9	10	9	9	9	9	9	9	10	11	11	12	12	10	9	9	9	9	9	9	8	7	8	8	8	8	8	8	8	8	8	8	8	9	9	8	Nixon Resigns; Wage & Price Controls End
1975	7	7	5	8	7	8	10	11	9	10	9	10	10	10	9	10	10	11	12	12	12	11	9	9	9	9	9	9	8	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	Microsoft; Optical Videodisk Demo
1976	4	5	3	7	6	7	9	10	8	9	9	9	9	9	9	9	10	11	11	12	12	10	9	9	9	9	9	9	8	7	7	7	8	8	8	8	8	8	8	8	8	9	9	8	Apple I; Cray-1; Home Satellite Dish
1977	7	7	4	9	7	8	10	11	9	10	10	10	10	10	10	10	11	12	12	13	12	11	10	9	9	9	9	9	8	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	Elvis Dies; TRS-80 PC; Fiber Optic Call
1978	11	10	6	11	9	10	12	13	11	12	11	11	11	11	10	11	11	12	13	13	13	12	10	10	10	10	10	10	9	8	8	8	8	8	9	9	8	9	9	9	9	9	9	9	Modems; Cell Phone Tests; Intel 16-bit Chip
1979	15	11	5	12	9	10	13	14	11	12	11	11	11	11	10	11	12	13	13	14	13	12	10	10	10	10	10	10	9	8	8	8	8	8	9	9	8	9	9	9	9	9	9	9	CompuServe Online; VisiCalc Spreadsheet
1980		8	0	11	8	9	12	13	11	12	11	11	11	11	10	11	11	12	13	14	13	12	10	10	10	10	10	10	9	7	8	8	8	8	9	9	8	9	9	9	9	9	9	9	CPI 13.5%; CNN; Sony Camcorder
1981			-7	12	8	10	13	14	11	12	11	11	11	11	10	11	12	13	13	14	14	12	10	10	10	10	10	10	9	7	8	8	8	8	9	9	8	9	9	9	9	9	9	9	IBM PC Introduced; 300 bps Modems
1982				34	16	16	19	19	14	15	14	14	13	13	12	12	13	14	15	15	15	13	11	10	11	11	10	11	9	8	8	8	8	9	9	9	9	9	9	9	9	10	9	9	Dow Over 1,000; Compact Disk; 5.5 Mil. PCs
1983					0	8	14	16	11	12	11	11	11	11	10	11	12	13	14	14	14	12	10	9	10	10	10	10	8	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	AT&T Breakup; 288k Chips; Domain Names
1984						16	21	21	13	15	13	13	13	12	11	12	13	14	15	15	15	13	11	10	10	10	10	10	9	7	8	8	8	8	9	9	8	9	9	9	9	9	9	9	3 1/2" Floppy; Intel 32-bit; 1 MB Chips
1985							27	24	12	15	12	12	12	12	11	11	12	14	14	15	15	12	10	10	10	10	10	10	9	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	Cellphones; 2400k Modems; Windows OS
1986								21	6	11	9	10	10	10	9	10	11	13	14	14	14	11	9	9	9	9	9	9	8	6	7	7	7	7	8	8	8	8	8	8	8	9	8	8	Laser Printers; TV On 7 Hrs/Day In U.S.
1987									-7	6	5	7	8	8	7	8	10	12	13	14	13	11	9	8	8	8	8	9	7	6	6	6	6	7	7	7	7	7	8	8	8	8	8	8	Stock Market Crash; 50% Have Cable TV
1988										22	12	12	12	11	10	11	12	14	15	16	15	12	10	9	9	9	9	9	8	6	7	7	7	8	8	8	8	8	8	8	8	9	8	8	Transatlantic Fiberoptic Cable; Internet T1
1989											4	8	9	9	7	9	11	13	14	15	14	12	9	8	9	9	9	9	7	6	6	6	7	7	7	7	7	8	8	8	8	8	8	8	Poland Solidarity; Nintendo Profits @ $1 Bil.
1990												12	11	11	8	10	12	15	16	17	16	12	9	8	9	9	9	9	7	6	6	7	7	7	8	8	7	8	8	8	8	9	8	8	World Wide Web (www)
1991													11	10	7	10	12	15	16	17	16	12	9	8	9	9	9	9	7	5	6	6	6	7	7	7	7	7	8	8	8	8	8	8	Gulf War; USSR Breakup; 75% Have VCRs
1992														9	5	9	13	16	17	18	17	12	9	8	9	9	9	9	7	5	6	6	6	7	7	7	7	7	8	8	8	8	8	8	65 Mil. PCs; 200k On AOL; CDs > Cassettes
1993															2	10	14	18	19	20	18	13	9	8	9	9	9	9	7	5	6	6	6	7	7	7	7	8	8	8	8	8	8	8	Pentium Chip; HTML; V-Chip
1994																18	21	24	24	24	21	15	10	9	9	9	9	9	7	5	6	6	6	7	7	7	7	8	8	8	8	9	8	8	First WTC Attack; Satellite TV; 33% w/PC
1995																	24	27	26	25	21	14	9	7	9	8	8	9	6	4	5	5	6	6	7	7	7	7	7	7	7	8	8	8	NAFTA Enacted; Dot.com; Internet Audio
1996																		30	27	26	21	12	7	5	7	7	7	7	5	3	4	4	5	5	6	6	6	6	7	7	7	8	7	7	100k Web Sites; 30 Mil In U.S. On Internet
1997																			24	23	18	8	3	2	4	4	5	5	3	1	2	3	3	4	5	5	5	5	6	6	6	7	6	6	Internet Video; 43% In U.S. Have PCs
1998																				22	15	3	-2	-2	1	2	2	3	1	-1	0	1	2	3	4	4	4	4	5	5	5	6	6	6	Russia Debt Default; 75 Mil U.S. On Internet
1999																					8	-5	-9	-8	-3	-2	0	1	-1	-3	-1	0	0	2	3	3	3	3	4	4	4	5	5	5	Satellite Can See 3' Objects On Earth
2000																						-16	-17	-12	-6	-3	-1	0	-2	-4	-2	-1	0	1	2	2	2	3	4	4	4	5	5	5	Dow Hits 11,723; NASDAQ Hits 5,048
2001																							-17	-10	-2	0	2	4	0	-3	-1	1	1	3	4	4	4	5	5	5	5	7	6	6	WTC Attack (9/11); >50% U.S. On Internet; iPod
2002																								-3	7	7	7	8	3	-1	2	3	3	5	6	6	5	6	7	7	7	8	7	7	HDTV Grows; Wi-Fi Laptops; DVD Sales>VCR
2003																									17	12	11	11	5	0	2	3	4	5	7	7	6	7	7	7	7	9	8	8	Iraq Conflict; Home Networks; T-Bills @ <1%
2004																										7	8	9	2	-3	0	2	3	4	6	6	5	6	7	7	7	8	7	7	Hybrid Cars; Flat Panel TVs; Blogs; VoIP
2005																											9	11	0	-6	-1	1	2	4	5	5	5	6	7	6	7	8	7	7	Hurricanes; $70 Oil; Podcasts; Housing Boom
2006																												13	-4	-10	-3	-1	1	3	5	5	5	6	6	6	7	8	7	7	YouTube; Dow High; Pluto Demoted; Fed Pause
2007																													-17	-20	-8	-4	-1	2	4	4	4	5	6	6	6	8	7	7	iPhone; Sub-Prime; Going Green; Facebook
2008																														-22	-3	1	3	6	8	8	7	8	8	8	8	10	9	9	Recession; Wall Street Crisis; $144 Oil; Obama
2009																															20	16	13	15	15	14	12	13	13	12	12	13	12	11	H1N1; Jackson Dies; GM Bankruptcy; Digital TV
2010																																11	10	13	14	13	11	12	12	11	11	13	11	11	iPad; Greece Debt Crisis; Twitter; QE2
2011																																	9	14	15	13	11	12	12	11	11	13	11	11	The Cloud; Arab Spring; OWS; E-books
2012																																		19	18	14	11	12	12	11	11	13	12	11	Google Glass; Mars Rover; iPhone5; Fiscal Cliff
2013																																			17	12	8	10	11	10	10	13	11	10	Fed Taper; Detroit Ch 9; NSA; ACA Launch; Nest
2014																																				7	4	8	9	9	9	12	10	9	Ebola; ISIS; Amazon Drones; Wearable Tech
2015																																					2	9	10	9	9	13	10	10	ZIRP Ends; Iran Deal; Refugees; Driverless Car
2016																																						17	15	12	11	15	12	11	Brexit; Trump; <$30 Oil; Cyborg Stingray
2017																																							12	9	10	15	11	10	Bitcoin Mania; Robot Citizen; Teleporting; WattUp
2018																																								6	8	16	11	9	Apple $1T; Tax Reform; Zero Carbon Nat Gas; 5G
2019																																									10	21	12	10	UPS Drones; Quantum Supremacy; Starlink L1
2020																																										33	13	10	Covid; Zoom; ZIRP II; mRNA Vaccine; Dow 30k
2021																																											-4	0	Inflation; Bitcoin ETFs; Metaverse; Kirk To Space
2022																																												5	ChatGPT; Pig Heart; Genome 100%; World 8B
2023																																													Everything AI; WHO Covid End; India Moon/#1 Pop
S&P 500 Index Value	119	128	120	160	160	187	236	287	266	323	335	376	416	452	460	542	670	873	1086	1327	1427	1194	994	965	1131	1207	1310	1477	1220	948	1140	1268	1379	1644	1931	2061	2095	2449	2746	2913	3218	4273	4099	4284	
S&P 500 Div Yield (%)	5	5	6	4	5	4	3	3	3	3	3	3	3	3	3	2	2	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	4.0% Avg (S&P 500 Div Yield %)
CPI (Inflation %)	13	10	6	3	4	4	2	4	4	5	5	4	3	3	3	3	3	2	2	2	3	3	2	2	3	3	3	3	4	0	2	3	2	1	2	0	1	2	2	2	1	5	8	4	3.2% Avg (CPI Inflation %)
GDP (Nominal %)	9	12	4	9	11	7	6	6	8	8	6	3	6	5	6	5	6	6	6	6	6	3	3	5	7	7	6	5	2	-2	4	4	4	4	4	4	3	4	5	4	-1	11	9	6	
GDP (Annualized %)						+7.9%										+5.5%										+4.2%										+4.0%						+6.2%			+6.1% Avg (GDP Nominal %)
GDP (Real %)	0	3	-2	5	7	4	3	3	4	4	2	0	4	3	4	3	4	4	4	5	4	1	2	3	4	3	3	2	0	-3	3	2	2	2	3	3	2	2	3	2	-2	6	2	2	
GDP (Annualized %)						+3.1%										+3.2%										+1.9%										+2.4%						+2.0%			+3.2% Avg (GDP Real %)

2023 MATRIX: AVERAGE ANNUAL DATA

NOTES:

1) Numbers reflect the percentage annual rate of return from the starting period to the ending period
2) Returns include index returns & exclude dividends, transaction costs/fees (bid/ask spread, commissions, fees, etc.), and taxes; nominal returns include inflation (see assumptions)
3) Red: <0%; Pink: 0% - 3%; Blue: 3% - 7%; Light Green: 7% - 10%; Dark Green: >10%
4) Black type reflects P/E ratio increasing over the period; White type reflects P/E ratio decreasing over the period
5) The black diagonal line reflects the boundary of 20-year periods
6) S&P 500 & P/E reflect the methodology popularized by Robert Shiller with average daily index annually and other related data (P/E10)
7) Other data and information developed from various sources and believed to be reliable

LEGEND				
Red		<	0.0%	
Pink	0.0%	-	3.0%	
Blue	3.0%	-	7.0%	
Light Green	7.0%	-	10.0%	
Dark Green		>	10.0%	

White Numbers: Decreasing P/E Ratio

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