

Bogle Sources of Return Model - 1915-2014

10-Year Period Ending December 31	STOCKS						BONDS	
	ESTIMATED PARAMETERS / MODEL INPUTS					ACTUAL	INPUT	ACTUAL
	Investment Return Initial Yield	Earnings Growth	Speculative Return Initial P/E Ratio	Annual Return	Total Return	Total Return on S&P 500	Initial Yield on 10-Year Treasury	Return on Inter-Term U.S. Gov't Bonds
1915	3.5%	4.0%	14.2	0.7%	8.1%	4.5%	3.5%	3.2%
1916	4.1	5.4	12.9	1.7	11.1	5.3	3.7	3.6
1917	6.7	6.8	10.0	4.4	17.9	6.7	3.9	3.9
1918	4.4	7.4	15.6	-0.1	11.7	5.0	3.9	4.0
1919	4.3	7.5	13.6	1.3	13.1	5.2	3.8	3.7
1920	5.2	7.5	12.4	2.2	14.9	4.0	3.9	3.9
1921	5.2	7.3	15.4	0.0	12.5	4.8	3.9	5.0
1922	5.1	7.0	13.4	1.5	13.6	6.9	4.0	5.5
1923	6.0	6.5	12.8	2.0	14.4	8.0	4.1	5.6
1924	5.7	5.7	14.1	0.9	12.3	11.2	4.1	5.9
1925	4.5	4.8	10.8	3.6	12.9	10.7	4.2	5.9
1926	5.7	4.1	6.4	8.9	18.7	11.0	4.1	6.0
1927	10.1	3.7	5.3	10.7	24.6	16.2	4.4	6.0
1928	7.2	3.7	8.0	6.0	16.9	18.5	4.8	5.5
1929	5.9	3.6	9.6	3.9	13.4	15.4	5.5	6.2
1930	7.5	3.3	8.5	4.9	15.7	13.9	6.1	6.3
1931	6.3	2.8	25.2	-5.9	3.1	6.4	6.0	4.6
1932	5.8	2.3	12.7	0.8	8.9	2.7	5.1	5.1
1933	6.2	2.4	8.7	4.5	13.1	6.7	5.1	4.5
1934	5.4	2.8	10.9	1.9	10.1	4.1	5.0	4.7
1935	4.8	3.1	10.0	2.5	10.4	5.9	4.9	4.7
1936	5.1	2.6	10.9	1.4	9.1	7.8	3.6	4.5
1937	4.4	1.7	15.7	-2.4	3.8	0.0	3.4	4.2
1938	3.7	1.2	16.8	-3.0	1.9	-0.9	4.0	4.7
1939	4.5	1.2	13.3	-0.6	5.1	-0.1	3.6	4.6
1940	6.3	1.5	16.0	-2.4	5.5	1.8	2.9	4.2
1941	9.7	2.1	13.8	-0.9	10.9	6.4	4.1	4.5
1942	7.3	2.5	16.6	-2.7	7.1	9.3	3.0	3.8
1943	4.4	1.7	22.7	-5.5	0.6	7.2	3.3	3.9
1944	4.9	0.5	18.9	-3.6	1.8	9.3	2.5	3.2
1945	3.6	-0.4	17.2	-2.7	0.5	8.4	1.6	2.8
1946	4.2	-0.8	16.7	-2.3	1.1	4.4	1.3	2.5
1947	7.3	-0.7	9.8	3.2	9.7	9.6	1.1	2.5
1948	4.0	-1.2	19.8	-3.8	-1.0	7.3	1.5	2.0
1949	5.0	-2.3	13.7	-0.2	2.5	9.2	1.0	1.8
1950	6.4	-2.9	10.0	2.9	6.4	13.4	0.6	1.6
1951	8.1	-3.0	7.6	5.8	10.9	17.3	0.8	1.6
1952	6.2	-2.4	9.2	3.5	7.3	17.1	0.7	1.6
1953	5.3	-0.8	12.2	0.6	5.1	14.3	1.5	1.6
1954	4.9	0.6	14.1	-0.8	4.6	17.1	1.4	1.7

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	Investment Return		Speculative Return		Total Return	Total Return on S&P 500	Initial Yield on 10-Year Treasury	Return on Inter-Term U.S. Gov't Bonds
Initial Yield	Earnings Growth	Initial P/E Ratio	Annual Return					
1955	3.8	1.3	18.1	-3.2	1.9	16.7	1.0	1.4
1956	4.7	1.7	14.3	-0.6	5.8	18.4	1.1	1.3
1957	5.6	2.0	9.3	3.8	11.4	16.4	1.3	1.9
1958	6.1	3.2	6.6	7.5	16.8	20.1	1.5	1.6
1959	6.9	5.1	7.1	6.6	18.6	19.4	1.2	1.3
1960	7.4	6.3	7.0	6.8	20.6	16.2	1.6	2.4
1961	6.0	6.9	9.6	3.3	16.2	16.4	2.2	2.5
1962	5.4	7.1	10.9	1.9	14.4	13.4	2.4	2.9
1963	5.8	7.0	9.9	2.8	15.6	15.9	2.2	2.8
1964	4.4	7.4	12.6	0.4	12.2	12.8	1.7	2.9
1965	3.6	8.3	12.5	0.5	12.4	11.1	2.8	3.1
1966	3.7	9.7	13.6	-0.3	13.2	9.2	3.6	3.6
1967	4.4	10.5	12.0	1.0	16.0	12.8	2.8	2.9
1968	3.3	10.2	18.5	-3.3	10.1	10.0	3.8	3.5
1969	3.1	9.3	17.4	-2.7	9.7	7.8	5.0	3.5
1970	3.4	8.6	17.4	-2.7	9.4	8.2	3.3	3.9
1971	2.8	7.8	22.5	-5.0	5.6	7.0	3.8	4.6
1972	3.4	7.3	17.1	-2.3	8.4	9.9	3.9	4.6
1973	3.1	6.8	18.5	-3.1	6.8	6.0	4.1	4.9
1974	3.0	6.3	18.5	-3.2	6.1	1.2	4.2	5.1
1975	3.0	5.4	17.7	-2.7	5.7	3.3	4.7	5.7
1976	3.5	4.4	14.7	-0.9	7.0	6.6	4.6	6.5
1977	3.1	3.9	17.9	-2.7	4.2	3.6	5.7	6.6
1978	2.9	4.0	18.5	-3.0	3.9	3.2	6.2	6.5
1979	3.5	4.3	15.8	-1.4	6.3	5.9	7.9	7.0
1980	3.5	4.5	17.6	-2.4	5.7	8.5	6.5	5.7
1981	3.1	4.9	17.4	-2.1	6.0	6.5	5.9	5.8
1982	2.7	5.1	18.3	-2.3	5.5	6.7	6.4	8.0
1983	3.6	5.3	11.6	2.3	11.2	10.7	6.9	8.3
1984	5.4	5.6	7.5	6.7	17.6	14.8	7.4	9.1
1985	4.1	5.7	11.1	2.5	12.3	14.3	7.8	10.3
1986	3.9	5.8	10.6	2.9	12.5	13.8	6.8	10.5
1987	5.0	6.0	8.6	5.0	15.9	15.3	7.8	10.7
1988	5.3	6.1	7.8	6.0	17.4	16.3	9.2	11.0
1989	5.2	6.4	7.3	6.8	18.4	17.6	10.3	11.9
1990	4.6	6.9	9.0	4.5	16.1	13.9	12.4	12.5
1991	5.4	7.5	8.1	5.7	18.5	17.6	14.0	13.1
1992	4.9	7.8	11.0	2.4	15.1	16.2	10.4	11.0
1993	4.3	7.7	11.7	1.8	13.9	14.9	11.8	11.4
1994	4.6	7.6	9.9	3.6	15.8	14.4	11.6	9.4

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	Investment Return Initial Yield	Earnings Growth	Speculative Return Initial P/E Ratio	Annual Return	Total Return	Total Return on S&P 500	Initial Yield on 10-Year Treasury	Return on Inter-Term U.S. Gov't Bonds
1995	3.8	7.8	14.2	-0.1	11.5	14.9	9.0	9.1
1996	3.3	7.8	17.2	-1.9	9.1	15.3	7.2	7.8
1997	3.7	7.5	13.8	0.4	11.5	18.1	8.8	8.3
1998	3.5	7.3	11.6	2.0	12.9	19.2	9.1	8.7
1999	3.2	7.0	15.2	-0.8	9.4	18.2	7.9	7.2
2000	3.7	6.4	15.4	-0.9	9.1	17.5	8.1	7.5
2001	3.1	5.5	24.3	-5.4	3.3	12.9	6.7	6.7
2002	2.8	4.8	22.8	-4.6	3.0	9.3	6.7	7.3
2003	2.7	4.7	21.3	-3.9	3.5	11.1	5.8	6.4
2004	2.9	4.5	14.9	-0.4	7.0	12.1	7.8	7.2
2005	2.2	4.6	18.1	-2.4	4.5	9.1	5.6	5.7
2006	2.0	5.0	19.2	-2.9	4.2	8.4	6.4	5.8
2007	1.6	5.7	24.2	-5.0	2.3	5.9	5.8	6.0
2008	1.4	5.7	31.6	-7.3	-0.2	-1.4	4.7	6.2
2009	1.2	5.7	29.7	-6.4	0.4	-0.9	6.5	6.2
2010	1.2	6.2	26.6	-5.1	2.3	1.4	5.1	5.6
2011	1.4	6.6	46.4	-9.9	-2.0	2.9	5.1	5.8
2012	1.8	6.9	32.6	-6.3	2.3	7.1	3.8	4.8
2013	1.6	7.0	22.2	-2.4	6.1	7.4	4.3	4.4
2014	1.6	7.3	20.5	-1.5	7.5	7.7	4.2	4.5
1915-2014	4.5	4.7	14.9	0.2	9.4	10.1	4.8	5.4
1951-2014	3.8	5.7	15.8	-0.2	9.3	11.5	5.5	5.9