2011 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)

2011 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 including inflation (see assumptions)
3) Red: <0%; Pink: 0% - 3%; Blue: 3% - 7%; Lt Green: 7% - 10%; Dk 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&P500 index & P/E ratio reflect the methodology popularized by Robert Shiller of average daily prices annually, including related data
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%
Lt Green	7.0%	-	10.0%
Dk Green		>	10.0%

White Numbers: Decreasing P/E Ratio

CRESTMONT RESEARCH

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FROM	P/E	S&P500	Yr: 19
TO			00
	18.6	6	1900
	22.7	8	1901
	22.0	8	1902
	17.6	7	1903
	16.3	7	1904
	19.3	9	1905
	18.7	10	1906
	13.4	8	1907
	13.1	8	1908
	14.9	10	1909
	13.5	9	1910
	14.2	9	1911
	13.7	10	1912
	11.9	9	1913
	11.1	8	1914
	11.5	8	1915
	12.0	9	1916
	8.8	8	1917
	6.4	8	1918
	6.5	9	1919
	5.3	8	1920
	5.4	7	1921
	7.5	8	1922
	7.9	9	1923
	8.4	9	1924
	10.1	11	1925
	11.7	13	1926
	15.9	15	1927
	21.8	20	1928
	27.6	26	1929
	21.5	21	1930
	14.7	14	1931
	8.1	7	1932
	11.1	9	1933
	12.2	10	1934
	13.1	11	1935
	19.3	15	1936
	18.5	15	1937
	13.9	11	1938
	15.6	12	1939
	14.7	11	1940
	12.2	10	1941
	9.2	9	1942
	11.0	12	1943
	11.3	12	1944
	13.3	15	1945
	14.0	17	1946
	11.2	15	1947
	10.7	16	1948
	9.9	15	1949
	11.2	18	1950
	12.0	22	1951
	12.5	24	1952
	12.0	25	1953
	13.7	30	1954
	17.5	40	1955
	18.3	47	1956
	15.6	44	1957
	15.1	46	1958
	18.4	57	1959
	17.4	56	1960
	20.5	66	1961
	18.8	62	1962
	20.3	70	1963
	22.6	81	1964
	23.3	88	1965
	21.3	85	1966
	21.6	92	1967
	21.5	98	1968
	19.4	98	1969
	15.2	83	1970
	16.9	98	1971
	17.8	109	1972
	16.1	107	1973
	10.9	83	1974
	10.2	86	1975
	11.5	102	1976
	10.4	98	1977
	9.4	96	1978
	8.9	103	1979
	8.8	119	1980
	8.5	128	1981
	7.3	120	1982
	9.6	160	1983
	9.4	160	1984
	10.7	187	1985
	13.4	236	1986
	16.0	287	1987
	14.4	266	1988
	16.6	323	1989
	16.5	335	1990
	17.9	376	1991
	19.6	416	1992
	20.7	452	1993
	20.5	460	1994
	22.7	542	1995
	25.9	670	1996
	31.0	873	1997
	36.0	1086	1998
	42.1	1327	1999
	41.7	1427	2000
	32.1	1194	2001
	25.9	994	2002
	24.1	965	2003
	26.4	1131	2004
	26.0	1207	2005
	26.0	1310	2006
	26.8	1477	2007
	20.8	1220	2008
	16.9	948	2009
	20.7	1140	2010
		Yr: 19	11
S&P 500 Index Value			
S&P500 Div Yield (%)			
CPI (Inflation %)			
GDP (Nominal %)			
GDP (Annualized %)			
GDP (Real %)			
GDP (Annualized %)			

P/E Ratio	
S&P 500 Index	
←"TO" Year	
FROM	Rodin Completes 'The Thinker'
1901	First Electric Typewriter
1902	Navy Installs Radio
1903	Wright Bros Fly
1904	Crayola & Jell-O
1905	Pen Gets Pocket Clip
1906	S.F. Earthquake
1907	Photocopier Marketed
1908	Model T Introduced
1909	Chlorine In Drinking Water
1910	Electric Range Invented
1911	Sherman Anti-Trust Act; Airmail Begins
1912	Titanic Sinks; U.S. Radio Act
1913	Income Tax & Federal Reserve
1914	WWI Starts; First Transcon. Phone Call
1915	Americans Avg 40 Phone Calls A Year
1916	Keds & Electric Clock Invented
1917	US Enters WWI; Einstein Theorizes Lasers
1918	WWI Ends
1919	Prohibition; Shortwave Radio; Dial Phones
1920	Women's Right To Vote
1921	World Series On Radio; Quartz Crystals
1922	100,000 Radios Made In U.S.; 3 Frequencies
1923	500,000 Radios Made; Neon Signs
1924	2.5 Million Radios Made; Frozen Food Invented
1925	Commercial Picture Fax By Radio In U.S.
1926	First Publicly Shown 'Talkie'
1927	2-Way Radio Phone: U.S. To London ($15/min)
1928	Teletype Machine; Test TV In 3 Homes
1929	Crash of '29; Car Radio
1930	Photo Flash Bulbs
1931	Radios In 40% Of Homes; Scotch Tape
1932	Radar; 8 mm Cameras; Electric Eye Scanner
1933	End of Prohibition; FM Radio; Wallboard
1934	Radios In 50% Of Homes; AP Wirephoto
1935	Social Security Act Passed
1936	BBC First TV Service, 3 Hours A Day
1937	Hindenburg Airship Crash
1938	National Minimum Wage Enacted
1939	Regular TV Broadcasts In U.S.; Helicopter
1940	World War II Begins; Radar Invented
1941	Pearl Harbor Attack; 2-Way Police Radio
1942	U.S. Office Of Censorship Due To War
1943	Phone Line Repeaters Help Service
1944	D-Day, Normandy
1945	World War II Ends; FCC Sets VHF Channels
1946	ENIAC, 1st Computer; First Copy Machine Sold
1947	Transistor Invented; Microwave Oven
1948	Israel Established; RCA High Speed Fax
1949	NATO Established; Network TV In U.S.
1950	Korean War Begins; Credit Card Created
1951	Color TV; Modern Plastic Invented
1952	Phone Area Codes; EDVAC Computer
1953	Korean War Ends; Magnetic Core Memory
1954	TVs In 54% Of Homes; Transistor Radios
1955	Tests Begin On Digital Fiber Optics
1956	Transatlantic Phone Cable; The Pager
1957	Sputnik, First Satellite; EEC Formed
1958	Stereo LP Records; Data On Phone Lines
1959	COBOL; Microchip; Plain Paper Xerox
1960	90% Homes w/TVs; Laser; Weather Satellite
1961	Berlin Wall Built; IBM Selectric Typewriter
1962	Cuban Missile Crisis; Mariner II At Venus
1963	Kennedy Killed, Income Tax 91% To 70%
1964	Vietnam Begins; Home VCR
1965	First Minicomputer; Car Phones; Hypertext
1966	Dow @ 1,000; 8-Tracks In Cars; Fax Machine
1967	Floppy Disk; Cordless Phones; Dolby
1968	Intelsat Global Satellite Link; Intel 1KB RAM
1969	Neil Armstrong Walks On Moon; ATMs
1970	Barcodes; First Internet Connections
1971	Microchip, Price Controls; Answering Machine
1972	Dow Closes Above 1,000; Pong; HBO
1973	U.S. Leaves Vietnam; International Internet
1974	Nixon Resigns; Wage & Price Controls End
1975	Microsoft; Optical Videodisk Demo
1976	Apple I; Cray-1; Home Satellite Dish
1977	Elvis Dies; TRS-80 PC; Fiber Optic Call
1978	Modems; Cell Phone Tests; Intel 16-bit Chip
1979	CompuServe Online; VisiCalc Spreadsheet
1980	CPI 13.5%; CNN; Sony Camcorder
1981	IBM PC Introduced; 300 bps Modems
1982	Dow Over 1,000; Compact Disk; 5.5 Mil. PCs
1983	AT&T Breakup; 288k Chips; Domain Names
1984	3 1/2" Floppy; Intel 32-bit; 1 MB Chips
1985	Cellphones; 2400k Modems; Windows OS
1986	Laser Printers; TV On 7 Hrs/Day In U.S.
1987	Stock Market Crash; 50% Have Cable TV
1988	Transatlantic Fiberoptic Cable; Internet T1
1989	Poland Solidarity; Nintendo Profits @ $1 Bil.
1990	World Wide Web (www)
1991	Gulf War; USSR Breakup; 75% Have VCRs
1992	65 Mil. PCs; 200k On AOL; CDs > Cassettes
1993	Pentium Chip; HTML; V-Chip
1994	First WTC Attack; Satellite TV; 33% w/PC
1995	NAFTA Enacted; Dot.com; Internet Audio
1996	100k Web Sites; 30 Mil In U.S. On Internet
1997	Internet Video; 43% In U.S. Have PCs
1998	Russia Debt Default; 75 Mil U.S. On Internet
1999	Satellite Can See 3' Objects On Earth
2000	Dow Hits 11,723; NASDAQ Hits 5,048
2001	WTC Attack (9/11); >50% U.S. On Internet; iPod
2002	HDTV Grows; Wi-Fi Laptops; DVD Sales>VCR
2003	Iraq Conflict; Home Networks; T-Bills @ <1%
2004	Hybrid Cars; Flat Panel TVs; Blogs; VoIP
2005	Hurricanes; $70 Oil; Podcasts; Housing Boom
2006	YouTube; Dow High; Pluto Demoted; Fed Pause
2007	iPhone; Sub-Prime; Going Green; Facebook
2008	Recession; Wall Street Crisis; $144 Oil; Obama
2009	H1N1; Jackson Dies; GM Bankruptcy; Digital TV
2010	iPad; Greece Debt Crisis; Twitter; QE2
2011	The Cloud; Arab Spring; OWS; E-books
Avg	4.2%
Avg	3.2%
Avg	6.5%
Avg	3.4%