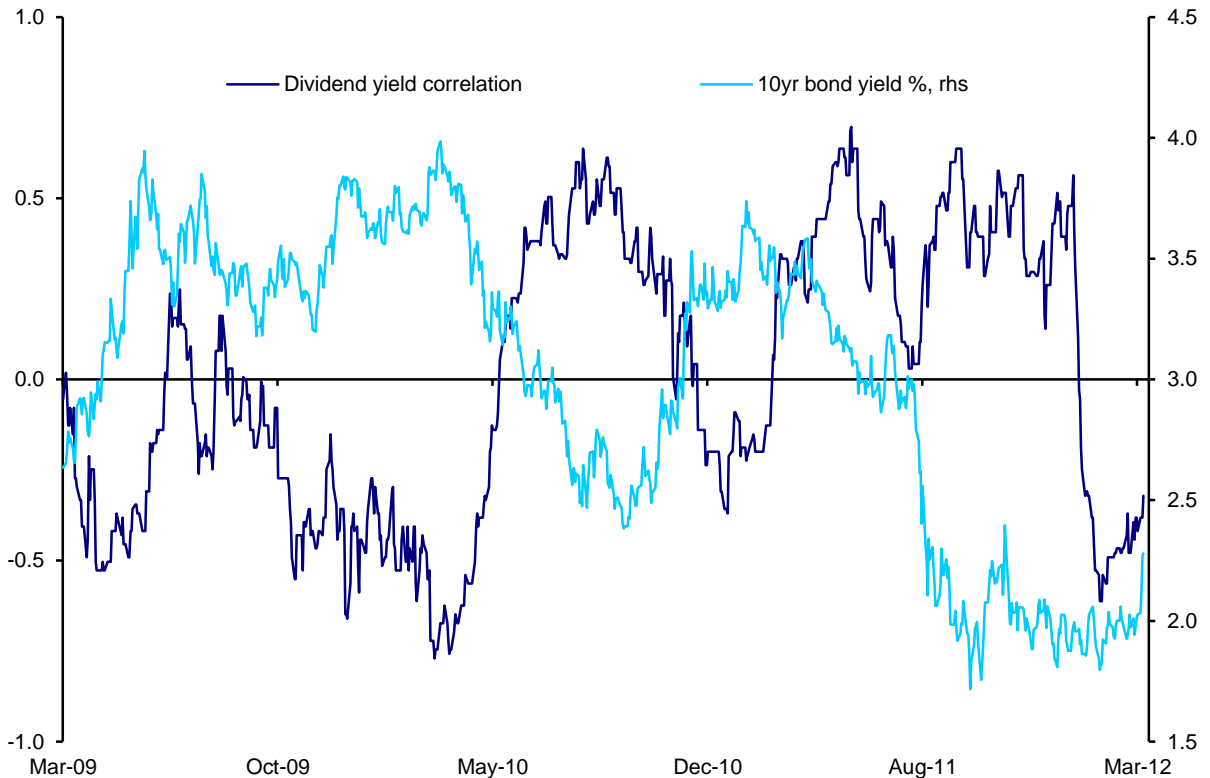


Pennsylvania Association of Public Employee Retirement Systems

Linda Bakhshian, CPA
Federated Investors

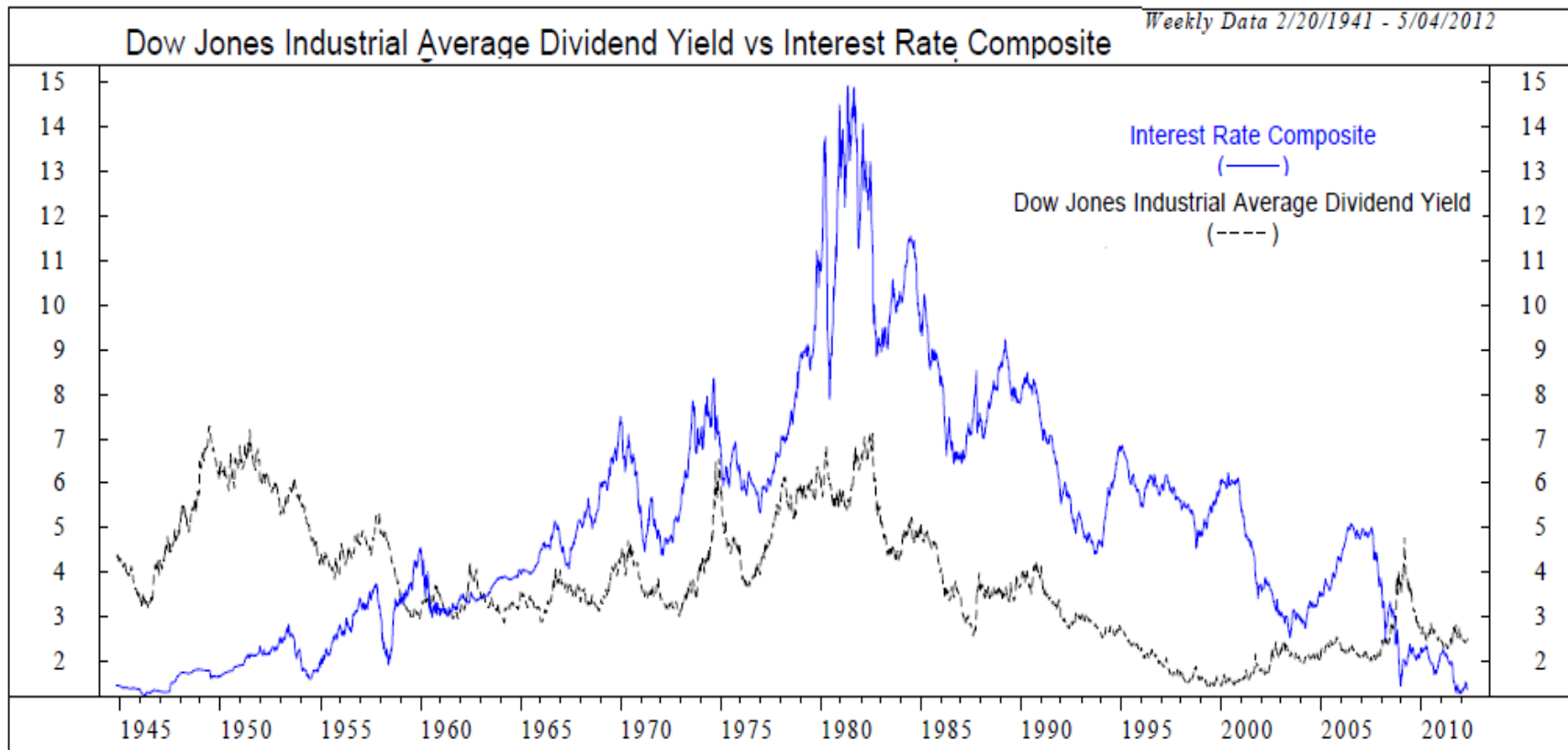
Federated Equity Management Company of Pennsylvania

Institutions have typically raised their dividend holdings when bond yields have been low



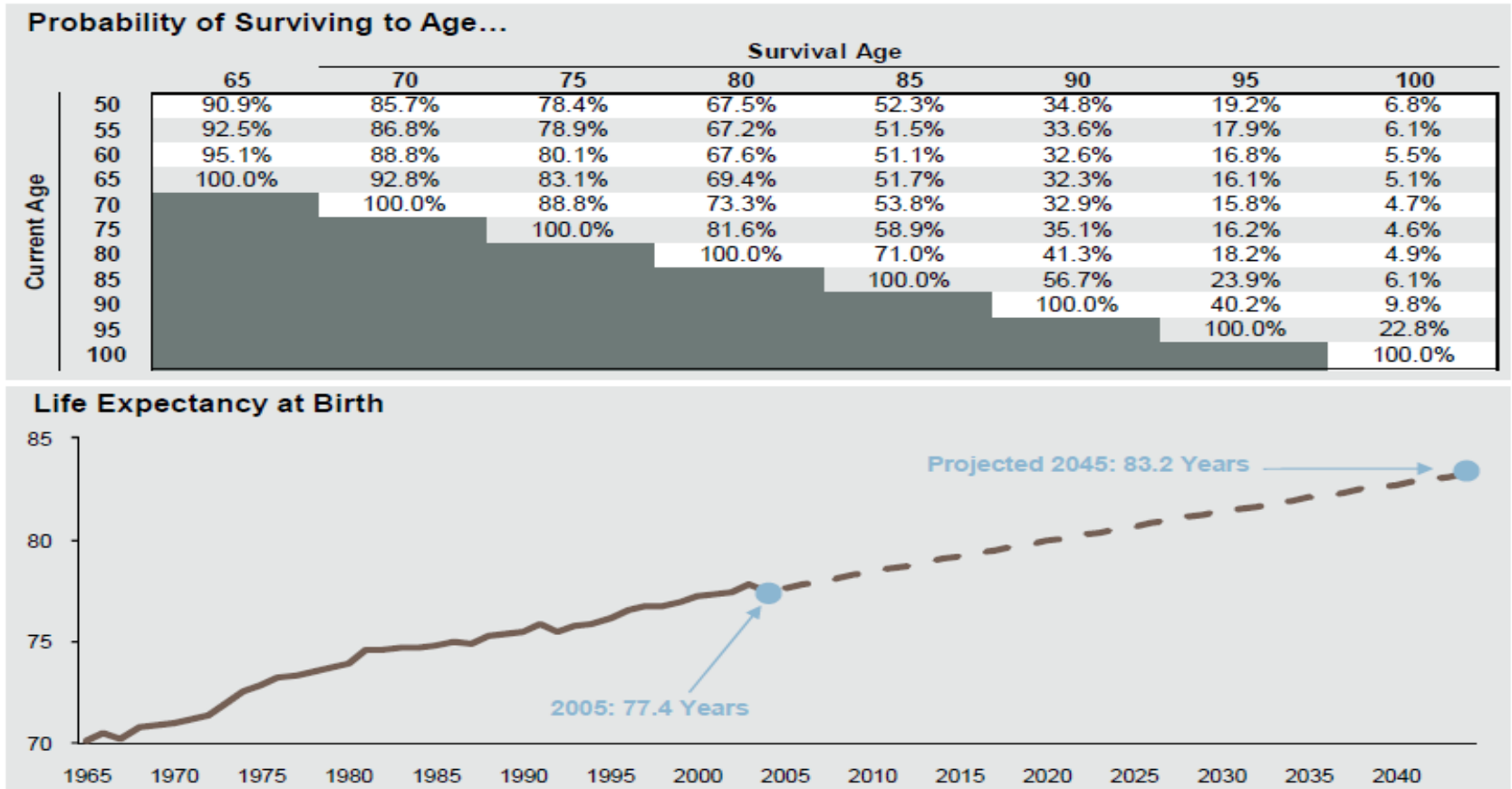
Source: state street research

Stocks or Bonds for Yield?



Beneficiary of Changing Demographics

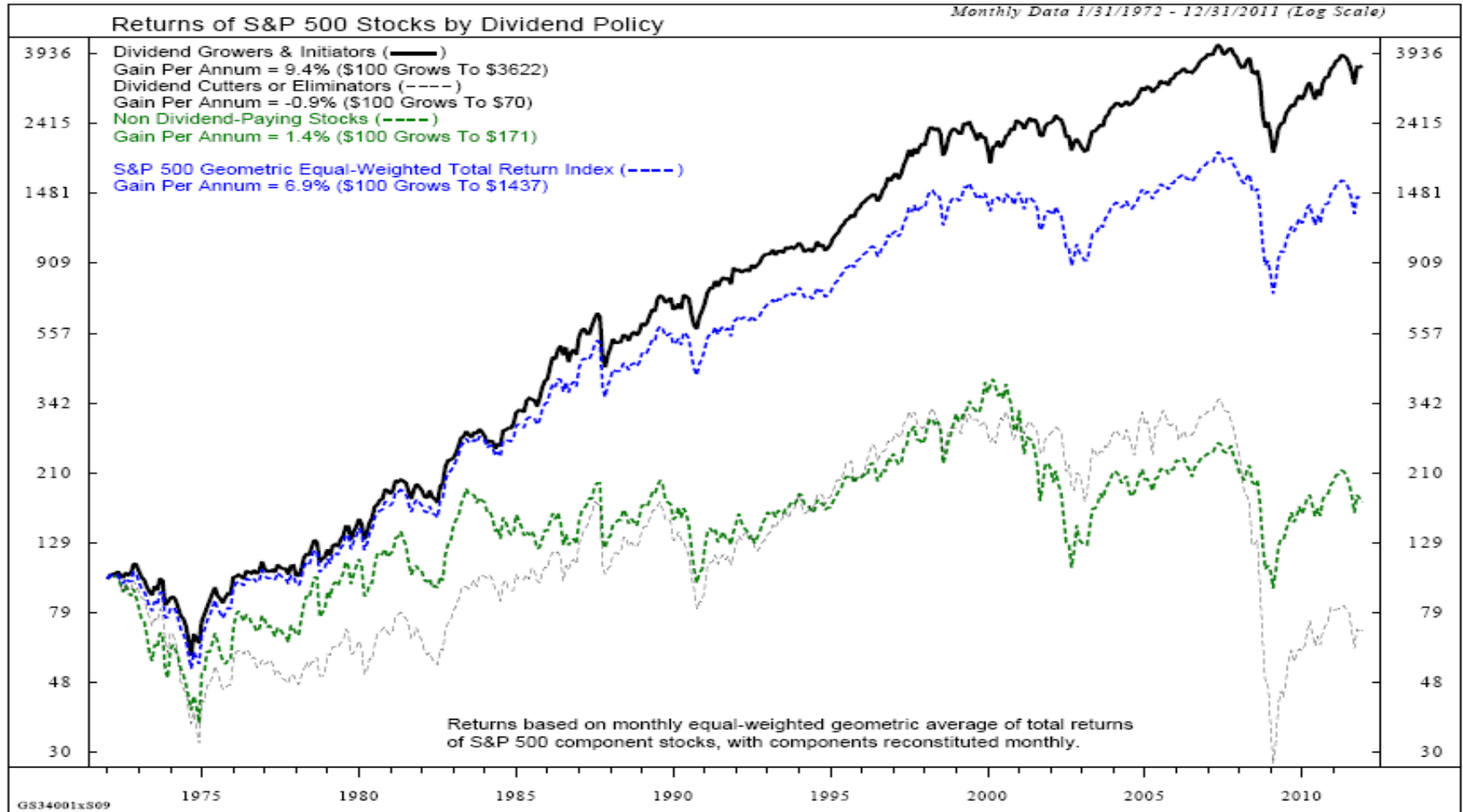
As life expectancy increases, so does the need for income



Source: J.P. Morgan Asset Management.; enters for Disease Control and Prevention. (Top) Projections assume a continuation of improvement observed in survival rates between 1990 and 2004. (Bottom) Graph uses historical data until 2005. Years 2006 through 2045 represent projections assuming a continuation of improvement observed in survival rates. Information as of 12/31/10.

Total Return of US Portfolios by Dividend Yield, 1972 – December 2011

Driver of shift towards dividend paying stocks is simple: Aging demographics, diversification, current income and proven record



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Past performance is no guarantee of future results. This chart is for illustrative purposes only and is not representative of performance for any particular investment. Investments cannot be made in an index. Data from 1/31/1972 to 12/30/2011.

Dividends are a Major Component of Total Returns in Modest Return Environments

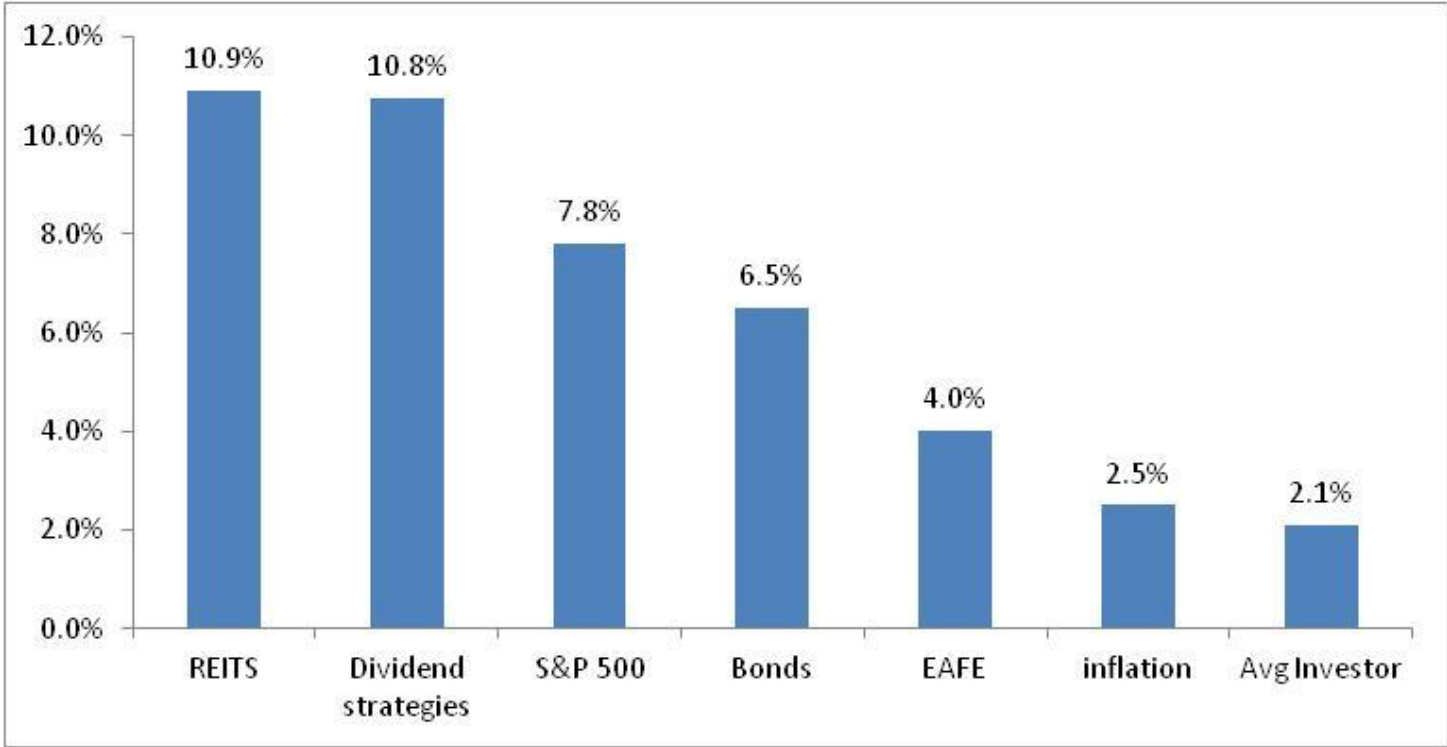
S&P 500 Returns Contribution of Dividends to Total Return (%) 1926-2011	As a Share of Total Return				
	Total Return	Income Return	Capital Appreciation	Dividend Income	Price Appreciation
1926-29	18.80	4.94	13.86	26.28	73.72
1930's	0.33	5.59	(5.26)	n/m	n/m
1940's	8.93	5.95	2.98	66.63	33.37
1950's	19.20	5.63	13.57	29.32	70.68
1960's	7.72	3.33	4.39	43.13	56.87
1970's	5.72	4.12	1.60	72.03	27.97
1980's	17.35	4.77	12.58	27.49	72.51
1990's	18.13	2.82	15.31	15.55	84.45
2000's	(0.96)	1.76	(2.72)	n/m	n/m
2009-2011	8.27	2.07	6.20	25.03	74.97
1926-2011	9.68	4.20	5.48	43.39	56.61

*Past performance is no guarantee of future results. Investments cannot be made in an index.
This chart is for illustrative purposes only and is not representative of performance for any specific investment.*

Source: Ned Davis Research, inc. Information as of 12/31/11

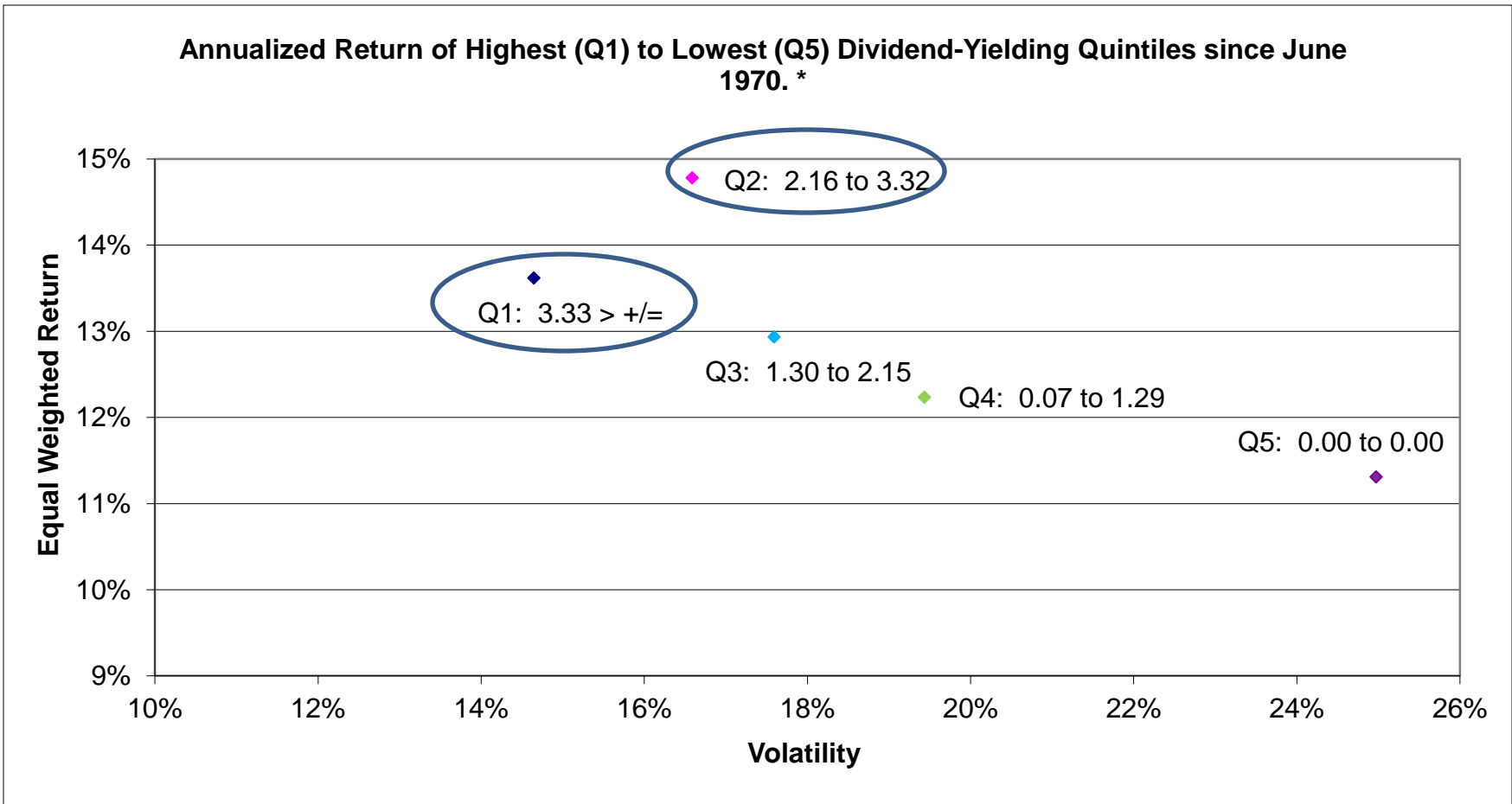
Dividend payers and Growers have outperformed most other asset classes

20-year Annualized Returns by Asset Class (1992 – 2011)



Source: JPM Asset Management.

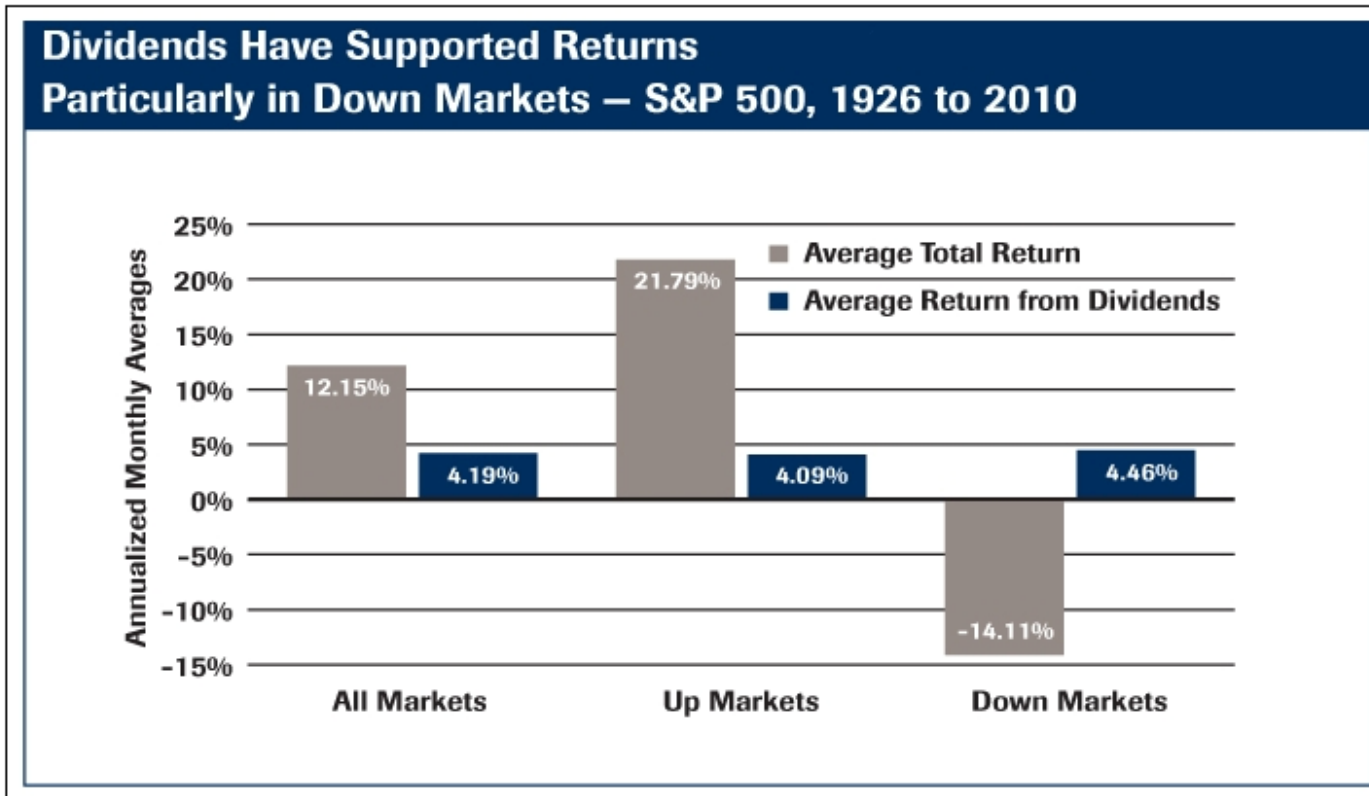
Value and Dividend strategy has historically outperformed with lower volatility



Source: FactSet March 2012 and Compustat.

**The Universe is the largest 1000 U.S. firms by Market Cap. The equal-weighted Quintiles are rebalanced monthly through March 2012. Each stock in the universe is ranked from highest to lowest by indicated dividend yield at the end of every month. Q5 represents stocks that do not pay any dividends, and the rest of the stocks are split equally in number to the remaining four Quintiles, where Q1 contains the stocks with the highest dividend yield and Q4 the lowest of those that pay dividends. The monthly returns are equally weighted within the Quintiles. Past performance is no guarantee of future results. This chart is for illustrative purposes only and is not representative of any specific investment. There are no guarantees that dividend paying stocks will continue to pay dividends. In addition, dividend paying stocks may not experience the same capital appreciation potential as non-dividend paying stocks. Investments cannot be made into an index. Standard Deviation is a statistical measure of the historical volatility, using monthly returns. The higher the standard deviation, the greater the volatility.*

Dividends Help Us To Sleep

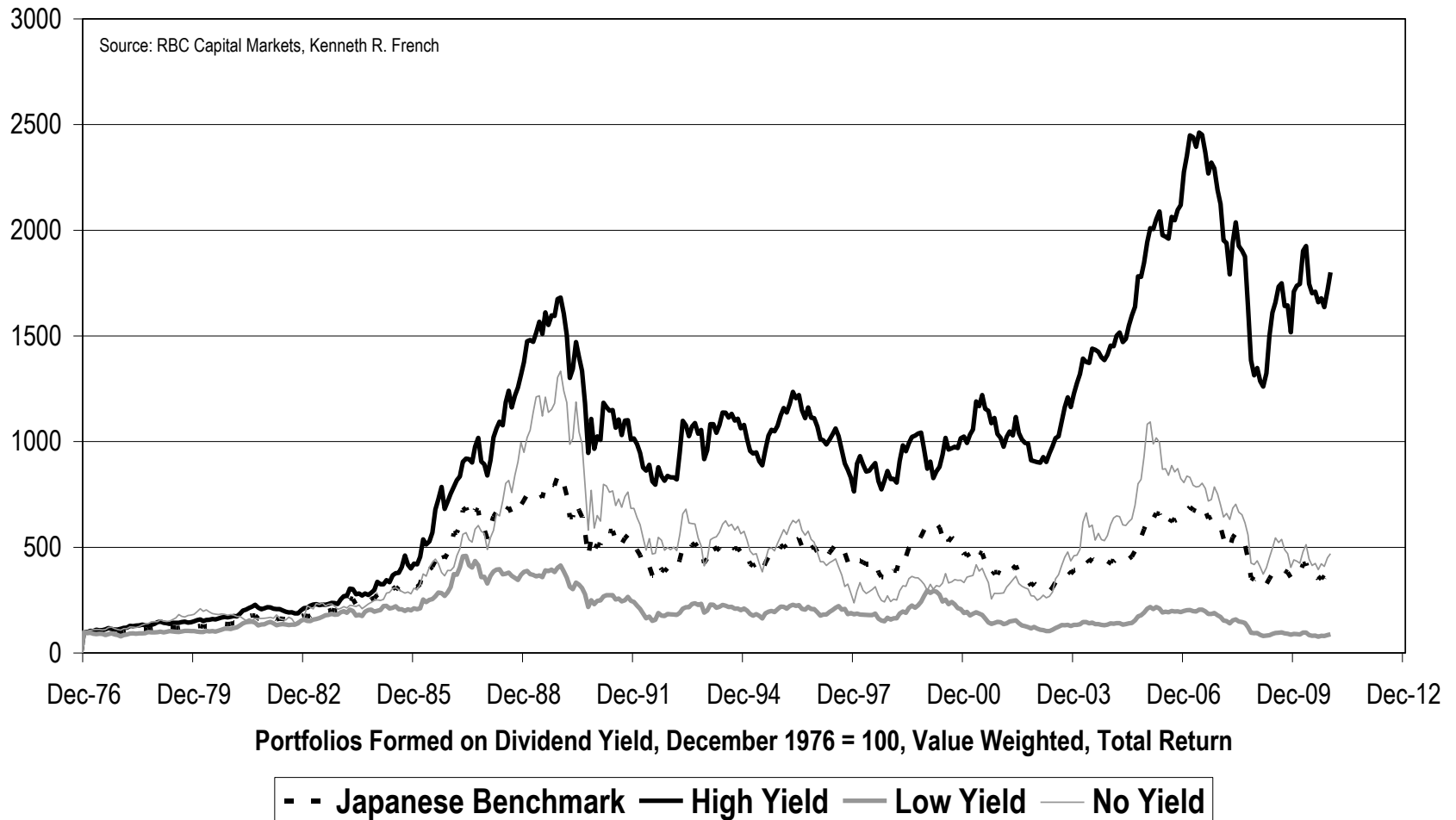


Source: Standard & Poors's. For the period beginning January 1, 1926, and ending December 31, 2010.

These charts are for illustrative purposes only and are not representative of the performance of any particular investment.

Past performance is no guarantee of future results

High Dividend Yields Worked During Japan's Lost Decades



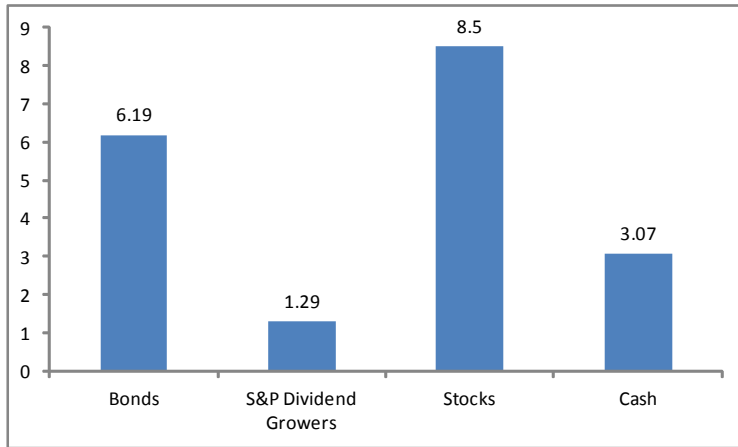
Past performance is no guarantee of future results. This chart is for illustrative purposes only and is not representative of performance for any specific investment. There are no guarantees that dividend paying stocks will continue to pay dividends. In addition, dividend paying stocks may not experience the same capital appreciation potential as non-dividend paying stocks.

Appendix

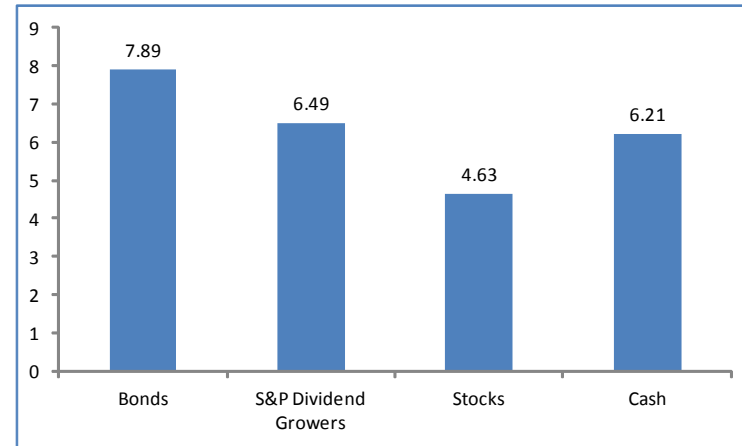
Returns in Different Inflation Environments – 40 years

Median Inflation 3.5%

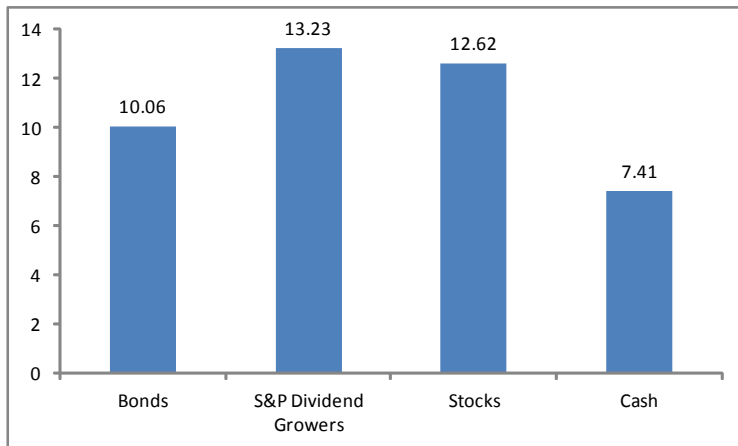
High Inflation Rising



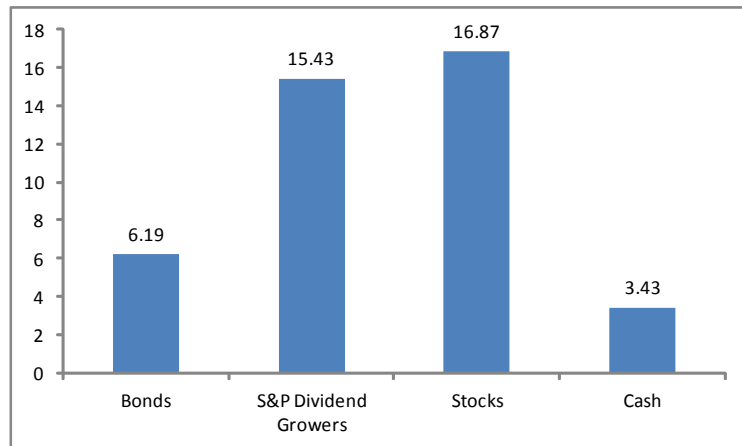
High Inflation Falling



Low Inflation Rising



Low Inflation Falling



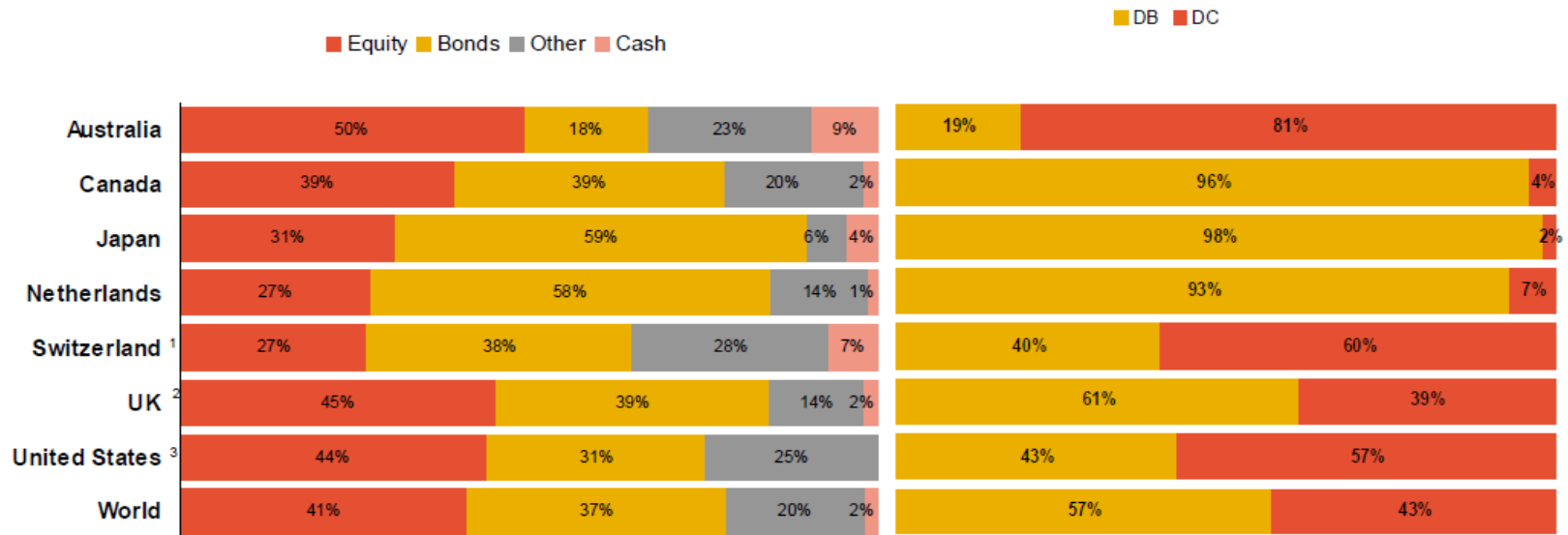
Source: Ned Davis Research Group; Date 5/4/12. High Inflation = Above 3.5% Mean / Low Inflation Below 3.5% Mean. Rising and Falling Inflation are defined to be the change in inflation rate from six months. Stocks = S&P 500. Total Return Bonds = Barclay US Aggregate Index since 1976 Long-Term Treasuries 1973 to 1975 ago. Stocks = S&P 500 Total Return. Cash = T-Bills.

Global Pension Assets Study 2012

Key findings - figures

Asset allocation 2011

DB/DC Split 2011



Source: Towers Watson and secondary sources

¹ DC assets in Switzerland are for cash balance plans

² Excludes Personal and Stakeholder DC assets

³ Includes IRAs

Global pension assets growth rates

Compound annual growth rates – local currency – 2011e

Market	Growth rates to 2011e (Local Currency)	
	5-year (31/12/06- 31/12/11) CAGR	10-year (31/12/01- 31/12/11) CAGR
Australia	4.5%	9.2%
Brazil	9.6%	14.3%
Canada ¹	3.4%	5.6%
France ¹	-3.7%	0.8%
Germany	7.5%	5.7%
Hong Kong	6.0%	10.3%
Ireland	-2.3%	4.4%
Japan	-4.9%	-0.7%
Netherlands	1.6%	5.1%
South Africa	10.5%	12.5%
Switzerland	2.2%	3.5%
UK ²	4.5%	7.9%
US ³	3.0%	5.2%
Average	3.2%	6.4%

Source: Towers Watson and secondary sources