

Figure 23: Our Intrinsic Valuation Model

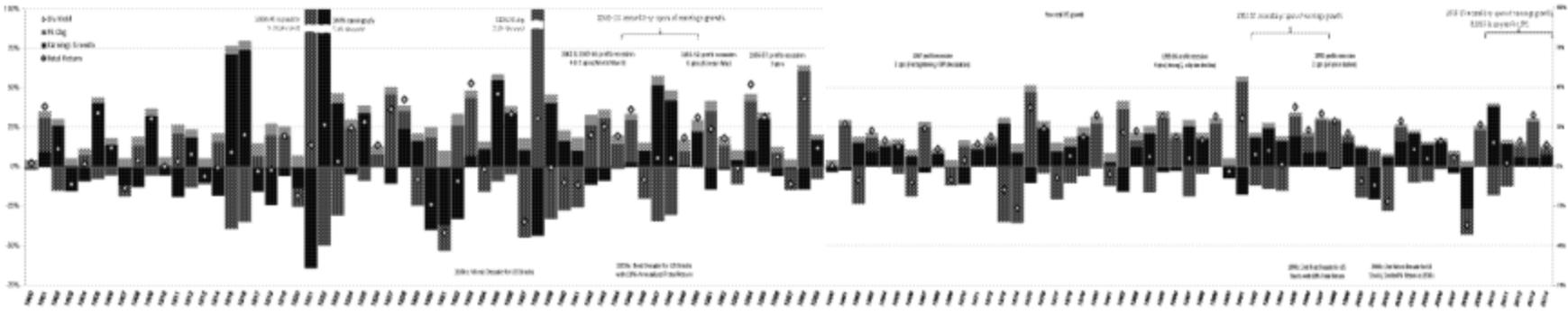
S&P 500 Capitalized EPS Valuation	S&P 500 Dividend Discount Model	S&P 500 Long-term EPS & DPS Growth	S&P 500 Cost of Equity & Fair Book Multiple
Deutsche Bank's 2015E S&P 500 EPS	\$118 Deutsche Bank's 2015E S&P 500 DPS	\$42.00 Deutsche Bank's 2015E S&P 500 aggregate ROE	15.7% Fair long-term nominal return on S&P 500 index
DB's 'normal 2015E' S&P 500 EPS	\$121 DB's 'normal 2015E' S&P 500 DPS	36% 2014 end S&P 500 book value per share	\$750 Components of estimated fair S&P 500 return:
*Normal 2015E' EPS / 2015E EPS	103% Normal dividend payout ratio	39% DB's 'normal 2015E' S&P 500 aggregate ROE	+ Long-term real risk free interest rate
Accounting quality adjustment to pro forma EPS	-12.00 EPS directed to net share repurchases	\$26.50 Estimated ROE on reinvested S&P 500 EPS	+ Long-term fair S&P 500 equity risk premium*
Normal 2015E S&P 500 EPS fair to capitalize	\$109 Total payout of S&P 500 EPS	\$68.50 Economic margin (EM) or ROE-CoE	+ Long-term real S&P 500 cost of equity
Key principle: steady-state value = normal EPS / real CoE	63% Total payout ratio	2.00% Sources of long-term earnings growth	+ Long-term inflation forecast
S&P 500 EPS Capitalization Valuation	S&P 500 DPS Discount Model	+ Long-term inflation forecast	2.00% Fair S&P 500 Market Value and Book Value Multiple
Normal EPS / (real CoE - (EM) payout - EM)	Normal DPS / (nominal CoE - DPS growth)	+ Fair return on true reinvestment	2.04%
S&P 500 intrinsic value at 2015 start	1982 S&P 500 intrinsic value at 2015 start	+ Value added return on true reinvestment	0.00%
S&P 500 intrinsic value at 2015 end	2088 S&P 500 intrinsic value at 2015 end	= Long-term earnings growth	4.04%
Implied fair fwd PE in early 2015 on 2015E \$118 EPS	16.8 Implied fair forward yield on 2015E DPS of \$42.0	+ Growth from net share repurchases	1.34%
Implied fair trailing PE at 2015 end on 2015E \$118 EPS	17.7 Implied fair trailing yield on 2015E DPS of \$42.0	= Long-term S&P 500 EPS/DPS growth	5.38%
		+ Fair normal dividend yield	2.12%
		= Total shareholder return at constant PE	7.50%
			2.00%
			* S&P 500 ERP usually 300-400bps, w/ real CoE @ 5.5% - 6.5%
			2014 end S&P 500 book value per share
			\$750
			Fair PB = Fair PE * normal aggregate ROE
			2.64
			Fair PE = (ROE-g) / (real ROE*(real CoE-real g))
			18.2
			Implied S&P 500 fair value of book at 2015 start
			1982
			Steady-state PB = normal agg. ROE / real CoE
			2.64
			Confirmed by fair steady-state PE = 1 / real CoE
			18.2
Normal EPS / (real CoE-value added EPS growth)	DPS discount model using true DPS (all payout)	Value added growth premium in fair value est.	0%
1982	1982		
			Normal 2015E economic profit per share
			\$67.75

- S&P 500 EPS discount model 5 steps to value:
- 1) Estimate normalized S&P 500 EPS
 - 2) Adjust normalized EPS for pro forma accounting quality
 - 3) Estimate a fair long-term real return on S&P 500 ownership (CoE)
 - 4) Capitalize normalized and accounting quality adj. EPS at real CoE
 - 5) Consider long-term potential for value added growth opportunities

Sensitivity matrix of S&P fair value at 2015 year end to normalized EPS and Real CoE

		Normal 2015E S&P 500 EPS				
		\$115	\$118	\$121	\$125	\$135
Real	5.00%	2162	2226	2291	2312	2376
	5.25%	2062	2123	2185	2205	2266
cost of equity	5.50%	1971	2030	2088	2108	2167
	5.75%	1888	1944	2001	2019	2076
	6.00%	1812	1866	1920	1938	1992

Figure 24: S&P Total Return Breakdown 1900-2014 – Another record consecutive number of years of earnings growth, if 2015 EPS is up y/y



Source: Deutsche Bank, S&P, IBES
Record 6 year span of earnings growth since 1900: 1945-1950 and 1992-1997

