

Dr. Amjad Waheed, CFA  
Chief Executive Officer

## Historical Performance of Asset Classes

Long term results from history may provide useful insights on future probable outcomes. Recognizing this principle, we have examined the historical performance of key domestic investment classes for a 15-year period from January 2001 to December 2015. We have included six categories for which long-term data is available, comprising of five major asset classes i.e. Treasury Bills, Bank Deposits, National Savings Schemes (NSS), Pakistan Investment Bonds (PIBs) and Equities. We have also added a synthetic asset class Capital Protected Strategy (CPS) in our analysis. Under the Capital Protected Strategy (CPS), portfolio is dynamically managed between low risk and high risk component with the objective of protection of initial investment amount, while also providing some upside growth of the stock market. However, the results from this strategy are based on back-testing and not actual results as this strategy was not practiced during this entire period. During this 15-year period, headline inflation (CPI) has averaged 8.3% per annum, and Pak Rupee has depreciated against USD by 4.02% per year, on average.

The historical analysis, as given in the table below, shows that equities offered the best nominal and real return among all asset classes in our study. A PKR 100 investment in equities in 2001 would be worth PKR 2,177 by 2015 end. During the same period, a PKR 100 investment in bank deposits or T-bills would have increased to just PKR 235 and PKR 371, respectively.

Performance of asset classes from January 2001 to December 2015

Asset class	Bank Deposit***	T-bill	Special Savings Certificates (SSC)	Pakistan Investment Bonds (PIB)	Capital Protected Strategy (CPS)	Equity
Nominal annualized return	5.9%	9.1%	10.3%	13.5%	14.0%	22.8%
Inflation	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%
Real return (adjusted for inflation)	-2.2%	0.8%	1.9%	4.8%	5.3%	13.4%
Annualized Standard Deviation (Risk)	0.6%	1.2%	6.7%	13.6%	8.1%	26.5%
Sharpe Ratio*	N/A**	N/A	0.18	0.32	0.61	0.52
Future Value of Rs. 100 at the end of 15 years - Nominal value	235	371	436	666	717	2,177
Future Value of Rs. 100 at the end of 15 years - Real value (adjusted for inflation)	71	113	133	203	218	662

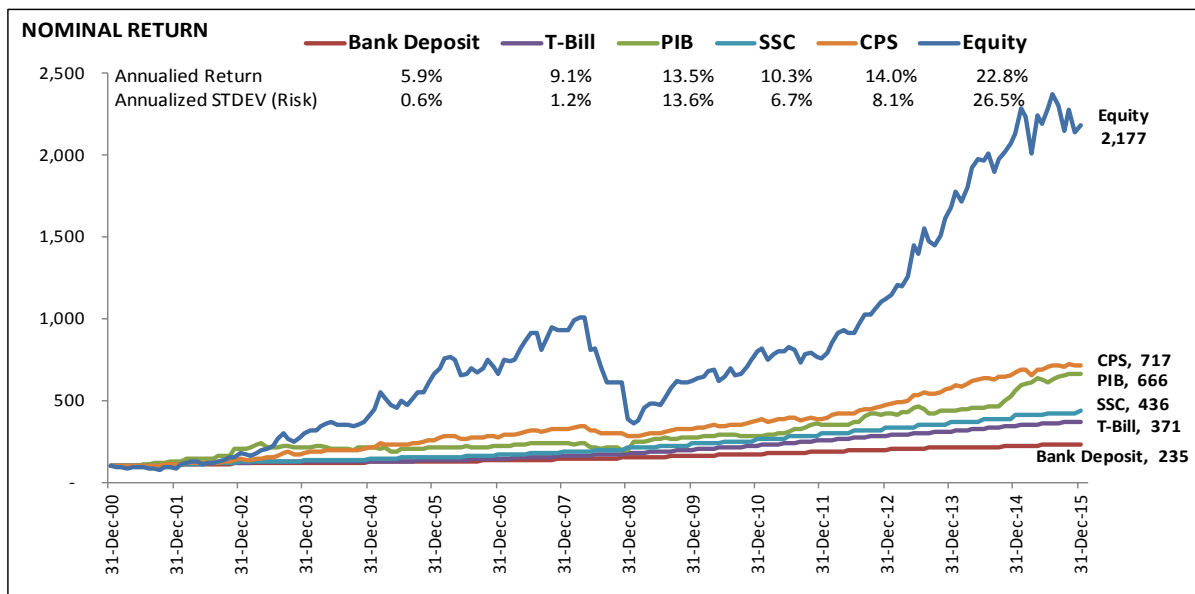
\*Sharpe Ratio = Excess return per unit of risk = (Expected return – Risk free rate)/(Standard deviation)

\*\*Due to negative excess return, standard Sharpe ratio is meaningless

\*\*\* Monthly weighted average deposit rates

Source: SBP Statistical Bulletin, KSE, NSS website, NAFA Research

Value of Rs. 100 at the end of 15 years – Nominal



The historical analysis of these asset classes supports the basic notion that there is a positive relationship between risk and return. As expected, equities have the highest volatility or risk, and bank deposits and T-bills have the lowest risk. Our analysis shows that for investors with long-term investment horizon, equities offer the highest return. However, over the long-term, Capital Protected Strategy (CPS) offered the best risk-adjusted return as measured by the Sharpe Ratio during the 15-year period. More specifically, CPS delivered an attractive nominal return of about 14.0% per annum with a relatively low risk level (standard deviation of 8.1%).

**Disclaimer:** This publication is for informational purpose only and nothing herein should be construed as a solicitation, recommendation or an offer to buy or sell the fund. All investments in mutual funds and pension funds are subject to market risks. The price of units may go up as well as down. Past Performance is not necessarily indicative of future results.