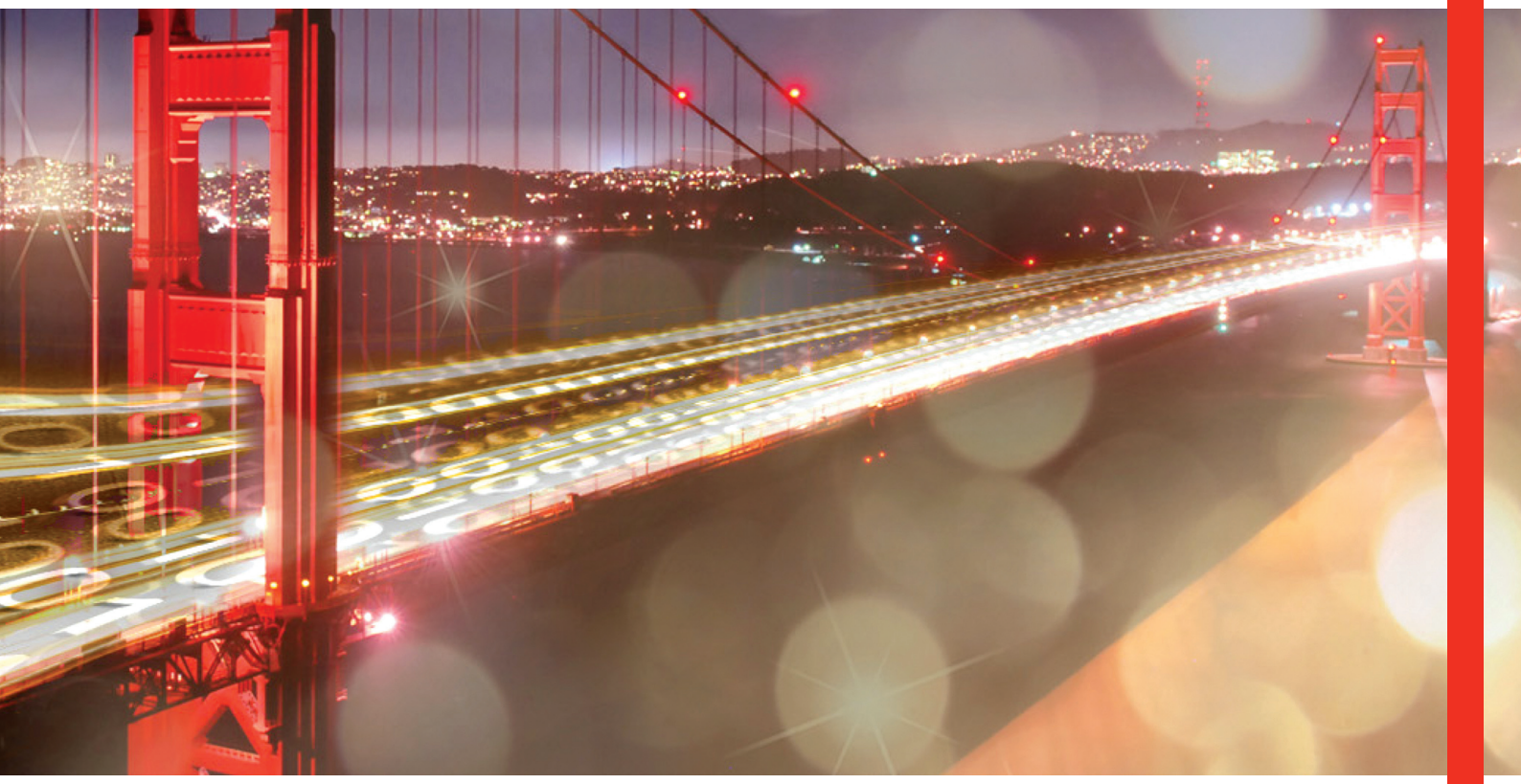
S&P 500 Low Volatility Index®



The S&P 500 Low Volatility Index measures the performance of the 100 least volatile stocks in the S&P 500® based on their historical volatility. The index is designed to serve as a benchmark for low volatility investing in the US stock market.

The challenge

In an environment of continued uncertainty and turbulent markets many investors are asking the question – how can I potentially reduce equity risk while preserving the long term return advantages that stocks generally provide?

Introducing the S&P 500 Low Volatility Index – a diversified equity index that, in back-tested results, has out-performed the S&P 500 over the near, medium, and long term, with less volatility.*

The simple approach

The S&P 500 Low Volatility Index follows a transparent and replicable methodology. The Index methodology is simple, as opposed to other more complex low volatility approaches which involve the calculation and estimation of a number of factors.

*Based on a comparison of 1,3,5,10,15,20 year annualized return and annualized standard deviation data, as of December 31, 2011. All information presented prior to the inception date of the S&P 500 Low Volatility Index is back-tested. The back-tested calculations are based on the same methodology that was in effect when the index was officially launched. Past performance is not indicative of future results, including how the S&P 500 Low Volatility Index might perform relative to the S&P 500 in any future period.

HSBC

S&P 500 Low Volatility Index Methodology

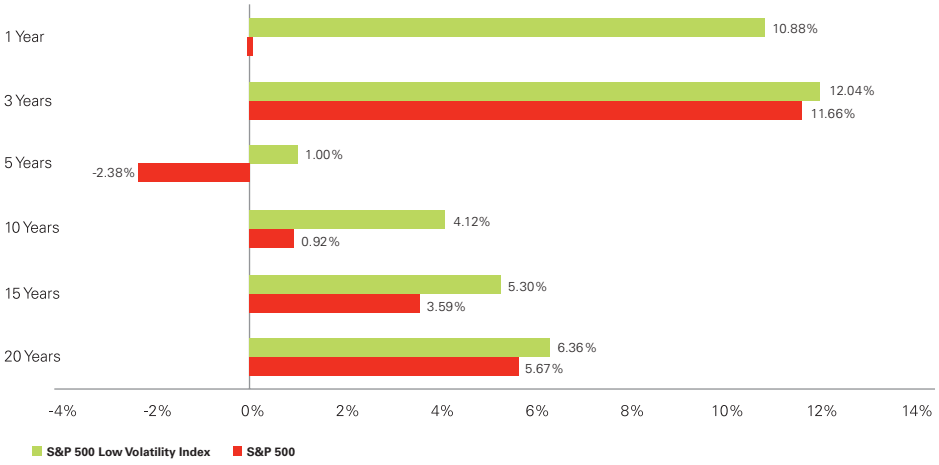
There are just three steps in the calculation of the Index:

1) Calculate the historical volatilities of the 500 stocks in the S&P 500 Index using daily standard deviation data for the past year (252 trading days)
2) Rank the stocks in ascending order of their historical volatility
3) Weight the 100 least volatile stocks from Step 2 by the inverse of their volatility, with the least volatile stocks receiving the highest weights

The index is rebalanced after the close on the third Friday of February, May, August, and November of each year, based on market data as of the last business day of January, April, July, and October, respectively.

Index performance

Annualized price return data as of 12/31/11[1]



Volatility analysis as of 12/31/11

Annualized standard deviation[2]

Time period	S&P 500 Low Volatility Index	S&P 500 Index
1 year	8.78%	15.97%
3 years	11.88%	19.00%
5 years	12.87%	18.91%
10 years	10.77%	15.93%
15 years	12.14%	16.59%
20 years	11.33%	15.01%

[1] Annualized price return is a return an investment provides over a period of time, representing a geometric average of annual returns over that period. The geometric average of annual returns represents the average rate per year on an investment that is compounded over a period of several years. The inception date of the S&P 500 Low Volatility Index was April 20, 2011 at the market close. All information presented prior to the index inception date is back-tested. The back-tested calculations are based on the same methodology that was in effect when the index was officially launched. Past performance is not indicative of future results, including how the S&P 500 Low Volatility Index might perform relative to the S&P 500 in any future period.

[2] Standard Deviation:
A statistical measure of the distance a quantity is likely to lie from its average value. In finance, standard deviation is applied to the annual rate of return of an investment, to measure the investment's volatility, or "risk".

Tickers

S&P 500 Low Volatility Index price return	
BLOOMBERG[SM]	SP5LVI
Reuters	.SP5LVI
Yahoo Finance	^SP500LVOL

Calendar year annual returns[1]

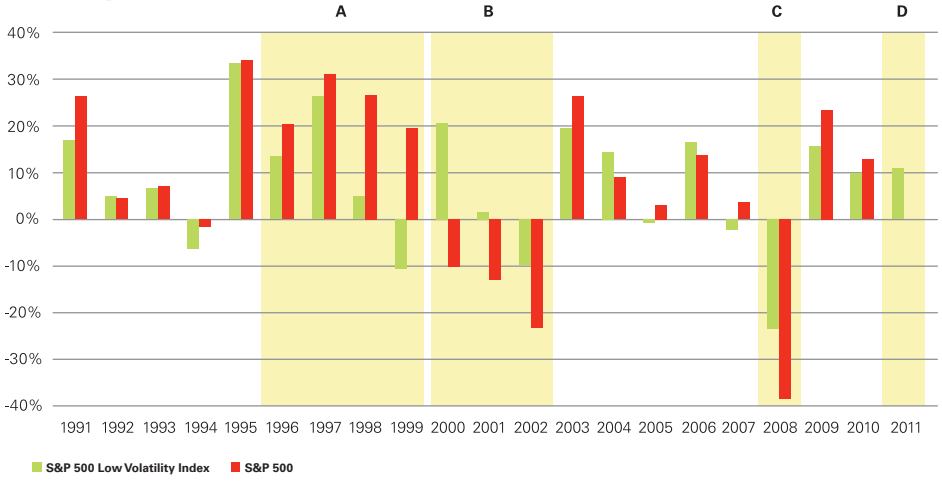


Exhibit A – 1995-1999
Exhibit B – Tech bubble bursts from 2000 – 2002
Exhibit C – Financial crisis in 2008
Exhibit D – Sovereign debt crisis of 2011 (note no bar is shown for the S&P 500 since its return was flat)

Sector diversification

Sector	Current weight*	Average weight**	Maximum weight (as of date)
Consumer Discretionary	5.6%	8.6%	16.1% (7/31/91)
Consumer Staples	30.9%	18.0%	31.4% (7/31/09)
Energy	1.7%	5.6%	12.0% (7/31/01)
Financials	1.6%	14.9%	35.0% (7/31/02)
Health Care	14.0%	6.6%	27.1% (4/30/09)
Industrials	3.7%	11.7%	18.7% (10/31/00)
Information Technology	5.2%	1.9%	10.1% (4/30/10)
Materials	3.3%	4.8%	12.1% (4/30/97)
Telecomm	4.7%	2.7%	10.0% (10/31/92)
Utilities	30.0%	25.4%	43.2% (7/31/99)

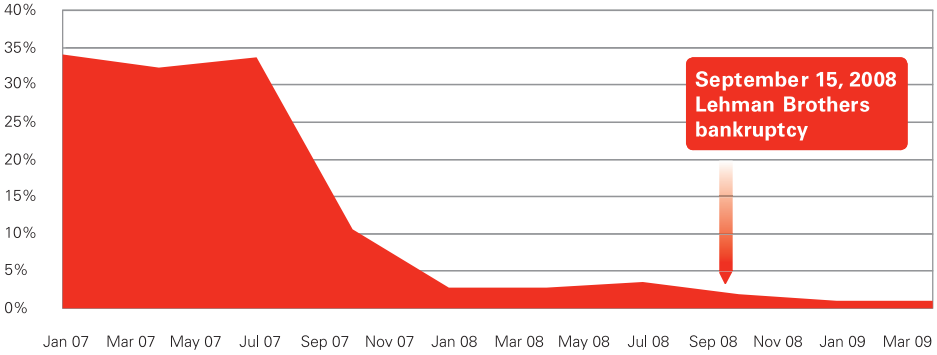
* as of August 2012 rebalancing
** since October 31, 1990

S&P Low Volatility Index at work – 2008 financial crisis

The S&P Low Volatility Index's weighting to the financial sector was cut by 98% from January 2007 (33.65%) to April 2009[2] (0.98%).

As shares in financials started showing signs of weakness, their volatility increased and thus fewer of them were eligible for inclusion in the index.

S&P 500 Low Volatility Index – financial sector weighting



[1] Annual Return is a return an investment provides over a period of one year, expressed as (a) the difference between ending level and starting level, divided by (b) starting level.The inception date of the S&P 500 Low Volatility Index was April 20, 2011 at the market close. All information presented prior to the index inception date is back-tested. The back-tested calculations are based on the same methodology that was in effect when the index was officially launched. Past performance is not indicative of future results, including how the S&P 500 Low Volatility Index might perform relative to the S&P 500 in any future period.

[2] Remainder of sector weightings as of April 2009:
Energy: 0%, Materials: 2.5%, Industrials: 11.9%, Consumer Discretionary: 2.9%, Consumer Staples: 29.8%, Healthcare: 27.1%, Information Technology: 6.3%, Telecom: 0.9%, Utilities: 17.7%".

Prior to any decision to invest in a specific issuance of a structured investment linked to the S&P 500 Low Volatility Index, investors should carefully review the disclosure documents for such issuance which contain a detailed explanation of the terms of the issuance as well as the risks, tax treatment and other relevant information.

An investment in structured investments involves risks. It is important to note that structured investments may not always reflect the actual performance of the underlying asset and have different risks than traditional debt instruments. These risks can include but are not limited to: fluctuations in the price, level or yield of the underlying asset, interest rates, substantial or complete loss of principal, limits on participation in appreciation of the underlying asset, limited liquidity, HSBC credit risk and conflicts of interest.

HSBC USA Inc. has filed a registration statement (including a prospectus) with the SEC for the offering to which this free writing prospectus relates. Before you invest in any security offering by HSBC USA Inc., you should read the prospectus in that registration statement and other documents HSBC USA Inc. has filed with the SEC for more complete information about HSBC USA Inc. and such offering. You may get these documents for free by visiting EDGAR on the SEC's web site at www.sec.gov. Alternatively, HSBC Securities (USA) Inc. or any dealer participating in this offering will arrange to send you the prospectus if you request them by calling toll-free 1-866-811-8049.

Standard & Poor's®", "S&P®" and "S&P 500® are trademarks of Standard and Poor's and have been licensed for use by HSBC USA Inc. Structured Investments are not sponsored, endorsed, sold or promoted by Standard & Poor's and Standard & Poor's does not make any representation regarding the advisability of investing in Structured Investments.