

Mutual Fund Operations

Chapter Objectives

- provide a background on mutual funds
- describe the various types of stock and bond mutual funds
- describe the performance of mutual funds
- describe other types of funds

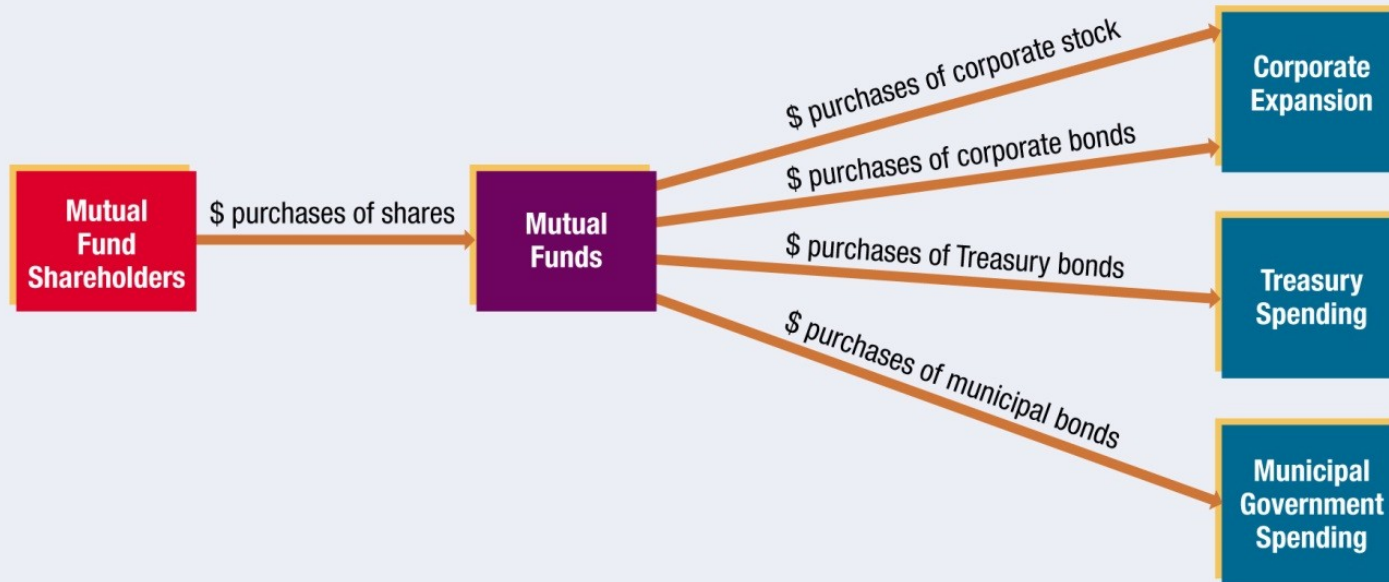
Background on Mutual Funds

- Mutual funds serve as a key financial intermediary.
- Mutual funds provide an important service for individual investors who wish to invest funds.
- Mutual funds are sometimes referred to as open-end funds because they are open to investors, meaning that they will sell shares to investors at any time. In addition, they allow investors to sell (redeem) the shares back to the fund at any time.
- Close-end mutual funds – with maturity

Background on Mutual Funds

- Mutual funds offer a way for small investors to diversify when they could not do so on their own with the purchases of individual stocks
- Comparison to depository institutions
 - Like depository institutions, mutual funds repackage proceeds from individuals to make investments
 - Bank deposits are a liability contract, but a mutual fund represents partial ownership
 - No federal insurance with mutual fund shares

How Mutual Funds Finance Economic Growth



GE US \$ Market

P25.95 / 26.30P

1 x 1

Prev 26.21

Vol 27,482,919

GE US Equity

98) Report

Page 1/5 Description

1) Profile

2) Issue Info

3) Ratios

4) Revenue & EPS

5) Industry Info

GENERAL ELECTRIC CO

6) Electrical Power Equipment (CCB)

General Electric Company is a globally diversified technology and financial services company. The Company's products and services include aircraft engines, power generation, water processing, and household appliances to medical imaging, business and consumer financing and industrial products. [BBGID BBG000BK6MB5]

7) Price Chart (GP)



Px/Chg 1D (USD)	26.21/+1.12%
52 Wk H (12/31/13)	28.09
52 Wk L (10/09/13)	23.50
YTD Change/%	-1.82/-6.49%
Mkt Cap (USD)	262,988.6M
Shrs Out/Float	10,033.9M/10,02...
SI/% of Float	72.1M/0.72%
Days to Cover	3.3

8) Earn (ERN)

9) Est (EE)

Date	(C)	10/17/14
P/E		18.52
Est P/E	12/14	15.61
T12M EPS (USD)		1.41
Est EPS		1.68
Est PEG		1.71

11) Dividend (DVD)

Ind Gross Yield	3.35%
5Y Net Growth	0.72%
Cash 09/18/14	0.22

12) Corporate Info

13) www.ge.com
 Fairfield, CT, United States
 Empls 307,000 (12/31/13)

14) Management (MGMT)

15) Jeffrey R Immelt "Jeff"
 Chairman/CEO
 16) Keith S Sherin
 Vice Chairman

17) Daniel C Heintzelman "Dan"
 Vice Chairman:Service & Ops

18) 12M Total Ret (TRA) 10.75%
 Beta vs SPX 1.05

20) Depository Receipts

Active Receipts 5

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000
 Copyright 2014 Bloomberg Finance L.P.
 SN 660879 CEST GMT+2:00 H196-2921-0 17-Sep-2014 10:27:13

GE US \$ Market

P25.95 / 26.30P

1 x 1

Prev 26.21 Vol 27,482,919

GE US Equity 98 Report Page 2/5 Description

1) Profile

2) Issue Info

3) Ratios

4) Revenue & EPS

5) Industry Info

6) Public Offerings (CACs)

7) More

8) Institutional Holdings (OWN)

Date	Shares	Price	Lead Manager
10/02/08	547.83M	\$ 22.25	F C JOINT LEADS
03/08/04	119.39M	\$ 31.83	F C MS,CITI,GS,JPM
01/01/61	0.00	\$ 72.25	F C Not Available

# of Inst. Owners	2,891
Shares Owned	5.57B
Shares Out/Float	55.5%/55.5%
# of Buyers/Sellers	1.074k/1.031k
Shares Bought	24.01M

IPO 06/23/82

9) Issue Information (RELS)

10) Eqty Wgts (WGT)

11) Insider Holdings (OWN)

Sec Type	Common Stock			
Pri Exch	New York	PAR	USD	0.06
Pri MIC	XNYS			
Incorp	UNITED STATES (NY)			
SIC Code	3600 (ELECT EQUIP)			
BBGID	BBG000BK6MB5			
ISIN	US3696041033			
CUSIP	369604103			
SEDOL1	2380498 US	NAICS	336412	
Common	002079925	WPK #	851144	
		Sicovam	012943	

SPX	N.A.
INDU	0.982%
RIY	N.A.
RAY	N.A.
OEX	N.A.
RLV	N.A.
S5INDU	N.A.
SPR	N.A.
COMP	0.543%
BWORLD	0.486%

% Held by Insiders	0.05%
Net change last 6M	2.11%

12) Top Holders (HDS)

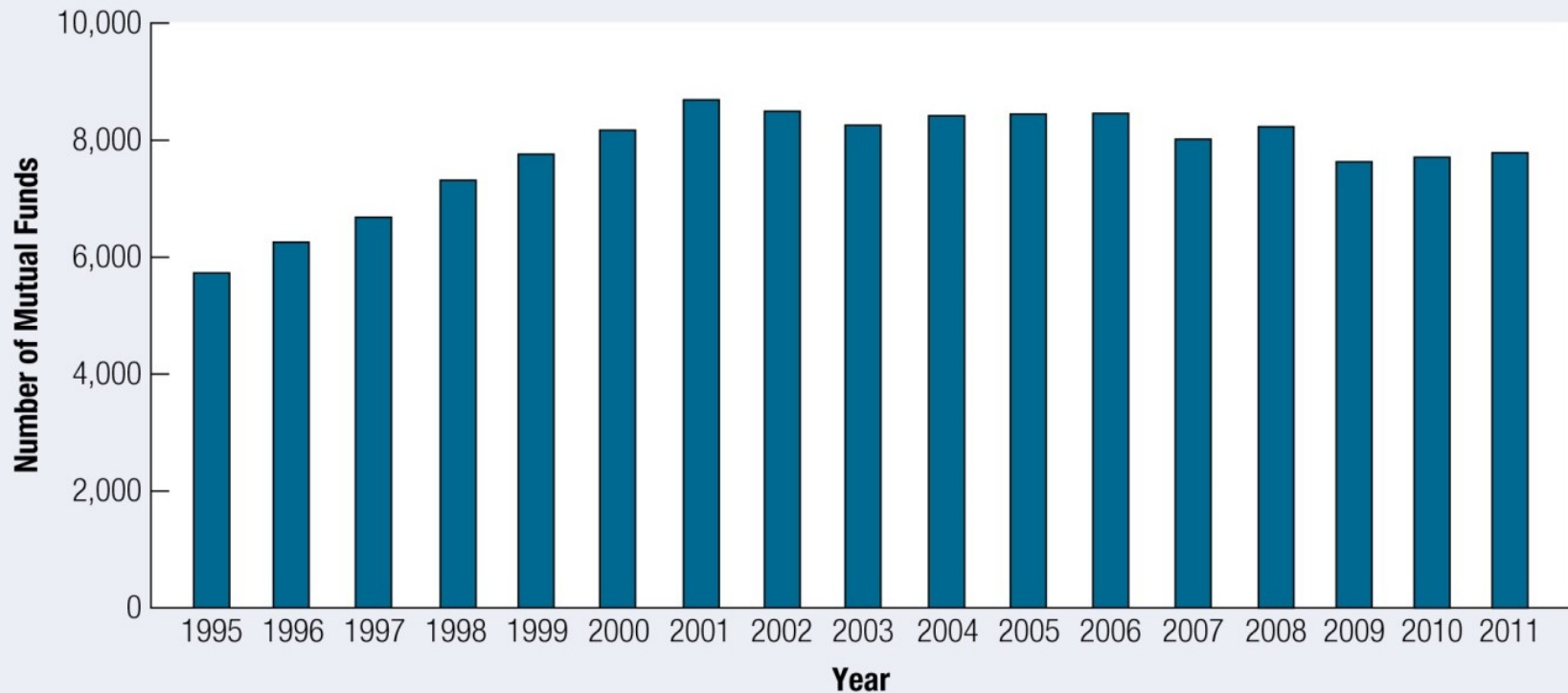
as of 9/16/2014

BLACKROCK	5.51%
VANGUARD GROUP INC	5.09%
STATE STREET CORP	4.00%
CAPITAL GROUP COMPANI...	2.77%
NORTHERN TRUST CORPOR...	1.51%
BANK OF NEW YORK MELLO...	1.37%
T ROWE PRICE ASSOCIATES	1.27%

13) OMON

Opt/LEAPs/Marginable

Growth in Mutual Funds



Note: The numbers shown here include money market funds.

Source: Investment Company Institute.

Pricing Shares of the Mutual Fund

- The price per share of a mutual fund is equal to the net asset value (NAV) per share, which represents the value of the portfolio (per share) after accounting for expenses incurred from managing the fund.
- When a mutual fund pays its shareholders dividends, its NAV declines by the per share amount of the dividend payout.

Calculation: $NAV = (\text{Market Value of Assets} - \text{Liabilities}) / \text{Shares Outstanding}$

Mutual Fund Distributions to Shareholders

- Funds can generate returns to their shareholders in three ways.
 1. First, they can pass on any earned income (from dividends or coupon payments) as dividend payments to the shareholders.
 2. Second, they distribute the capital gains resulting from the sale of securities within the fund.
 3. A third type of return to shareholders is through mutual fund share price appreciation.

Regulation of Mutual Funds

- Information Contained in a Prospectus.
- The minimum amount of investment required.
- The investment objective of the mutual fund.
- The return on the fund over the past year, the past three years, and the past five years, in comparison to a broad market index.
- The exposure of the mutual fund to various types of risk.
- The services (such as check writing, ability to transfer money by telephone, etc.) offered by the mutual fund.
- The fees incurred by the mutual fund (such as management fees) that are passed on to the investors.
- Names of their portfolio managers and the length of time that they have been employed by the fund in that position.

How Mutual Funds Utilize Financial Markets

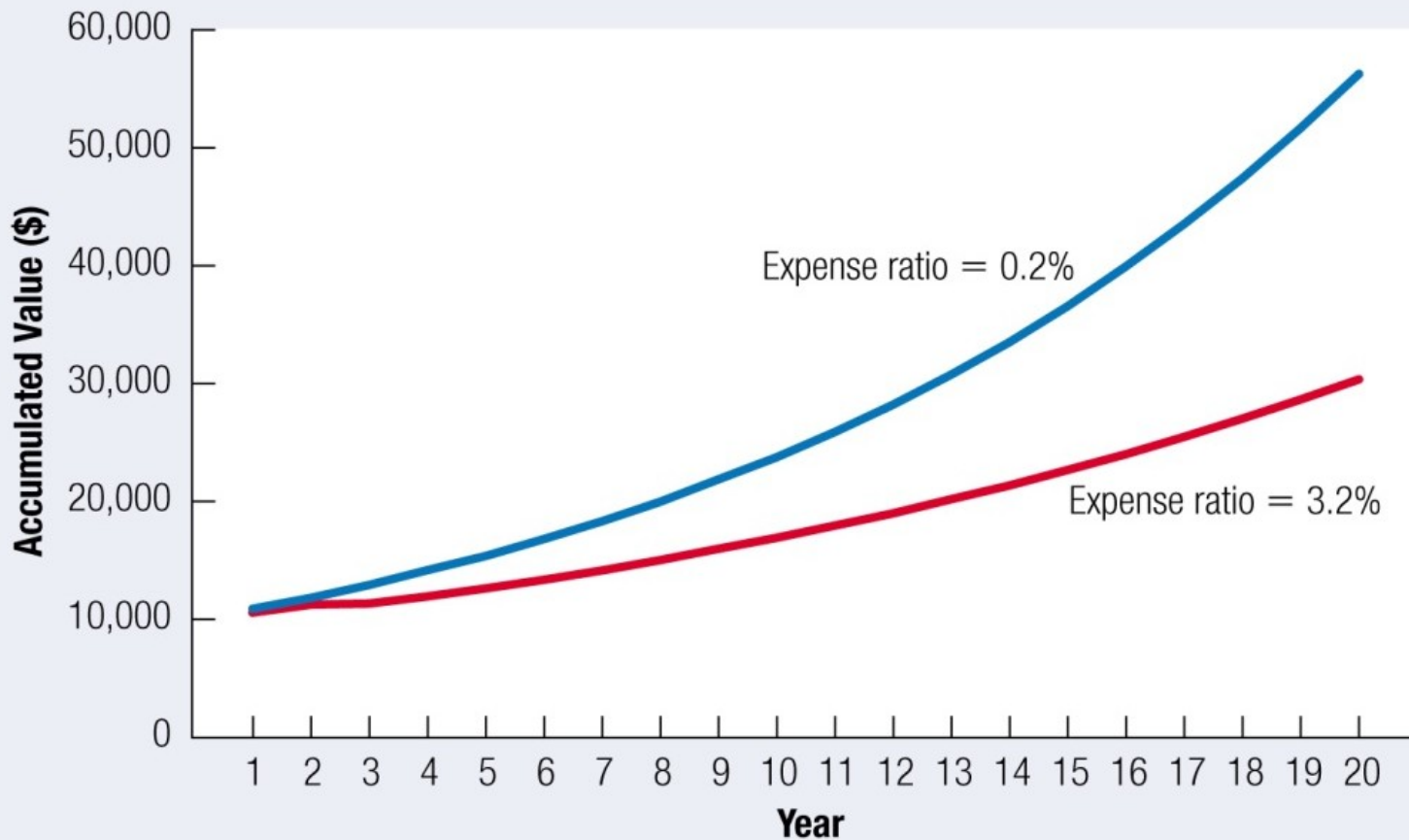
TYPE OF MARKET	HOW MUTUAL FUNDS USE THAT MARKET
Money markets	<ul style="list-style-type: none"> • Money market mutual funds invest in various money market instruments, such as Treasury bills, commercial paper, banker's acceptances, and certificates of deposit.
Bond markets	<ul style="list-style-type: none"> • Some bond mutual funds invest mostly in bonds issued by the U.S. Treasury or a government agency. Others invest in bonds issued by municipalities or firms. • Foreign bonds are sometimes included in a bond mutual fund portfolio.
Mortgage markets	<ul style="list-style-type: none"> • Some bond mutual funds invest in bonds issued by the Government National Mortgage Association (GNMA, or "Ginnie Mae"), which uses the proceeds to purchase mortgages that were originated by some financial institutions.
Stock markets	<ul style="list-style-type: none"> • Numerous stock mutual funds purchase stocks with various degrees of risk and potential return.
Futures markets	<ul style="list-style-type: none"> • Some bond mutual funds periodically attempt to hedge against interest rate risk by taking positions in interest rate futures contracts.
Options markets	<ul style="list-style-type: none"> • Some stock mutual funds periodically hedge specific stocks by taking positions in stock options. • Some mutual funds take positions in stock options for speculative purposes.
Swap markets	<ul style="list-style-type: none"> • Some bond mutual funds engage in interest rate swaps to hedge interest rate risk.

Expenses Incurred by Mutual Fund Shareholders

- Mutual funds pass their expenses to shareholders.
- The expenses include compensation to the portfolio managers and other employees, research support, recordkeeping and clerical fees, and marketing fees.

(Exhibit 23.5)

How the Accumulated Value Can Be Affected by Expenses (Assume Initial Investment of \$10,000 and a Return before Expenses of 9.2 Percent)



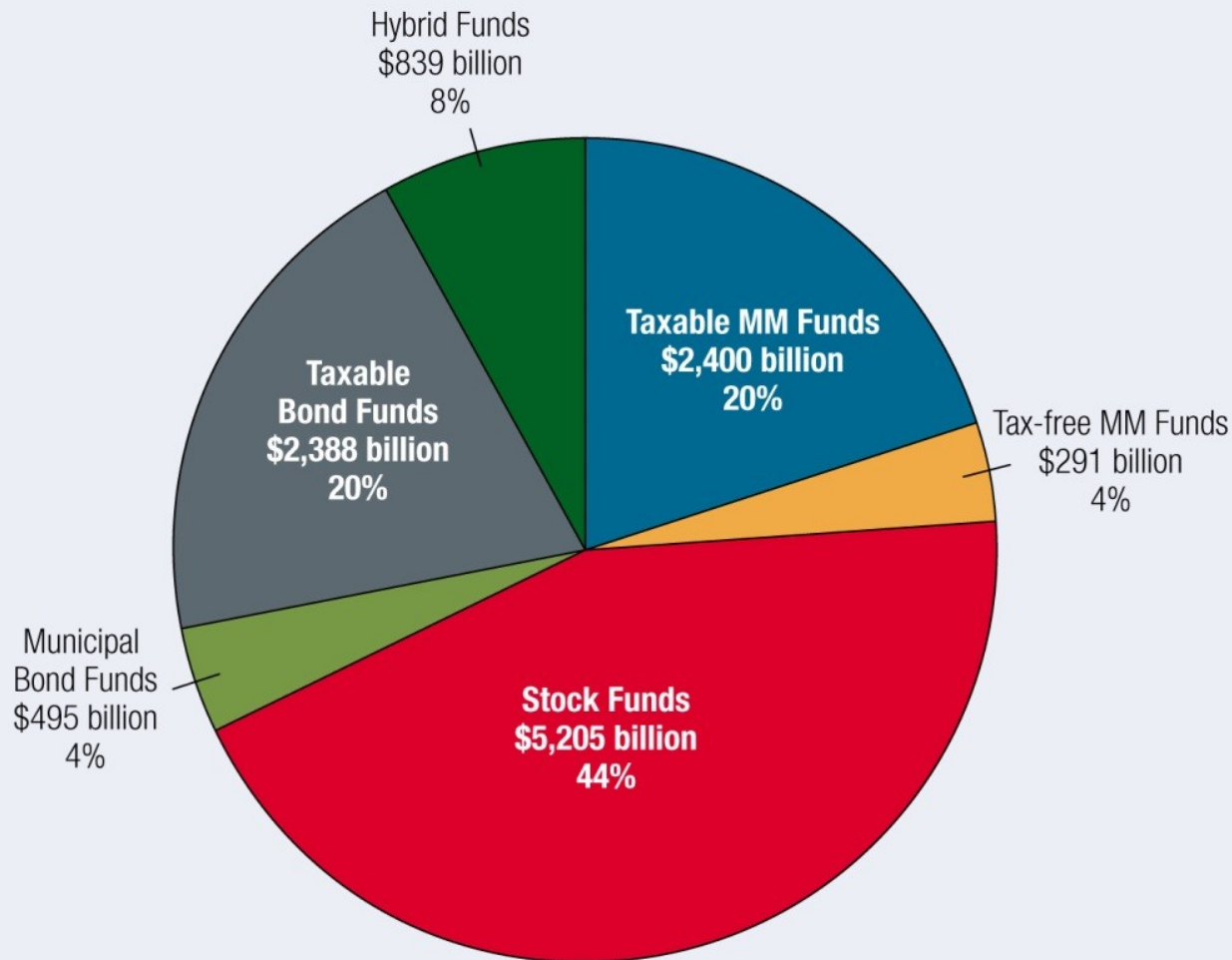
Expenses Incurred by Mutual Fund Shareholders (Cont.)

- Sales Charge - Mutual funds may be referred to as either as a load fund or a no-load fund.
 - Load funds are promoted by registered representatives of brokerage firms, who earn a sales charge upon the investment in the fund (commonly referred to as a front-end load) ranging between 3 and 8.5 percent.
 - No-load funds are promoted strictly by the mutual fund of concern, thereby avoiding an intermediary
- 12b-1 Fees
 - Some mutual funds charge shareholders a 12b-1 fee (in reference to SEC rule 12b-1) as part of the fund's annual expenses to cover administrative or marketing expenses.
 - These fees are controversial because many mutual funds do not clarify how they use the money received from the fees.

Mutual Fund Categories

- Mutual funds are classified as
 - Stock (or equity) mutual funds
 - Bond mutual funds
 - Money market funds
- Stock funds are dominant when measured by the market value of total assets among mutual funds.

Composition of Mutual Funds



Source: Investment Company Institute.

Stock Mutual Fund Categories

- Growth Funds
 - Typically composed of stocks of companies that have not fully matured and are expected to grow at a higher than average rate in the future.
 - The primary objective is to achieve an increase in the value with less concern about the generation of steady income.
- Capital Appreciation Funds
 - Also known as aggressive growth funds - Composed of stocks that have potential for very high growth but may also be unproven.
 - These funds are suited to investors who are willing to risk a possible loss in value.

Stock Mutual Fund Categories (cont.)

- Growth and Income Funds
 - Contains a unique combination of growth stocks, high-dividend stocks, and fixed-income bonds.
 - For investors looking for potential for capital appreciation along with some stability in income.
- International and Global Funds
 - Created to enable investors to invest in foreign securities without incurring excessive costs.
- Specialty Funds
 - Focus on a group of companies sharing a particular characteristic.

Stock Mutual Fund Categories (cont.)

- Index Funds
 - Composed of stocks that, in aggregate, are expected to move in line with a specific index.
 - These funds may be attractive to investors who wish to invest in a particular foreign market but do not have much knowledge about the specific stocks in that market.
- Multifund Funds
 - Invest in a portfolio of different mutual funds.
 - Investors incur two types of management expenses: (1) the expenses of managing each individual mutual fund and (2) the expenses of managing the multifund mutual fund.

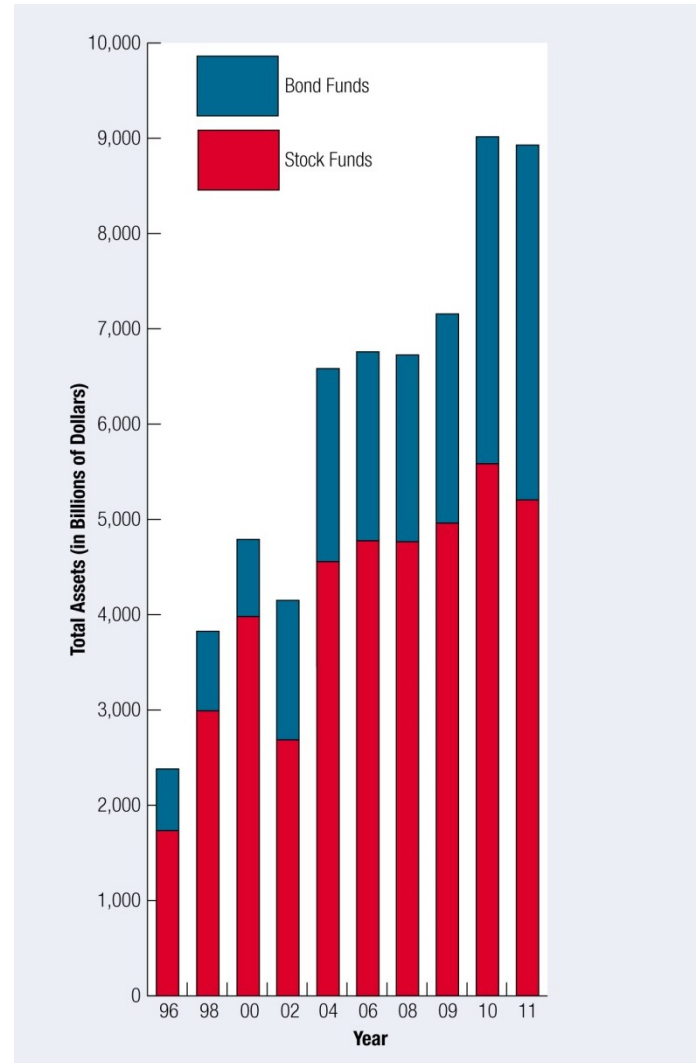
Bond Mutual Fund Categories

- Income Funds
 - Composed of bonds that offer periodic coupon payments and vary in exposure to risk.
 - Best suited for investors who rely on the fund for periodic income and plan to maintain the fund over a long period of time.
- Tax-Free Funds
 - Mutual funds containing municipal bonds
 - Allow investors in high tax brackets with even small amounts of money to avoid taxes while maintaining a low degree of credit risk.

Bond Mutual Fund Categories (cont.)

- High-Yield (Junk) Bond Funds
 - Typically, the bonds are issued by highly leveraged firms.
 - Investors desiring high returns and willing to incur high risk may consider bond portfolios with at least two-thirds of the bonds rated below Baa by Moody's or BBB by Standard & Poor's.

Investment in Bond and Stock Mutual Funds



VTSMX US \$ NAV 44.24 -.01 Purch Prc 44.24

On 21 Oct

VTSMX US Equity	98 Report	99 Feedback	Page 1/4	Description: Profile
1) Profile	2) Performance	3) Holdings	4) Organizational	

VANGUARD TOT STK MKT IND-INV Objective Blend Large Cap

Vanguard Total Stock Market Index Fund is an open-end fund incorporated in the USA. The Fund seeks to track the performance of a benchmark index that measures the investment return of the overall stock market. The Fund employs an indexing investment approach designed to track the performance of the CRSP U.S. Total Market Index. [BBGID BBG000BGS0K8]

6) Current Data (COMP)



Bloomberg Classification

Fund Type	Open-End Fund
Asset Class	Equity
Market Cap	Large-cap
Strategy	Blend
Geo. Focus Country	U.S.
General Attribute	Index Fund

7) NAV (GP) USD 44.240

Assets 09/30/13 USD 238.97B

Performance	Return	Percentile
1 Month	2.45%	68
YTD	25.78%	69
1 Year	26.57%	72
3 Year	16.80%	78
5 Year	16.16%	79
Px Source	NASDAQ	

Fund Info	
Inception Date	03/16/92
Share Class	Investor
Min Investment	USD 3.00k
Min Subsequent	USD 100.00
Min IRA	USD 3000
Expense Ratio	.17%

Fees	
Front Load	.00%
Back Load	.00%
Early Withdrawal	.00%
Current Mgmt Fee	.15%
Performance Fee	N.A.
12b1 Fee	.00%

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000
 SN 541209 CEST GMT+2:00 H430-3971-1 22-Oct-2013 13:34:52
 Copyright 2013 Bloomberg Finance L.P.

VTSMX US \$ NAV 44.24 -.01 Purch Prc 44.24

On 21 Oct

VTSMX US Equity 98 Report 99 Feedback Page 2/4 Description: Performance

1) Profile 2) Performance 3) Holdings 4) Organizational

VTSMX Returns 10/21/13 CRSPTM1 Returns As Of 10/21/13

Return	Fund	Index	Peers	Pct	Relative %-1Yr vs Index		Absolute% 1Yr	Fund	Index	Peers
1 Wk	2.08	2.07	2.04	64	Excess Return	0.13	Sharpe Ratio	2.41	2.38	2.23
1 Mo	2.45	2.47	2.30	68	BETA	1.00	Volatility	11.33	11.37	11.54
3 Mo	4.37	4.41	4.26	62	Alpha	0.00	Sortino Ratio	2.36	2.33	2.20
YTD	25.78	26.05	24.68	69	Correlation	1.00	Downside Risk	7.93	7.99	8.03
1 Yr	26.57	26.41	25.08	72	Treynor	0.27	5) Peer Group (FSRC)			
3 Yr	16.80	N.A	15.71	78	R-Stat	1.00	1 Yr	Rtn %	Vol %	
5 Yr	16.16	N.A	15.24	79	Information Ratio	0.59	Average	25.08	11.54	
2012	16.25	13.87	15.51	65	Tracking Error	0.19	Standard Devia	5.12	2.01	
2011	.96	N.A	.40	51	6) DVD Curr Income Cap. Gain		Median	24.54	11.32	
2010	17.09	N.A	14.48	85	YTD	USD .538000 .000000	Dividend Statistics			
2009	28.70	N.A	29.57	62	2012	USD .720000 .000000	12 Month Yield	1.79%		
2008	-37.04	N.A	-38.77	62	2011	USD .562000 .000000	Indicated Yield	1.77%		
2007	5.87	N.A	7.08	52	2010	USD .530000 .000000	1 Yr Dividend Growth	25.47%		
2006	15.51	N.A	14.03	73	2009	USD .515000 .000000	3 Yr Dividend Growth	14.02%		
2005	5.98	N.A	5.49	62	2008	USD .586000 .000000	5 Yr Dividend Growth	5.35%		
2004	12.52	N.A	10.24	83			Dividend Frequency	Quarter		
2003	31.35	N.A	28.54	88						

VTSMX US \$ NAV 44.24 -.01 Purch Prc 44.24

On 21 Oct

VTSMX US Equity 98 Report 99 Feedback Page 3/4 Description: Holdings

1) Profile 2) Performance 3) Holdings 4) Organizational

Holdings As Of 6/30/13 Portfolio Stats As Of 6/30/13 Alloc As Of 6/30/13

6) Top Holdings (MHD)	Position	% Net	Value	Top Asset Allocation
Exxon Mobil Corp	63.13M	2.254%	5.70B	Equity 99.57%
Apple Inc	13.33M	2.086%	5.28B	Cash and Other .40%
Microsoft Corp	106.72M	1.456%	3.68B	Government .03%
Johnson & Johnson	39.88M	1.353%	3.42B	
General Electric Co	146.80M	1.345%	3.40B	
Google Inc	3.85M	1.339%	3.39B	
Chevron Corp	27.54M	1.288%	3.26B	
Wells Fargo & Co	75.19M	1.226%	3.10B	Top Sector Allocation
International Business Machine	15.74M	1.189%	3.01B	Oil&Gas 7.43%
Procter & Gamble Co/The	38.91M	1.184%	3.00B	Banks 7.15%
				Pharmaceutical 6.35%
				Retail 6.34%
				Computers 5.10%
				Insurance 4.29%

7) Port Stats (PORT)

Top 10 Hldings % Port	14.72	Average P/C	9.14	Top Geo. Allocation
Median Mkt Cap	38.65B	Average P/S	1.38	U.S. 96.84%
Avg Wtd Mkt Cap	87.08B	Average P/E	19.56	Ireland .89%
Avg Div Yield	2.08	Average P/B	2.37	Switzerland .57%
				U.K. .45%

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2013 Bloomberg Finance L.P.
 SN 541209 CEST GMT+2:00 H430-3971-1 22-Oct-2013 13:35:18

VTSMX US \$ NAV 44.24 -.01 Purch Prc 44.24

On 21 Oct

VTSMX US Equity 98 Report 99 Feedback Page 4/4 Description: Organizational

1) Profile

2) Performance

3) Holdings

4) Organizational

5) Management (MGMT)

6) Gerard C O'Reilly
Fund Manager
1994 - Present

Contact Information

Vanguard Group Inc/The
Address
The Vanguard Group
P.O. Box 2600
Valley Forge, PA 19482-2600

1-610-669-1000
1-800-997-2798
1) www.vanguard.com

Agent
Vanguard Group Inc/The

Identifiers

Sedol
2486028 US
Valor
N.A.
WPK
N.A.
Sicovam
N.A.
CUSIP
922908306
ISIN
US9229083061

Notes

*As of June 2013 the benchmark was changed from MSCI US Broad Market Index, {MSCIBM Index GIP<GO>} to CRSP US Total Market Index {CRSPTM1 Index GIP<GO>}

<HFIP> for explanation

<HELP> for explanation.

Enter all fields and press <Go>, <Page> to view table

sis

96 Create Reports

97 Show Definitions

Page 1/3

Historical Fund Analysis

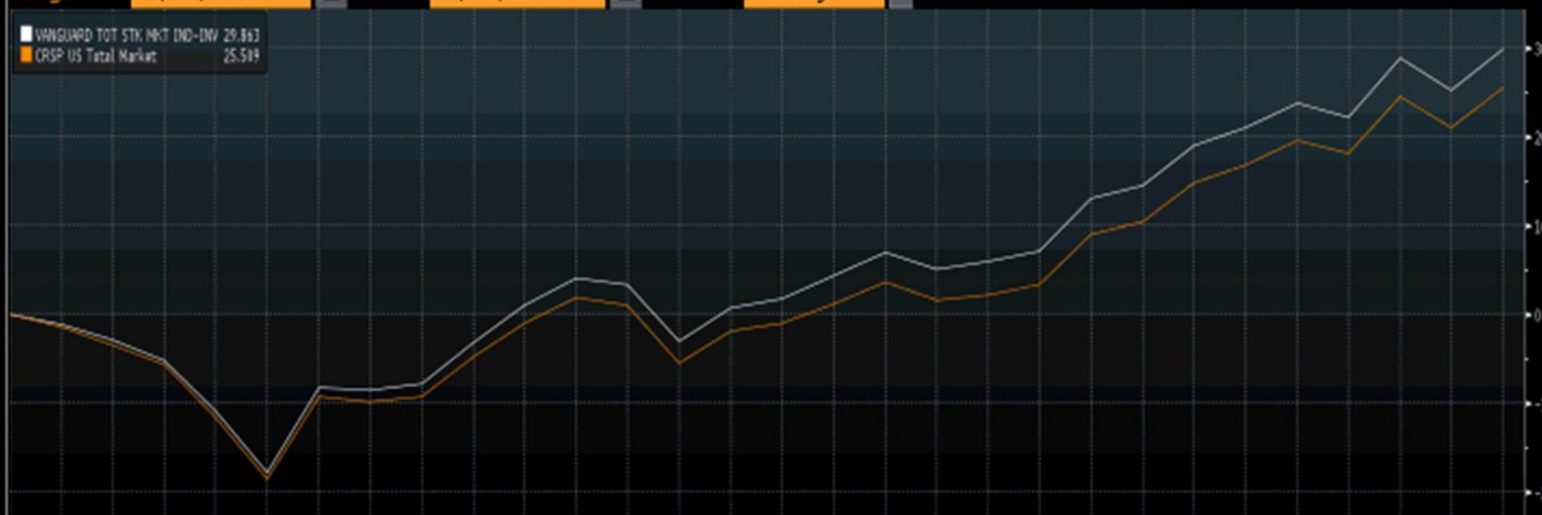
Total Return Performance Tracking Stats Seasonality

Source Single Fund VTSMX US Equity Benchmark Primary Benchmark CRSPTM1 Index

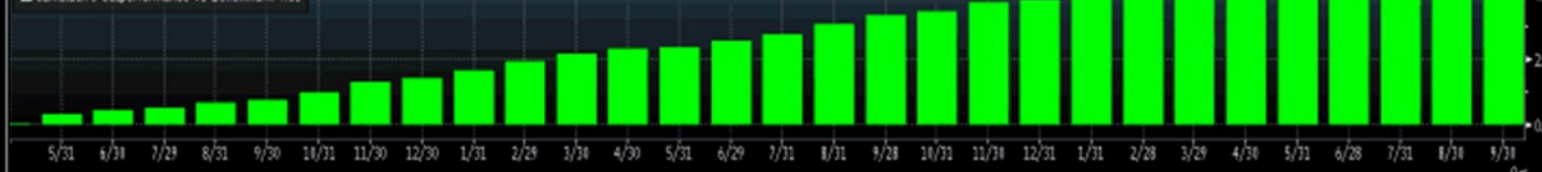
Week Portfolio Default Hist Sim Currency USD

Range 04/29/2011 - 09/30/2013 Monthly

VANGUARD TOT STK MKT IND-DIV 29.863
CRSP US Total Market 25.514



Cumulative Outperformance Vs Benchmark 4.35



Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000
 Copyright 2013 Bloomberg Finance L.P.
 SN 541209 CEST GMT+2:00 H430-3971-1 22-Oct-2013 13:36:50

0
30
20
10
0
-10
-20
-30
4.00
2.00
0.00
0.00
100
P.
50

Types of Funds

- Closed-End Funds
 - Issue shares and use the proceeds to make investments in stocks or bonds representing a particular sector or country for their investors.
 - Some closed-end funds engage in secondary offerings of new shares and use the proceeds to expand their investment portfolios.
- Market Price of Closed-End Funds
 - The market price of a closed-end fund can deviate from the aggregate value of the underlying stocks (measured by net asset value per share).

Other Types of Funds

- Exchange-Traded Funds
 - Designed to mimic particular stock indexes and are traded on a stock exchange just like stocks.
 - Exchange-traded funds have a fixed number of shares.
- Management of ETFs
 - Not actively managed
 - Not trying to outperform an existing index
- Capital Gains on ETFs - normally do not have capital gains and losses
- Liquidity of ETFs - more liquid than shares of open-end mutual funds because they can be sold at any moment

Other Types of Funds

Exchange-Traded Funds (cont.)

- **Brokerage Fees**

- One disadvantage of ETFs is that each purchase of additional shares must be executed through the exchange where they are traded. This incurs a brokerage fee for each trade.

- **Short Sales of ETFs**

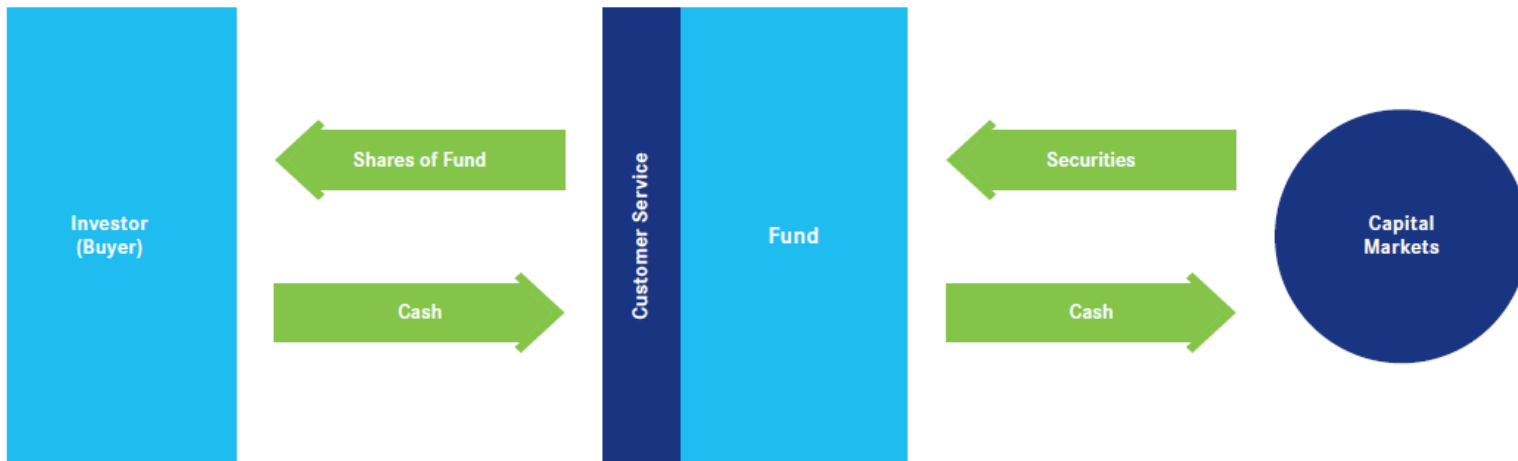
- ETFs can be sold short.
- Their liquidity makes them more popular than closed end funds for selling short.

Exchange-Traded Funds

- Popular ETFs
- Exchange-traded funds are classified as broad based, sector, or global, depending on the specific index that they mimic.
- The broad-based funds are the most popular, but both sector and global ETFs have experienced substantial growth in recent years.
- A popular ETF is the PowerShares QQQ, or Cube (its trading symbol is QQQQ), which represents the Nasdaq 100 index of technology firms.
- Another popular ETF is the Standard & Poor's Depository Receipt (SPDR or Spider), which represents the S&P 500 index.

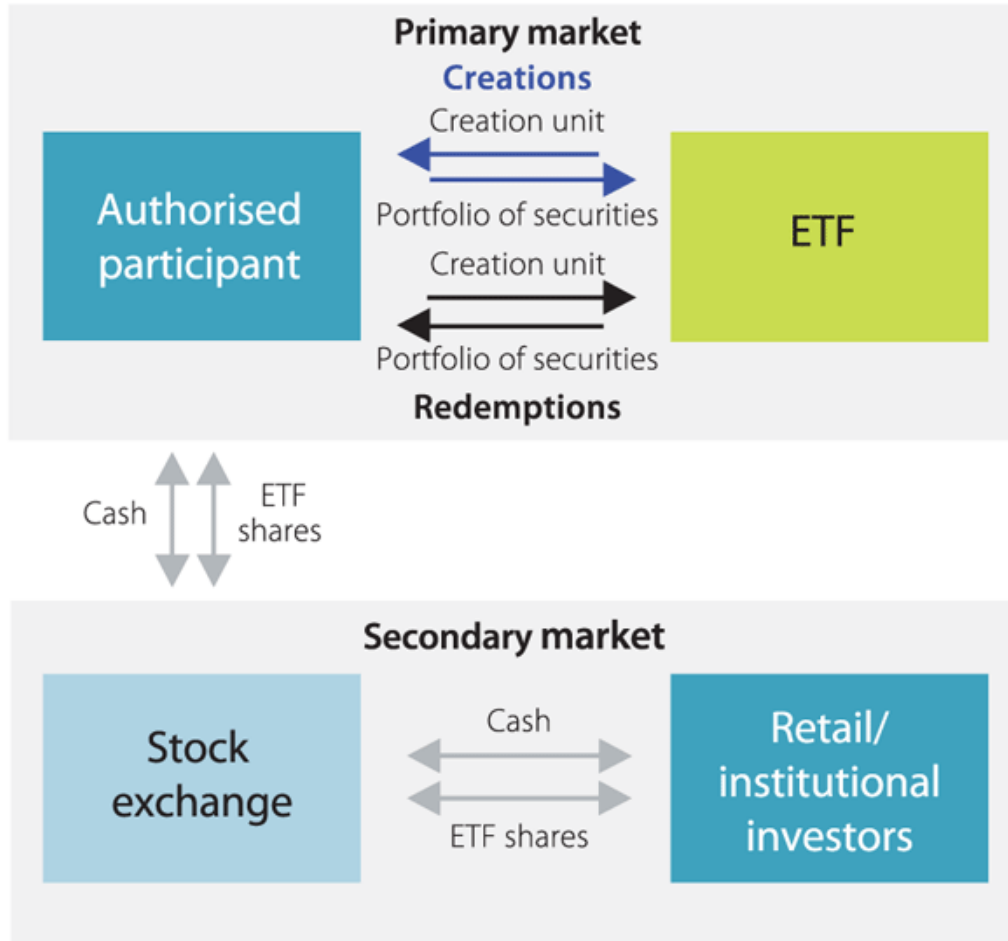
Mutual fund process

Figure 1: Traditional US mutual fund process



Creation process of ETFs

ETF Creation and Redemption Process



Source: RBA

SPY US \$

Market

T174.39 / 174.39P

5x1

Prev 175.41

Vol 208,360

SPY US Equity

98 Report

99 Feedback

Page 1/5

Description: Profile

1) Profile

2) Performance

3) Holdings

4) Allocations

5) Organizational

SPDR S&P 500 ETF TRUST

Objective Large-cap

SPDR S&P 500 ETF Trust is a unit investment trust incorporated in the United States. The Trust consists of a portfolio representing all 500 stocks in the S&P 500 Index. [BBGID BBG000BDTBL9]

6) Current Data (COMP)



Bloomberg Classification

Fund Type ETF
 Asset Class Equity
 Market Cap Large-cap
 Strategy Blend
 Geo. Focus Co U.S.

Appropriations

Leverage No
 Actively Managed No
 Swap Based No
 Derivatives Based No
 Currency Hedged No
 Replication Strategy Full
 Securities Lending No

7) Price (GP)

USD 175.41

8) NAV 10/22/13

USD 175.43

INAV

USD 175.33

Fund Percent Premium

0.063%

52 Wk H 10/22/13

USD 175.93

52 Wk L 11/16/12

USD 134.70

9) Options(OMON)

Yes

Trading Data

Bid Ask Spread 0.030
 30D Avg Volume 125.9M
 Implied Liquidity 46.9M
 Market Cap USD 158.06B
 Shares Out 901.1M
 Total Assets USD 158.07B

Characteristics

Und. Index 10) SPX
 Index Weight Market Cap
 Px Track. Error .298
 NAV Track. Error .038
 Inception Date 01/29/93
 Expense Ratio .095%

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000
 Copyright 2013 Bloomberg Finance L.P.
 SN 541209 CEST GMT+2:00 H266-3963-0 23-Oct-2013 13:04:37

SPY US \$ Market

T174.39 / 174.39P

5 x 1

Prev 175.41

Vol 208,360

SPY US Equity 98 Report 99 Feedback Page 2/5 Description: Performance

1) Profile 2) Performance 3) Holdings 4) Allocations 5) Organizational

SPY Returns 10/22/13 Inception Date 01/29/93 Index Returns 10/22/13

Return	SPY	SPTR	Absolute Measure - 1Yr	SPY	SPTR
1 Month	+2.75%	+2.77%	Max Return	4.53	4.59
3 Month	+3.99%	+4.04%	Min Return	-2.40	-2.32
YTD	+24.98%	+25.14%	Sharpe Ratio	2.27	2.27
1 Year	+25.00%	+25.11%	Downside Risk	7.67	7.72
3 Year	+16.40%	+16.51%	Periods Up(%)	63.46	63.46
5 Year	+16.59%	+16.93%	Periods Down(%)	36.54	36.54

Rel. Measure	7) BETA	Dividend Information	10) DVD	Period	Curr	Income	Cap. Gain
Benchmark	8) SPX	12 Month Yield	1.93%	YTD	USD	2.37	0.00
Raw Beta 6M	.997	Net Indicated Yield	1.91%	2012	USD	3.10	0.00
Adjusted Beta 6M	.998	1 Yr Dividend Growth	18.97%	2011	USD	2.58	0.00
Raw Beta 1Yr	1.003	3 Yr Dividend Growth	15.46%	2010	USD	2.27	0.00
Adjusted Beta 1Yr	1.002	5 Yr Dividend Growth	4.08%	2009	USD	2.18	0.00
Correlation	.994	Dividend Frequency	Quarter	2008	USD	2.72	0.00
Standard Deviation	9.110						
Volatility 30 Day	12.733						

9) Historical Fund Analysis

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2013 Bloomberg Finance L.P.
 SN 541209 CEST GMT+2:00 H266-3963-0 23-Oct-2013 13:05:07

SPY US \$

Market

T174.40 / 174.41P

1x3

Prev 175.41

Vol 208,460

SPY US Equity

98 Report

99 Feedback

Page 4/5

Description: Allocations

1) Profile

2) Performance

3) Holdings

4) Allocations

5) Organizational

Allocations as of 10/22/13

Top Sector Allocation

Oil&Gas	8.21%
Banks	7.51%
Pharmaceuticals	7.06%
Retail	6.42%
Computers	5.86%
Insurance	4.40%
Internet	3.93%
Software	3.65%
Media	3.61%
Telecommunications	3.60%

Top Geographic Allocation

U.S.	97.50%
Ireland	.98%
Switzerland	.64%
U.K.	.34%
Bermuda	.03%

Top Asset Allocation

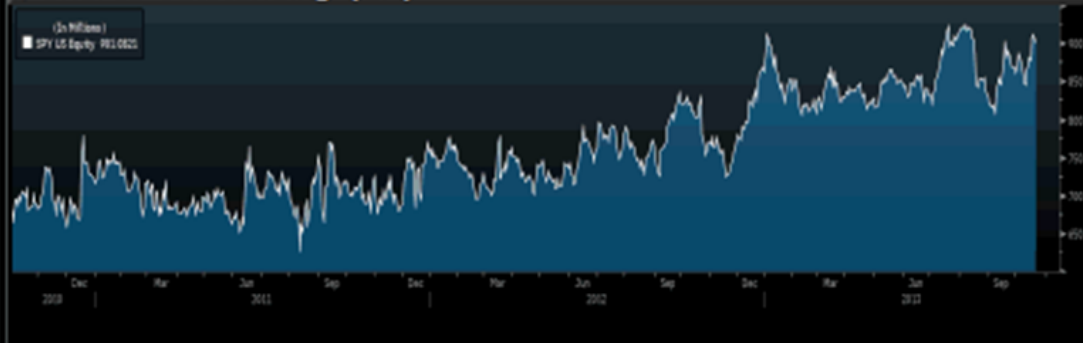
Equity	99.49%
Cash and Other	.51%

6) Port Stats (PORT)

10/22/13

Top 10 Hldings % Port	17.86
Median Mkt Cap	USD 66.15B
Avg Wtd Mkt Cap	USD 112.37B
Avg Div Yield	2.01
Average P/B	2.42
Average P/E	18.03
Average P/S	1.69
Average P/C	11.63

7) Shares Outstanding (GP)



Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000
 Copyright 2013 Bloomberg Finance L.P.
 SN 541209 CEST GMT+2:00 H266-3963-0 23-Oct-2013 13:05:35

Other Types of Funds

Venture Capital Funds

- Venture capital (VC) funds use money that they receive from wealthy individuals and some institutional investors to invest in companies.
- Invested monies are pooled and used to create a diversified equity portfolio.
- Venture capital funds tend to focus on technology firms, which have the potential for high returns but also exhibit a high level of risk.
- A VC fund typically plans to exit from its original investment in a business within about four to seven years.

Other Types of Funds

- Private Equity Funds
 - Private equity funds pool money provided by individual and institutional investors and buy majority (or entire) stakes in businesses.
- When a private equity fund purchases a business, it assumes control and is able to restructure the business in a manner that will improve its performance.
- The Market for Private Equity Businesses
 - The potential to capitalize on inefficiencies in this market has attracted much more investment in private equity and has led to the creation of many new private equity funds.

Other Types of Funds

- Hedge Funds
- Sell shares to wealthy individuals and financial institutions and use the proceeds to invest in securities.
- They differ from open-end mutual funds in several ways.
 - Require a much larger initial investment (such as \$1 million).
 - Many hedge funds are not “open” in the sense that they may not always accept additional investments or accommodate redemption requests unless advance notice is provided.
 - Hedge funds have been subject to minimal regulation.
 - Hedge funds invest in a wide variety of investments to achieve high returns.

Other Types of Funds

- Hedge Funds (cont.)
- Use of Financial Leverage
 - Use borrowed funds to complement the equity that they receive and invest.
 - The use of financial leverage allows them to make more investments with a given amount of equity and can magnify the returns.
- Hedge Fund Fees
 - Hedge funds charge a management fee of between 1 and 2 percent of the investment per year.
 - In addition, they charge an incentive fee that is based on the return of the fund. The typical incentive fee is 20 percent of the return.

Other Types of Funds

- Hedge Funds (cont.)
- Financial Problems Experienced by LTCM
 - One of the best-known hedge funds was Long-Term Capital Management (LTCM), which was created in 1994 and managed by a group of partners who had a very strong track record.
 - LTCM had investments in relatively risky bonds and lost more than \$2 billion, or about 40 percent of its total equity.
 - On September 23, 1998, the Federal Reserve Bank of New York organized a rescue of LTCM by 14 large commercial banks and securities firms.

Other Types of Funds

- Madoff Fund Scandal
 - Bernard Madoff managed a large and well-respected hedge fund that included various institutions, charities, and wealthy individuals among its investors.
 - Madoff admitted that he had been periodically using money from new investors to pay off investors who wanted to cash out of the fund.
 - The potential losses to investors were estimated to be as high as \$50 billion, making this possibly the biggest financial scandal in U.S. history.

Regulatory Reform of Hedge Funds

- The Financial Reform Act of 2010 contained provisions to stabilize the financial system.
- Mandates that hedge funds managing more than \$100 million register with the SEC as investment advisors.
- Must also disclose financial data that can be used by the Financial Stability Oversight Council (created by the Financial Reform Act) in order to assess systemic risk in the financial system.
- Prevents commercial banks from investing more than 3% of their capital in hedge funds, private equity funds, or real estate funds.