Bloomberg

YOUR GUIDE TO FUNDS ON BLOOMBERG

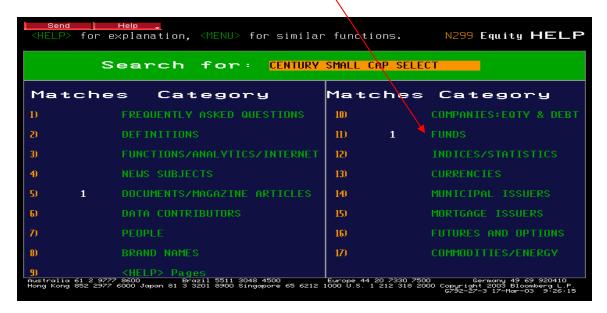
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I. Finding funds on the system

There are two main ways to locate mutual funds on the Bloomberg terminal: 1) simply type the name of the mutual fund, or part of the name followed by the F1 HELP key, and then choose option #11, or 2) if you know the ticker of the mutual fund, type the ticker followed by the F8 EQUITY key, then hit <go>. See illustration below for an example of each:

1) use the help key, then choose option 11:



2) use the ticker from any screen on Bloomberg:

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CSMCX US Equity

Enter # <a href="COD">CSMCX US Equity TOP</a>

Enter # <a href="COD">CSMCX US Equity TOP</a>

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TOP STORIES FOR March 17

Bloomberg NEWS

1) News Menu

2) Business Summaries
3) Scrolling Top News
4) Treasuries, Oil and Gold Rise on Bush's Iraq Deadline; Dollar, Stocks Drop
5) Stocks Fall in U.S. on War Concern; Intel, General Electric Shares Decline
6) RWE Says Profit to Drop for a Second Straight Year on Cost of Acquisitions
7) European Commission Cuts Economic Forecast, Calls for Lower Interest Rates
8) Citigroup, UBS Reap Bonanza as $355 Billion Market for Muni Bonds Booms
9) Turkish Markets Slump on Concern Country Won't Get $30 Billion U.S. Loans
10) Goldman, Lehman and Bear Stearns to Report Higher Earnings From Bond Sales
11) Federal Reserve May Keep Rates Unchanged as U.S. Showdown With Iraq Nears
12) Lockheed, Northrop, Rival Defense Stocks Lose Favor in Prelude to Iraq War
13) Ahold's 'Organic Growth' Definition Makes Analysts Question Its Accounting
14) Iraq's $62 Billion in Defaulted Debt Lures Investors Making a Post-War Bet
15) Bush, Chirac, Schroeder Aides Differ on Tax Policies and Budget Deficits
16) Worldwide Summaries
17) Multimedia
18) Worldwide Stories
19) UN Weapons Inspectors Advised by U.S. to Leave Iraq, IAEA's ElBaradei Says
20) Deadly Respiratory Illness Prompts Airline Precautions; Nine People Dead
21) Israeli Troops Raid Gaza Camps, Killing Nine Palestinians, Ha'aretz Says
22) Serbian Police Arrest 318 People Amid Investigation Into Djindjic's Murder
23) Meningitis Vaccine May Provide the First Long-Term Protection in Africa
24) Blair Faces Labour Party Critics as Time Runs Out for Diplomacy on Iraq
25) Opinion
26) Headlines
27) Letters to Editor
28) Internet Slump Threatens Traditional Stocks: Commentary by Matthew Lynn
Rustralis 612 9777 6600 Brazil 5511 3048 4500 Europe 41 20 7330 7500

COD Copy 1507 1000 Japan 81 3 3201 8000 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copy 1507 1000 Span 91 3 3201 8000 Singapore 91 100
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II. General mutual fund functions

The main mutual fund information function is DES. This function includes information ranging from the fund's description, objective classification, returns, performance ranking, manager profile, contact information, distributions, benchmarking and, last but not least, information pertaining to the ENTIRE portfolio of the fund. Once you have accessed the fund on Bloomberg, simply type DES<go>. You will see there are four pages to DES. To see all four pages simply page forward.

DES page 1, description, objective classification, performance ranking, NAV



DES page 2, manager profile, fees/expenses, distributions, identification numbers

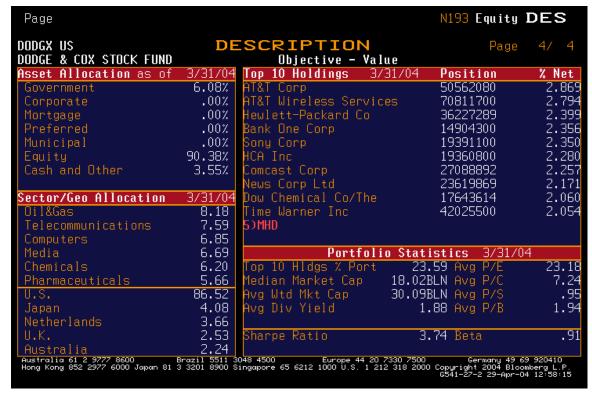




DES page 3, performance ranking, benchmarking

Page				N193 Equity DES
DODGX US	DI		PTION	Page 3/ 4
DODGE & COX STOCK FU	ND		ctive - Valu	
Current		Return		Percentile
	Fund	SPX	Difference	Ranking in Objective
as of	4/28/04	4/28/04		
3)TRA 1 Week	52	13	39	27
1 Month	.60	1.41	80	30
3 Month	.09	14	.23	44
4)COMPYTD	3.81	1.43	2.38	82
1 Year	37.00	24.82	12.18	78
3 Year	7.74	-2.02	9.76	85
9)HRH 5 Year	9.87	-2.22	12.09	85
Historical	Fund	SPX	Difference	Ranking in Objective
2003	32.34	28.68	3.66	58
2002	-10.54	-22.10	11.56	85
2001	9.33	-11.89	21.22	82
2000	16.31	-9.11	25.41	71
1999	20.20	21.04	84	75
1998	5 . 40	28.58	-23.18	35
1997	28.40	33.36	-4.96	66
1996	22.27	22.96	70	66
1995	33.38	37.58	-4.20	61
1994	5.17	1.32	3.85	90
Australia 61 2 9777 8600 Hong Kong 852 2977 6000 Japan	Brazil 5511 30 81 3 3201 8900 S:)48 4500 ingapore 65 621	Europe 44 20 73 2 1000 U.S. 1 212	30 7500 Germany 49 69 920410 318 2000 Copyright 2004 Bloomberg L.P. G541–27–2 29-Apr-04 12:56:26

DES page 4, asset allocation, sector/geo allocation, top 10 holdings, portfolio statistics





The great thing about the DES page is that there are 7 analytical functions that you can use to further investigate a mutual fund, and these functions are linked through the DES page so you don't have to memorize the functions. Simply get to the DES page and look for the RED highlighted numbers and click on them. See below for example:



These linked functions include: GP – which is a graph of the fund's NAV; TRA – which is Bloomberg's Total Return Analysis; MGMT – which allows you to see the manager's profile; DVD – which displays the fund's distributions; COMP – which displays the fund's total return performance against it's benchmark's and one other security's returns (this security is your choice), on a graph; and MHD – which displays the entire portfolio of a mutual fund!



III. Manager Profiles

The People department at Bloomberg handles the procurement of information so that you can look up virtually any portfolio manager of any fund, and find the necessary information you need to make good investment decisions. When you are researching a fund on Bloomberg, the manager's profile can be accessed by running the function, MGMT<go>. An example of what this page looks like is provided below.



IV. Peer grouping analysis

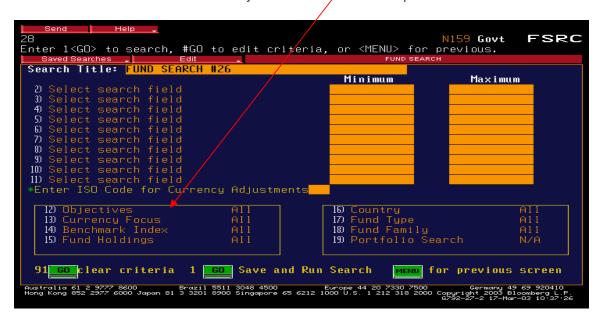
The strength of any company's peer group analysis stems from the quality of its classification system. Bloomberg is unique in the way that it creates peer groups. Unlike most, Bloomberg uses the stated objective found in the prospectus of a fund, to find an appropriate peer group for the fund. The advantage is that once a fund declares a certain investment objective, it will forever be compared to only those funds that share that exact objective. The benefit to you is consistent, high quality peer group analyses from week to week, month to month, and year to year. Only when an official corporate action has been declared, and the objective of a fund changed, will that fund find a new home in a different peer group. This feature enables you to find your peers, get to know them, watch them and continually compare your fund against those that are its closest competitors. To see your fund's peer group, the function you want to run is FSRC<go>.

1) Simply type FSRC<go> and you will see this menu page. You will see that you can save up to 20 searches, shown here in the left hand column. Your first step from here is to click on option #28 – Create Customize Template. You are basically telling Bloomberg that you would like to start assigning criteria to see a particular peer group.

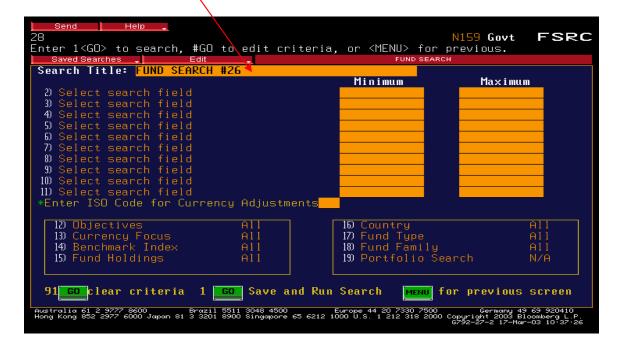




2) Next you will see a screen that is asking you for the criteria you want included in your search/peer group. What is most popularly used is the Bloomberg Classification Data found on page 1 of the DES of the fund you are researching to fill out that same criteria on this page in FSRC. You are asking the Bloomberg to find all funds with the same objective as the fund in question.



3) You can name your fund whatever you like, and once you hit the <go> key, it will be a saved search. \





4) Once you have put in the critical criteria found under options #12-#19, you can go ahead and further refine your search by putting in criteria that can be expressed within a minimum/maximum range. For instance, you only want small cap growth funds that have assets between 500 million and 2 billion dollars, and/or an expense ratio that lies between .8 and 1.2%.



5) Once you have entered all of your criteria, it's time to put Bloomberg to work. Simply hit 1<go> and in seconds you are returned the results to your search. Depending on what your defaults are set on, your display might look differently than this. However, it is important to know that the columns of information can easily be changed to display whatever you would like, and you can have up to 20 columns of information displayed!

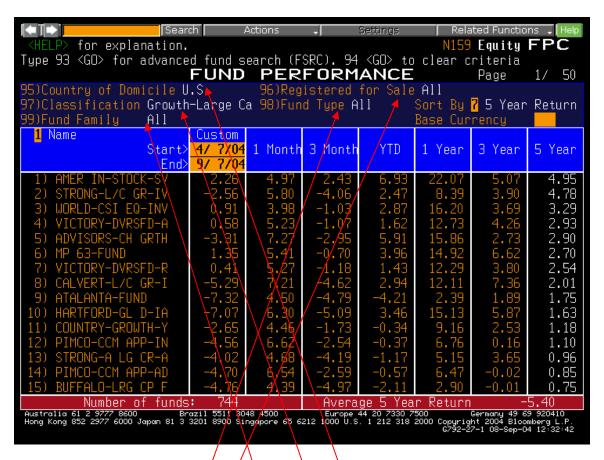
SMAL	L CAP GROW	тн		23 Se	curities Fo	und Page	1/
Ticker	Name	Fund	Expense	Total Return	Funds - Total	Funds - Total	Geographic
		Manager	Ratio	1 Year Pot	Return 3 Year - Ann	Return 1 Month	Focus
1) LLSCX	LONGLEAF PARTNERS SM CAP FD	Team Managed	.950	-20.000	5.290	970	U.8
2) RYPRX	ROYCE PREMIER FUND-INVICLASS	Team Managed	1.170	-18.260	2.770	-2.150	U.S
3) BUFSX	BUFFALO SMALL CAP FUND	Team Managed	1.010	-36.020	-1.650	-1.770	U.8
4) OPMYX	OPPENHEIMER MAIN ST S/C FD-Y	Team Managed	.930	-21.610	-2.010	-1.070	U.8
5) USCIX	AXA ROSENBERG US SML CAP-INS	FLOYD COLEMAN	1.150	-17.070	-2.080	-1.250	U.8
6) WPSCX	WESTPORT SELECT CAP-INST	Team Managed	1.070	-22.890	-3.730	-1.680	U.:
7) ARSTX	FIRST AMERICAN S/C SLCT FD-Y	Team Managed	.960	-25.700	-3.910	.360	U.:
8) WUSAX	WANGER U.S. SMALL COM-ADVISR	ROBERT MOHN	1.000	-24.040	-7.020	110	U.:
9) FSLCX	FIDELITY SMALL CAP STOCK FD	PAUL ANTICO	1.070	-24.810	-7.280	-1.280	Glob
10) FDSCX	FIDELITY SMALL CAP INDEPEND	JAMES M HARMON	.910	-26.550	-8.700	240	Glob
11) VSEIX	JP MORGAN SMALL CAP EQ-SEL	JULIET ELLIS	.850	-25.070	-8.700	-1.040	U.
12) KNEEK	FIFTH THIRD S/C GROWTH-INST	Team Managed	.930	-30.380	-15.770	640	U.:
13)KNBMX	FIFTH THIRD S/C GROWTH-A	Team Managed	1.180	-30.570	-16.000	650	U.:
14) BJSCX	BRAZOS SMALL CAP PORTFOLIO-Y	Team Managed	1.030	-32.630	-17.460	1.510	U.:
15) PSCPX	NATIONS SMALL COMPANY-PRM A	Strategic Growth Team	1.150	-33.240	-22.040	.100	U.:
16) DGTIX	DELAWARE TREND FUND-INSTL	GERALD S FREY	1.160	-24.110	-22.440	070	U.
17) WTSGX	CREDIT SUISSE TRST S/C GRTH	Team Managed	1.110	-34.850	-27.340	680	U.
18) JSGIX	JOHN HANCOCK S/C GROWTH FD-I	Team Managed	.950	-33.440	-30.610	630	U.:



6) You have many options once you run the search, just look to the red tool bar to see what these options are. Some include: editing options, output options that allow you to download this to Excel, email to another user, or print your results. However, the most powerful option is the option to turn your search/peer group, into a security of it's own. For example, if you feel as though the search/peer group you have created is a perfect representation of your fund's closest competitors, turn this search/peer group into a benchmark security, assign it a price history and ticker, and now you can view this benchmark as if it were your fund's benchmark index!!



Another, more simplified way to find your funds peer group is through the FPC<go> function. FPC stands for Fund Performance Chart. This function allows you to create a particular peer group and analyze their returns over 6 predetermined time periods, or better yet, customize your own date range. To get started, from any Bloomberg screen just type FPC<go>.



The beauty of this function is its simplicity. You will see only five options by which you can set the criteria for the search. 1) You tell Bloomberg from which country you want to search for funds from (remember we have about 80,000 funds worldwide available for you to see), 2) You tell Bloomberg which types of funds are included in your search, 3) You can choose to see only the funds from a particular fund family, 4) You can search for funds that are registered for sale in particular countries, 5) and you can search for open-end, closed-end, hedge funds, ETFs, Unit Trusts and many others.

Happy with your search in FPC, but want to add just one or two additional pieces of criteria, just type 99<go> and Bloomberg will automatically take the search you created in FPC and drop it into FSRC! From there you can add whatever additional criteria you want.



V. Mutual fund portfolios

What makes the Bloomberg mutual fund database so powerful is its holdings information. Bloomberg currently receives holdings for over 96% of the U.S. mutual fund market in Excel format, and more frequently than semi-annually—most of them come quarterly. This enables our users, you, to gain added value by being able to see virtually any fund's portfolio, in its entirety. Bloomberg provides several functions that allow you to view, breakdown or compare the portfolio of a fund.

**NOTE: for each of the following functions with the exception of MHD, you must first run the MHD function, then choose option 99<go>. Then you can proceed to run the PRPT or PCMP functions.

1) MHD – Mutual fund holdings function. You will see that this function provides the security name, ticker, position held, market value, change in position since the last filing, and the percent of the portfolio that the security makes up. You will also see that there are 5 pages to this fund's holdings, and the last page will always show the complete sell-offs of the fund. This information can be downloaded to Excel for your convenience!



2) RVP – Relative Value Portfolio. This function allows you to view the portfolio holdings, as represented in MHD, in a more user friendly, customizable format. Once the securities load in RVP you will see a default view that is fully customizable. You can edit the columns by choosing the edit button on the toolbar and then Data Fields. Up to 20 columns of information may be chosen and you may also choose from a list of pre-developed templates under Template List on the toolbar. Once you develop a template with the data fields you find to

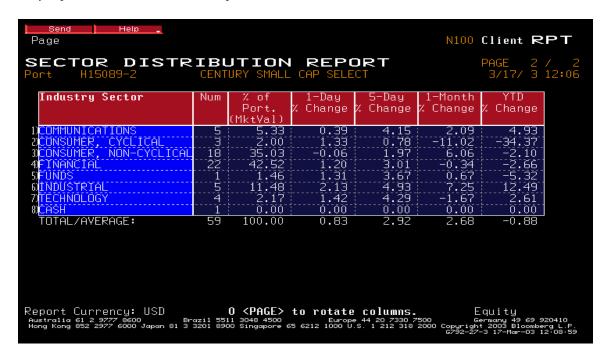


be most important there are several options. Such options include sending the securities and data fields to Excel, downloading the portfolio into a Launchpad monitor, printing the template, and sending the template to another Bloomberg user. Additionally, you may upload a portfolio you have saved on the Bloomberg into RVP.

Example: CSMCX Equity <go>, MHD <go>, 99 <go>, RVP <go>

Template List							
	Current	Portfolio	DOTAGE POR DECEMBER ON SMALL CAP SELECT	Last	Change Year	Price	
	Position	Weight	Name	Price	To Date	EarningsRatio (P	
Averages:	26172.93	1.43		32.15	43.47	27.0	
1) ABCO	18600.000	1.089	ADVISORY BOARD CO/THE	32.26	+7.893	32.5	
2) ACAS	35000.000	1.661	AMERICAN CAPITAL STRATEGIES	26.14	+21.075	10.2	
3) AHG	45000.000	2.359	APRIA HEALTHCARE GROUP INC	28.88	+29.856	13.9	
4) AJG	9000.000	0.455	ARTHUR J GALLAGHER & CO	27.85	-5.208	16.4	
5) AMHC	10000.000	0.784	AMERICAN HEALTHWAYS INC	43.20	+146.857	38.5	
6) ANSS	20000.000	1.312	ANSYS INC	36.149	+78.955	26.0	
7) ARB	25000.000	1.747	ARBITRON INC	38.50	+14.925	24.8	
8) ASCL	35000.000	1.385	ASCENTIAL SOFTWARE CORP	21.81	+127.188	114.7	
9) BCGI	45000.000	0.732	BOSTON COMMUNICATIONS GROUP	8.96	-29.504	10.4	
10) BFAM	26000.000	2.074	BRIGHT HORIZONS FAMILY SOLUT	43.959	+56.326	31.1	
11) BPFH	.000	N.A.	BOSTON PRIVATE FINL HOLDING	24.64	+24.068	24.1	
12) CBIZ	80000.000	0.581	CENTURY BUSINESS SERVICES	4.00	+50.943	25.0	
13) CPWM	30000.000	2.249	COST PLUS INC/CALIFORNIA	41.30	+44.053	30.3	
14) CRAI	17490.000	0.944	CHARLES RIVER ASSOCIATES INC	29.739	+109.430	26.3	
15) CRL	15000.000	0.911	CHARLES RIVER LABORATORIES	33.48	-12.994	21.0	
16) CRMT	35000.000	1.992	AMERICA'S CAR-MART INC	31.351	+145.890	16.9	
17) CRVL	21655.000		CORVEL CORP	34.499	-3,499	21.8	
18) CSGP	19500.000		COSTAR GROUP INC	33.03	+79.024	100.0	
19) CTR	30800.000		CATO CORP-CL A	20.64	-4.400	13.1	
20) CTXS	.000	N.A.	CITRIX SYSTEMS INC	24.60	+99.675	31.1	

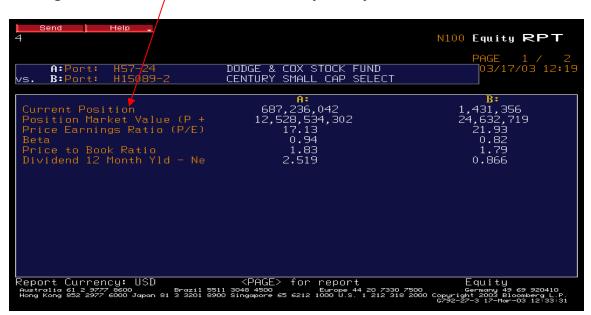
3) PRPT – Portfolio report. This function enables you to breakdown any portfolio and view it's holdings in a variety of different ways. Group by sales/revenue, QTD returns or by sector distribution for equity funds, sort by duration, industry or currency for fixed-income funds, or set up your own report customized around exactly how you want to see a portfolio displayed. Below is an example of an equity fund broken down by sector. Page 1 displays the broad industry sectors that are represented in this portfolio. It provides you with the number of stocks in each industry, % of the portfolio it makes up, 1-day % change, 5-day % change, 1-month % change and YTD % change. These columns are editable, you can display whatever information you desire.



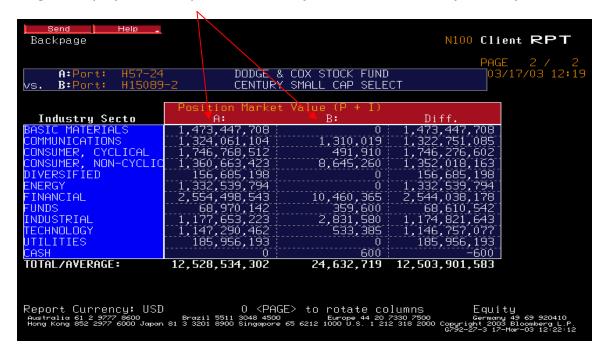
Page 2 of PRPT drills down one more layer of detail. By clicking on one of the sectors above, you are able to see exactly which stocks make up that industry sector. The example below shows the first 11 of the 22 financial stocks in this portfolio. Simply page down to see the remaining 11 stocks. PRPT then provides you with columns of information pertaining to those specific stocks. Flexibility is the name of the game; you can even click on the stock itself and be sent to the individual security's menu page!



3) PCMP – Portfolio comparison. This function allows you to compare the portfolios of two funds or indices side-by-side. An example is shown below of two equity portfolios shown side by side. The first page is a summary page. The information displayed: current position, position market value, and price to earnings ratio can all be edited to show only what you want to see.



Page 2 displays the two portfolios side by side broken down by industry.



4) PHDC – Portfolio holdings search. This is the portfolio database's flagship function. This function alone attracts more than 40,000 customer hits per day! What PHDC does for you is take a single security, be it an equity, bond or mutual fund, and displays all the holders of that security. The advantage to you is that with one function you can find out all of the other mutual funds that hold either a stock or bond that you hold, or are considering buying. Another benefit is that with more market transparency given to you through Bloomberg, your investment decisions may be influenced by knowing what your peers are doing with a certain security, or by viewing what the insiders are doing. The example below displays all the holders of Microsoft. You can run this function by typing MSFT US <Equity> PHDC1<go>.



**REMEMBER: Bloomberg is always available to assist you in navigating these functions. If you have questions or feedback regarding our information or functionality, hit your green HELP key twice for immediate assistance 24 hours a day, 7 days a week, 365 days a year!

