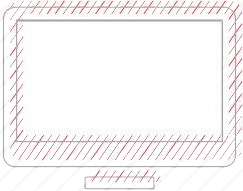
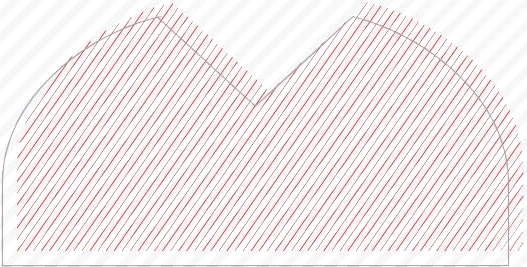
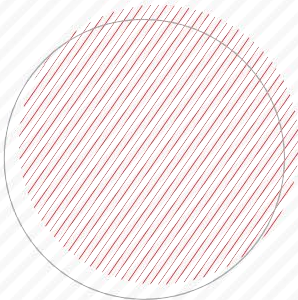
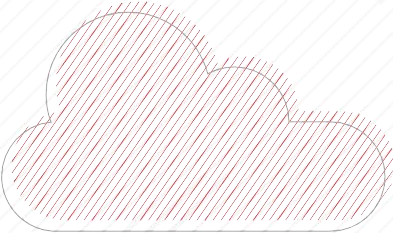
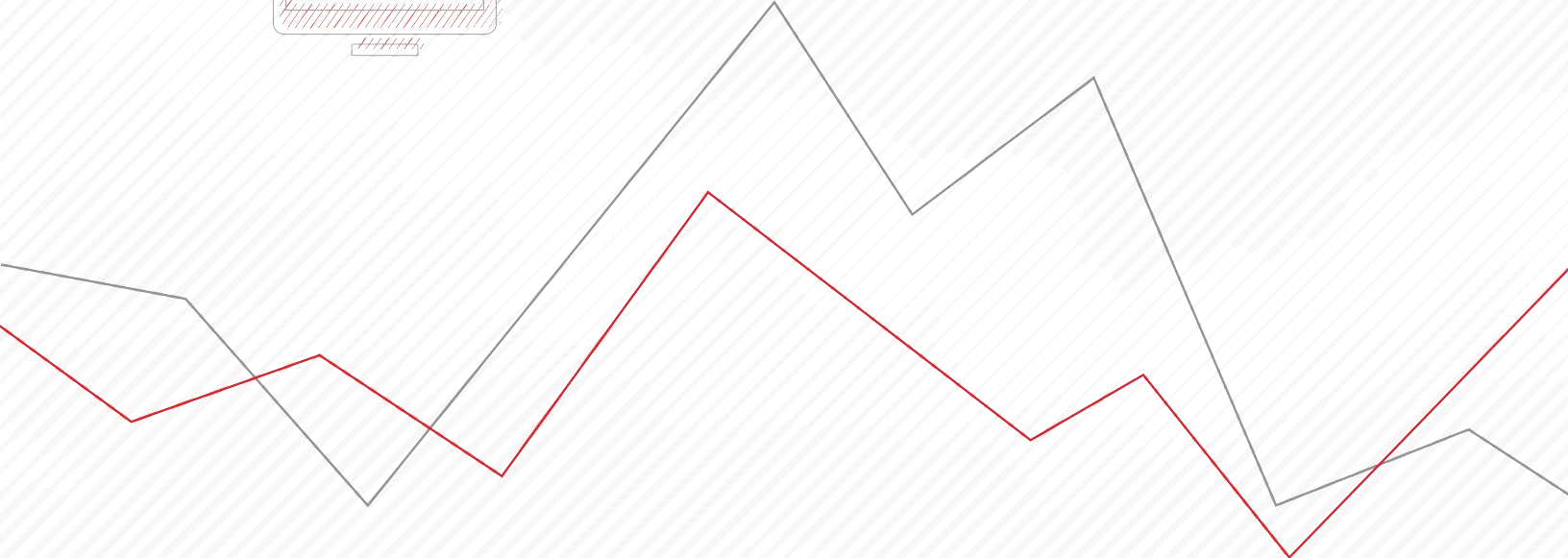


Morningstar Direct Training Guide
Analysing Market Trends



MORNINGSTAR Direct



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Analysing Market Trends

Overview

The Asset Flows module in Morningstar Direct uses estimated data (provided by fund families to Morningstar) to understand changes in asset levels at the fund, category, strategy (active vs. passive), and firm level. Not only can you see which items have net inflows vs. outflows, but you can also evaluate the size of the change relative to a fund itself, and take measure of investment trends as individuals and institutions adjust to market conditions.

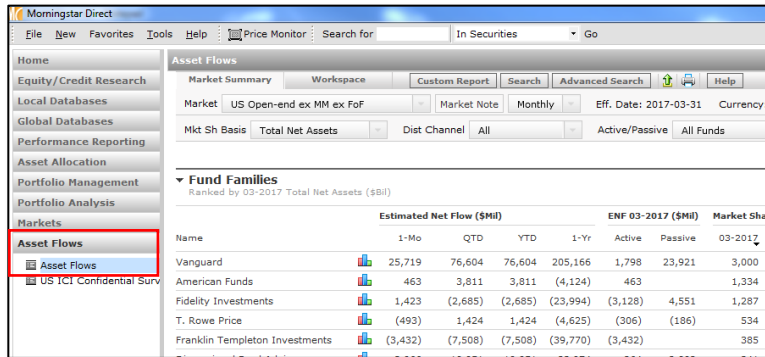
Share Classes		Estimated Net Flow (\$Mil)				Organic Growth Rate % (TTM)	Query Mkt Sh%	Query Rank
Name		1-Mo	QTD	YTD	1-Yr		10-2016	10-2016
1	Columbia Select Large Cap Growth...	(64)	(64)	(935)	(1,129)	(27.28)	(43.84)	25
2	ClearBridge Aggressive Growth A	(43)	(43)	(634)	(748)	(13.11)	(29.12)	24
3	Alger Small Cap Growth Institutio...	(12)	(12)	(182)	(201)	(56.30)	(8.37)	23
4	BMO Small-Cap Growth Y	(4)	(4)	(128)	(142)	(52.27)	(2.97)	22
5	Highland Long/Short Healthcare A	(3)	(3)	(57)	(84)	(46.26)	(1.73)	18
6	FPA US Value	(3)	(3)	(39)	(77)	(37.37)	(2.35)	20
7	Tocqueville Opportunity	(2)	(2)	(41)	(45)	(28.94)	(1.46)	17
8	Scotia Dynamic U.S. Growth I	(1)	(1)	(16)	(19)	(22.30)	(0.54)	13
9	Nuveen Concentrated Core A	(3)	(3)	(20)	(18)	(30.33)	(2.38)	21
10	WesMark Growth	(3)	(3)	(11)	(14)	(4.13)	(1.92)	19
11	AllianzGI Ultra Micro Cap Institutio...	0	0	(12)	(13)	(33.76)	(0.27)	9

Morningstar Asset Flows supplies critical knowledge for monitoring broad investor trends performing competitive analysis, developing new products, and marketing managed investment products. It delivers comprehensive estimated cash flow and market share data for a variety of investment types across multiple geographical markets. Fund marketing professionals, financial analysts, and the media rely on this data to track trends in the asset management industry.

Exercise 1: Accessing Asset Flows

To access Asset Flows, do the following:

1. Log in to Morningstar Direct using your credentials.
2. Click on the **Asset Flows** folder in the left navigation panel.



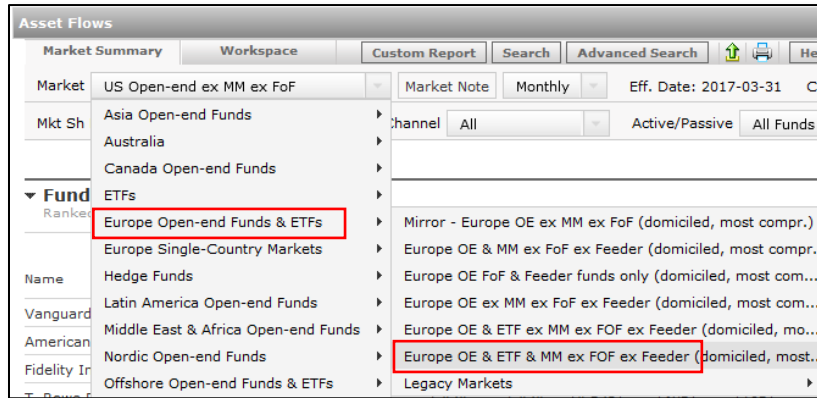
Morningstar Asset Flows hosts several databases over various geographical areas and investment types.

Each database will be displayed in a specific currency, related to that market. For instance, the US databases are displayed in US Dollars, whereas the Europe Open-end Funds & ETFs databases are displayed in Euro.

To select a specific universe, do the following:

1. From the **Market Summary** tab, click the **Market** drop-down menu.
2. Select **Europe Open-end Funds & ETFs > Europe OE & ETF & MM ex FOF ex Feeder**.

Exercise 2: Changing Market Universe



Select Europe OE & ETF & MM ex FOF ex Feeder

The Europe OE & ETF & MM database is now displayed on the page. Note that the currency is in Euro.

Name	Estimated Net Flow (CMI)				Market Share Basis: Total Net Assets (CBII)						# of Funds	
	1-Mo	QTD	YTD	1-Yr	02-2017	Mkt Sh%	Rank	02-2016	Mkt Sh%	Rank	Reported	Total
BlackRock	1,812	3,555	3,555	17,716	380	4.28	1	339	4.40	1	250	270
Amundi	(4,143)	20,366	20,366	32,633	307	3.45	2	261	3.39	2	722	780
JPMorgan	1,549	5,618	5,618	33,043	296	3.33	3	243	3.16	3	209	228
iShares	3,510	7,256	7,256	32,482	266	2.99	4	205	2.66	5	295	305
UBS	2,419	3,831	3,831	5,512	256	2.88	5	226	2.94	4	901	966

The market is broken down into various groupings, such as Asset Classes, Fund Families, Morningstar Categories, Index Funds, and more. Within each grouping variable, local results for the given market will be displayed.

We want to start an analysis with asset classes, identifying the one with the highest estimated net flows over the last year, and break it down to find the fund family with the highest flows.

Exercise 3: Identifying the top Asset Class

To get started, do the following:

1. From the **Market Summary** page, use the second grouping – **Global Broad Category Group**.
2. Under the **1-Yr** column, identify which asset class has the highest flows.
3. Under the **Name** column, click on that asset class. A new window opens.

Name	Estimated Net Flow (€M)				Market Share Basis: Total Net Assets (€Bil)						# of Funds	
	1-Mo	QTD	YTD	1-Yr	02-2017	Mkt Sh%	Rank	02-2016	Mkt Sh%	Rank	Reported	Total
Allocation	9,721	17,226	17,226	54,630	1,167	13.14	4	1,020	13.25	4	8,721	9,271
Alternative	5,793	9,233	9,233	41,390	430	4.84	5	391	5.07	5	1,921	2,483
Commodities	1,899	4,004	4,004	14,322	67	0.76	8	47	0.62	9	457	513
Convertibles	124	(148)	(148)	(6,982)	64	0.72	9	66	0.86	8	240	247
Equity	11,166	22,716	22,716	(12,679)	3,271	36.83	1	2,780	36.09	1	10,166	11,654
Fixed Income	28,039	47,469	47,469	176,063	2,417	27.22	2	2,093	27.17	2	6,519	6,906
Property	596	1,091	1,091	1,274	123	1.39	7	124	1.61	6	88	144
Miscellaneous	(251)	1,510	1,510	7,498	123	1.39	6	116	1.51	7	1,973	2,335
Unclassified	(302)	(250)	(250)	1,605	5	0.06	10	4	0.05	10	65	676
All Long Term	56,785	102,850	102,850	277,122	7,670	86.35		6,642	86.22		30,150	34,229
Money Market	(3,940)	26,529	26,529	129,315	1,213	13.65	3	1,061	13.78	3	705	753
Total	52,845	129,379	129,379	406,437	8,882	100.00		7,703	100.00		30,855	34,982

Click on the identified asset class

☞ We now see only the **Fixed Income** asset class. The left panel offers additional filter options, such as Domicile, Morningstar Categories, Strategic Beta, Index Funds, Morningstar ratings, and more.

Name	Estimated Net Flow (€M)				Organic Growth Rate % (TTM)	Query Mkt Sh%	Query Rank	# of Fund
	1-Mo	QTD	YTD	1-Yr				
Fixed Income	28,039	47,469	47,469	176,063	8.41	100.00	1	6,518
All Long Term	28,039	47,469	47,469	176,063		100.00		6,518

Note the Filter options available

From this view, we can apply additional filters to help us find where the money was flowing into over the last year.

Exercise 4: Applying Additional Filters

To apply a filter, do the following:

1. From the left panel, click **Branding Names**.
2. Click on the **1-Yr** column to sort descending.

Name	1-Mo	QTD	YTD	1-Yr
1 iShares	1,098	2,877	2,877	19,124
2 PIMCO	4,265	6,761	6,761	16,798
3 Vanguard	417	1,312	1,312	9,626
4 Credit Suisse	971	2,576	2,576	8,440
5 BlackRock	1,451	2,476	2,476	7,699
6 AB (AllianceBernstein)	809	1,231	1,231	7,147

Sort on the highlighted column

☞ iShares is the fund family with the highest flows over that time period.

3. Click on **iShares**. The page refreshes to show only this fund family.
4. From the left panel, click **Morningstar Categories**.

Name	1-Mo	QTD	YTD	1-Yr	Query Mkt Sh%	Query Rank
1 EAA Fund EUR Corporate Bond	(599)	(904)	(904)	2,696	18.83	(54.54) 34
2 EAA Fund Global Emerging Market...	565	1,144	1,144	2,639	75.39	51.43 1
3 EAA Fund USD Corporate Bond	345	803	803	2,107	47.64	31.44 3
4 EAA Fund Global Emerging Market...	284	586	586	1,964	109.71	25.85 5
5 EAA Fund EUR Ultra Short-Term B...	215	314	314	1,811	366.86	19.57 6
6 EAA Fund EUR High Yield Bond	(95)	(17)	(17)	1,596	41.98	(8.66) 33
7 EAA Fund USD Inflation-Linked Bo...	457	319	319	1,573	84.98	41.58 2
8 EAA Fund EUR Corporate Bond - S...	(734)	(274)	(274)	1,539	39.66	(66.88) 35
9 EAA Fund Global Emerging Market...	160	255	255	882	150.67	14.56 7
10 EAA Fund USD High Yield Bond	285	758	758	831	24.27	25.99 4
11 EAA Fund Global Corporate Bond ...	37	(118)	(118)	655	93.29	3.39 13

Filter on Morningstar Categories

☞ EAA Fund EUR Corporate Bond is the Morningstar Category with the highest flows over the last year.

5. Click on **EAA Fund EUR Corporate Bond**. The page refreshes to show only this Morningstar Category.
6. From the left panel, click **Funds**.

Name	1-Mo	QTD	YTD	1-Yr	Query Mkt Sh%	Query Rank	#
1 iShares Core € Corp Bond	(289)	(212)	(212)	1,212	20.03	(48.32)	7
2 iShares € Corp Bond Large Cap	(111)	(474)	(474)	747	19.72	(18.45)	5
3 iShares € Corp Bond Interest Rate	15	5	5	471	72.84	2.43	1
4 iShares € Corp Bond ex-Financials	(203)	(262)	(262)	253	15.52	(33.96)	6
5 iShares € Covered Bond	6	49	49	85	7.35	0.98	2
6 iShares € Corp Bond Financials EU-	4	9	9	69	171.09	0.71	3
7 iShares Pfandbriefe (DE)	(20)	(19)	(19)	(142)	(14.18)	(3.40)	4

Filter on Funds

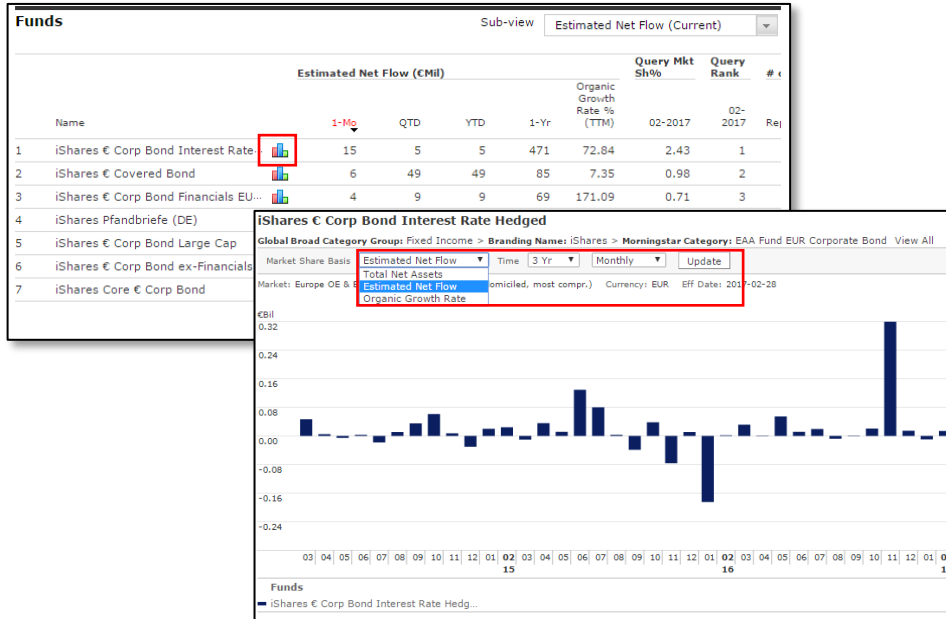
☞ Seven funds are displayed; iShares Core € Corp Bond had the highest flows over the last year.

Within Asset Flows, you can generate a bar chart displaying historical flows.

Exercise 5: Charts

To display the first fund in a chart, do the following:

1. Click the bar chart icon next to the first fund's name. A new window opens, displaying the **Monthly Estimated Net Flows** over the last 3 years.



2. Using the controls at the top of the screen, select **Total Net Assets** over **1 Year** displayed with a **monthly** frequency.
3. Click **Update**.



4. Click **Export Data** to export to Microsoft Excel.

Now that we have a short list of investments, we can easily change the displayed data and export to Microsoft Excel.

Exercise 6: Changing Displayed Data

To do so, do the following:

- Using the **Sub-view** drop-down menu in the top-right corner of the window, select **Estimated Net Flow > Estimated Net-Flow (Monthly)**.

Name	Estimated Net Flow (Current)	Estimated Net Flow (Monthly)	Estimated Net Flow (Quarterly)	Estimated Net Flow (Calendar Year)
1 iShares Core € Corp Bond	2012	51	(109)	190
2 iShares Core € Corp Bond	2013	289	175	76
3 iShares Core € Corp Bond	2014	176	99	213
4 iShares Core € Corp Bond	2015	436	351	652
5 iShares Core € Corp Bond	2016	(316)	(73)	373
6 iShares Core € Corp Bond	2017	77	(289)	
7 iShares Core € Corp Bond	2012	10	21	13
8 iShares Core € Corp Bond	2013	(3)	178	31
9 iShares Core € Corp Bond	2014	32	19	4
10 iShares Core € Corp Bond	2015	35	16	(59)
11 iShares Core € Corp Bond	2016	0	(21)	(32)
12 iShares Core € Corp Bond	2017			

Note: The monthly data is displayed in a matrix format.

- Using the **Sub-view** drop-down menu, select **Total Net Assets > Total Net Assets (Calendar Year)** to change the view.

Note: Calendar year is displayed in a matrix format.

Name	Total Net Assets (Current)	Total Net Assets (Monthly)	Total Net Assets (Quarterly)	Total Net Assets (Calendar Year)
1 iShares Core € Corp Bond	2011	1,113		
2 iShares Core € Corp Bond	2012	1,855		
3 iShares Core € Corp Bond	2013	2,682		
4 iShares Core € Corp Bond	2014	4,886		
5 iShares Core € Corp Bond	2015	6,398		
6 iShares Core € Corp Bond	2016	7,674		
7 iShares Core € Corp Bond	2017			
8 iShares Core € Corp Bond	2011	554		
9 iShares Core € Corp Bond	2012	944		
10 iShares Core € Corp Bond	2013	1,244		
11 iShares Core € Corp Bond	2014	1,230		
12 iShares Core € Corp Bond	2015	1,155		

Custom Report is a useful tool to extract the latest or historical total net assets and fund flows at an aggregated or fund level.

Exercise 7: Custom Report

We will now learn how to create a custom report for competitor analysis purposes. We want to select a few fund families and see their total net assets and estimated net flows over the last year aggregated by Morningstar Rating.

To do so, do the following:

1. From the Asset Flows page, click the **Custom Report** button. The **Custom Reports** dialogue box opens.
2. In the **Query** section, type **"Competitor Analysis"** in the **Name** field.
3. In the **Row Definition** section, using the **Group By** drop-down menu, select **Branding Name**.
4. Click **Select a Subset** to the right of that menu. A selection window opens.

Enter a title

See highlighted options

5. At the bottom of the window, click **Remove All**.
6. In the **Jump to record name**, type **Fidelity**.
7. Select Fidelity from the list and click **Add**.
8. Repeat the same operation for Candriam, HSBC, NN IP, ABN AMRO, BNP Paribas.

Enter company name here

Click Add

9. Click **OK**.

- Using the **Sub-Group By** drop-down menu, select **Morningstar Rating**.

Row Definition		
Group By	Branding Name	Edit Subset
Sub-Group By	Morningstar Rating	Select a Subset

That’s it for our selection. Next, we want to display a time series of total net assets and estimated net flows for the last year on a monthly basis.

To do so, do the following:

- In the **Column Definition** section, facing **Type**, select **Time Series**.
- Using the **Start Date** drop-down menu, select a one-year time period.
- Using the **Periodicity** drop-down menu, select **Monthly**.
- Using **Field 1**, select **Total Net Assets** and **Ending Value**.
- Click **Add Field**. Another selection row appears.
- Using the **Field 2** drop-down menu, select **Estimated Net Flow** and **Ending Value**.

Column Definition			
Type	<input type="radio"/> Current <input checked="" type="radio"/> Time Series <input type="radio"/> Trailing		
Start Date	03/01/2016		
End Date	02/28/2017		
Periodicity	Monthly		
Field 1	Total Net Assets	Ending Value	
Field 2	Estimated Net Flow	Ending Value	

See highlighted areas

- Using the **Sort By** drop-down menu, select **Branding Name, Ascending**.
- Using the **Then By** drop-down menu, select **Morningstar Rating, Ascending**.

Sort By	Branding Name	<input checked="" type="radio"/> Ascending	<input type="radio"/> Descending
Then By	Morningstar Rating	<input checked="" type="radio"/> Ascending	<input type="radio"/> Descending
Then By	None	<input checked="" type="radio"/> Ascending	<input type="radio"/> Descending
<input type="button" value="Generate Report"/> <input type="button" value="Clear"/> <input type="button" value="Close"/> <input type="button" value="Save"/> <input type="button" value="Save As"/>			

Note: These settings will provide aggregated Total Net Assets and Estimated Fund Flows at the company level and by Morningstar Star Rating.

- Click **Save** to save the report in Asset Flows. You will be prompted to give a name to the query. You may call it “Competitor Analysis”.
- Click **Generate Report** to extract the information in Excel.
- Click **Close** to close this dialogue box.

Branding Name	Morningstar Rating	Total Net Assets 2016-03	Total Net Assets 2016-04	Total Net Assets 2016-05	Total Net Assets 2016-06	Total Net Assets 2016-07	Total Net Assets 2016-08	Total Net Assets 2016-09
ABN AMRO	1-star	60,957,000	56,000,000	54,275,514	49,596,000	46,445,000	42,318,000	39,136,000
ABN AMRO	2-star	1,125,105,323	1,091,496,477	1,077,309,274	1,056,627,315	969,825,891	960,170,531	962,809,276
ABN AMRO	3-star	2,459,217,787	2,373,943,186	2,420,981,327	2,296,508,351	2,357,512,631	2,308,399,462	2,362,449,333
ABN AMRO	4-star	3,288,283,334	3,080,438,963	3,099,134,150	2,971,037,003	2,957,178,155	2,959,865,537	2,888,470,844
ABN AMRO	5-star	4,828,614,877	4,714,358,700	4,787,196,734	4,717,017,377	4,728,403,381	4,752,457,066	4,895,339,436
ABN AMRO	NR <1 Year			1,041,326	661,908,303	538,974,241	539,587,670	543,160,079
ABN AMRO	NR 1-2 Years	312,455,780	347,942,036	356,190,517	351,856,084	372,446,797	388,453,368	412,859,434
ABN AMRO	NR 2+ Years	4,356,929,706	4,616,273,445	4,575,208,646	3,890,006,740	4,112,547,617	4,154,477,398	4,245,179,209
BNP Paribas	1-star	1,684,767,879	1,696,484,499	1,726,289,977	1,740,434,115	1,827,801,820	1,846,996,805	1,872,589,680
BNP Paribas	2-star	9,895,677,042	9,906,512,895	10,260,266,263	10,020,090,914	10,022,862,106	9,976,667,100	10,115,842,316
BNP Paribas	3-star	25,496,703,035	25,321,936,498	25,775,529,195	25,000,132,695	25,890,436,368	26,133,721,116	25,833,063,775
BNP Paribas	4-star	22,002,618,638	22,150,251,432	22,414,002,328	21,943,998,059	22,112,733,205	22,399,457,210	22,227,038,138
BNP Paribas	5-star	5,462,943,257	5,300,622,459	5,421,470,100	5,387,912,163	5,477,679,830	5,468,979,935	5,346,161,449
BNP Paribas	NR <1 Year			66,657,021	197,113,359	390,022,321	504,169,655	647,113,266
BNP Paribas	NR 1-2 Years	1,500,647,300	2,462,976,447	2,594,055,073	2,644,515,349	2,931,007,920	3,154,167,632	3,039,926,899
BNP Paribas	NR 2+ Years	80,224,300,773	86,855,959,748	88,346,242,878	88,888,552,779	93,841,329,251	94,774,934,634	96,352,464,074
Candriam	1-star	104,474,658	110,272,179	112,163,745	115,410,470	118,947,966	121,868,799	113,391,943
Candriam	2-star	1,537,236,317	1,574,776,199	1,588,897,998	1,536,856,905	1,564,283,520	1,540,857,081	1,294,232,532

Exercise 8: Charting in Microsoft Excel

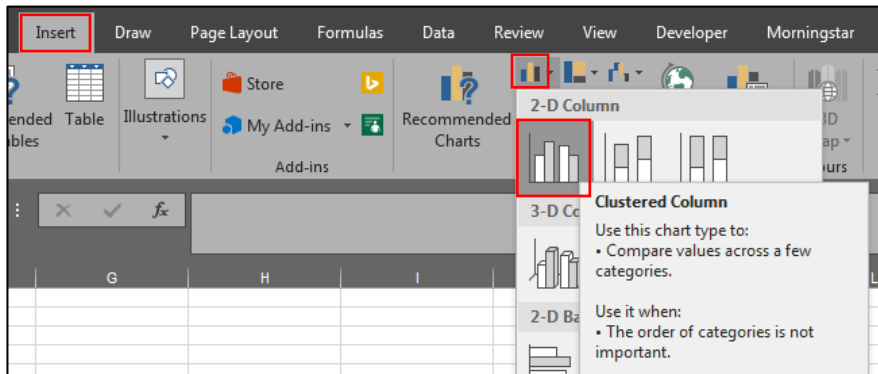
Data is exported in Microsoft Excel

From Microsoft Excel, you can now analyse the data further. For instance, we can see that ABN AMRO's Total Net Assets are mostly in 5 star rated funds.

From there, we can generate a chart to see the trends for this fund company over the last year.

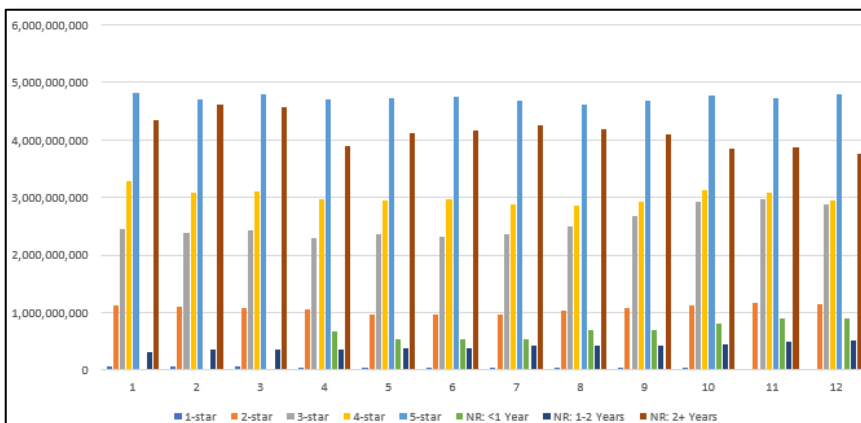
To generate a graph, do the following:

1. Select cells B10 to N17 to select all ABN AMRO funds with star ratings and Total Net Assets.
2. From the **Toolbar**, click the **Insert** tab and select the 2-D Column chart.



Generate a graph

You can now visualise changes in the aggregated data over time.



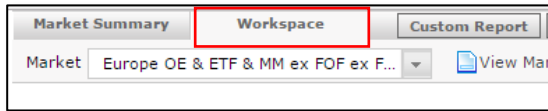
The advantage of saving your Custom Report, is to be able to run it time and time again and extract the latest data.

Exercise 9: Modifying a Custom Report

Custom Reports are saved within Asset Flows, on the Workspace page. We are now going to use the report we just saved and modify it to display the funds.

To do so, do the following:

1. Within Asset Flows, click the **Workspace** tab.

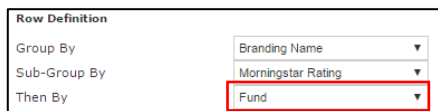


Note: From the **Commentaries** section, you can check previous and upcoming database updates dates, as well as access the market commentaries.

Previous Updates		Upcoming Updates		Commentary
Effective Date	Expected Data Release Date	Actual Data Release Date		
02-28-2017	03-21-2017	04-04-2017		
01-31-2017	02-21-2017	02-20-2017		
12-31-2016	01-20-2017	02-17-2017		
11-30-2016	12-21-2016	12-19-2016		
10-31-2016	11-21-2016	12-14-2016		

Access the monthly commentary for the selected market

2. Under the **Saved Actions** section in the bottom-left corner of the Workspace page, click the **Custom Reports** tab.
3. Single-click on **Competitor Analysis**. The dialogue box opens with all your saved settings.
4. In the **Row Definition** section, using the **Then By** drop-down menu, select **Fund**.



5. In the sorting section at the bottom of the dialogue box, select **Fund** in the 3rd drop-down menu and **Ascending**.



6. Click **Save As** and save the report as **"Detailed Competitor Analysis"** and click **OK**.
7. Click **Generate Report**.

Your detailed report at the fund level opens in Microsoft Excel.

Branding Name	Morningstar Rating	Fund	Fundid	Total Net Assets 2016-03	Total Net Assets 2016-04
ABN AMRO	1-star	ABN AMRO Medium Risk Budget	FS00008LIA	60,957,000	56,008,000
ABN AMRO	2-star	AAMMF Edinburgh Partners European Eqs	FS0000A7PM	317,057,223	322,793,503
ABN AMRO	2-star	AAMMF FoM Euro Government Bonds	FSUS00AR4V	68,637,603	70,231,681
ABN AMRO	2-star	AAMMF Hermes European Equities	FS0000A7PJ	22,644,815	22,877,236
ABN AMRO	2-star	AAMMF Profile 1	FSUS00AYA6	56,909,298	55,923,394
ABN AMRO	2-star	AAMMF TCW US Equities	FS0000A7PQ	293,554,120	240,023,003
ABN AMRO	2-star	AAMMF Verzekerings Profile 1	FS00009FIW	10,521,711	10,289,875
ABN AMRO	2-star	AAMMF Verzekerings Profile 6	FS00009F21	189,283,553	188,223,804
ABN AMRO	2-star	ABN AMRO Euro Sustainable Bonds	FSGBR056FK	11,432,000	11,158,000