

Data Appendix to “It Depends on Where You Search: Institutional Investor Attention and Underreaction to News”¹

January 2017

In this appendix, we describe in detail how to obtain the attention data from a Bloomberg Terminal. We first show how to find and view the raw data in Bloomberg. Next, we explain how to install the Bloomberg Excel Add-in. Finally, we explain how to import the Bloomberg attention data using the Excel Add-in.

A.1 Bloomberg’s Attention Measures

The Bloomberg variable upon which we base our AIA measure is called “News Heat – Daily Max Readership” and has the API (Application Program Interface) data field names “NEWS_HEAT_READ_DMAX” and “NW016”. The measure, available only at the daily frequency, is created using the maximum daily number from the hourly measures which are available in real time only. The real time hourly measure is named “News Heat – User Activity (Realtime)” and has API data field names of “NEWS_HEAT_USER_ACTIVITY_RT” and “RQ369”. Figure A.1 displays the full set of “News Heat” variables in Bloomberg as well as their associated data field names.

To view the “News Heat – User Activity (Realtime)” for a specific stock on the Bloomberg terminal, type the ticker symbol followed by “Equity” and then either the data field name (i.e., “RQ369”), or “News Heat”, and then select the appropriate field from the drop down menu. Figure A.2 shows that “News Heat – User Activity” for Google had a value of 3 at 10:28 AM on January 29, 2016.

¹ Ben-Rephael, Azi, Zhi Da, and Ryan Israelsen, 2017, Data Appendix to “It Depends on Where You Search: Institutional Investor Attention and Underreaction to News” available on SSRN: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2692181

A.2 – Installing the Bloomberg Add-in for Excel

While it is also possible to view and export historical daily data (e.g., News Heat – Daily Max Readership) directly from the Bloomberg software, it is more efficient to use the Bloomberg Add-in in Excel which uses Bloomberg’s API.

To check whether the Bloomberg Add-in is installed, open Excel. If there is no “Bloomberg” tab, it is likely not installed. The Add-in can be installed by running the file “BBAddIn.exe” which can be reached either by navigating to the folder “C:\blp\DAPI\dde” or by searching for “Install Office Add-ins” in the Start Menu (See Figure A.3). After running the file, click on “Install” (see Figure A.4). Once the installer has finished, the window will indicate whether the installation was successful. If there was an installation error, re-running the installer and/or opening and closing Excel often resolves the problem. If the Bloomberg Add-in was successfully installed, there should be a “Bloomberg” tab (as shown in Figure A.5).

A.3 – Importing Bloomberg Data into Excel

Once the Add-in is installed correctly, open the Bloomberg Import Data Wizard by choosing “Import Data>Real-Time/Historical>Historical End of Day” from the “Bloomberg” tab in Excel as shown in Figure A.5.

Step one of the Bloomberg Data Wizard requires you to create a list of securities for which to import data. As seen in Figure A.6, this can be done by entering securities one at a time, or by using either an index or another list of securities. For example, to select the entire list of securities for the Russell 3000 index, type “RAY” (Bloomberg’s abbreviation for the Russell 3000) into the “Indices” field and (once the “Available securities” field is populated) click on “Add all”. After adding the list of securities, click “Next” to move to step 2.

In step 2, we add the fields of interest to the query. This can be done by searching for fields using the “search text” box, or by navigating through a directory based on categories of fields (using the “Categories” tab). In our case (as seen in Figure A.7), we add the attention variable by searching for the words “news heat” and selecting the appropriate variable from the

lists of variables matching the search. In this case, we select “News Heat – Daily Max Readership” and click “Add”.

Step 3 allows the choice of date range for the query (shown in Figure A.8). Choose the appropriate range and click “Next”.

In Step 4 of the wizard, the user can exclude or include non-trading days. This can be seen in Figure A.9. Bloomberg’s attention measures are only available for trading days. In our case, we include all calendar days, but crucially, we do NOT select “carry over last value”. Instead, we choose to indicate missing data with blank spaces.

Step 5 of the wizard is not relevant for the attention data. Choose “Yes” (if not already selected) for “Follow DPDF Settings” and click “Next”.

Step 6 (shown in Figure A.10) determines the layout of the exported data. Select “Only first security” under the category “Show labels.” If this is not selected, dates are listed to the right of data for each security as opposed to a single time to the right of the first security. After clicking “Finish”, the data should appear similar to that displayed in Figure A.11.

Figure A.1 – Bloomberg’s News Heat Data Fields

<Menu> to Return

news heat		Page 1/1		Search Bloomberg: Results	
1) Top Results		Sort By	Relevance	Category	All
General		Data Fields			
2) Companies	2	4) News Heat - User Activity (Realtime)	RQ369	NEWS_HEAT_USER_ACTIVITY_RT	
3) Functions	3	4) News Heat - Story Flow (Realtime)	RQ368	NEWS_HEAT_STORY_FLOW_RT	
4) People	3	4) News Heat - Max Story Flow	NW012	NEWS_HEAT_PUB_DMAX	
5) FAQs	3	4) News Heat - Daily Max Readership	NW016	NEWS_HEAT_READ_DMAX	
6) Definitions	0	4) News Heat - Average Readership	NW015	NEWS_HEAT_READ_DAVG	
7) Reference	7	4) News Heat - Daily Average Story Flow	NW013	NEWS_HEAT_PUB_DAVG	
8) Excel Library	0	4) News Publication - Daily Number of Stories	NW014	NEWS_HEAT_PUB_DNUMSTORIE	
9) Data Fields	7				
10) News	500 +				
11) Law					
Securities					
12) Equities	1				
13) Funds	0				
14) Fixed Income	0				
15) Currencies	0				
16) Mtge Issuers	0				
17) Muni Issuers	0				
18) Commodities	0				
19) Indices	1				
20) Statistics	1				
21) Economics	0				
Contributors					
22) Pricing	0				
23) Research	2				

Australia 61 2 9777 8600 Brazil 5511 2395 9000 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 2016 Bloomberg Finance L.P.
 SN 816554 EST GMT-5:00 6457-3648-0 29-Jan-2016 10:19:48

Figure A.2 – News Heat – User Activity for Google on January 29, 2016 at 10:28 AM

GOOG US Equity	Field Information for RQ369
News Heat - User Activity (Realtime)	NEWS_HEAT_USER_ACTIVITY_RT
3	
<p>A measure of readership interest in a company relative to the previous 30 days, based on the number of times people call up stories with the ticker attached and the number of times they run CN on the ticker looking for news. A score of 0 indicates readership is not widespread or is below the 30-day average. Scores of 1-4 indicate readership is unusually high, with 4 representing the top of the range. This field updates in realtime.</p>	
90) Definition	
<p>Australia 61 2 9777 8600 Brazil 5511 2395 9000 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 2016 Bloomberg Finance L.P. SN 816554 EST GMT-5:00 6457-3648-0 29-Jan-2016 10:28:23</p>	

Figure A.3 – Locating Excel Add-in Installer

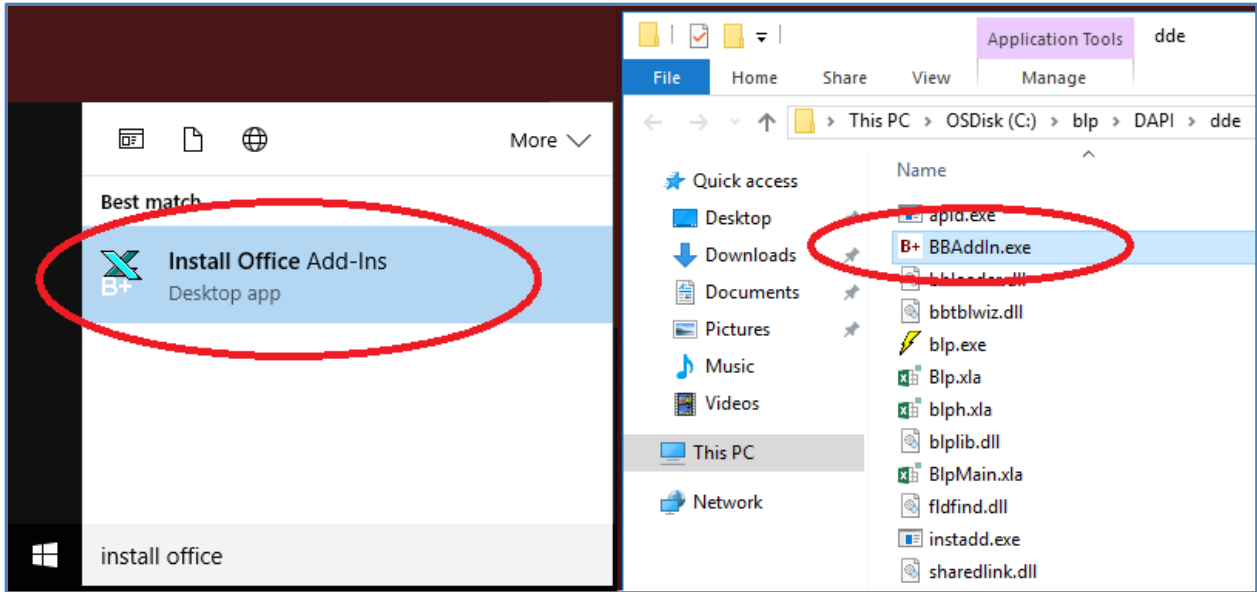


Figure A.4 – Installing the Excel Add-in

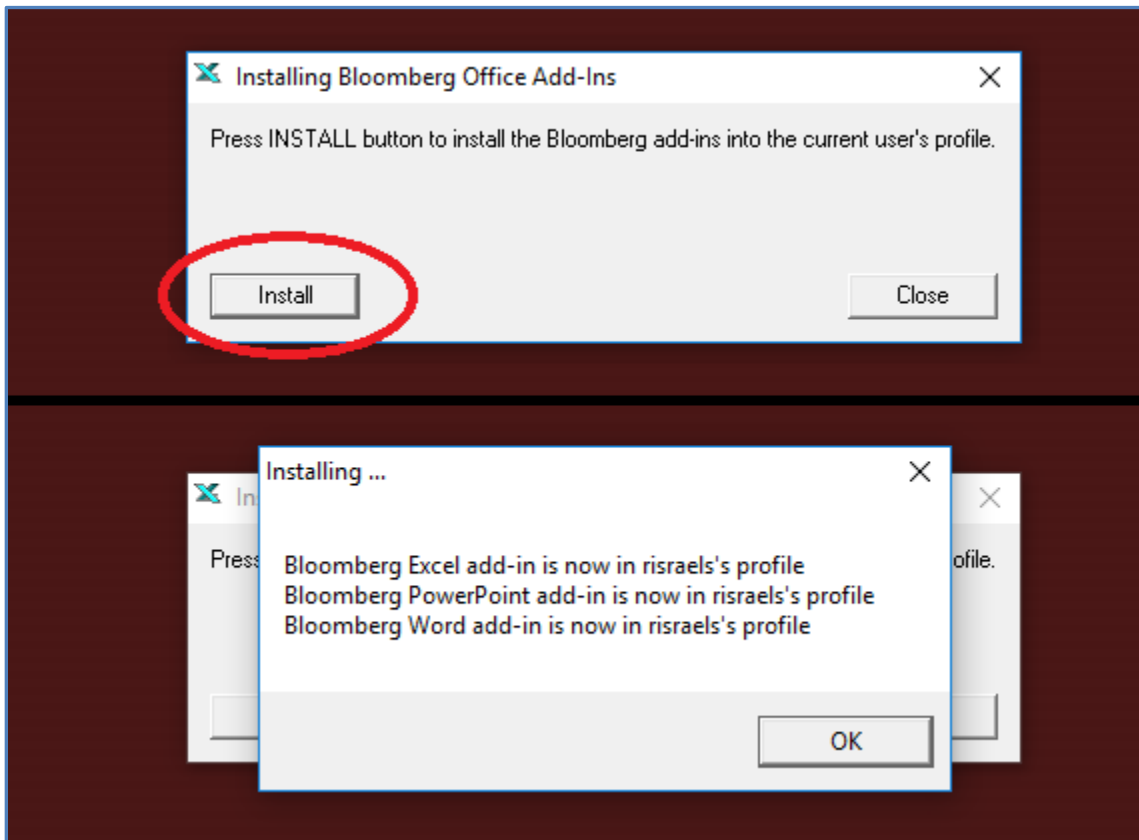


Figure A.5 – Bloomberg’s Import Data Wizard in Excel

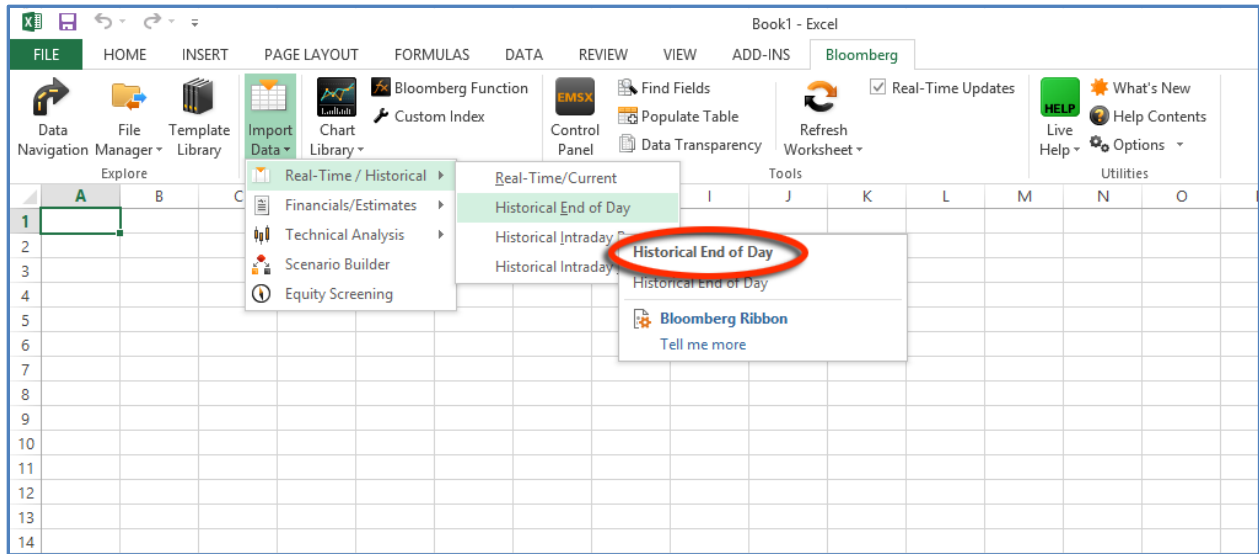


Figure A.6 – Step 1 - Adding Russell 3000 securities to Bloomberg Data Wizard in Excel

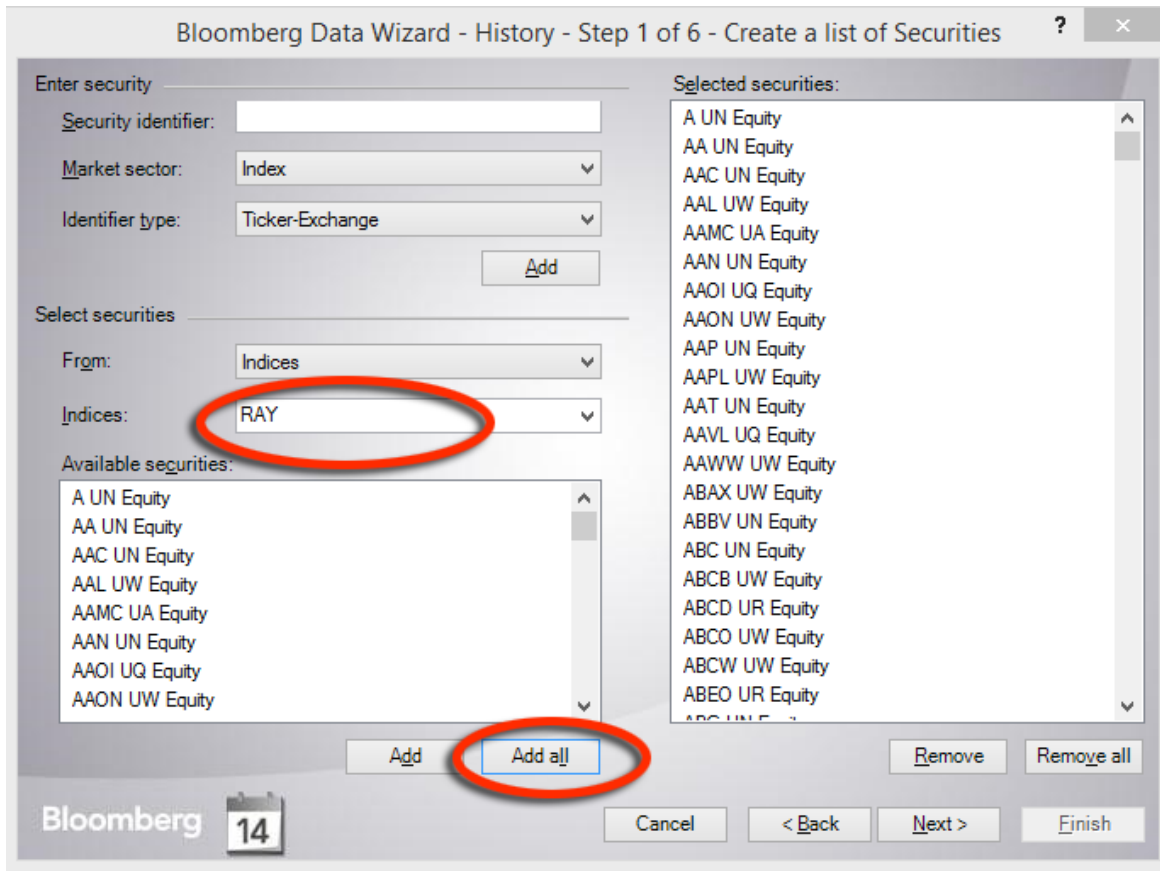


Figure A.7 – Step 2 - Choosing “News Heat – Daily Max Readership” in Bloomberg Data Wizard

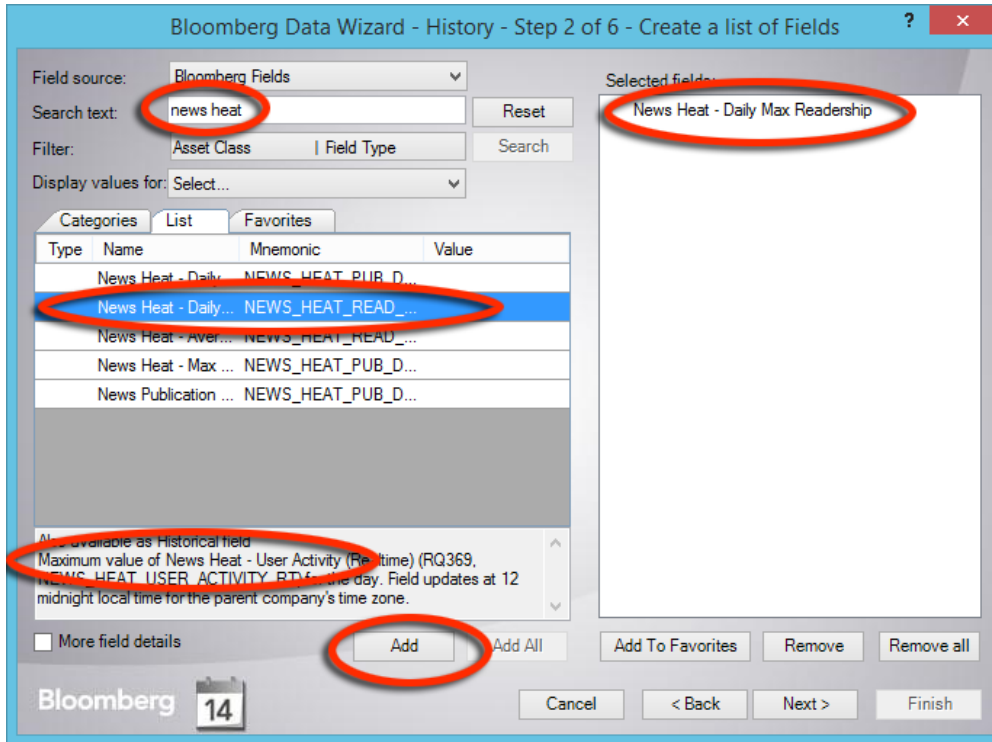


Figure A.8 – Step 3 - Choosing Date Range in Bloomberg Data Wizard in Excel

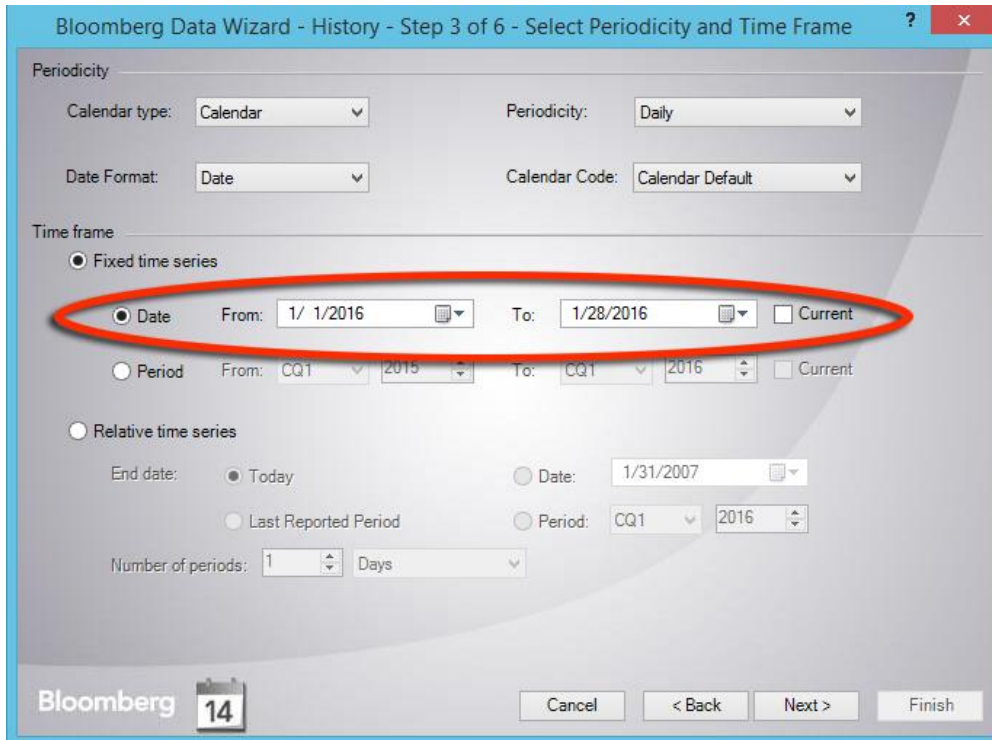


Figure A.9 – Step 4 - Non-trading days and missing data in Bloomberg Data Wizard in Excel

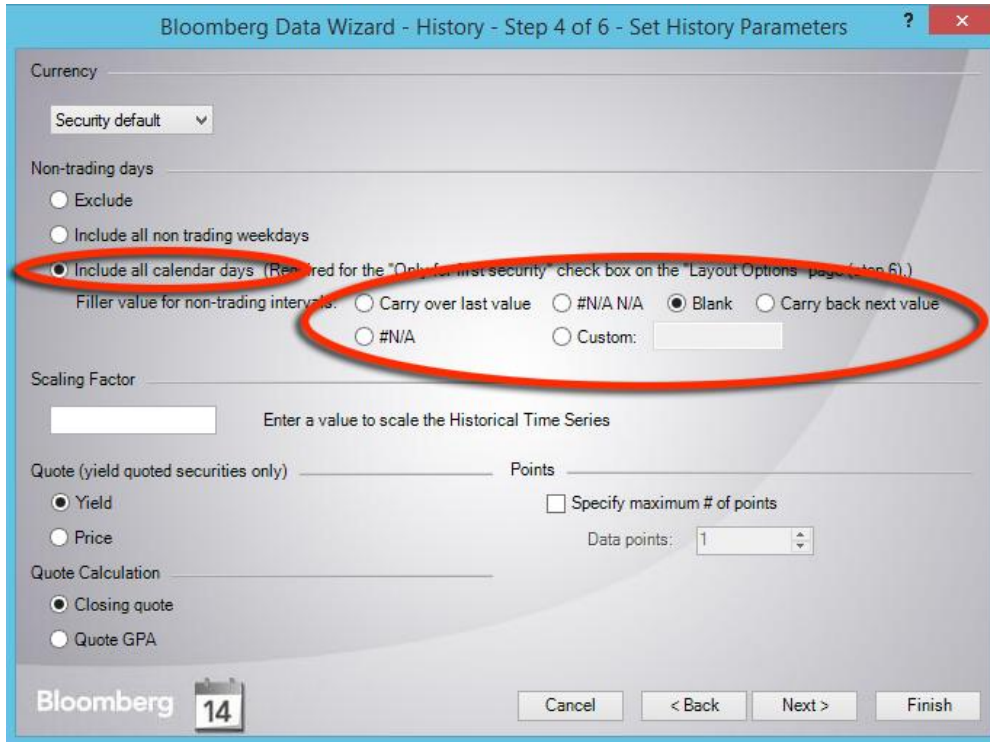


Figure A.10 – Step 6 - Layout Options in Bloomberg Data Wizard in Excel

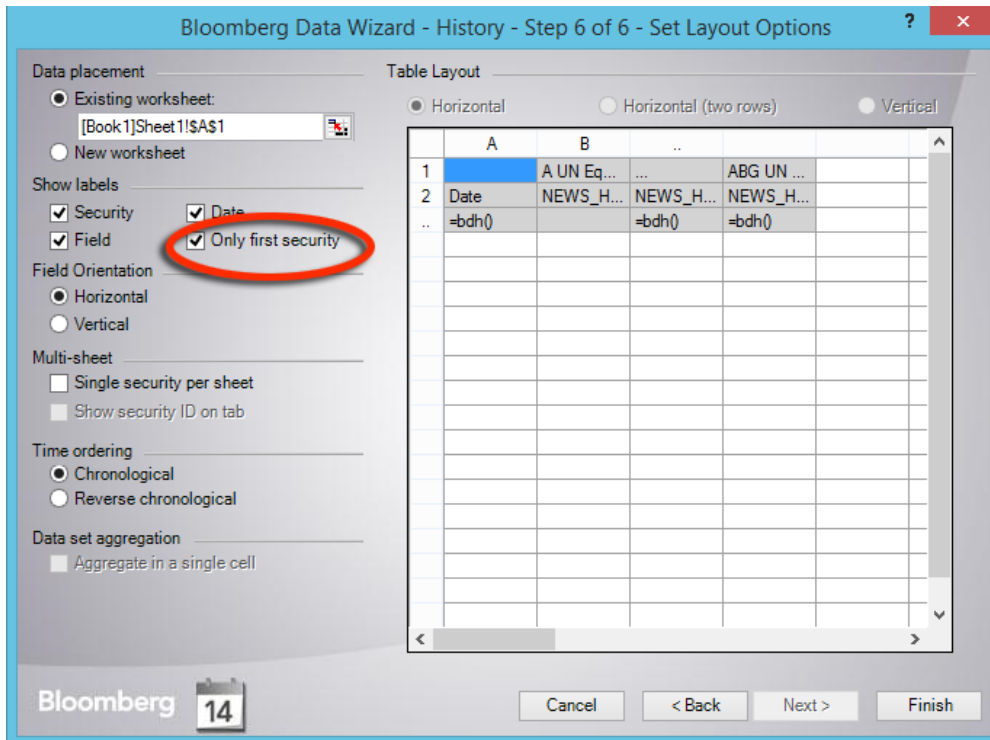


Figure A.11 – Bloomberg Attention Data Imported to Excel

	A	B	C	D	E	F	
1		A UN Equity	AA UN Equity	AAC UN Equity	AAL UW Equity	AAMC UA Equity	AAN UN Equity
2	Date	NEWS_HEAT_READ_DMAX	NEWS_HEAT_READ_DMAX	NEWS_HEAT_READ_DMAX	NEWS_HEAT_READ_DMAX	NEWS_HEAT_READ_DMAX	NEWS_HEAT_READ_DMAX
3	1/1/2016	0	0	0	0	0	0
4	1/2/2016						
5	1/3/2016						
6	1/4/2016	2	3	0	4	0	
7	1/5/2016	2	4	0	4	0	
8	1/6/2016	2	4	0	4	0	
9	1/7/2016	4	4	0	4	0	
10	1/8/2016	1	4	0	1	1	
11	1/9/2016						
12	1/10/2016						
13	1/11/2016	3	4	0	3	0	
14	1/12/2016	2	4	0	4	0	
15	1/13/2016	0	2	0	2	0	
16	1/14/2016	0	1	0	0	0	
17	1/15/2016	0	1	0	0	0	
18	1/16/2016						
19	1/17/2016						
20	1/18/2016	0	0	0	0	0	
21	1/19/2016	2	1	0	0	0	
22	1/20/2016	0	1	0	0	0	
23	1/21/2016	0	1	0	0	0	
24	1/22/2016	0	1	0	0	0	
25	1/23/2016						
26	1/24/2016						
27	1/25/2016	4	4	4	0	1	
28	1/26/2016	1	0	3	0	0	
29	1/27/2016	0	1	2	0	0	
30	1/28/2016	2	1	4	0	0	
31							