

Internet Appendix to “Information Consumption and Asset Pricing”

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

I. Bloomberg’s Attention Measures

The Bloomberg variable upon which we base our AIA measure is called “News Heat – Daily Max Readership” and has Application Program Interface (API) 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 called “News Heat – User Activity (Realtime)” and has API data field names of NEWS_HEAT_USER_ACTIVITY_RT and RQ369. Figure IA.1 displays the full set of “News Heat” variables in Bloomberg as well as their associated data field names.

To view “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.” Next, select the appropriate field from the drop down menu. Figure IA.2 shows that “News Heat – User Activity” for Google had a value of 3 at 10:28 AM on January 29, 2016.

II. Installing the Bloomberg Add-in for Excel

* Citation format: Ben-Rephael, Azi, Bruce I. Carlin, Zhi Da, and Ryan D. Israelsen, Internet Appendix to “Information Consumption and Asset Pricing,” *Journal of Finance*, DOI String.

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 IA.3). After running the file, click “Install” (see Figure IA.4). Once the installer has finished, the window will indicate whether the installation was successful. If there was an installation error, rerunning 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 IA.5).

III. Importing Bloomberg Data into Excel

Once the Add-in is installed correctly, open the Bloomberg Spreadsheet Builder by clicking “Spreadsheet Builder” from the “Bloomberg” tab in Excel, clicking “Historical Data Table”, and then clicking “Next” as shown in Figure IA.5.

Step 1 of the Bloomberg Data Wizard requires that you create a list of securities for which to import data. As can be seen in Figure IA.6, this can be done either 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, click on “Equity Index” in the left window. This will reveal a list of equity indexes to choose from. Click on “RAY” (Bloomberg’s abbreviation for the Russell 3000). Then, click on “Add”. It will take a while for the Spreadsheet Builder to add all 3,000 securities to the “Selected Securities” window. Once they appear, 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 (in the left window). In our case (as seen in Figure IA.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”, click “Add”, and then click “Next”.

Step 3 allows one to specify the date range for the query, the number of days per week, and the handling of missing values (as shown in Figure IA.8). Choose the appropriate date range. The user can exclude or include non-trading days. Bloomberg’s attention measures are only available for trading days. In our example, we include all calendar days (“7D-7 BUS DAY NO HOLIDAY”), but choosing “5D-5 BUS DAY NO HOLIDAY” would generate similar results. Crucially, we do NOT select “carry over last value”. Instead, we choose to indicate missing data with blank spaces. Otherwise, the most recent non-missing data point will be inserted.

Step 4 (shown in Figure IA.9) 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 those displayed in Figure IA.10.

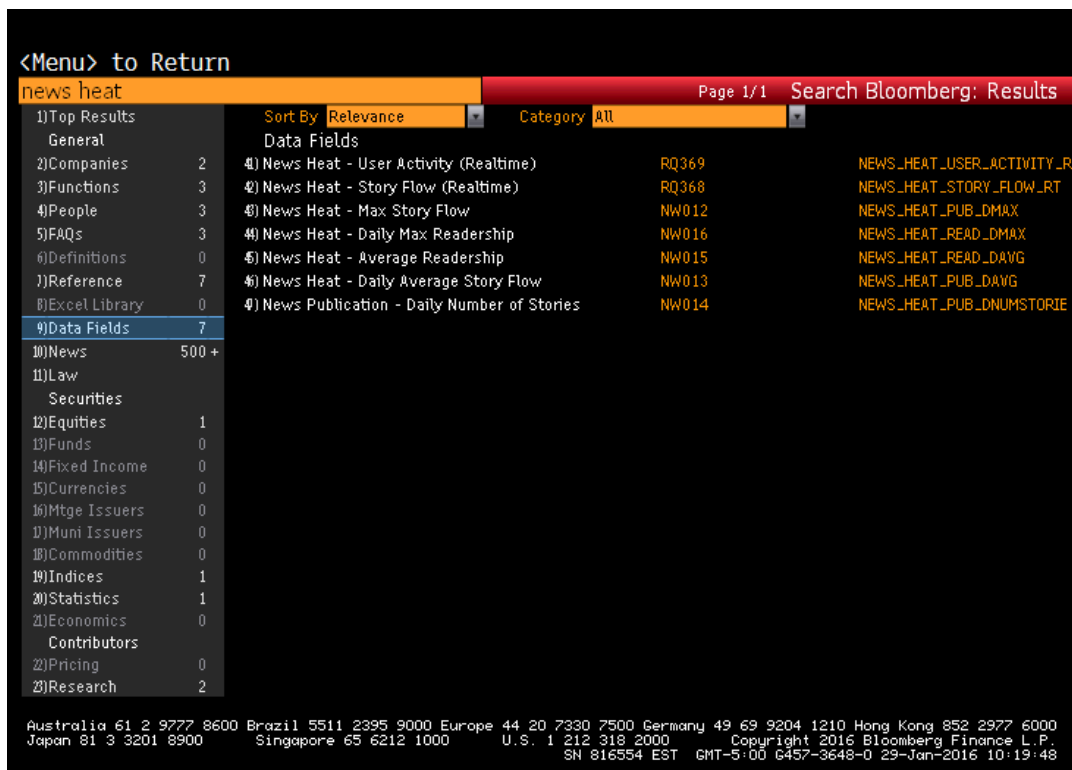


Figure IA.1. Bloomberg’s News Heat data fields.

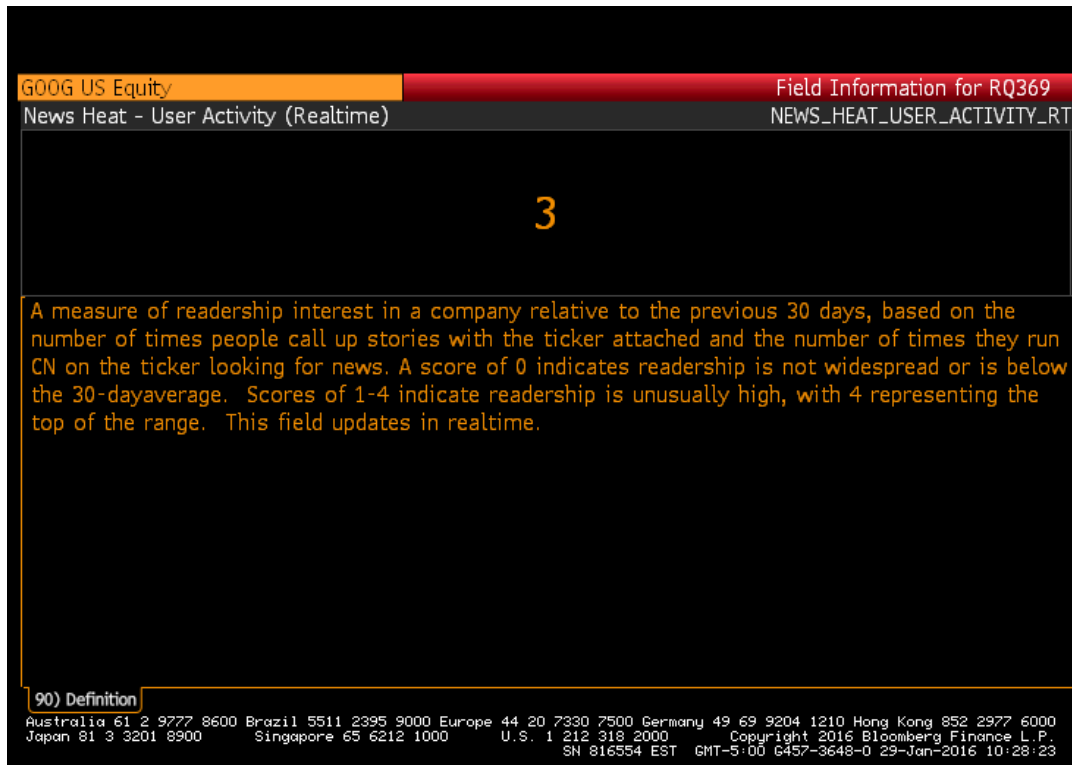


Figure IA.2. News heat – User activity for Google on January 29, 2016 at 10:28 AM.

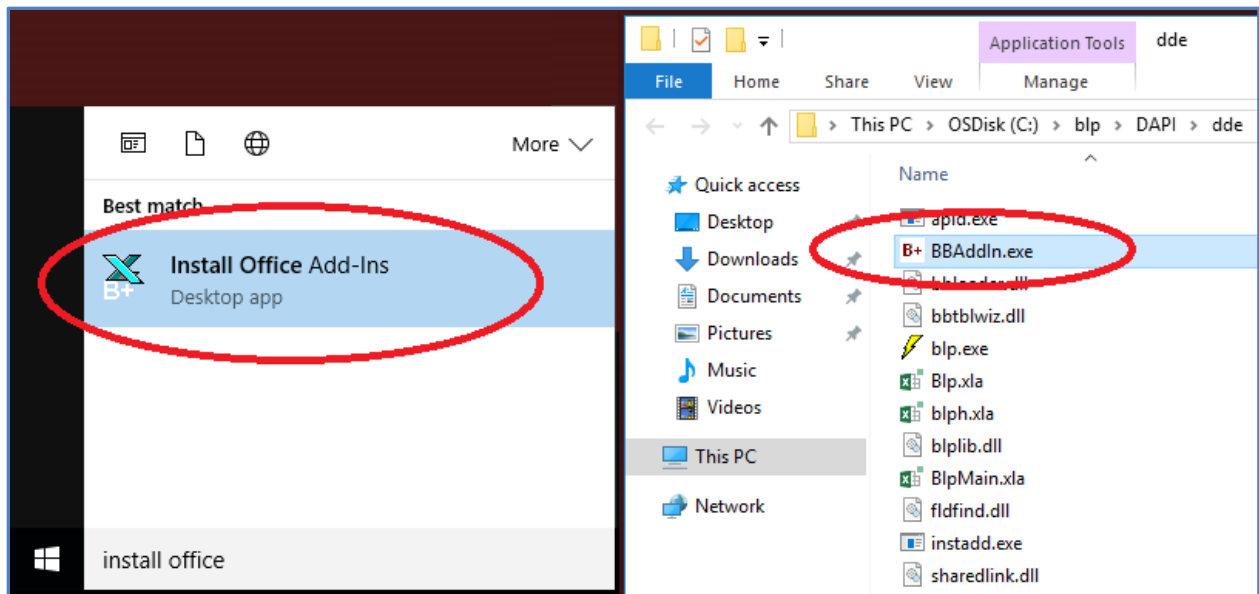


Figure IA.3. Locating Excel Add-in installer.

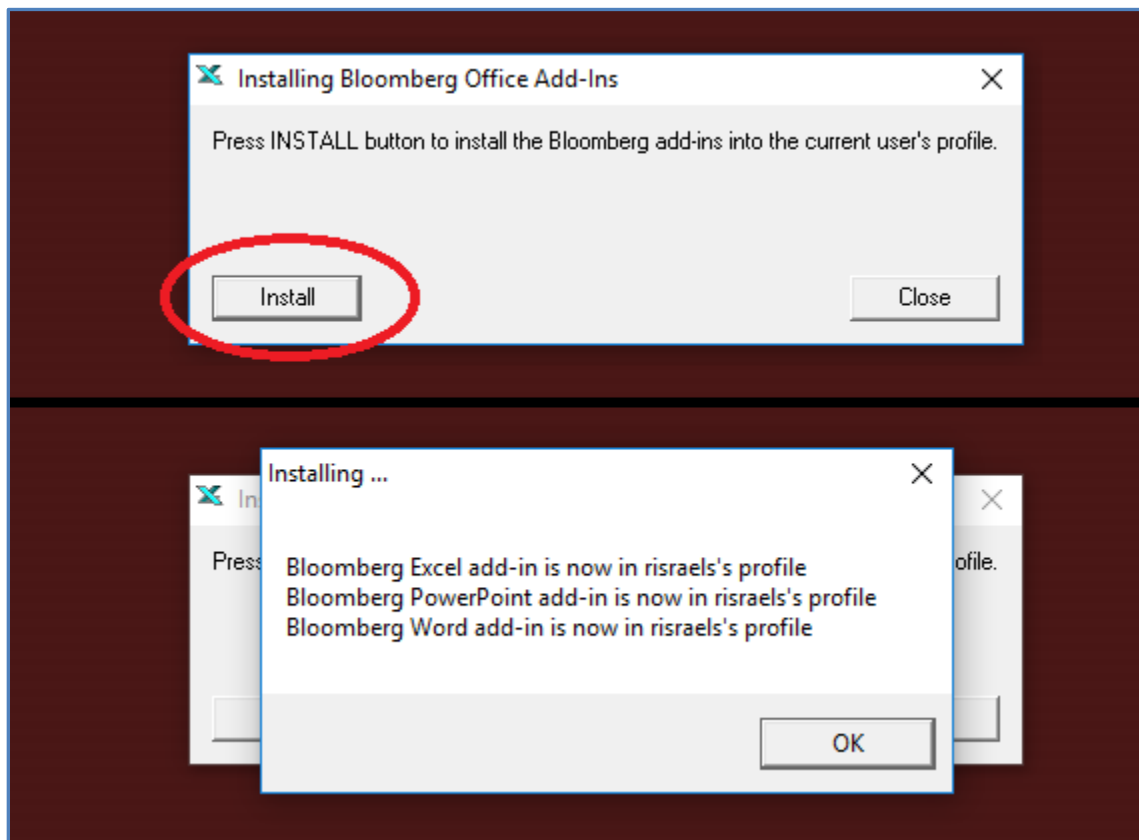


Figure IA.4. Installing the Excel Add-in.

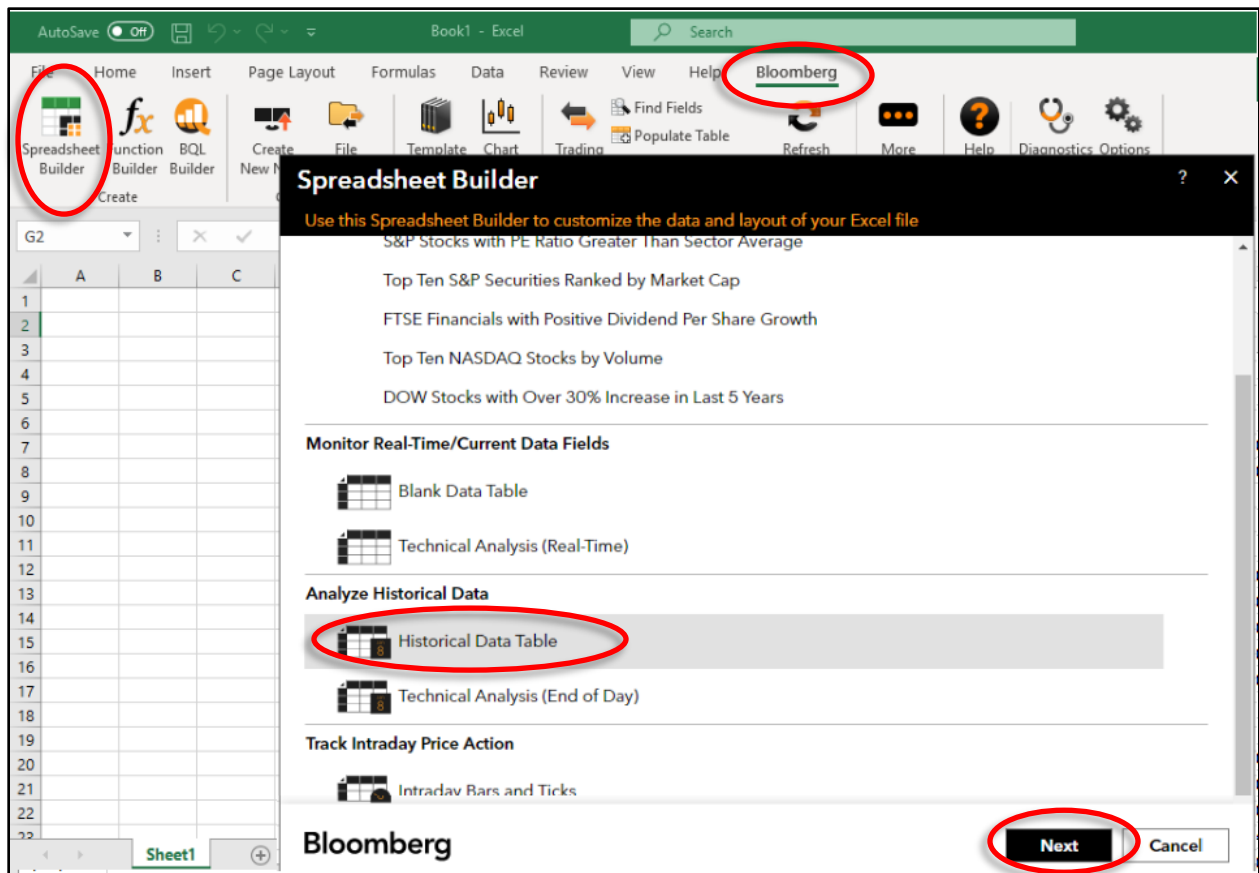


Figure IA.5. Bloomberg's Spreadsheet Builder in Excel

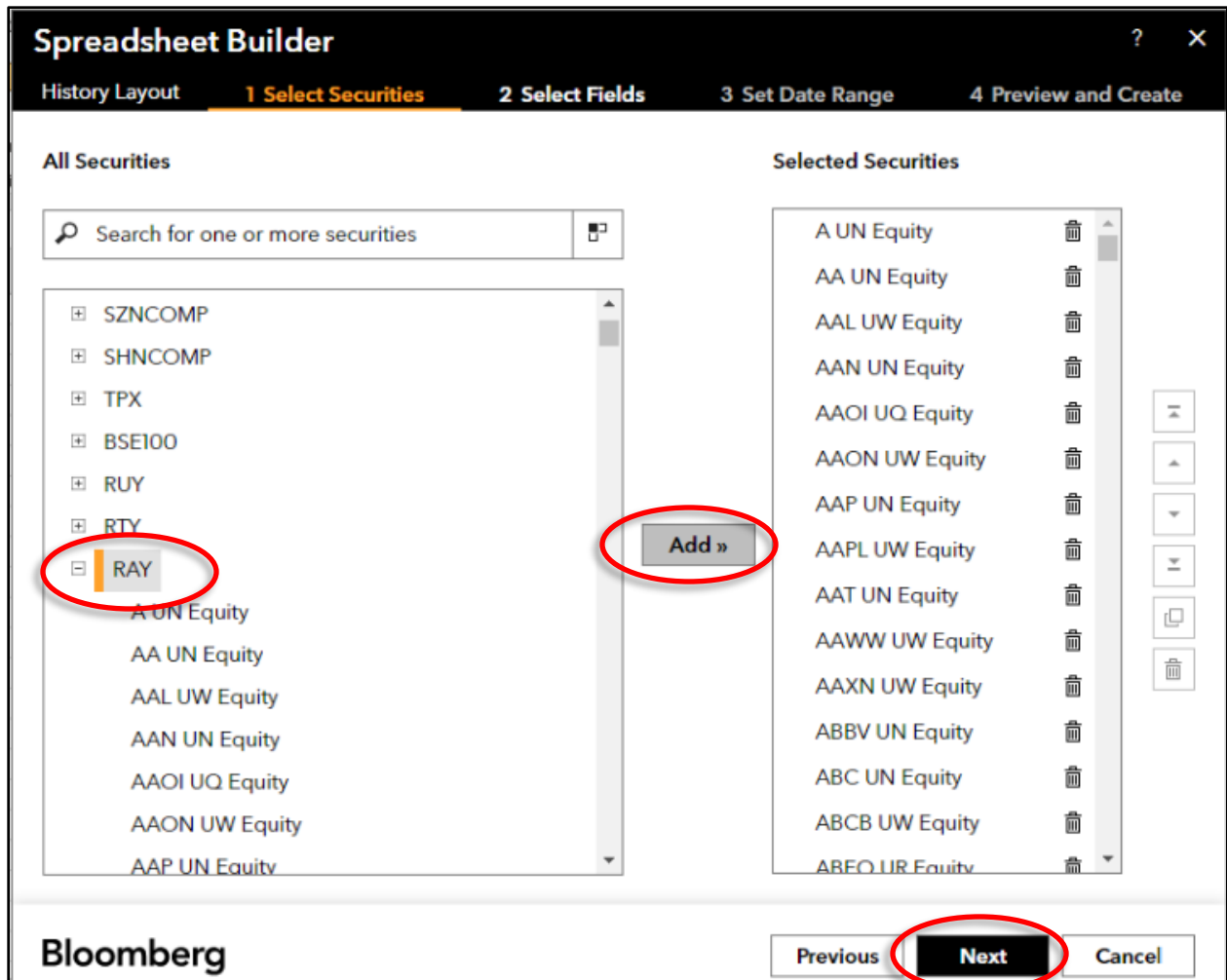


Figure IA.6. Step 1 - Adding Russell 3000 securities to Bloomberg Spreadsheet Builder in Excel.

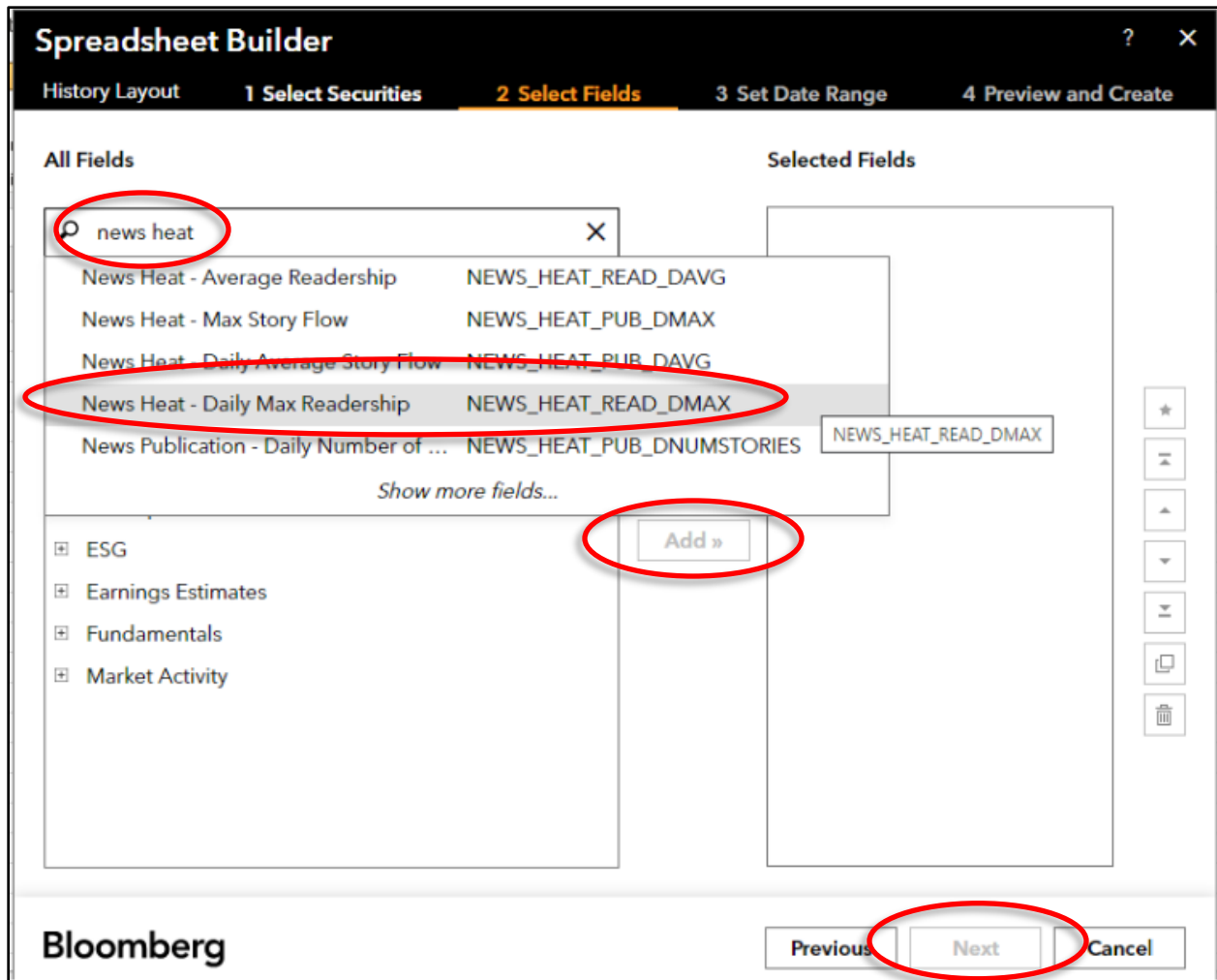


Figure IA.7. Step 2 - Choosing “News Heat – Daily Max Readership” in Bloomberg Spreadsheet Builder in Excel

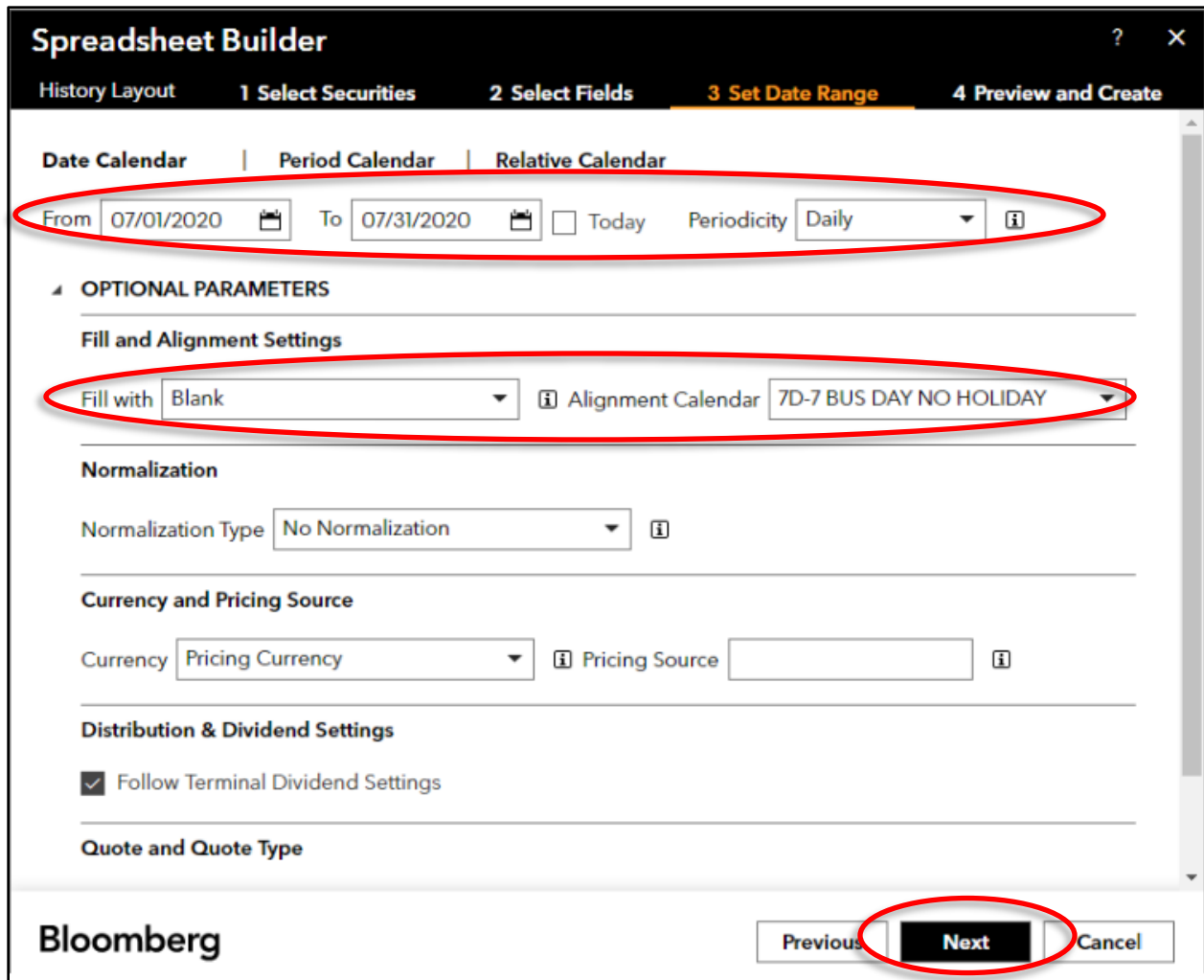


Figure IA.8. Step 3 - Choosing Date Range and Missing Values in Bloomberg Spreadsheet Builder in Excel

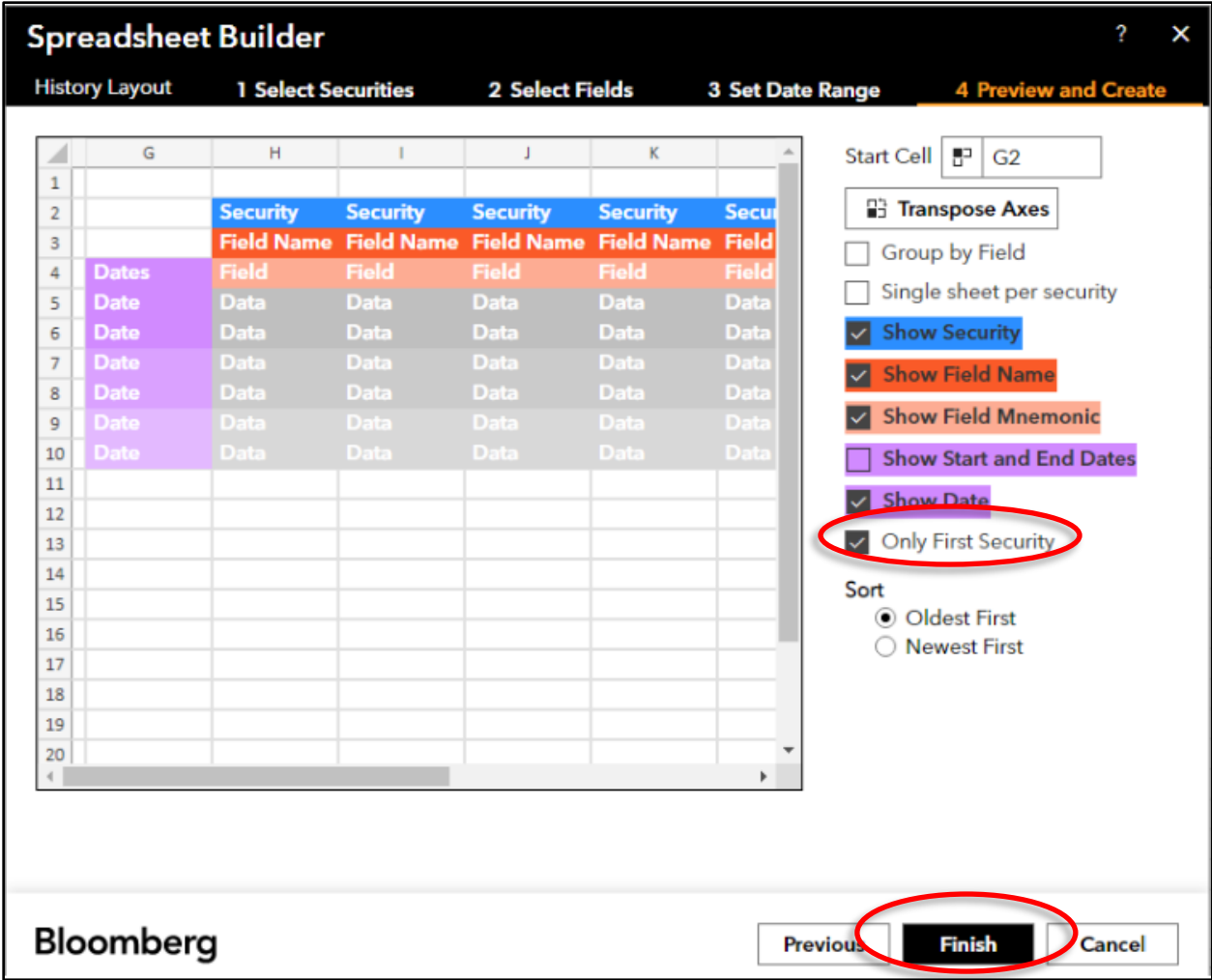


Figure IA.9. Step 4 - Layout options in Bloomberg Spreadsheet Builder in Excel.

	G	H	I	J	K
2		A UN Equity	AA UN Equity	AAL UW Equity	AAN UN Equity
3		News Heat - Daily Max Readership	News Heat - Daily Max Readership	News Heat - Daily Max Readership	News Heat - Daily Max Readership
4	Dates	NEWS_HEAT_READ_DMAX	NEWS_HEAT_READ_DMAX	NEWS_HEAT_READ_DMAX	NEWS_HEAT_READ_DMAX
5	7/1/2020	0	0	2	0
6	7/2/2020	0	1	4	0
7	7/3/2020				
8	7/4/2020				
9	7/5/2020				
10	7/6/2020	4	0	1	0
11	7/7/2020	0	2	1	0
12	7/8/2020	0	4	2	0
13	7/9/2020	0	2	4	0
14	7/10/2020	4	1	2	0
15	7/11/2020				
16	7/12/2020				
17	7/13/2020	0	3	2	0
18	7/14/2020	0	4	3	0
19	7/15/2020	2	4	3	0
20	7/16/2020	0	4	4	4
21	7/17/2020	0	1	1	0
22	7/18/2020				
23	7/19/2020				
24	7/20/2020				

Figure IA.10. Bloomberg attention data imported to Excel.