# **How to Create Analysis from AAII Data**

1. In the directory C:\Sundeep\Stocks\_Automation\Downloaded\_from\_AAII\_for\_Analysis there are xls files. The name of the files is in the format : <YYYY\_mm\_dd\_AAII\_Analysis> , for e.g. : 2020\_11\_13\_AAII\_Analysis

The file has 3 worksheets (tabs)

* 0\_Analysis\_Misc\_00 (Last Col : AA, Col Val : Quick Ratio Q1)
* 0\_Analysis\_QTR (Last Col : CD, Col Val : Shared Diluted Q8)
* 0\_Analysis\_YR (Last Col : CH, Col Val : Return on Equity Y7)

So, go to that directory, open the file that has the latest date in the name, and “Save as” the file for the date for which you want to download AAII data and create Analysis for it.

For e.g. Open the file 2020\_11\_13\_AAII\_Analysis and then “Save as” 2021\_04\_03\_AAII\_Analysis

1. Now – open the newly created xls file, and delete all the data in each of the tabs – This is done because the number of companies in AAII Investor Pro database changes – and we don’t want to have duplicate entries towards the end (This can happen when the older file has – say 6600 companies and now AAII Investor Pro database has 6550 companies. In this case the 50 companies will remain the worksheet from the older file towards the end and most likely will be duplicate with some of the names from the newly copied data).
2. In the AAII Investor Pro database – I have made three views that correspond to each of the tabs of the worksheet

* AAII View 🡪 SC\_0\_Analysis\_Misc\_00 🡪 Workbook Tab 🡪 0\_Analysis\_Misc\_00
* AAII View 🡪 SC\_0\_Analysis\_Financials\_ QTR 🡪Workbook Tab 🡪 0\_Analysis\_QTR
* AAII View 🡪 SC\_0\_Analysis\_Financials\_YR 🡪 Workbook Tab 🡪 0\_Analysis\_YR

1. These are the las columns for the various tabs:
   * 0\_Analysis\_Misc\_00 🡪 **Last Column AA1** (Quick Ratio Q1)
   * 0\_Analysis\_QTR 🡪 **Last Column CD1** (Shares Diluted Q8)
   * 0\_Analysis\_YR 🡪 **Last Column CH1** (Return on Equity Y7)
2. Copy the data from each view and paste in the corresponding tab. The size of the file should be around 7~8 MB. Once the data from AAII is pasted in the tabs, then change the date in the script : **SC\_parse\_AAII\_Download.py** in the variable : **aaii\_xls\_file** . **Please read the following section before running it.**

**<<< IMPORTANT >>>**

1. **Make sure to Change ticker name “TRUE” 🡪 “TRUEE”**
2. **Before running it fill throttle, I do a dry run for one ticker – say IBM – and make sure that it generates data right. Generally, it would be best, if you can find the company whose fiscal year is also ending for the quarter for which we are running the script to make sure that generates the data right for QTR and YR. That stock can be found out from the Configuration file say for a ticker whose fiscal year ends in Mar/Jun/Sep/Dec (depending upon when I am running the script). NOTE : The ticker that I pick from the configurations file should also exist in the Master Tracklist 😊. The script can be run for just one ticker by modifying the list variable ticker\_list in the script.   
   When doing that, I open the three files IBM\_Key\_statistics\_data.csv, IBM\_QTR\_data.csv and IBM\_YR\_data.csv in notepad++ and run the script. That way I can see what the script changed by reloading the files from the disk in notepad++. Once I am satisfied, I do a “git checkout” for those files from git to make sure that they are in the “original state” and then run the script unattended.**
3. When you have changed the name to TRUEE and feel comfortable and confident with the data, then run the script. The script will go through each ticker in the AAII pasted data (it also has the option to only go through the tickers in the tickerlist but that we can discuss later). The script with either update or create the files in the three subdirectories:

C:\Sundeep\Stocks\_Automation\Analysis

* + Key\_Statistics
  + Quarterly
  + Yearly

You can monitor the progress of the script through this command in the Logs directory :

$ **tail -f SC\_Parse\_AAII\_Download\_debug.txt | grep -i "Iteration "**

1. It will update if it finds a file corresponding to that ticker in the subdirectories. If it does not find a file corresponding to the ticker that it is working on, then it will create a new excel file in those subdirectories.
2. The script takes about 20-25 minutes to run. Once run – there is a **git\_commit.sh** script in the directory that can be used to commit/add the files updated/created in the three subdirectories. There is no modification required in that script before running.
3. There are two more files that need to be taken care of before you can do a git push into github
   * git add ../Downloaded\_from\_AAII\_for\_Analysis/YYYY\_MM\_DD\_AAII\_Analysis.xlsx

This is the AAII file that has the newly downloaded data from AAII. The python script used this file to update the ticker\_qtr/yr/key\_statistics\_data.csv files.

* + git commit –m “More changes” ../Downloaded\_from\_AAII\_for\_Analysis/YYYY\_MM\_DD\_AAII\_Analysis.xlsx

This commit the AAII Analysis file that was added above

* + git commit –m “More changes” ../Scripts/SC\_parse\_AAII\_Download.py

This is the python script that Sundeep ran to create the ticker\_qtr/yr/key\_statistics\_data.csv files. This script was changed in step #5 above to reflect the date of the newly downloaded AAII Analysis file

1. Once that script is run and the above git add/git commit are done, execute **git push** to get the newly added/updated files on github

# **How to Create Plots from AAII Analysis Data**

1. This can be done with or without the data collection and the script run from the previous section, though it generally is done following the steps in the previous section after the files are updated (sometimes created) in the directory C:\Sundeep\Stocks\_Automation\Analysis with the latest AAII data from the previous step. This step reads in the files from Analysis directory to create the plots.
2. Prep work before the script is run:
   1. Updating the Tracklist.csv file with the list of tickers for which we want to create the analysis plots. Generally, the way I work it is that I want to create the plots for all the AAII tickers, so I open the latest AAII\_Analysis file that was used in the previous section and copy its tickers into Tracklist.csv. For e.g

I will copy all the tickers from the file: C:\Sundeep\Stocks\_Automation\Downloaded\_from\_AAII\_for\_Analysis/2021\_05\_29\_AAII\_Analysis.xlsx and paste them into Tracklist.csv file

* 1. If you are running with all the tickers pasted in the Tracklist.csv file, then you can delete the plots from subdirectories Not\_Wheat and Wheat (see below). You can also delete to plots from the Analysis\_Plots directory(see below).
  2. Then run the script **SC\_Create\_0Analysis.py.**You can monitor the progress of the script through this command in the Logs dir  
     **tail -f SC\_Create\_0Analysis\_debug.txt | grep -i iteration**

The script takes about 6 hours to run and make plots for all the ~6300—6400 tickers.

1. Once the script runs, it will populate the plots in two directories (Note that since these two directories are NOT under git control – they are not available on all the computes after git pull. They need to be duplicated from cloud, if needed. That is the reason that I run this script mostly from Office Laptop Computer, but it can be run from other computers are well – Just so that the user is aware of this):
   1. C:\Sundeep\Stocks\_Automation\Analysis\_Plots 🡪 This directory will have ALL the plots corresponding the tickers in the Tracklist.csv file
   2. C:\Sundeep\Stocks\_Automation\Analysis\_Watchlist 🡪 This directory will have two sub-directories
      1. Not\_Wheat
      2. Wheat

Both of these sub-directories have the plots for tickers that have at least 2 out of 5 metrics that have grown more than 10% YoY for the duration for which the data is being plotted. The plots are exactly the same as the ones created in Analysis\_Plots directory. They are just, additionally, copied to these sub-directories if they pass the criterion of growth. So, these sub-directories can be thought to have a filtered list of plots that might be more interesting to begin looking at good stock for. The Not\_Wheat has the plot for tickers that are NOT WHEAT while the Wheat sud-directory has plots for the tickers that are wheat (from Master\_Tracklist).

**Note – The Analysis\_Plots and Analyis\_Watchlist directories are NOT under git control. <<< They are backed up ONLY on the Cloud >>>**