**Assignment** EFS -02: QUANTITATIVE STRATEGY MODELING IN EXCEL

**Note:** If there are multiple files for the assignment, please zip all the files in .zip format.

**Submitted By: Souvik Chanda**

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| **Question:** Make sure that you complete the model discussed in the class and work on the data as provided in the “In\_Class\_EFS-02\_File” which was used in class. Check the sheet “Desired Output”. You have to calculate following values using various excel formulas discussed in the class: |

|  |  |
| --- | --- |
| Number of Long Signals | 225 |
| Number of Short Signals | 181 |
| Total number of Signals | 406 |
|  |  |
| Number of Long Signals Traded | 44 |
| Number of Short Signals Traded | 46 |
| Total number of Signals Traded | 90 |
|  |  |
| Number of Profitable Trades | 8 |
| Number of Loss Making Trades | 81 |
| Profit from Profitable Trades | 180.8961399 |
| Loss from loss making trades | -903.0747818 |
| Total Profit | -722.1786419 |
|  |  |
| Average Number of Signals per Trading Hour | 34.84978541 |
| Average Number of Trades per Trading Hour | 7.725321888 |
| Average Holding Period of a Trade (in minutes) | 6.733333333 |
|  |  |
| Maximum Profit from a trade | 23.62028781 |
| Maximum Loss from a trade | -12.37401818 |
| Average Profit (or Loss) Per Trade | -8.114366763 |
| Assumed Slippage (assume a value) | 0.5 |
| Brokerage (assume a value) | 0.25 |
| Net Profit per trade after costs | -8.864366763 |
| Total Net Profit after costs | -797.7930087 |

* Make sure that you are not doing these calculations manually. All computations need to be done using excel formulas.
* Upload your final model along with completed table of values.
* **Note:** If there is more than one file kindly zip it in .zip format.

**Answer.**

* Values have been calculated using excel formulae in the spreadsheet.
* Same values updated in above table as well.
* Spreadsheet formulae have been updated to make them dynamic with respect to ATR (n) value as well.
* Number of trades is one more than what was calculated in class using P&L column as I used a new “Trade” column which includes a final “sell” signal that was not closed during the backtesting period. Ideally this should have been closed using last traded price on final day of backtesting, but this has not been done for simplicity. Relevant comments have been added in the Desired Output tab where there is an impact.