

SF2942: Assignment 2

Guide to the Quantlab workspace

This document is intended to assist you with the Quantlab workspace used in the assignment on index tracking, providing short descriptions its parameters and data fields. Figure 1 shows a screenshot of the workspace as it looks when you open it the for the first time. Most of your actions will be performed in

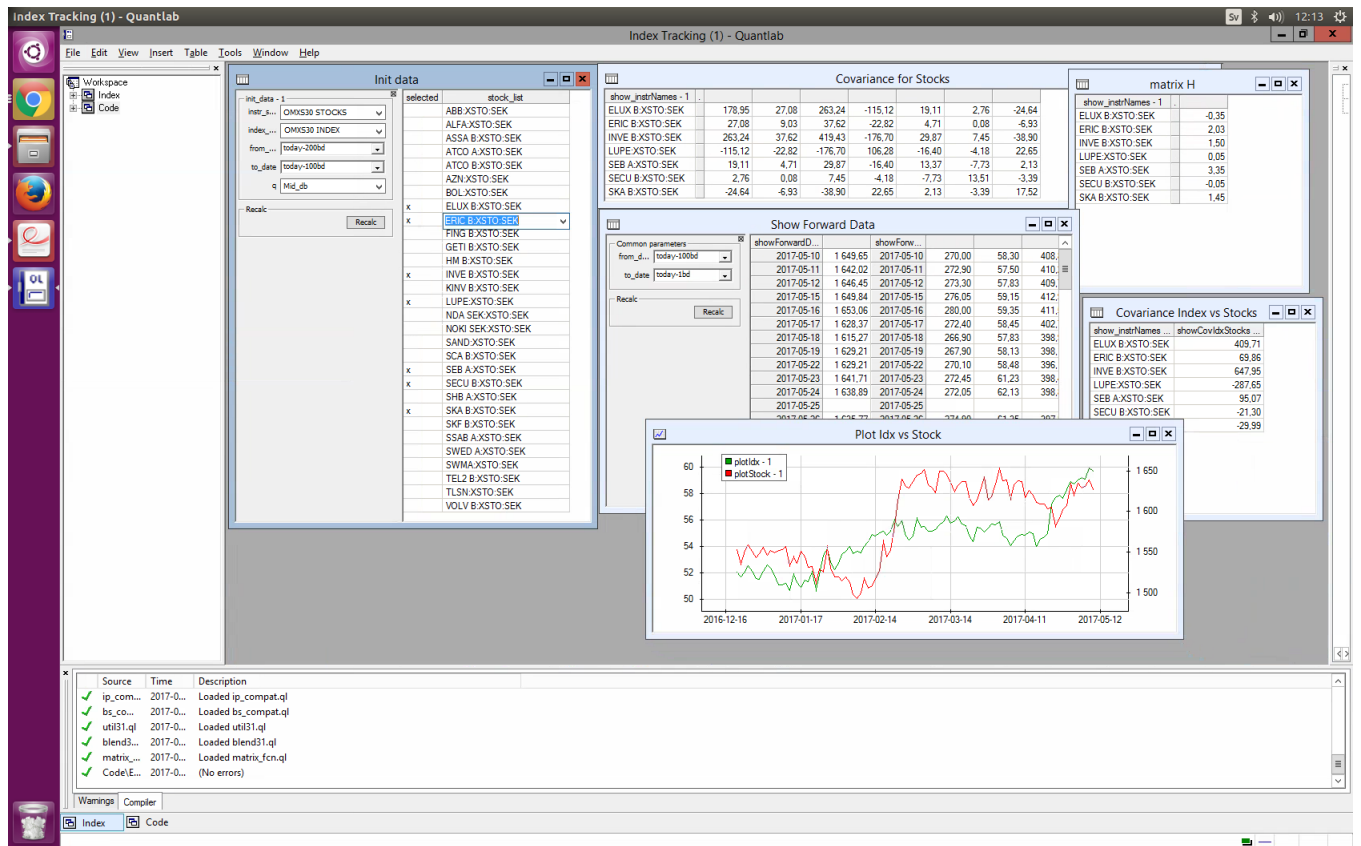


Figure 1: View of the workspace.

the “Init data” window. The selection in the first two fields determines the tracking instruments and the index. The default setting should not be changed when gathering data for the assignment. In the fields `fram_date` and `to_date` a historical period is selected, from which data is used to calculate the weights $\mathbf{h} = \Sigma_{\mathbf{Z}}^{-1} \Sigma_{L, \mathbf{Z}}$ (cf. Proposition 3.3, Hult et al.). You can either use the format `yyyy-mm-dd` or, as in Figure 1, `today - xbd` (where `bd` stands for business days, i.e. weekends and holidays are excluded). The field `q` sets the quotes, use the default setting `Mid_db` (mid quotes at closing time). Include stocks in the index

tracking by typing `x` in the column `selected`, exclude stocks by leaving the field empty. In Figure 1, seven stocks are selected.

In the windows “Covariance for stocks”, “Covariance Index vs Stocks” and “matrix H” you find $\Sigma_{\mathbf{Z}}$, $\Sigma_{L,\mathbf{Z}}$ and \mathbf{h} corresponding to your choices in “Init data”. From the window “Show Forward Data” you can extract data in order to evaluate the performance during the testing period. Select the testing period and press the “Recalc” button. The index values for this period is then found to the right of the column `ShowForwardDataIdx` and the prices of your selected stocks is found to the right of the column `ShowForwardData`. To copy data from the table, highlight it with the mouse and press Ctrl+C (or equivalent).

You can compare a stock with the index during the time period selected in “Init data” by double-clicking its name in the column `stock_list`. The trajectory of the stock price and the index are then plotted in the window “Plot Idx vs Stock”. In Figure 1, Ericsson B is plotted together with OMXS30.