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Topic: Weekly report (7/8-7/14) – All three solvers implemented

Last week, I combined all three solvers and made a pull request for them. They are ready to be merged now.

After a few tests, I found that the mco engine is pretty good on optimizing portfolio with a few assets (generally under 20). However, mco cannot beat osqp and Rglpk while optimizing on large asset pool (test on all stocks from NYSE).

As I mentioned weeks ago, I wanted to use osqp to optimize linear objectives such as Mean/ES. However, after many attempts, I found that osqp cannot solve linear programming problems with large constraint matrix. Meanwhile, the ES optimization requires us to build a constraint matrix based on historical data, which may have hundreds of rows. So, until now, osqp cannot be used to solve linear programming problems.

The next step on this scoop will be doing more tests, fix potential bugs, and polish codes.