

Title: **PROGRESS TOWARDS A GAME-OF-LIFE DECISION SUPPORT SYSTEM**

Speaker: **HARRY MARKOWITZ**
Harry Markowitz Company

Importance: Why this matters:

Another approach to informing investors about planning for retirement through an elaborate simulation.

Investigation: "Speaker analyzed XXX data to address the questions yyy, zzz, etc."

1. Make forward looking estimates of asset class expected returns, variances and covariances;
2. Generate an efficient frontier at the asset class level;
3. Elicit from a new client (401k plan sponsor), plan specifics such as investible securities and matching policy
4. Assign a portfolio of plan-permitted investments to each MV efficient asset class portfolio;
5. Elicit from a participant, and/or the plan's record keeper, information needed by the simulator;
6. Inform participant of results of Monte Carlo analysis:
 - probabilities of possible post retirement consumption levels,
 - for current portfolio versus recommended portfolio,
 - taking into account savings rate, matching policy, selected portfolio,
 - include Social Security and spouse's income if participant elects,
 - allow participant to vary the above.
7. Instruct the plan's record keeper to execute the selected advice; and
8. Report account status to the participant and the plan sponsor.

Innovation: Are there new techniques of interest in the data or approach to the problem?

Markowitz frames the problem in terms of a "family unit" which includes accumulation of assets, decumulation, costs of implementing and taxes, plus a residual passed on to descendants.

Insights: 1-2-3, what are the three most important things the speaker offered?

9. This is the broadest view of life cycle investing anyone has investigated.
10. The results describe for varying asset selections the division of assets between consumption, endowment, expenses and taxes.
11. For more information, visit www.informedchoice.com

Audience rating: 2.98