## QUESTION 7 - PORTFOLIO CONSTRUCTION

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## 1. Short Introduction

For this question I will construct a Global Balanced Index Fund portfolio using a mix of traded global indexes.

To achieve a balanced index fund I will take the following considerations:

- A look-back of less than 3 years
- Disregard any assets with less than 3 years' returns data
- Apply Quarterly Rebalancing
- Limit exposure to Bonds and credit instruments at 25%
- Limit exposure to Equities at 60%
- Limit single asset exposure at 40%

```
## # A tibble: 10 x 7
##
      stocks
                                      mv minvol maxdecor sharpe date
                                                                           Look_B~1
                                   <dbl> <dbl>
##
      <chr>
                                                   <dbl> <dbl> <date>
                                                                               <dbl>
   1 Asia_dollar_Idx
                                  0.0100 0.375
                                                  0.375 0.0769 2018-06-29
##
                                                                                  12
   2 Bbg_EUCorpCred_Unhedged_USD 0.0100 0.0100
                                                  0.0100 0.0769 2018-06-29
                                                                                  12
##
   3 Bbg_EuroBonds_UnhedgedEUR
                                                  0.0100 0.0769 2018-06-29
                                                                                  12
##
                                  0.0100 0.0100
   4 Bbg_GlBonds_HedgedUSD
                                  0.0100 0.0395
                                                  0.0395 0.0769 2018-06-29
                                                                                  12
##
                                  0.0100 0.0100
##
   5 Bbg_GlCorpCred_Hedged_USD
                                                  0.0100 0.0769 2018-06-29
                                                                                  12
   6 Bbg_USBonds_UnhedgedUSD
                                  0.0100 0.246
                                                  0.246 0.0769 2018-06-29
                                                                                  12
##
## 7 Bbg USCorpCred Unhedged USD 0.0100 0.0100
                                                  0.0100 0.0769 2018-06-29
                                                                                  12
##
   8 Commod_Idx
                                  0.0100 0.01
                                                  0.01
                                                         0.0769 2018-06-29
                                                                                  12
## 9 Dollar_Idx
                                  0.0100 0.25
                                                  0.25
                                                         0.0769 2018-06-29
                                                                                  12
## 10 MSCI_ACWI
                                  0.400 0.0100
                                                  0.0100 0.0769 2018-06-29
                                                                                  12
## # ... with abbreviated variable name 1: Look_Back_Period
```