



Toolkit for Risk-based
pensions supervision

Case Study
Mexico



Working out an example of the Historical VaR...(Cont.)

h) And then we sort in descending order the changes in percentage of the value of the portfolio. The regulatory VaR is the 13th worst result.

Returns in order

1	-3.5229%
2	-1.8844%
3	-1.3071%
4	-1.1988%
5	-1.1782%
6	-0.9392%
7	-0.9188%
8	-0.8883%
9	-0.8616%
10	-0.8354%
11	-0.7440%
12	-0.7234%
13	-0.7159%
14	-0.5888%
15	-0.5638%
16	-0.5326%
17	-0.4237%
18	-0.4155%
19	-0.3976%
20	-0.3319%

In our example, As we use 500 scenarios and looking for a confidence level of 95%, the VaR Portfolio will be the 13^o worst scenario $((0.05/2)*500=13)$, ie. VaR will be 0.7159%

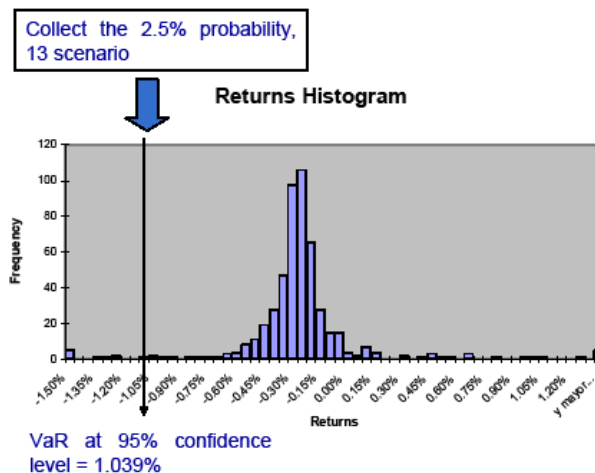
← VaR at 95% confidence level

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Working out an example of the Historical VaR...(Cont.)

A histogram of the changes in the value of the portfolio is shown below:



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