Finance

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Contents

Initial parameters for the simulations.

We apply the scenarios below to see what we get after a few iterations

my @Scen = (231,529*.4,755*.5,231+529*.4,1000,700,800,950,750);

- The first simulation apply a reduction of the Toxics by 231 euros each month
- The second scenario apply a reduction of the debt by 40 percent of the 529
- The third one divide the amount of cash spent by 50 percent
- The fourth one cumulate the reduction of the toxics by 231 euros with the amount of cash spent reduced by 50 percent
- The fifth one is a reduction of 1000 euros each month
- The fifth one is a reduction of 700 euros each month
- The fifth one is a reduction of 800 euros each month
- The fifth one is a reduction of 950 euros each month
- The fifth one is a reduction of 750 euros each month

On the graph we can notice that all the scenarios are positive, as they were built to show how to maximize profit just by managing the charge, and especially useless charges.

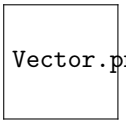
BarPlotPnl

2.1.2 PnL

2.1.3 Kapital

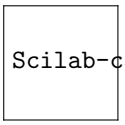
2.1.4 Plot of an example

2.1.5 Graph



This where science enter the game as here can call scilab and there is no limit at what we could calculate... fascinating! How do we populate Scilab with Negative numbers where there are Debits and Positive numbers for the Credit

2.1.6 Graph



2.1.7 Surface

2.1.8 Gaussian Curve

2.1.9 Table

All the figures need to be checked carefully by someone who knows what it's doing.

2.2 History and extrapolations

2.2.1 Kapital curve

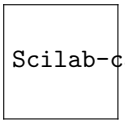
Kapital trend,Assets trend,Liabilities trend,Leverage trend

2.2.2 PnL curve

2.2.3 Cash curve

Funny cashflow/kapital superior to percent

2.2.4 Cash curve from Scilab man!



3 Cash Balance Management

3.1 Monthly drift

3.1.1 Table

3.1.2 Table

To be able to have data for the drift, you need to build a C++ insert like for the kapital go through the dates in the cashflows, and calculate a drift based on this (modulo the salary)

3.1.3 Graph

3.2 Incomes

3.2.1 Table

3.2.2 Graph

3.2.3 Chart

3.3 Charges

3.3.1 Charges plot

Removed to preserve my eyes from the colors....!!!!

3.3.2 Charges kiviat

3.3.3 Table

3.3.4 Graph

3.3.5 Chart

3.3.6 Cheese

4 Asset Liability Management

4.1 Kapital

4.1.1 Table

History of the Kapital is available in the database (select * from kapital)

4.1.2 Graph

A graph of the kapital and not income and charges cumulated should be easy to build. Say a readKapital which would select the cash balance + all the other stuff like assets - liabilities Better do it with Latex than with the C++

4.1.3 History

Historical graph of the kapital, liab and assets, yearly ALM management

4.1.4 Definitions

Vp: value weight (basically the value of the asset against the total value - to be replaced by InitPrice)
Rp: return weight (the return compared to the total returns)
Cp: cost weight (the maintenance cost compared to the total maintenance
Vd: historical deprecation of value (the Value compared to the InitPrice
R/V: monthly rentability (the return minus the maintenance)

4.1.5 Ratios

Vp = value/Totalvalue
Rp = return/Totalreturn
Cp = cost/Totalmaintenance
Vd = value/Initprice
R/V = return/Value

4.1.6 Formulas

$\lim_{x \to \infty} \exp(-x) = 0$

4.2 Assets

4.2.1 Data

The top 5 assets are listed sorted by value, but the totals are given for all the assets as of today

4.2.2 Graph

;

4.2.3 Cheese

4.2.4 Kiviat

Seems like the assets Cheese

4.3 Liabilities

The top 4 liabilities are listed but the totals are given for all the liabilities

4.3.1 Table

4.3.2 Graph

4.3.3 Chart

4.3.4 Cheese

5 Cashflows

All cashflows from history are being used here

5.0.5 Table

5.0.6 Graph

6 Currencies

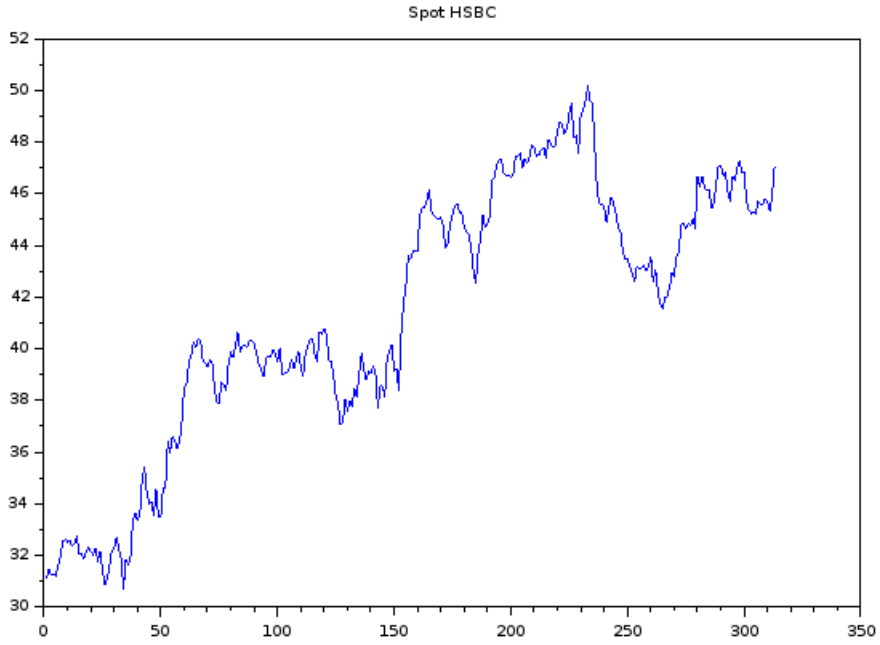
All stocks and the evolution of their stock price are shown here

Scilab-currencies.png This is the graph of the EUR/GBP

7 Cash balance

Scilab-cashBalance.png This is the graph of my EUR cashbalance

8 Stocks



This is the graph of HSBC stock

8.0.7 Table

Stocks table is available in the database ;-) select * from stocks

8.0.8 Graph

The graph is also available and produced by C++ under ”legends”