

Finance

©Frederic Kerdraon

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1 Introduction

2 Management summary

2.1 PnL Projections

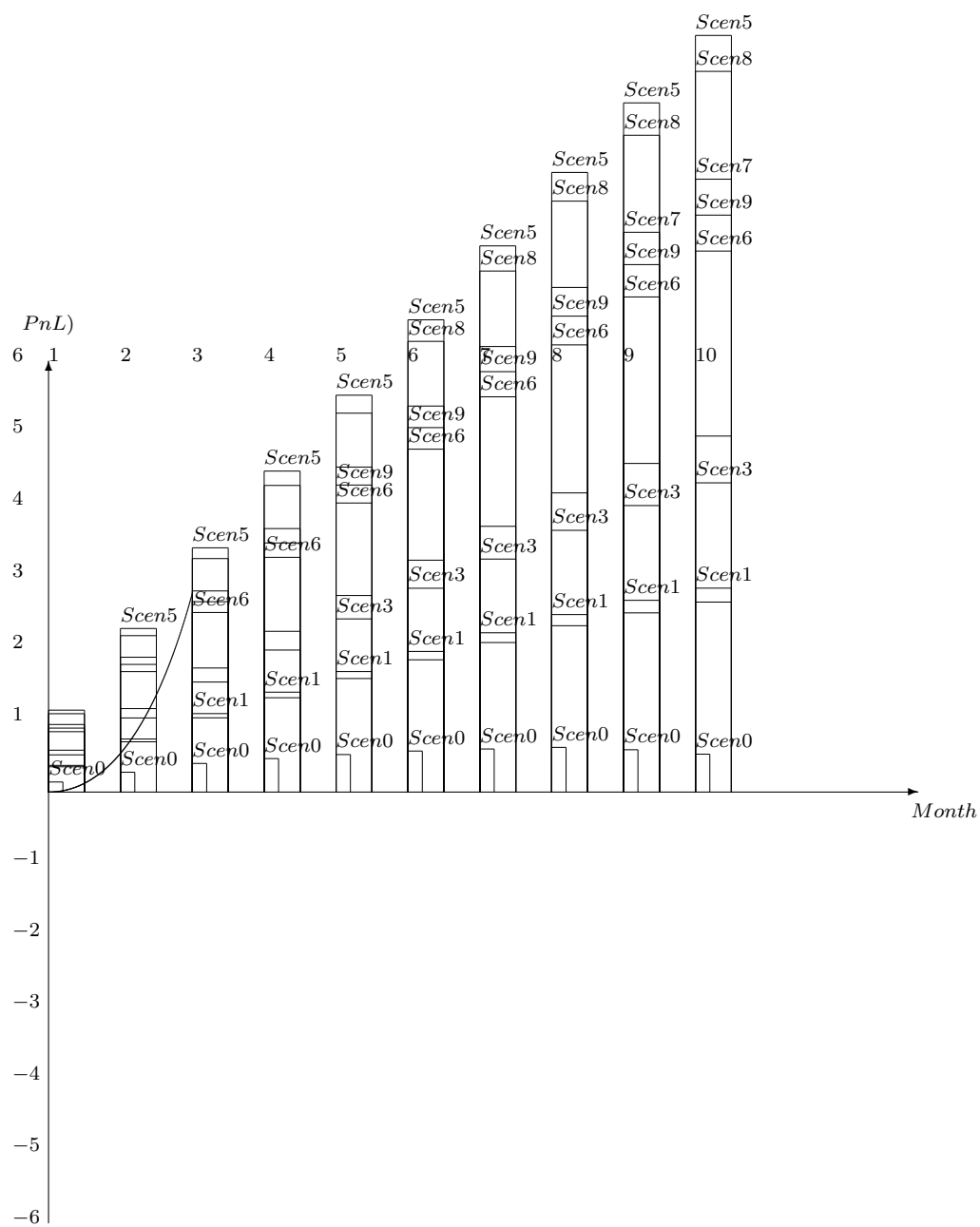
2.1.1 Latex Graph of the scenarios

```

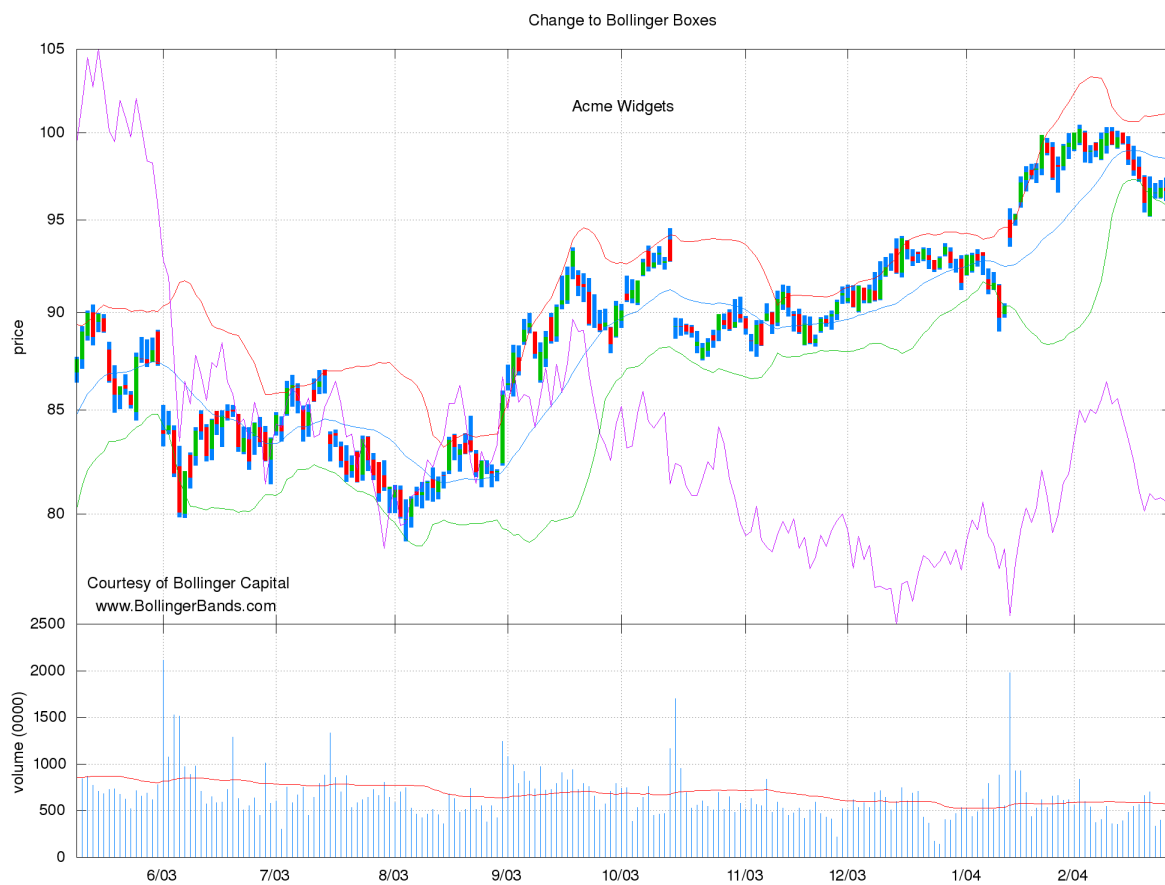
TotalDrift = 0.01;
TotalScenTox = 0;
TotalScenDebt = 0;
TotalScenCash = 0;
TotalScenToxDebt = 0;
TotalScen = 0;
Scen = 135;
ScenToxics = 231;
ScenDebt = 529 * .4;
ScenCash = 755 * .5;
ScenToxDebt = 231 + 529 * .4;

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

```



2.1.2 Plot of an example

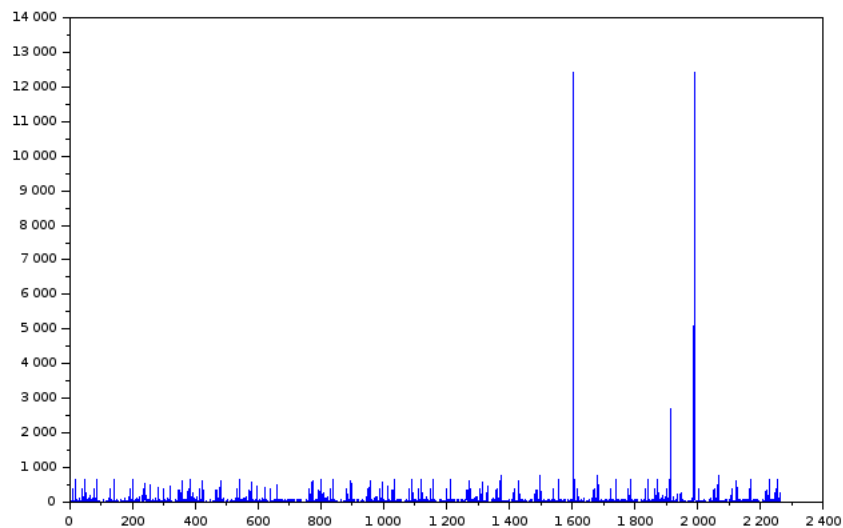


2.1.3 Plot of an example

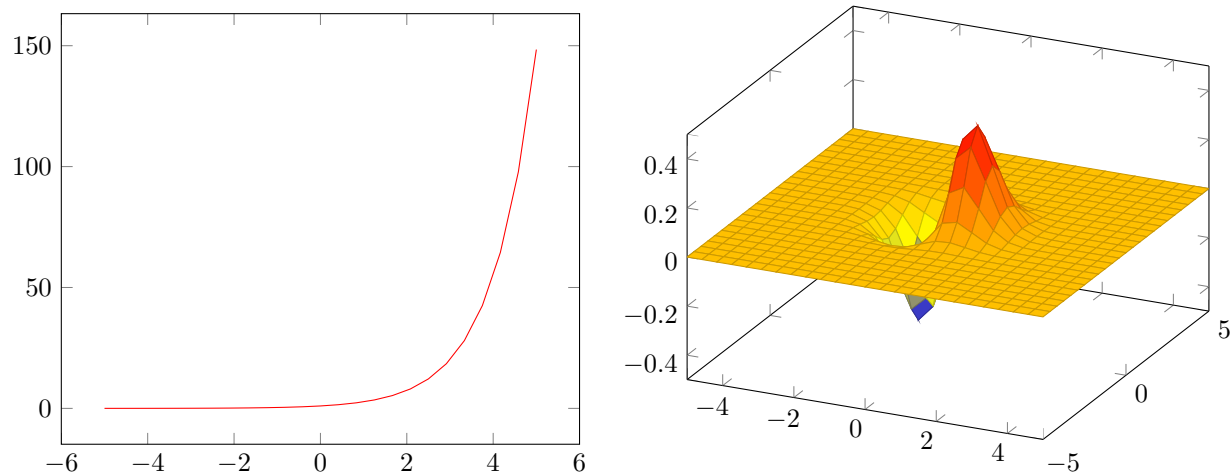


On the graph we can notice that all the scenarios are positive, as they were built to show how to maximize profit just by managing the charge, and especially useless charges.

2.1.4 Graph



2.1.5 Surface



This surface is really good looking but I doubt on its information.

2.1.6 Table

The scenarios given in the table are only examples, the real scenarios are provided in the graph below

Scenarios					
PnL; CumPnL; Tox; Debt(40PnL)	CumPnL	Tox	Debt(40%)	Cash(50%)	Tox-Debt(40%)

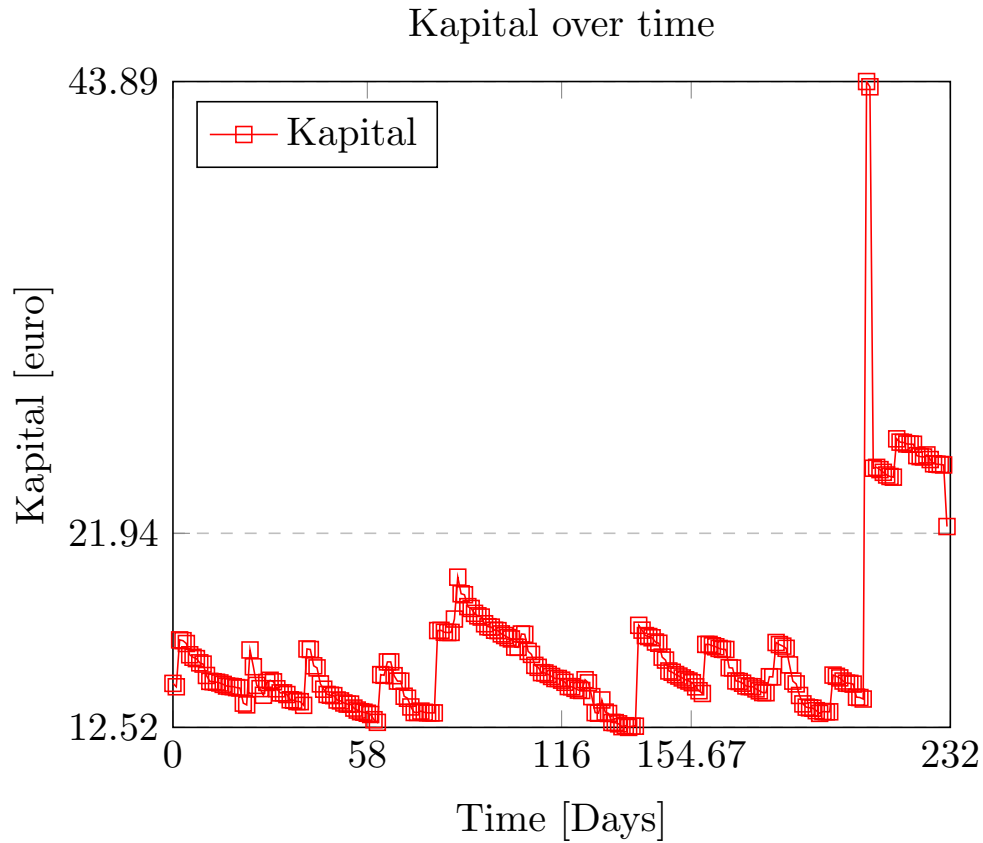
140;140;371;351;517;582 140	140	371	351	517	582
136;276;738;699;1031;1161 136	276	738	699	1031	1161
122;398;1091;1033;1530;1726 122	398	1091	1033	1530	1726
67;465;1389;1312;1975;2236 67	465	1389	1312	1975	2236
55;521;1676;1579;2409;2734 55	521	1676	1579	2409	2734
49;570;1956;1840;2835;3226 49	570	1956	1840	2835	3226
28;599;2216;2080;3241;3697 28	599	2216	2080	3241	3697
22;621;2469;2314;3641;4162 22	621	2469	2314	3641	4162
-32;588;2667;2493;3986;4572 -32	588	2667	2493	3986	4572
-61;527;2837;2643;4302;4953 -61	527	2837	2643	4302	4953

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

2.2 History and extrapolations

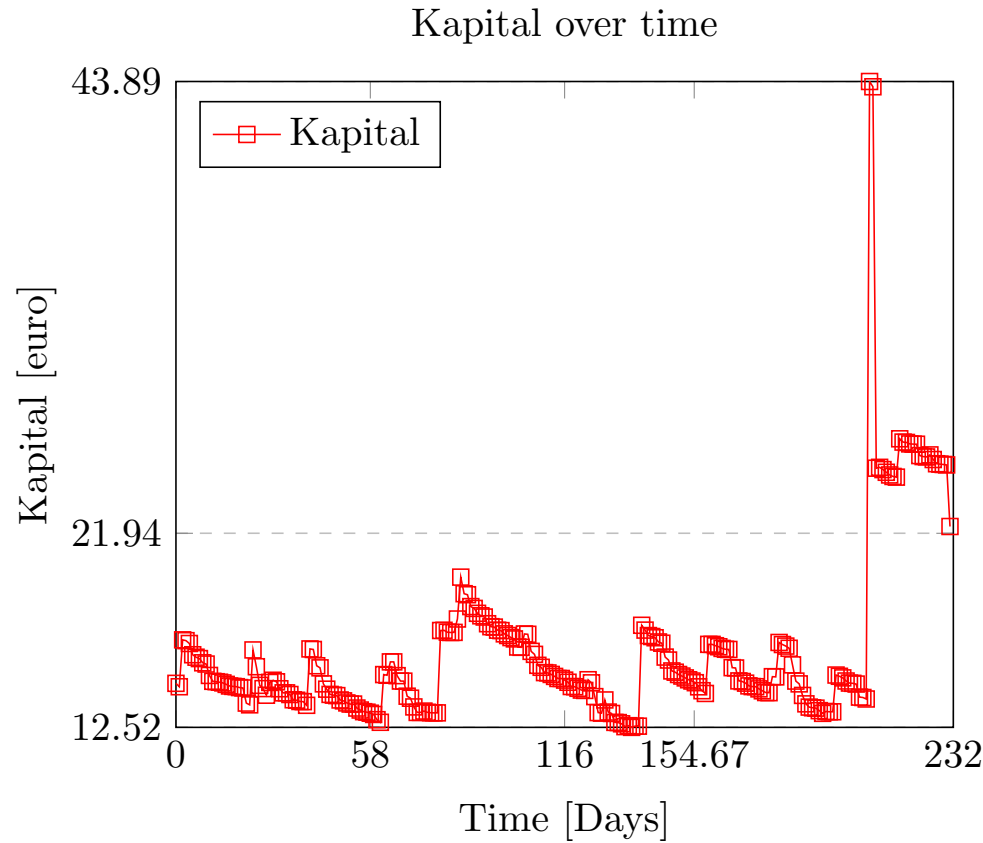
2.2.1 Kapital curve

Kapital trend, Assets trend, Liabilities trend, Leverage trend



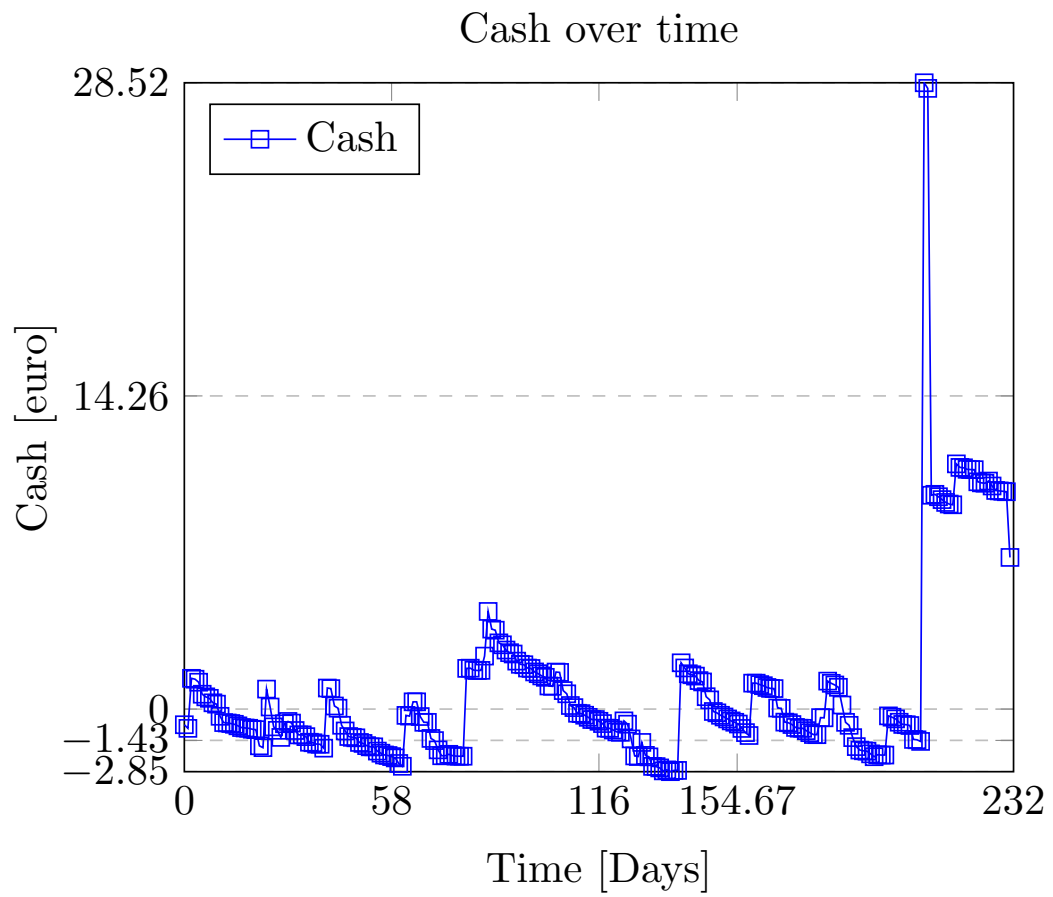
2.2.2 PnL curve

PnL trend
Income trend
Expenses trend



2.2.3 Cash curve

Funny cashflow/kapital superior to percent

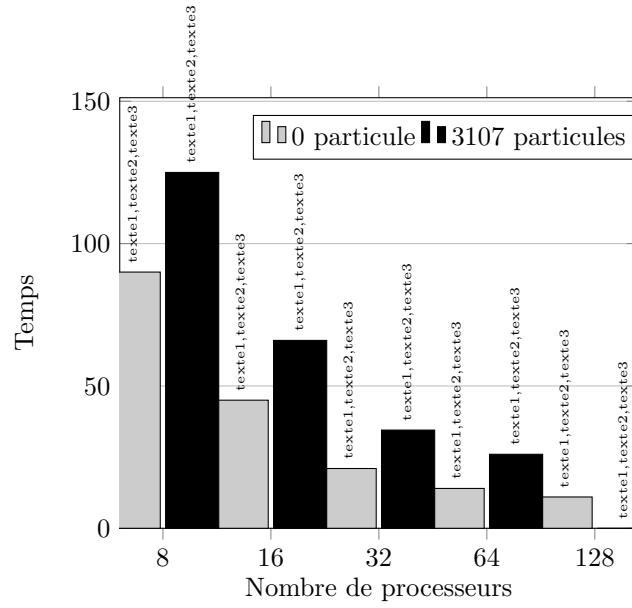


3 Cash Balance Management

3.1 Monthly drift

Data are aggregated between Initial date: **2011/01/01** and Last date: **2021-01-13**

3.1.1 Table

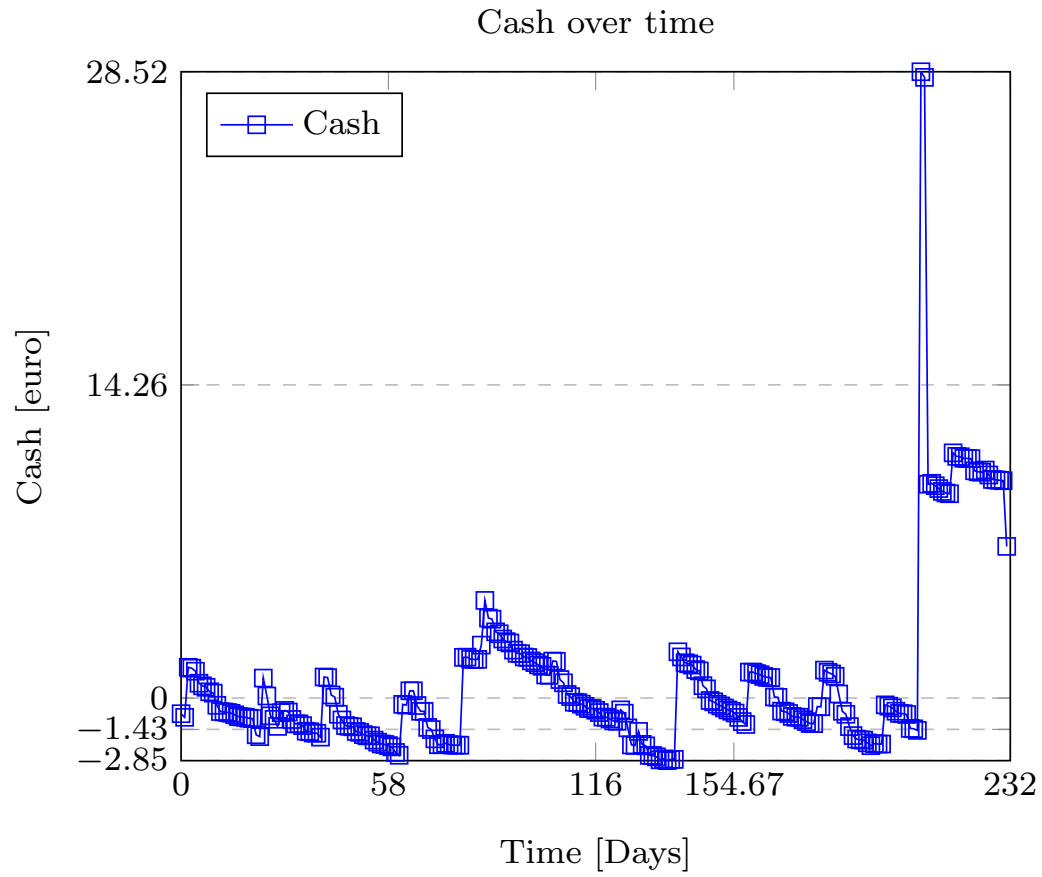


3.1.2 Table

Cashflows					
MinDate	MaxDate	Income	Charges	PnL	NumDays
2011-01-01	2015-01-06	2340	940	1400	1466
2011-01-01	2015-01-07	2340	980	1360	1467
2011-01-01	2015-01-08	2340	1117	1223	1468
2011-01-01	2015-01-09	2340	1664	676	1469
2011-01-01	2015-01-12	2340	1783	557	1472
2011-01-01	2015-01-13	2340	1850	490	1473
2011-01-01	2015-01-14	2340	2055	285	1474
2011-01-01	2015-01-15	2340	2116	224	1475
2011-01-01	2015-01-16	2340	2669	-329	1476
2011-01-01	2015-01-19	2340	2955	-615	1479
2011-01-01	2015-01-20	2340	2973	-633	1480
2011-01-01	2015-01-21	2340	2998	-658	1481
2011-01-01	2015-01-22	2340	3033	-693	1482
2011-01-01	2015-01-23	2340	3103	-763	1483
2011-01-01	2015-01-26	2340	3181	-841	1486
...
Total					

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

3.1.3 Graph

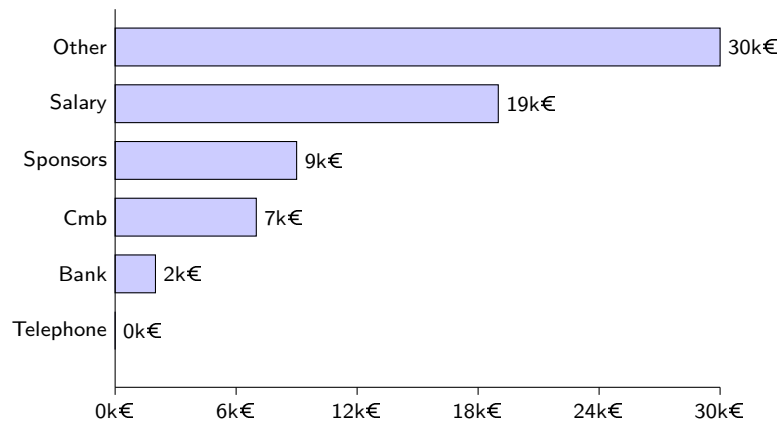


3.2 Incomes

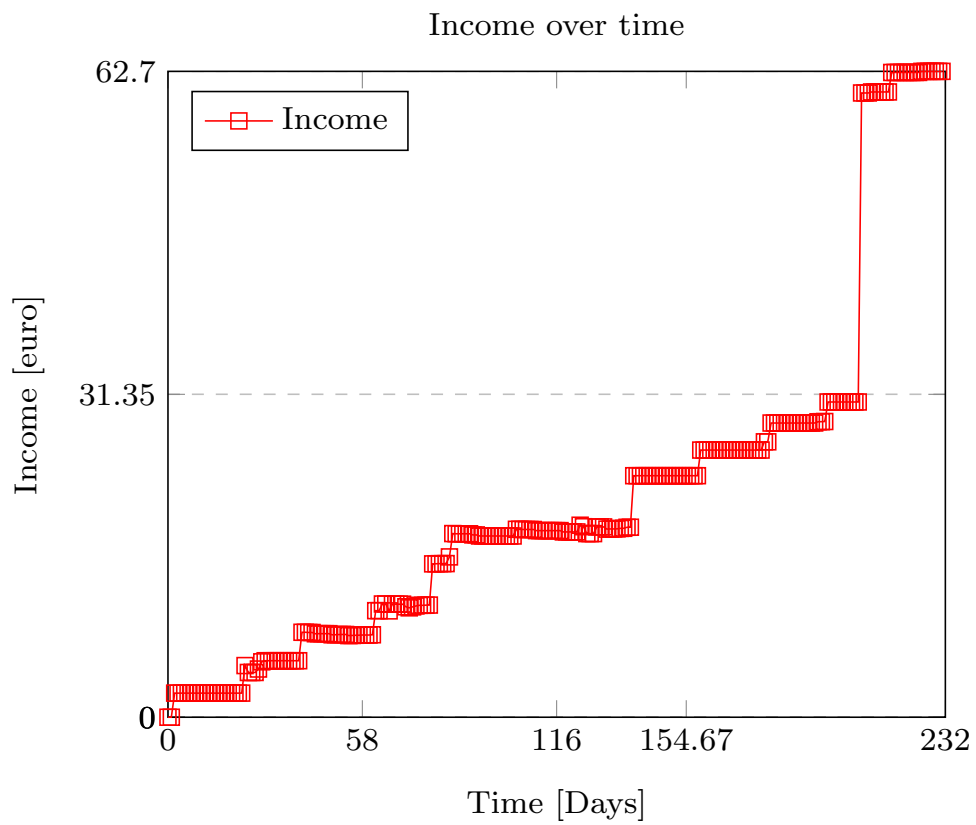
3.2.1 Table

Cashflows			
Category	Debit	Credit	PnL
Other	0	30368	30368
Salary	0	19498	19498
Sponsors	0	9000	9000
Cmb	0	7287	7287
Bank	0	2046	2046
Telephone	0	38	38
...
Total	55799	62704	6905

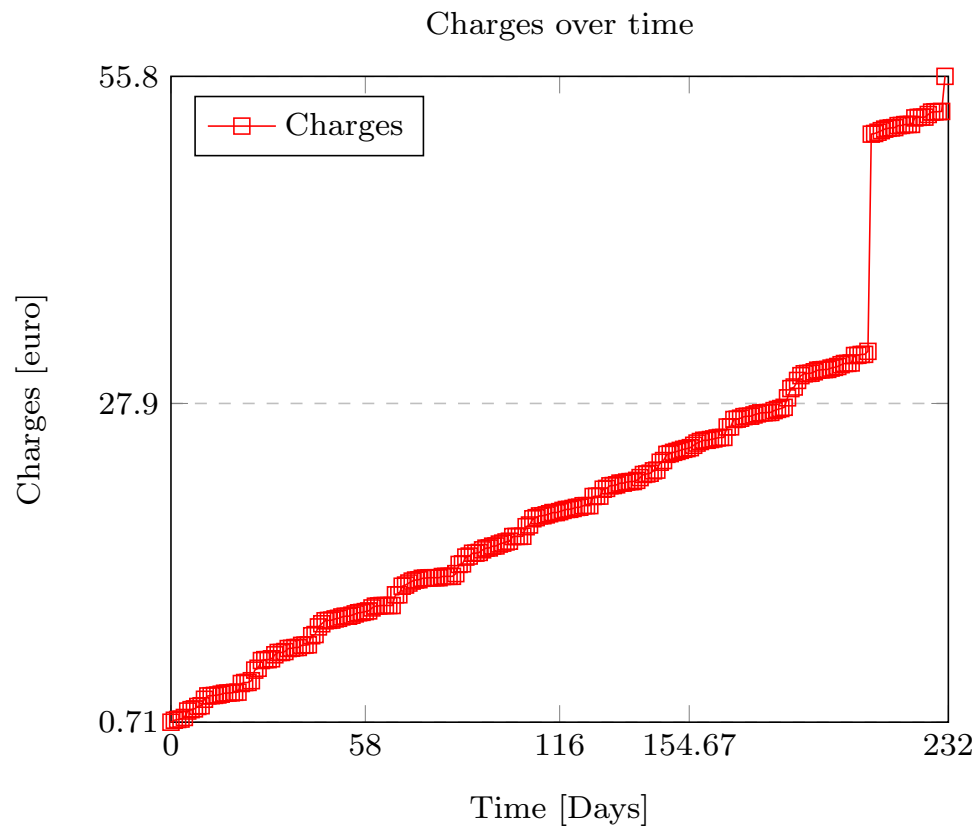
3.2.2 Graph



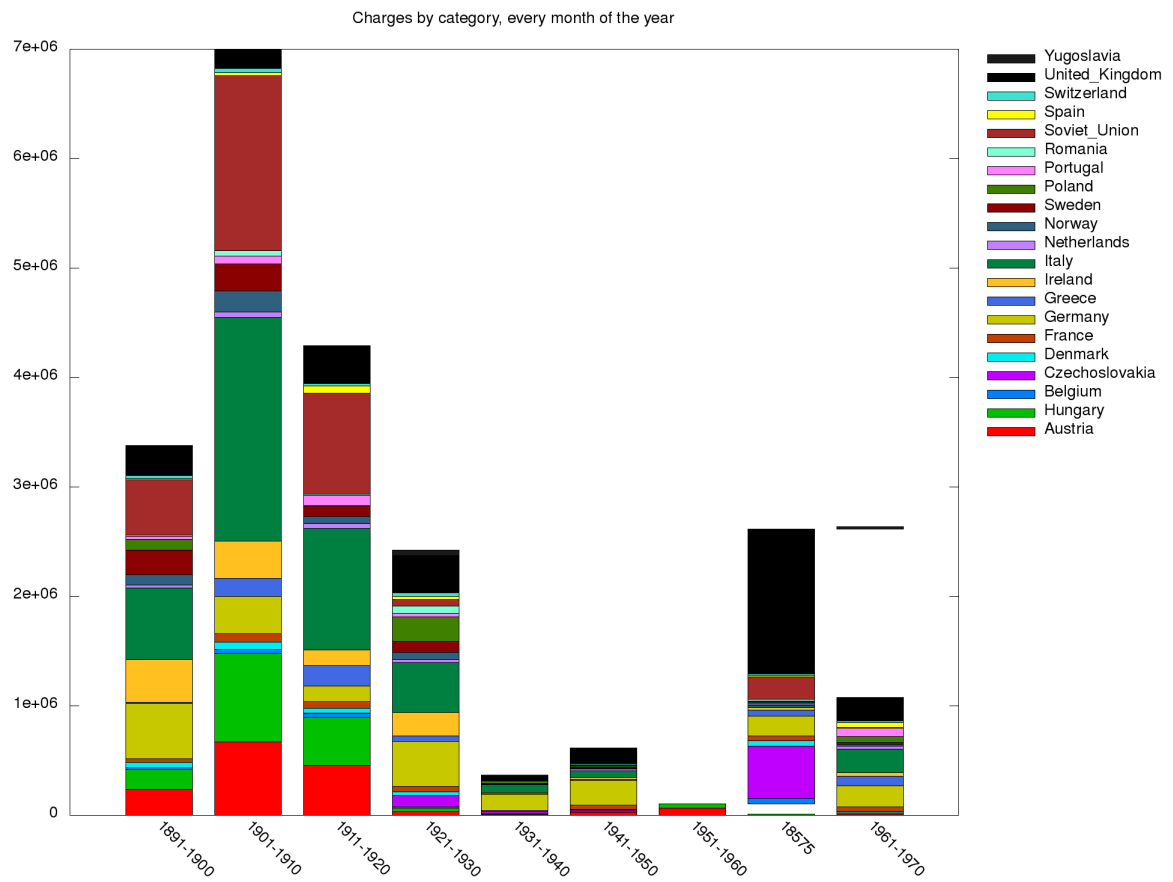
3.2.3 Chart



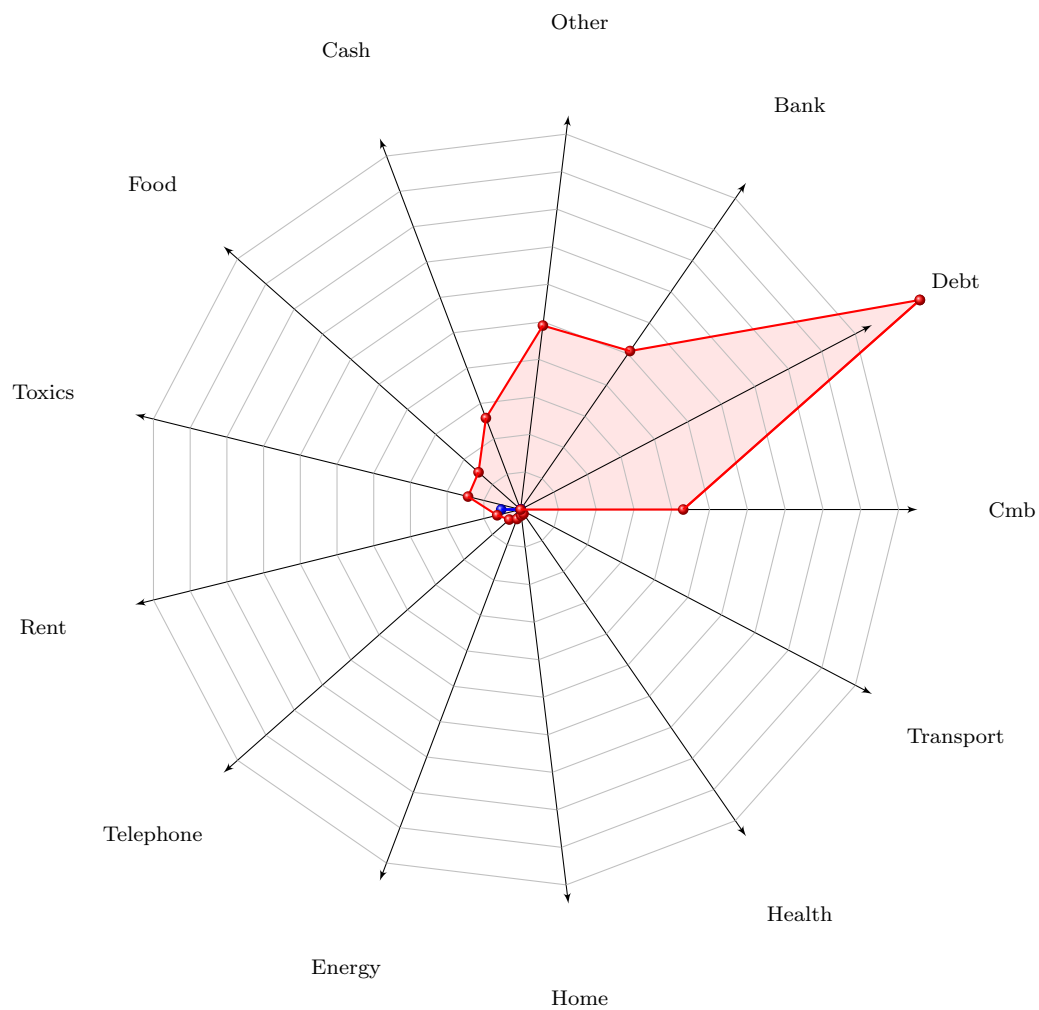
3.3 Charges



3.3.1 Charges plot



3.3.2 Charges kiviat

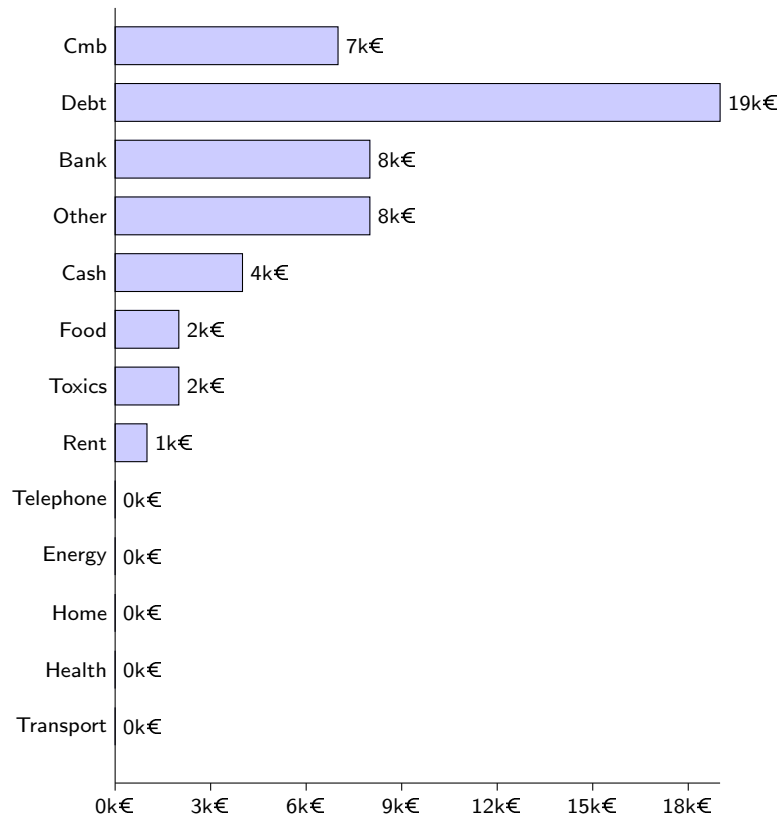


3.3.3 Table

Cashflows			
Category	Debit	Credit	PnL
Cmb	7201	-963	-8164
Debt	19965	0	-19965
Bank	8527	0	-8527
Other	8205	0	-8205
Cash	4330	0	-4330
Food	2487	0	-2487
Toxics	2395	0	-2395
Rent	1066	0	-1066
Telephone	669	0	-669
Energy	448	0	-448
Home	272	0	-272
Health	232	0	-232

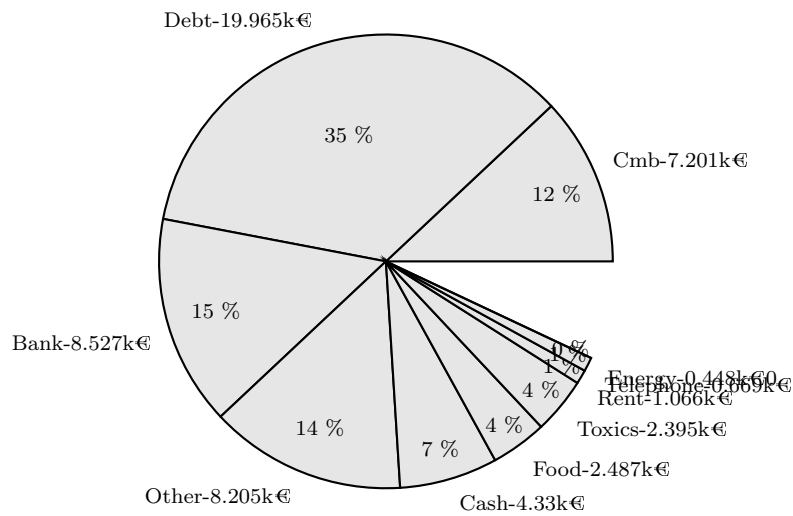
Transport	2	0	-2
...
Total	55799	62704	6905

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

$V_p = \text{value} / \text{Totalvalue}$

$R_p = \text{return} / \text{Totalreturn}$

$C_p = \text{cost} / \text{Totalmaintenance}$

$V_d = \text{value} / \text{Initprice}$

$R/V = \text{return} / \text{Value}$

4.1.6 Formulas

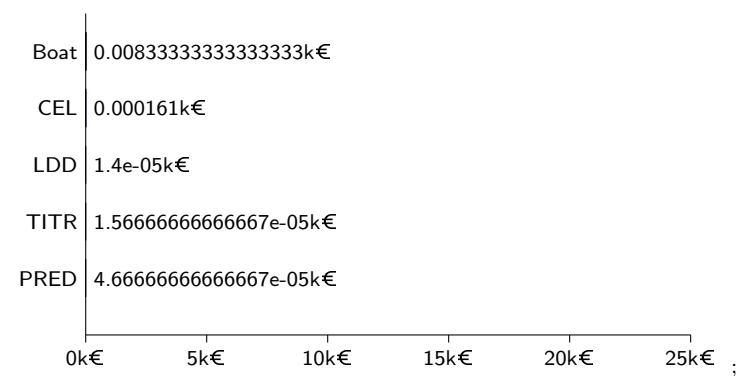
4.2 Assets

4.2.1 Data

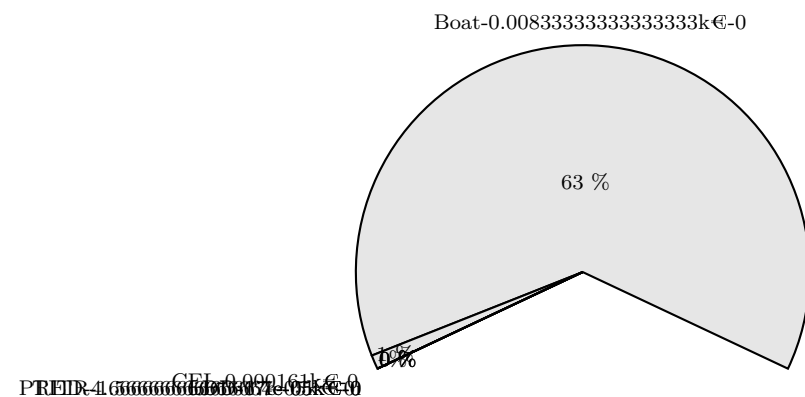
The top 5 assets are listed sorted by value, but the totals are given for all the assets as of today

Assets												
Type	Name	Maturity	Value	Return	Cost	InitPrice	vp	rp	mp	dv	PnL(R/V)	
Boat	Acquisition	2013-01-07	8.333333333333333	50	400	30000	63	0	3	83	0	
CEL	Acquisition	2013-01-07	0.161	50	400	30000	1	0	3	1	0	
LDD	Acquisition	2013-01-07	0.014	50	400	30000	0	0	3	0	0	
TITR	Acquisition	2013-01-07	0.01566666666666667	50	400	30000	0	0	3	0	0	
PRED	Acquisition	2013-01-07	0.04666666666666667	50	400	30000	0	0	3	0	0	
...	
	Total assets	273076	39593	7991	10273						-2282	

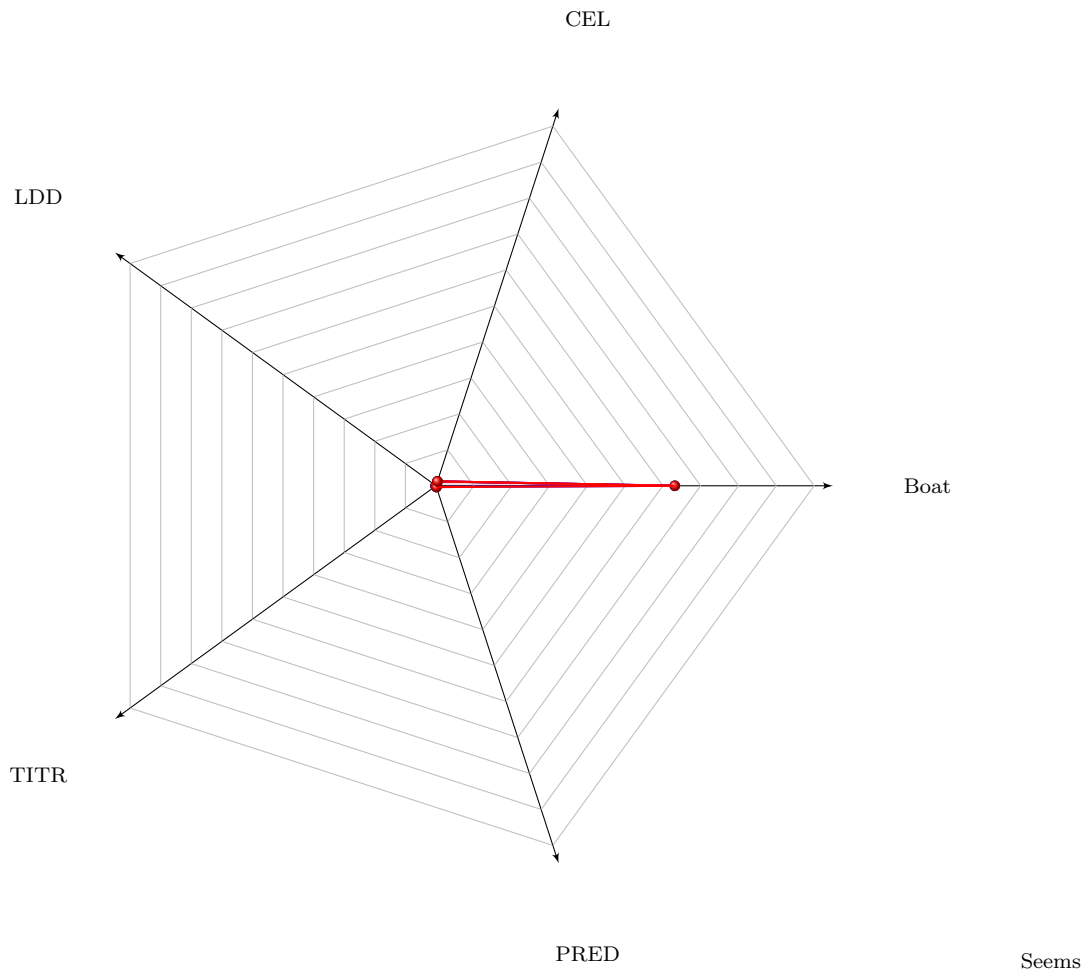
4.2.2 Graph



4.2.3 Cheese



4.2.4 Kiviat



like the assets Cheese

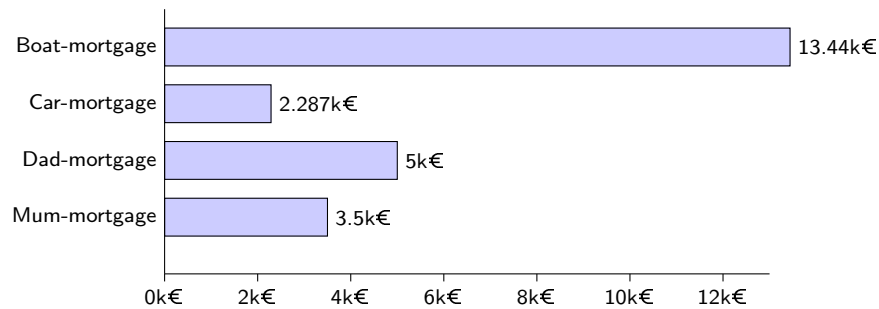
4.3 Liabilities

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

4.3.1 Table

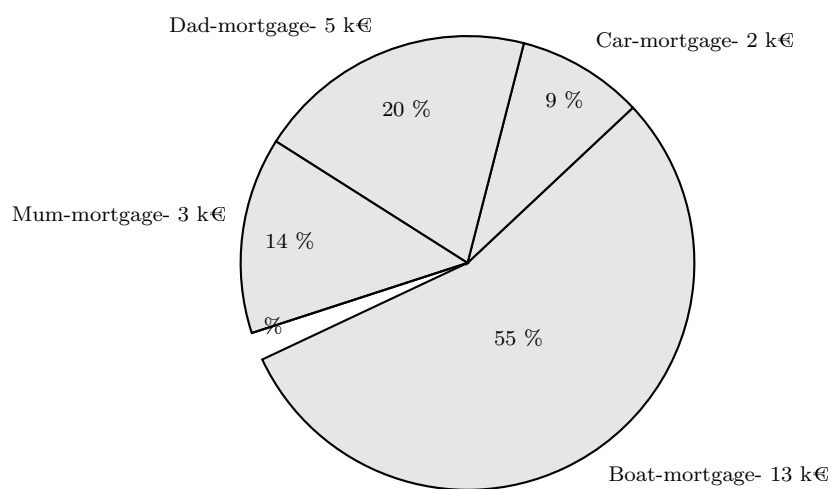
Liabilities											
Type	Name	InitPrice	Value	Return	Cost	Maturity	vp	rp	mp	dv	PnL
Boat-mortgage	mortgage	30000	13440	0	1	2013-01-07	55	0	25	44	0
Car-mortgage	mortgage	7000	2287	0	1	2013-01-07	9	0	25	32	0
Dad-mortgage	mortgage	5000	5000	0	1	2013-01-07	20	0	25	100	0
Mum-mortgage	mortgage	3500	3500	0	1	2013-01-07	14	0	25	100	0
...
	Total	45500	24227	0	4						-4

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

Cashflows			
Category	Debit	Credit	PnL
Debt	19965	0	-19965
Bank	8527	0	-8527
Other	8205	0	-8205
Cmb	7201	-963	-8164
Cash	4330	0	-4330
Food	2487	0	-2487
Toxics	2395	0	-2395
Rent	1066	0	-1066
Telephone	669	0	-669
Energy	448	0	-448

...
Total	55799	62704	6905

5.0.6 Graph

6 Stocks

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

6.0.7 Table

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

6.0.8 Graph

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