



# Hedge Fund Model

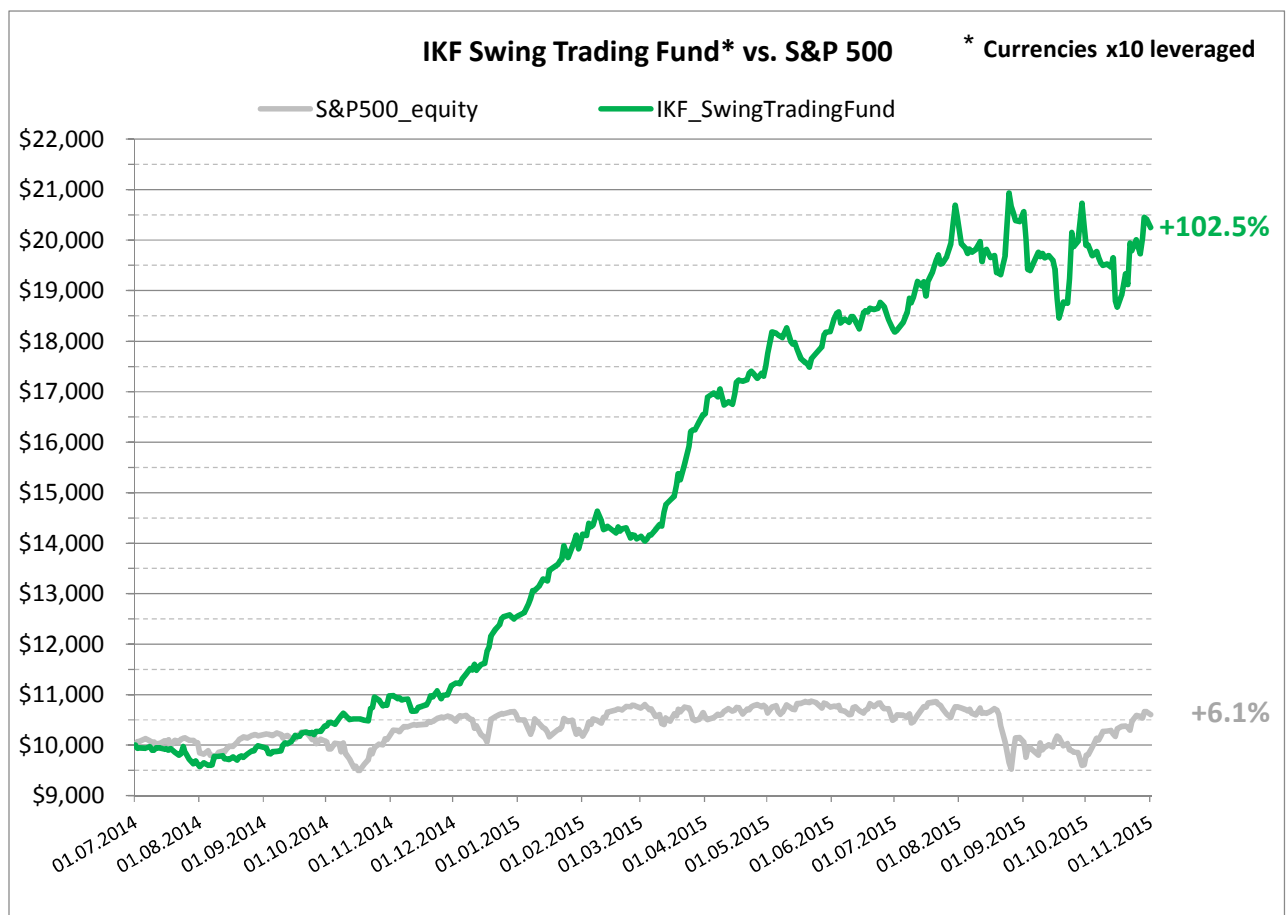
Daily Re-Adjustment Swing Trading

Stocks + Interest rates + Currencies



# Swing Trading Model

Following the development of Dr. Lipa Roitman’s understanding of relying on the 5 day simple moving average as a secondary trigger for entry and exit, the I Know First R&D team has developed a complementary model to support his thesis. The results were positive, and incorporating the 5 day SMA trigger allows us to design day trading strategies which further enhance returns and reduce risks. The following portfolio invests in the best stocks, interest rate ETFs, and currency pairs as identified by the algorithm and the specified selection process. The trades selection takes place daily before the market opens. Good opportunities are continuously replaced by even better ones to ensure the portfolio is at its optimum with respect to the algorithmic predictions. Both long and short positions are taken, regardless of market direction and trend. The equity is allocated to 60% in stocks, 30% in interest rates, and 10% in G10 currencies x10 leveraged. **The overall return in the one year period from July 1<sup>st</sup>, 2014 to October 31<sup>st</sup>, 2015 is 102.5% while the S&P 500 increased by just +6.1% during the same period.**



## Swing Trading

Time Period: July 1<sup>st</sup>, 2014 – October 31<sup>st</sup>, 2015

Stocks (60%), Interest Rates (30%), Currencies G10 (10%) – leveraged by 10



Below is a summary given for the total, daily and annualized performance including the respective key risk metrics - for each of the allocation pools separately as well as for their total combination into the fund. For the Currencies it is differentiated between leveraged (x10) and unleveraged.

Performance, risk metrics	IKF Fund	IKF Fund G10 leveraged	IKF Stocks	IKF Interest Rates	IKF Currencies G10	IKF Currencies G10 leveraged	S&P500
<b>Whole time period returns</b>							
Total Return (TR)	25.57%	102.47%	26.92%	22.82%	25.70%	794.66%	6.08%
linearly annual. TR	19.13%	76.64%	20.14%	17.07%	19.22%	594.37%	4.55%
discr. comp. (estim. trading days) annual.	18.57%	69.49%	19.52%	16.62%	18.66%	414.98%	4.51%
discr. comp.(gen. assumption) annual.	18.50%	69.20%	19.45%	16.56%	18.59%	412.30%	4.50%
std.dev. annualized	14.98%	17.46%	21.96%	20.03%	3.89%	38.92%	14.27%
max drawdown	-18.47%	-11.82%	-22.17%	-21.59%	-2.02%	-19.65%	-12.35%
recovery duration (in trading days)	not recovered	not recovered	not recovered	not recovered	not recovered	not recovered	not recovered
average draw down	-2.065%	-1.630%	-2.953%	-3.506%	-0.345%	-3.470%	-1.934%
# draw downs	23	36	22	19	34	33	23
minimum equity value	9618.33	9577.17	9584.03	9508.58	9934.35	9349.93	9501.39
<b>Trading day returns</b>							
geom. average return	0.067%	0.209%	0.071%	0.061%	0.068%	0.650%	0.017%
arithm. average return	0.072%	0.215%	0.080%	0.069%	0.068%	0.680%	0.021%
max	3.94%	6.31%	5.26%	6.18%	1.03%	10.27%	3.90%
min	-2.94%	-4.30%	-4.81%	-3.99%	-0.88%	-8.76%	-3.94%
Std.Dev of returns	0.94%	1.10%	1.38%	1.26%	0.25%	2.45%	0.90%
Std.Dev of negative returns	0.58%	0.65%	0.91%	0.78%	0.16%	1.56%	0.65%
1%-quantile	-2.56%	-2.66%	-3.43%	-2.78%	-0.48%	-4.83%	-2.40%
5%-quantile	-1.32%	-1.38%	-2.00%	-1.97%	-0.32%	-3.23%	-1.52%
50%-quantile(or median)	0.034%	0.150%	0.000%	0.000%	0.036%	0.362%	0.006%
95%-quantile	1.62%	1.95%	2.48%	1.96%	0.48%	4.79%	1.35%
99%-quantile	2.60%	3.37%	3.79%	4.03%	0.87%	8.70%	2.27%
<b>Risk-return measures</b>							
return/vola-ratio on a trading day basis	0.08	0.20	0.06	0.05	0.28	0.28	0.02
returns' correlation with S&P500	-0.14	-0.30	0.04	-0.26	-0.29	-0.29	1.00
MAR ratio (return / max drawdown)	1.00	5.86	0.88	0.77	9.20	20.98	0.36
Sterling ratio (return/avg. draw down)	8.96	42.45	6.59	4.73	53.87	118.82	2.32
Sortino ratio (return/std.dev of neg.returns)	2.02	6.74	1.35	1.33	7.50	16.63	0.43
Sharpe ratio*	1.10	3.85	0.79	0.73	4.26	10.54	0.17

\*Conservative assumption for the risk free rate of 2%

Swing Trading

Time Period: July 1<sup>st</sup>, 2014 – October 31<sup>st</sup>, 2015

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The respective trade statistics are presented in the table below:

Separate asset trades of the strategies	IKF Fund	IKF Fund G10 leveraged	IKF Stocks	IKF Interest Rates	IKF Currencies G10	IKF Currencies G10 leveraged	S&P500
<b>Count</b>							
# total			1221	604	926	926	338
# profitable			604	292	549	549	173
# losing			609	284	361	361	165
# neutral			8	28	16	16	0
<b>Hit ratios</b>							
profitable/losing			99.18%	102.82%	152.08%	152.08%	104.85%
profitable/all			49.47%	48.34%	59.29%	59.29%	51.18%
(profitable+neutral)/all trades			50.12%	52.98%	61.02%	61.02%	51.18%
losing/all			49.88%	47.02%	38.98%	38.98%	48.82%
<b>Trades returns statistics</b>							
average			0.09%	0.08%	0.10%	0.99%	0.02%
max			14.48%	6.90%	3.55%	35.49%	3.90%
min			-12.27%	-5.15%	-2.03%	-20.30%	-3.94%
Std.Dev.			2.51%	1.64%	0.48%	4.79%	0.90%
1%-quantile			-6.15%	-4.14%	-1.08%	-10.85%	-2.40%
5%-quantile			-3.74%	-2.58%	-0.64%	-6.38%	-1.52%
50%-quantile (or median)			0.000%	0.000%	0.077%	0.765%	0.006%
95%-quantile			4.17%	2.91%	0.91%	9.05%	1.35%
99%-quantile			6.69%	6.04%	1.43%	14.31%	2.27%
avg/stddev			0.04	0.05	0.21	0.21	0.02
<b>Profitable trades returns</b>							
average			1.89%	1.23%	0.38%	3.76%	0.65%
<b>Losing trades returns</b>							
average			-1.69%	-1.10%	-0.32%	-3.16%	-0.64%
<b>abs(average pos./average neg.)</b>			1.11	1.12	1.19	1.19	1.02

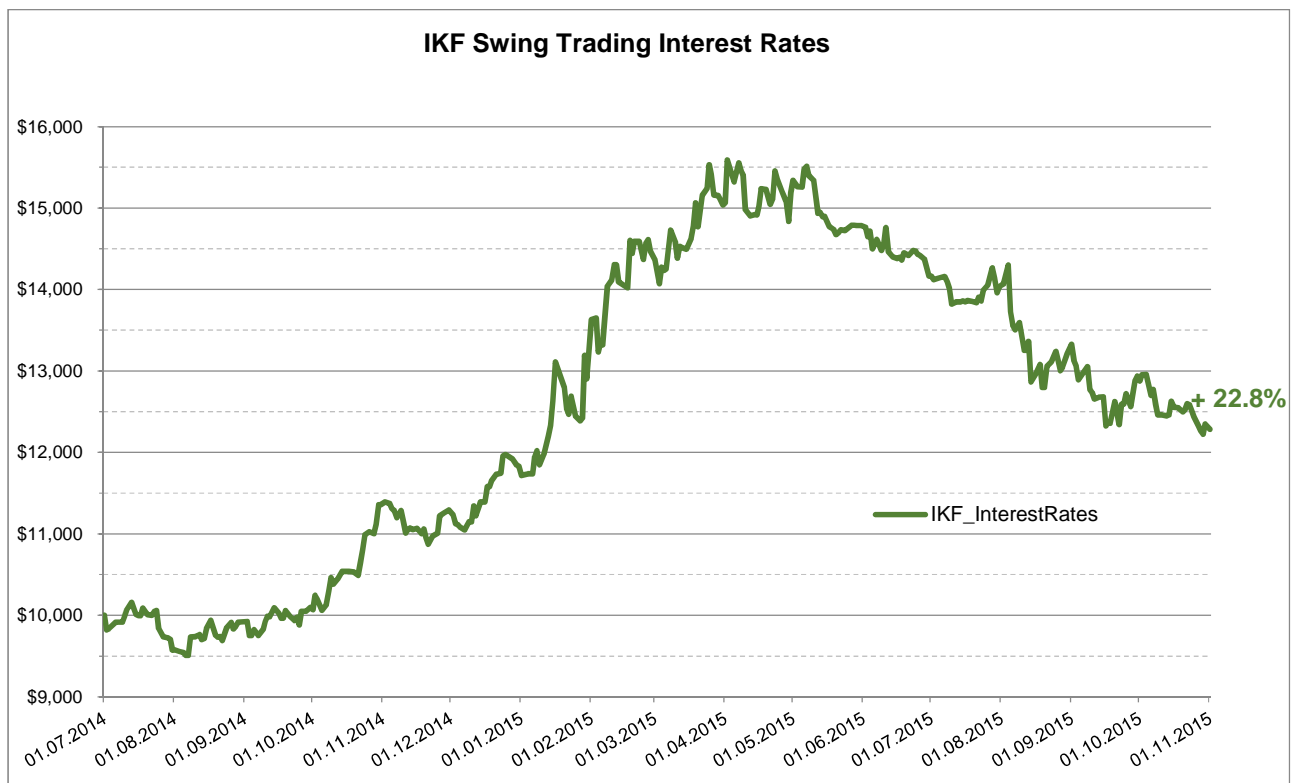
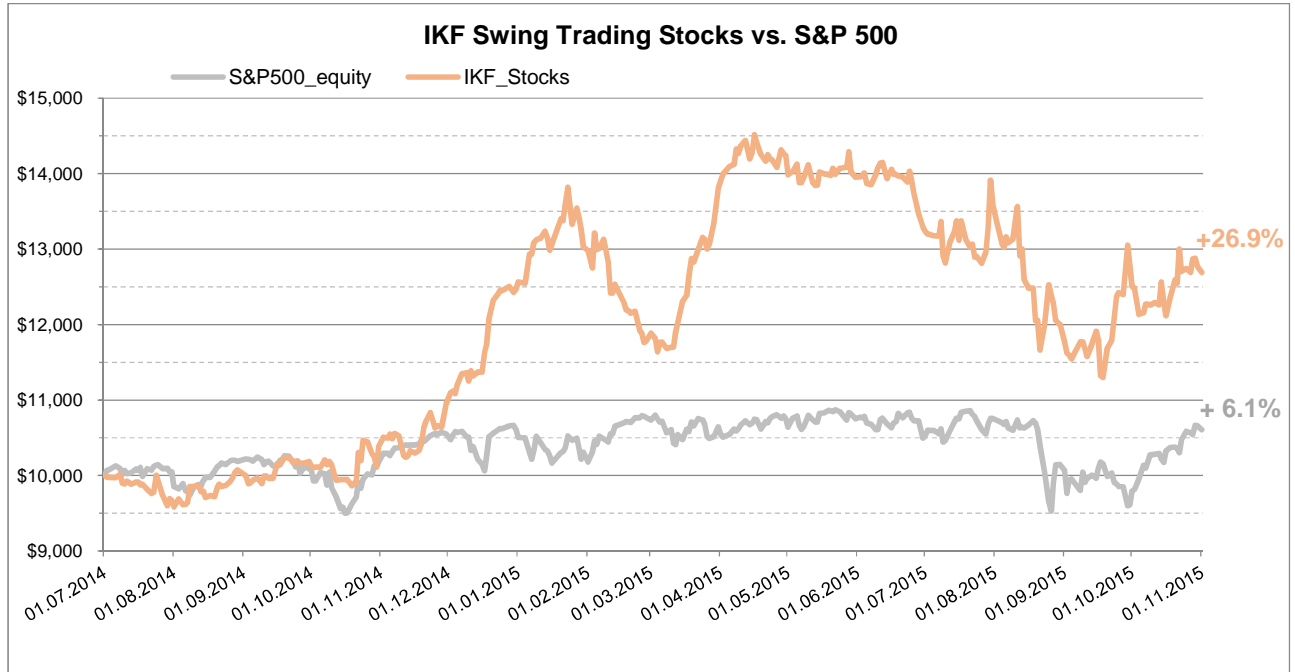
# Swing Trading

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Stocks (60%), Interest Rates (30%), Currencies G10 (10%) – leveraged by 10



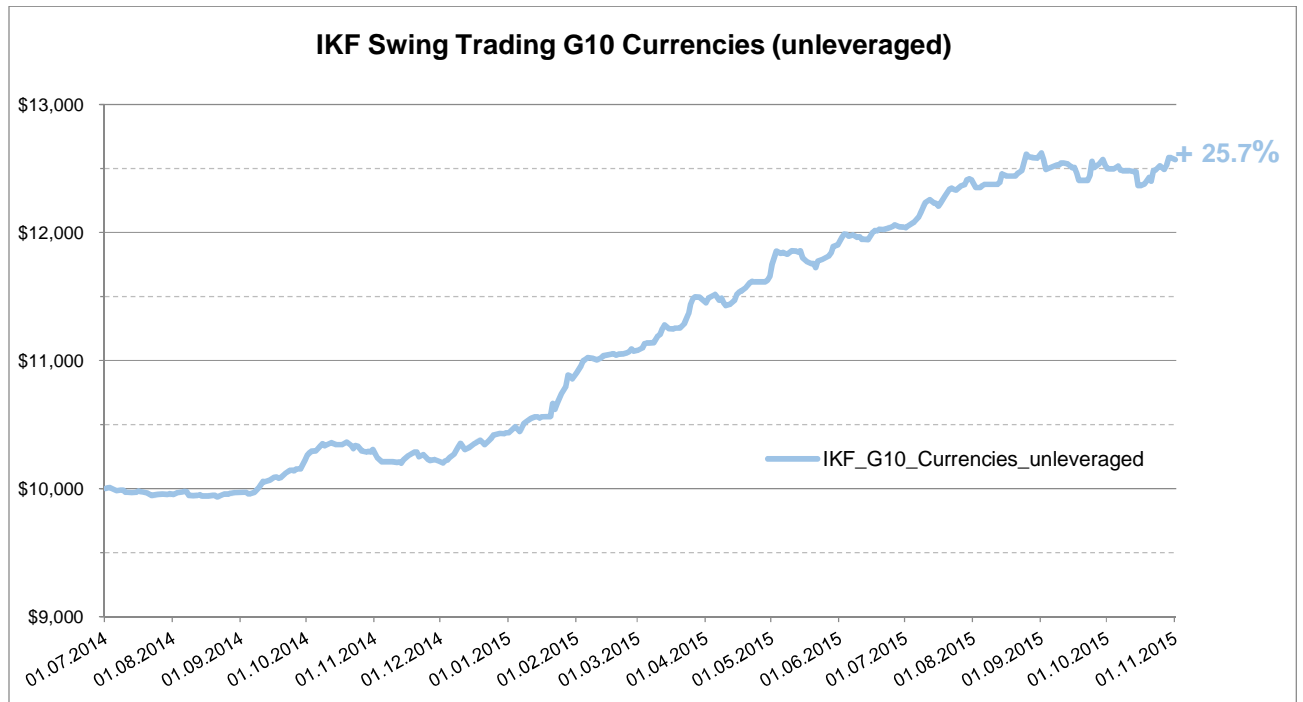
The following charts depict the individual development of the stocks, interest rates, and currencies (un-leveraged) over time.



Swing Trading

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