

**fLAB fUNDS Sicav - fLAB Satellite**  
**Relative Return UCITS Fund - www.flabfunds.com**



The Compartment aims to provide long-term capital growth through a tactical and dynamic allocation portfolio.  
 fLAB Satellite tries to maximize Sharpe Ratio (Relative Return), through a multi style, multi class portfolio.

Net assets €: **11.33 M**

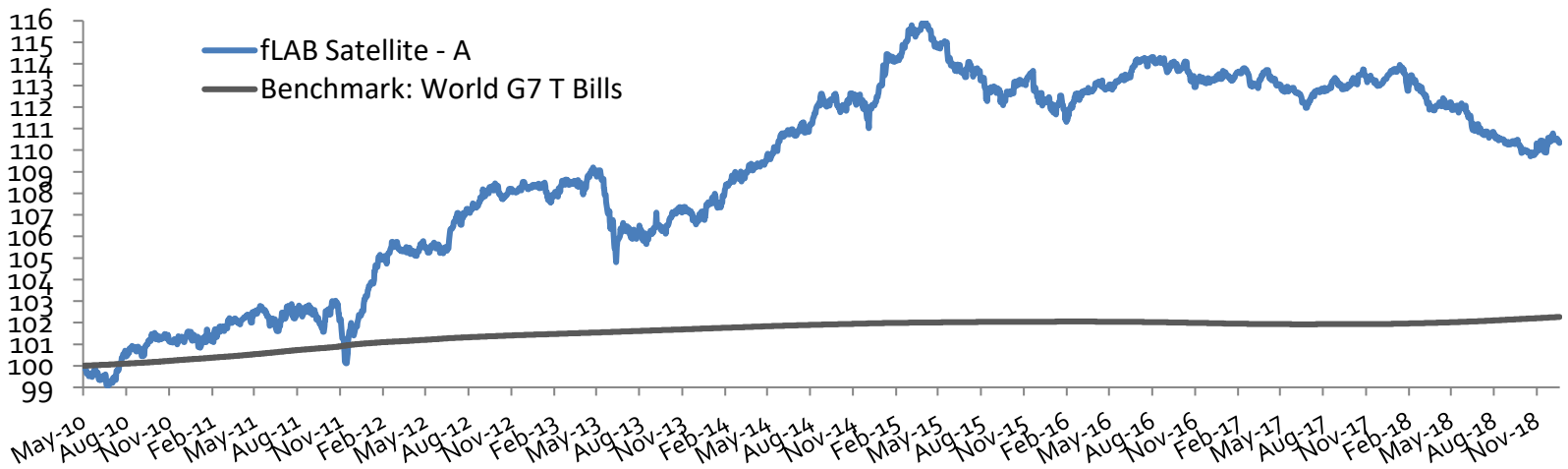
December 31, 2018

	share	NAV	ytd	ISIN	inception	Mg Fee	2017	2016	2015	2014	2013	2012	2011	2010
eur Institutional	A EUR	110.33	-2.78%	LU0415025179	may'10	0.66%	0.16%	0.92%	0.03%	4.99%	-1.36%	5.71%	1.35%	1.17%
eur platform	C EUR	96.47	-3.05%	LU1353746958	jun'16	0.91%	-0.11%	-0.37%						
eur	B EUR	104.21	-3.29%	LU0415027464	dec'10	1.16%	-0.37%	0.43%	-0.65%	4.38%	-1.85%	4.89%	0.90%	0.02%
usd \$ hedged	H-USD	105.59	-0.74%	LU0847086740	dec'12	0.91%	1.40%	1.68%	-0.21%	4.73%	-1.57%	0.32%		
sterl. £ hedged	H-GBP	tbd	tbd	LU1353747097	tbd	0.91%	0,00%							
sing \$ hedged	H-SGD	106.01	-1.30%	LU0847086666	dec'12	0.91%	1.23%	2.07%	0.63%	4.61%	-1.51%	0.28%		

*\*New Clean Shares launched Apr '18: LU1805616767 (EUR) & LU1805616841 (USD) with the lowest Management Fee: 0.66%*

fLAB Satellite-A Performance since 2010

'10	'11	'12	'13	'14	'15	'16	'17	'18	Annual Yield Since Inception 1.14%
1.17	1.35	5.71	-1.36	4.99	0.03	0.92	0.16	-2.78	



Sharpe Ratio Target = **0.33**      Real Sharpe Ratio 3yr **-0.21**    5yr **0.43**

We use Risk-Free Rate as our Benchmark. This is the theoretical rate of return of an Investment with Zero Risk.

The basket of G7 Government 3 Months Treasury Bills is our tool.

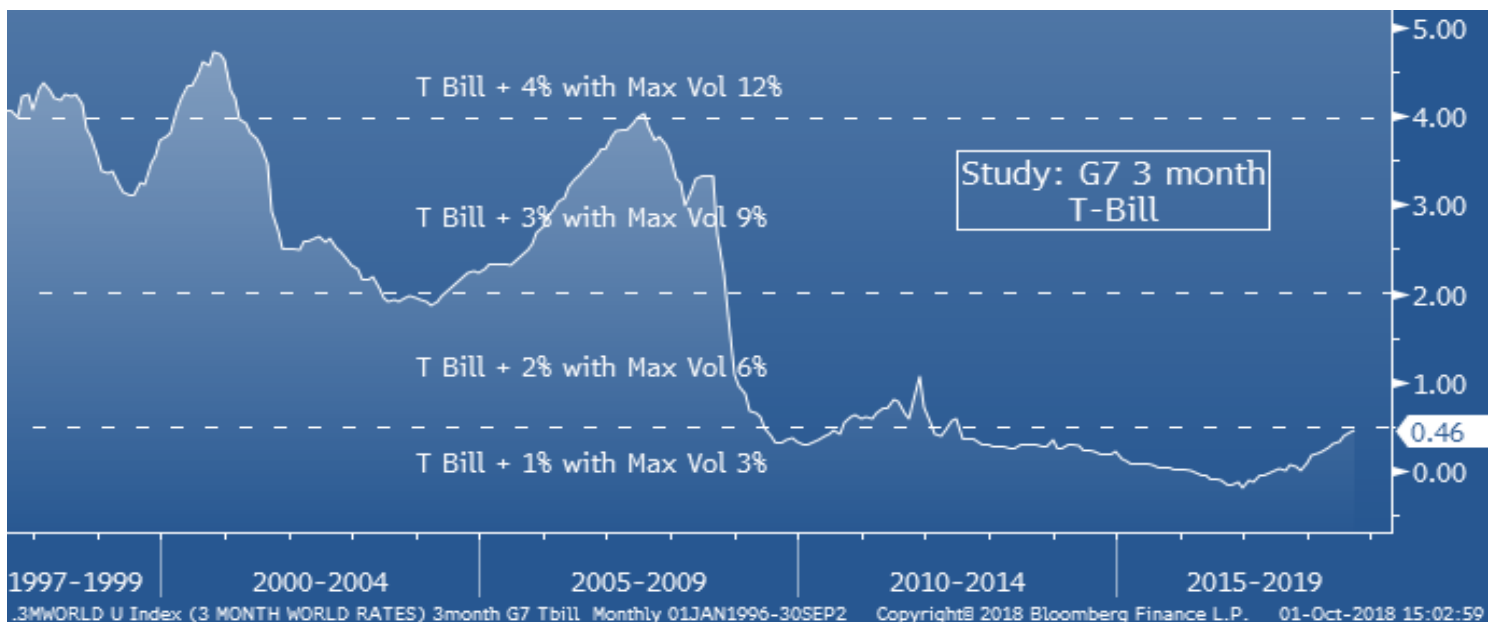
We take the data provided by Bloomberg and create the average: US+Can+Jap+UK+Ger+Fr+Ita

When G7 3Months Treasury Bills	< 0.50%	0.50%	2.00%	> 4%	G7 3Month T Bill 0.46%
Target over G7 T Bills	+1	+2	+3	+4	
Maximum Volatility	3%	6%	9%	12%	

We cannot say you should expect T Bills + 3%, under any level of risk free rate. We have to adapt the target dynamically.

That's why we change the excess return we want to obtain above T Bills while we adapt different levels of maximum accepted volatility. **The minimum projected long-term Sharpe Ratio will be always of 0.33**

**0.33 Sharpe Ratio Study: adjusting excess return above T-Bills (adapting volatility vs.free risk rate) over the last 20 yr**



## Technical information

**Minimal Subscription:** Only for (A Institutional Share Class: 1 Million €)  
**Management fee:** 0.66% (A share & Clean Shares); 1.16% (B share); 0.91% (C share & All Hedged Shares); **Performance Fee:** a percentage of the annual performance of the compartment: 5% (A share and Clean Shares); 10% (B share), 7.5% (C share & All Hedged) with high watermark  
**Subscription & Redemption Fee:** 0%  
**Share classes TER (2017):** A 1.43%; B 1.97%; C & All Currency Hedged 1.70%

## Legal Structure

**Management Company:** Casa4Funds  
**Custodian Bank:** Banque et Caisse d'Epargne de L'Etat Luxembourg (BCEE:Aa2/AA+)  
**Investment Advisor:** Market LAB Luxembourg sarl  
**Transfer & Paying Agent:** EFA, European Fund Administration  
**Auditor:** Ernst & Young **Regulator:** CSSF  
**Net Asset Value, Reporting & Liquidity:** daily

### 1 year Correlation Matrix: fLAB Satellite vs:

MSCI World	World Govies	World IG	World HY	Euro/USD	Commdty Ind	Gold Spot	Hedge F Index	fLAB CORE
0.04	-0.03	0.01	0.21	0.15	0.31	0.36	0.29	0.54

### Portfolio Top 30

Amundi ETF Float Rate Eur Corp 1-3 UCITS Dist	EUR	7.95 %
iShares EUR Ultrashort Bond UCITS ETF Dist	EUR	7.05 %
LyxorBarclays Floating Rate 0-7 UCITS ETF	EUR	6.09 %
Amundi ETF Floating RateUSD Corp UCITS Hedged	EUR	5.67 %
Xtrackers iTraxx Crossover Short Swap UCITS ETF	EUR	5.67 %
Credit Suisse Gr MTN 1% 04/23	CHF	5.03 %
Lyxor UCITS ETF EMTS 5-7Y IGDR	EUR	4.86 %
Santander Intl Debt SA 4% EMTN 13/24.01.20	EUR	4.76 %
BBVA Senior Finance SA 2.375% EMTN 14/22.01.19	EUR	4.51 %
DB ETC Physical Gold Euro Hedged	EUR	3.81 %
Deutsche Bank SAE 1.125 1/2023	EUR	3.66 %
iShares Euro Corp Bond exFinancial EUR 1-5	EUR	3.58 %
UBS GroupFunding 1.75 11/22	EUR	2.74 %
BAIC Inalfa HK Investment 1.9% 02.11.20	EUR	2.69 %
db x-trackers Iboxx Euro High Yield 1-3 UCITS ETF	EUR	2.55 %
PIMCO Low Duration US Corp Bond UCITS ETF	USD	2.34 %
Xtrackers II Eurozone Gvt Bd 1-3 UCITS ETF 1C Cap	EUR	2.03 %
L&G Longer Dated All Commodities UCITS ETF	USD	1.71 %
iShares III Plc EUR Covered Bond UCITS ETF Dist	EUR	1.63 %
iShares IV Plc Healthcare Innovation UCITS ETF Cap	EUR	1.42 %
Xtrackers DBLCI ComOpt Yield Swap UCITS ETF 1C	EUR	1.42 %
Lyxor UCITS Euro MTS Inflation InvG ETF	EUR	1.31 %
iShares Edge MSCI World Min Volatility Eur Hedged	EUR	1.13 %
ETFS Euro Daily Hd Industrial Metal ETF	EUR	1.07 %
Invesco Global BuyBack Achievers UCITS ETF	USD	1.02 %
Wells Fargo & Co FRN EMTN Reg S Sen 15/02.06.20	EUR	0.88 %
iShares Plc USD Corp Bond UCITS ETF Dist	USD	0.84 %
iShares Global Government Bond UCITS ETF Dist	EUR	0.82 %
Xtrackers Harvest CSI300 UCITS ETF 1D Dist	EUR	0.80 %
iShares JPM Emerging Market Bond UCITS ETF	EUR	0.80 %

### Asset Allocation

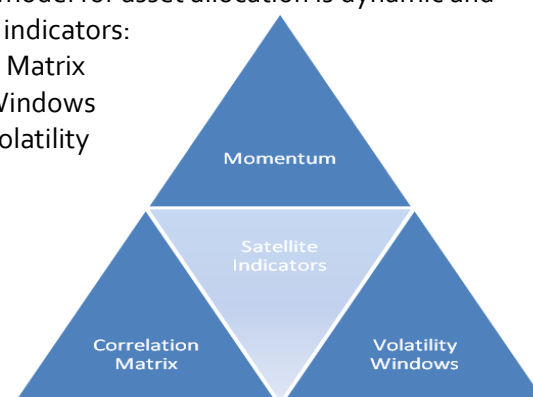
<b>Fixed Income</b>	<b>73.60%</b>	<b>Liquidity</b>	<b>8.38%</b>
Govies	8.25%	Cash	8.38%
Inflation Bds	1.32%	Depo Aa2/AA+	0.00%
Fixed Inv Grade	31.42%	<b>Other Assets</b>	<b>29.71%</b>
Floating Inv Grade	20.85%	MultiStrategy	4.09%
Covered Bonds	5.35%	Short Equity	11.70%
Convertible Bonds	0.00%	Short Credit	5.79%
Emerg. Mkt Bonds	3.54%	Commodity Index	8.14%
High Yield	2.87%		
Gov Bond Futures	0.00%		

**Duration:** fixed income: 2.13 total portfolio: 1.57  
**Currency :** 87% EUR; 13% USD (fully hedged)  
**Volatility :** 90 day 1.70%; 1 year 1.62%  
**VAR** 1 month, 99% conf, 1yr hist data : 1.32%

### fLAB Satellite Indicators

fLAB internal model for asset allocation is dynamic and uses 3 tactical indicators:

- 1) **Correlation** Matrix
- 2) **Volatility** Windows of accepted volatility
- 3) Short term **Momentum**



### fLAB Satellite Asset Universe

The model runs through different assets. The heart of the Satellite is a Fixed Income Portfolio + Overlay of decorrelated ETFs  
**Fixed Income** (Government Bonds, Investment Grade, High Yield, Covered Bonds, Munis, Inflation Bonds, Convertible Bonds)  
**ETF Overlay:** Currency Strategies, Gold&Commodities, Credit, Preferred Shares, Decorrelated Equity, Multistrategy...)

## LIPPER LEADERS

5 year Period: June 2013 to June 2018

**fLAB Satellite**

Absolute Return Low

Total  
Return

④

Consistent  
Return

④

Expense  
Preservation

⑤

Expense  
Ratio

②

*Disclaimer: This Fund is authorised in the Grand Duchy of Luxembourg and regulated by the "Commission de Surveillance du Secteur Financier" (CSSF). The historical performance graph, Awards, Sharpe Ratio, Correlation, Volatility and VAR are calculated using the oldest share class: fLAB Satellite A. Inception was in May 2010, under a SIF structure. In February 2016 it was converted into a full UCITS structure.*