



## **fLAB fUNDS**

*it's all about Asset Allocation*

### **fLAB : the strongest Asset Allocation Model**

We believe alpha is a very nice word, everybody talks about it, but only a few have ever seen it.

Since 2009, we run our 2 funds through a 2-tier Model : Global Flexible Asset Allocation + Betalphing© (achieving alpha through the best beta selection)



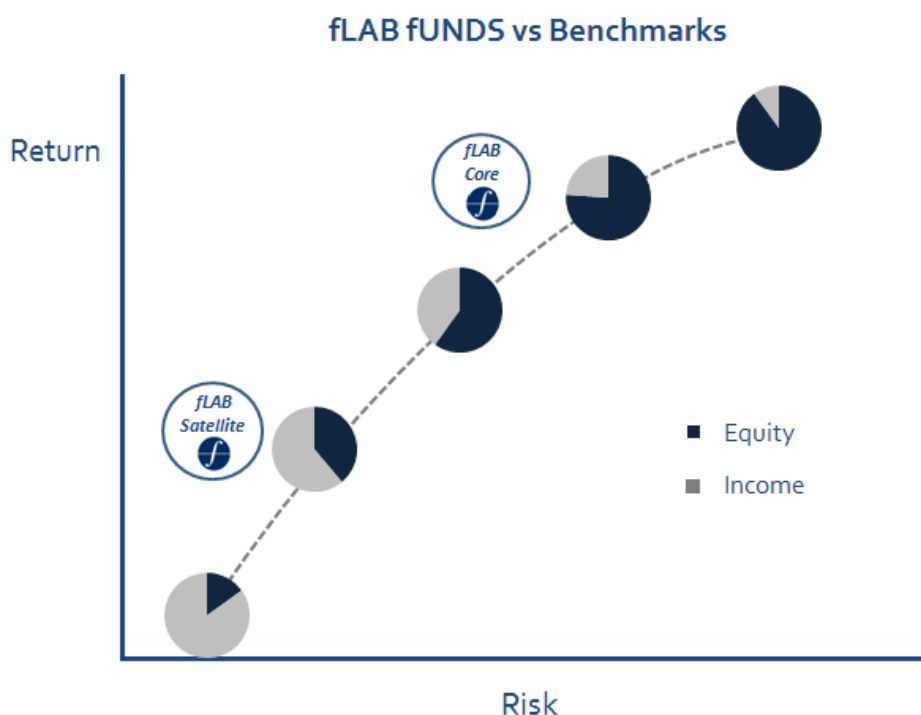
## Our approach: It's all about Asset Allocation

In fLAB FUNDS, we believe alpha is a very nice word, everybody talks about it, but only a few have ever seen it. To be honest, the only way we believe we can find alpha is through:

- 1) a disciplined, flexible & dynamic **Global Asset Allocation**, and
- 2) **Betalphing**®, or how to add alpha through the best and most efficient Beta Selection.

We follow closely every advance in asset allocation, and we have worked hard to separate the wheat from the chaff in emerging industry trends; rewarding true innovations and discarding mere marketing claims.

Our UCITS funds, fLAB Core & fLAB Satellite have outperformed their peers since their inception (2009).



## LIPPER LEADERS

since inception to Dec 2016

		Total Return	Consistent Return	Preservation	Expense Ratio
<b>fLAB Core</b>	Mixed Asset Flexible Global	5	5	4	5
<b>fLAB Satellite</b>	Absolute Return Low	5	5	5	2



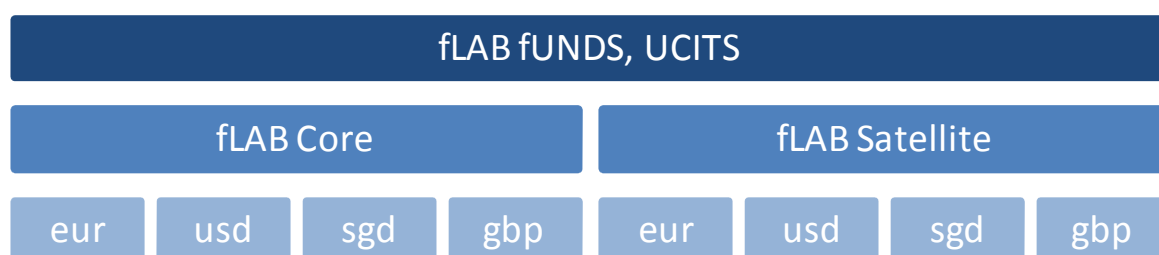
# Key Points

## 1. It's All About Asset Allocation.

fLAB Core follows a Strategically Guided Global Asset Allocation framework with Tactical approach: Betalphing©. It provides long-term capital growth through a dynamic, global flexible portfolio, investing in the 3 traditional asset classes (equity, bonds and cash).

fLAB Satellite has Preservation as its main aim. It is a Relative Return Fund with a Minimum Sharpe Ratio Target. Our role is to try and find the best combination between Assets to provide positive relative returns, maximizing the Sharpe Ratio.

## 2. Two compartments: fLAB Core & fLAB Satellite available in EUR, USD, GBP and SGD



## 3. The Custodian: highest credit rating in Luxembourg



Our Custodian Bank is **Banque et Caisse d'Epargne de l'Etat, Luxembourg**. BCEE ratings : **Aa2/ AA+** by Moodys and S&P.

BCEE is ranked as '**One of the 10 safest banks in the world**' by the Global Finance Magazine.

## 4. Independent Research



Disciplined, objective approach to Global Investment Research.

We only use independent research provided by Ned Davis Research for our Asset Allocation decisions. Since 1980, NDR has worked with some of the world's largest investment managers to provide a full range of sophisticated analytical tools, a high level of data integrity and highly responsive customer support.



## 4 frequently asked questions

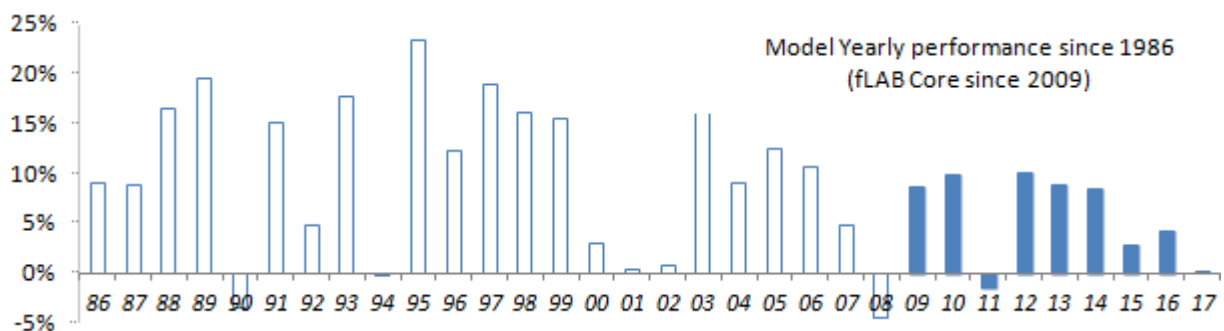
- 1) Which type of products do we admire? Robust, transparent and successful asset allocation funds.
- 2) Which are some of the most admired funds in the world? Carmignac Patrimoine, BlackRock Global Allocation, Julius Baer Absolute Return, Pimco Unconstrained Bond, M&G Optimal Income...
- 3) Which type of custodian would you rely on? Only the highest rated financial institutions in the world.
- 4) How do you keep away from black boxes? Only investing in fully transparent products and daily NAV.

### Our answer:

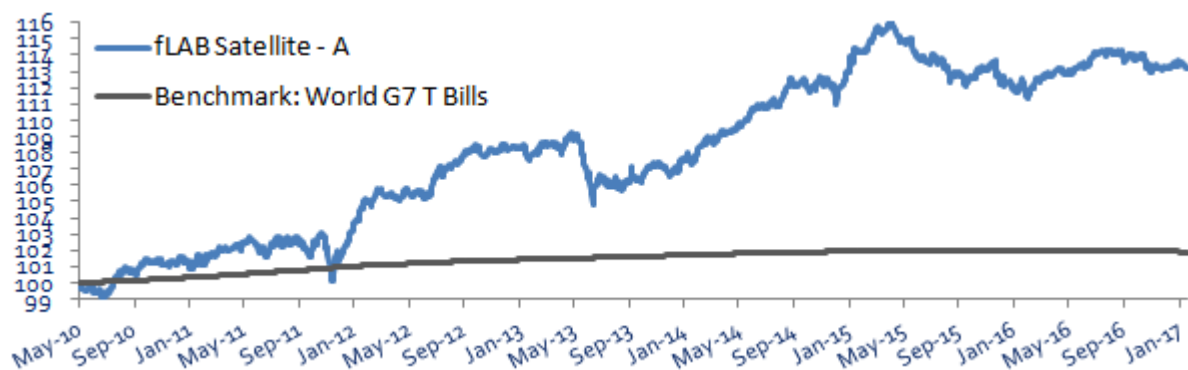
**fLAB Core, a strategically & tactically guided asset allocation fund & fLAB Satellite, a relative return fund with a Sharpe Ratio target.**

**Outperforming our most admired products, custodied by BCEE, the Aa2/AA+ State Owned Bank in Luxembourg, with daily NAV and free & daily access to the whole portfolio.**

- **fLAB Core:** Our long-term allocation to stocks, bonds and cash, based on our goals and our tolerance for risk. Sometimes called investment policy, it shouldn't change just because the market moves up or down. We call it CORE, and our product is **fLAB Core**:



- **fLAB Satellite.** A short-term fixed income diversified portfolio + an overlay of ETFs that invest in other asset classes as a hedge to adverse market movements, in order to produce Absolute & Relative Return patterns. We call it SATELLITE, and our product is **fLAB Satellite**:



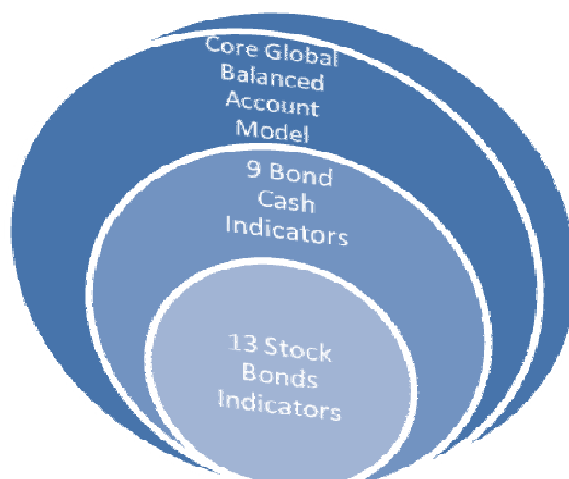
## fLAB Core : Global Flexible Asset Allocation Fund

Provides long-term capital growth through a dynamic and global flexible portfolio, investing in the 3 traditional asset classes (equity, bonds and cash). The management consists in 2 different steps:

**1) Strategically guided monthly asset allocation model:** A Stock/Bond Model first generates the allocation to stocks, and then the balance of the portfolio is allocated between bonds and cash based on the reading of the Bond/Cash Model.

Stock returns are proxied by the MSCI World Total Return Index, bonds by the Barclay's Global Long Term Treasury Total Return Index and cash returns are proxied by an equal-weighted average of the total returns of three-month Treasury securities from the U.S., Japan, U.K., Canada, and the Euro-Zone. Benchmark used is 55-35-10.

**Model Transparency:** The 22 allocation indicators that we use for our Asset Allocation are the key point of our Fusion Analysis. They are a perfect sample of our 5 types of analysis: trend, valuation, sentiment, economic & interest rate indicators:



### 13 Indicators Equity vs. Bonds

Stock/Bond Ratio Trend Model  
Stock/Bond Ratio Trend  
Stock/Bond Overbought/Oversold Indicator  
% Of Stocks Above 10Wk & 40Wk MovAvg  
% Markets Above 10Wk & 40Wk MovAvg  
Stock Momentum  
Bond Momentum  
Corp. Bond Yield - Stock Earnings Yield  
NDR Global Consumer Sentiment Composite  
NDR Global Business Sentiment Composite  
Yield Curve  
OECD G7 Leading Indicator Index  
Crude Oil Momentum

### 9 Indicators Bonds vs. Cash

Bond/Cash Trend (Double Weighted)  
Bond/Cash Overbought/Oversold Indicator  
Stock/Bond Momentum  
NDR Global Consumer Sentiment Composite  
NDR Global Business Sentiment Composite  
Stock Earnings Yield  
Stock Earnings Yield/Bond Yield  
OECD G7 Leading Indicator Index  
North American GDP



**2) Tactical Asset Allocation through our Betalphing model** : or how to find Alpha through the best Beta Allocation.

Once we have designed the Monthly Asset Allocation, we run our 3 steps **Betalphing** model:

1. The Sector and Geo Equity Models to allocate between Sectors and Countries
2. The Bond Geographical and Duration Model: Countries bond Allocation and curve strategy
3. The Currency Hedge Overlay Model



We implement Betalphing through futures contracts and UCITS Compliant ETFs.

Benefits of Asset Allocation Using ETFs:

- Diversification – instant exposure to a variety of asset classes
- Transparency – exact understanding of the underlying securities
- Low Expense Ratios – allow for a fully-allocated multi asset portfolio at a lower cost to a single asset class fund
- Flexibility – high liquidity enables fast, easy moves among asset classes

Choosing an ETF over another is complex and challenging. Once a benchmark is selected, assessing the quality of ETF candidates is a specific task that requires disciplined steps. We only choose the ETFs with the lowest Tracking Error and then we filter them into the following investment process:



Our results have been outstanding since inception in 2009:

Model Results: 1986 to 2008 (in %);																						
1986	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	2000	'01	'02	'03	'04	'05	'06	'07	'08
8.91	8.81	16.41	19.43	3.60	15.00	4.75	17.61	-0.13	23.27	12.16	18.87	16.08	15.53	3.01	0.29	0.75	18.40	9.03	12.40	10.59	4.79	-4.55

and fLAB Core-A Performance since 2009									
'09	'10	'11	'12	'13	'14	'15	'16	Annual Yield Since Inception	
8.71	9.76	-1.55	9.93	8.85	8.36	2.69	4.15	6.64%	

LIPPER LEADERS



5 year Period: Dec 2011 - Dec 2016

fLAB Core

Total Return	5
Consistent Return	5
Preservation	4
Expense Ratio	5

MORNINGSTAR®

fLAB Fund SICAV Core A | ★★★★★

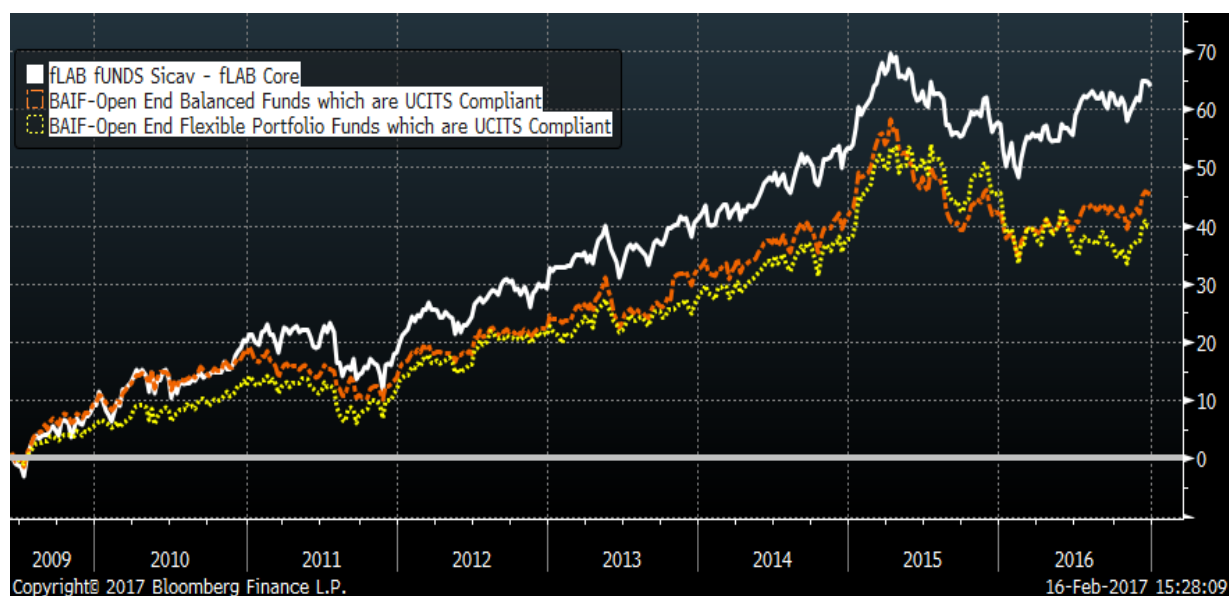
fLAB Fund SICAV Core H-USD | ★★★★★





## Annex: fLAB Core performance since inception

<i>Until 31.12.2016</i>	Total Return	IRR
<b>fLAB Core</b>	<b>62,89%</b>	<b>6,64%</b>
<b>Bloomberg UCITS Balanced Funds Index</b>	<b>45,20%</b>	<b>5,05%</b>
<b>Bloomberg UCITS Flexible Funds Index</b>	<b>39,75%</b>	<b>4,52%</b>





## fLAB Satellite : Absolute & Relative Return Fund

In a game of non-stable correlations, our role is to try and find the best combination between assets to provide positive relative returns: our aim is to maximize the Sharpe Ratio.

The most important part of the Portfolio is a Fixed Income Portfolio. Then we add an overlay of liquid assets, mainly through ETFs: Commodities (Metal, Energy, Agriculture, Livestock, Precious Metals), Currency Products, Inflation Linked, High Yield, Convertible Bonds, Credit Markets, Equity Strategies, and a few more sub-assets

**Our minimum projected Sharpe Ratio will be always of 0.33:**  
(Sharpe ratio = excess return over T-Bills / Volatility)

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

*We are currently here*

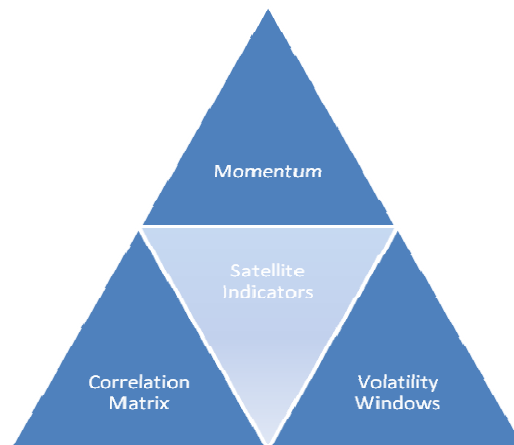
Risk-free rates change. Therefore, the possibilities to achieve a relative return, also change. We cannot say we will achieve T-Bills + 3%, under any level of risk-free rate. We have to dynamically change the target. That's why the excess return we try to obtain over T-Bills changes, as we adapt to different levels of maximum accepted volatility: Relative Return.

As a Benchmark, we don't use indicators provided by banks. We use a basket of G7 Government 3 Months Treasury Bills. This risk-free rate is our tool and we take the data provided by Bloomberg from the G7 countries: US, Canada, Japan, UK, Germany, France and Italy.

Once we have defined the Benchmark and the Dynamic Target, how dynamic do we want to be?



We will add these other assets linked ETFs to the fixed income risk-off portfolio, only if our fLAB Satellite Indicators allow us to do so. We have to maintain the Sharpe Ratio over the promised threshold. We use 3 type of indicators to evaluate if we can add those ETFs



- 1) In House Momentum Indicators of each asset class (ETFs/ETNs) to be added at several terms, short-term (1 month) and mid-term (between 3 and 6 months depending on the input).
- 2) Correlation Matrix between the assets included in fLAB Satellite and the traditional ones, and also correlation and covariance between all assets.
- 3) Volatility of all the assets and of the aggregated one.

**Our results have been outstanding since inception in 2009:**

<b>Minimum Sharpe Ratio Target</b>	<b>0.33</b>	<b>Real Sharpe Ratio</b>	<b>3yr 1.25</b>	<b>5yr 0.76</b>
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*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, Sharpe Ratio, Correlation, Volatility and VAR are calculated using the oldest share class: fLAB Core A and fLAB Satellite A  
Inception was in June 2009, under a SIF structure. In February 2016 it was converted into a full UCITS structure.  
SIF legal frame is not applicable anymore as the investments restriction and policies were amended to a UCITS framework in Feb 2016*



## The product (UCITS): fLAB FUNDS, Core & Satellite

- UCITS established in accordance with the provisions of the 2010 Law on undertakings for collective investment, as amended. All dividends and investment revenues are capitalized
- Base Currency: EUR , Available also in USD, GBP and SGD (hedged classes)
- Management fee:  
fLAB Core 0.66% (EUR A share) ; 1.66% (EUR B share); 1.16% (EUR C share & Hedged share classes: H-USD, H-GBP and H-SGD)  
fLAB Satellite 0.66% (EUR A share) ; 1.16% (EUR B share); 0.91% ((EUR C share & Hedged share classes: H-USD, H-GBP and H-SGD)
- Performance fee: a percentage of the annual performance of the compartment:  
5% (A share); 10% (B share); 7.5% (C share, H-USD, H-GBP & H-SGD shares) all subject to a high watermark principle
- Subscription & Redemption fee: 0%
- Taxation: no withholding tax
- Management Company: Casa4Funds
- Investment advisor: Market LAB Luxembourg sarl
- Depositary Bank: Banque et Caisse d'Epargne de L'Etat Luxembourg (BCEE: Aa2/AA+)
- Regulator: Commission de surveillance du Secteur Financier (CSSF)
- Registrar & Transfer Agent: EFA - European Fund Administration
- Auditor: Ernst & Young
- Net Asset Value, Reporting & Liquidity: daily

Core	fLAB CORE	ISIN Code	Bloomberg Code	Management Fee
eur	share A EUR	LU0415020451	LUFLCOA LX	0.66%
eur	share C EUR	LU1353746792	LUFLCCE LX	1.16%
eur	share B EUR	LU0415023042	LUFLCOB LX	1.66%
us \$ hedged	share H USD	LU0847086583	LUFLCOC LX	1.16%
sterling hedged	share H GBP	LU1353746875	LUFLCHG LX	1.16%
singapore \$ hedged	share H SGD	LU0847086401	LUFLCOD LX	1.16%

Satellite	fLAB SATELLITE	ISIN Code	Bloomberg Code	Management Fee
eur	share A EUR	LU0415025179	LUFLSAA LX	0.66%
eur	share C EUR	LU1353746958	LUFLSCE LX	0.91%
eur	share B EUR	LU0415027464	LUFLSAB LX	1.16%
us \$ hedged	share H USD	LU0847086740	LUFLSAC LX	0.91%
sterling hedged	share H GBP	LU1353747097	LUFLSHG LX	0.91%
singapore \$ hedged	share H SGD	LU0847086666	LUFLSAD LX	0.91%

### How can I buy fLAB Core & fLAB Satellite?

- Directly through EFA, Fundsettle, Allfunds, Inversis or MFEX platforms for clients in Europe. Skandia and Friends Provident.in Singapore
- Sending a mail to [info@flabfunds.com](mailto:info@flabfunds.com), and you will receive a Subscription Form

*The funds are registered in Luxembourg and Spain. Also included in MAS Singapore list of restricted schemes to be offered to Accredited Investors*

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