

## BONDS FLEX 1 INVESTMENT PROGRAM



As of: Nov 30th, 2016

### Description

<b>Objective</b>	The BFX program aims to invest in a large basket of <b>investment grade corporate bonds</b> and <b>government bonds</b> , with an automatic <b>hedge against drawdowns</b> .
<b>Mechanism</b>	The program invests in listed total return ETFs tracking a set composed principally of AA & BBB investment grade corporate bonds and AAA government bonds that collect cash coupons. In addition, the various sub-portfolios are dynamically hedged through a systematic reduction of their exposure when drawdowns approach 5%, which allows for an adjustment of their net exposure to between 10% and 100%. The exposure is automatically adjusted on a daily basis at a level determined by dedicated quantitative hedging strategies which are scientifically defined.
<b>Hedging strategy</b>	The exposure of each sub-portfolio is set to: <ul style="list-style-type: none"> <li>• 100% when the sub-portfolio is not in a drawdown over the period (new high).</li> <li>• 10% when the current drawdown over 250 trading days is equal or higher than 5%.</li> <li>• A calculated percentage between 10% and 100% based on the convexity of an optimal curve which itself is defined by the market's stress levels. The more volatile the market, the faster the exposure is geared down.</li> </ul>

### Program

Asset class	Investment Grade Corporate & Government Bonds
Minimum exposure	10%
Maximum exposure	100%
Program Return Yield (last 12m)	2.92%
Number of holdings (direct & indirect)	8,245

### Investment

Management fee (per annum)	0.30% *
Performance fee	NONE
Subscription / Redemption fee	NONE
Dividend policy	Distributed
Benchmark	EONIA
Liquidity	Hourly, during NYSE hours
Minimal notional funding	YES
Required funding	20%
Shortable	YES
Base currency	LOCAL

### Key features

- ▶ Catches structural risk premium
- ▶ Limited bond risk through high diversification and rating
- ▶ Dynamic hedging based on 5% maximum drawdown
- ▶ Available through total return swaps (up to 80% funding, high liquidity)
- ▶ Currency may be hedged towards EUR
- ▶ Low cost

\* subject to minimums

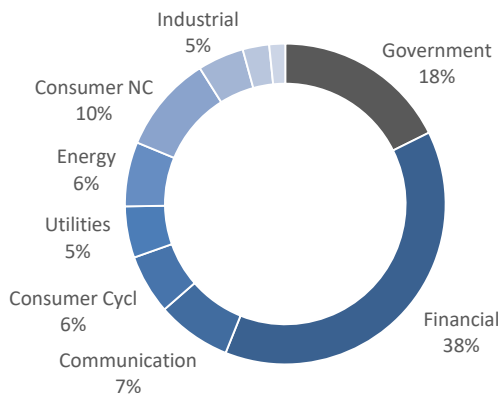
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## Investment profile

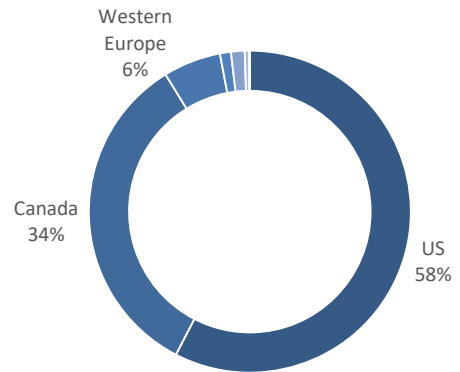
### Top holdings

	Issuer	Country	Maturity	Weight
1	<b>US Treasury</b>	USA	10 + yr	<b>12.4%</b>
2	<b>Royal Bank of Canada</b>	Canada	1-10 yr	<b>3.4%</b>
3	<b>Bank of Nova Scotia</b>	Canada	1-10 yr	<b>2.6%</b>
4	<b>Toronto Dominion</b>	Canada	1-10 yr	<b>2.3%</b>
5	<b>Bank Of Montreal</b>	Canada	1-10 yr	<b>1.9%</b>
6	<b>Canadian Imperial Bank</b>	Canada	1-10 yr	<b>1.9%</b>
7	<b>Hydro One Inc</b>	Canada	1-10 yr	<b>1.8%</b>
8	<b>General Electric</b>	USA	1-5 yr	<b>1.3%</b>
9	<b>KFW</b>	USA	1-5 yr	<b>1.3%</b>

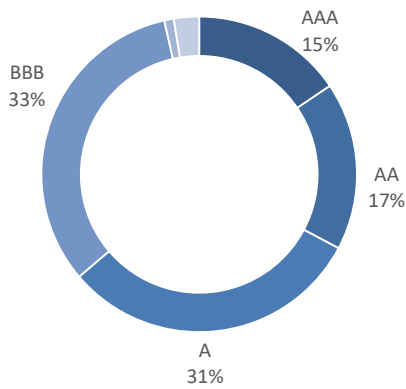
### Sectors



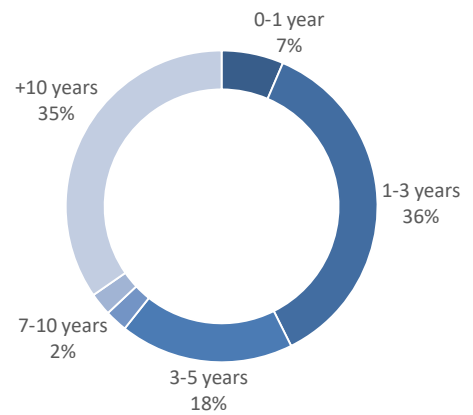
### Geography



### Ratings



### Maturities



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## Detailed Performance <sup>1</sup>

(monthly data)

		YTD	1Y	3Y	5Y	ITD
<b>Net compounded returns</b>	<b>Program</b>	<b>3.26%</b>	<b>2.98%</b>	<b>8.90%</b>	<b>13.90%</b>	<b>36.40%</b>
	Core portfolio (w/o hedge)	2.72%	2.47%	9.01%	11.21%	33.13%
	Program vs core	+0.54%	+0.52%	-0.11%	+2.69%	+3.27%
	Eonia	-0.29%	-0.31%	-0.29%	0.07%	9.25%
	Program vs Eonia	+3.56%	+3.29%	+9.19%	+13.83%	+27.16%
<b>Net annualized returns</b>	<b>Program</b>	<b>3.57%</b>	<b>2.97%</b>	<b>2.96%</b>	<b>2.78%</b>	<b>3.78%</b>
	Core portfolio (w/o hedge)	2.97%	2.46%	3.00%	2.24%	3.44%
	Program vs core	+0.59%	+0.51%	-0.04%	+0.54%	+0.34%
	Eonia	-0.32%	-0.31%	-0.10%	0.01%	0.96%
	Program vs Eonia	+3.89%	+3.28%	+3.06%	+2.76%	+2.82%
<b>Annualized Volatility</b>	<b>Program</b>	<b>2.29%</b>	<b>2.10%</b>	<b>2.09%</b>	<b>2.23%</b>	<b>2.32%</b>
	Eonia	0.02%	0.03%	0.05%	0.09%	0.43%
<b>Maximum Drawdown</b>	<b>Program</b>					<b>-1.94%</b>
<b>Sharpe ratio</b>	<b>Program</b>	<b>1.70</b>	<b>1.56</b>	<b>1.46</b>	<b>1.24</b>	<b>1.21</b>
<b>Calmar ratio</b>	<b>Program</b>					<b>0.04</b>
<b>Average exposure</b>		<b>70.7%</b>	<b>73.3%</b>	<b>75.4%</b>	<b>75.0%</b>	<b>80.5%</b>
<b>% time fully exposed</b>		<b>46.0%</b>	<b>41.8%</b>	<b>41.1%</b>	<b>39.0%</b>	<b>56.8%</b>
<b>% time min exposure</b>		<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Minimum exposure reached</b>		<b>14.8%</b>	<b>14.8%</b>	<b>14.8%</b>	<b>14.8%</b>	<b>14.5%</b>

### Net compounded returns

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
<b>2016</b>	0.56	0.40	1.33	0.43	0.10	1.44	0.28	-0.07	-0.78	-0.19	-0.28		<b>3.26</b>
<b>2015</b>	0.93	-0.67	-0.02	-0.61	-0.05	-0.07	0.60	-0.52	0.27	0.21	-0.20	-0.27	<b>-0.41</b>
<b>2014</b>	1.63	0.46	0.16	0.80	0.30	0.24	-0.05	1.16	-0.80	0.99	0.63	0.47	<b>6.14</b>
<b>2013</b>	-0.72	0.74	-0.02	1.26	-1.02	-0.19	0.03	-0.06	0.82	0.99	0.25	-0.23	<b>1.84</b>
<b>2012</b>	0.23	-0.18	-0.86	0.36	1.18	-0.10	1.09	-0.15	-0.07	0.19	0.14	-0.30	<b>1.53</b>
<b>2011</b>	-0.13	0.14	-0.08	0.72	0.77	-0.51	1.09	1.31	1.70	0.06	-0.21	0.92	<b>5.92</b>
<b>2010</b>	0.52	0.05	-0.09	0.74	0.40	1.08	0.28	1.45	-0.61	-0.56	-0.07	-0.09	<b>3.14</b>
<b>2009</b>	-0.97	-0.07	0.57	-0.66	0.42	0.91	0.74	0.68	0.74	-0.28	0.28	-0.82	<b>1.52</b>
<b>2008</b>	0.67	0.07	0.30	0.18	-0.57	0.56	0.11	0.58	-0.65	-0.11	0.46	3.36	<b>5.03</b>
<b>2007</b>				0.57	-0.34	-0.14	0.56	0.95	0.14	0.89	1.01	0.07	<b>3.77</b>

<sup>1</sup> Proforma performance net of fees, considering constant repartition of components. Periodical rebalancing of portfolio components and operating trading hours may impact real performance depending on execution conditions.

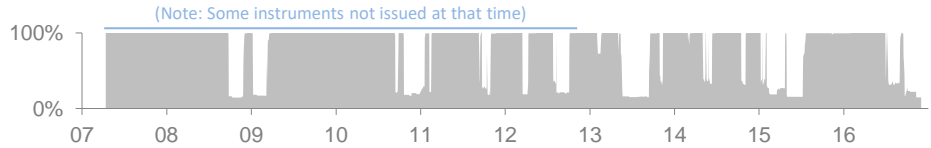
### Performance before tax, inception date Apr 2007 (subject to existence of ETFs), monthly data

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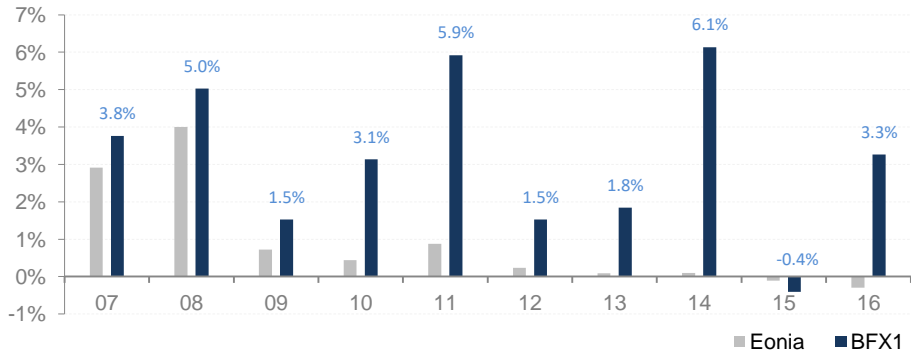
VAMI since Apr 13, 2007<sup>2</sup>



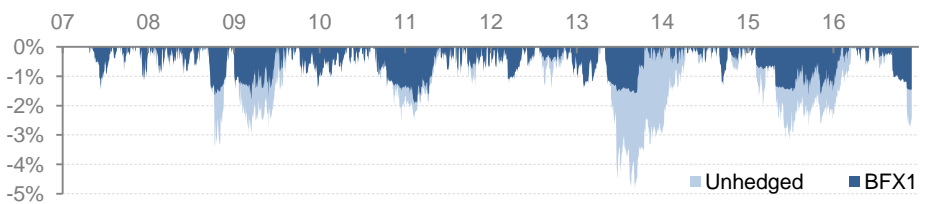
Net exposure



Yearly net returns<sup>2</sup>

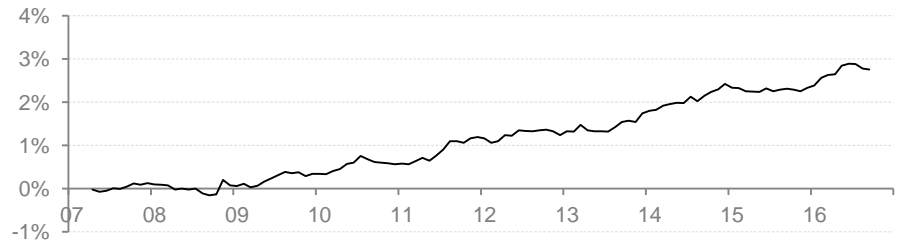


Drawdowns on period



Alpha

Compounded VAM: BFX1 - Eonia



<sup>2</sup>VAMI: Proforma performance net of fees, considering constant repartition of components. Periodical rebalancing of portfolio components and operating trading hours may impact real performance depending on execution conditions.

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## Asset Manager

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Program and corresponding trading signals are provided by [Quantam SA](#)

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