Aktia EMD

Aktia EM Local Currency Frontier Strategy



Aktia Asset Management is a part of Aktia Bank Plc., a Finnish financial services group with history dating back to 1826. Aktia Bank Plc. listed on Nasdaq OMX Helsinki since 2009

Aktia AM has carved out a niche for itself and built a strong track record in its chosen areas of expertise

The first mutual funds were launched in 1987, laying the foundation for the business' investment philosophy. Aktia AM has built a strong track record in its chosen areas of expertise, which are Emerging Market Debt and European Credit, receiving recognition both domestically and internationally

Aktia AM has around EUR 14 billion of AUM, a well-established institutional client base in Finland and a growing international presence

Aktia AM builds a sustainable future through responsibility and impact across all asset classes, Aktia's Responsible Investment Policy and Climate Strategy guiding all investment activities

Investment Philosophy in Aktia Asset Management

Shared investment philosophy

Aktia

Implemented in the EMD team

Find focus areas where you can add value

Well-resourced team with focus purely on macro economic risks, we don't spend time on analysing corporates. Country selection process creates a holistic approach across EMD platform.

2 Long-term investing creates value

Country fundamental approach and ESG are intertwined as this is key for the longer term outlook. We do not try to create value from short-term trading.

 $\mathbf{3}$ Do it your own way

Benchmark is not relevant for portfolio construction. If we believe that a country's fundamentals are deteriorating, it can have a zero weight in the portfolio. We also look at opportunities outside the benchmark.

Aktia Emerging Market Debt Platform

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Diverse Range of EMD Strategies

Aktia emerging market debt platform

	EM LC Frontier Bond Strategy	EM LC Bond Strategy	EM HC Bond Strategy
Launch Date	7.12.2015	14.10.2008	12.2.2007
Strategy Focus	Local currency Frontier markets	Local currency markets	Hard currency markets
Reference Index	JPM GBI-EM Div.	JPM GBI-EM Div.	JPM EMBI Global Div, EUR Hedged
SFDR-Classification	Article 8	Article 8	Article 8
Performance Target	400 bps over the cycle	100 bps over the cycle	50 bps over the cycle
Tracking Error Target	None	None	None
Liquidity	Daily, Dilution levy	Daily	Daily
Strategy Assets (EUR)	~1300m	~500m	~300m
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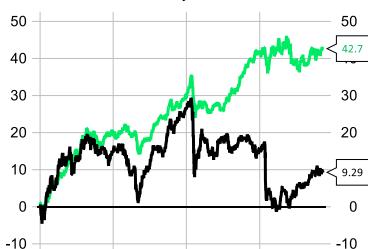
Aktia

Strategy Performance

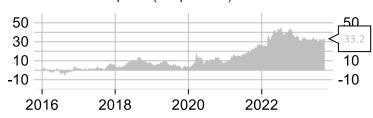
Aktia Emerging Market Debt

10 year performance in EUR (%)*

- J.P. Morgan GBI-EM Diversified EUR Unhedged
- Aktia EM Local Currency Frontier Bond+



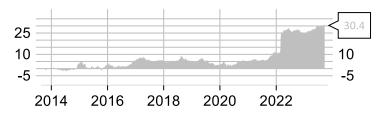
Cumulative alpha (%-points)



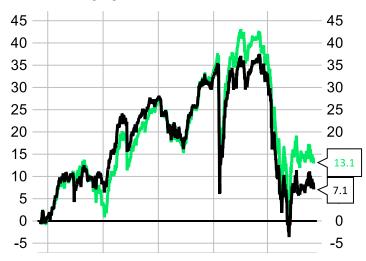
- J.P. Morgan GBI-EM Diversified EUR Unhedged
- Aktia EM Local Currency Bond+



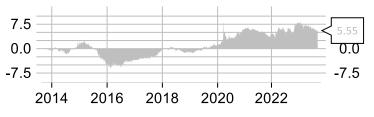
Cumulative alpha (%-points)



- J.P. Morgan EMBIG Diversified Hedged EURO
- Aktia Emerging Markets Bond+



Cumulative alpha (%-points)



Sources Aktia and Macrobond, Updated: 26/09/2023

Investment Process Overview

Aktia's Traffic Light Approach

Fundamental long-term views

Positive fundamental outlook

Investable

Fundamental outlook permits investments

Investable, but under heightened monitoring

Fundamental outlook permits investments...

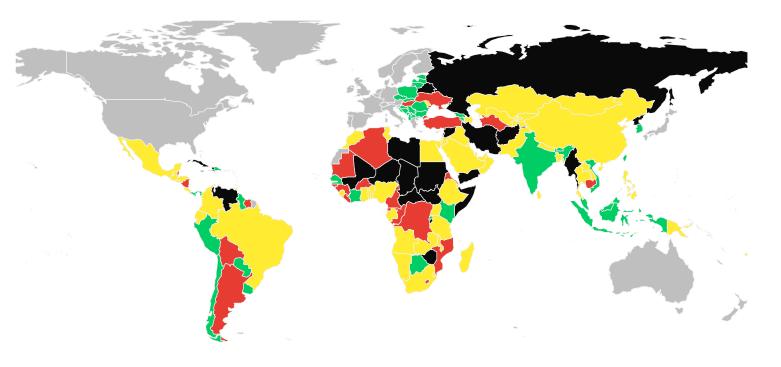
...but country has more structural weaknesses than a green country

No government funding

Partial exclusion; FX and positions and AAA rated DFI bonds possible Less duration and credit risk taken

Non-investable

Countries that fail to pass our three-steps of pruning are excluded No active valuation analysis conducted



Negative fundamental outlook

Investments Process and Idea Generation

ESG-integrated investment process combining quantitative and qualitative analysis

Quantitative Analysis



Qualitative Assessment



Valuation Analysis

risks



- Aktia's in-house tools:
- Fundamental Model as a starting point
- ESG-Balance to validate the output
- Data-driven assessment of fundamentals
- Quarterly monitoring of development trends

Data is always backward-looking, qualitative

analysis conducted to fill in the gaps

- Short-term signals both from the economic and ESG point of view
- Country research trips
- In-house country cases
- Research, news and local analysis

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- FX Models highlighting currency valuation and
- Trading gives valuable input to market movements and instrument valuations
- Liquidity and duration management

Idea Generation Process

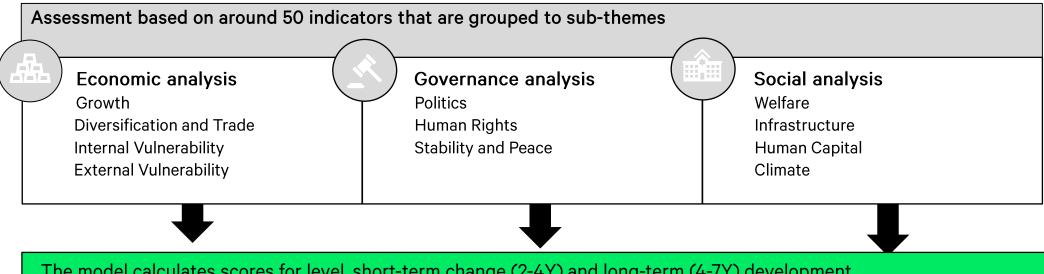
- Quarterly Traffic Light review
- Countries with improving (buy) or deteriorating (sell) fundamentals in quantitative analysis

- Signals through qualitative assessment
- Weekly formal EMD meeting
- Weekly strategy meetings
- Daily informal discussions

- Investment ideas based on market signals and valuations
- FX Model highlights heightened risks or undervaluation
- Quarterly FX signals review

Quantitative Analysis

In-house Fundamental data model



The model calculates scores for level, short-term change (2-4Y) and long-term (4-7Y) development Total output takes into account how much data is reported from each country, missing values lead to a lower score

Aktia Market Debt

ESG Integrated in the Long-Term Fundamental Analysis

Investment process overview

ESG-integration



- Focus on long term fundamentals: Deteriorating ESG profile equals weak long-term growth outlook
- Development and trend more important than the current level
- Wealth adjusted approach where countries are compared to their income peers, not their absolute level
- Data-driven analysis combined with qualitative assessment, ESG not a separate analysis layer





Data-driven assessment



- Aktia's in-house tools:
- ✓ Fundamental Model as a starting point
- ✓ ESG-Balance to validate the output
- Annual data from credible sources



Qualitative assessment

- Data is backward-looking, qualitative analysis fills the gaps
- Short-term signals both from the economic and ESG point of view
- Country research trips and discussions with policy makers

Country fundamental views and instrument selection

- ESG-integrated fundamental views are main driver for investment decisions
- Government Bonds excluded from countries where we do not want to

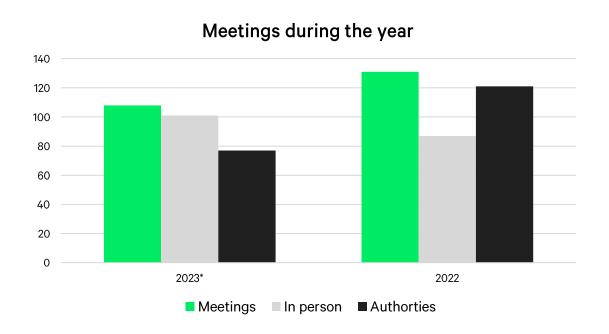
finance the government due to weak long-term outlook

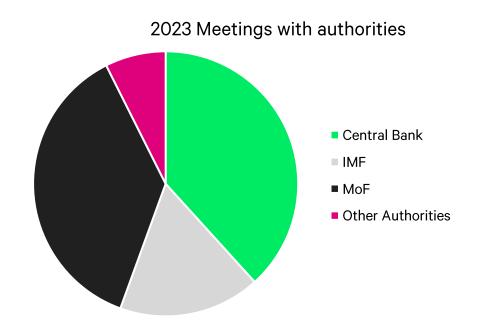
• DFIs create positive impact and to improve diversification



Meetings with Authorities are a Key Part of Qualitative Research

- Discussions with policymakers give valuable insight on fundamentals and development trends
- Opportunity to get informal information on both politics and economic developments
- Possibility to engage in important topics such as transparency, corruption and climate





Aktia EM Local Currency Frontier Strategy

Aktia

Aktia Emerging Market Debt

Local Currency Frontier as an Asset Class

Attractive risk-reward profile due to low volatility and high running yield

Aktia EMD

Long track of investing in LC Frontier markets and expertise in countries that are overlooked by other investors. Focus on economically, socially and politically improving countries.

Investment process

Aktia's Traffic Light Approach: Tools, research and trading done by the team, giving an enhanced view on the countries, pricing and market movements.

Investment thesis

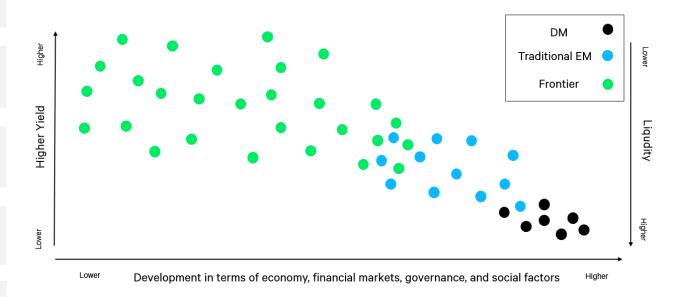
High and stable carry that offsets weakening trend of FX, a well-diversified portfolio without benchmark restrictions. Government bonds, FX derivatives and DFI bonds.

Benchmark agnostic

No benchmark restrictions, provides freedom to ignore countries that do not meet our investment criteria's due to ESG reasons.

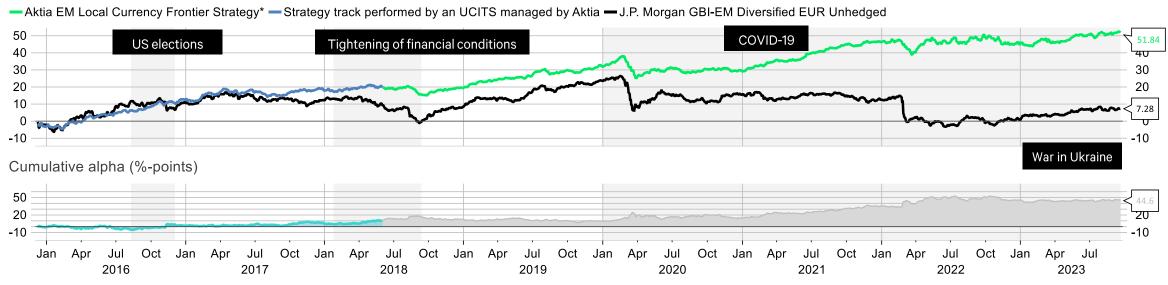
Lower beta

Focus on less liquid markets with lower foreign participation, which lowers volatility and correlation to other markets. Excellent tool for diversification.



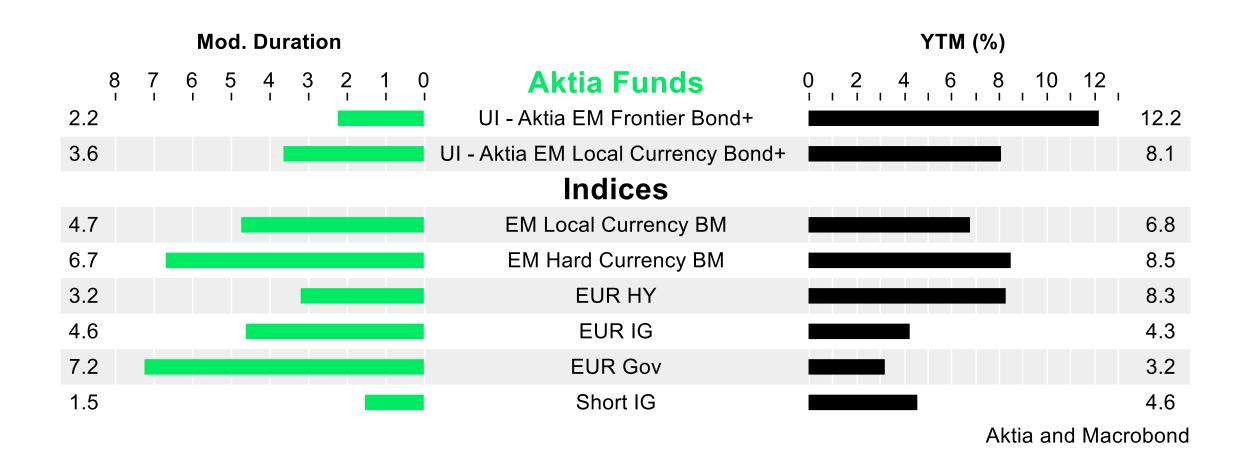
Strategy's Long-Term Performance Against the Benchmark

- The long-term performance of the strategy is based on an analysis of countries' long-term development potential, where we aim to find countries with improving fundamentals over the long term.
- Strategy will underperform in a market environment that is driven by strong positive inflows. The fund has been typically defensive in times of high global uncertainty, as now. According to the strategy's history, negative rolling returns for 12-month period are expected to be relatively uncommon compared to its benchmark.



Sources Aktia and Macrobond, Updated: 21/09/2023

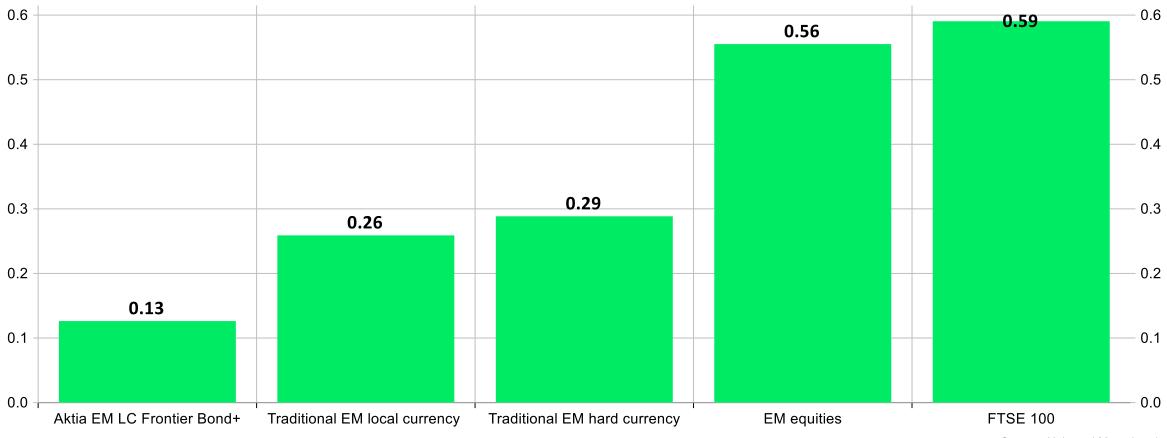
Lower Modified Duration and Higher YTM Than Most Indices



Low Correlation to Other Global Assets Due to Idiosyncratic Drivers

Aktia EM Local Currency Frontier Strategy

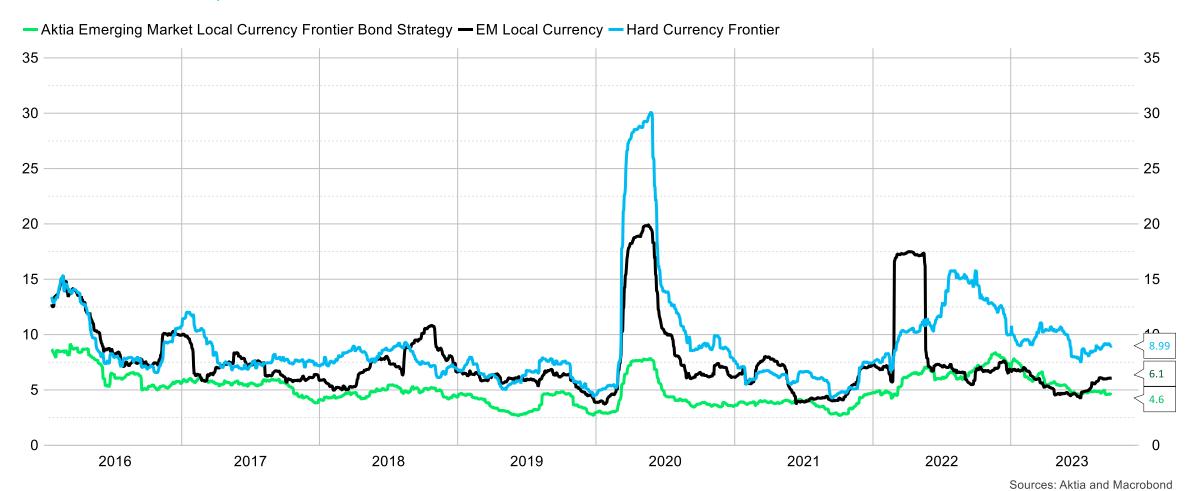




Source: Aktia and Macrobond

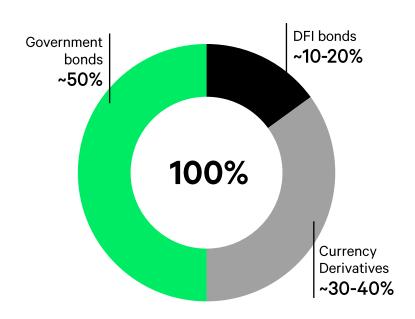
Lower Volatility Than in Other EMD Markets

3M realized volatility (%)



Investment Process Overview

Aktia EM Local Currency Frontier Strategy: Portfolio construction



Currency Derivatives

- Typical maturity range 0-1 years
- Typical average maturity 6 months
- Typical yield level 5-15 %

DFI bonds issued by AAA rated Supranationals & Agencies

- Typical maturity range 0–5 years
- Typical average maturity 3 years
- Typical yield around 10 %

Government bonds

- Typical maturity range 0-20 years
- Typical average maturity 10 years
- Typical yield range 5-20 %

- Increased liquidity and no government exposure
- Provide access to markets without functioning bond markets

- Provide exposure to markets without functioning markets
- Provides opportunity to create positive impact
- Only FX risk and AAA rated counterparty risk

Aktia EMD and DFIs

Overview of our investments in the Frontier Strategy

- We have a long history of cooperating with Development Financial Institutions
- DFIs want to hedge their FX risk
- We want to invest into the local currency, as such the only exposure we have is to the FX and AAA-rated DFIs. No project specific risk.
- Since the inception of the Frontier
 Strategy we have done investments in 30 countries and in c.100 instruments
- Since inception, the total size of investments in the Frontier strategy amount to almost EUR 1 billion



UI – Aktia EM Frontier Bond+

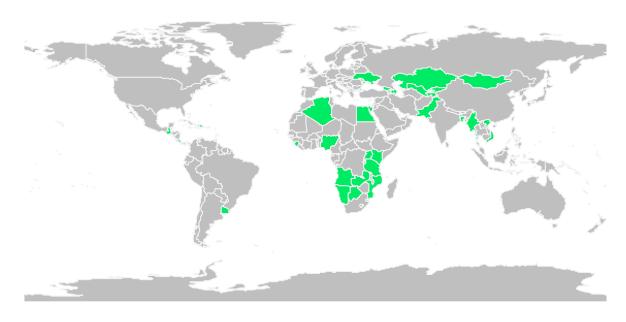
Portfolio Characteristics

	YTM	Mod. duraation	Countries	AUM (EUR)	Government bonds	FX derivatives	DFI	Cash	Mid. Rating
Fund	12.2%	2.1	31	831 million	41.2%	33.0%	21.2%	4.6%	Α
Benchmark	6.8%	4.7	16	-	100.0%	0.0%	0.0%	0.0%	BBB

Credit Rating Breakdown		
AAA	21.2%	
AA	0.0%	
A	33.3%	
BBB	12.8%	
IG	64.9%	
BB	12.0%	
В	16.4%	
CCC	0.0%	
CC	0.0%	
С	0.0%	
D	0.0%	
НҮ	28.4%	

Top Country Exposur	re
Kazakhstan	9.0%
Uzbekistan	8.8%
Uruguay	8.2%
Uganda	7.4%
Dominican Republic	7.2%
Maturity Buckets	
< 1 y	49.3%
1 - 2 y	15.1%
2 - 5 y	9.2%
5 - 10 y	15.3%
> 10 y	6.8%

Currency Exposure



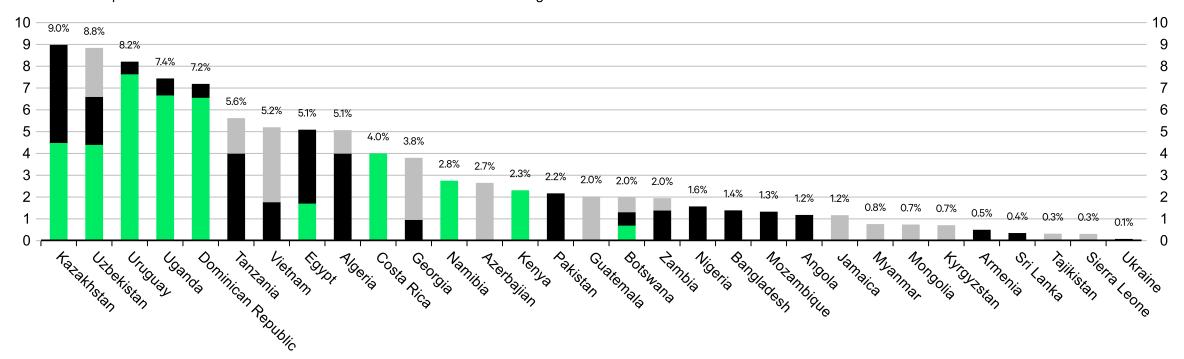
Appendix

Portfolio by Risk Country/Currency and Instrument Type

Aktia EM Local Currency Frontier Strategy

- Higher conviction allocation done through government bond investments
- Investments in smaller and less liquid markets through FX and DFI investments
- Soft limit of 10% per currency

■ Development Finance Institutions ■ FX Derivatives and Cash ■ Sovereigns



Key Information of UI-Aktia EM Frontier Bond+

Aktia EM Local Currency Frontier Strategy.

Key information

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Launch Date	16.11.2017**		
Countries in investment universe	132		
Investment guidelines	Only local currency instruments		
	Max 10 % issuer		
	Max 10 % per currency		
	No off-benchmark exposure limits		
	No tracking error limits		
	No stop-loss limits		
FI Instruments used	Government cash bonds and T-bills, DFI issued AAA rated bonds		
FX Instruments used	Forwards, NDFs		

Key Figures		Benchmark Index
YTM	12.2%	6.8%
Duration	2.2	4.7
Countries in allocation	31	16
Alpha since inception p.a. (gross)*	3.8%	-
Volatility*	5.9%	6.0%
Tracking error*	6.8%	-
Average rating	BBB	BBB

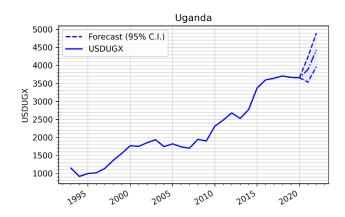
^{**} Strategy launch 2015 (Finnish domiciled)

^{*}UI-Aktia EM Frontier Bond+ I

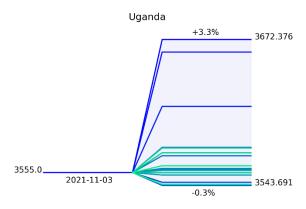
FX Models in a Nutshell

Case study of Uganda: risks surrounding UGX are rather balanced, or slightly tilted towards depreciation.

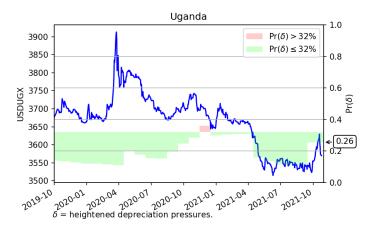
- FAVAR:
- Uses IMF data on macroeconomic aggregates and exchange rates to generate FX forecasts.
- Typically these types of models are used by central banks to model inflation and output.
- Here it has been adapted to model FX dynamics.
- Analysis: joint macroeconomic dynamics point towards the Ugandan shilling depreciating. Short term valuation gap \approx 8% above spot.



- REER:
- Provides insights into a currency's relative strength with respect to its historical REER values.
- REER models typically use arbitrarily selected time intervals to calculate the average REER, such as five or 10 years.
- Here different lengths are used (green=longest*, blue=shortest**).
- Analysis: the Ugandan shilling is close to fair value. Fair value \approx 1% above spot.



- · EWS:
- Uses FX reserves, external loans, GDP growth, trade balance, and REER as variables to model periods of heightened external vulnerability.
- The output yields a probability of heightened risk.
- The cut-off threshold signifies the "average probability" for a specific country.
- Analysis: pressures facing the Ugandan shilling are balanced, although risks have slightly increased during the past months.



^{*} At max. since 2000.

^{**} At min, five years.

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