TOBAM **LBRTY** Strategies

TOBAM Webinar - May 14th, 2024

TOBAM LBRTY® Webinar: Pricing the decline of democracy

Our mission: "Provide rational and professional solutions to
long term investors in the context of efficient markets"

tobam
unbiased.

tobam*
unbiased.

TOBAM WEBINAR PRESENTATION – MAY 14TH , 2024

TOBAM LBRTY® Webinar: Pricing the decline of democracy
Democracy is receding, putting portfolios at risk
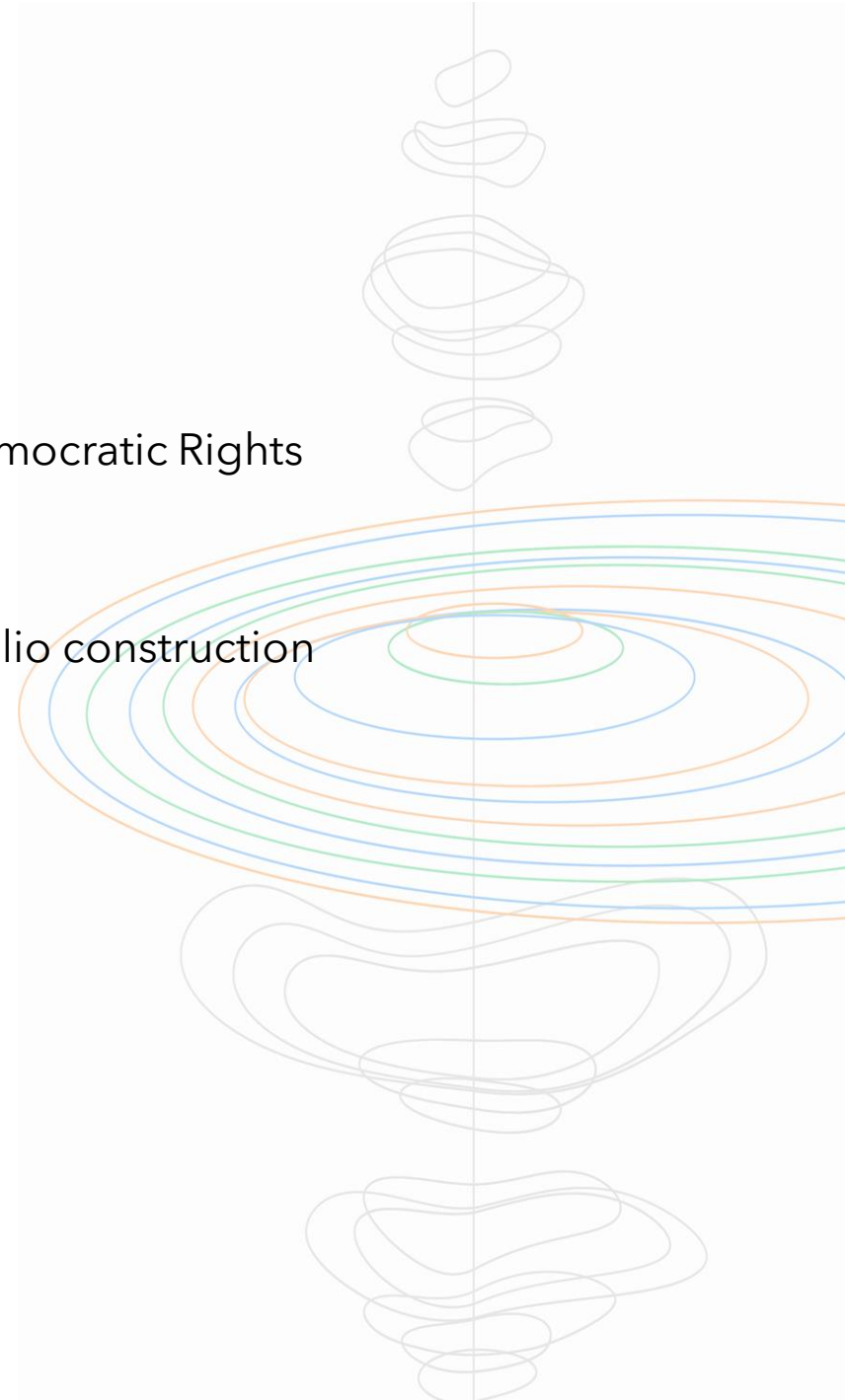
Speakers:

Philippe Bolopion
Co-Head of Long-Term Investing, TOBAM North America

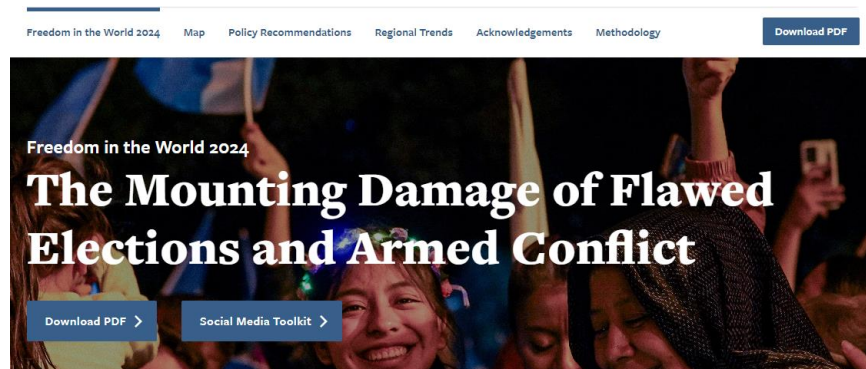**Yves Choueifaty**
TOBAM CEO and Founder

tobam*
unbiased.

INTRODUCTION: « DEMOCRACY UNDER ATTACK »

- "The end-point of mankind's ideological evolution and the universalization of Western liberal democracy as the final form of human government." *Francis Fukuyama*

- Trend went in reverse in the 2000s. Since then, democracy has been receding around the world

72% of the world population lives in **autocracies**.

Source: V-DEM institute. Democracy Report 2023 "Defiance in the Face of Autocratization"

4
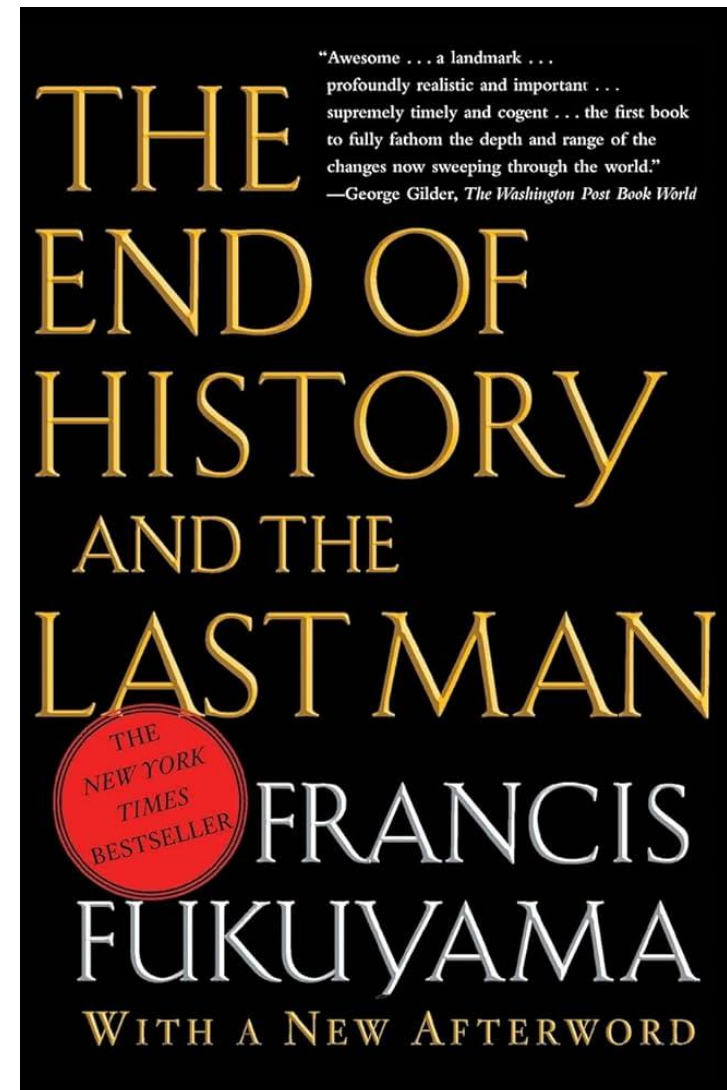
DEMOCRACY IN DECLINE WORLDWIDE, NEW REPORTS SAY

tobam*
unbiased.

Source: Freedom House - Freedom in the World 2024
EIU, Democracy Index 2023
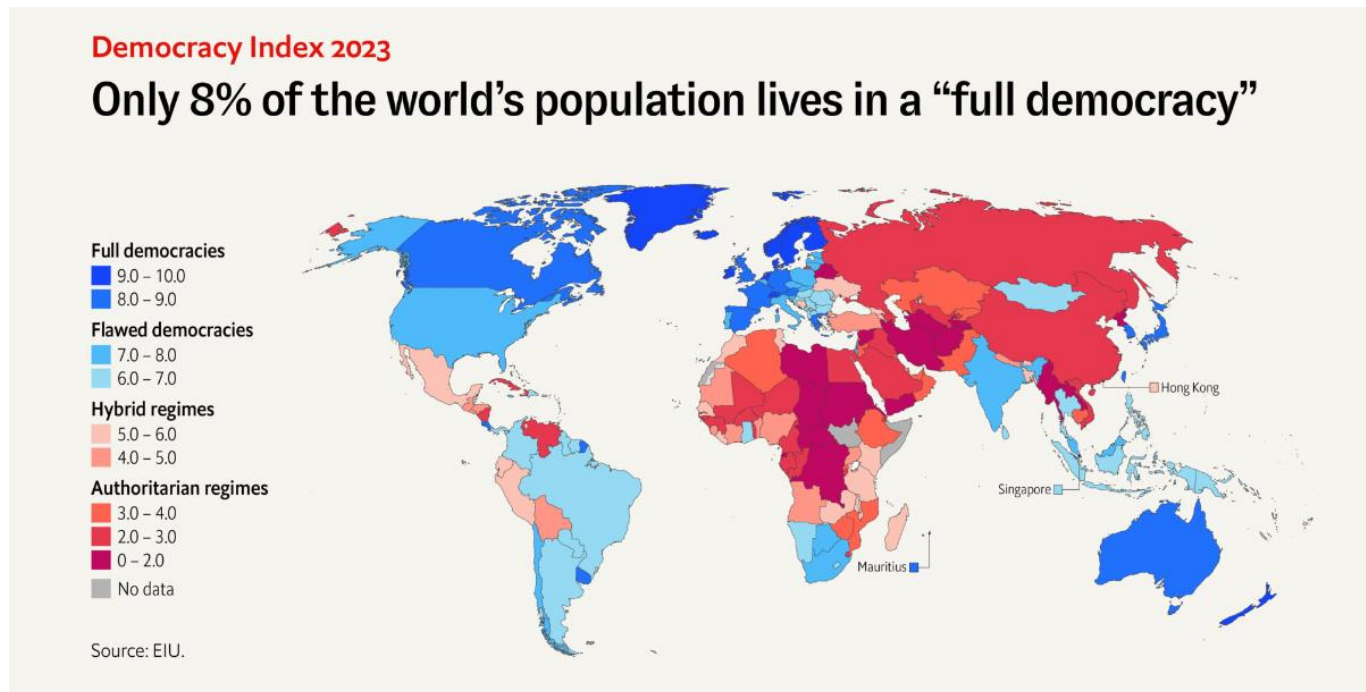
DEMOCRACY IS RECEDING ACROSS THE BOARD

- Democracy in the world is declining, from top countries (USA) to bottom ones (Saudi Arabia, China)

**COUNTRIES BY SCORE ON V-DEM'S LIBERAL DEMOCRACY INDEX (LDI), 2013 COMPARED TO 2023**

Source: V-Dem, Democracy report 2024

DEMOCRACY IS RECEDING ACROSS THE BOARD

- Democracy in the world is declining, from top countries (USA) to bottom ones (Saudi Arabia, China)

**COUNTRIES BY SCORE ON V-DEM'S LIBERAL DEMOCRACY INDEX (LDI),
2013 COMPARED TO 2023**

Source: V-Dem, Democracy report 2024

tobam*
unbiased.
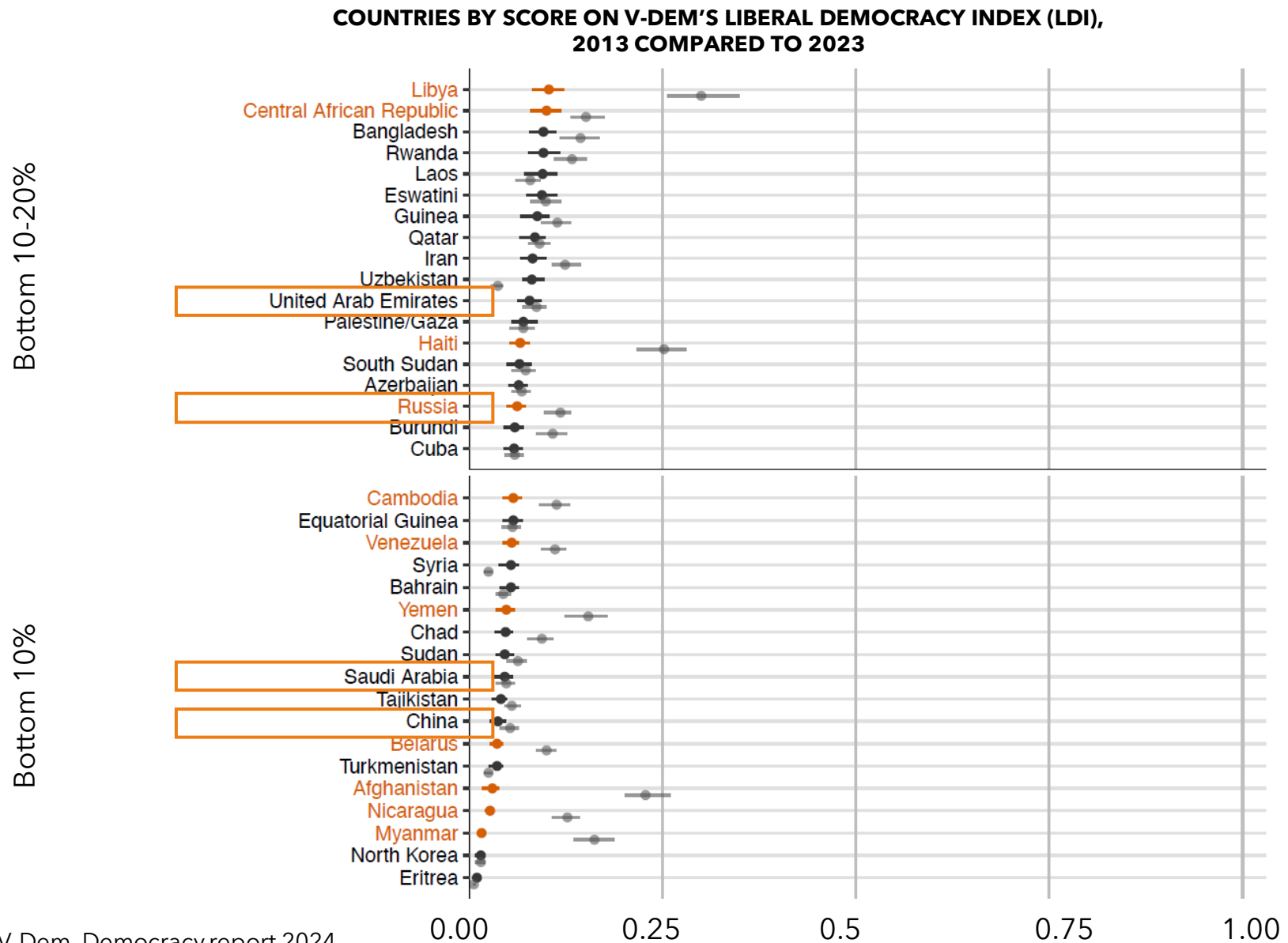
RUSSIA AND CHINA ACTIVELY UNDERMINING DEMOCRACY WORLDWIDE

- **Russia** and **China** push the trend and actively undermine democracy around the world.

- Emergence of more **sophisticated autocrats** :

  - appearance of democracy

  - but subverting it

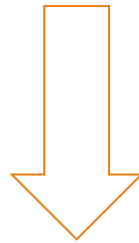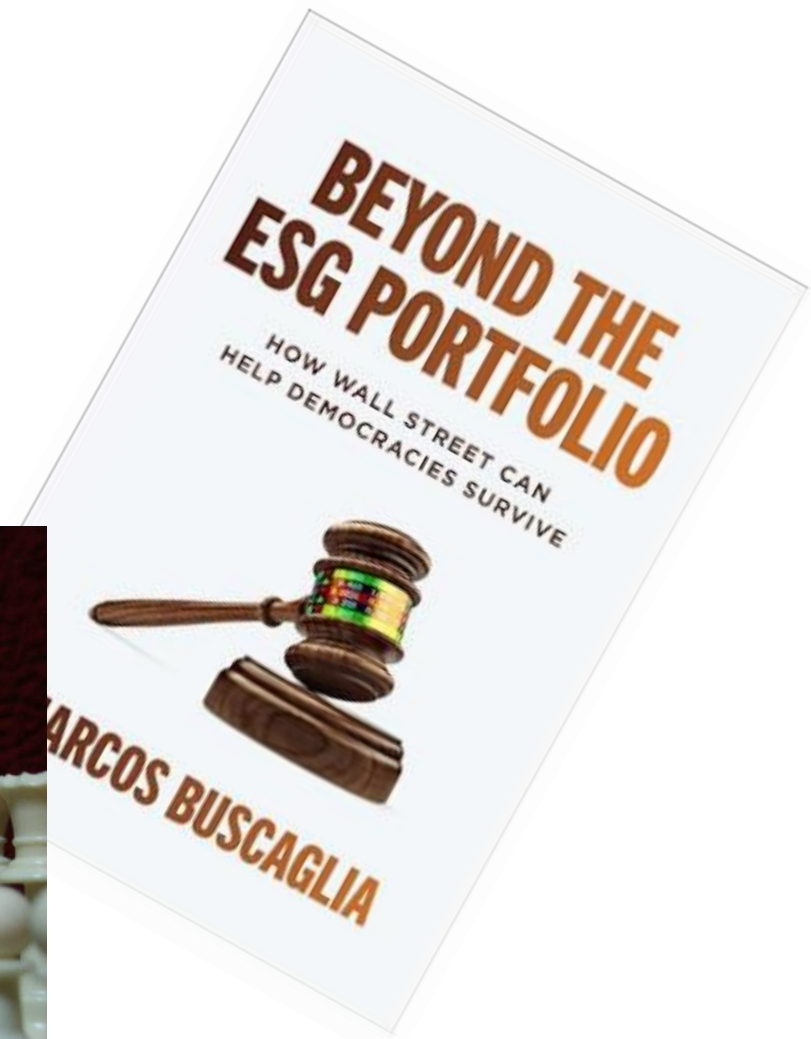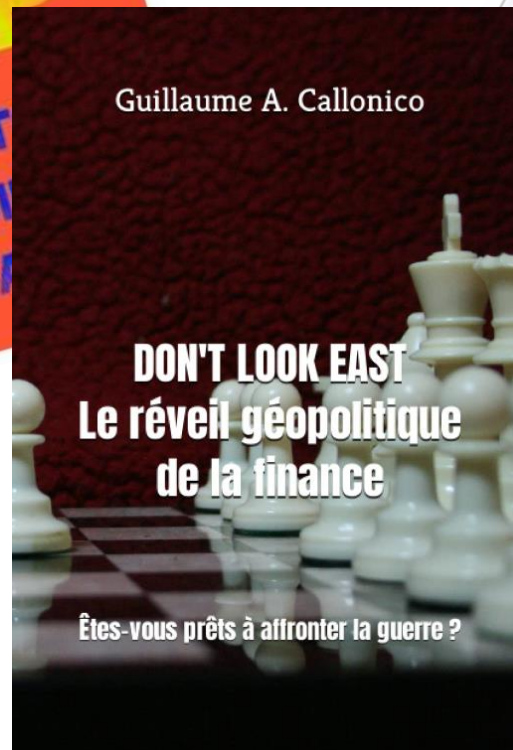- Aspiration for liberty is alive and well!

DEMOCRATIC RIGHTS: KEY TO SUSTAINABLE DEVELOPMENT

tobam*
unbiased.

- Considerations for Civil and Democratic rights (the "S" of ESG) have been overlooked … but are gathering interest among investors.

⬇

- Supporting democracy and the rule of law is the only sustainable way for economic development

…and in line with investors' long-term interest

MORE AND MORE INVESTORS WAKING UP TO GEOPOLITICAL RISK

tobam*
unbiased.

MATHIAS DÖPFNER

THE TRADE TRAP

HOW TO ST...
DOING BUSI...
WITH DICTA...

Guillaume A. Callonico

DON'T LOOK EAST
Le réveil géopolitique
de la finance

Êtes-vous prêts à affronter la guerre ?

BEYOND THE ESG PORTFOLIO

HOW WALL STREET CAN
HELP DEMOCRACIES SURVIVE

...ARCOS BUSCAGLIA

tobam*
unbiased.

tobam*
unbiased.

MIGRATING TOBAM FROM A MONO-CORE …

TOBAM*
CORE INVESTMENTS

→

tobam*
unbiased.

…. To Multi-Core

CrypTOBAM®

TOBAMSolutions®

Maximum Diversification®

LBRTY®
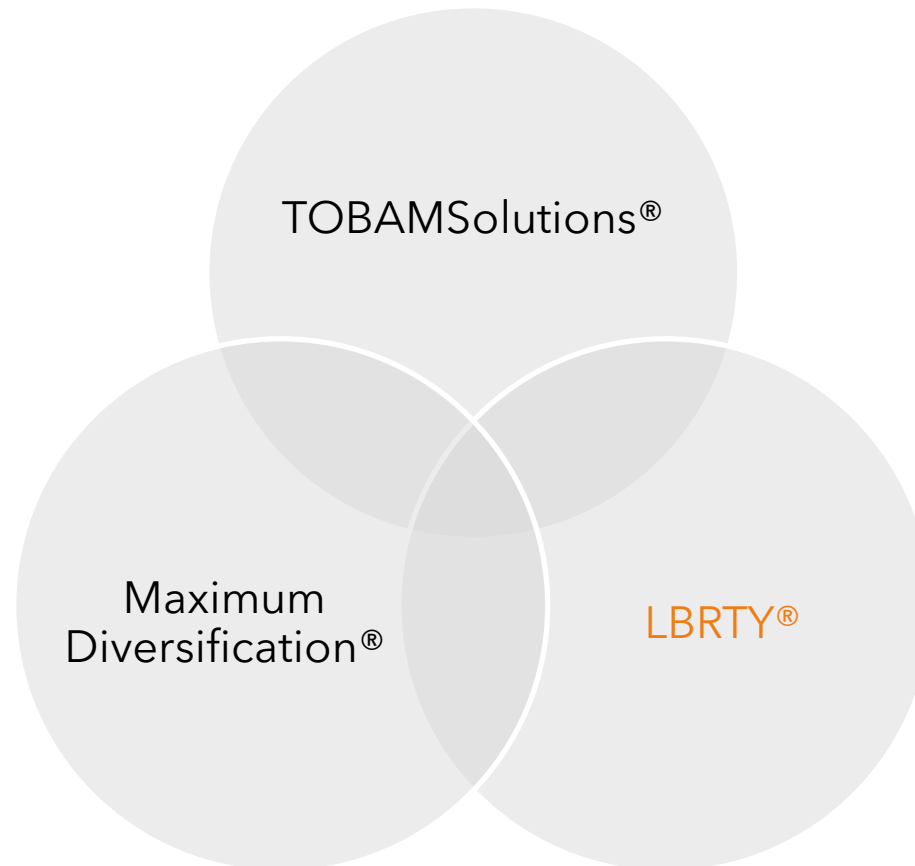
ASSETS UNDER MANAGEMENT

AuM by **Clients Type**

Public Entities
61%

Wealth Management
20%

Corporate Pension Funds
10%

Others
6%

Bank/Ins…
3%
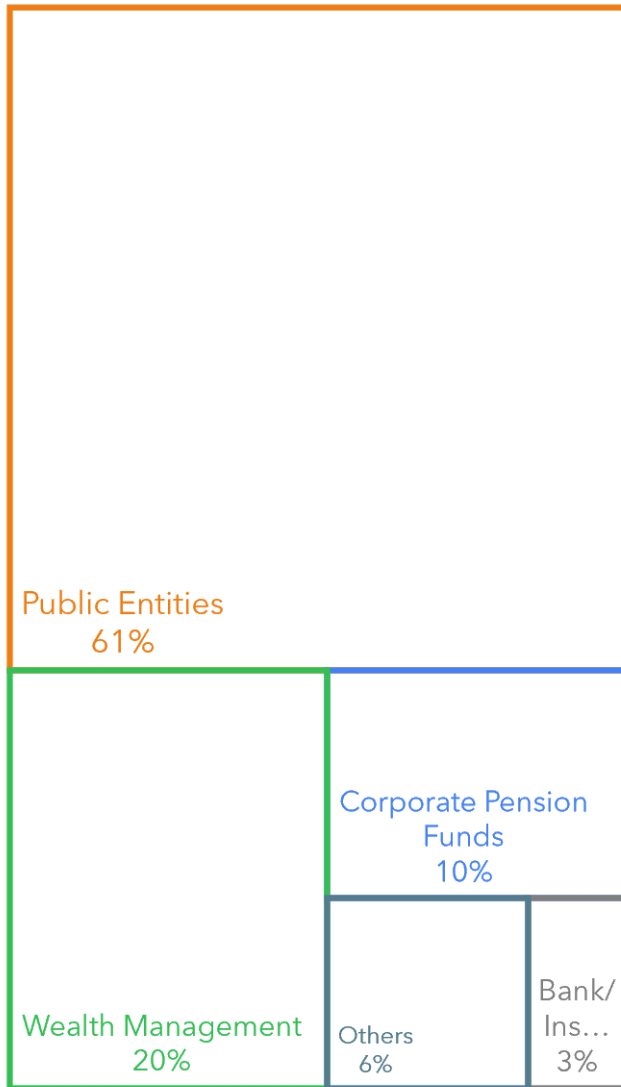
AuM By **Clients Geography**

North America
65%

Switzerland
24%

France
6%

Ger…
3%

Oth…
2%

Nordi…
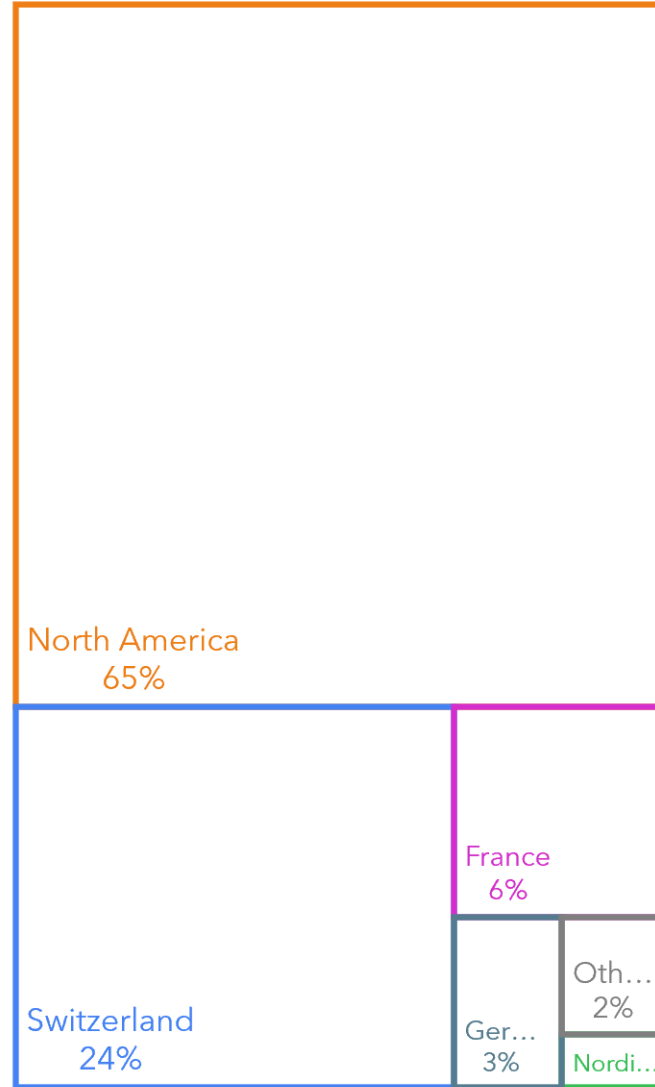
Strategies	AUM in $ million
US Equities	**1,473**
of which open-ended funds	*651*
Global Developed Equities	**1,068**
of which open-ended funds	*346*
Global EM Equities	**647**
of which open-ended funds	*597*
Global Developed ex US Equities	**395**
of which open-ended funds	*184*
Canada Equities	**324**
of which open-ended funds	*11*
ACWI Equities	**289**
of which open-ended funds	*26.6*
World ex Swiss Equities	**68**
of which open-ended funds	*68*
Swiss Equities	**65**
of which open-ended funds	*65*
Euro Equities	**38**
of which open-ended funds	*33*
Japan Equities	**24**
of which open-ended funds	*24*
EAFE Equities	**18**
of which open-ended funds	*-*
Other Equities	**15**
of which open-ended funds	*15*
Total Equities	**4,424**
Global IG Credit	**207**
of which open-ended funds	*207*
Global HY Credit	**104**
of which open-ended funds	*104*
Total Fixed Income	**311**
Multi-Asset	**105**
of which open-ended funds	*105*
Total Multi Asset	**105**
Crypto Assets	**49**
of which open-ended funds	*33*
Total Crypto Assets	**49**
Total AUM	**$5B**
of which open-ended funds	*2,470*

Key Risks: The value of your investment and the income from it will vary and your initial investment amount is not guaranteed. Allocations are subject to change.
Data as of March 28, 2024

TOBAM'S COMMITMENT TO HUMAN RIGHTS
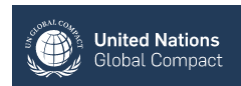## *ADRESSING THE AUTOCRACY RISK*

TOBAM's journey into Human Rights

Year	
2009	TOBAM Choses Human Rights as its philanthropy field. First donation to **Amnesty International**
2010	TOBAM becomes signatory of the **United Nations Global Compact**
2011	Systematic Revenue-Linked Donation Program set up AB EM
2015	Onboarding of **Human Rights Watch** In TOBAM's Donation Process Ukraine project
2016	Promotion and Education around Human Rights Key Challenges
2018	
2019	*Conferences, Interviews, Webinar, Internal presentation*
2020	Onboarding of **Reporters without Borders** Fundraising Campaign after the Blast in Beirut
2021	Fundraising Campaign for Ukraine in coordination with HRW
2023	**Launching LBRTY®, first strategy focused on Civil Rights & Democracy**

TOBAM'S COMMITMENT TO CIVIL RIGHTS & DEMOCRACY
## *ADRESSING THE AUTOCRACY RISK DRIVER* …*BECAUSE IT WORKS*

Our convictions:

Not "Good" "vs "evil"
But "what works" vs "what doesn't work"

- It is about creating value on the long run
- It is not about doing philanthropy with investors' money
- It is about integrating what contributes to value creation and removing what contributes to value destruction
- It is not about discriminating between evil and good, it is about promoting what works, what lasts and will survive on the long run and what will create value

Democracy, Respect of Human Rights, Freedom of Speech, Promotion of Diversity and Pluralism are key to innovation, creativity and economic growth

tobam*
unbiased.

tobam*
unbiased.
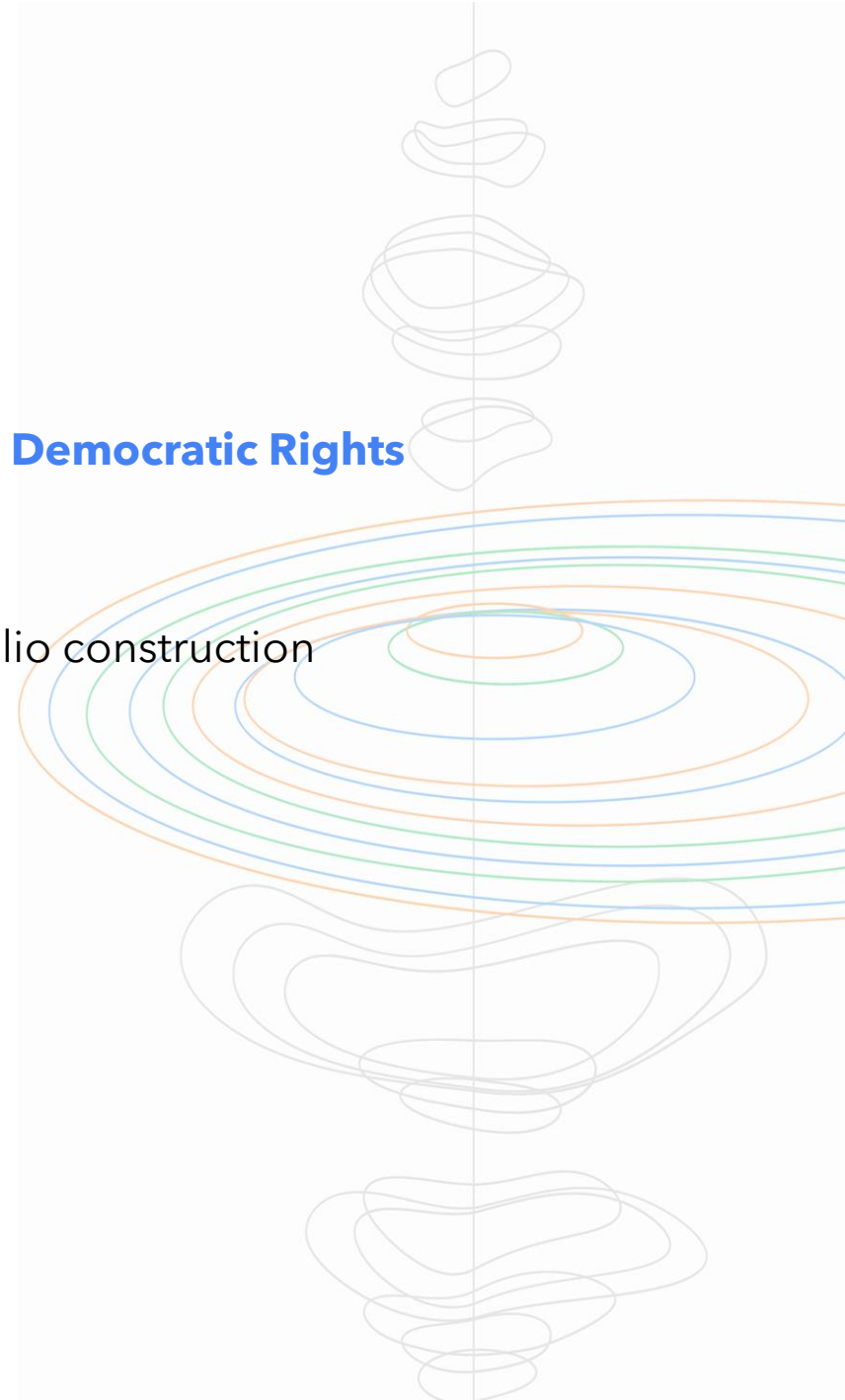
INVESTMENT PHILOSOPHY

Numerous research have demonstrated the cost of dictatorship and lack of civil liberties

- In the long-run investors in countries with oppressive regimes and arbitrary rules are exposed to unrewarded risks.

- **Notably due to arbitrary state behaviour, uncompensated expropriations, social unrest, corruption, war**…. In the long run they will underperform others.

2 The Economic Effects of Dictatorships
JOSE MARIA MARAVALL

JOURNAL ARTICLE
Dictatorial Institutions and their Impact on Economic Growth
JENNIFER GANDHI

The Dictator Effect: How Long Years in Office Affects Economic Development in Africa and the Near East
May 2012 · Journal of Institutional Economics
Authors:
Kostadis Papaioannou
The London School of Economics and Political Science
Jan Luiten van Zanden
Utrecht University

The Economic Effects of Human Rights
Kyklos, Vol. 60, No. 4,
30 Pages
Posted: 26 Oct 2007

Lorenz Blume
Phillips University Marbu

Stefan Voigt
University of Hamburg - Institute of Law & Economics; CESifo (Center for Economic Studies and Ifo Institute)

The economic costs of a discriminatory ideology
Kilian Huber, Volker Lindenthal, Fabian Waldinger / 8 Oct 2018

tobam*
unbiased.

LAUNCHING FIRST STRATEGY FOCUSED ON CIVIL RIGHTS & DEMOCRACY
### *ADRESSING THE AUTOCRACY RISK*

- Identifying the "autocracy risk driver"
- Building a portfolio under exposed to the autocracy risk

1. There is an autocracy risk driver

2. This risk driver is negatively rewarded

3. Most of the exposure to the autocracy risk driver is indirect

4. The autocracy risk driver is independent from other risk drivers

Yves Choueifaty: "BEING EXPOSED TO AUTOCRACY, CONSIST INTO BEING EXPOSED TO A REVERSE J-CURVE."

tobam*
unbiased.

Example of Reverse J-Curve:
Germany 1933-1943

- Germany's stock market knew a sharp rise from 1939 to 1943 .

- This rise is not present in the US market.

- From 1944, prices were frozen, and it was impossible to get out from the German's stocks market.

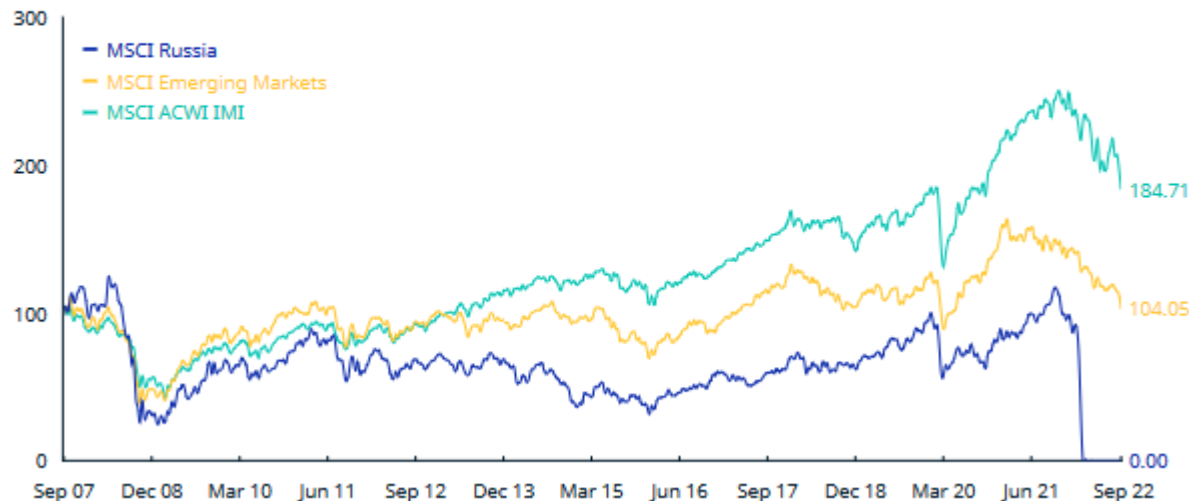- The German's stocks market opened back in mid-1948 with a fall of ~80% (+inflation).
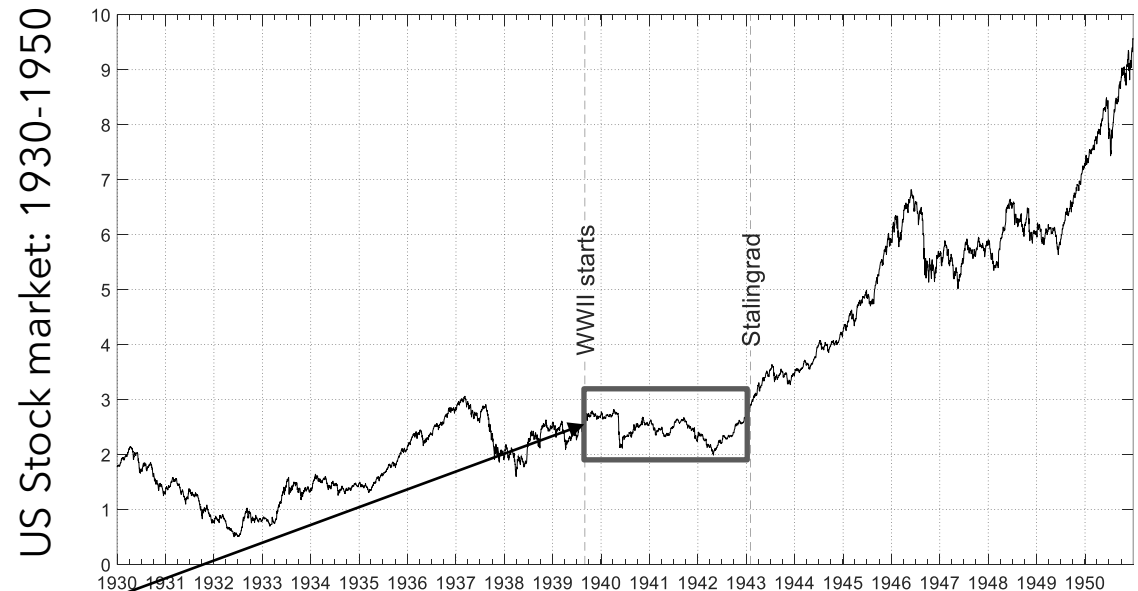
Source: Wealth, war and wisdom, by Biggs, Barton, John Wiley & Sons, 2009.

tobam*
unbiased.

Reverse J-Curve: THE CASE OF RUSSIA

- The potential instability of non-democratic countries makes them more susceptible to black swan events.

- One of the most recent example being Russia where direct investments in stocks/bonds of companies in Russia or in companies located elsewhere but with significant economic ties to Russia have been a very painful experience for investors.

- Russia is a country classified as authoritarian since 2011.

CUMULATIVE INDEX PERFORMANCE – NET RETURNS (USD)
(SEP 2007 – SEP 2022)

— MSCI Russia
— MSCI Emerging Markets
— MSCI ACWI IMI

Source: TOBAM, MSCI

tobam*
unbiased.

WEAR YOUR CORRELATION GLASSES ! ! !

Source: Yale University, as of Nov 28th, 2022

Source: https://tfiglobalnews.com/

tobam*
unbiased.
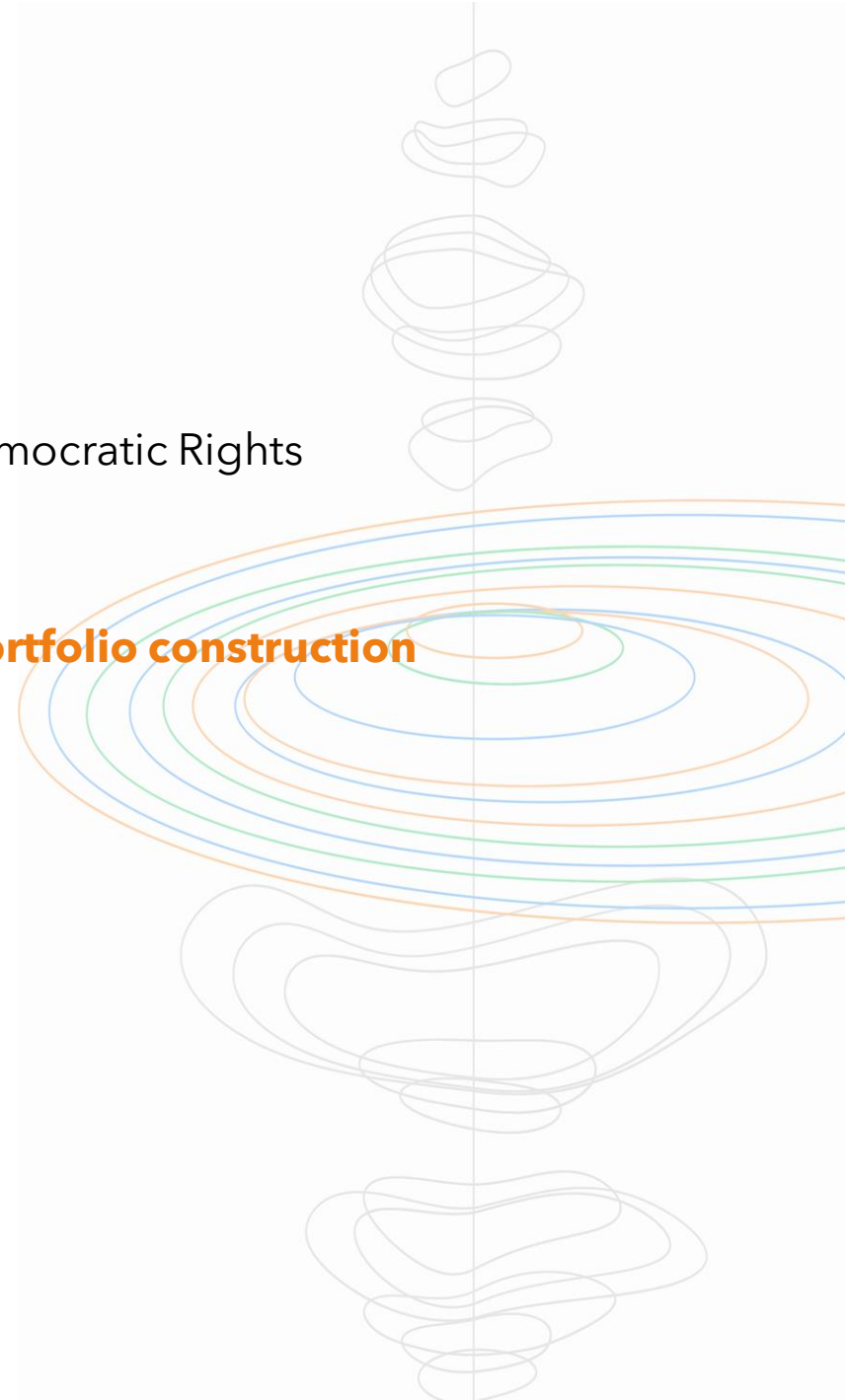
tobam*
unbiased.

TOBAM USES 7 DIFFERENT DATASETS.
EXAMPLE OF DATASET: THE V-DEM PROJECT

- Founded in 2011, Varieties of Democracy (V-Dem) is a unique approach to conceptualizing and measuring democracy. It provides a multidimensional and disaggregated dataset **dating back to before 1789** that reflects the complexity of the concept of democracy as a system of rule that goes beyond the simple presence of elections.

- The V-Dem project distinguishes between five high-level principles of democracy: electoral, liberal, participatory, deliberative, and egalitarian, and collects data to measure these principles.

- The dataset is governed by Principal Investigators (the highest decision making body), a Steering Committee (body for the overall guidance and decision making connected to the various V-Dem programs and projects) and a large number of Project Managers (they identify reliable and relevant data sources, develop surveys and assure cross-country equivalence for the indicators) that are all Professors from institutions with an excellent academic reputation mainly in the Nordics, USA, and some also from other European Countries. Moreover, the V-Dem institute relies on a wide set of Regional Managers who are Professors at Universities in the respective geographic regions for which data is collected (e.g., Africa, Asia etc.). Overall, the headcounts are 5 Principal Investigators, 18 Personnel at V-Dem Institute, 22 Project Managers, 33 Regional Managers, 134 Country Coordinators and 3700 Country Experts.

- The Host Institution is the University of Gothenburg. The University of Notre Dame played an instrumental part in building and establishing V-Dem

- Funders of the data collection and research infrastructure are:

- We deem the V-Dem institute as a high-quality academic source.
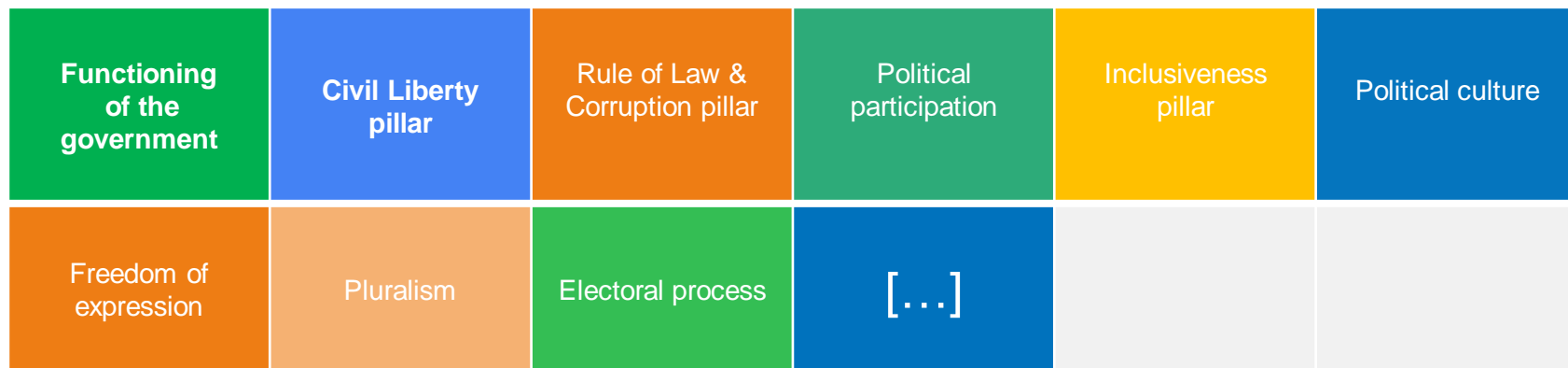
- More information can be found here:
  https://www.v-dem.net/about/v-dem-project/

tobam*
unbiased.

INVESTMENT PROCESS: LBRTY PORTFOLIO CONSTRUCTION

Measuring Countries Civil Liberty and The State of Democracy

There is plenty of data sources, reliable, independent, neutral.
TOBAM uses 7 sources of Data).

Datasets include typical pillars:

Functioning of the government	Civil Liberty pillar	Rule of Law & Corruption pillar	Political participation	Inclusiveness pillar	Political culture
Freedom of expression	Pluralism	Electoral process	[…]		

Data processing

Step 1. The TOBAM "Country CD rating" synthetizes the information. Country CD ratings are between 0 and 10. The threshold is set at 6.
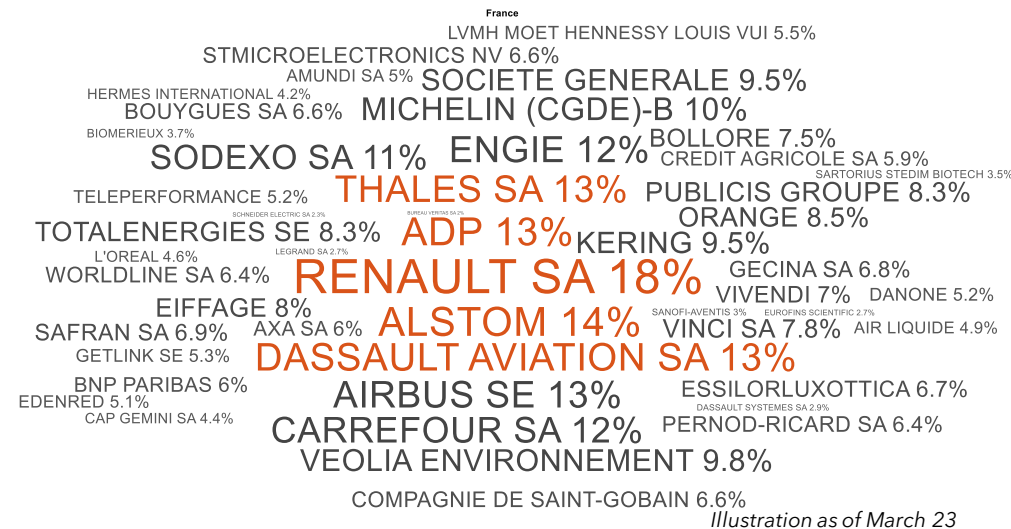
0   6   10

INVESTMENT PROCESS: LBRTY PORTFOLIO CONSTRUCTION

tobam*
unbiased.
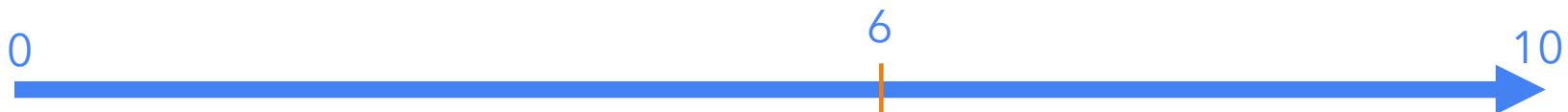
Step 2. **Excluding Autocracies. Additional exclusion lists (tobacco,…). The stocks of this Benchmark constitute the Investment Universe**

Compute Whitelisted Benchmark: Mkt-Cap weighted portfolio of Investment Universe

Step 3. **Wearing the "correlation glasses": Estimate the Authoritarian Exposure of each stock of the investment universe, homogeneous to a (partial) volatility**

- Capture each company's overall economic exposure to authoritarian countries de-biased for market and sectors effects.

- Define the authoritarian exposure (AE) of a company as the sum of its exposure to each authoritarian country.

France
LVMH MOET HENNESSY LOUIS VUI 5.5%
STMICROELECTRONICS NV 6.6%
AMUNDI SA 5% SOCIETE GENERALE 9.5%
HERMES INTERNATIONAL 4.2%
BOUYGUES SA 6.6% MICHELIN (CGDE)-B 10%
BIOMERIEUX 3.7%
SODEXO SA 11% ENGIE 12% BOLLORE 7.5%
CREDIT AGRICOLE SA 5.9%
SARTORIUS STEDIM BIOTECH 3.5%
TELEPERFORMANCE 5.2% THALES SA 13% PUBLICIS GROUPE 8.3%
SCHNEIDER ELECTRIC SA 2.3% BUREAU VERITAS SA 2% ORANGE 8.5%
TOTALENERGIES SE 8.3% ADP 13% KERING 9.5%
L'OREAL 4.6% LEGRAND SA 2.7% GECINA SA 6.8%
WORLDLINE SA 6.4% RENAULT SA 18% VIVENDI 7% DANONE 5.2%
EIFFAGE 8% SANOFI-AVENTIS 3% EUROFINS SCIENTIFIC 2.7%
SAFRAN SA 6.9% AXA SA 6% ALSTOM 14% VINCI SA 7.8% AIR LIQUIDE 4.9%
GETLINK SE 5.3% DASSAULT AVIATION SA 13%
BNP PARIBAS 6% AIRBUS SE 13% ESSILORLUXOTTICA 6.7%
EDENRED 5.1% DASSAULT SYSTEMES SA 2.9%
CAP GEMINI SA 4.4% CARREFOUR SA 12% PERNOD-RICARD SA 6.4%
VEOLIA ENVIRONNEMENT 9.8%
COMPAGNIE DE SAINT-GOBAIN 6.6%

Illustration as of March 23

Step 4. **Construct LBRTY Portfolio : Minimization of overall authoritarian exposure subject to a defined long term tracking error**

tobam*
unbiased.

THE AUTOCRACY RISK CAN BE EFFECTVELY MITIGATED

TOBAM LBRTY EM PERFORMANCE IN Q1 2022: IMPACT OF THE RUSSIAN CRISIS

24/02
Russia invades Ukraine

—TOBAM LBRTY EM $ GTR — BBG Emg Mkt L/M TR
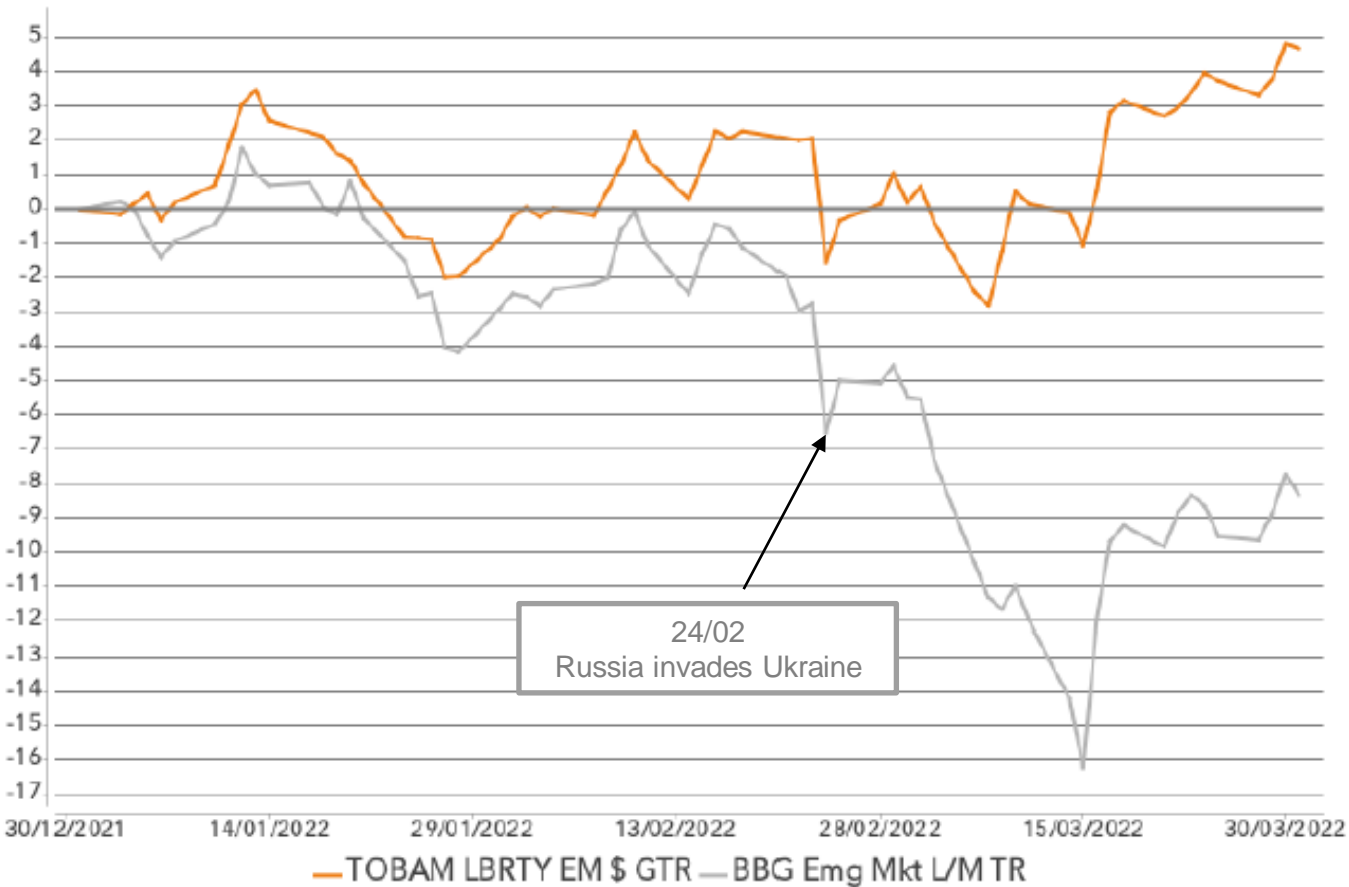
TOBAM LBRTY EM $ GTR	
Return:	4.70%
Hist volatility:	15.37%

BBG Emg Mkt L/M TR	
Return:	-8.32%
Hist volatility:	21.92%
Excess Return:	13.02%

Source Bloomberg and TOBAM, from 31/12/2021 to 31/03/2022. Returns reflect back tested data from Aug 29, 2008, to Jul 03, 2023, plus live data for the TOBAM LBRTY Emerging Markets Equity Index from Jul 03, 2023, to date. Back tested results are for information purposes only. They are intended to illustrate how the Strategy may have behaved had it been launched prior to Jul 03, 2023. The back tests are gross of tax and exclude costs of transaction and fee assumptions. Warning: Past performance is not an indicator or a guarantee of future performance. The value of your investment and income received from it can go down as well as up and you may not get back the full amount invested. Performance is in USD.
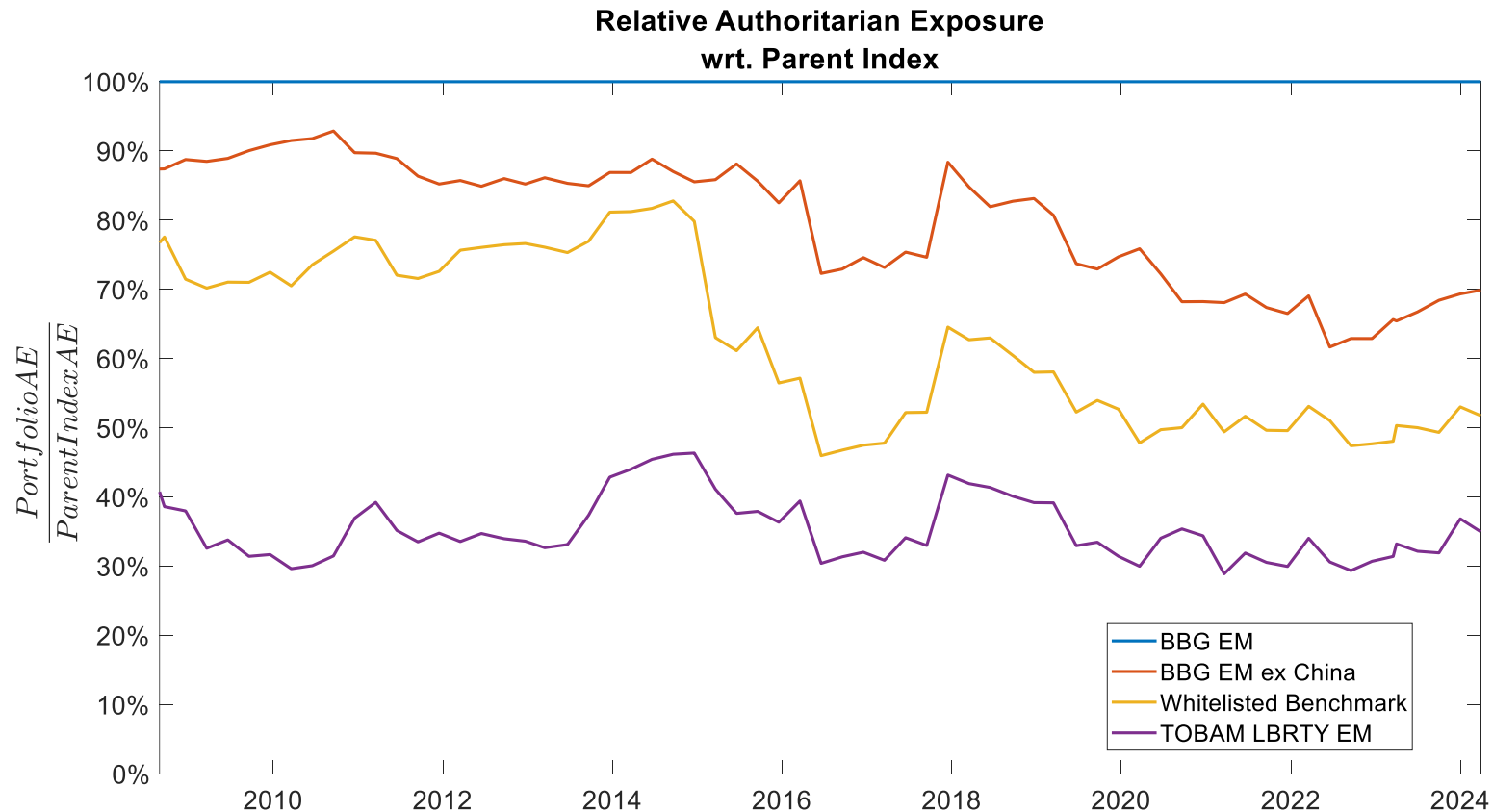
26
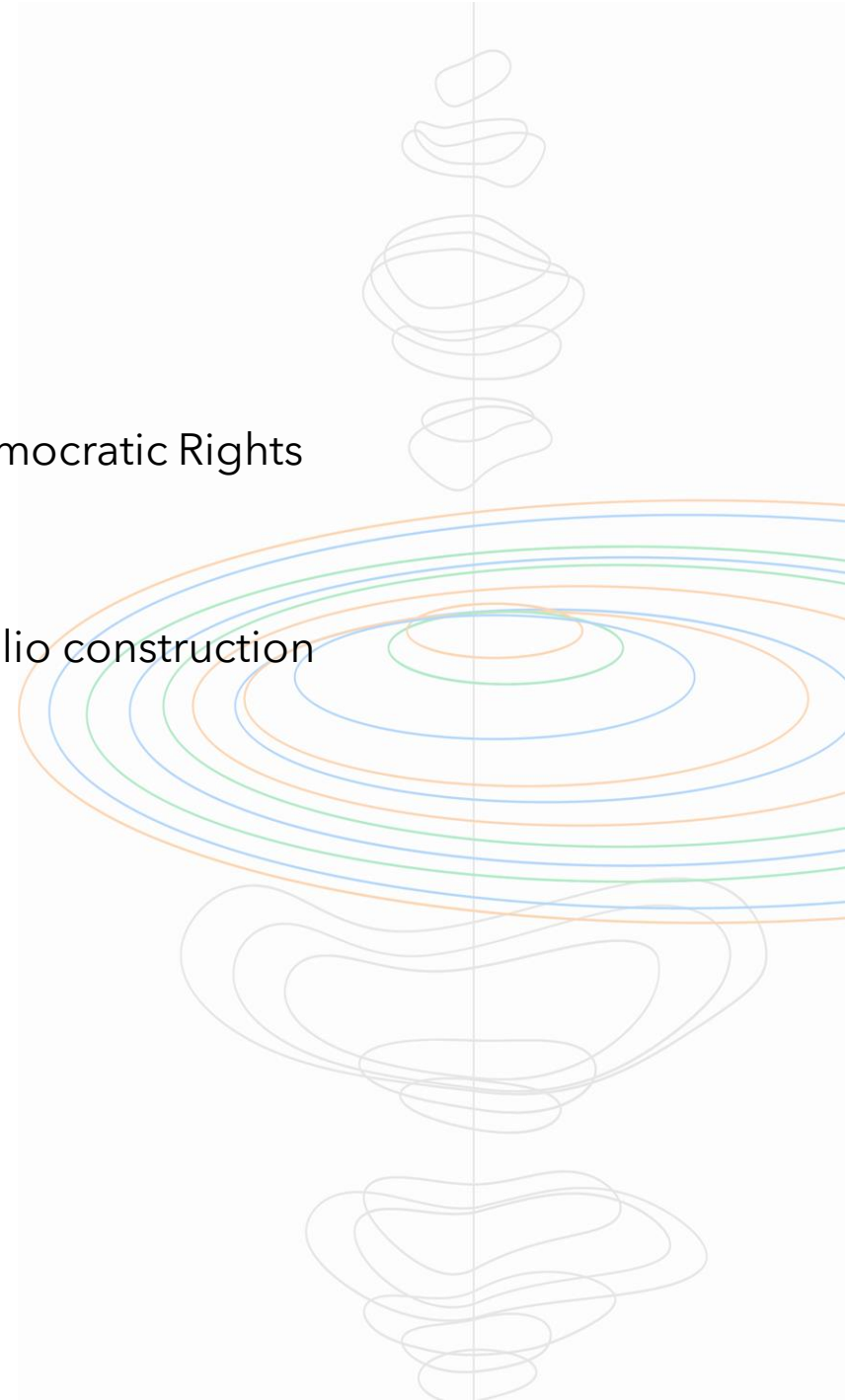
tobam*
unbiased.

PORTFOLIOS RELATIVE AUTHORITARIAN EXPOSURE

EM

Relative Authoritarian Exposure wrt. Parent Index

Source: TOBAM. August 2008 to March 2024

Within a given country companies exhibit a large spectrum of authoritarian exposures allowing TOBAM LBRTY portfolio to exhibit an authoritarian exposure 50 to 70% lower compared to its parent index.
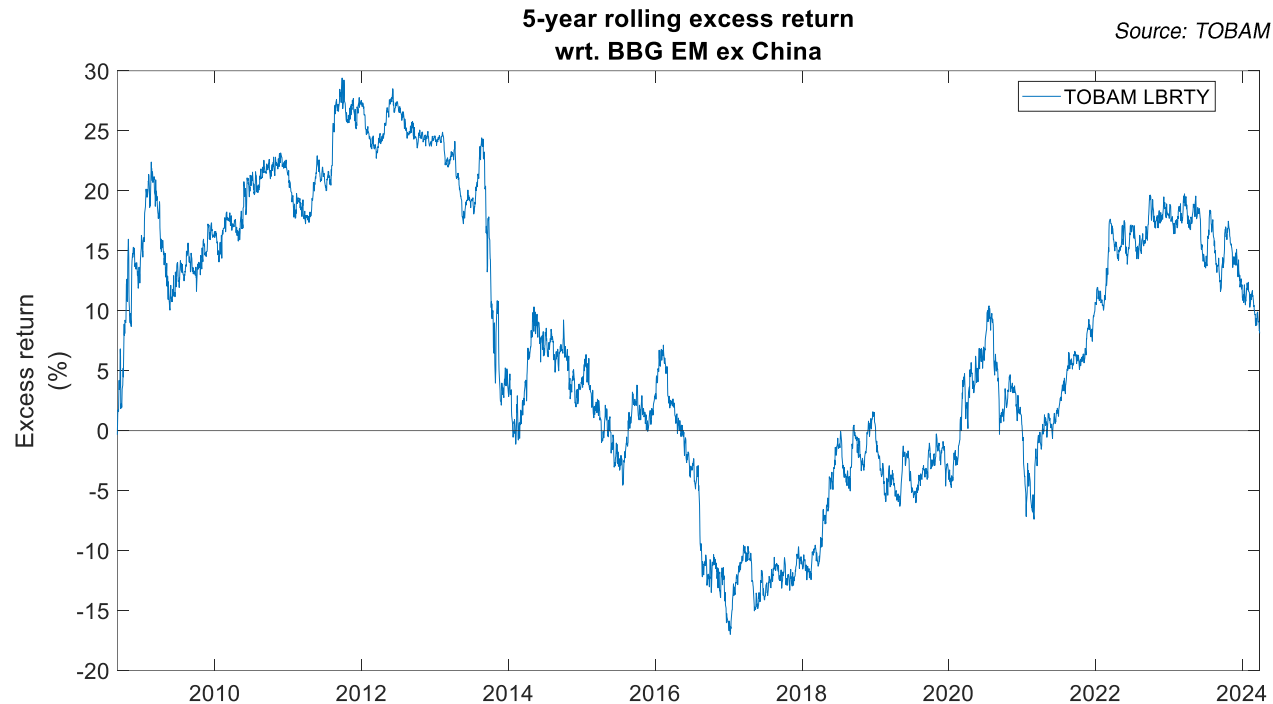
BACKTEST SUMMARY
EM

Statistics	BBG EM	BBG EM ex China	*Whitelisted Benchmark*	TOBAM LBRTY
Annualized Gross return	3.8%	4.6%	4.9%	**6.7%**
Annualized Net return	3.8%	4.6%	4.4%	**6.2%**
Vol	19.8%	19.8%	19.0%	**18.3%**
Sharpe Ratio	0.14	0.18	0.18	**0.29**
Beta to Mkt	1.0	1.0	0.9	**0.9**
Average Number of stocks	1108	833	451	**133**
Average Eff. Number of stocks	158.5	134.2	111.6	**61.0**
Authoritarian Exposure (Q1 2024)	16.5%	11.5%	8.7%	**5.9%**
Relative Authoritarian Exposure (Q1 2024)	100.0%	69.6.2%	52.4%	**35.9%**
TE(Parent index)	0.0%	5.3%	6.7%	**8.8%**
TE(Whitelisted index)	6.7%	4.5%	0.0%	**6.2%**
TE(BBG EM ex China index)	5.3%	0.0%	4.5%	**7.0%**

The period covered is from August 2008 to March 2024. Returns reflect back tested data for the entire time provided. Back tested results are for information purposes only. They are intended to illustrate how the Strategy may have behaved had it been launched. Back tested performance returns and/or charts illustrating performance provided on this page are gross of management fees, sales charges and other commissions, other taxes and relevant costs to be paid by an investor are not included in the calculations. The net performance, are computed assuming a hypothetical fee of 45bps . Warning: Past performance is not an indicator or a guarantee of future performance. The value of your investment and income received from it can go down as well as up and you may not get back the full amount invested. Performance details provided are in reference index specific local currency.
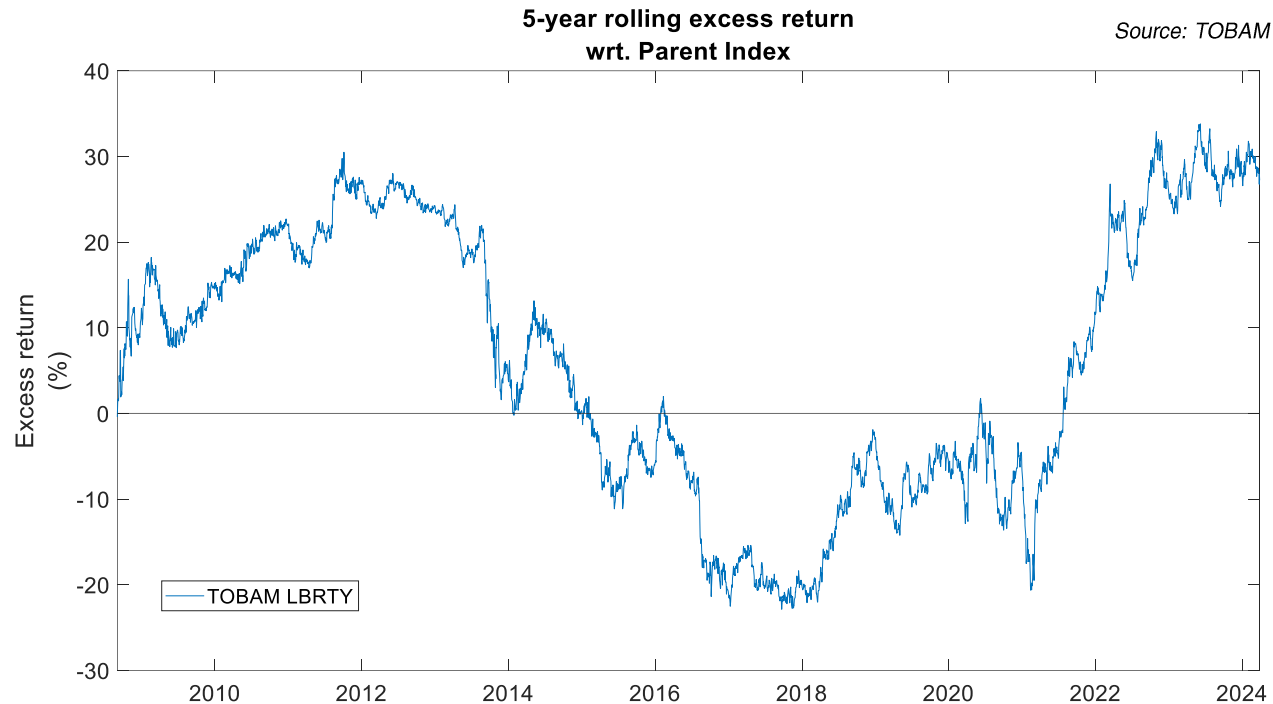
tobam*
unbiased.

5-YEAR ROLLING EXCESS RETURNS
VS BBG EM EX CHINA - EM

5-year rolling excess return wrt. BBG EM ex China

Source: TOBAM

5 Years Statistics	BBG EM	BBG EM ex China	*Whitelisted Benchmark*	TOBAM LBRTY
Annualized Gross return	3.0%	7.2%	6.7%	9.1%
Annualized Net return	3.0%	7.2%	6.3%	8.7%
Vol	16.6%	16.5%	16.9%	15.8%
Sharpe ratio	0.06	0.32	0.25	0.42
Beta to Mkt	1.0	0.9	0.9	0.8

The period covered in the table is from March 2019 to March 2024. The graph shrinks the 5-year window near the start of the period to include only existing elements. Returns reflect back tested data for the entire time provided. Back tested results are for information purposes only. They are intended to illustrate how theStrategy may have behaved had it been launched. Warning: Past performance is not an indicator or a guarantee of future performance. The value of your investment and income received from it can go down as well as up and you may not get back the full amount invested. Performance details provided are in reference index specific local currency

30

tobam*
unbiased.

5-YEAR ROLLING EXCESS RETURNS
VS PARENT INDEX -EM

5-year rolling excess return wrt. Parent Index

Source: TOBAM

5 Years Statistics	BBG EM	BBG EM ex China	*Whitelisted Benchmark*	TOBAM LBRTY
Annualized Gross return	3.0%	7.2%	6.7%	9.1%
Annualized Net return	3.0%	7.2%	6.3%	8.7%
Vol	16.6%	16.5%	16.9%	15.8%
Sharpe ratio	0.06	0.32	0.25	0.42
Beta to Mkt	1.0	0.9	0.9	0.8

The period covered in the table is from March 2019 to March 2024. The graph shrinks the 5-year window near the start of the period to include only existing elements. Returns reflect back tested data for the entire time provided. Back tested results are for information purposes only. They are intended to illustrate how theStrategy may have behaved had it been launched. Warning: Past performance is not an indicator or a guarantee of future performance. The value of your investment and income received from it can go down as well as up and you may not get back the full amount invested. Performance details provided are in reference index specific local currency

31

AQR AND FAMA-FRENCH FACTOR EXPOSURE
EM

- Traditional AQR and Fama French factors explain poorly TOBAM LBRTY's excess returns

XR regression	Whitelisted Benchmark	TOBAM LBRTY
Market	-2.3%*	-10%***
SMB	6.7%	10.3%**
HML	17.1%***	16.3%***
UMD	-4.1%*	-5.1%*
QMJ	12.1%**	14.9%***
BAB	6.7%**	5.3%
Alpha	-0.9%	1.2%
R²	8%	18%

Fama-French XR regression	Whitelisted Benchmark	TOBAM LBRTY
Market	1%	-11.4%***
SMB	20.7%**	24.9%**
HML	18.4%**	13.1%
RMW	3.4%	1.3%
CMA	26.3%***	33%***
WML	4.4%	2.6%
Alpha	-1.7%	0.7%
R²	19%	32%

Factors are on AQR Pacific universe. Size (SMB), Value (HML), Momentum (UMD), Quality (QMJ) and Betting against Beta (BAB). *indicates that the estimated coefficient is different from zero with a probability of 90%, ** with a probability of 95% and *** with a probability of 99%.

Factors are on Emerging market universe. . Size (SMB), Value (HML), Quality(RMW&CMA), Momentum (WML) *indicates that the estimated coefficient is different from zero with a probability of 90%, ** with a probability of 95% and *** with a probability of 99%.

TOBAM LBRTY TRACKING ERROR DECOMPOSITION
EM

The majority of the TE vs. parent index and about 25% of the TE vs. Whitelisted Benchmark is due to the reduction of exposure to authoritarian countries

Emerging markets Nov 2009 - Mar 2024	Tracking error attribution vs. **Parent Index**		Tracking error attribution vs. **Whitelisted Benchmark**	
Risk factor	**TCR**	**PCR**	**TCR**	**PCR**
Market	1.6%	18.0%	0.7%	11.0%
Authoritarian countries	1.2%	**14.1%**	0.0%	0.0%
Indirect exposure	3.6%	**41.1%**	1.5%	**23.9%**
Sector	0.3%	3.6%	0.6%	9.5%
Residuals	2.0%	23.1%	3.5%	55.6%
Total	8.8%	100.0%	6.2%	100.0%

TCR = Total contribution to tracking error

PCR = Percentage contributions to tracking error

Source: TOBAM
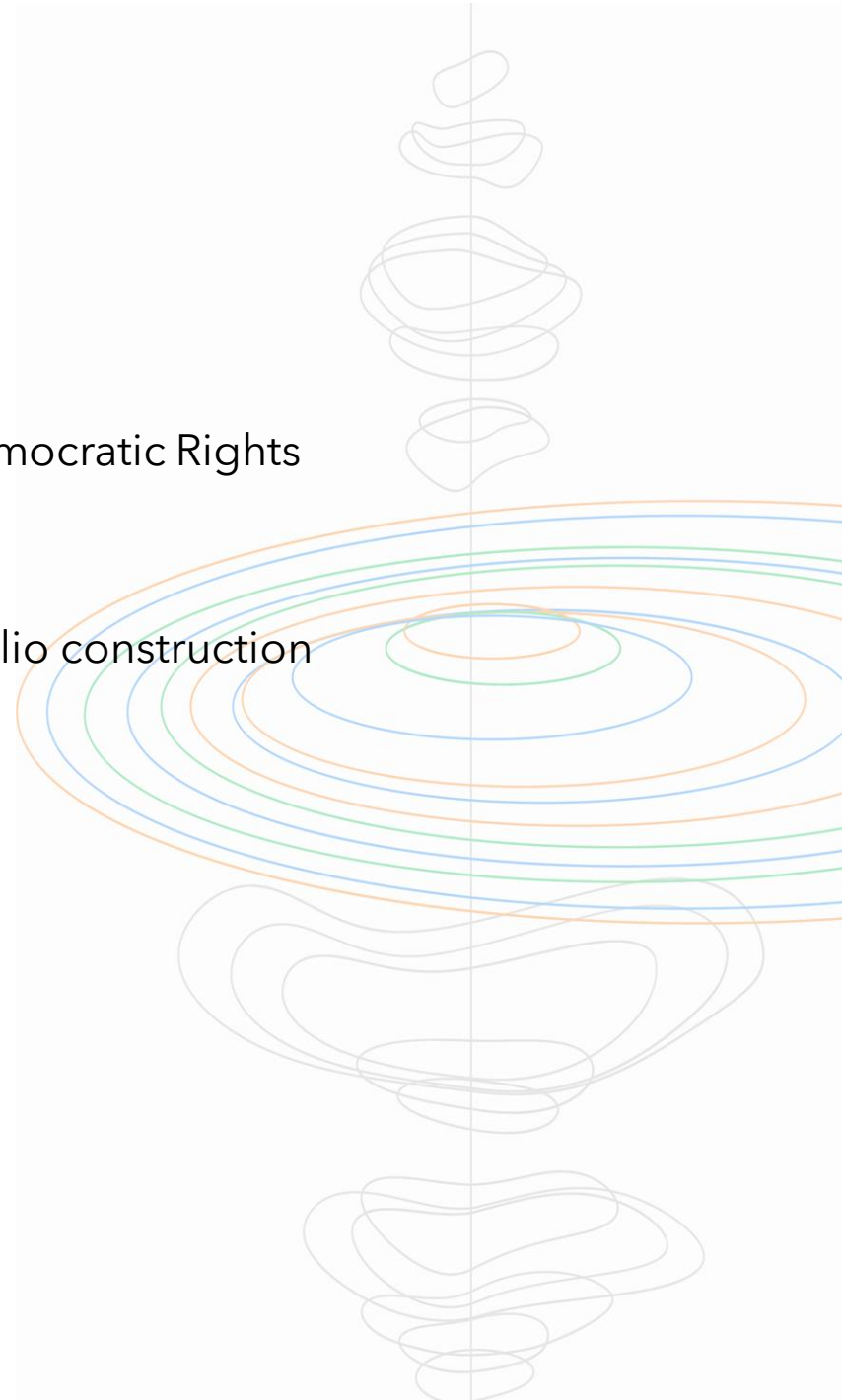
tobam*
unbiased.

PRODUCTS

On 03 July 2023, the TOBAM LBRTY **indices** were launched:
- All World (Bloomberg ticker: LBRTY)
- All World ex USA (Bloomberg ticker: LBRTYXU)
- Emerging Markets (Bloomberg ticker: LBRTEM)

The tracking error constraint defined vs. whitelisted index is set at:
- 10% of the parent index volatility for the **index** TOBAM LBRTY All World and All World ex USA
- 30% of the parent index volatility for the TOBAM LBRTY EM

The capacity* of the TOBAM LBRTY as of 28 February 2023 is at:
- 17.2% for the TOBAM LBRTY All World index
- 16.1% for the TOBAM LBRTY All World ex USA index
- 7.3% for the TOBAM LBRTY EM

*Following the 40-act SEC guidance , the capacity of a portfolio is defined as the maximum size such that a proportion 85% of it can be purchased – or sold- in less than 5 days, at a maximum 20% participation rate. The capacity is expressed as a percentage of the Parent index capacity

TOBAM LBRTY ALL WORLD EQUITY PERFORMANCE

tobam*
unbiased.

Sources: TOBAM, Bloomberg. Indexes are unmanaged and do not incur management fees, costs and expenses. One cannot invest directly in an index.

Warning: Past performance is not an indicator or a guarantee of future performance. The value of your investment and income received from it can go down as well as up and you may not get back the full amount invested. Performance details provided are in USD and include reinvested dividends.

Returns reflect back tested data from Aug 29, 2008 to Jul 03, 2023, plus live data for the TOBAM LBRTY All World Equity Index (AB) from Jul 03, 2023 to date.

Back tested results are for information purposes only. They are intended to illustrate how the Strategy may have behaved had it been launched prior to Jul 03, 2023. The back tests are gross of tax and exclude costs of transaction and fee assumptions.
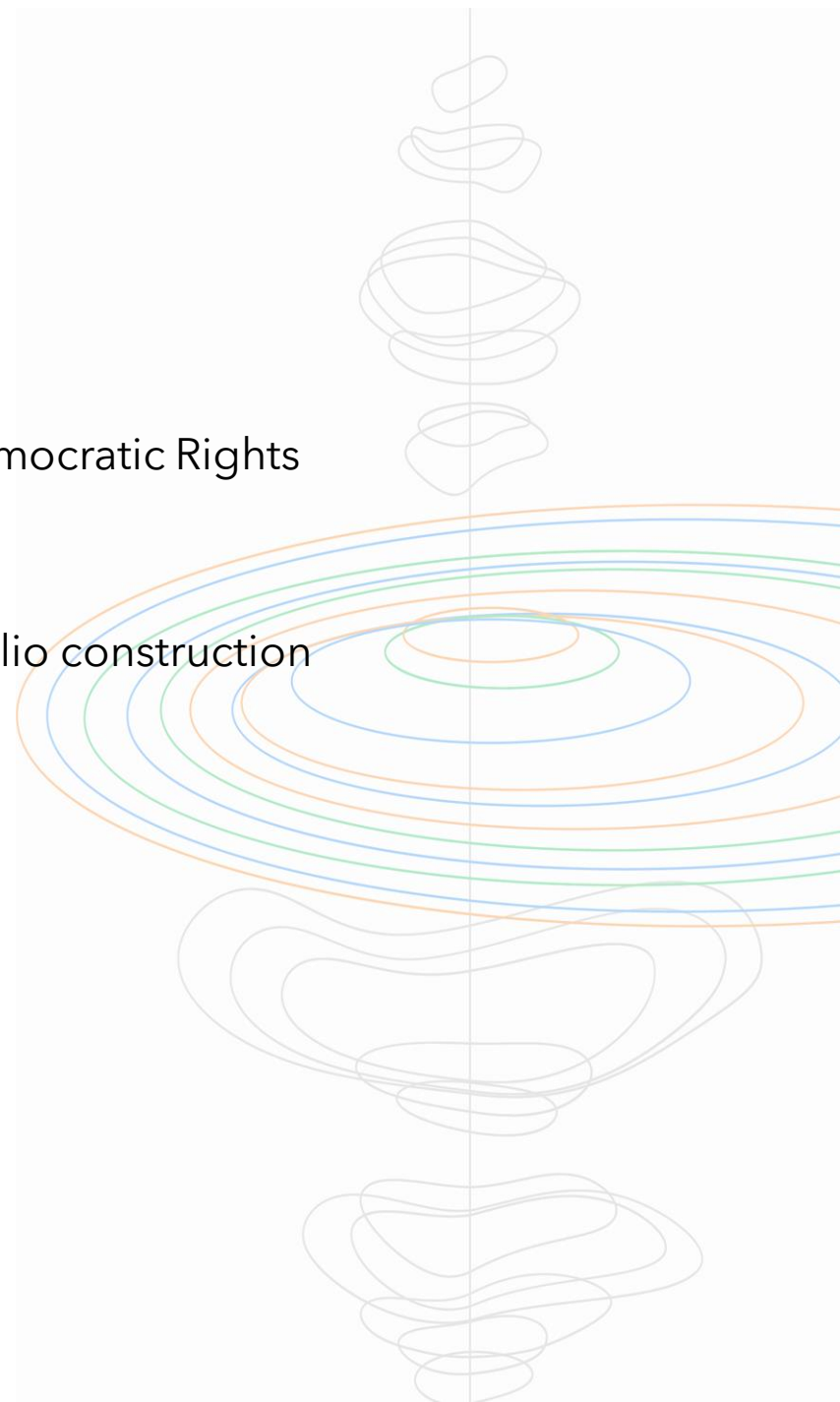
● Monthly Returns(%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Index	Bench
2024	1.27	3.71	3.85										9.07	8.18
2023	6.43	-3.09	3.47	2.56	-0.11	5.42	3.99	-2.41	-4.73	-3.07	9.71	5.46	24.98	22.24
2022	-4.83	-2.49	2.12	-7.90	0.55	-7.95	7.57	-4.37	-8.82	7.75	8.02	-3.80	-15.16	-18.24
2021	-1.69	2.29	3.88	5.49	1.75	1.52	3.13	2.85	-4.37	6.06	-1.48	4.53	26.12	18.50
2020	-0.19	-8.41	-13.17	10.74	4.93	3.10	4.83	6.34	-4.06	-2.91	11.56	3.81	14.36	17.10
2019	8.10	3.49	1.71	3.53	-5.24	6.57	0.81	-2.09	2.41	2.12	3.32	3.34	31.14	27.10
2018	4.18	-4.11	-0.94	0.54	0.41	-0.07	3.23	1.87	0.08	-7.39	1.80	-8.18	-9.05	-8.76
2017	1.84	3.16	0.94	1.66	2.83	0.13	2.58	-0.51	1.63	1.85	2.70	1.22	21.90	24.54
2016	-5.47	-0.28	7.11	0.90	0.94	-1.33	4.11	-0.04	0.58	-1.95	1.79	2.77	8.93	8.54
2015	-2.07	6.06	-1.27	1.67	0.39	-2.12	2.20	-6.31	-2.96	8.11	-0.08	-2.53	0.24	-1.67
2014	-3.09	4.77	0.32	1.41	1.66	2.16	-1.68	2.77	-2.56	0.90	1.86	-1.38	7.05	4.89
2013	5.32	0.31	2.41	2.58	0.10	-2.21	5.21	-2.66	4.39	4.33	1.52	2.34	25.89	23.16
2012	4.92	4.10	0.79	-1.24	-8.32	4.09	1.03	3.07	2.74	-0.65	1.53	1.87	14.05	17.16
2011	2.22	3.49	-0.48	3.60	-1.92	-1.06	-2.71	-5.93	-8.18	9.98	-2.26	-0.09	-4.47	-7.21
2010	-4.16	2.93	6.49	0.74	-8.56	-3.47	8.19	-2.79	8.62	3.92	-1.70	6.92	16.55	13.30

● Statistics

	TOBAM LBRTY All World Equity Index	BBG World Lrg/Mid Cap TR
Return (Aug '08 - Mar '24)	311.66 %	239.01 %
Annualized return	9.51 %	8.15 %
Volatility	18.64 %	17.56 %
Sharpe ratio	0.46	0.41
Tracking error	3.58 %	
Downside deviation	12.15 %	11.53 %
Sortino ratio	0.70	0.62
Information ratio	0.38	
Correlation to index	0.98	
Beta to index	1.04	

TOBAM LBRTY ALL WORLD EX USA EQUITY PERFORMANCE

tobam*
unbiased.

Sources: TOBAM, Bloomberg. Indexes are unmanaged and do not incur management fees, costs and expenses. One cannot invest directly in an index.

Warning: Past performance is not an indicator or a guarantee of future performance. The value of your investment and income received from it can go down as well as up and you may not get back the full amount invested. Performance details provided are in USD and include reinvested dividends.

Returns reflect back tested data from Aug 29, 2008 to Jul 03, 2023, plus live data for the TOBAM LBRTY All World ex USA Equity Index (AB) from Jul 03, 2023 to date.

Back tested results are for information purposes only. They are intended to illustrate how the Strategy may have behaved had it been launched prior to Jul 03, 2023. The back tests are gross of tax and exclude costs of transaction and fee assumptions.

● Monthly Returns(%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Index	YTD Bench
2024	-0.40	0.63	4.15										4.39	4.60
2023	8.52	-2.02	2.13	3.17	-2.54	4.57	4.07	-4.60	-3.22	-4.71	10.29	6.54	22.86	15.22
2022	-4.47	-2.15	0.65	-6.72	0.85	-10.05	5.71	-5.16	-8.21	4.19	10.63	-0.59	-16.06	-15.97
2021	-1.55	2.11	2.84	4.18	3.93	-0.71	1.34	1.49	-3.70	3.34	-3.19	5.50	16.17	8.45
2020	-2.23	-8.62	-15.31	6.68	4.28	4.21	4.23	4.75	-2.66	-2.48	13.87	4.84	8.52	12.45
2019	6.80	3.01	0.81	3.05	-4.04	5.29	-1.48	-2.59	3.31	3.35	1.58	3.65	24.59	21.95
2018	4.15	-4.90	-0.93	2.00	-1.89	-1.13	2.61	-1.82	-0.04	-8.00	0.55	-5.06	-14.14	-13.20
2017	2.60	0.94	2.37	2.29	4.09	0.08	3.29	-0.67	1.89	0.88	1.41	2.29	23.58	27.51
2016	-6.50	-0.23	6.96	3.00	-0.57	-3.18	4.63	0.04	1.37	-1.74	-1.55	3.33	4.93	5.12
2015	-0.21	5.82	-1.68	3.81	-1.16	-2.14	1.10	-6.87	-3.60	7.28	-1.48	-2.30	-2.29	-4.71
2014	-3.78	5.10	-0.27	1.91	1.57	1.63	-1.33	0.74	-4.05	-1.54	1.38	-3.38	-2.42	-3.03
2013	4.24	-1.29	0.86	3.91	-1.68	-3.74	5.60	-1.61	6.54	3.85	0.23	2.25	20.26	15.54
2012	5.35	5.17	-0.91	-1.64	-11.04	5.61	0.71	3.63	3.66	0.44	2.16	3.31	16.35	18.11
2011	2.17	3.53	-1.39	4.53	-2.40	-0.97	-1.79	-6.89	-9.89	9.41	-4.82	-0.87	-10.36	-13.63
2010	-4.77	0.47	6.98	-0.97	-10.85	-1.94	10.29	-2.77	9.30	3.79	-5.06	7.98	10.48	12.05

● Statistics

	TOBAM LBRTY All World ex USA Equity Index	BBG World Ex-US L/M TR
Return (Aug '08 - Mar '24)	137.53 %	101.13 %
Annualized return	5.71 %	4.59 %
Volatility	18.78 %	18.16 %
Sharpe ratio	0.25	0.20
Tracking error	4.33 %	
Downside deviation	12.03 %	11.75 %
Sortino ratio	0.39	0.31
Information ratio	0.26	
Correlation to index	0.97	
Beta to index	1.01	

TOBAM LBRTY EMERGING MARKETS EQUITY PERFORMANCE

Sources: TOBAM, Bloomberg. Indexes are unmanaged and do not incur management fees, costs and expenses. One cannot invest directly in an index.

Warning: Past performance is not an indicator or a guarantee of future performance. The value of your investment and income received from it can go down as well as up and you may not get back the full amount invested. Performance details provided are in USD and include reinvested dividends.

Returns reflect back tested data from Aug 29, 2008 to Jul 03, 2023, plus live data for the TOBAM LBRTY Emerging Markets Equity Index (AB) from Jul 03, 2023 to date.

Back tested results are for information purposes only. They are intended to illustrate how the Strategy may have behaved had it been launched prior to Jul 03, 2023. The back tests are gross of tax and exclude costs of transaction and fee assumptions.

● Monthly Returns(%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Index	YTD Bench
2024	-1.35	0.82	2.55										1.99	1.87
2023	2.82	-2.68	2.66	2.12	2.27	3.20	5.58	-4.49	-2.39	-3.65	8.72	7.60	22.85	8.47
2022	-0.87	1.04	4.54	-7.20	0.70	-11.06	4.18	1.23	-6.81	0.52	9.11	-3.32	-9.32	-20.54
2021	-3.41	-1.46	4.15	3.11	4.72	-0.70	-0.20	4.40	-2.27	-1.61	0.07	2.58	9.31	0.21
2020	-3.04	-6.11	-20.99	12.34	4.52	6.97	9.76	0.96	-2.90	2.83	12.05	8.46	21.47	22.03
2019	4.16	-0.66	2.74	0.78	-3.57	3.61	-1.32	-3.31	4.28	3.73	-0.91	5.35	15.34	18.81
2018	4.93	-3.52	-1.26	1.24	-4.02	0.32	3.92	0.12	-1.59	-8.22	4.51	-0.15	-4.45	-12.01
2017	5.10	4.33	3.96	0.93	2.51	0.83	4.38	1.65	-2.05	2.59	0.55	5.03	33.90	35.95
2016	-4.27	-0.10	8.06	0.13	-0.99	0.85	4.44	-0.25	0.87	-0.54	-5.49	-0.75	1.30	11.61
2015	0.47	2.24	-3.07	3.80	-1.80	-2.16	-5.03	-3.86	-0.48	4.69	-4.29	-1.62	-11.06	-11.75
2014	-4.91	4.37	4.47	1.83	1.18	3.75	0.45	2.69	-7.34	-1.06	-0.68	-4.82	-0.93	-0.94
2013	0.81	-2.38	-0.70	-1.55	-4.86	-5.59	1.81	-1.35	4.19	5.03	-4.91	0.20	-9.50	-1.20
2012	9.48	4.69	-2.16	-1.01	-9.24	3.81	0.52	0.23	5.32	-1.07	0.91	5.53	16.94	20.36
2011	-5.88	0.68	4.29	4.20	-0.82	-1.66	-0.31	-3.26	-14.29	11.02	-5.15	-1.92	-14.26	-18.97
2010	-5.34	2.55	8.00	1.00	-7.52	0.52	9.21	-0.14	10.70	3.91	-2.59	7.22	28.95	19.91

● Statistics

	TOBAM LBRTY Emerging Markets Equity Index	BBG Emg Mkt L/M TR
Return (Aug '08 - Mar '24)	188.82 %	80.08 %
Annualized return	7.04 %	3.85 %
Volatility	18.24 %	19.80 %
Sharpe ratio	0.33	0.14
Tracking error	8.77 %	
Downside deviation	11.71 %	12.65 %
Sortino ratio	0.52	0.23
Information ratio	0.36	
Correlation to index	0.90	
Beta to index	0.83	

tobam*
unbiased.

CONCLUSION

Since its beginning:

- TOBAM's ONLY focus is the long-term risk reward of its clients

- We believe that, side by side with diversification, Democracy, Respect of Human Rights and Civil Rights are key to innovations and economic growth

- TOBAM had human rights at the core of its values.

→ LBRTY®

Reducing both direct and indirect Authoritarian Exposure
- enhances long term expected returns
- reduces market risk induced by geopolitical instability

ABOUT TOBAM

tobam*
unbiased.

TOBAM is an asset management company offering innovative investment capabilities designed to increase diversification. Its mission is to provide rational and professional solutions to long term investors in the context of efficient markets.

The Maximum Diversification® approach, TOBAM's flagship investment process founded in 2006, is supported by original, patented research and a mathematical definition of diversification and provides clients with diversified core exposure, in both the equity and fixed income markets.

In line with its mission statement and commitment to diversification, TOBAM also launched a separate activity on cryptocurrencies in 2017.

TOBAM manages approx. US$5 billion (at December 30, 2023). TOBAM's team is composed of 40 professionals.

For more information, visit www.tobam.fr

CONTACTS

PARIS
49-53, Avenue des
Champs Élysées,
75008 Paris
France

NEW YORK
DUBLIN

CLIENT SERVICE
clientservice@tobam.fr

tobam*
unbiased.

DISCLAIMER