

# TOBAM LBRTY®

## Civil and Democratic Rights Strategies

### TOBAM Event - Oct 10<sup>th</sup>, 2023

'Introducing TOBAM LBRTY strategy: How mitigating portfolio's exposure to autocratic regimes can lead to superior returns'

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

Institutional investors only - Do not distribute further

AF, TXP

  
\*  
tobam  
unbiased.

## TOBAM LUNCH PRESENTATION - OCT 4<sup>TH</sup>, 2023

### **Introducing TOBAM LBRTY<sup>®</sup> strategy:**

How mitigating portfolio's exposure to autocratic regimes can lead to superior returns

### **Speaker:**



**Christophe Roehri**  
Deputy CEO, TOBAM

1. **TOBAM**

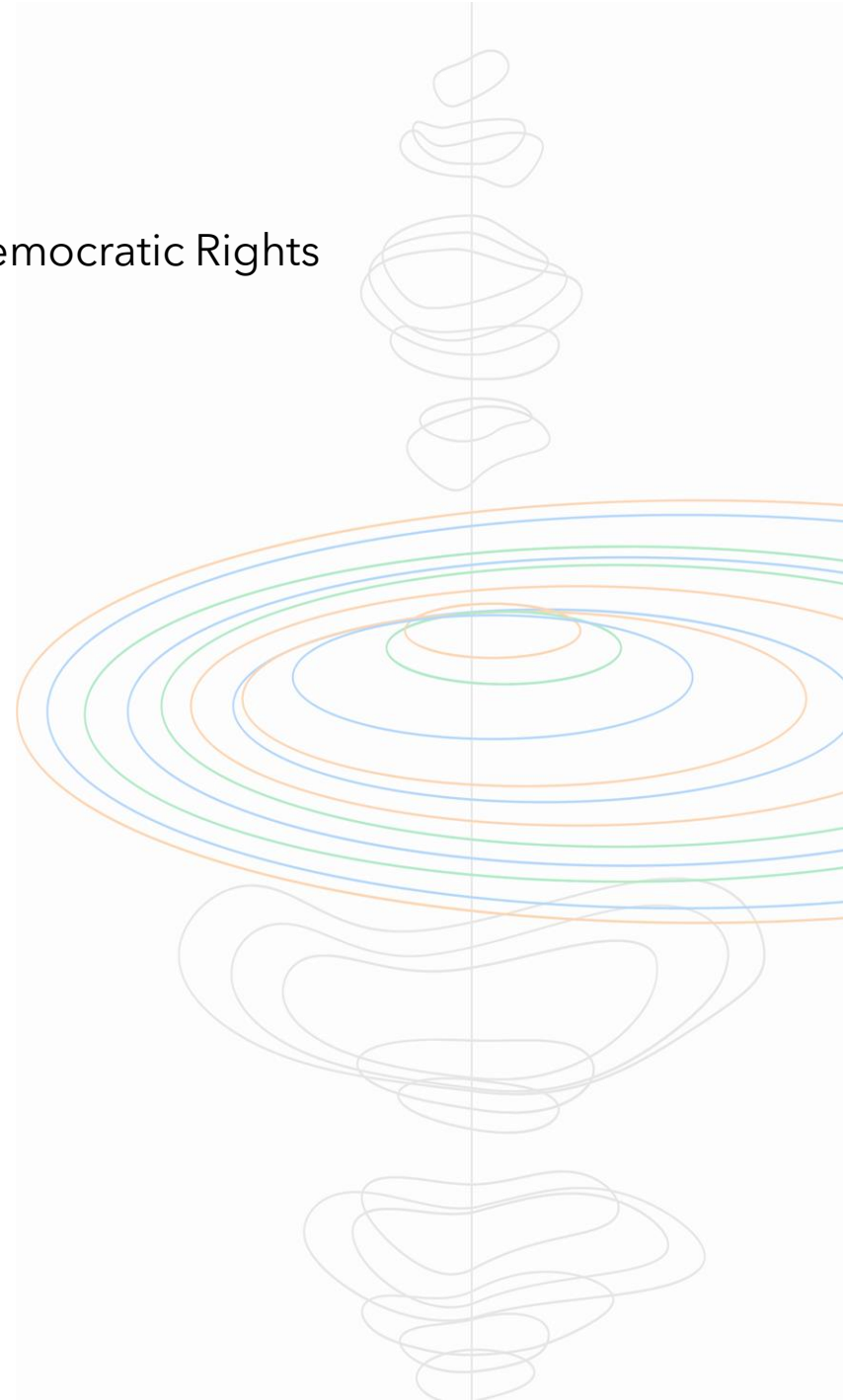
2. Investment Philosophy - The case for Civil and Democratic Rights

3. Investment Process

4. Empirical results

5. Conclusion

6. Appendix



## MIGRATING TOBAM FROM A MONO-CORE STRATEGY...

**TOBAM\***  
CORE INVESTMENTS



tobam\*  
unbiased.

.... To Multi-Core Strategies

Since  
2016



CrypTOBAM®

(Satellite Strategy)

Since  
2009

TOBAMSolutions®

Since  
2006

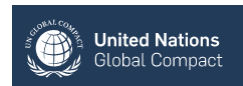
Maximum  
Diversification®

**LBRTY®**

**NEW**

# TOBAM'S COMMITMENT TO HUMAN RIGHTS ADDRESSING THE TYRANNY RISK

## TOBAM's journey into Human Rights



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

*Conferences, Interviews, Webinar, Internal presentation*

2019

Onboarding of **Reporters without Borders**  
Fundraising Campaign after the Blast in Beirut

2020

Fundraising Campaign for Ukraine in coordination with HRW

2021

**Launching LBRTY®, first fund focused on Civil Rights & Democracy**

2023



1. TOBAM

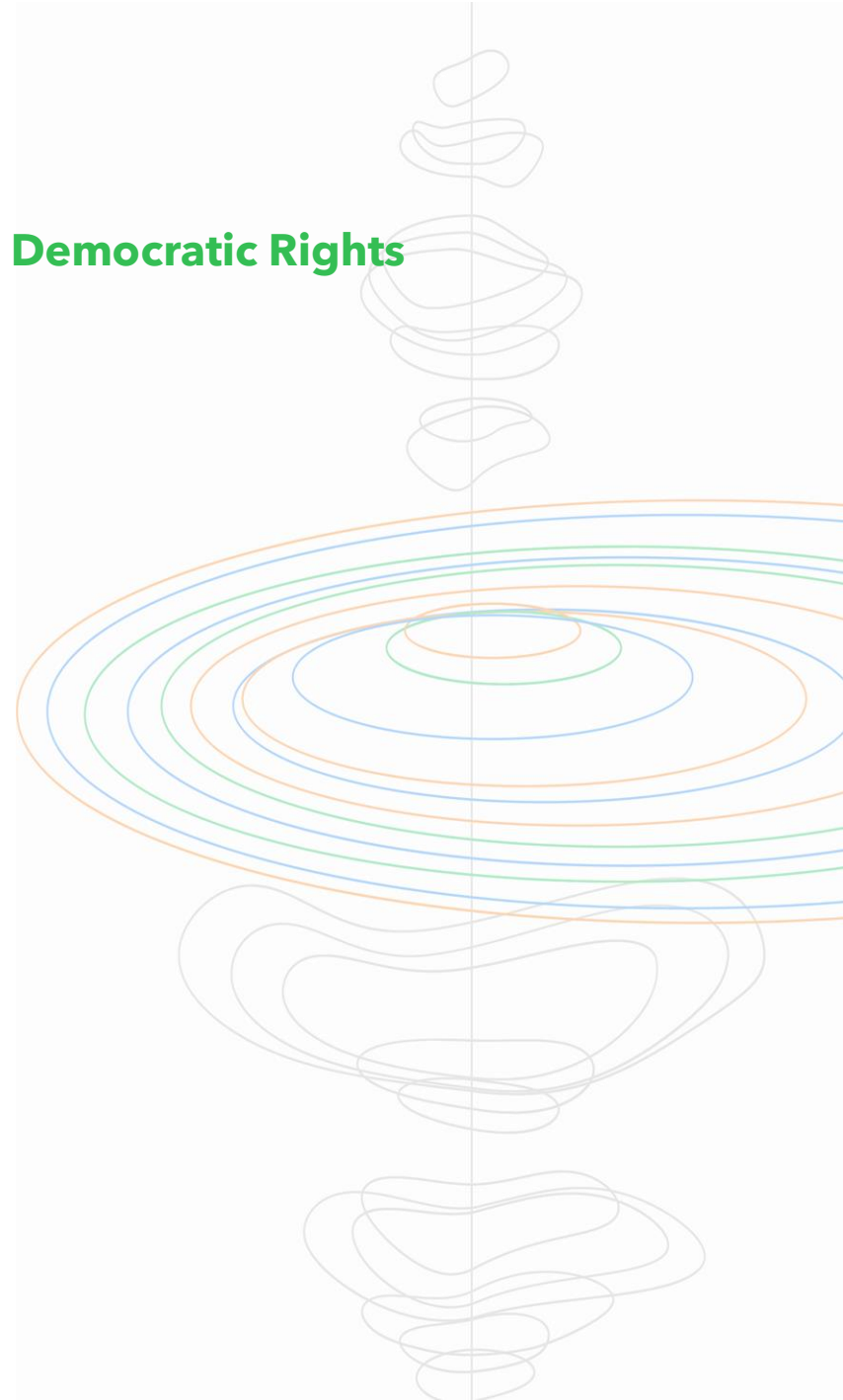
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## INVESTMENT PHILOSOPHY

- 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.

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

#### 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 Papaloannou  
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)

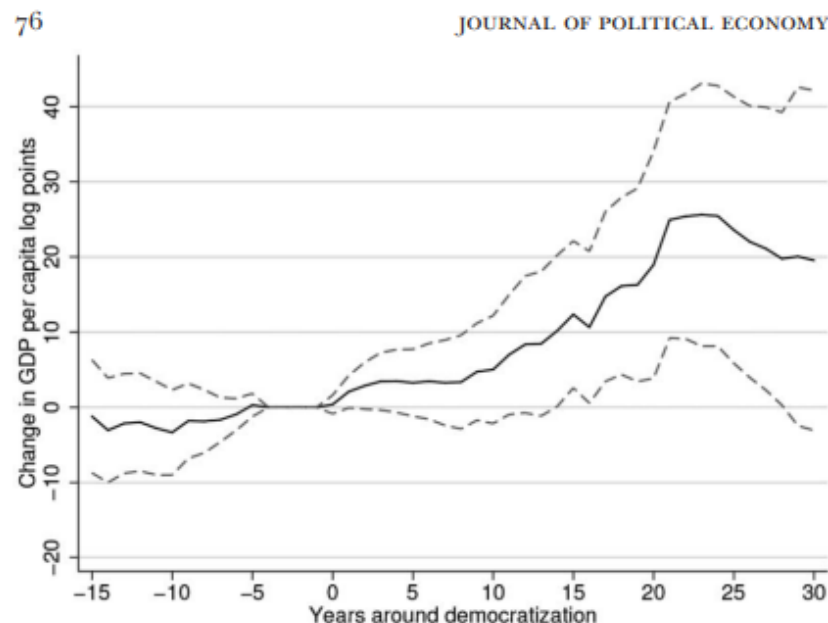
#### The economic costs of a discriminatory ideology

Kilian Huber, Volker Lindenthal, Fabian Waldinger / 8 Oct 2018

## ILLUSTRATION: DEMOCRACY DOES CAUSE GROWTH (ACEMOGLU & AL. 2019)

Acemoglu & al (2019) identify 122 democratizations and 71 reversals from democracy based on data from 1960 until 2010 and show that:

- There is a positive causal effect of democracy on economic growth.
  - A country that transitions from nondemocracy to democracy achieves about 20 percent higher GDP growth per capita in the next 25 years than a country that remains a nondemocracy.
  - It drives greater investments in capital, schooling, and health.
  - The effect of democracy does not depend on the initial level of economic development/level of income.
- Acemoglu & al (2019 : Estimated avg effect on GDP per capita on countries that democratized



The solid line plots the estimated average effect on GDP per capita on countries that democratized (in log points), with a 95 percent confidence interval in dashed lines

Source: TOBAM, Acemoglu et al 2019



## LAUNCHING FIRST FUND FOCUSED ON CIVIL RIGHTS & DEMOCRACY *ADDRESSING THE TYRANNY RISK*

- Identifying the “tyranny risk driver”
- Building a portfolio under exposed to the tyranny risk

TOBAM’s findings:

1. There is a tyranny risk driver
2. This risk driver is negatively rewarded
3. Most of the exposure to the tyranny risk driver is indirect
4. The tyranny risk driver is independent from other risk drivers

## GERMANY 1930-1950: REVERSE J-CURVE

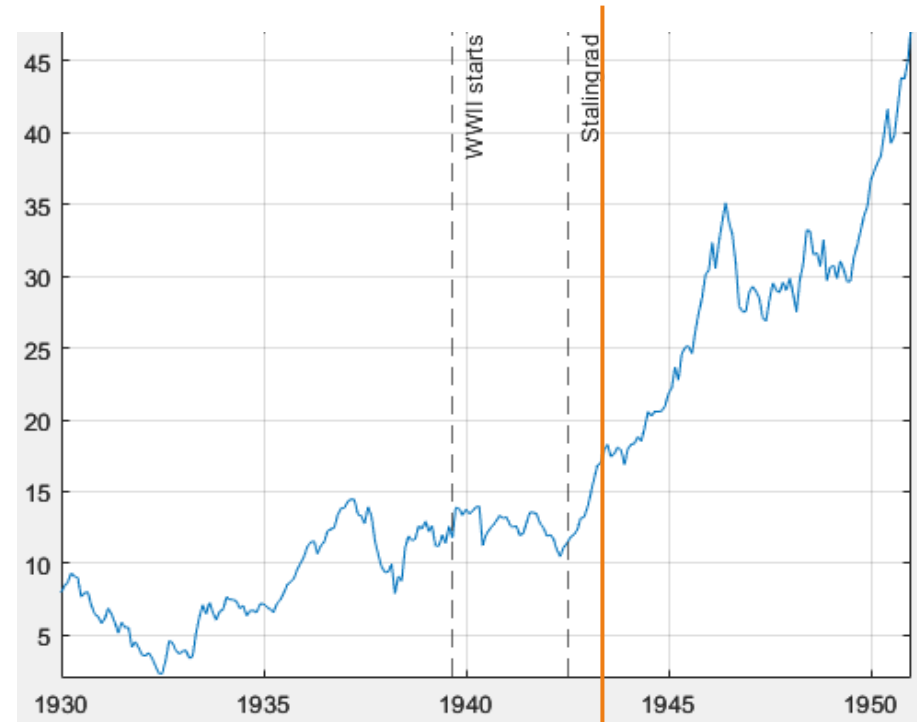
Germany's stock market knew a sharp rise from 1939 to 1944.

This rise is not present in the US market.

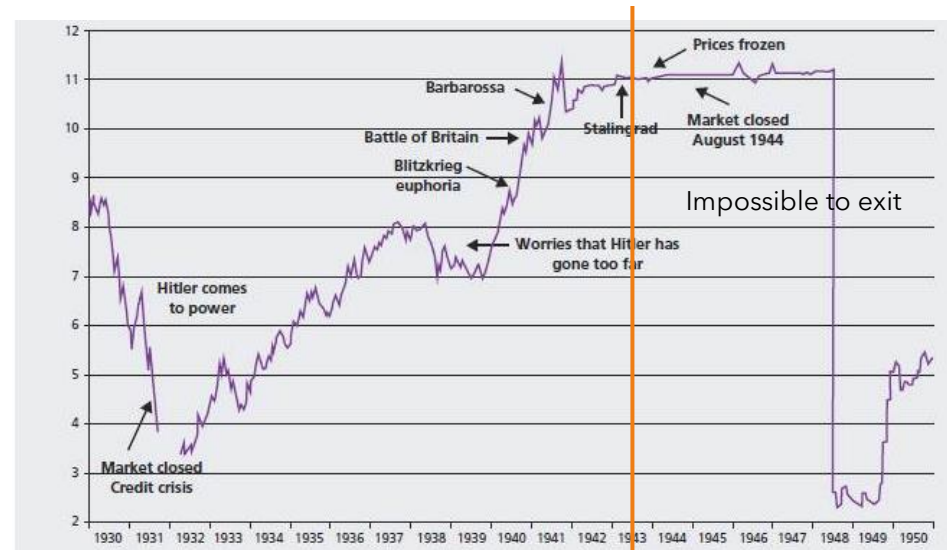
From 1944, prices were frozen, and it was impossible to get out from the German's stocks market.

The German's stocks market opened back in mid-1948 with a fall of ~80% (+inflation).

- US Stock Market



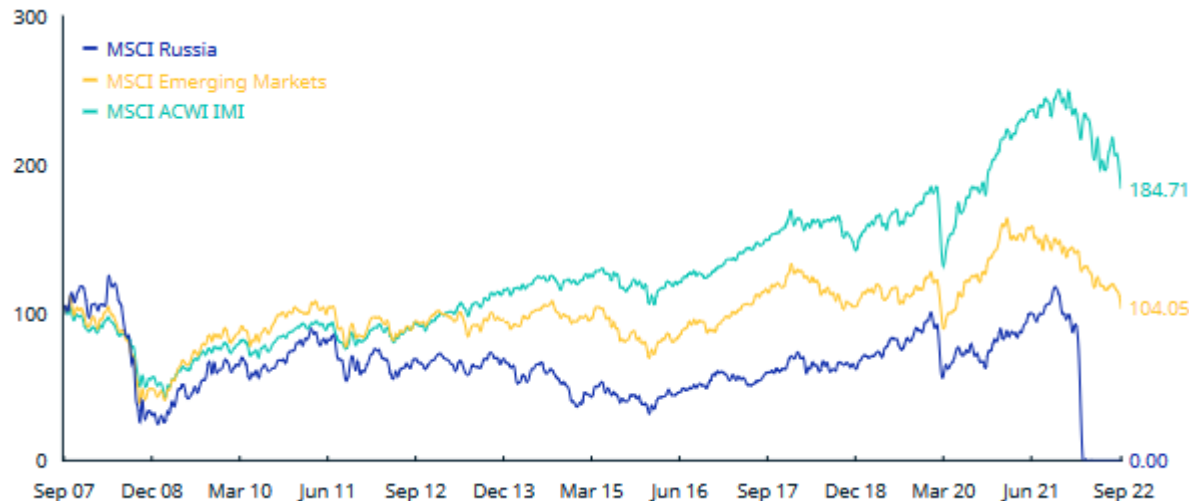
- Germany CDAX Index : 1930 - 1950



## ILLUSTRATION ON FINANCIAL MARKETS: 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)



Source: TOBAM, MSCI

# DEMOCRACIES AND WARS IN THE 20TH CENTURY ACCORDING TO... CHATGPT

YV number of wars in the 20th century



It is difficult to give an exact number of wars that occurred in the 20th century, as there is some debate over what constitutes a "war." However, some estimates suggest that there were **around 180 armed conflicts** that took place during the 20th century. This includes both major international wars and smaller, less well-known conflicts.

The number of wars also depend on how they are defined or categorized. Some sources might include civil war and other internal conflicts, while others might only consider conflicts between nation-states to be "wars."

However, it is important to highlight again that the number may vary depending on how conflicts are defined and categorized, giving a exact number is hard.

YV how many wars opposed 2 independant democratic countries during the 20th century?



There were very few instances of two independent, democratic countries engaging in war with each other during the 20th century.

One notable example is the War of the Pacific (1879-1883) fought between Chile, Bolivia and Peru. Chile was considered a democratic country during this time and all the three countries were independent

Another notable example was the the Football War (1969) between Honduras and El Salvador, which was a **100 hour-long conflict**, the cause of the war were not just the Football but also caused by disputes over land, economic issues and immigration. Both countries were democratic but not fully consolidated democracies.

Those are the main examples that comes to mind when it comes to fully independent democratic countries fighting each other, however this is a very rare ocurrence in history.

# WEAR YOUR CORRELATION GLASSES !!!



## Over 1,000 Companies Have Curtailed Operations in Russia—But Some Remain

November 28, 2022



Source: Yale University, as of Nov 28<sup>th</sup>, 2022

## \$240 billion: The cost of abandoning Russia for global corporations



by Ansh Pandey — October 9, 2022 in Europe, Geopolitics Reading Time: 4 mins read



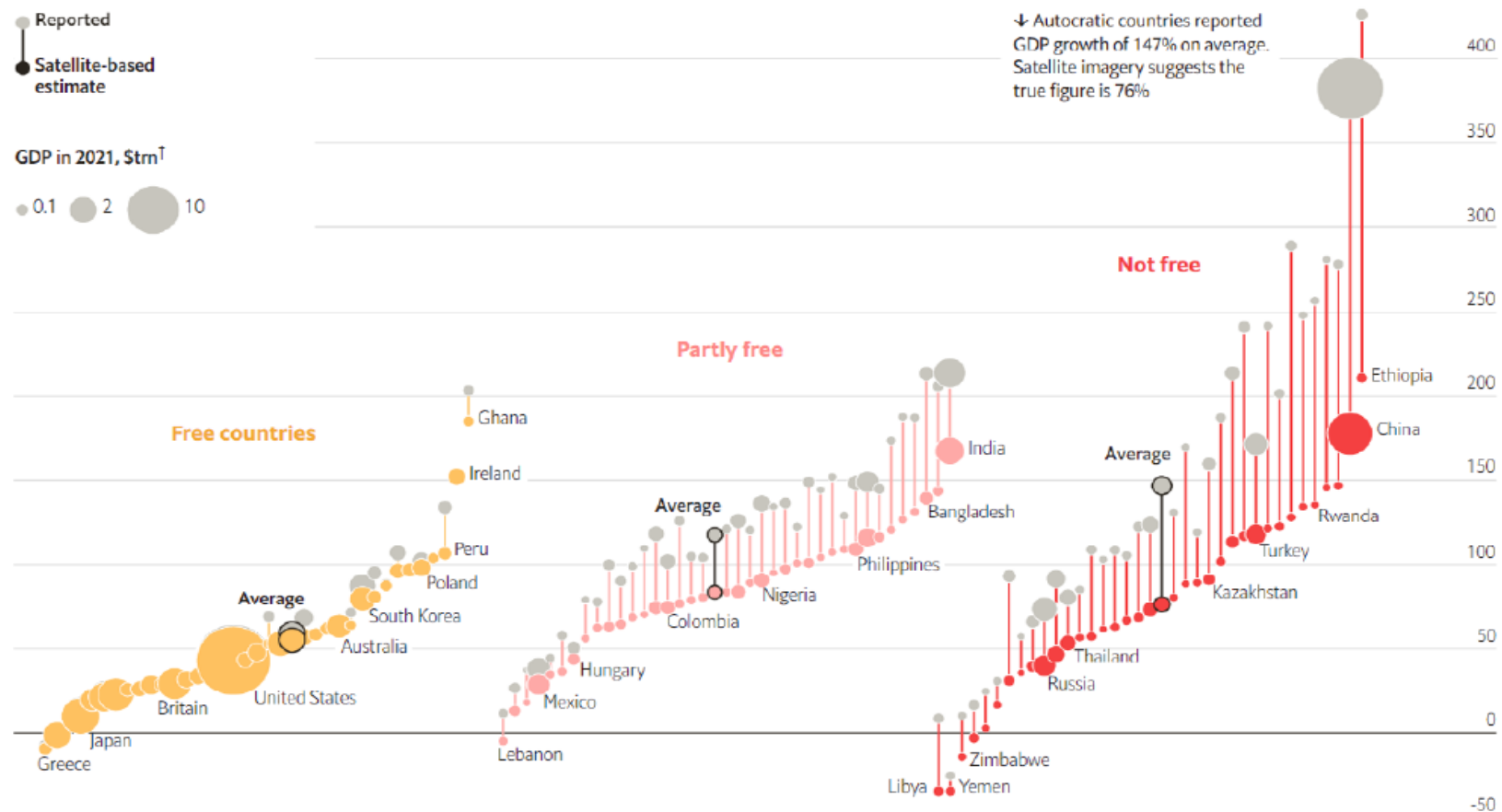
Source: <https://tfiglobalnews.com/>

# DO NOT TRUST DICTATORS' GDP GROWTH ESTIMATES

We should not trust the dictators' GDP growth estimates (L.R. Martinez, 2022):

- GDP growth reported by autocracies are **inflated by up to 35%** per annum on average.
- In the long run, the **reported GDP growth** numbers nearly **doubled** the autocracies' **actual** economic **growth**.

- Change in GDP, 2002-2021, %\*



Source: The Economist, 1-7 October 2022, p.77; "How much should we trust the dictators' GDP growth estimates?", L.R. Martinez, 2022; Freedom House; World Bank. \*In 2021 USD at market exchange rates, assuming reported 1992 GDP figures are accurate. †Countries with over 5 million people, freedom status in 2021.

1. TOBAM

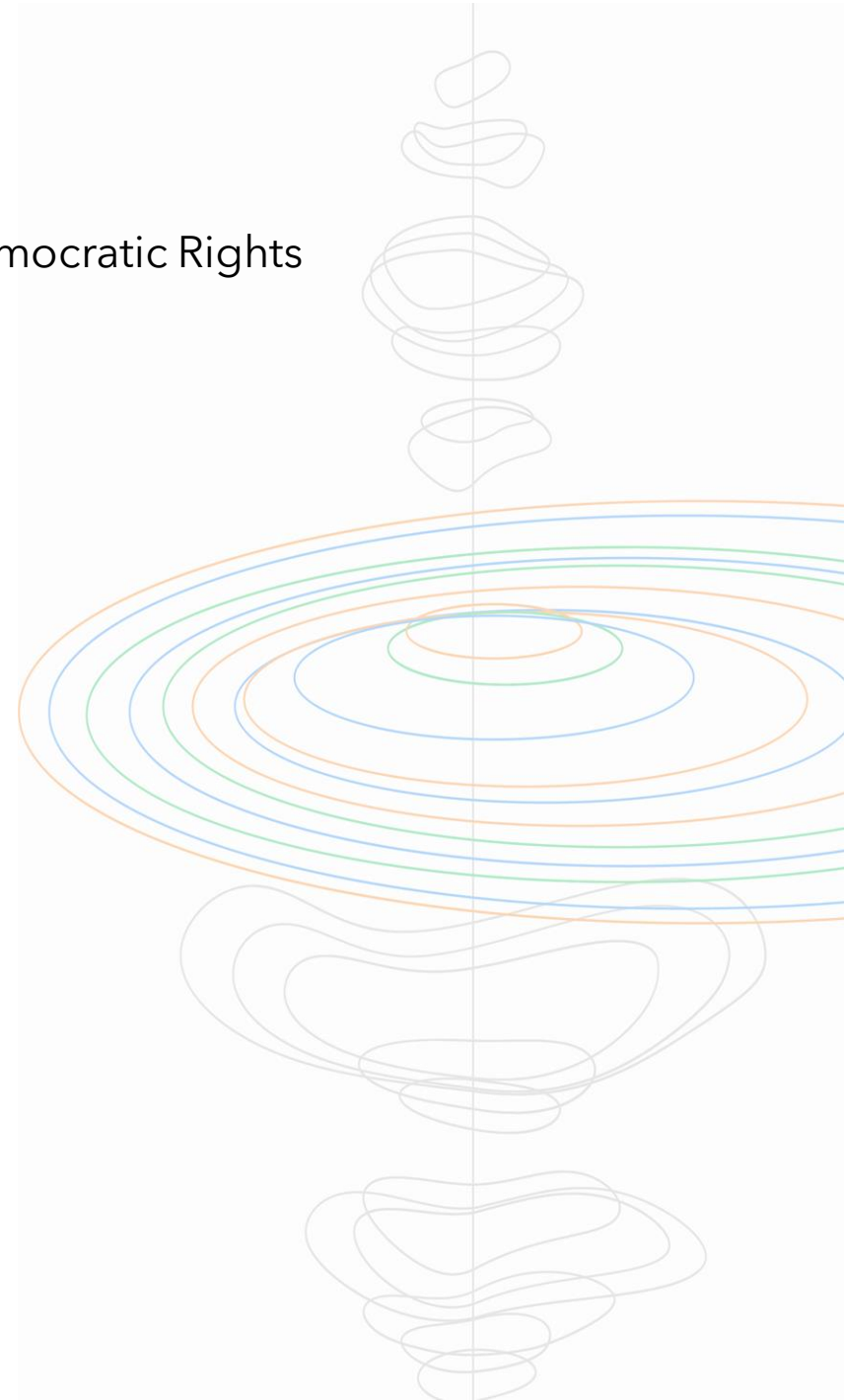
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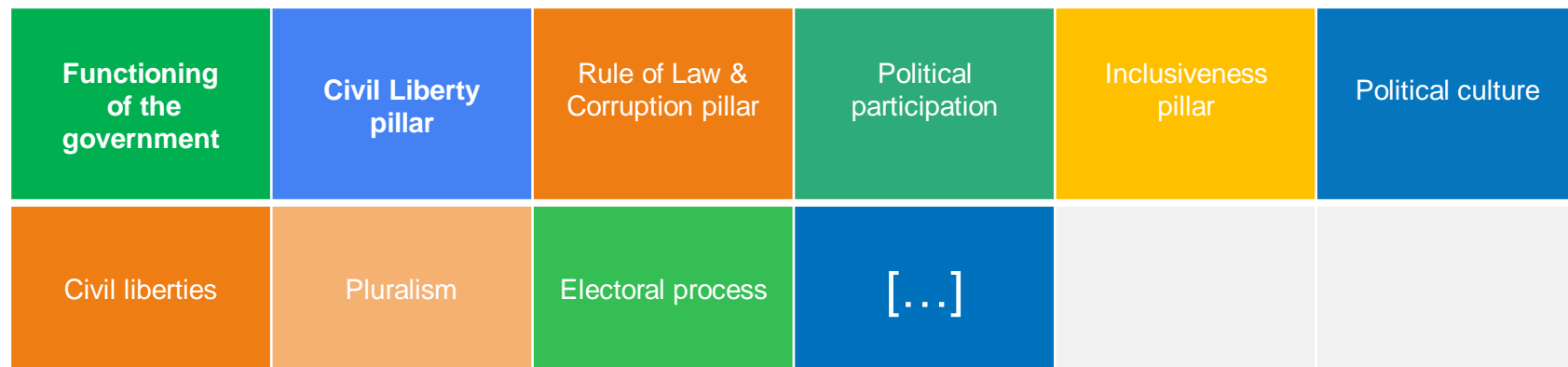


## INVESTMENT PROCESS: LBRTY PORTFOLIO CONSTRUCTION

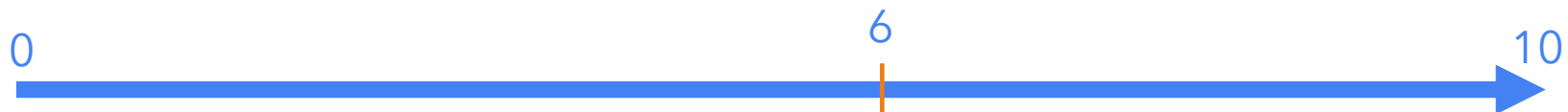
### Measuring Countries Civil Liberty and The State of Democracy

There is plenty of data sources, reliable, independent, neutral.  
Good example of that is VDEM (see illustration next slide).

Datasets include typical pillars:



01. The TOBAM “Country CD rating” synthesizes the information. Country CD ratings are between 0 and 10. The threshold is set at 6.





## EXAMPLE OF DATASET: THE V-DEM PROJECT

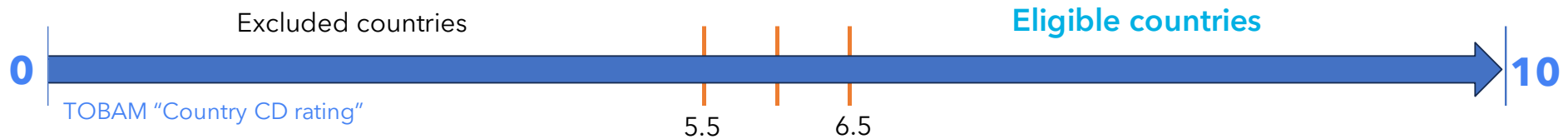
- Founded in 2011, Varieties of Democracy (V-Dem) is a unique approach to conceptualizing and measuring democracy. It provides a multidimensional and disaggregated dataset **dating back to before 1789** that reflects the complexity of the concept of democracy as a system of rule that goes beyond the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

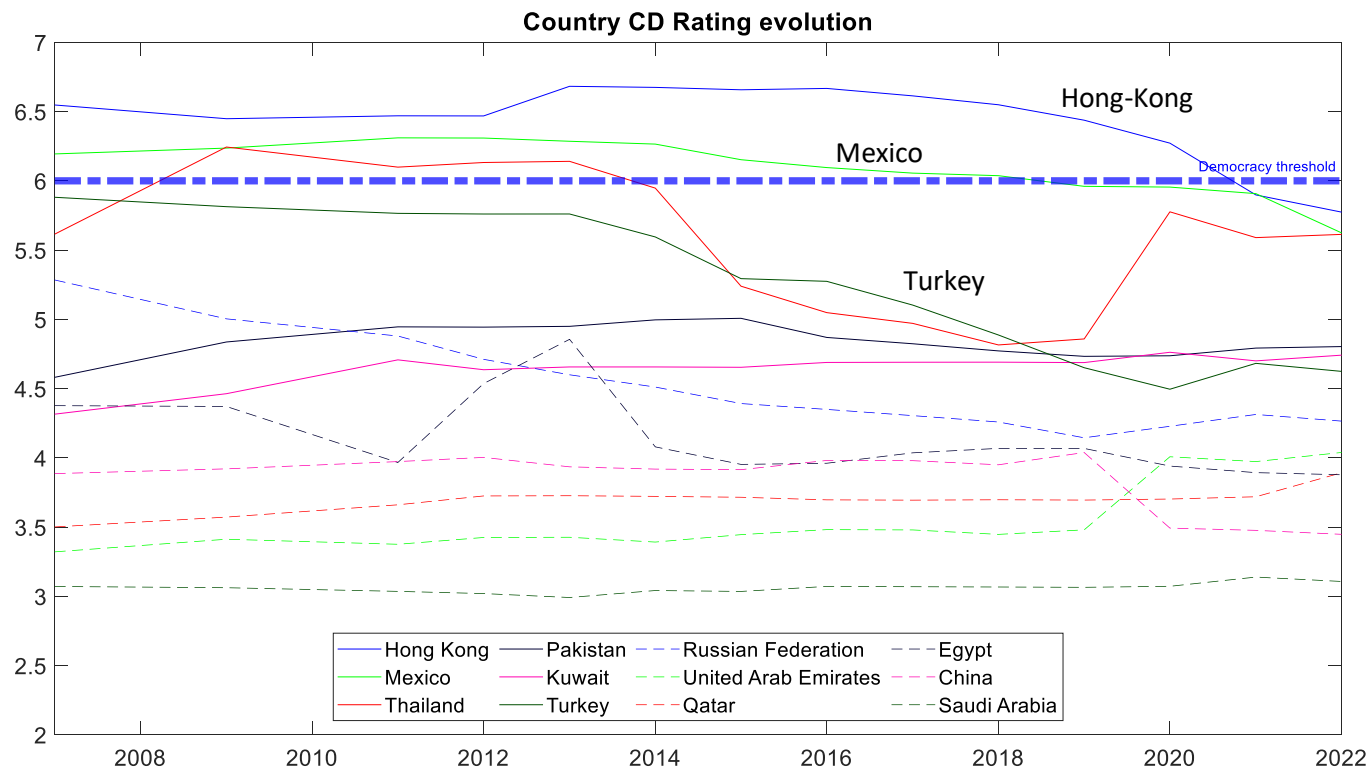


# INVESTMENT PROCESS: LBRTY PORTFOLIO CONSTRUCTION

## 2. Define Eligible countries:



The **CD Governance Committee** comprising external experts decides, based on granular information, whether countries are improving or not.



12 countries, classified as nondemocratic, are part of the index as of Dec-22.

Country CD ratings are relatively stable over time.

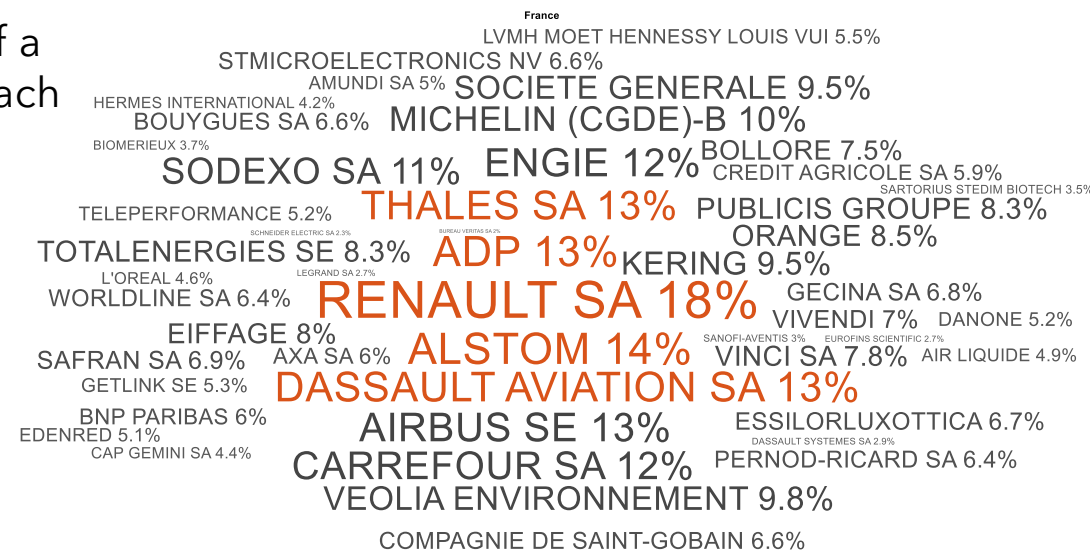
# INVESTMENT PROCESS: LBRTY PORTFOLIO CONSTRUCTION

## 03. Additional exclusion lists (tobacco,...). The stocks of this Benchmark constitute the **Investment Universe**

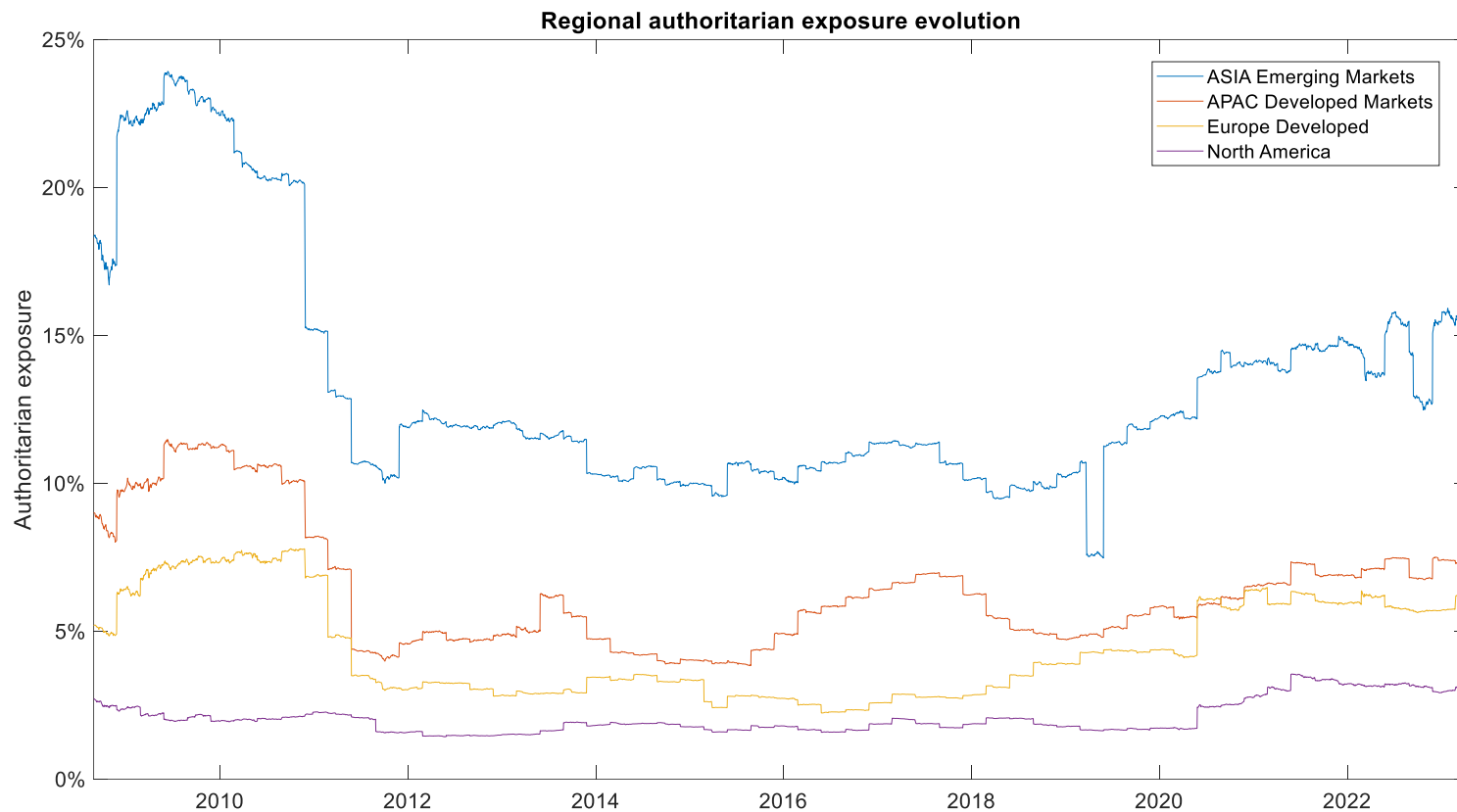
Compute **Whitelisted Benchmark**: Mkt-Cap weighted portfolio of Investment Universe

## 04. 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.
- Define the **authoritarian exposure** (AE) of a company as the sum of its exposure to each authoritarian country.



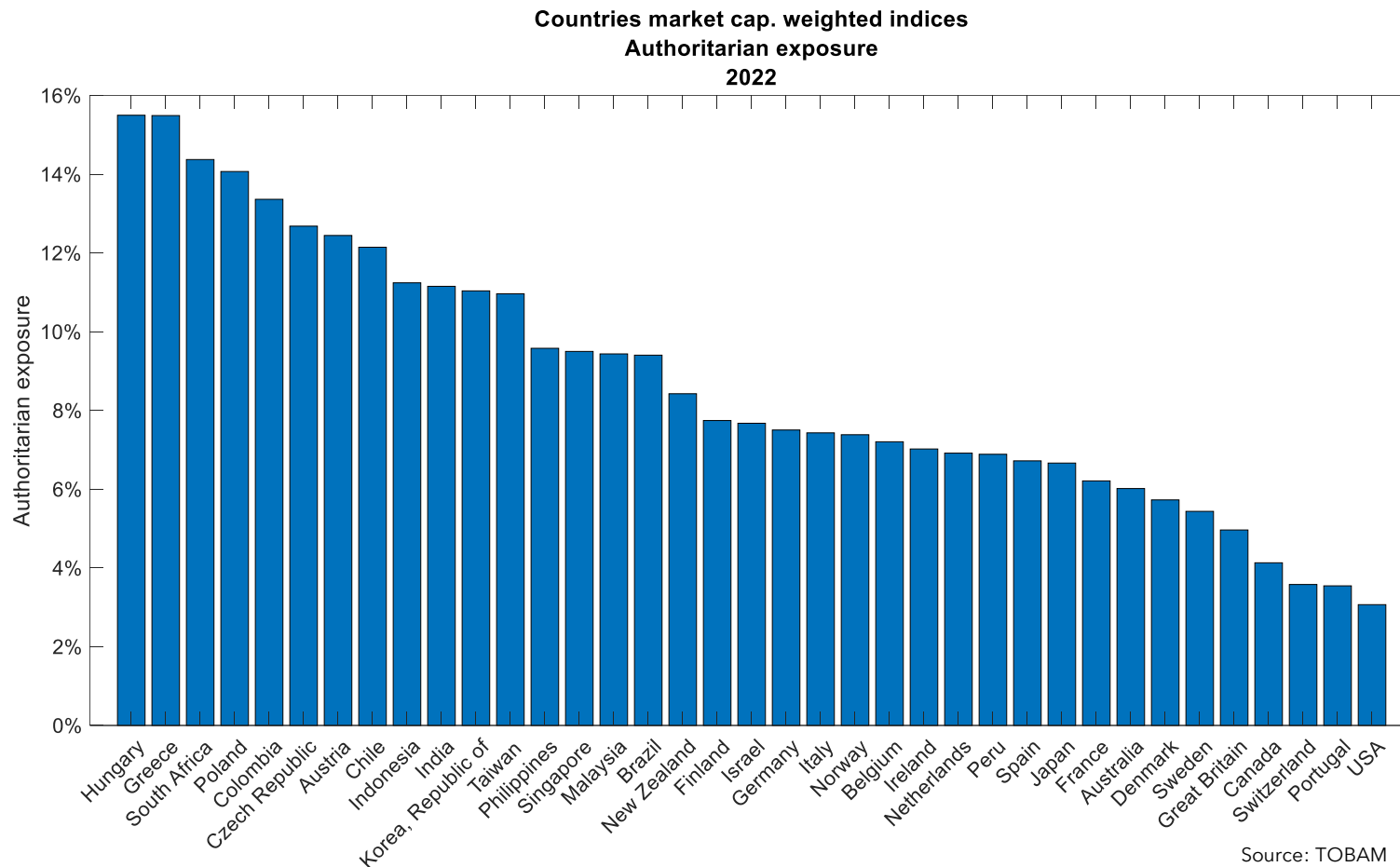
## DEVELOPED REGIONAL BENCHMARKS AUTHORITARIAN EXPOSURE



Source: TOBAM

Democratic Asian benchmarks have recently been two to five times more exposed to authoritarian countries compared to their North-American / European counterparts

# ELIGIBLE **COUNTRY BENCHMARKS** AUTHORITARIAN EXPOSURE AVERAGE 2022

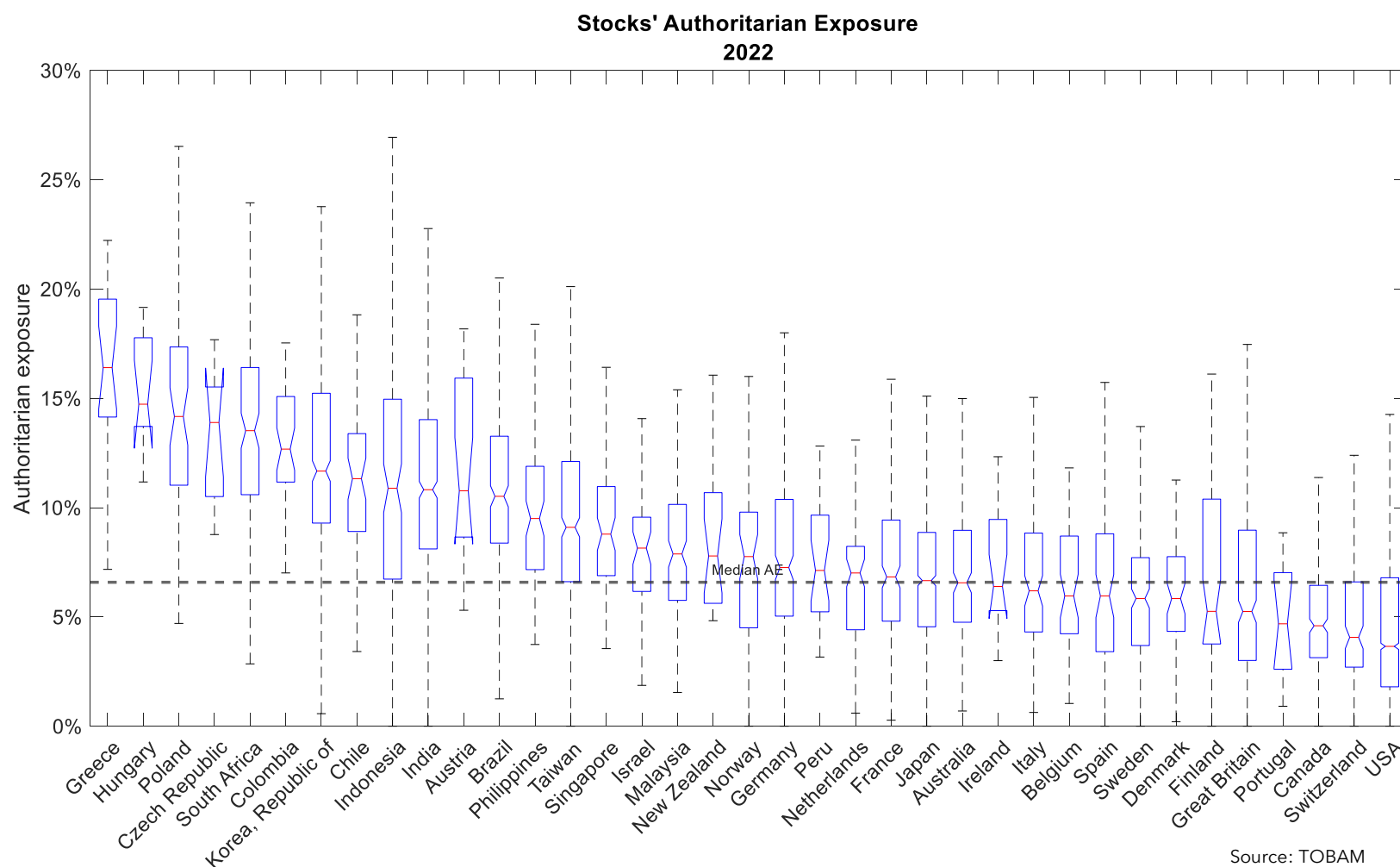


At the country level, democratic benchmarks exhibit a large spectrum of exposures to authoritarian countries, with the South-African and Hungarian benchmarks for example being 4 to 5 times more exposed to authoritarian countries compared to benchmarks of Sweden, USA, Switzerland and Portugal.

# ELIGIBLE **COMPANIES'** AUTHORITARIAN EXPOSURES BY COUNTRY

## 2022

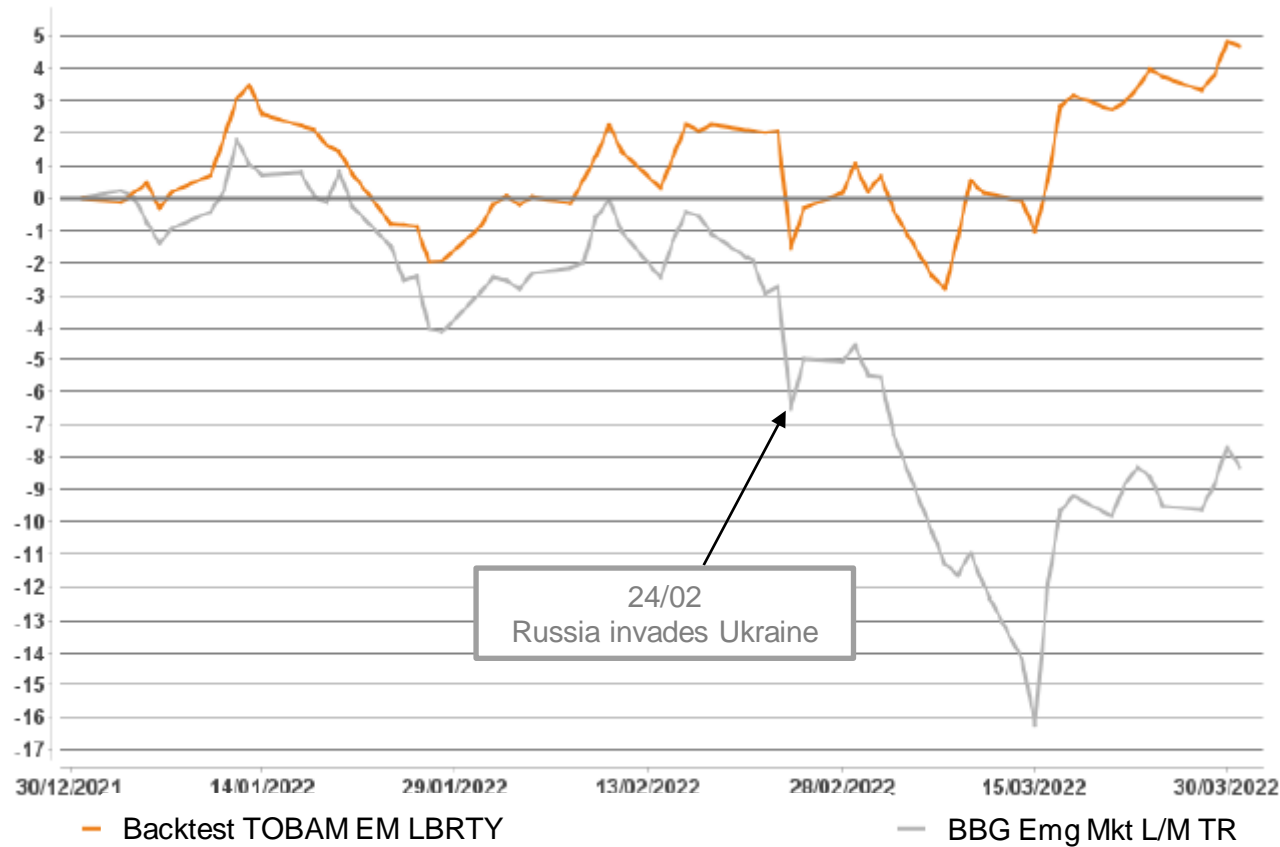
Within a given country, companies exhibit a large spectrum of authoritarian exposures.



## INVESTMENT PROCESS: CD PORTFOLIO CONSTRUCTION

05. **Construct CD Portfolio** : Minimization of overall authoritarian exposure subject to TE constraints

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



### Backtest TOBAM EM LBRTY

**Return:** 4.70%

**Hist volatility:** 15.37%

**Sharpe ratio:**

### BBG Emg Mkt L/M TR

**Return:** -8.32%

**Hist volatility:** 21.92%

**Sharpe ratio:**

**Excess Return:** 13.02%



## TOBAM LBRTY EM PERFORMANCE YTD

- LBRTY EM strategy YTD performance



Sources: TOBAM, Bloomberg. Returns reflect back tested data from Aug 29, 2008 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. 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 details provided are in USD and include reinvested dividends. Performance returns and/or charts illustrating performance provided on this page are net 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. Performance may also be affected by currency fluctuations.

1. TOBAM

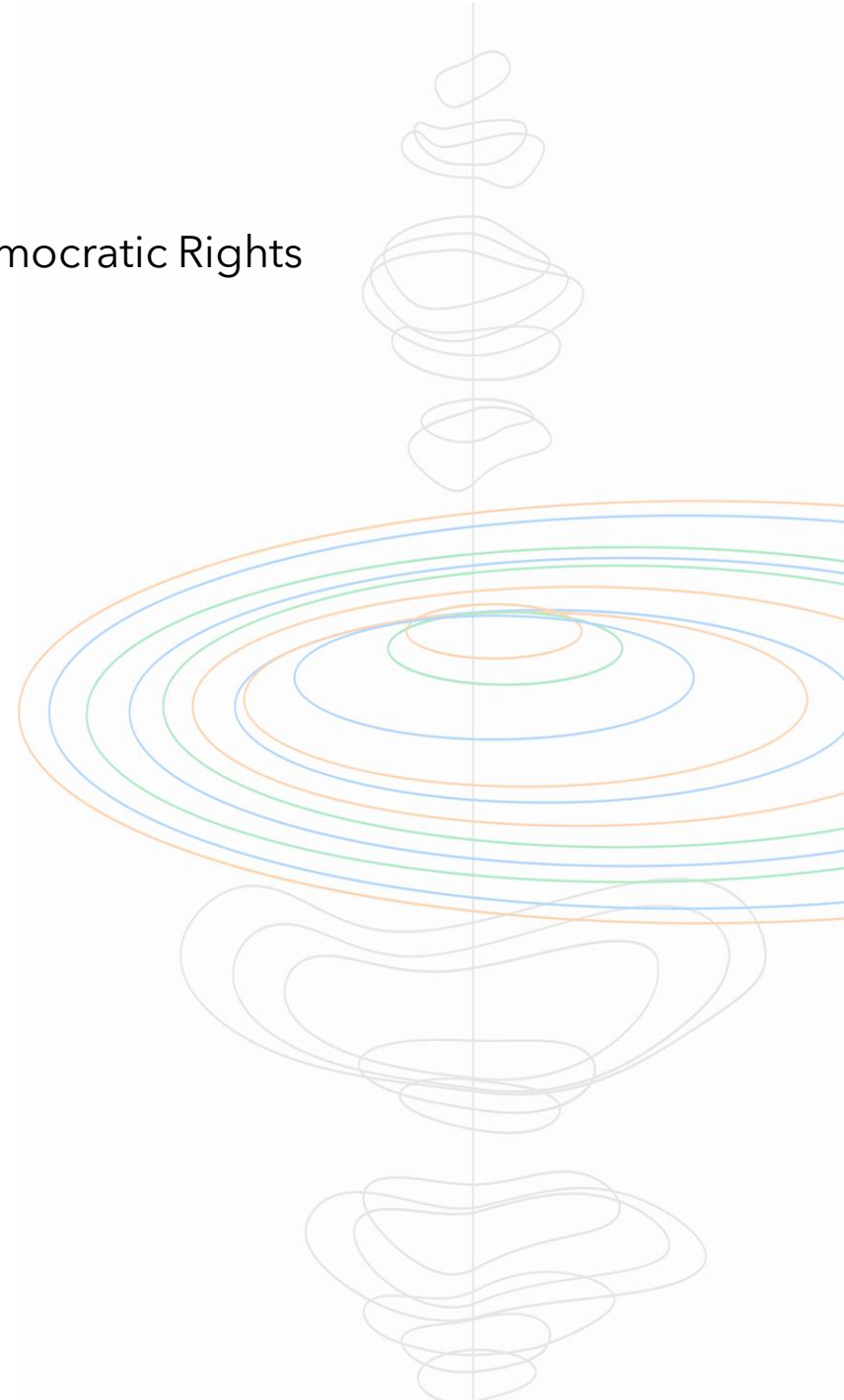
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4. **Empirical results**

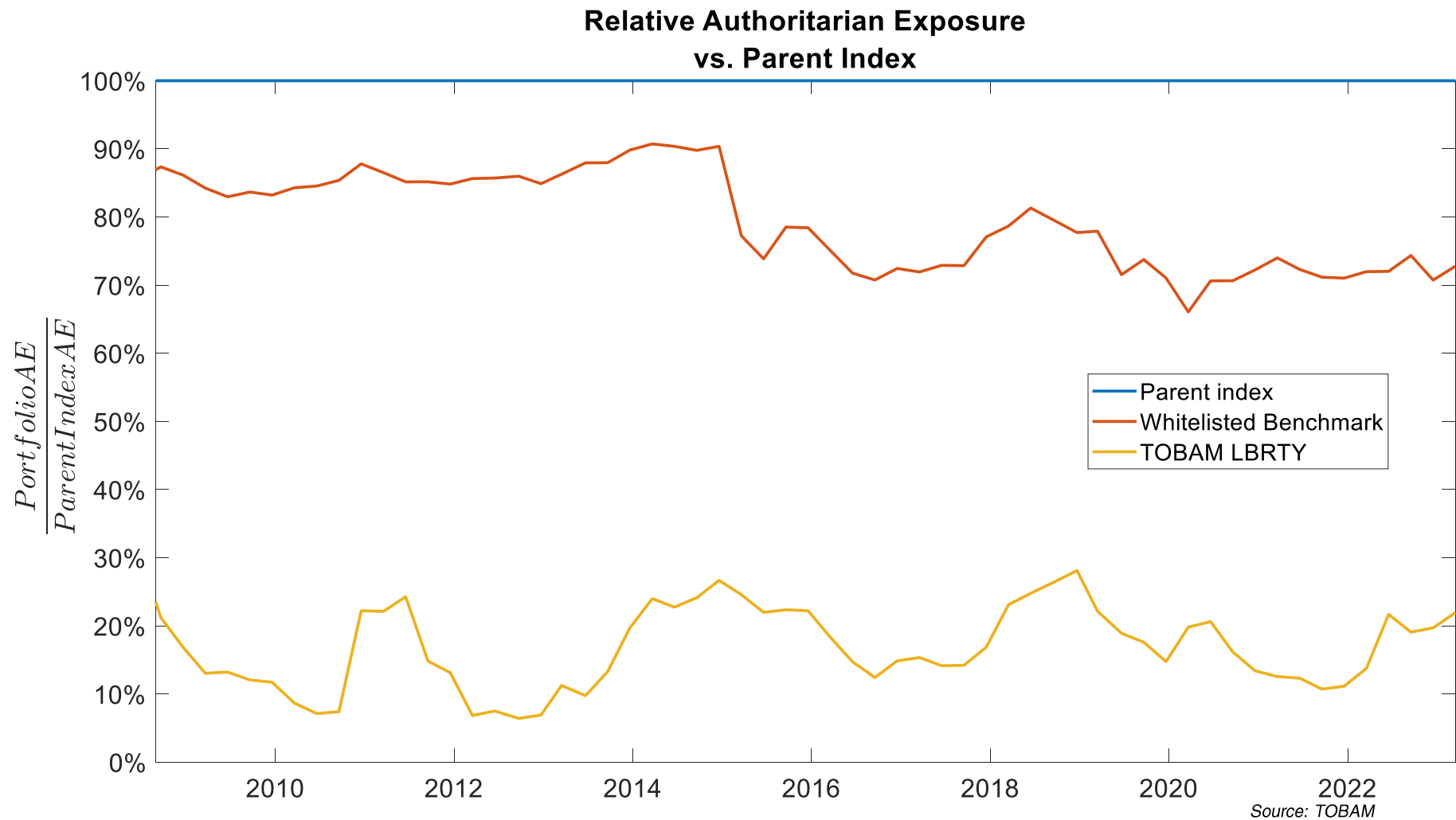
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# PORTFOLIOS RELATIVE AUTHORITARIAN EXPOSURE

WORLD INCL. EM



Within a given country companies exhibit a large spectrum of authoritarian exposures allowing TOBAM LBRTY to exhibit an authoritarian exposure 70 to 90% lower compared to their parent index.

## BACKTEST SUMMARY

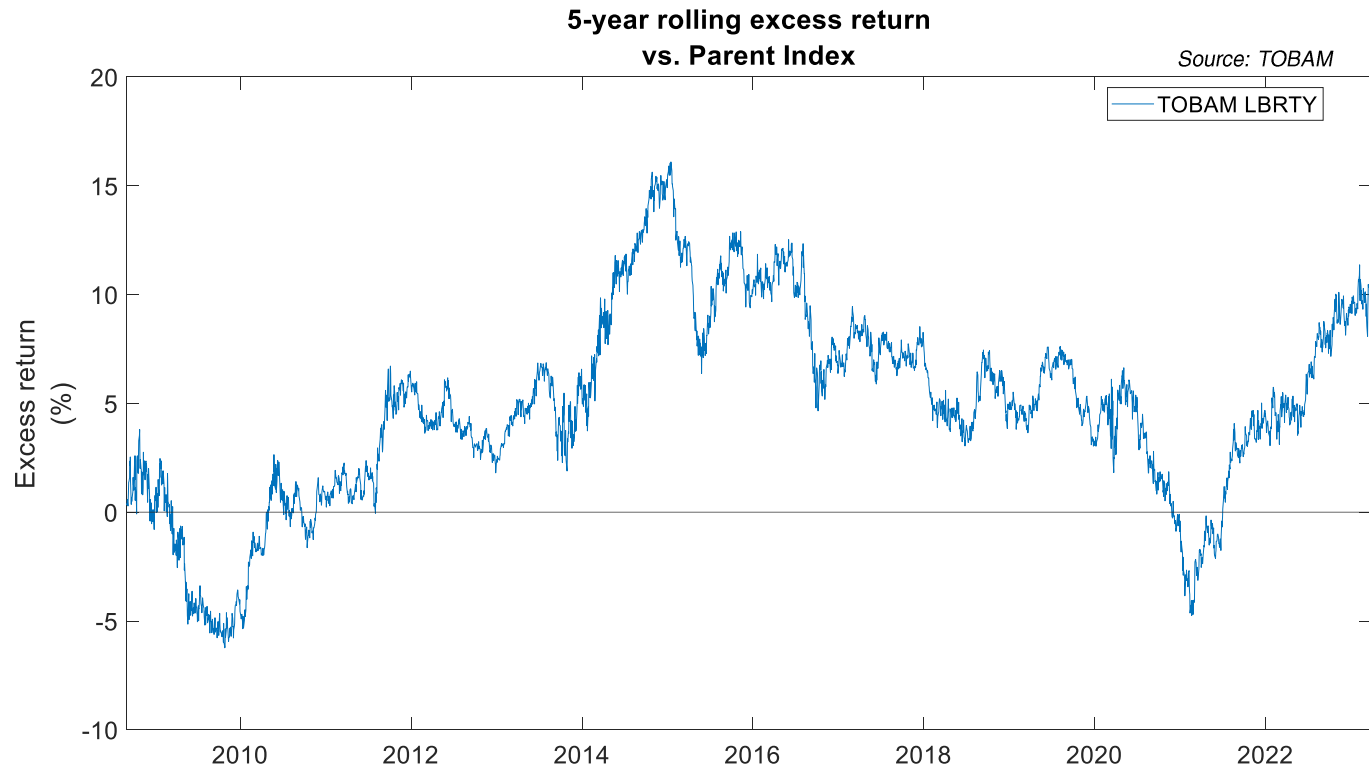
EM

Statistics	BBG EM	BBG EM ex China	Whitelisted Benchmark	TOBAM LBRTY
Annualized Gross return	3.7%	3.5%	3.8%	<b>6.1%</b>
Annualized Net return	3.7%	3.5%	3.3%	<b>5.6%</b>
Vol	20.3%	20.3%	19.5%	<b>18.7%</b>
Sharpe Ratio	0.15	0.14	0.13	<b>0.26</b>
Beta to Mkt	1.0	1.0	0.9	<b>0.9</b>
Average Number of stocks	1099	842	460	<b>135</b>
Average Eff. Number of stocks	161.4	138.7	113.7	<b>61.6</b>
Authoritarian Exposure (2022)	14.0%	11.4%	9.5%	<b>6.0%</b>
Relative Authoritarian Exposure (2022)	100.0%	81.5%	68.4%	<b>42.8%</b>
TE(Parent index)	0.0%	5.3%	6.7%	<b>8.8%</b>
TE(Whitelisted index)	6.7%	4.6%	0.0%	<b>6.3%</b>
TE(BBG EM ex China index)	5.3%	0.0%	4.6%	<b>7.1%</b>

The period covered is from August 2008 to March 2023. 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 40bps . 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

## 5-YEAR ROLLING EXCESS RETURNS

WORLD INCLUDING EM



5 Years Statistics	BBG World (Including EM)	Whitelisted Benchmark	TOBAM LBRTY
Annualized Gross return	7.1%	9.0%	8.5%
Annualized Net return	7.1%	8.6%	8.0%
Vol	17.5%	18.7%	20.5%
Sharpe ratio	0.33	0.39	0.33
Beta to Mkt	1.0	1.1	1.1

The period covered is from February 2008 to March 2023. 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 the Strategy 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

## AQR AND FAMA FRENCH FACTOR EXPOSURES

WORLD INCLUDING EM

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

XR regression	Whitelisted Benchmark	TOBAM LBRTY
Market	1.7%***	3.7%***
SMB	-0.7%	2.4%
HML	-7.1%***	0%
UMD	-0.6%	-1.5%
QMJ	6.5%***	22.1%***
BAB	-1%	-3.1%*
Alpha	0.4%	-0.3%
<b>R<sup>2</sup></b>	21%	10%

Factors are on AQR Global universe. Value (HML), momentum (UMD), size (SMB), 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%.

Fama-French XR regression	Whitelisted Benchmark	TOBAM LBRTY
Market	0.2%	-1.1%
SMB	-8.1%***	-16.2%***
HML	-6.8%***	-1.5%
RMW	4.9%***	18%***
CMA	3.3%**	7.2%*
WML	-0.8%*	-1.3%
Alpha	0.4%	0.2%
<b>R<sup>2</sup></b>	25%	14%

Factors are on Developed universe. Value (HML), momentum (WML), size (SMB), Quality (CMA & RMW)

\*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

WORLD INCLUDING EM

Majority of the TE vs. parent index and 50% of the TE vs. Whitelisted Benchmark is due to the reduction of exposure to authoritarian countries

World (Including EM) Nov 2009 - Mar 2023	Tracking error attribution vs. <b><u>Parent Index</u></b>		Tracking error attribution vs. <b><u>Whitelisted Benchmark</u></b>	
<b><i>Risk factor</i></b>	<b>TCR</b>	<b>PCR</b>	<b>TCR</b>	<b>PCR</b>
Market	0.4%	6.5%	0.3%	6.7%
Authoritarian countries	-0.1%	<b>-1.9%</b>	0.0%	<b>0.0%</b>
Indirect exposure	3.6%	<b>66.3%</b>	2.3%	<b>49.6%</b>
Sector	0.6%	11.2%	0.7%	14.8%
Residuals	1.0%	18.0%	1.4%	28.8%
<i>Total</i>	<i>5.4%</i>	<i>100.0%</i>	<i>4.7%</i>	<i>100.0%</i>

TCR = Total contribution to tracking error

Source: TOBAM

PCR = Percentage contributions to tracking error

1. TOBAM

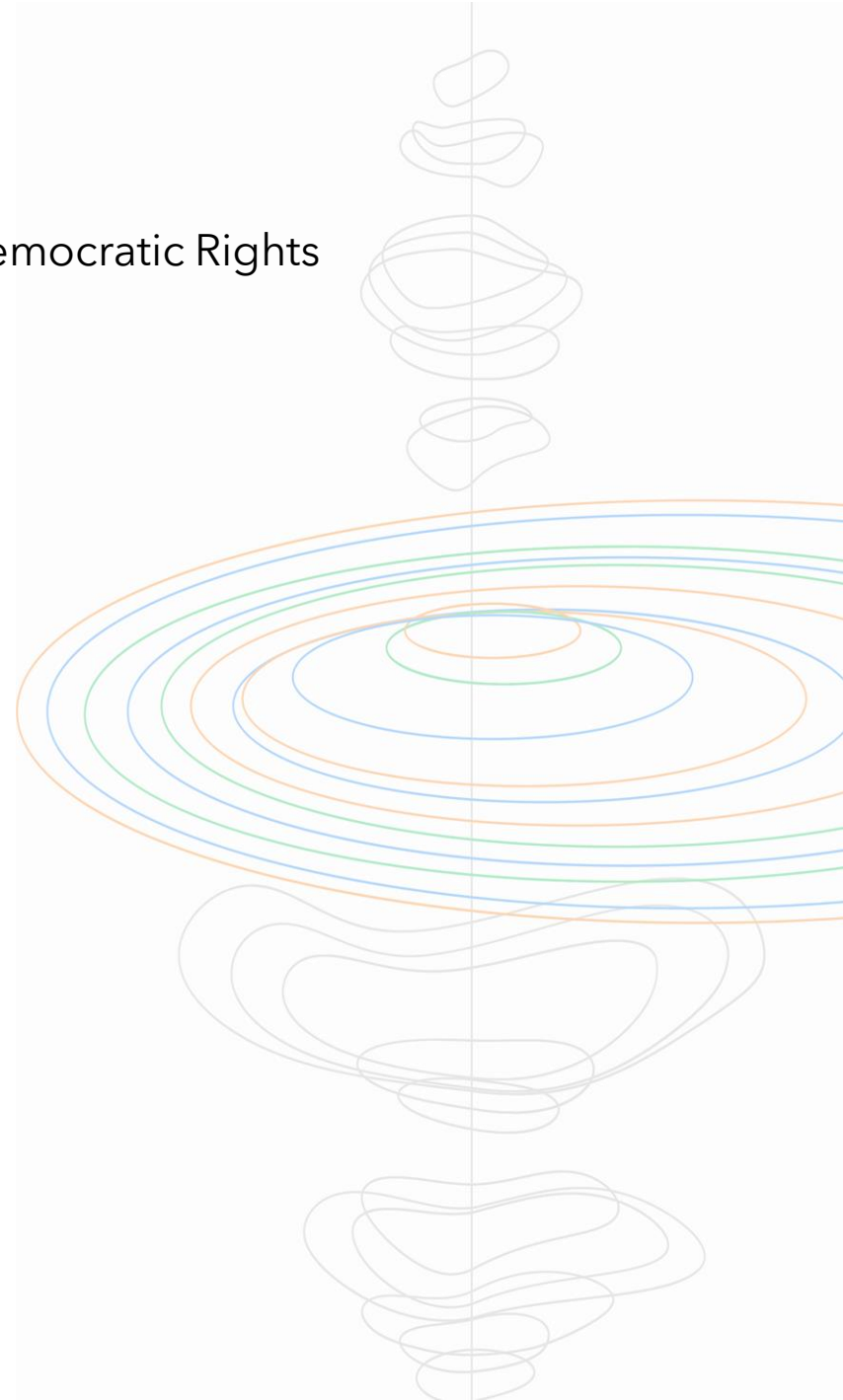
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## PRODUCTS

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)

On 22 August 2023, the TOBAM LBRTY **funds** were approved by CSSF:

- All World (Ticker: MDPALWA LX Equity)
- All World ex USA (Ticker: MDTALCA LX Equity)
- Emerging Markets (Ticker: MTABEMA LX Equity)

## CONCLUSION

- Since its inception, TOBAM's ONLY focus is the long-term risk reward of its clients
- We believe that, together with diversification, Democracy, Respect of Human Rights and civil rights in general are the Keys to innovations and economic growth
- Since its beginnings TOBAM had human rights at the core of its values.
- TOBAM LBRTY®

Tracking error managed portfolio with exposure to Civil and Democratic Rights handled at the

- country level, via exclusion of authoritarian & hybrid regimes
- stock level, via minimization of exposures to authoritarian regimes

1. TOBAM

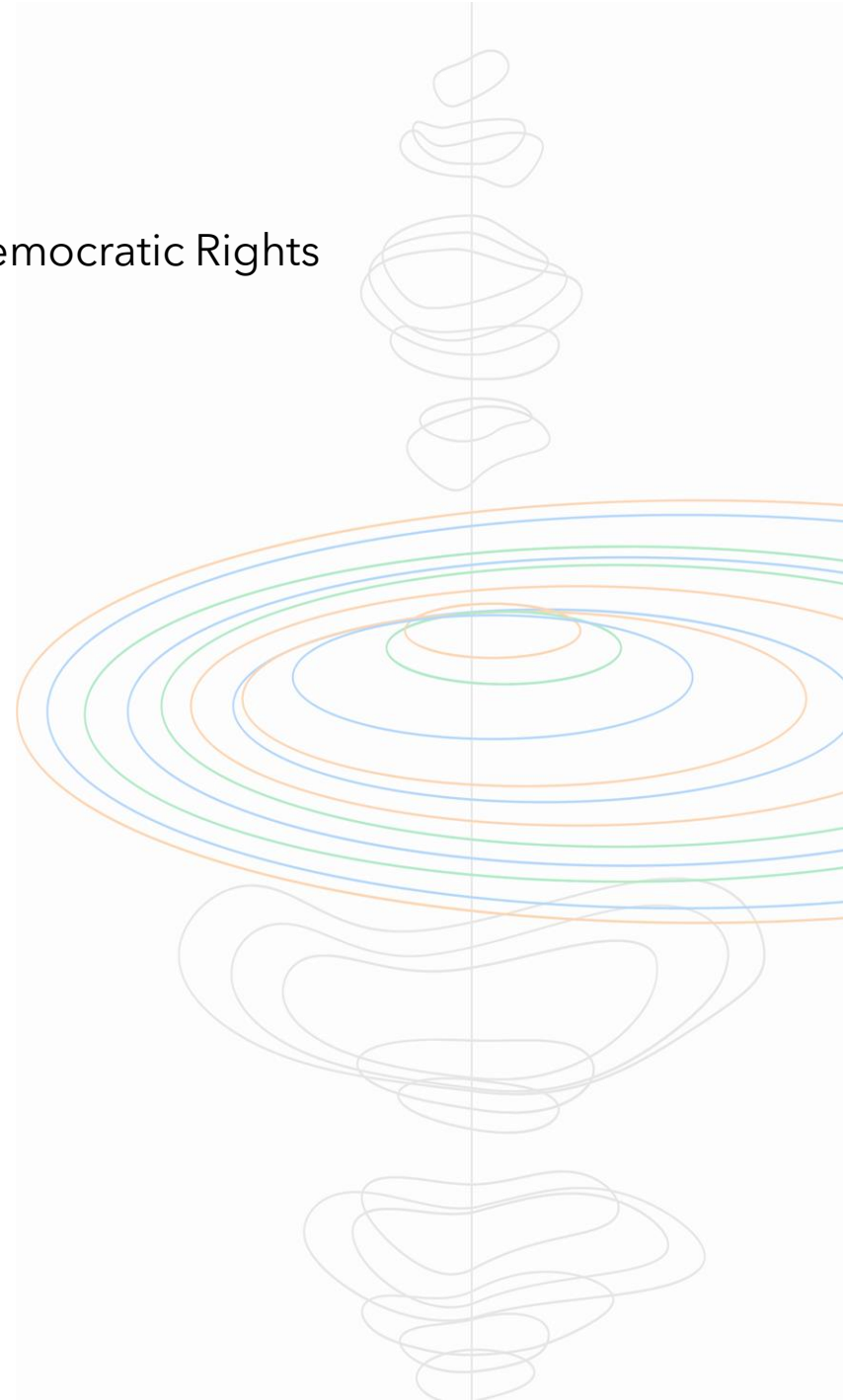
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# TOBAM LBRTY EMERGING MARKETS EQUITY INDEX PERFORMANCE

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	Bench
2023	2.82	-2.68	2.66	2.12	2.27	3.20	5.58	-4.49					11.65	3.86
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
2009	-3.13	-3.83	12.05	11.76	17.00	-0.94	9.93	3.11	9.30	0.33	7.12	4.08	87.36	82.60

## Statistics

	TOBAM LBRTY Emerging Markets Equity Index	BBG Emg Mkt L/M TR
Return (Aug '08 - Aug '23)	157.38 %	69.25 %
Annualized return	6.50 %	3.57 %
Volatility	18.49 %	20.07 %
Sharpe ratio	0.31	0.14
Tracking error	8.82 %	
Downside deviation	11.88 %	12.84 %
Sortino ratio	0.48	0.21
Information ratio	0.33	
Correlation to index	0.90	
Beta to index	0.83	

# TOBAM LBRTY ALL WORLD EQUITY INDEX 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 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
2023	6.43	-3.09	3.47	2.56	-0.11	5.42	3.99	-2.41					16.97	14.79
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
2009	-8.23	-9.94	6.21	11.17	9.62	-0.63	8.84	4.05	4.36	-1.56	5.35	2.27	33.26	36.15

## ● Statistics

	TOBAM LBRTY All World Equity Index	BBG World Lrg/Mid Cap TR
Return (Aug '08 - Aug '23)	253.25 %	194.28 %
Annualized return	8.77 %	7.46 %
Volatility	18.89 %	17.81 %
Sharpe ratio	0.42	0.37
Tracking error	3.61 %	
Downside deviation	12.32 %	11.70 %
Sortino ratio	0.65	0.57
Information ratio	0.36	
Correlation to index	0.98	
Beta to index	1.04	

# TOBAM LBRTY ALL WORLD EX USA EQUITY INDEX 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 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	Bench
2023	8.52	-2.02	2.13	3.17	-2.54	4.57	4.07	-4.60					13.37	8.63
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
2009	-8.50	-9.13	5.59	13.22	13.42	-1.63	9.60	5.46	5.03	-2.06	4.32	2.02	40.35	44.07

## Statistics

	TOBAM LBRTY All World BBG World Ex-US L/M TR ex USA Equity Index	
Return (Aug '08 - Aug '23)	109.97 %	81.30 %
Annualized return	5.07 %	4.04 %
Volatility	19.02 %	18.41 %
Sharpe ratio	0.22	0.18
Tracking error	4.34 %	
Downside deviation	12.19 %	11.91 %
Sortino ratio	0.35	0.27
Information ratio	0.24	
Correlation to index	0.97	
Beta to index	1.01	

# TOBAM LBRTY TRACKING ERROR DECOMPOSITION

*WORLD EX USA INCLUDING EM*



## ELIGIBLE COUNTRY BENCHMARKS AUTHORITARIAN EXPOSURE WORLD (INCLUDING EM) - AVERAGE 2022



Source: TOBAM

TOBAM WORLD LBRTY portfolios has an authoritarian exposure in 2022 lower than the Market Cap Weighted Benchmark of any eligible country.



## EXCESS RETURN PERFORMANCE ATTRIBUTION BY COUNTRY

WORLD INCLUDING EM



*The period covered is from September 2009 to March 2023. Source Bloomberg and TOBAM. 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. 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*

# WORLD (INCLUDING EM) PORTFOLIOS COUNTRY WEIGHTS AVERAGE 2023

Overweight  
vs. Parent index

Underweight  
vs. Parent index



## NAVS AND TRACKING ERRORS

*WORLD INCLUDING EM*



Source: TOBAM

## PORTFOLIOS RELATIVE AUTHORITARIAN EXPOSURE EM



Source: TOBAM

Within a given country companies exhibit a large spectrum of authoritarian exposures. TOBAM LBRTY portfolio exhibits 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	3.7%	3.5%	3.8%	<b>6.1%</b>
Annualized Net return	3.7%	3.5%	3.3%	<b>5.6%</b>
Vol	20.3%	20.3%	19.5%	<b>18.7%</b>
Sharpe Ratio	0.15	0.14	0.13	<b>0.26</b>
Beta to Mkt	1.0	1.0	0.9	<b>0.9</b>
Average Number of stocks	1099	842	460	<b>135</b>
Average Eff. Number of stocks	161.4	138.7	113.7	<b>61.6</b>
Authoritarian Exposure (2022)	14.0%	11.4%	9.5%	<b>6.0%</b>
Relative Authoritarian Exposure (2022)	100.0%	81.5%	68.4%	<b>42.8%</b>
TE(Parent index)	0.0%	5.3%	6.7%	<b>8.8%</b>
TE(Whitelisted index)	6.7%	4.6%	0.0%	<b>6.3%</b>
TE(BBG EM ex China index)	5.3%	0.0%	4.6%	<b>7.1%</b>

The period covered is from August 2008 to March 2023. 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 40bps. 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

## 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	-2.4%*	-10.1%***
SMB	6.8%	11.4%**
HML	17.1%***	18.8%***
UMD	-4.3%*	-4.5%*
QMJ	10.2%**	14.3%**
BAB	6.9%**	4.8%
Alpha	-1.6%	0.6%
<b>R<sup>2</sup></b>	8%	19%

Factors are on AQR Pacific universe. Value (HML), momentum (UMD), size (SMB) 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%.

Fama-French XR regression	Whitelisted Benchmark	TOBAM LBRTY
Market	1.4%	-11.9%***
SMB	18.8%**	25.5%**
HML	14.4%*	14.7%
RMW	2.3%	2.7%
CMA	28.5%***	30.7%***
WML	3.7%	3%
Alpha	-2.1%	0.2%
<b>R<sup>2</sup></b>	17%	31%

Factors are on Emerging market universe. Value (HML), momentum (WML), size (SMB), Quality(CMA & RMW)  
 \*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%.

## 5-YEAR ROLLING EXCESS RETURNS

VS BBG EM EX CHINA - EM

Source: TOBAM



5 Years Statistics	BBG EM	BBG EM ex China	Whitelisted Benchmark	TOBAM LBRTY
Annualized Gross return	0.6%	2.2%	1.6%	6.3%
Annualized Net return	0.6%	2.2%	1.1%	5.9%
Vol	17.1%	16.9%	17.1%	15.8%
Sharpe ratio	-0.04	0.05	-0.01	0.29
Beta to Mkt	1.00	0.89	0.86	0.77

The period covered is from February 2008 to March 2023. 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 the Strategy 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

## 5-YEAR ROLLING EXCESS RETURNS

VS PARENT INDEX -EM

Source: TOBAM



5 Years Statistics	BBG EM	BBG EM ex China	Whitelisted Benchmark	TOBAM LBRTY
Annualized Gross return	0.6%	2.2%	1.6%	6.3%
Annualized Net return	0.6%	2.2%	1.1%	5.9%
Vol	17.1%	16.9%	17.1%	15.8%
Sharpe ratio	-0.04	0.05	-0.01	0.29
Beta to Mkt	1.00	0.89	0.86	0.77

The period covered is from February 2008 to March 2023. 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 the Strategy 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



## 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 2023	Tracking error attribution vs. <b><u>Parent Index</u></b>		Tracking error attribution vs. <b><u>Whitelisted Benchmark</u></b>	
<b><i>Risk factor</i></b>	<b>TCR</b>	<b>PCR</b>	<b>TCR</b>	<b>PCR</b>
Market	1.6%	17.9%	0.7%	11.7%
Authoritarian countries	0.7%	<b>7.8%</b>	0.0%	<b>0.0%</b>
Indirect exposure	4.2%	<b>47.9%</b>	1.5%	<b>23.3%</b>
Sector	0.8%	8.9%	1.1%	17.5%
Residuals	1.5%	17.5%	3.0%	47.5%
<i>Total</i>	8.8%	100.0%	6.3%	100.0%

TCR = Total contribution to tracking error

Source: TOBAM

PCR = Percentage contributions to tracking error

# TOBAM LBRTY TRACKING ERROR DECOMPOSITION

EM



## ELIGIBLE COUNTRY BENCHMARKS AUTHORITARIAN EXPOSURE AVERAGE 2022

TOBAM EM LBRTY portfolio has an authoritarian exposure in 2022 comparable to the Denmark Market Cap Weighted Benchmark.



Source: TOBAM

## EXCESS RETURN VS BBG EM EX CHINA

PERFORMANCE ATTRIBUTION BY COUNTRY - EM



*The period covered is from September 2009 to March 2023. Source Bloomberg and TOBAM. 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. 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*

## EXCESS RETURN VS PARENT INDEX

PERFORMANCE ATTRIBUTION BY COUNTRY - EM



*The period covered is from September 2009 to March 2023. Source Bloomberg and TOBAM. 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. 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*

## EM PORTFOLIOS COUNTRY WEIGHTS AVERAGE 2023



Source: TOBAM, Bloomberg

Excluding Hong-Kong, China, other autocracies, taking authoritarian exposures into account, leads TOBAM LBRTY portfolio to overweight Taiwan, India and Brazil

# NAVS AND TRACKING ERRORS

EM



Source: TOBAM

# CIVIL AND DEMOCRATIC RIGHTS STRATEGY ESG FEATURES SUMMARY

## SFDR Article 9

- **Positive contribution to Social objective**

*The strategy aims to promote the good respect of civil liberty and democracy by excluding countries that achieve an insufficient level of democracy and civil liberty from the investment universe*

- Exclusion of countries based on CD Rating
- Exclusion of companies CD-score ranked in the last quintile of the BBG World CD Scores

- **Do not Significantly Harm**

Application of TOBAM's exclusion policy

- **Good Governance**

*Exclusion based on bad governance (Companies failing to reach a G score in the top 80% of the reference index are excluded)*



## CIVIL AND DEMOCRATIC RIGHTS STRATEGY ESG FEATURES SUMMARY

- **SFDR Article 9**

- **Social Thematic Strategy**

*The strategy aims to promote the good respect of civil liberty and democracy by excluding countries that achieve an insufficient level of democracy and civil liberty from the investment universe*

- **Minimum Sustainable Investment :** 90%
- **Minimum Taxonomy Alignment :** 0%
- **Consideration of Principal Adverse Impact Indicators :** Yes

- **Ambitious Engagement Process**

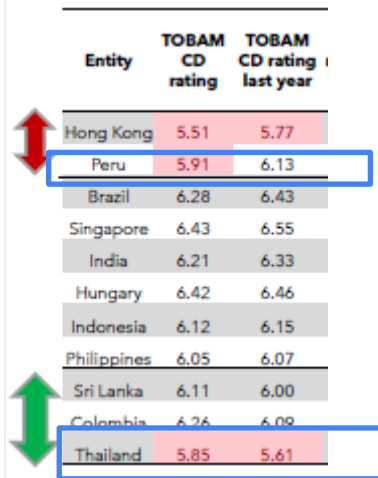
- Systematic engagement for human rights policies and proper due diligences  
(additional PAI #9 and #10)
  - PAI 9 : Lack of a human rights Policy
  - PAI 10 : Lack of human rights due diligence procedures

- **Application of TOBAM's SRI general features**

- Exclusion Policy
- Carbon reduction -20%
- E, S, G footprint monitoring and matching to bench
- SRI voting Policy & Engagement Policy

# LBRTY® GOVERNANCE COMMITTEE – CASE STUDY

## Extract of June 2023 Committee



Entity	TOBAM CD rating	TOBAM CD rating last year
Hong Kong	5.51	5.77
Peru	5.91	6.13
Brazil	6.28	6.43
Singapore	6.43	6.55
India	6.21	6.33
Hungary	6.42	6.46
Indonesia	6.12	6.15
Philippines	6.05	6.07
Sri Lanka	6.11	6.00
Colombia	6.26	6.09
Thailand	5.85	5.61

Two countries in discussion : Peru & Thailand

### TOBAM's initial views

Given the trend (upward for Thailand, downward for Peru), TOBAM inclination would be to **include Thailand and exclude Peru**

### Committee's experts' views

**Thailand** : Even though, recent elections were indeed free and fair, the newly elected coalition *move forward*, will very unlikely be able to be in power and in government. Unelected senate is run by the militaries, and they will certainly not put newly elected in power. This poses high risks of streets protests and uncertainties for the coming weeks. Outcomes might play out during the summer. **Recommend to continue exclusion.**

**Peru** : The downward trend in the rating might be due to the attempted coup last December but is not a good reflection of the current situation in Peru. Attempted coup failed; the legislators acted. Peru is at an uneasy crossroads, with good reasons to be worried as well as optimistic. Coming up elections will give some insights of the direction taken by Peru. Recommend to wait 6/8 months to advise. **Peru to remain in whitelist**

## MIGRATING TOBAM FROM A MONO-CORE STRATEGY...

**TOBAM\***  
CORE INVESTMENTS



tobam\*  
unbiased.

.... To Multi-Core Strategies

Since  
2016



CrypTOBAM®

(Satellite Strategy)

Since  
2009

TOBAMSolutions®

Since  
2006

Maximum  
Diversification®

**LBRTY®**

**NEW**

## ABOUT TOBAM

TOBAM is an asset management company offering innovative capabilities designed to maximize the benefits of scientific research to build efficient investment exposures.

TOBAM's expertise relies on 3 core pillars:

- TOBAM's Maximum Diversification<sup>®</sup> approach, supported by original, patented research and a mathematical definition of diversification, provides clients with diversified core exposure, in equity and fixed income markets.
- A research driven, *Solutions* division (TOBAMSolutions<sup>®</sup>), dedicated to build customized solutions and services to sophisticated institutional investors,
- A *LBRTY*<sup>®</sup> strategy range, which aims to help investors substantially mitigate their exposure to autocratic regimes in their portfolio.

In line with its mission statement and commitment to diversification, TOBAM also launched a satellite activity (CRYPTOBAM<sup>®</sup>) on cryptocurrencies in 2017.

TOBAM Maximum Diversification<sup>®</sup>, TOBAMSolutions<sup>®</sup>, TOBAM LBRTY<sup>®</sup> and CRYPTOBAM<sup>®</sup> illustrate TOBAM's systematic "out of box" dedication to demanding investors.

TOBAM manages north of USD 6 billion (as of 30 December 2022). Its team includes 44 finance professionals based in Paris, New York, Dublin, and Luxembourg.

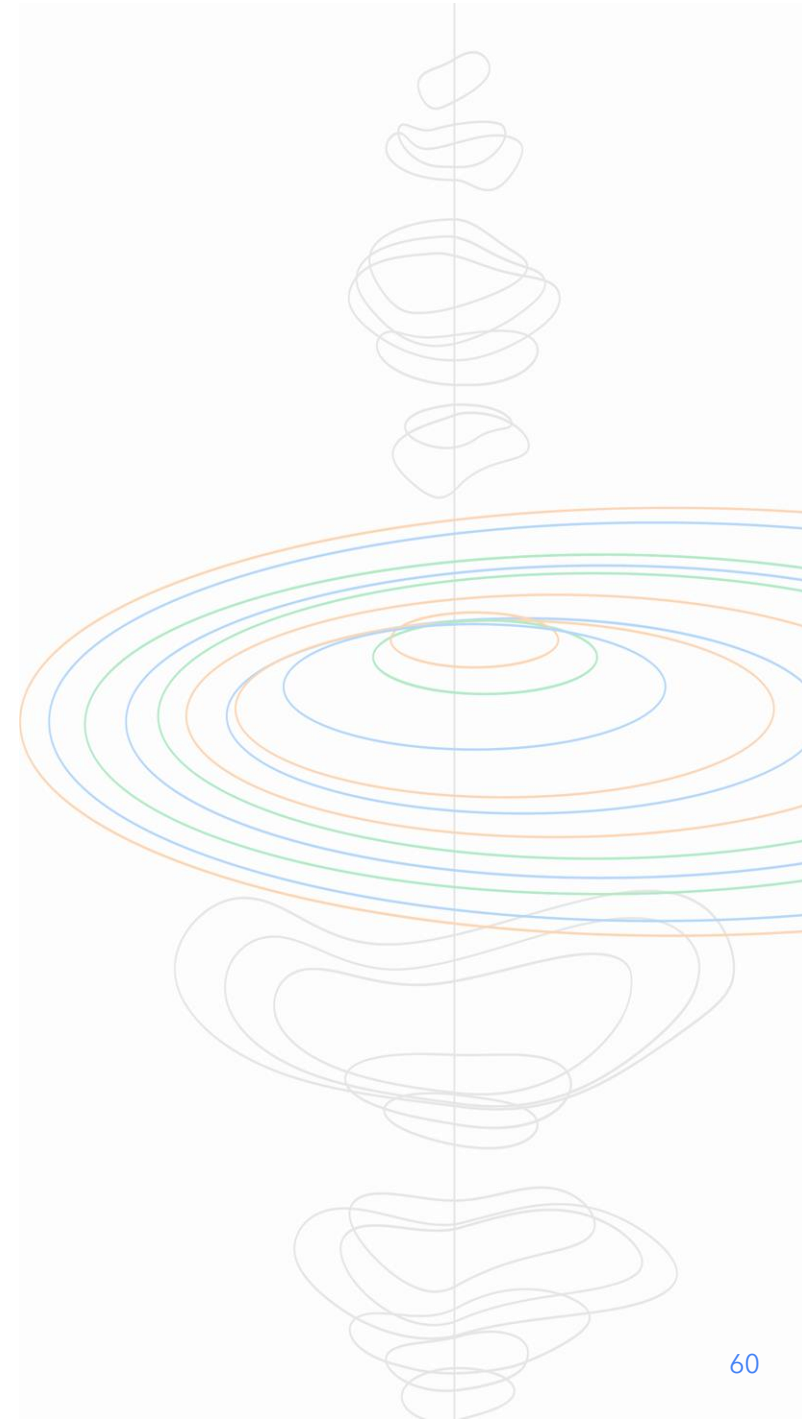
For more information, please visit [www.tobam.fr](http://www.tobam.fr) or [tobamdirect.com](http://tobamdirect.com)

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## DISCLAIMER - STRATEGIES RISKS

The Compartment will be invested primarily in financial instruments selected by the Management Company. These instruments will be subject to market movements and fluctuations. The Management Company invests according to a systematic, fundamentals-based model: there is a risk that the equities selected may not be the best performing stocks.

### Equity risk

If the equities or indices to which the portfolio is exposed decline, the Compartment's net asset value will fall.

In the small- and mid-cap markets, the trading volume of listed shares is limited, and so market movements tend to be larger on the downside and also more rapid than for large-cap stocks. The Compartment's net asset value may thus decline more rapidly and more strongly.

Investors' attention is drawn to the fact that small-cap markets are intended to host businesses that, owing to their specific characteristics, may carry risks for investors.

### Risk associated with the Management Company's investment process

Investors' attention is drawn to the fact that the portfolio is constructed and its assets selected and weighted using processes developed by the Management Company. The Compartment's investment process is based on a systematic model designed to identify signals based on past statistical results.

There is a risk that the model may not be efficient, since there is no guarantee that past market situations will repeat themselves in the future. The aim of the processes developed by TOBAM is to achieve healthy diversification of the Compartment's portfolio, and so use of these processes may lead the Management Company to not select the top-performing assets.

### Risk associated with the emerging market equities

The equities of emerging countries provide a more limited liquidity than equities of developed countries. Consequently, the possession of these securities may increase the level of portfolio risk. The movements of market decline may be greater and faster than in developed countries, the net asset value may decline more sharply and quickly.

### Risk associated with the use of financial futures

The Compartment may use some financial futures for up to one times its assets. The Compartment may thus be exposed for up to 110% of its assets to the market, assets, index and economic and/or financial instrument or parameter, which can imply a risk of reduction in the net asset value of the Compartment that might be more significant and quicker than the one observed on the markets where the Compartment is invested.

### Currency risk

Currency risk is the risk of depreciation in the currencies in which the Compartment invests relative to the reference currency. This currency risk will be managed according to market opportunities and may thus account for a significant proportion of the risk. In the event of depreciation in foreign currencies, investors are thus exposed to a decline in the value of their units.

## STRATEGIES RISKS

### Counterparty risk

The Compartment may incur a loss in the event of default by a counterparty with which certain transactions were conducted, leading to a decline in the Compartment's net asset value.

### Interest rate risk

This is the risk of depreciation in fixed-income instruments deriving from interest-rate fluctuations. Should interest rates rise, the Compartment's net asset value may decline. The Compartment's exposure to fixed-income products is secondary.

### Credit risk

This is the risk of depreciation in shares issued by a private-sector issuer or default by the latter. The value of the debt securities in which the Compartment is invested may decline, leading to a fall in net asset value.