



Omar Selim, CEO of Arabesque

Mission Statement



Sustainability

Big Data

Make sustainable investing financially attractive and available to the mainstream.

We integrate Environmental, Social and Governance (ESG) data with quantitative investment strategies to generate financial outperformance.



Sustainability should not be about...

- Imposing moral or faith based values
- About greenwashing
- Implementing values at the expense of performance
- A mixed services provider





Technology and sustainability: accelerating market transformation

- Silent revolution
- Global momentum
- Growing support of the business case
- Regulatory changes
- Reporting revolution





Disrupting the financial industry

- Rise of the quants
- Equity is the new Fixed Income
- Banking models, savings, and pensions will change
- Surge in ESG big data and computing power, with new models to process information
- Demand for "lifestyle" finance by Millennials

 Generation S

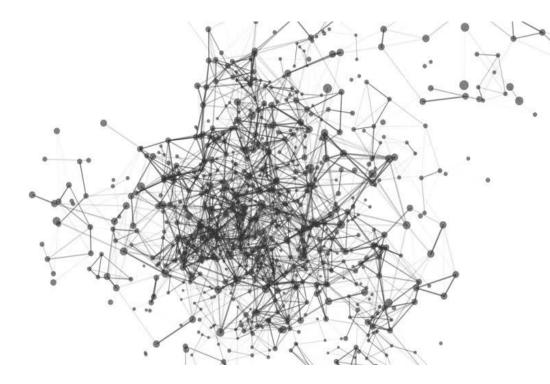
ESG is to finance what electricity is to the auto industry





ESG Big Data

- Over 90% of all the world's data was generated in the past two years
- Current level of ESG data is a fraction of what it will be in five years
- Investor demand for ESG is growing rapidly
- ESG to finance is what the X-Ray was to medicine
- A new dimension to investing



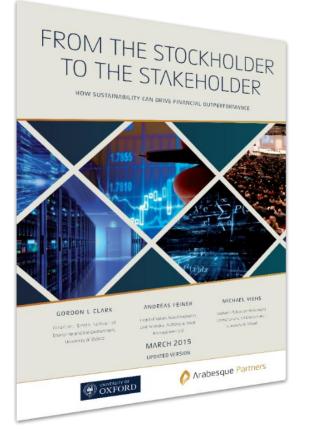


The Age of Al

- Al infiltrating into everything we do, from Apple's Siri, to Amazon's Alexa
- Arabesque's technology capable of processing billions of data points
- Arabesque's quant models extract information out of data through pattern recognition and machine learning
- Al and sustainability big data combined
- Our mission is to make this technology accessible to more investors



Innovation Based on Sound Research



- Overview of current research on ESG (Environment, Social and Governance)
- Collaboration between Oxford and Arabesque
- Meta-study of over 200 papers
- 85% of the world's 250 largest companies report on sustainability

- ESG ~ lower cost of capital
- ESG ~ better operational performance
- 88% of studies
- ESG ~ better stock price performance
- 80% of studies

Information Environment

ESG information provides a gauge to management quality and company strategy

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Revenues, Profitability, Assets, Leverage, Cash Flow

ESG Data

Forward Looking



Carbon emissions, Employee relations, Board structure



ESG & Market Performance

Stocks of sustainable companies tend to significantly outperform their less sustainable counterparts



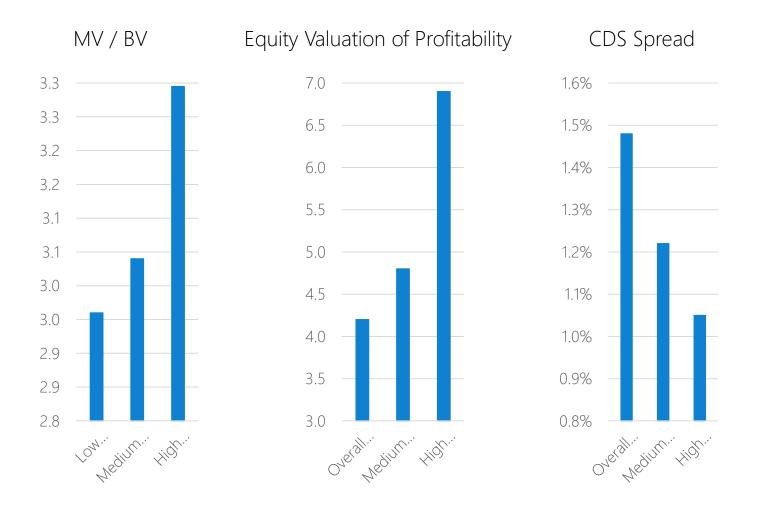
Evolution of \$1 invested in the stock market in value-weighted portfolios



Source: Eccles, Robert G., Ioannis Ioannou, and George Serafeim. "The Impact of Corporate Sustainability on Organizational Processes and Performance." Management Science 60, no. 11 (November 2014): 2835–2857. <u>http://www.hbs.edu/faculty/Publication%20Files/SSRN-id1964011_6791edac-7daa-4603-a220-4a0c6c7a3f7a.pdf</u>

ESG & Corporate Performance

Valuations of firms with better ESG reflect higher expected growth and lower cost of capital





Source: MSCI, Calvert-Serafeim Research. The Role of the Corporation in Society: Implications for Investors, Calvert Investments and George Serafeim, September 2015, http://www.calvert.com/NRC/literature/documents/wp10012.pdf



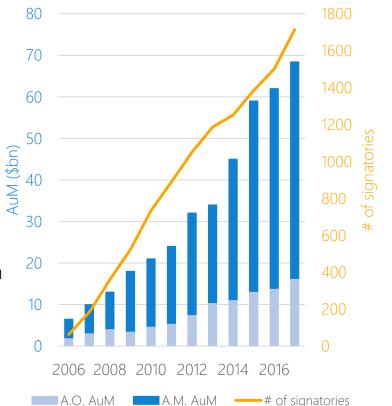
Market actors who have signed into the Principles of Responsible Investing have committed to account for sustainability topics in their portfolios



1714 Signatories, US\$68 trillion

Principles

- 1. .Integrate ESG in capital allocation
- 2. .Active ownership
- 3. .Seek ESG disclosure
- 4. .Promote ESG
- 5. .Collective effort on implementation
- 6. .Report on progress

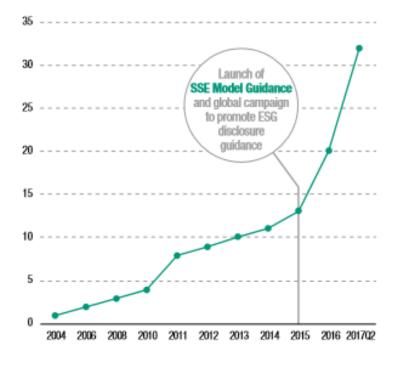




ESG and the SSE

- ESG indices are the most popular sustainability instrument
- 38 of 82 exchanges provide them
- Over 100 ESG themed indices world-wide

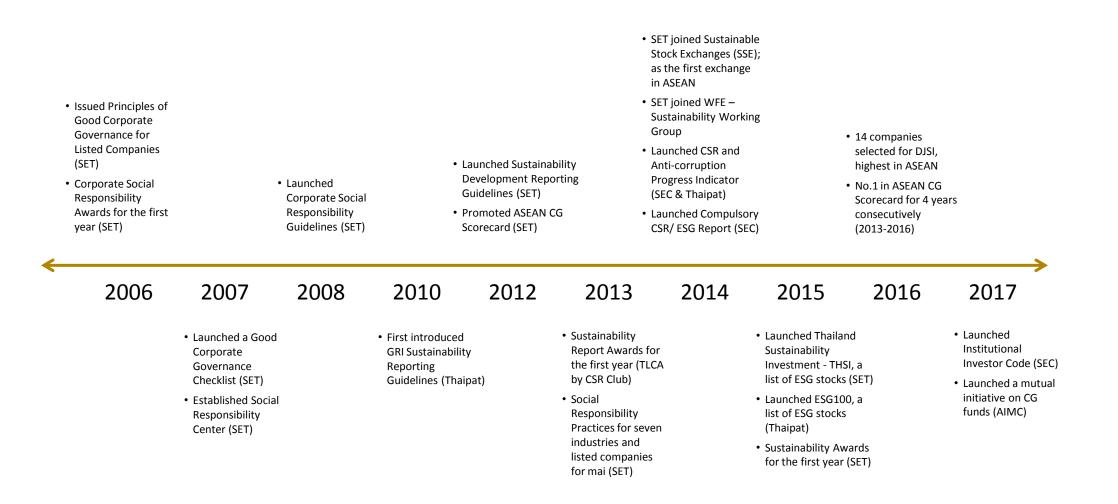




Source: ©UNCTAD, SSE initiative database.



Sustainability Journey in Thai Capital Market over the last 10 years





What's Next?

Technology won't replace managers, but managers who use technology will replace those who don't

Aviation in the Past



Aviation Now





The Opportunity

- The race to lead ESG investing into the mainstream will be won by whoever sets the standards
- ...and can explain the link between ESG and alpha
- This will open a new dimension to investing
- ...and have a self-fulfilling effect





Three Pillars of S-Ray™



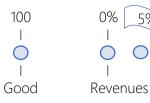
A normative assessment of each company based on the core principles of the United Nations Global Compact

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Bad	Neutral	Good



A sector specific analysis of each company's performance on financially material environmental, social and governance (ESG) issues





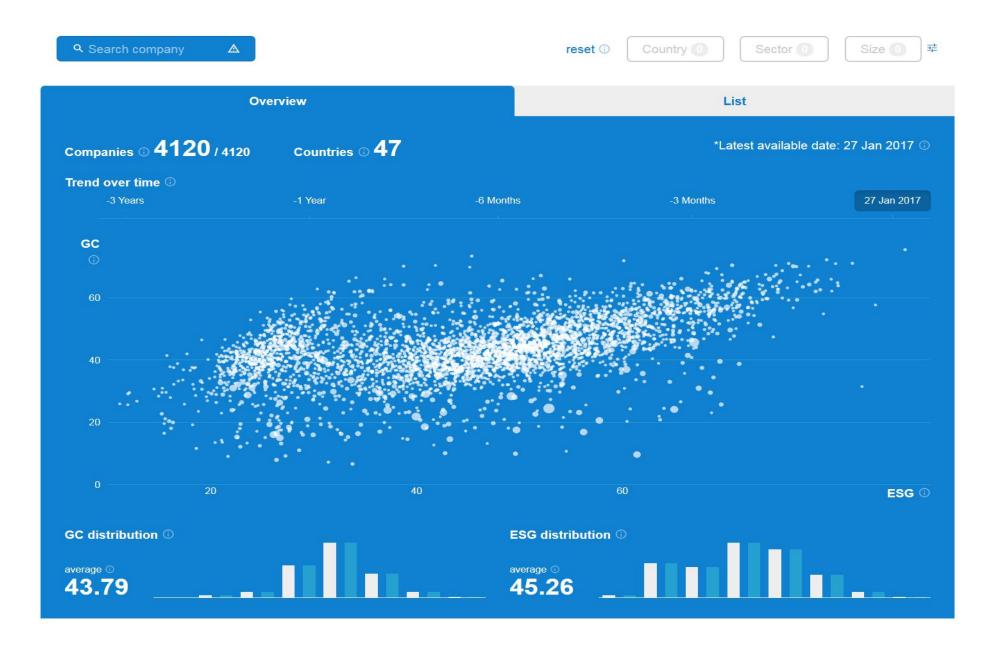


A search tool that allows anyone to check the business involvements of companies against their personal values



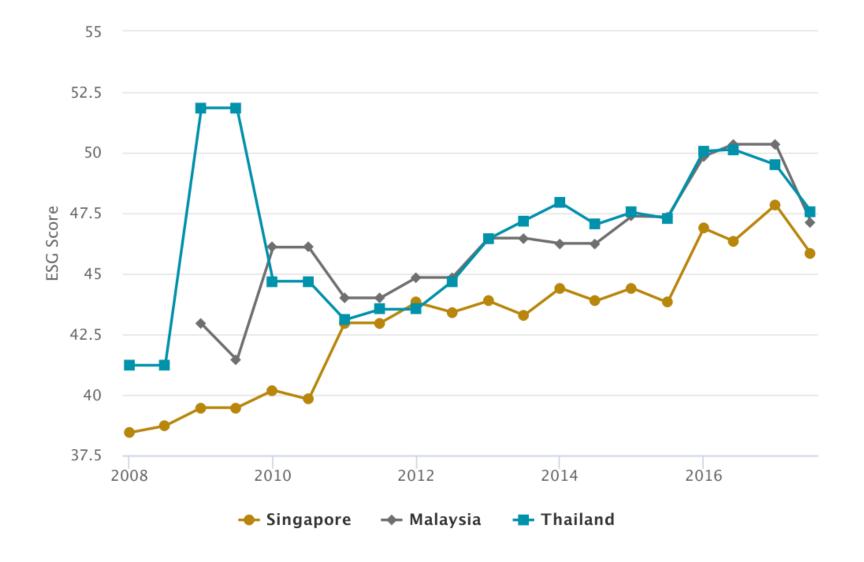


• S-Ray[™] is a transparency tool



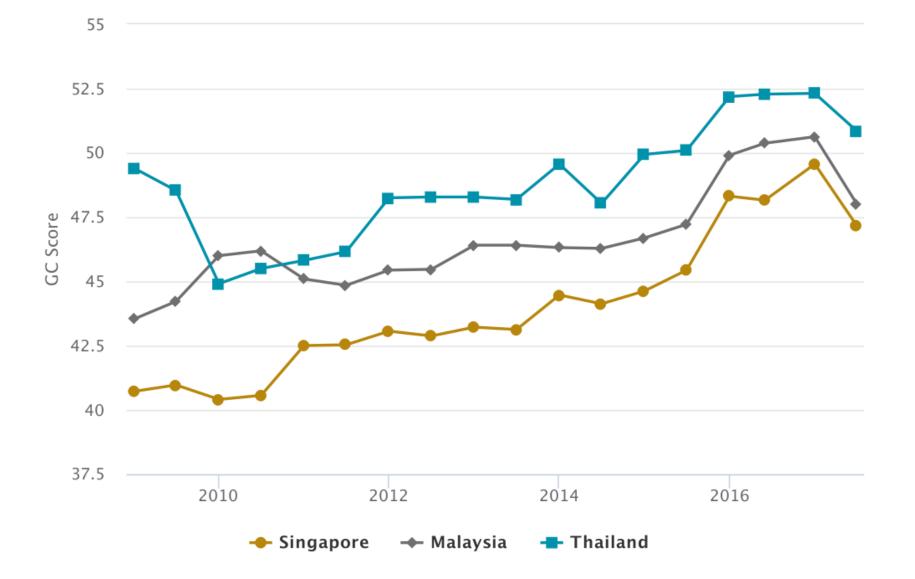


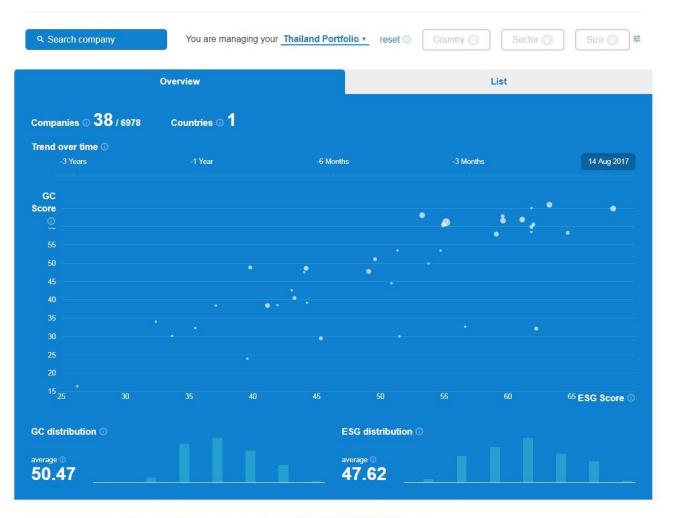
Average ESG Score for Region





Average GC Score for Region





More statistics on current selection of companies Top movers ranking

Top GC Momentum ①		Top ESG Momentum 🛈	
Robinson Public Company Ltd	21%	BEC World Public Co., Ltd.	22%
BEC World Public Co., Ltd.	16%	Delta Electronics (Thailand) Public Co. Ltd.	21%
Thai Union Group Public Company Limited	13%	Robinson Public Company Ltd	18%
Thai Airways International Public Co. Ltd.	10%	Bangkok Bank Public Company Limited	7%

More statistics on current selection of companies Top movers ranking •

Top GC Momentum 💿		Top ESG Momentum ①
Robinson Public Company Ltd	21%	BEC World Public Co., Ltd.
BEC World Public Co., Ltd.	16%	Delta Electronics (Thailand) Public
Thai Union Group Public Company Limited	13%	Robinson Public Company Ltd
Thai Airways International Public Co. Ltd.	10%	Bangkok Bank Public Company Li
CP All Public Co. Ltd.	9%	Siam Commercial Bank Public Co
Electricity Generating Public Co., Ltd.	8%	Banpu Public Co. Ltd.
Delta Electronics (Thailand) Public Co. Ltd.	8%	Thai Oil Public Co. Ltd.
Minor International Public Co., Ltd.	7%	Home Product Center Public Co.,
Bangkok Bank Public Company Limited	7%	Electricity Generating Public Co., I
Siam Commercial Bank Public Company Limited	6%	Minor International Public Co., Ltd

BEC World Public Co., Ltd.	22%
Delta Electronics (Thailand) Public Co. Ltd.	21%
Robinson Public Company Ltd	18%
Bangkok Bank Public Company Limited	7%
Siam Commercial Bank Public Company Limited	6%
Banpu Public Co. Ltd.	6%
Thai Oil Public Co. Ltd.	5%
Home Product Center Public Co., Ltd.	4%
Electricity Generating Public Co., Ltd.	4%
Minor International Public Co., Ltd.	3%

Company name	Country	Sector	GC ()	ESG ()
Advanced Info Service Public C	Thailand	Communications	• 43.16 ≻	• 49.12 ►
Airports of Thailand Public Co	Thailand	Transportation	• 47.28 ≻	• 47.19 ≻
Bangkok Bank Public Company	Thailand	Finance	• 36.75 ≻	• 42.06 ≻
Bangkok Dusit Medical Service	Thailand	Health Services	• 36.03 ≻	• 39.81 ≻
Banpu Public Co. Ltd.	Thailand	Energy Minerals 🔺	• 19.56 ≻	• 27.44 ≻
BEC World Public Co., Ltd.	Thailand	Consumer Services	• 38.16 -	• 47.75 -
Berli Jucker Public Co. Ltd.	Thailand	Process Indu 🔺	• 31.30 ≻	• 21.44 ≻
BTS Group Holdings Public Co	Thailand	Finance	• 46.66 -	• 35.06 ►
Bumrungrad Hospital Public Co	Thailand	Health Services	• 37.16 ≻	• 39.53 -
Central Pattana Public Co. Ltd.	Thailand	Finance	• 51.53 ≻	• 58.03 ≻

Company name	Country	Sector	GC 🛈	ESG 🛈
Charoen Pokphand Foods Publi	Thailand	Process Industries	• 27.50 ≻	• 22.34 ≻
CP All Public Co. Ltd.	Thailand	Retail Trade	• 37.75 ≻	• 38.59 -
Delta Electronics (Thailand) Pu	Thailand	Electronic Techn	• 47.00 -	• 49.56 ≻
Electricity Generating Public Co	Thailand	Utilities 🔺	• 44.53 ≻	• 35.91 ×
Glow Energy Public Co., Ltd.	Thailand	Utilities A	• 41.75 ≻	• 55.72 ≻
Home Product Center Public Co	Thailand	Retail Trade	• 42.38 ≻	• 44.72 ≻
Indorama Ventures Public Co. L	Thailand	Process Industries	• 46.56 ≻	• 40.12 ≻
IRPC Public Co., Ltd.	Thailand	Energy Minerals 🔺	• 53.41 ≻	• 66.44 -
Kasikornbank Public Co. Ltd.	Thailand	Finance	• 54.75 ≻	• 60.28 ≻
KCE Electronics Public Co., Ltd.	Thailand	Electronic Techn	• 47.75 🔺	• 44.38 🔺

Company name	Country	Sector	GC ①	ESG ()
Minor International Public Co.,	Thailand	Consumer Se… 🔺	• 47.50 ≻	• 50.75 ≻
PTT Exploration & Production Plc	Thailand	Energy Minerals 🔺	• 35.66 -	• 34.34 ×
PTT Global Chemical Plc	Thailand	Process Industries	• 57.94 ≻	• 55.59 ≻
PTT Public Co., Ltd.	Thailand	Energy Minerals 🔺	• 33.09 ≻	• 41.88 -
Robinson Public Company Ltd	Thailand	Retail Trade	• 42.47 ≻	• 38.16 ≻
Siam Cement Public Co. Ltd.	Thailand	Process Industries	• 49.53 ≻	• 66.50 ≻
Siam Commercial Bank Public	Thailand	Finance	• 48.84 ≻	• 54.91 ≻
Thai Oil Public Co. Ltd.	Thailand	Energy Minerals 🔺	• 66.19 ≻	• 68.50 ≻
Thai Union Group Public Comp	Thailand	Consumer Non-D	• 28.00 -	• 25.89 •
TMB Bank Public Co., Ltd.	Thailand	Finance	• 44.47 ≻	• 49.84 ≻
True Corp. Public Co., Ltd.	Thailand	Communications	• 35.72 ≻	• 22.30 ≻

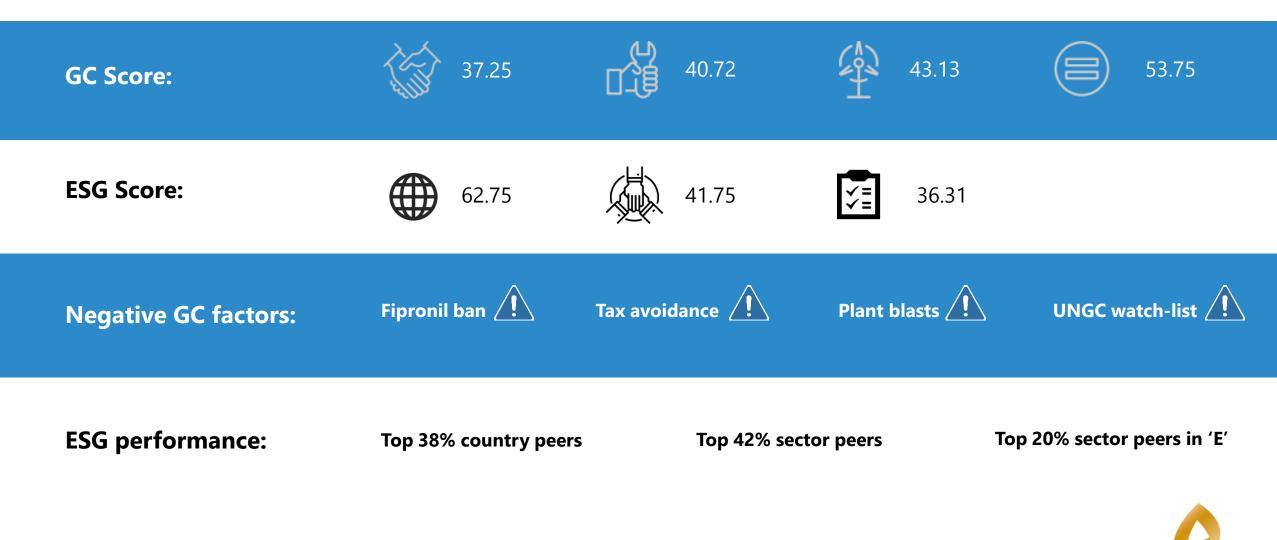




Arabesque S-Ray	EXPLOR	E MY PORTFOLIO 🔒		About Free Version
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Overvi	ew		List	
GENERAL		GC DETAIL 🔒	ESG DI	ETAIL 🔒
Company name	Country	Sector	GC 🛈	ESG ()
× BASF SE	Germany	Process Indus 🛦	19.59 ∢	43.12 -
Company dashboard 🔒	Business involvemen	ts: ①	Country rank: 4.03 Sector rank: 3.51	Country rank: 37.86 Sector rank: 41.48
Gamuda Bhd.	Malaysia	Industrial Services	• 33.66 ≻	• 23.25 ×
Gap, Inc.	United States	Retail Trade	• 30.03 ×	• 53.94 ≻
Garmin Ltd.	United States	Electronic Techno	• 46.62 ≻	• 49.31 ≻
Gartner, Inc.	United States	Commercial Servi	<mark>•</mark> 41.56 ≻	• 49.44 ≻
Gas Natural SDG, S.A.	Spain	Utilities 🔺	• 55.56 ≻	• 67.38 ≻









A Global Equity Universe

Arabesque's global database covers all listed stocks

Strong emphasis on data quality

Internal 'Data Fingerprint' verification is applied to ensure data integrity

No. of Equities (circa)

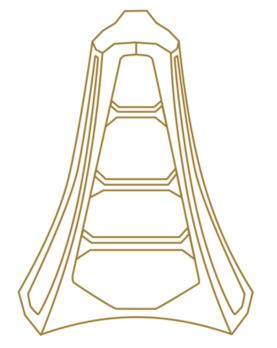
77,000 Global Universe

2,900 Arabesque Universe 330 Arabesque Prime

100 Arabesque Systematic

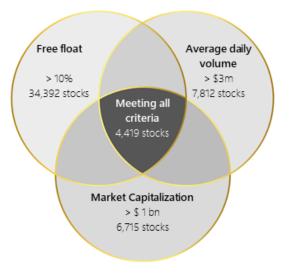








Portfolio Liquidity



The best strategy is worthless if it cannot be executed owing to liquidity constraints

Liquidity maintains a healthy and agile portfolio, and minimizes transaction costs

Minimum requirements on size, free float, and daily volume

% of Total Market Cap 76 %

Average Market Cap USD 13.2 BN

UCITS V

Compliant

Focus on large and liquid stocks





S-Ray[™] - Global Compact Performance



Georg Kell Former Executive Director, United Nations Global Compact

The UN has established the largest corporate responsibility initiative in the world.

A normative assessment of each company based on the core principles of the United Nations Global Compact.

We exclude companies that:

- are in violation of any of the UNGC principles and,
- the bottom 5% of companies according to their S-Ray[™] GC Score

Principles

| = | Human Rights



Anti-Corruption

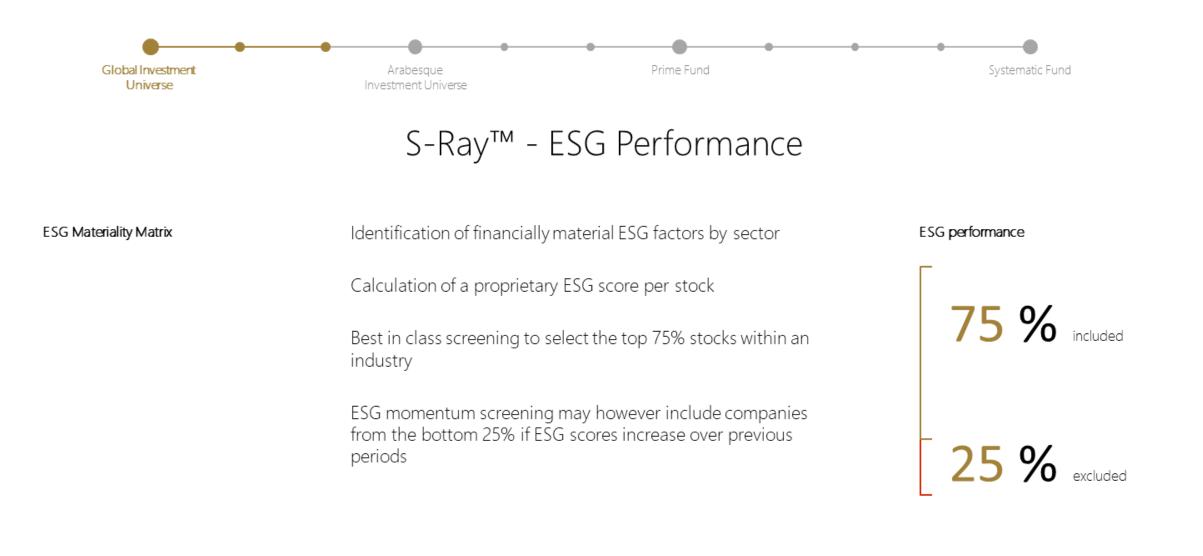




Environment



We respect the UNGC principles



Reducing portfolio risk and enhancing performance





S-Ray[™] - Preference Filter

Stock: LVMH



We analyze the nature of a company's revenue generating operations and balance sheet.

We exclude companies significantly involved in activities such as the production of weapons, tobacco, or gambling

Enabling the investor to construct a bespoke eligible investment universe with the required characteristics

Business involvement screening

Balance sheet analysis

Bespoke Solutions

Implementing investors' preferences





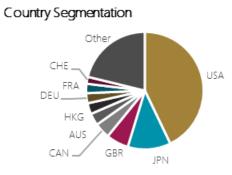
Arabesque Universe



A large, global, diversified, portfolio of liquid equities

Segregated investment universe for Arabesque Prime and Arabesque Systematic

Transparent to investors







c. 2,900 companies

Rebalancing



Monitoring

Daily

Note: As of June 30th 2017. Based on number of companies.

Outperformance powered by sustainability





F & G Score and Earnings Pressure



F - Score

Identifies strong balance sheets and cash flows

G - Score

Identifies firms showing continued growth and increasing earnings

Earnings Pressure

Utilizes behavioral patterns of sell-side research analysts

F - Score
Cash flow from operations
Return on assets
Long-term debt
Gross profit margin
Current sales

G - Score
R&D
Capital expenditure
Cash flow
Earnings per share
Advertising expenses

Unconstrained bottom-up fundamental stock screening





Arabesque Prime*

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Total Return since inception (as of 31/7/2017, net of fees)

+5.65%

p.a.

Morningstar Comparison

(as of 30/07/2017, net of fees, compared to the EAA OE Global Large Cap Blend Equity Peer group)

Top 30%

Combining values and performance

*) The fundamental investment technology was implemented in Arabesque Prime with effect from 1 February 2015. From August 2014 to 31 January 2015, it tracked the performance of Arabesque Universe.





Quantitative Assessment of Individual Stocks

Momentum Landscape per Single Stock

Based on a systematic quantitative approach to capture behavioural biases in the market

1,600 signals are analyzed per equity to determine its individual strength and overall market momentum

The calculated strength indicator is a key ingredient for the builtin risk management system Number of technical indicators

1,600 per stock

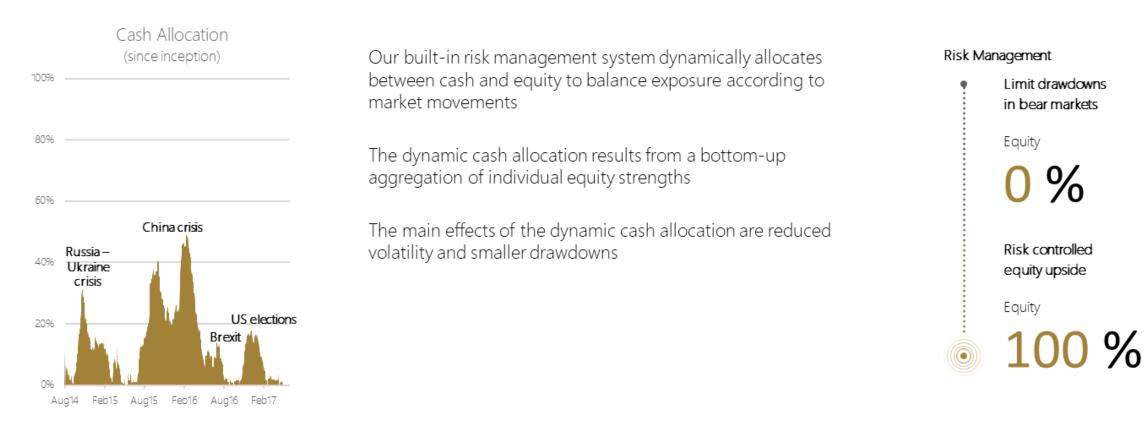
Recalibration Frequency
Monthly

Self-calibrating system to measure stock momentum





Identifying Optimal Equity Risk Exposure



Average market trend determines allocation between cash and equity





Stock Selection

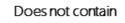
Portfolio as of 10/04/2015

MG	BWY	CLS	HWDN	PSN	SIG	GIL	PNDORA	BIIB	SIX
DOL	NTC	BVT	MANH	SHW	FPH	SSNC	COLM	SNA	HPOL.
JACK	FL	EW	ULTA	FIE	CVS	FISV	CNR	AAPL	ASSA
NTCT	JKHY	DLX	MCHP	CTAS	PPG	G	INFN	TSCO	SAP
πc	GL9	BR	ROST	MMS	LUV	CMPR	LOW	TYL	SNPS
KEY	HNI	ULTI	BNZL	KNX	IPXL	5108	AZO	3407	ALG
GIVN	4503	6869	4922	ASM	SN	7936	4452	GIB.A	LSTR
NOVN	PAYX	6448	CSL	LANC	4536	6645	UTDI	STE	HD
XHL	ROG	IDXX	SWI	UA	GLD	6849	ABF	МСК	LB
GPS	CFP	BCR	DSV	WFT	9843	Cash	Cash	Cash	Cash

Our system aims to find the best combination of equities that offer an expected superior risk adjusted return

The portfolio optimization selects upward-trending stocks with strong fundamental measures (G-Score, F-Score, and Earnings Pressure)

To limit the turnover (expected at 2.2x NAV p.a.), potential portfolio improvements have to exceed the trading costs



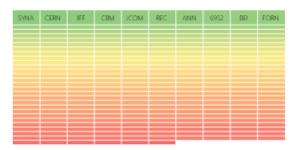






Stock selection is driven by single asset and portfolio properties

Remaining Stocks from Arabesque Universe





Arabesque Systematic



Arabesque Systematic is a long only global equity fund built on quantitative systems capturing market trends

Arabesque Systematic integrates sustainability with momentum analysis and advanced risk management techniques to limit maximum drawdowns and deliver superior performance

Arabesque Systematic is monitored on a daily basis

Total Return since inception (as of 31/7/2017, net of fees)

+7.68%

p.a.

Morningstar Comparison

(as of 31/7/2017, net of fees, compared to the EAA OE USD Flexible Allocation peer group)

Top 10 %

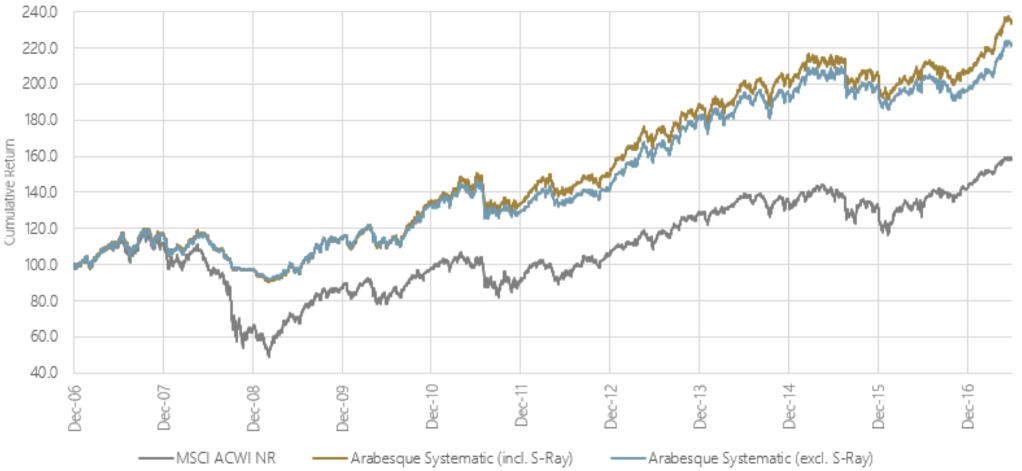


Systematic Performance

(USD, net of fees)



Backtest Performance Comparison - Systematic Global All Countries with and without S-Ray





A new perspective on finance

Sustainability now available to all

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7月8日(金) 7月9日(上)

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