

DIVERSIFICATION DASHBOARD

March 2015

Diversification Ratios[®]

<p>TOBAM's Diversification Ratio[®] (DR) measures to what extent a portfolio is diversified. The DR² (square of the diversification ratio) measures the number of effective degrees of freedom to which a portfolio is exposed. As the table shows, the "broad market" indices leave diversification on the table. In addition to a snapshot of each market's DR², the table shows the DR² of a well-diversified portfolio, and the fraction of available diversification used by the index.</p>	Universe	DR ² Index diversification	DR ² Maximum diversification [®]	% diversification used by index
	MSCI All Countries	6.13	28.36	21.6%
	MSCI World	5.31	22.38	23.7%
	MSCI Emerging	7.34	16.62	44.2%
	MSCI Canada	4.78	10.49	45.6%
	MSCI US	3.24	9.55	34.0%
	MSCI Pacific ex-Japan	3.17	9.58	33.0%
	MSCI EMU	2.11	5.78	36.4%
	MSCI UK	3.29	5.81	56.5%
	MSCI Japan	2.20	5.87	37.5%
	MSCI Australia	2.48	4.55	54.5%

Source: TOBAM, figures as of February 27, 2015

What makes a beta smart?

Yves Chouelfaty, President and Founder of TOBAM, explains why concepts such as "smart beta" or "neutral portfolio" require clear definitions and how the maximum Diversification approach answers the need for beta.

What is your definition of Smart Beta? What makes a Beta Smart?

TOBAM is one of the founders of what has been called by the industry the "Smart Beta" movement back in 2005 and 2006. I do not like the expression "Smart Beta" since it is lacking a clear definition and as a mathematician, I do not like undefined terminology.

In order to properly answer this question it is important first to define what is beta. Originally, beta is a measure of how much you access the systematic risk premium available in a given market. Secondly, what is the systematic risk premium? It is the return of the un-diversifiable portfolio.

Most of the smart beta approaches emerged from the observation that the current representation of beta by the industry, which is the market capitalization-weighted benchmark, is failing to achieve two objectives. The first objective is to be close to the efficient frontier ex-post and the second is to be truly diversified.

The market cap-weighted benchmark has failed to meet those two criteria and as a result there is a growing demand for a smarter way to access the equity risk premium.

The common thread of mainstream smart beta approaches and their providers is the recognition that market cap-weighted indices are not the optimal solution for investors. In that sense, "Smart beta" approaches are smart, or at least "smarter" than the traditional benchmarks.

What defines truly a smart beta approach, I believe, is its capacity to deliver an equilibrium portfolio. Risk Factor investing for example is contradictory with the notion of equilibrium since betting on a factor for pricing or strategic reasons, remains an arbitrage. This is as far as the similarities go in the smart beta world.

TOBAM is the founder and unique provider of the Maximum Diversification[®] approach and Anti-Benchmark[®] strategy, what makes your approach unique?

The core investment philosophy of TOBAM is to maximize diversification to optimally capture risk premium of an asset class. At TOBAM we don't know if we are "smart" but we believe that we provide the Beta.

Our conviction is that the inefficiency of the market cap-weighted strategy arises from insufficient diversification. TOBAM's patented Maximum Diversification[®] approach is designed to maximize the degree of diversification when selecting the weighting of assets in the portfolio allocation process.

TOBAM's proprietary measure of diversification, the Diversification Ratio[®], is maximized to produce a portfolio designed to access risk premium evenly from all the independent risk factors available in the market at any given time.

The Anti-Benchmark[®] portfolios generated by this approach have been shown to provide greater returns than market cap-weighted benchmarks over a market cycle, while these portfolios typically also have significantly lower volatilities than the market cap-weighted benchmarks.

What is your position in the current debate about the passive versus active management?

"Passive"... "management". This is the perfect example of an oxymoron. How can you be passive and manage? How can you manage and be passive?

In my mind passive has nothing to do with asset management it is literally a custody job.

The passive/active dilemma is hiding another much more crucial dilemma. We often tend to assume that a passive portfolio (i.e. following the benchmark) is a neutral portfolio. This is absolutely false. You can be passive, but you definitely are not neutral, implementing a neutral risk allocation. The market cap-weighted benchmarks are hugely biased and absolutely failing to allocate their risk neutrally across the risk drivers.

Smart beta approaches are active by design. To remain the Most Diversified Portfolio for instance, you need to stay active, in order to remain neutral. Being a systematic asset manager, we are systematically active.

Does that mean that the end is near for traditional benchmarks?

I believe that benchmarks have a role in the asset management industry. They are representative of the market; they are the sums of all speculations and as such provide information for asset managers and investors. They remain a very useful tool for the finance industry, but they need to remain an output.

The trends over the last 20 years to use market cap weighted benchmarks as inputs that some asset managers take as a strategy reference to follow, is highly inefficient and potentially destructive for the economy, as it diverts core asset managers from their fundamental role for the global economy.

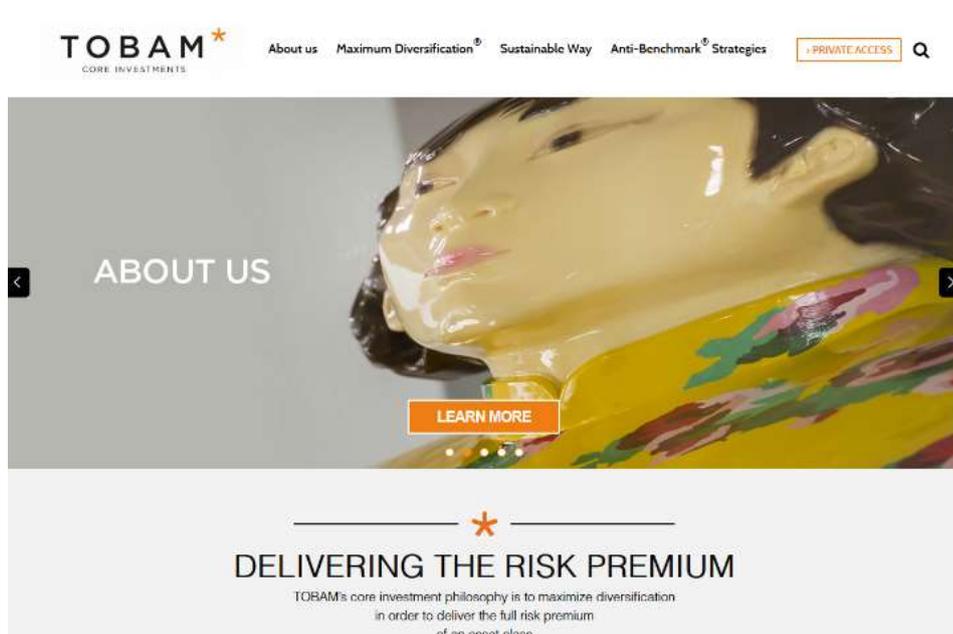
How would you then define the role of core asset managers for the global economy?

At its heart, the job of core asset managers within the overall wealth creation process is about reinvesting savings into the economy to create wealth for investors through growth and development. Importantly, the real source of wealth is not the "skills" of portfolio managers, but the "skills" of employees working in the companies in which savings are invested. Labour, in other words. It is labour that, through innovation, productivity gains and corporate governance, for example, create wealth for the investor. This is especially true in the case of equity holdings.

The fundamental role of core asset managers is to act as a link between savings and labour and ensure the risks savers are taking are rewarded as well as possible. To achieve this as purely as possible, it is critical to immunise investors' core portfolios against all kinds of speculation.

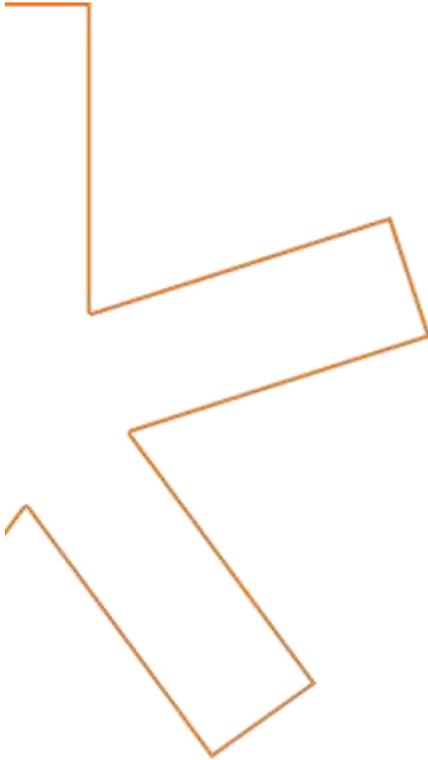
By definition, a maximum diversification approach intrinsically promotes firms that stand out in terms of innovation, efficiency and strong governance. It is these characteristics that, through time, create growth, wealth and improve the overall wellbeing of society.

TOBAM New Website



TOBAM invites you to explore its new website: www.tobam.fr

Find "[What Makes a Beta Smart](#)" article, and other articles related to TOBAM, on the news section of our website.



For more information

TOBAM is an asset management company offering innovative investment capabilities whose aim is to maximize diversification. TOBAM's flagship Anti-Benchmark® strategies, supported by original research and a mathematical definition of diversification, provide clients with diversified core exposure in equity and fixed-income markets. The company manages about \$9.0 billion (Mar 2015) via its Anti-Benchmark strategies for clients worldwide. Its team includes 35 financial professionals.

Contacts

Paris Office

Christophe Roehri

+33 1 53 23 41 60

Christophe.Roehri@tobam.fr

New York Office:

Stephane Detobel

+1 (646) 829-1621

stephane.detobel@tobamusa.com

Francis Verpoucke

+1 (646) 829-1622

francis.verpoucke@tobamusa.com

Client Service

Joe Kiwan

+33 1 53 23 41 66

ClientService@tobam.fr

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