On Track

Marketing material
For professional clients /
qualified investors only
AT / CH / DE / LI /
LU / NL / UK edition
Q4 2017

Magazine for index investors

In focus:

Rethinking indexed emerging markets (EM) investments

Special topic:

A quality indexing approach

UBS

Marketing material. For professional clients/qualified investors only.

Contents

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Always be on track with index-based solutions

> "Join us for an in-depth look at opportunities in emerging markets investing, focusing on passive solutions replicating fixed income and equity markets."
>
> Clemens Reuter

Clemens Reuter
Head Global UBS Passive & ETF Investment Specialists
Managing Director
UBS AM

Dear investors,

When I started in the industry more than 20 years ago, index-based solutions were in their infancy. Over the years the demand has increased significantly due to innovation and the transparency of the product.

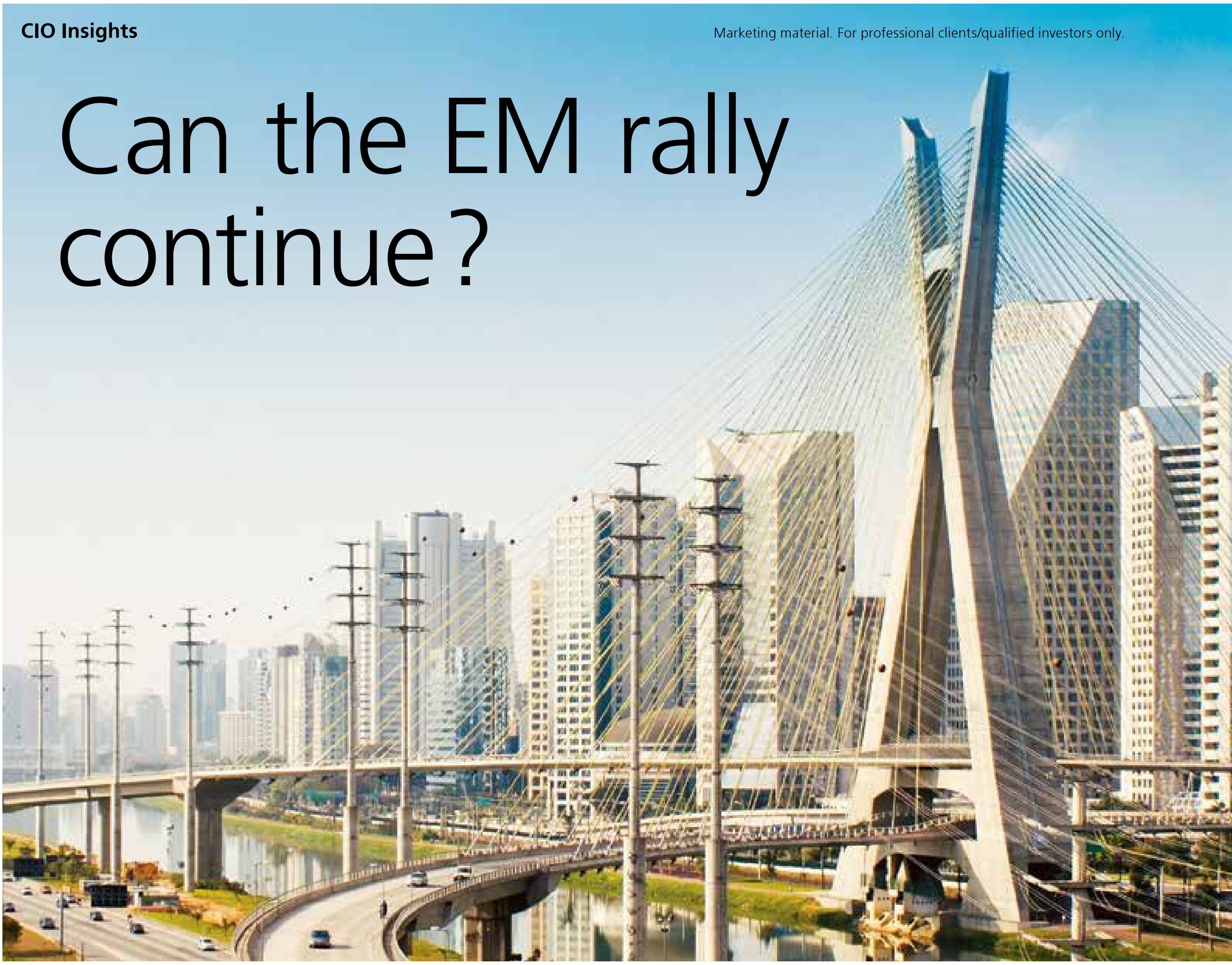
This year, UBS Asset Management decided to bring together all its index-based products in one area for the first time. We believe that this is the right approach as it highlights the needs of our clients and products that are tailored to their investment strategy.

With the On Track magazine we would like to give you more insights into our UBS Asset Management integrated passive offering and services. In this first issue, we take a closer look at opportunities in emerging markets investing, with a focus on passive investment solutions in fixed income and equity markets. Emerging markets will see an increased share of world economic growth over the next decade. Investors looking to capitalize on this ongoing trend should consider how best to access these markets. Investing in this space offers diversification benefits and the possibility of increased returns.

We hope that On Track will give you insights into our index-based solutions and help you to find interesting opportunities in the emerging markets space.

Best regards,
Clemens Reuter

Can the EM rally continue?



Given the strong economic and corporate profit growth in emerging markets (EM) and synchronized growth globally, benign liquidity conditions, and not overly stretched valuation, we think the EM rally has further to run.

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twitter.com/UBS_CIO

As we enter the last quarter of 2017, there are increasing doubts about the sustainability of the EM rally this year. With over 30% year-to-date gains in equities, 15% in local rates, and close to 10% in credit and currencies, are we already in the late stage of the EM cycle?

We think not, and here are three reasons why:
First, the growth backdrop remains solid. This year, EM GDP growth is set to accelerate for the first time since 2010. More importantly, the EM real GDP growth premium in developed economies is expected to widen in the coming years, according to IMF forecasts. Corporate profits are also growing again: earnings for the MSCI EM Index have risen 18% year-to-date in dollar terms, after several years of no growth or losses. In addition, profitability measures such as return on equity recovered to 11% from 10% a year ago, but this remains well below the 15% registered in 2011. Not only the solid revenue growth, but also improving profitability promise more earnings upside, in our view. Another metric we watch closely is the earnings revision ratio, which jumped from a deeply negative -40% last February to a moderate +8% currently. It indicates

that analysts are starting to raise their estimates. These factors all point to an early-to-mid stage in the earnings recovery, and we expect 6–10% earnings growth in the next 12 months. Moreover, growth is more synchronized now than in previous years. This indicates a higher sustainability of the current expansion phase.

Second, liquidity conditions should overall remain supportive for EM assets. A passive reduction in the US Fed’s balance sheet in October, and the tapering of the ECB’s quantitative easing program next year may pressure EM assets temporarily, especially if the Fed hikes the policy rate faster than expected. However, our base case foresees normalization as gradual and well telegraphed. In addition, real interest rates remain high in many emerging economies, underpinning the region’s resilience toward higher interest rates in the US and Europe. Also, inflation remains benign for most countries, leaving room for several EM central banks to cut interest rates.

Third, while valuations in EM are more demanding than a year ago, they are not stretched by historical standards, and still compare favorably to developed market peers. EM equities are trading at 15.3x trailing 12-month earnings, above their 10-year average of 13.6x, but at a 27% discount to developed market equities. EM credit spreads are 60bps, tight versus their 10-year average; as a comparison, European high yield spreads are 350bps, also tight versus their 10-year average. The EM real effective exchange rate (ELMI-weighted) on aggregate is in line with its 10-year average, and for EMEA and LatAm regions still around 8% below the 10-year average. This means despite the year-to-date gain, EM FX remains competitive.

Given the strong economic and corporate profit growth, benign liquidity conditions and not immodest valuation, we think the EM rally has further to run, and maintain a moderate pro-risk stance. In our dedicated EM portfolio, we remain overweight EM equities relative to corporate bonds to take advantage of the earnings rebound. Moreover, we are still holding exposure to selected high yield markets, both in credit and in FX.

Of course, investing in EM is rarely without risks. A sharper-than-expected slowdown in China is a possibility. So far this year, data has been stronger than expected, and the government has been managing the deleveraging effort smoothly. Other risks include faster-than-expected tightening by the Fed and ECB, lower commodity prices, potential trade protectionist policies and rising geopolitical tensions.

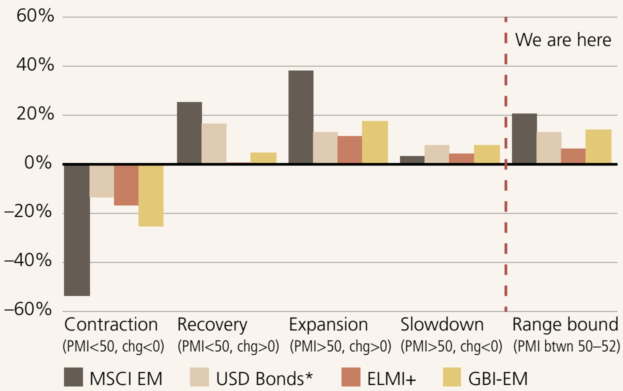
Jorge O. Mariscal
Chief Investment Officer
Emerging Markets
UBS WM Americas

Michael Bolliger
Regional Head CEEMEA
UBS WM

Late, but not too late

After a strong improvement in economic activity in the first half of 2017, the strongest acceleration phase of the EM business cycle is likely behind us. Nevertheless, we expect the overall macro backdrop to remain healthy and see EM purchasing managers’ indices (PMIs) staying in expansionary mode, though trending sideways at current levels. However, this lack of acceleration does not necessarily spell doom for EM assets. In fact, in this interim “range bound“ phase between expansion and slowdown, all EM assets on average are posting positive returns; equities are the best-performing asset class.

EM returns in 4 phases in %



* USD bonds represent average of EMBIG Diversified and CEMBI Diversified indices. Based on monthly returns. Change refers to month-on-month change in PMI.
Source: Bloomberg, UBS, as of 24 August 2017

A passive approach to EM investing

Emerging markets have potential to outperform as their economies converge towards developed countries. Investors looking to access emerging exposures can do so through standard EM benchmarks as well as solutions which include ESG assessment or have enhanced diversification properties.

Pawel Janus PhD, Head Passive and ETF Investment Analytics, UBS AM, pawel.janus@ubs.com
Marcin Wojtowicz PhD, Passive and ETF Investment Analytics, UBS AM, marcin.wojtowicz@ubs.com

Emerging markets

Emerging markets (EM) have become a mainstream component of asset allocation. Emerging economies currently account for almost 40% of global GDP compared to 21% back in 2000. This contribution is set to increase as economic growth in emerging countries is currently 2.5 percentage points higher than those of developed markets (DM), respectively 4.5% and 2.0% per annum[1,2].

EM countries have historically delivered good returns to investors. EM equities recorded an average annualized return of 10.0% vs. 4.9% for developed markets from December 2000 to August 2007 (Figure 1a). The broad emerging market USD debt benchmark has also outperformed its developed markets counterpart by 380 bps per annum (Figure 1b) over the same period. Clearly, taking on more economic risk by adding even limited EM exposure could help to significantly enhance portfolio returns.

EM Equities

Performance of broad EM equities can be measured by benchmarks of which the most widely used is the MSCI EM Index. It represents performance of stocks from 24 EM countries with the five largest allocations as of September 2017 being China (29.7%), South Korea (15.0%), Taiwan (11.5%), India (8.3%) and Brazil (7.5%). The index continues to evolve. For example, a new segment of China-A stocks will be added in June 2018. From a valuation perspective, the MSCI EM Index is quite attractive with a P/E ratio of 15.3x, close to its historical average[3] and substantially lower than the P/E of the MSCI World of 20.8x (Sept '17).

Emerging market investments can also be implemented through an ESG lens. For example, the MSCI EM Socially Responsible 5% Capped Index selects companies that score high on a number of Environmental, Social and Governance (ESG) measures. Noteworthy is that this SRI index has

Index Perfomance TR Net USD (Dec '00 – Aug '17)

Figure 1a

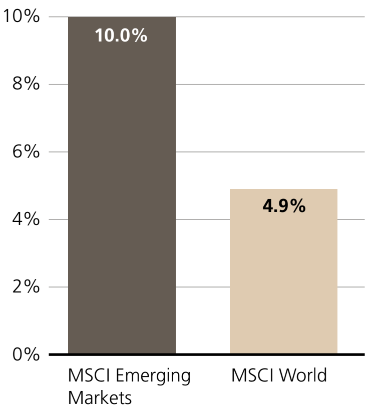
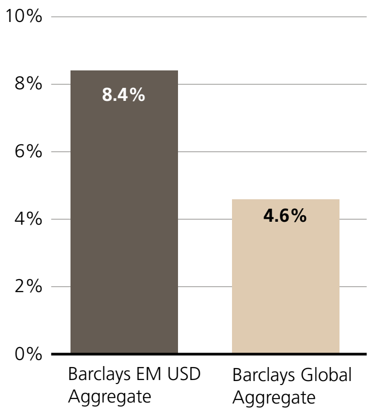


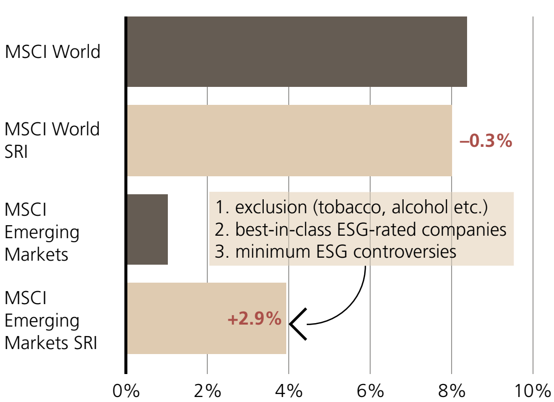
Figure 1b



Source: MSCI, UBS Asset Management

Relative Performance TR Net USD (May '11 – Aug '17)

Figure 2



Source: MSCI, UBS Asset Management

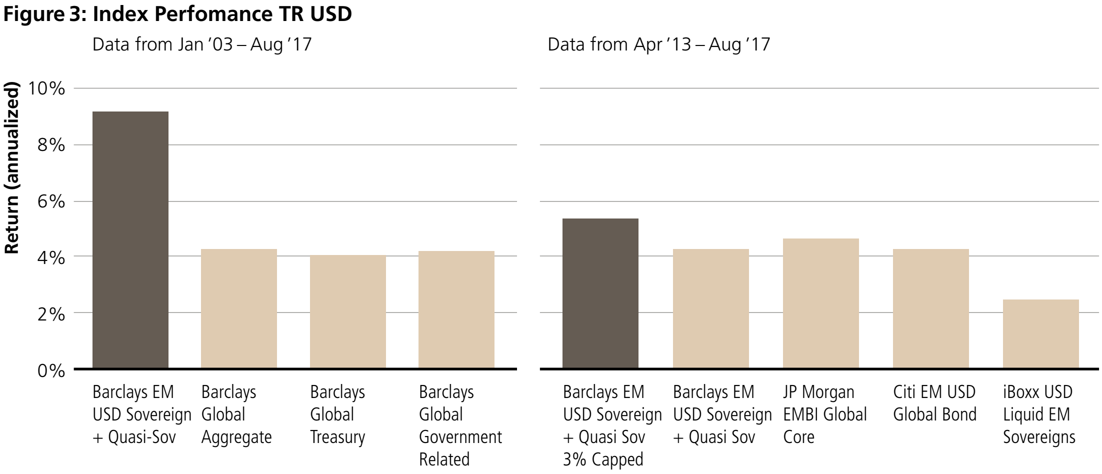
a relative underweight to China of 24.5 percentage points, but an overweight to India of 6.2 percentage points (Sept '17). ESG profiles of emerging economies are dynamic and more heterogeneous than those of developed economies, which results in a greater impact on performance. The EM SRI has outperformed the broad EM benchmark by 2.9% per annum since May 2011 demonstrating that ESG screening can be effective in selecting EM companies better positioned for sustainable growth (Figure 2).

EM Fixed Income

Investing in emerging market bonds is not without challenges. It requires a careful assessment of liquidity, currency and credit risks. One way to mitigate these risks is to focus on USD denominated bonds issued by government and quasi-government entities. A leading index doing just that is the Bloomberg Barclays Emerging Market USD Sovereign + Agency 3% Capped Index. The index mitigates credit risk as it primarily includes government and government-related bonds. A notable positive here is that EM countries have relatively low debt-to-GDP ratios. Furthermore, the 3% capping ensures broad issuer diversification so that performance is not excessively driven by countries with the most debt outstanding. The selection of USD-denominated paper eliminates local currency risks, which is important for fixed income as adverse currency fluctuations would be hard to offset from coupon payments. Sovereign USD bonds are also relatively liquid and the index methodology imposes specific liquidity criteria.

The EM USD benchmark has higher historical returns compared to developed markets fixed income (Figure 3). Additionally, the 3% capped version of this index has outperformed competing EM debt benchmarks. In general, investors in emerging markets debt can take advantage of the higher yield of 4.9% afforded by the Barclays EM USD Sovereign + Agency 3% Capped Index compared to the 1.1% for the Barclays Global Developed Treasury Index. Moreover, the duration on the EM debt index is 6.5% compared to 7.9% on Global Treasuries. Hence, EM debt carries slightly less duration risk, which limits the downside in a rising interest rate environment.

Figure 3: Index Perfomance TR USD



Source: Barclays Live, Bloomberg, UBS Asset Management

Matching Products

Fund Name	Fee	AuM (USD m)	NAV ccy	Replication	Distribution	ISIN
UBS ETF (LU) MSCI Emerging Markets UCITS ETF	0.45%	946	USD	Physical	Yes	LU0480132876
UBS ETF (IE) MSCI Emerging Markets SF UCITS ETF	0.26%	2,717	USD	Synthetic	No	IE00B3Z3FS74
UBS ETF (LU) MSCI Emerging Markets Socially Responsible UCITS ETF	0.53%	345	USD	Physical	Yes	LU1048313891
UBS ETF (LU) MSCI World UCITS ETF	0.30%	1,265	USD	Physical	Yes	LU0340285161
UBS ETF (LU) MSCI World Socially Responsible UCITS ETF	0.38%	404	USD	Physical	Yes	LU0629459743
UBS ETF (LU) Barclays USD Emerging Markets Sovereign UCITS ETF*	0.42%	180	USD	Physical	Yes	LU1324516050

* Currency hedged share classes are also available
Source: UBS Asset Management as of 31 August 2017

[1] We refer here to developed markets as those classified as Advanced Countries by IMF, while developing countries encompass both emerging and developing countries by IMF. Data is from IMF as of September 2017.
[2] Real GDP growth, annual percent change. IMF data as of September 2017.
[3] Long-term average P/E of MSCI EM is 15.2x (September 1995 to September 2007).

Investors are increasingly adding more innovative index-based solutions to their portfolios. We have in particular experienced considerable demand for Socially Responsible Investing (SRI) and Factor Investing solutions provided by UBS Passive & ETF.

Socially Responsible Investing

Investing in companies that score highly within Environmental, Social and Governance (or ESG) pillars has recently accelerated in many asset allocation programs. The SRI ETFs largely preserve sector diversification of the broad benchmarks while they exclude controversial business activities (e.g. alcohol, tobacco or weapons) and select top ESG-rated companies (best-in-class) to formulate a socially-friendly investment opportunity.

Fund Name	**ISIN**
UBS ETF (LU) MSCI World Socially Responsible UCITS ETF	LU0629459743
UBS ETF (LU) MSCI EMU Socially Responsible UCITS ETF*	LU0629460675
UBS ETF (LU) MSCI USA Socially Responsible UCITS ETF*	LU0629460089
UBS ETF (LU) MSCI Japan Socially Responsible UCITS ETF*	LU1230561679
UBS ETF (LU) MSCI Emerging Markets Socially Responsible UCITS ETF	LU1048313891
UBS ETF (LU) MSCI Pacific Socially Responsible UCITS ETF	LU0629460832
UBS ETF (LU) Barclays MSCI US Liquid Corporates Sustainable UCITS ETF*	LU1215461085
UBS ETF (LU) Barclays MSCI Euro Area Liquid Corp. Sustainable UCITS ETF	LU1484799769

* Currency hedged share classes are also available

Factor Investing

Factors provide a targeted exposure to specific stock features like Value, Low Volatility, Quality or Shareholder Yield that have historically earned premium over the long-term. Single-factor ETFs can be added to a portfolio to achieve a specific goal, e.g. reduce volatility or increase yield. It is also possible to use a balanced multi-factor ETF which diversifies across many factors to harvest multiple risk premia.

Fund Name	**ISIN**
UBS ETF (IE) DJ Global Select Dividend UCITS ETF	IE00BMP3HG27
UBS ETF (LU) MSCI EMU Prime Value UCITS ETF	LU1215452928
UBS ETF (LU) Factor MSCI EMU Low Volatility UCITS ETF*	LU1215454460
UBS ETF (LU) Factor MSCI EMU Prime Value UCITS ETF*	LU1215452928
UBS ETF (LU) Factor MSCI EMU Quality UCITS ETF*	LU1215451524
UBS ETF (LU) Factor MSCI EMU Total Shareholder Yield UCITS ETF*	LU1215455947
UBS ETF (IE) Factor MSCI USA Low Volatility UCITS ETF*	IE00BX7RQY03
UBS ETF (IE) Factor MSCI USA Prime Value UCITS ETF*	IE00BX7RR706
UBS ETF (IE) Factor MSCI USA Quality UCITS ETF*	IE00BX7RRJ27
UBS ETF (IE) Factor MSCI USA Total Shareholder Yield UCITS ETF*	IE00BX7RRT25
UBS ETF (IE) MSCI USA Select Factor Mix UCITS ETF	IE00BDGV0308

* Currency hedged share classes are also available

For more information, visit our homepage. ❯ **www.ubs.com/etf**

A quality indexing approach

Index-based investment strategies are often viewed as homogeneous commodities with little differentiation. We disagree with this notion, and believe our distinctive approach is the key to our success.

About Ian Ashment

Ian is Head of Systematic & Index Investments at UBS Asset Management. Prior to his current role, Ian was Global Head of Structured Beta & Indexing, responsible for index assets across all asset classes. He began his career at UBS Asset Management in 1985 as a statistical assistant before becoming an active equity fund manager and then a member of the Quantitative department specializing in indexing and risk measurement. Ian has 31 years of investment industry experience.

As index investing grows, clients are demanding their index assets work more effectively for them. This can include portfolios incorporating clients' ESG and risk requirements along with seeking added value through index plus and alternative ('smart') beta strategies. We have been managing index assets for over 30 years and have always specialized in this quality indexing approach, which has contributed to us being one of the fastest growing index managers globally over recent years. Our goal is to be at the forefront of the indexing industry by focusing on product innovations and developing custom solutions to meet our clients' objectives.

We now manage around USD 270 billion* in index assets benchmarked to a wide range of equity, fixed income and commodity indices, on behalf of clients in more than 25 countries. We are also the fourth largest European ETFs provider, managing the largest range of currency hedged ETFs and SRI ETFs in the region. Our index and rules-based products span the entire spectrum of systematic strategies: from plain vanilla market cap indices, through alternative beta indexation, to benchmark-oriented as well as benchmark-agnostic quantitative strategies.

Index and alternative beta strategies offer great benefits to investors, but they must be implemented carefully. When considering a manager to partner with for indexing and alternative beta strategies, we believe investors should consider whether the services offered include:

– research and analysis of standard, custom and proprietary indices
– blending factors and indices to achieve targets
– building a bespoke portfolio to meet client specific needs
– ESG overlays, voting, governance, and engagement
– adding options overlays to meet goals more precisely

The 4 keys – our alternative beta indexation framework

Key 1
Researching equity return factors

Key 2
Selecting best in class indices

Key 3
Blending indices efficiently

Key 4
Implementing portfolios effectively

We believe one of our strongest advantages in this space is that we clarify thoroughly client needs in advance, and then work with them to find the balance between standard and bespoke approaches to best meet these in the most cost-efficient way.

The UBS quality indexing approach

Team: UBS has more than 30 years of indexing experience and our team demonstrates exceptional stability, with portfolio managers having worked together at UBS for over 10 years. The portfolio managers work closely with our Index Investment Specialists and Distribution teams to understand client needs.

Technology: over the years, we have built state-of-the-art proprietary portfolio and risk management systems. Our industry-leading index equity portfolio management system allows us to consider simultaneously the three key factors (transaction costs, tracking error and index imbalances) in the construction and maintenance of index equity portfolios. Portfolios are therefore constructed to minimize costs and risks while closely replicating the index.

Size: we are big enough to benefit from economies of scale but not too big to face liquidity constraints when trading for index changes.

Performance: we have delivered consistent, long-term track records demonstrating close tracking, and have frequently added value across our indexing book of business. We aim to add value to our clients' portfolios in a risk-controlled manner by:

– minimizing transaction costs through efficient trading of cash flows and avoiding unnecessary rebalancing within funds through an efficient investment process
– trading index changes by avoiding price distortions at the point a stock enters/exits the index, subject to strict risk controls
– corporate activity: added value opportunities in stock dividends, open offers, M&A activity, underwritings/IPOs

4 keys framework: over the past several years we have developed our in-house alternative beta analytical framework, the 4 keys (see above box), allowing us to research, analyse, blend and implement efficiently alternative beta portfolios for our clients, and we now manage over USD 18 billion* in such strategies.

* Data as of 30 June 2017

"Increasingly some elements of what used to be considered as alpha strategy and requiring manager discretion could now be captured via beta in a cost-effective manner."

You head up the Systematic & Index Investments team. How large is it, how is it structured, and what are the roles and responsibilities within the team?

Ian Ashment The team comprises 34 investment professionals, including portfolio managers, research analysts and portfolio specialists, providing 24 hour coverage around the globe. The team is highly experienced, with many of the portfolio managers having worked together at UBS for more than 10 years. The portfolio managers work closely with our Index Investment Specialists and Distribution teams to understand client needs.

What is on the minds of your current index investors?

We manage rules-based products spanning the entire spectrum of systematic strategies. Hence, we serve a diverse client base with different requirements. On the indexing side, clients are becoming increasingly sophisticated and they demand more from their indexing assets, for example: index plus, alternative beta, ESG factor integration, customization.

How do you go about customizing an alternative beta solution to address specific client needs?

As mentioned earlier, we work closely with our clients to construct custom solutions to meet their specific objectives. Over the past several years, we have built our in-house alternative beta indexation analytical framework, the 4 keys, allowing us to research, analyze, blend and implement efficiently alternative beta index portfolios for our clients. We tend to structure solutions for our clients around the 4 keys framework, by selecting factors and indices that would be most suitable for their needs in the context of their overall asset allocation. We then blend and implement these indices efficiently. For example, for a number of our clients who aim to achieve better risk-adjusted returns vs. the market at passive-like fees, we have constructed 'all-weather' alternative beta index blends combining efficiently value, volatility and quality factors.

With the blurring of lines between passive and active portfolio management, what is your vision for the UBS Systematic and Index Investments business?

There is certainly a place for good active managers. However, increasingly some elements of what used to be considered as alpha strategy and requiring manager discretion – namely systematic factor exposures – could now be captured via beta in a cost-effective manner. Given the broad spectrum of active and index strategies across UBS Asset Management, I think we and our clients are well positioned to benefit from the trend of blurring lines between alpha and beta. This trend has led to dramatic growth in assets under management in index funds over the years, from less than USD 10 million in the 1970s to over USD 10 trillion as of June 2017, and their growth shows no signs of slowing down.

ETFs: From strength to strength

The ETF market seems to go from strength to strength, not only growing strongly in terms of invested assets, but also maturing. This is leading to increased choice for investors. As it matures, however, it also evolves, with new trends and opportunities that investors and providers will want to keep on top of.

Simone Rosti
Head Passive and
ETF Specialist Sales Europe
Executive Director

Simone Rosti joined UBS Asset Management in 2012 as Country Head Italy, obtaining the current role in 2017. Prior to joining UBS he has been Senior ETF Sales, responsible for wealth clients, for iShares/BlackRock Italy since 2010. From 2007 to 2010 Simone was Head of Marketing and Co-Head of Distribution, iShares Italy, based in London within Barclays Global Investors. Previously, he has worked for UBI Pramerica, one of the largest Italian asset managers, and for Anasf, the Italian association of financial advisors.

Simone graduated in 2001 at Università Cattolica in Milan with a MSc in Political Science. He also holds a MSc in Economics and International Relations from ASERI the Postgraduate School of Università Cattolica.

The year has not yet ended, yet it's already clear that this has been a good one for ETFs. The global market has already grown over 20% compared to the previous year, reaching more than USD 4 trillion in assets under management, and that was just through July. Europe remains strong as well. At just under USD 700 billion in AuM and some 1,600 funds, it is the second-largest ETF market in the world.

Along with a year of growth, this has also been a year of evolution. We have seen passive investors embrace important new trends but also change their behavior.

Which trends do we find most worthy of note?

For one, we are seeing more and more investors implementing ETFs on the back of heightened selection criteria. This is likely a function of the increased choice in the market. But whatever the cause, it represents a significant change in investor behavior, indicating an increased demand for quality. Passive institutional investors are clearly scrutinizing funds more closely, looking among other things to select the right ETF for each particular exposure. This naturally rewards the best trackers, and so poses a challenge for providers, adding for example to the pressure to perform.

Second, investors have become interested in innovative products, for example those tracking innovative indices or with innovative structures. We have seen this ourselves at UBS, where there has been intense interest in some of our newer offerings. Our emerging market bond fund, whose unique 3% cap offers wider diversification in the index than other trackers, is a good example.

Thirdly, we have seen interest in a number of specific investment themes. One of these is clearly Smart Beta or factor approaches: in July alone, European Smart Beta ETFs saw more than USD 1 billion of inflows. Another important trend is sustainable investing or SRI. Of note here is that, at least in our experience, today's clients are increasingly looking at SRI products not just for the fringes of their portfolios, but as core elements – for example by replacing MSCI EMU with MSCI EMU Socially Responsible. At UBS we have had SRI ETFs since 2011. As the market leader today with 43% share, our SRI products continue to be an important part of our offering.

Another strong theme in the passive investment community has been commodities. Inflows into commodity index products have been strong across the board, as well as for us at UBS, where our offering of first and second generation commodity exposures has been doing well. Our clients are also increasingly hedging their currency risk using our products as tools. In an environment with a strengthening euro and US dollar volatility, as well as market shocks like Brexit or the end of the floor of the Swiss franc's exchange rate versus the euro, such strategies make sense and become increasingly important. To help meet this need, we have developed a unique, multi share class framework to serve investors with different funding currencies.

Looking forward, we expect the ETF market to continue to grow and mature. How exactly will depend on a number of factors, for instance regulation and interest rates. Passive investors should however continue to have an excellent, and ever-growing, range of choices, which we think will only fuel momentum.

Three times our best offering

To invest successfully means making the right decisions. We show you the entire spectrum of index-based solutions offered by UBS Asset Management.

UBS Segregated Mandates

Main clients
- Pension funds
- Corporates
- Sovereign wealth funds

Minimum size
- USD 100m

Advantages (tax, reporting, transparency, etc.)
- Customization
- High transparency
- High direct control of underlying
- Unregulated

Replication method
- Full replication
- Sampling

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UBS ETFs

Main clients
- All client segments (asset managers, banks, corporates, pension funds, insurance, retail)

Minimum size
- 1 share for all client segments

Advantages (tax, reporting, transparency, etc.)
- Intraday trading & liquidity
- Transparency
- Cost efficiency
- Granularity of exposures

Replication method
- Physical or synthetic replication
- Full or optimized sampling in case of physical

Contact
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UBS Index Funds*

Main clients
– Institutional (pension funds, corporates)
– Selected asset managers (only clients with an existing business relationship with UBS AM)

Minimum size
– No minimum size for retail share classes (1 share)
– Minimum investment size for professional clients dependent upon exposure and share class model

Advantages (tax, reporting, transparency, etc.)
– Pricing (end of day)
– Tax advantages only for locally domiciled qualified investors

Replication method
– Physical (full or optimizing sample)

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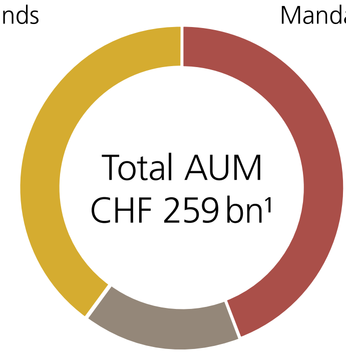
Contact United Kingdom
Andrew Walsh, andrew.walsh@ubs.com

* Available in Switzerland and the UK only.

A leading global index manager across asset classes

Total index AUM by vehicle



Source: UBS Asset Management, data as of 30 June 2017.
[1] AUM reported in official UBS financial statements CHF 247bn. Difference to above quoted AUM due to exclusion of index element in multi-asset strategies.

Ask our experts

What challenges do investors face in accessing emerging market economies with index-tracking equity funds?

Markus Goetschi
Head Passive Products
Product Management
Executive Director

As Head Passive Products Markus Goetschi is responsible for the development, launch and the lifecycle management of ETFs and Index Funds. He coordinates all activities and collaborates closely with involved internal and external partners.

Markus Goetschi started his professional career at Zürcher Kantonalbank as a business organizer in the area of electronic sales channels. On completing his studies, he switched to SIX Swiss Exchange as Index Analyst in 2004. From 2007 to 2009 he led the Index unit and then joined STOXX as part of the transfer of the operative index business, where he focused on the development of new global index concepts. Since 2011, Markus Goetschi has been with UBS Asset Management in Product Management.

Markus Goetschi completed his studies at the University of Zurich in 2004 with a MSc in Computer Science (commercial information technology). In 2008 he also completed further training as a financial analyst with the CIIA® diploma.

First of all, one needs to understand the term "emerging markets" (EM). Following the definition of least developed countries (LDCs) by the United Nations in 1971[1], EM are seen as less developed countries with the potential to meet the characteristics of developed countries in the future given their annual economic growth, the improvement of their social and political regimes and their efforts to remove capital in- and outflow barriers for international investors. The most prominent emerging national economies are the BRICS countries, namely Brazil, Russia, India, China and South Africa.

Market accessibility

For investors to gain access to emerging economies through an index-tracking vehicle, a global index sponsor needs to create benchmarks that are based on a set of rules to properly classify a country as a Developed, Emerging or Frontier Market. MSCI has defined five market accessibility criteria:

1. Openness to foreign ownership (no distinction between local and international investors),
2. Ease of capital inflows/outflows (move capital in and out of a market without disruption, delay and in a cost-efficient manner),
3. Efficiency of the operational framework (holdings are well identified and protected, operational risks are mitigated and the trading, clearing and settlement process is efficient),
4. Competitive landscape (exchanges should not abuse their position by imposing anti-competitive clauses) and
5. Stability of the institutional framework (long term track record of a country's economic system).[2]

The most recent and prominent classification change was MSCI's decision to include China A shares into the Emerging Markets index effective as of June 2018. Their decision is supported by the fact that China has demonstrated an improvement in market accessibility as a result of the expansion of the Stock Connect program that offers international investors a more flexible access framework compared to the current Qualified Foreign Institutional Investors (QFIIs) and Renminbi Qualified Foreign Institutional Investors (RQFIIs) regimes.[3]

Operational setup

In order to trade shares on local exchanges, the fund custodian has to open respective local custody accounts. The account opening process is not only less efficient for EM than for developed countries, but also takes much longer as comprehensive documentation is required (i.e. the account opening process to access equities traded on the Bombay or the National Stock Exchange of India can take up to six months, whereas accounts can be opened to trade Swiss equities usually within 48 hours).

Market liquidity

Direct access to a local capital market of a country without restrictions is fundamental for an index-tracking equity fund if the country in question is part of the underlying financial index (otherwise, the market has to be tracked using index futures, ADRs, P-notes or equivalent financial instruments). In most cases the home market where an index security is traded not only provides the highest on- and off-exchange liquidity, but also ensures efficient index tracking measured by the tracking error of the fund vs. its benchmark. The annualized ex-post tracking error of the UBS ETF on MSCI World has been 6 basis points compared to 26 basis points on the MSCI EM over the last 3 years (2014 to 2016)[4]. The table below illustrates the differences of MSCI's market accessibility framework by means of some further key figures. It is not surprising that both the annualized volatility and maximum drawdown of the MSCI EM is higher compared to the MSCI World over the last 10 years. The average market capitalization of a company in the MSCI World is 1.7 times and ten times the size of a company in the MSCI EM and the MSCI Frontier Markets respectively.

	MSCI World	MSCI EM	MSCI Frontier Markets
Number of countries	23	24	29
Number of securities	1652	842	115
Average Mkt Cap (USD bn)	9.9	6.0	1.0
Annualized Net Returns 10 Yr (%)	4.5	2.4	-0.9
Annualized Std Dev 10 Yr (%)	16.5	23.4	18.7
Max Drawdown (%) (2007 to 2009)	57.8	65.3	67.5

Source: MSCI; data as of end of August 2017

Providing competitive investment solutions via index-tracking funds necessarily requires tracking the underlying benchmarks as closely as possible. This in turn requires direct market access to trade contained securities in local currency without restrictions at a high volume and low cost. This is guaranteed for Developed, less guaranteed for Emerging and hardly guaranteed for Frontier Markets.

If your question is not answered, feel free to ask our specialists:
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[1] UN Resolution 2768 (XXVI), Identification of the least developed among developing countries with the lowest indicators of socioeconomic and human development; http://research.un.org/en/docs/ga/quick/regular/26
[2] MSCI Global Market Accessibility Review, June 2017; https://www.msci.com/market-classification
[3] Results of the MSCI 2017 Market Classification Review, June 2017; https://www.msci.com/eqb/pressreleases/archive/2017_Market_Classification_Announcement_Press_Release_FINAL.pdf
[4] Annual report 2016 UBS ETF, SICAV; http://www.ubs.com/2/e/files/lux_etf_ar2016e.pdf

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