

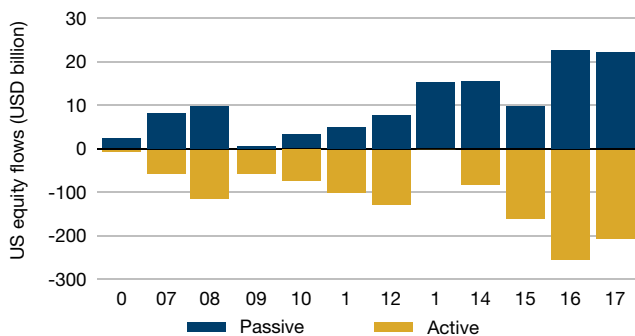
For investment professionals only. Not for public distribution.

April 2018

Historically, it tends to take a while before the unanticipated consequences of any new market phenomenon come clearly into view. The exponential growth of ETFs and other passive investment vehicles over the past few years has had a profound impact on the functioning of markets, and particularly on the behavior of equity indices. Last month, we wrote about the incomplete picture that these indices paint of the markets they purport to represent. We now want to delve a little deeper into the impact of the precipitous rise of passive investing on indices and their component securities.

We are currently seeing inflows into passive investment funds that are, if not quite unprecedented (ETFs still make up a smaller share of the US market than they did in 2007, although the absolute value of investment is higher now), then certainly remarkable. Investors allocated a massive USD692 billion into passive funds and ETFs last year, compared to USD45 billion in outflows for active funds, according to Bloomberg. A recent EY survey predicted that assets in passive investment funds would exceed active funds in the next 10 years. It also suggested that the ETF market would grow to USD7.6 trillion by the end of 2020 from just under USD5 trillion currently. Figure 1 illustrates the scale of the secular shift from active to passive management that has taken place over the past decade.

Figure 1. Passive flows dwarf active

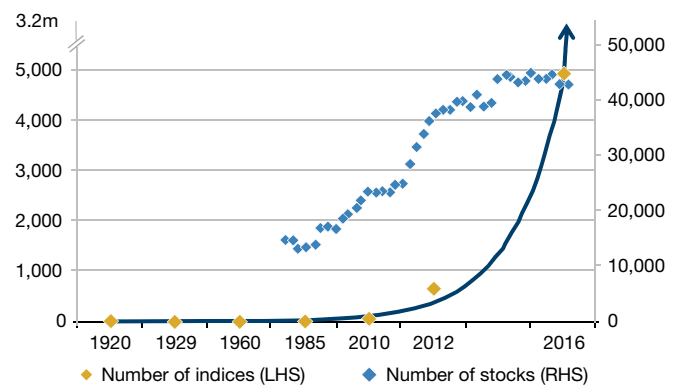


Source: Morningstar Direct Asset Flows.

According to a survey of its members conducted by the Index Industry Association, there are now 3.28 million indices being regularly updated for asset management clients. The World Bank reports there are 43,192 public companies (Figure 2). Where indices were once a useful way of grouping together the stocks of a particular market, region, or sector, they have now become so prevalent and in demand that the scale of investment in indices represents a substantial portion of overall

equity market investment. Seven of the 10 most actively traded securities on US stock markets last year were ETFs, while SPY, the USD254 billion ETF that tracks the S&P 500, was by value the most traded share.

Figure 2. Manufactured indices exceed the number of publicly traded companies<sup>1</sup>



Source: Wurgler (2011), ERI Scientific Beta, World Bank and Bernstein analysis. For the number of indices, the first five datapoints are based on Wurgler (2011) "On the Economic Consequences of Index-Linked Investing". The last two datapoints refer to the cumulative number of factor indices (4,274 from ERI Scientific Beta) and 673 ETFs identified by Morningstar. Bernstein fitted an exponential curve. It left the scale on the X-axis non-linear on purpose as, in fact, the recent rate of index creation exceeds that fitted by an exponential curve. S&P's claim of a million indices spans all asset classes: of that it says 850,000 are equity indices. The overall figure of 3.28 million indices is from the Index Association Alliance.

While the benefits to investors of the move to passive investment, in terms of lower fees, are obvious, the potential costs are less immediately clear. Sanford C. Bernstein's team of analysts, which in 2016, labeled passive investing 'worse than Marxism', recently pointed out that there really is no such thing as passive investment. Even supposedly passive investment requires active decisions to be made, either by humans or machines. And at each stage of the decision-making process, whether we're talking about substitutions within an index or the loss of investor agency when it comes to voting rights, the rise of passive investment has generated inefficiencies. The exclusive focus on the cost efficiency of following an index has ignored the opportunity cost of suboptimal investing and the distortions being caused in markets, and there are a host of people seeking to take remunerative advantage.

Let's take as an example the inclusion of a stock within an index. When a company joins the S&P 500, then, on the day of inclusion, a wall of passive money will be forced to purchase the stock by the nature of the rules that govern the ETFs. This obviously works the same way for those companies who drop out of the index and are sold by index funds and ETFs. Traders

have exploited the obvious arbitrage opportunities presented by this in the past, but the sheer size of the move to passive investment means that there is greater scope to potentially profit here than ever before.

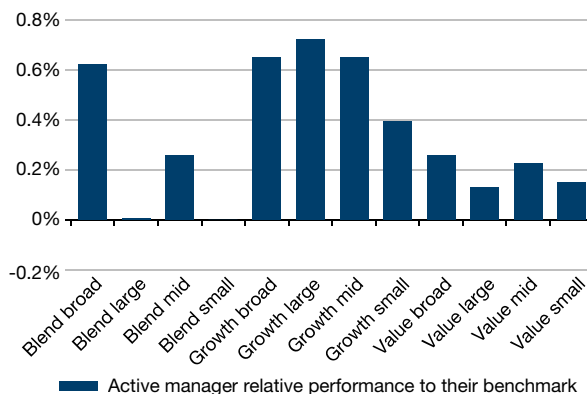
This situation has led to some strange imbalances. One obvious case is the devaluation of the voting rights attached to stocks. The concentration of voting power in the hands of a relatively few large ETF issuers leads to a host of potential conflicts. Where once activist and other small shareholders would have been able to put pressure on management teams when it comes to the central decisions that impact share prices: corporate strategy, M&A policy, and dividend pay-outs, investors have now ceded these valuable benefits to organizations who may not have their best interests at heart. Passive funds are keen to talk up the work they do when it comes to things like board membership and executive compensation, but we believe that they are less willing to apply pressure on the issues that potentially have the most tangible impact on companies' share prices. Already we have heard numerous anecdotes of firms acting with apparent impunity because the voices of smaller investors are drowned out by the more management-friendly passive behemoths.

It's striking that the last time ETFs garnered such heightened investor interest was at the tail end of the previous bull market. In the final stages of a cycle, the market can be a tide that lifts all ships. At times of low volatility and low dispersion, passive investment can make sense, with a focus on cost reduction clearly of prime concern.

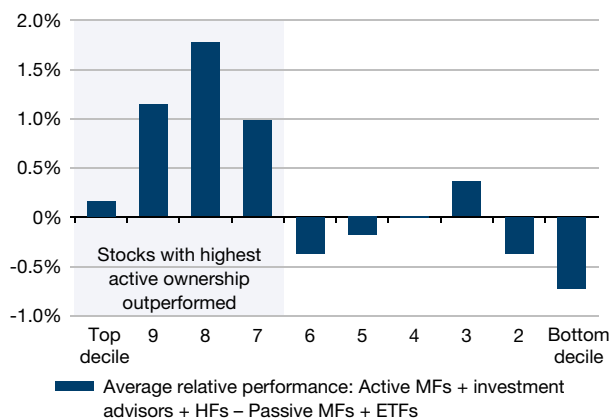
We are not calling the end of the bull run, but, as following graphs illustrate, in a more volatile market, active managers have potential to add value. These charts show that at times of market turmoil, such as we experienced at the end of January this year, active management has outperformed. Volatility is picking up and inflation and interest rates are rising. After several years of watching passive funds hoovering up investor

money, we believe stock-pickers may now have a chance to prove their worth.

**Figure 3. Stock-pickers strike back?**



Source: Bloomberg and UBS. Date range: 29 Jan to 6 Feb 2018.



Source: FactSet and UBS.



**Pierre-Henri Flamand**  
CIO of Man GLG

Pierre-Henri Flamand is the Chief Investment Officer of Man GLG ('GLG') with responsibility for investment performance across the firm's strategy range. Pierre-Henri joined GLG in June 2014 to manage its Value Opportunity strategy. Prior to joining GLG, Pierre-Henri ran Edoma Capital Partners – a European-focused, event-driven hedge fund. Before his role at Edoma, Pierre spent 15 years with Goldman Sachs where he ran the Principal Strategies Group. Pierre-Henri graduated from the Ecole Polytechnique, the Ecole Nationale de la Statistique et de l'Administration Economique and the Institut d'Etudes Politiques de Paris.

## IMPORTANT INFORMATION

This material represents an assessment of market and political conditions at a particular time and is not a guarantee of future results. This information should not be relied upon by the reader as research or investment advice. This presentation has been prepared based upon publicly available information and sources, believed to be reliable. Though utmost care has been taken to ensure its accuracy, no representation or warranty, express or implied, is made that it is accurate or complete. The opinions expressed herein are subject to change without notice and neither the author nor Man Group is under any obligation to inform recipients when opinions or information in this report changes. This document is for the use and consumption of the recipient only and may not be printed, sold or circulated or distributed without the written consent of Man Group. Forward-looking statements in this newsletter are not predictions and may be subject to change without notice. Neither Man Group nor any of its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information included in this presentation.

All investments involve risks including loss of principal. Foreign securities involve additional risks, including foreign currency changes, political risks, foreign taxes, and different methods of accounting and financial reporting.

This information is communicated and/or distributed by the relevant GLG or Man entity identified below (collectively the 'Company') subject to the following conditions and restriction in their respective jurisdictions. This material represents an assessment of market conditions at a particular time and is not a guarantee of future results. This information should not be relied upon by the reader as research or investment advice regarding any particular security.

Opinions expressed are those of the author and may not be shared by all personnel of Man Group plc ('Man'). These opinions are subject to change without notice, are for information purposes only and do not constitute an offer or invitation to make an investment in any financial instrument or in any product to which the Company and/or its affiliates provides investment advisory or any other financial services. Any organisations, financial instrument or products described in this material are mentioned for reference purposes only which should not be considered a recommendation for their purchase or sale. Neither the Company nor the authors shall be liable to any person for any action taken on the basis of the information provided. Some statements contained in this material concerning goals, strategies, outlook or other non-historical matters may be forward-looking statements and are based on current indicators and expectations. These forward-looking statements speak only as of the date on which they are made, and the Company undertakes no obligation to update or revise any forward looking statements. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those contained in the statements. The Company and/or its affiliates may or may not have a position in any financial instrument mentioned and may or may not be actively trading in any such securities. This material is proprietary information of the Company and its affiliates and may not be reproduced or otherwise disseminated in whole or in part without prior written consent from the Company. The Company believes the content to be accurate. However accuracy is not warranted or guaranteed. The Company does not assume any liability in the case of incorrectly reported or incomplete information. Unless stated otherwise all information is provided by the Company. Past performance is not indicative of future results.

Financial indices are shown for illustrative purposes only and are provided for the purpose of making general market data available as a point of reference. An index is a statistical measure that shows changes in the economy of financial markets and may serve as a benchmark against which economic and financial performance of an investment is measured. An index is not available for direct investment, and its performance does not reflect the expenses associated with the management of an actual portfolio. All investments involve risks including the potential loss of principal.

Unless stated otherwise this information is communicated by GLG Partners LP, One Curzon Street, London W1J 5HB. Authorised and regulated in the UK by the Financial Conduct Authority.

**Australia:** To the extent this material is distributed in Australia it is communicated by Man Investments Australia Limited ABN 47 002 747 480 AFSL 240581, which is regulated by the Australian Securities & Investments Commission (ASIC). This information has been prepared without taking into account anyone's objectives, financial situation or needs.

**European Economic Area:** Unless indicated otherwise this website is communicated in the European Economic Area by Man Solutions Limited which is an investment company as defined in section 833 of the Companies Act 2006 and is authorised and regulated by the UK Financial Conduct Authority (the "FCA"). Man Solutions Limited is registered in England and Wales under number 3385362 and has its registered office at One Curzon Street, London W1J 5HB, England. As an entity which is regulated by the FCA, Man Solutions Limited is subject to regulatory requirements, which can be found at <http://register.fca.org.uk>.

**Germany:** To the extent this material is used in Germany, the communicating entity is Man (Europe) AG, which is authorised and regulated by the Liechtenstein Financial Market Authority (FMA). Man (Europe) AG is registered in the Principality of Liechtenstein no. FL-0002.420.371-2. Man (Europe) AG is an associated participant in the investor compensation scheme, which is operated by the Deposit Guarantee and Investor Compensation Foundation PCC (FL-0002.039.614-1) and corresponds with EU law. Further information is available on the Foundation's website under [www.eas-liechtenstein.li](http://www.eas-liechtenstein.li). This material is of a promotional nature.

**Hong Kong:** To the extent this material is distributed in Hong Kong, this material is communicated by Man Investments (Hong Kong) Limited and has not been reviewed by the Securities and Futures Commission in Hong Kong. This material can only be communicated to intermediaries, and professional clients who are within one of the professional investor exemptions contained in the Securities and Futures Ordinance and must not be relied upon by any other person(s).

**Liechtenstein:** To the extent the material is used in Liechtenstein, the communicating entity is Man (Europe) AG, which is regulated by the Financial Market Authority Liechtenstein (FMA). Man (Europe) AG is registered in the Principality of Liechtenstein no. FL-0002.420.371-2. Man (Europe) AG is an associated participant in the investor compensation scheme, which is operated by the Deposit Guarantee and Investor Compensation Foundation PCC (FL-0002.039.614-1) and corresponds with EU law. Further information is available on the Foundation's website under [www.eas-liechtenstein.li](http://www.eas-liechtenstein.li).

**Switzerland:** To the extent this material is distributed in Switzerland, this material is communicated by Man Investments AG, which is regulated by the Swiss Financial Market Authority FINMA.

**United States:** To the extent his material is distributed in the United States, it is communicated by GLG, Inc. and is distributed by Man Investments, Inc. ('Man Investments'). Man Investments is registered as a broker-dealer with the US Securities and Exchange Commission ('SEC') and also is a member of the Financial Industry Regulatory Authority ('FINRA'). Man Investments is also a member of the Securities Investor Protection Corporation ('SIPC'). GLG, Inc. is registered with the SEC as an investment advisor. GLG, Inc. and Man Investments are members of the Man Investments division of Man Group plc. The registration and memberships described above in no way imply that the SEC, FINRA or the SIPC have endorsed GLG, Inc., or Man Investments. Man Investments, 452 Fifth Avenue, 27th fl., New York, NY 10018.

Recipients of this material are deemed by the respective Marketing Entity to be investment professionals and/or qualified investors that have employed appropriately qualified individuals to manage their financial assets and/or are a financial services entity appointed by an investor to provide fiduciary advisory and/or portfolio management services in respect of their financial assets. Marketing Entities will provide prospective and existing investors with product and strategy information prepared by the Investment Manager and assist with queries regarding investment strategies and products managed by the Investment Manager but will not provide investment advice or personal investment recommendations, assess the suitability or appropriateness of any investment products and will not consider the particular circumstances specific to any individual recipient to whom this material has been sent nor engage in any activity which may be deemed to be "receipt and transmission of client orders" or "arranging deals" in investments.

US/GL/I/W