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European Fund and Asset Management Association

ICSA International Council of Securities Associations

Global Memo: Benchmark Data Costs

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CONTRIBUTORS

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European Fund and Asset Management Association

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Background and global principles for benchmark data cost regulation

Introduction

A key purpose of the financial system is to allocate capital and risk in a manner that supports sustainable economic development and growth, including through the provision of financing, investment and hedging products. Financial benchmarks/indices are fundamental to the functioning of financial markets and are widely used in both retail and wholesale markets. In particular, benchmarks are a valuable tool helping market participants to set prices, measure performances, or work out amounts payable under financial contracts or instruments.

Benchmarks increase market transparency, facilitate diversification and risk management, simplify performance measurement, and support decision-making. By developing innovative benchmark products, benchmark administrators foster investments in areas that are economically, socially, and environmentally beneficial.

Historically, financial benchmarks were not regulated. Following significant misconduct resulting in benchmark failings (especially after the financial crises in 2008-2010 and for FX benchmarks), confidence in benchmarks and participation in the related financial markets were threatened. Misconduct and manipulation cases affected market stability and prompted FCA interventions in the UK (e.g. in 2014 the fines for such manipulation added up to £1.1bn).

As part of a wider effort to restore market confidence, regulators around the world began to implement regulation of financial benchmarks. As part of these regulatory efforts and as a starting point, IOSCO published principles on financial benchmarks in 2013.[1] The IOSCO principles address conflicts of interest in the Benchmark-setting process, as well as transparency and openness when considering issues related to transition.

The implementation of a regulatory framework for financial benchmarks coincides with an increasingly digital global financial market. Given that asset management is already a largely digitized industry, digital technologies have the potential to bring about massive innovation in the financial industry in the coming years. Asset management will be significantly influenced by better availability of data, algorithms, digitization of assets, new processes for custody and settlement as well as reporting. Good financial benchmark data is a prerequisite for the provision of any service along the entire value chain in asset management and banking, from research, trading, portfolio, and risk management to clearing and settlement.

Financial benchmark data is often provided by natural monopolies and oligopolies such as stock exchanges or rating agencies and companies with a dominant market position such as large benchmark providers or data vendors. These companies have significant market power and can unilaterally set virtually all contractual conditions since the customers on the asset management or banking side cannot undertake the activities that are essential to their business without the data provided by these firms. The use of financial benchmark data has therefore been subject to regular, sometimes massive, price increases and the imposition of increasingly complex and arguably overpriced data licenses, which effectively cover all types of use along the whole value chain of the financial services industry.

[1] https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf

This paper identifies material challenges arising from continually increasing financial benchmark data costs to the effective functioning of markets and proposes initiatives to address this problem. Such initiatives are consistent with their regulatory purpose of promoting sound financial market regulation.

Given the importance of the consequences to the general wellbeing of financial markets related to the provision of Benchmark data, we recommend that governments, regulators, central banks, and standard setters establish core principles to address the problem.

As a starting point, regulators should recognize that certain benchmark administrators hold disproportionate market power on financial benchmark data.[2] A healthy competition which leads to an increase in the number of challenges and the diversity of benchmark markets does not properly exist. On the contrary, in recent years some long-established "benchmark administrators" sold their index businesses to well-positioned operators committed to investing and growing their firms. As such, financial benchmark data costs must be subject to regulatory oversight. Rigorous supervision of the entire financial benchmark data business (as well as contiguous markets and products where the search for revenue could shift once there is increased scrutiny of financial benchmark data sales) is crucial to maximize the economic benefits of financial markets.

This paper aims at taking a holistic approach and horizontal view on data costs at the EU level. Therefore, we apply the same considerations in terms of costs that we have for benchmark providers more broadly to all market data providers, including rating agencies.

[2] AMF, OPPORTUNITIES AND RISKS IN THE FINANCIAL INDEXMARKET (LAURENT GRILLET), June 2020, p. 16, and pp. 48-53;
https://www.amf-france.org/en/news-publications/publications/reports-research-and-analysis/opportunities-and-risks-financial-index-markets
FCA Accessing and using wholesale data – Call for Input, March 2020, pp16-17, para 3.53, 3.56,
https://www.fca.org.uk/publication/call-for-input/call-for-input-accessing-and-using-wholesale-data.pdf
FCA, Asset Management Market Study Final Report, June 2017, p.46, para 7.9, 7.10;
https://www.fca.org.uk/publication/market-studies/ms15-2-3.pdf

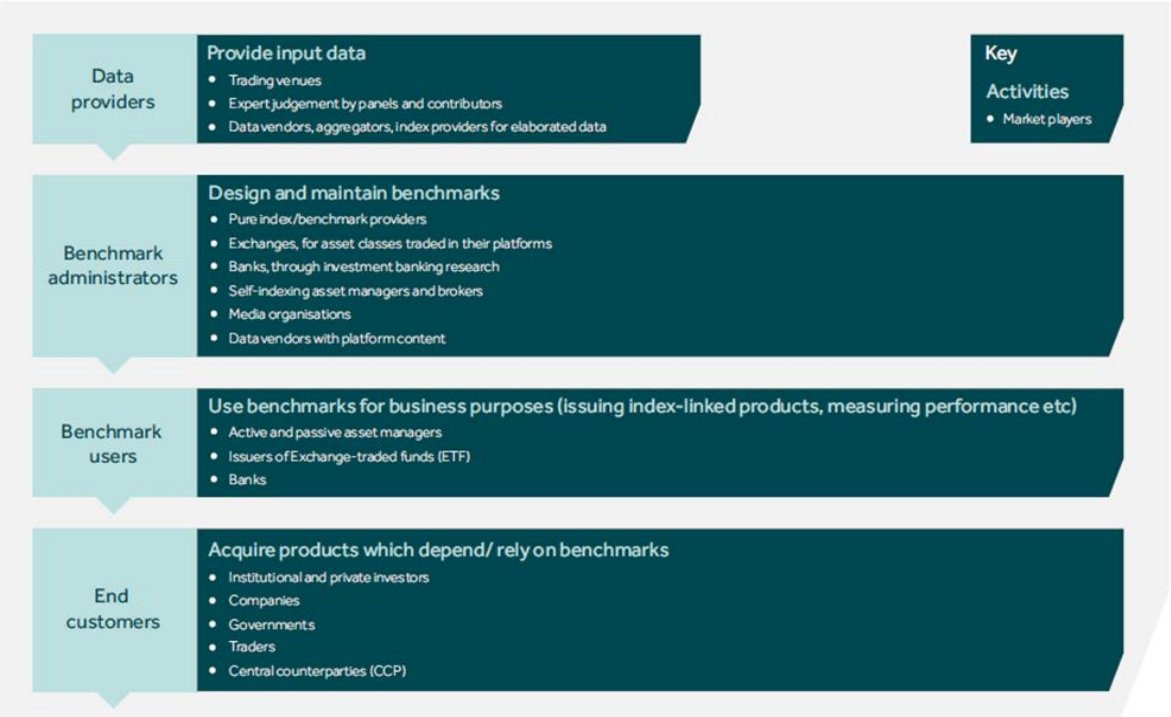
1. Market structure: barriers to market access are harming economic productivity

Benchmark administrators provide essential benchmark data on modern economies, bringing together issuers and investors, and allowing such entities to benefit from, *inter alia*, increased market transparency, facilitated diversification and risk management and simplified performance measurement. Over the last few years benchmarks, rates and their administrators have greatly evolved in response to market forces and technological and regulatory developments.

The typical business model of benchmark administrators involves sourcing data from trading venues, market data vendors and other benchmark administrators or publicly available sources. Using their own methodology, they then calculate and publish benchmarks or outsource this to other firms. They earn revenue from licensing benchmarks to professional users (e.g. Asset Managers), either through annual fees based on usage or a flat fee or from using their benchmarks to create financial products. Benchmark administrators can be specialist benchmark providers, or exchanges, banks, market data vendors, public bodies, or trade organisations. Some of them are vertically integrated firms that act as data generators, market data vendors and publication agents.

The typical flow of benchmark production and use is shown below.

Figure 3: Participants and activities in the provision of benchmarks value chain

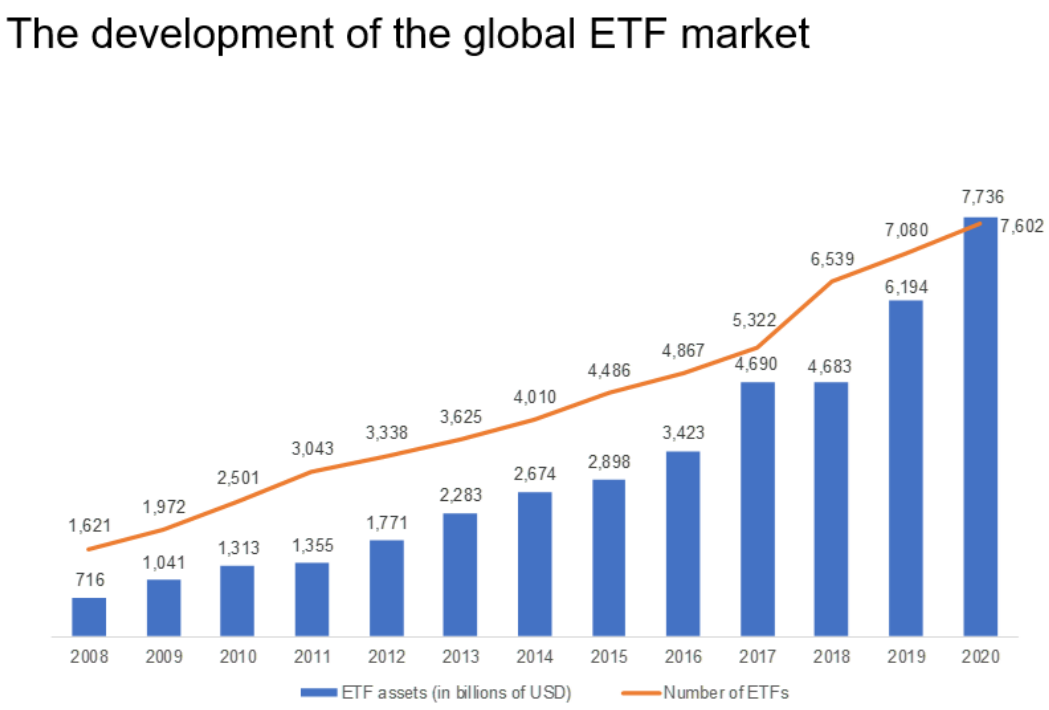


Source: FCA

2. Scope of benchmark data used by asset managers/banks

Asset managers represent an important group of benchmark users. Index funds and Exchange Traded Funds (ETFs) use benchmarks to construct portfolio baskets targeting an index. Active managers also use benchmarks to construct a portfolio and/or to measure performance against a selected index or a set of indices.

During the last two decades, the importance of certain benchmarks to investors has been growing. This may be illustrated by the growth of the asset under management of ETFs as shown in the next graph.



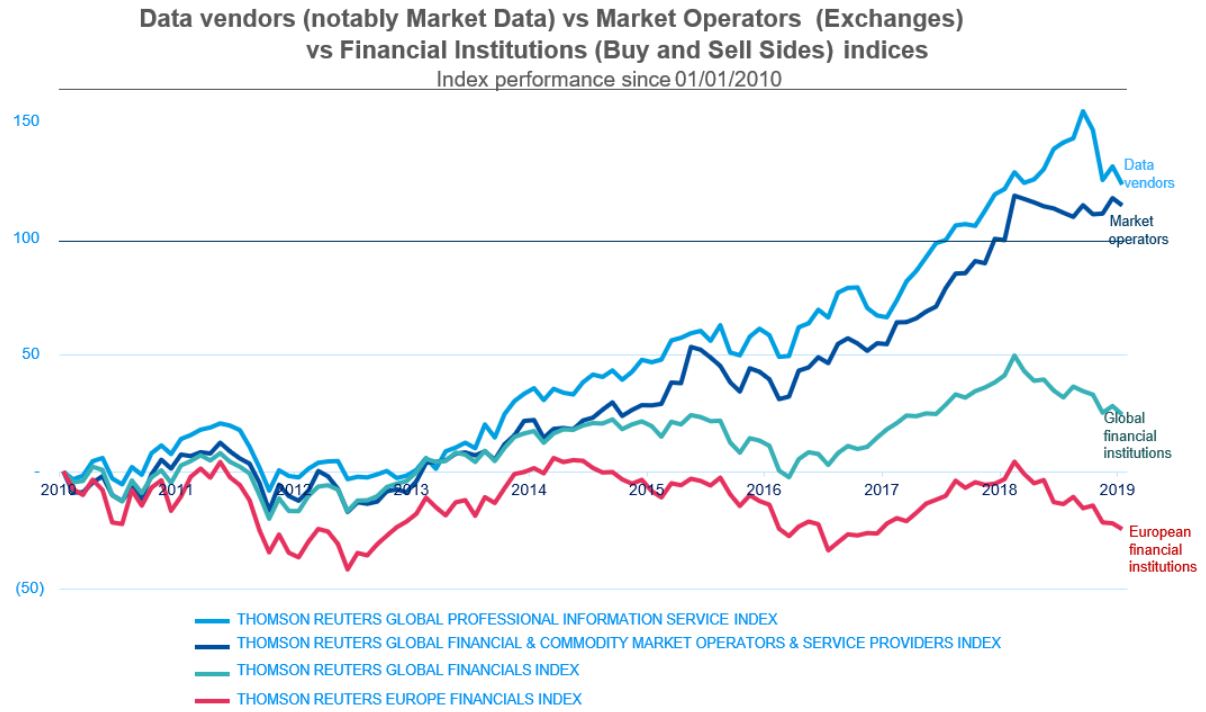
Source: ETFGI

Investment managers and banks use benchmarks made available by public bodies as well as customized indices and benchmarks provided by administrators which follow their own methodology in respect of the use of real transactions, tradable prices, quotes and offered rates.

Financial benchmark data can be broadly defined as encompassing the reference/static data and flow data to perform the necessary functions in the front office (e.g. research, trading), middle office (e.g. compliance, reporting) and back office (e.g. clearing, settlement, valuation, NAV calculation) within the asset management industry. Benchmark administrators and other entities as illustrated above may provide benchmark data (fixing, index) and their components (prices, values, composition, weightings).

3. Benchmark administrators and license practises/trends

During the last two decades asset managers have observed a significant increase in costs related to the use of benchmarks, especially in terms of access to the underlying data. Over the last few years, investment managers have suffered double-digit price increases imposed directly by benchmark administrators and indirectly by market data distributors (MDD) distributing the information. These high revenue streams lead to corresponding high stock market returns for major index provider shareholders.



Source: Refinitiv

Major components of benchmark data such as prices, values, composition, weightings, and traded data are originated and provided by benchmarks administrators (or affiliated group companies). Benchmark data are often procured by users not directly from data providers but from MDDs who collect, catalog and distribute them. Benchmark administrators (except for the EU) and MDDs – such as Bloomberg, Refinitiv, Rimes, or Six Financial – are globally not regulated as financial services providers.

In practice, the use of benchmark data has considerably changed and increased over recent decades, largely due to regulation and automation along the whole value chain of the asset management industry. There are now more benchmark data to consume, and their use has changed with the drive towards technical process improvement compared to the '90s when users largely consumed financial market data on screen ("display") and downloaded "locally" into individual user's applications.

It should also be noted that there are some agreements (typically those for fixed income indices) that are characterized by substantially low prices, an unlimited number of users, fewer constraints for the processing and distribution of data compared to others (typically those for equity indices, e.g. FTSE, MSCI that impose much more stringent policies such as groups of users, license for creating benchmarks, for data logging, for creating derived data, for use in each application, etc.).

The screen-based "*pair of eyes*" use of data is receding due to the massive growth of data sources to process. The speed of data delivered to the fund management companies has also drastically increased

as it is now mainly used in programmatic (Non-Display Usage) processes in the IT systems throughout the value chain of asset management. Data sources, benchmark administrators and market data distributors have reacted to the growth in data usage by developing new data strategies since the early 2000s. In this context, the Asset Management industry has experienced the following trends:

A significant increase in prices

BMD providers have introduced a significant above-inflation price increase for their products, without any additional value for asset managers. In addition to some strong price reviews, they change pricing policies by introducing new fees related to ad hoc services such as re-distribution.

A general increase in the workload associated with the administration of license agreements

Due to the growth of data usage, index providers have refined their licensing models and now cover each step along the whole value chain of an asset manager or bank. The data license practice ranges from internal applications support to external regulatory reporting as well as ETF production and brand licenses. Benchmark administrators also charge market participants (e.g. asset managers) for separate "created works", "manipulated data" or "derived data" licenses based on the use of the trading venue, ratings or index data to create (e.g., through mathematical or other manipulations or processes) new data points.

For example, benchmarks providers today impose more than 50 different licenses to the asset management community. BMD providers do not have a transparent price and cost policy for the different and complex license models. Further adding to licensing complexity, there is no standardization on the definition of license concepts (i.e., no taxonomy). There also appears to be increasing complexity in the diversification of the type and variety of data policies and price policies to allow for each index sponsor's unique selling point (USP), which makes it harder for investors to compare the cost of different index services. Due to a lack of standardization for license concepts fund management companies cannot compare the license models across different index providers.

Stringent audit procedures

Audit procedures are conducted on benchmark users to review the adoption and correct application of indices and benchmarks, but often with the apparent aim of generating additional fee income only.

"Slicing and Dicing" in license models

Existing licenses are (further) split along the whole value chain of an asset manager or bank. Existing license agreements which were previously priced only for one user are now often licensed several times for several companies (custodian, outsourced asset manager, investor). Licensing models have become more fragmented, which means that the rights of use of data are more restrictive and differentiated between the circumstances of the use of the same data. For example, multiple licensing fees may apply for the same data if used for internal analysis, client reporting and regulatory purposes. Enterprise agreements often cover all affiliates with the same package and are therefore not convenient. In addition, often levels cannot be acquired separately from constituents; it could also be impossible to subscribe to single indices and it is necessary to acquire expensive packages with many indices. Licenses apply also for blended indices i.e., a combination of two or more standard indices. This will also be the case for new products and services such as ESG or climate-related benchmarks (the use of which is now more and more encouraged by regulators).

Possible data cut-off by benchmark administrators or data vendors

Negotiations have become increasingly difficult in recent years with instances of benchmark administrators or data vendors increasing fees in a retaliatory fashion and threatening to cut off data delivery if incremental demands are not met. On top of these examples, some data sources (e.g. benchmark administrators) have resorted to terminating agreements early and unilaterally imposing new contract terms to achieve renewal at an elevated price.

Unfair practices

Some commercial practices push the free use of some benchmarks to institutional investors. The asset manager who manages the mandate of the institutional clients is usually obliged to use the same benchmark and therefore pay for the license.

Index errors

As asset managers, several ETF issuers and index fund managers have experienced instances of index calculation errors by the administrator, especially during volatile trading environments. There is increasing evidence highlighting how these errors have not been detected by the index providers themselves, yet the quality of an ETF's (or an index fund's) replication has suffered as a result, through greater tracking error and ultimate harm to investors. Users of these indices note how there are presently no liability clauses holding index administrators responsible for these sorts of errors. Moreover, there are various disclaimers in the relevant index use terms and licensing agreements to limit the administrator's responsibilities in this regard.

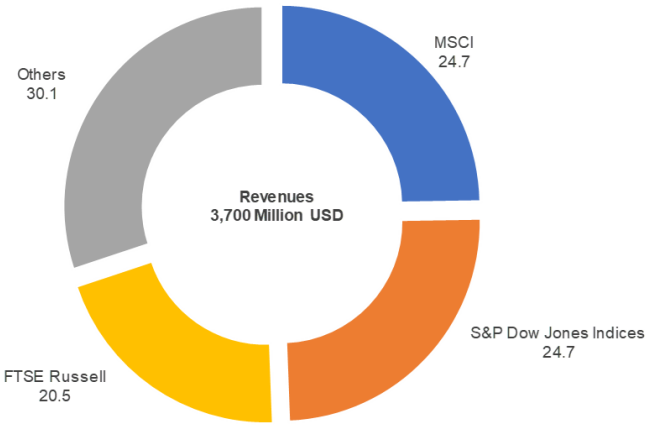
In summary, the current licensing trends observed in benchmark data space reflect the dominant position often enjoyed by large BMD providers, including both large benchmark administrators and their data vendors. These companies have great market power and can unilaterally set conditions, since their financial services clients usually cannot easily operate without the dominant benchmarks from their products without jeopardizing their own business due to investors' or, even regulators' pressure.

4. Impact of imbalance of market power between benchmark administrators and market participants

The above-mentioned licensing behaviour has contributed to increased revenues for benchmark administrators, especially when it comes to the largest among them. According to BT Consulting, the three biggest (equity) index providers FTSE Russell, S&P Dow Jones and MSCI dominate the financial benchmark market, contributing to three-quarters of the index market.

Three index providers dominate the market

Revenues 2019, in percent



Index provider Solactive reported the fastest growth in 2019, with revenue jumping 21.9%.

Source: Burton-Taylor International Consulting

Global index industry revenues increased by 8% in 2019, reaching a record $3.7 billion, according to Burton-Taylor International Consulting.

Index industry revenue increased across all segments in 2019, with the fastest growth occurring from index license fees based on assets under management (9% to a record $1.9 billion). Subscription fee revenue grew 8.3% to $1.4 billion in 2019, while other index revenue (non-recurring transaction revenue and revenue from index licensing for use with derivatives, OTC contracts, and structured products) increased 3.3% to $457.5 million.

Key findings include:

- MSCI accounted for the greatest market share, accounting for 24.74% of total industry revenues and narrowly edging out S&P Dow Jones Indices which accounted for a market share of 24.66%. FTSE Russell rounded out the top three with a 20.5% market share.

- Solactive reported the fastest growth in 2019, with revenue jumping 21.9% while Bloomberg index revenue has seen the highest growth since 2015 with a CAGR of 72.0%.

- ESG index revenues surged sharply in 2019 rising 31.3% while factor segment revenues increased by 11.4% over 2018 totals.

The UK's financial services regulator, the Financial Conduct Authority (FCA), analysed the dominant market position of index providers[3] and found that competition may not be working well in the provision of benchmarks. The FCA highlighted that users of benchmarks report high costs of switching

[3] https://www.fca.org.uk/publication/call-for-input/call-for-input-accessing-and-using-wholesale-data.pdf

benchmarks as well as a lack of suitable alternatives as drivers of market power (although this will be more significant for some benchmarks than others). Where this is the case, benchmark administrators may be able to charge users higher prices than they otherwise would, which can reduce net returns to investors. In addition, some benchmark administrators operate across different segments of the value chain. The FCA suggested that this could lead to competition concerns if those firms restrict access to data inputs or charge more for them to other benchmark administrators who compete with them.

Furthermore, the FCA states that for some asset classes, there are only a small number of benchmark administrators. Such index providers typically have strong brand recognition and, as such, appear to have established themselves as key providers for specific benchmarks. New benchmark administrators could also struggle to compete due to the cost of switching for benchmark users. Switching costs could be high, because of the time and technical requirements involved in setting up a new relationship with a benchmark administrator or the need to adapt business practices to different inputs. Some contractual arrangements such as long notice periods or exit fees could also create switching costs. Moreover, switching costs can cause harm if they prevent benchmark users from switching to products that better suit their needs.

The FCA study reveals the following findings for a dominant market position of index providers:

- Concentrated market conditions could allow benchmark administrators to charge higher fees to clients. These higher fees could then be passed through to downstream markets for asset management, investment banking and other wholesale and retail sectors (and ultimately, may feed into a retail investor or consumer prices). High switching costs and lack of suitable alternative substitutes may weaken incentives for providers to innovate or improve the quality of their products.

- Challenger firms may also be dissuaded from investing in designing and marketing alternative benchmarks or from entering the market if they believe clients will stick to the main brands.

- Potential harm could arise if contracts are unnecessarily complex and conditions are not transparent, weakening users' ability to compare the quality, charges, or innovation offered by alternative services. Complexity and lack of transparency could also hide switching costs, making it unexpectedly costly to exit contractual relationships if the quality is lower/or charges are higher than expected.

Furthermore, new areas of investment such as environmental and social investing will encourage the creation of new benchmarks. Through mergers and acquisitions, the already dominant market position of existing index providers is being strengthened further as described in detail in a recent report by IOSCO member AMF[4]. The possibility for established players to earn oligopoly rents is confirmed by a BT consulting report that ESG index revenues surged sharply in 2019 rising 31.3% over 2018 totals.[5]

The desire to trade financial products on a wide set of non-financial underlying market products, such as weather and cryptocurrencies, has led to new benchmarks being created. This will further increase the market position of the prevailing index providers.

[4] Please see ANNE DEMARTINI AMF, PROVISION OF NON-FINANCIAL DATA: MAPPING OF STAKEHOLDERS, PRODUCTS AND SERVICES, Dec 2020 at p. 7, available at: https://www.amf-france.org/sites/default/files/private/2020-12/mapping-esg-publication.pdf
[5] Please see FN 5 for the BT Consulting report.

In summary, the existing top benchmarks administrators have a dominant market position within the global financial benchmark industry, thereby weakening the ability of financial services firms to use innovative indices for their investment products' needs on behalf of the end client. Firms could lose access to important benchmarks because of cost considerations, thereby hampering their own growth and development. Excessively high benchmark data fees decrease international market integration and deteriorate the diversity and stability of the financial benchmark markets. Overall, excessive fees result in decreased economic productivity and diminished diversity and stability of markets.

5. (Global) Benchmark regulation does not solve the financial benchmark data issue

As part of a wider effort to restore market confidence, regulators around the globe have started to implement some form of regulation of financial indices, especially in the inter-bank offered rates space (IBOR). As part of these regulatory efforts, IOSCO published principles on financial benchmarks in 2013.[6] The IOSCO principles address conflicts of interest in the benchmark-setting process, as well as transparency and openness when considering issues related to transition. These Principles are intended to promote the reliability of benchmark determinations and address benchmark governance, quality, and accountability mechanisms. Although the Principles set out uniform expectations, IOSCO does not expect a one-size-fits-all method of implementation to achieve these objectives.

The Principles provide a framework of standards that benchmark administrators should implement according to the specificities of each benchmark. In particular, the application and implementation of the Principles should be proportional to the size and risks posed by each benchmark and/or administrator and the benchmark-setting process. Moreover, there is nothing in the Principles intended to restrict an administrator from adopting its own unique methodology or from adapting its methodologies to changing market conditions to meet the Principles. The IOSCO principles remain silent on the issue of BMD cost in terms of pricing and transparency**.**

The EU Benchmarks Regulation (BMR) came fully into force in January 2018, with a two-year transition period for EU administrators of non-critical benchmarks[7]. EU BMR builds on the IOSCO principles for financial benchmarks and applies to any benchmark administrator established in the EU.

The BMR aims to ensure benchmarks are robust, reliable, and to minimise conflicts of interest in benchmark-setting processes. It also requires the administrator of critical benchmarks (in practice certain IBORs) to ensure that all users are provided access on a fair, reasonable, transparent, and non-discriminatory basis. The BMR defines an index as a figure that is publicly available and is regularly determined, either by applying a formula or other calculation or by making an assessment based on the value of one or more underlying assets/prices. Underlying assets and prices could include estimated prices, actual or estimated interest rates, quotes and committed quotes, or other values or surveys. An index becomes a benchmark within the scope of the BMR where it is used to determine the amount payable under a financial instrument or contract or the value of it. An index also becomes a benchmark if it is used to measure the performance of an investment fund to track the return, defining the asset allocation, or computing performance fees.

However, the EU BMR does not tackle the costs and licensing issues for EU users of financial (and not critical) benchmarks. No other jurisdiction has implemented a regulatory framework for financial indices that takes into account the regulation of financial benchmark data costs.

[6] https://www.iosco.org/library/pubdocs/pdf/IOSCOPD409.pdf
[7] EU BMR is available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1011&from=EN

In summary, the structural changes in the benchmark administrator framework, together with the role that benchmarks have across the investment process lifecycle and regulations that effectively require data users to subscribe for data, have created an imbalance in market power that must be addressed through more rigorous regulatory powers and oversight. Given the change to benchmark administrators' ownership and business interests, policymakers need to regulate and review financial benchmark data fees to ensure that they do not unreasonably restrict market access or burden competition.

Proposed Actions to Address the Issues of Benchmark Data Costs

Regulatory Core Principles

For the reasons outlined above, we strongly encourage the regulatory community worldwide to take the following proposals into consideration to address the issue of benchmark costs:

1. Increase Benchmark Data (BMD) Cost Supervision by National Competent Authorities under the Auspices of IOSCO globally

Regulators should be empowered to ensure that the fees charged by benchmark providers to their clients for the provision of benchmark data (BMD) meet certain criteria, and they should take an explicit approach of examining benchmark fees relative to revenue or costs. Regulators should also examine the structure of benchmark data pricing agreements to consider how rules could support greater standardization in terms of definitions and other terminology or practices employed in those agreements.

Moreover, regulators should work through IOSCO to develop guidance with respect to benchmark data licensing practices and terminology used by exchanges for basic market data products. In this regard, applicable laws based on expanded IOSCO Benchmark Principles should be developed to achieve a coherent regulation of benchmark data cost, cost transparency and basic licensing rules.
Regulators should engage in more detailed and coherent development setting up of new regulation and subsequent enforcement actions of existing cost regulation.

2. Impose a Cost Based Licensing Mechanism

Any benchmark data license costs should in principle be based only on the incremental/ marginal cost of providing and distributing a given data service plus a reasonable profits margin.

More specifically:

- Benchmark providers should be required in principle to set fees for basic benchmark data services only, - i.e., benchmark level, prices, composition, and weightings, - based on the cost recovery principle;
- In the context of a principally cost recovery-based pricing of benchmark data, the sources and the market distributors may be allowed to charge a reasonable (inflation adjustment based) profit margin for the provision of basic BMD feeds.

3. Impose Transparency on Costs and Prices

In order to reduce disputes related to license fees, National Competent Authorities (NCA's) and users should have access to meaningful written information, which enables the reader to recalculate the actual costs based on the applicable pricing methods. This should include cost calculation methods as well as the guidelines on the allocation of fixed and variable costs, including the cost of third parties and the costs of the provision and distribution of benchmark data offerings. Secondly, the adherence to the cost recovery principle should be explained in writing by the vendor and be approved by the statutory auditor of the company.

Thirdly, the BMD provider should regularly publish transparent price lists on all BMD products and services. This would allow meaningful price comparison with previous periods. Off the run price lists should remain available on the BMD provider website.

4. Impose Best Practices on High Impact Data Licenses

Certain high-impact benchmark data license practices, which have significant negative consequences for end clients and financial markets should be subject to stricter controls:

- Data cut-offs before a binding court or arbitration decision in data license disputes should be prohibited in financial markets laws, at least in situations in which the data cut-off would harm the stability of financial services firms, markets and/or end user clients.
- New sector specific rules should ensure that regulated data providers not be permitted to escape their regulatory obligations through outsourcing of BMD business to unregulated (group) companies.

5. Clear responsibility for index calculation errors

There is a pressing need to hold index administrators responsible for any calculation errors and recognise how integral financial indices impact the implementation of investment management strategies - especially for index-tracking ones (like ETFs) - and how critical index quality is to their success for investors. Asset managers should not be held accountable for errors they have not provoked, nor can control.

6. Keep data unbundling

The user side of benchmark market data should only pay for data they are interested in rather than being forced to buy additional services. Benchmark data providers should always inform customers that the purchase of the benchmark is available separately from the purchase of additional data (for example license for constituents). Furthermore, benchmark data providers should not condition the purchase of individual benchmarks to the purchase of a broader range of benchmarks (in which there may be little interest). In similar way, double licenses should be avoided when the same benchmark is used as a single benchmark or in combination with another benchmark.

7. Keep the use of historical data

The benchmarks data should remain available for regulatory/audit purposes, without time constrain. Historical data are often not available beyond a certain number of years.

8. Impose transparency obligations

Data users have concerns about the inventiveness of benchmark providers in creating new use cases or categories of license. Due to a lack of standardization for license concepts, fund management companies do not have the ability to compare the license models across different index providers. More transparency, such as harmonized templates and standardisation of definitions of key terms and concepts used in license data agreements, would be helpful in better understanding the criteria for such use cases and the avoidance of paying several times over for the same data.

9. Public data utility for basic index data

The user side of benchmark data market is inelastic, as indices need to be used in the investment process. The creation of an easy-to-use public data benchmark utility website service with terms and conditions allowing the databasing and use of minimum benchmark data would help to offset the risk of oligopolistic pricing by index providers. In this context, as much benchmark data as possible should be collected by the public sector and made available via public databases (Open Data). This data should be free of charge and license in order to promote new data applications in the financial sector. In the

EU, the benchmark register operated by ESMA could be a starting point for a public data utility for basic benchmark data.

In summary, regulators worldwide need to ensure that all administrators of benchmarks/indices take adequate steps to ensure that licenses of, and information on, benchmarks are provided on a cost based, fair, reasonable, transparent, and non-discriminatory basis to all supervised entities. Specifically, all benchmark users should be provided (where applicable) with price lists and cost of data production disclosure. Furthermore, BMD production cost-based pricing rules should apply for at least basic "raw" BMD, including benchmark levels, prices, constituents, and weightings. Finally, a prohibition of certain license practices – should be introduced. In particular, the (early) termination of data licenses by benchmark administrators in case of pricing policy or data policy changes should be prohibited until an arbitration tribunal or a regular court has adjudicated on the legality of the changes. Lastly, public utilities for basic index data should be provided for the benefit of users and investors.