FESE Response to FCA Call for Input on Accessing and Using Wholesale Data

Brussels, 7th January 2021

Introductory remarks

The Federation of European Securities Exchanges (FESE) is an industry association that represents operators of European exchanges and other market segments, encompassing stock exchanges, financial derivatives, energy, and commodity exchanges. With 18 full members, FESE represents close to 36 exchanges from 30 different countries within the EU, Iceland, Norway, Switzerland, and the UK.

FESE welcomes the fact that the FCA's call for input (CFI) takes into account the wider market data ecosystem, acknowledging that this discussion is not only relevant to exchanges but also to the entire value chain for market data. This is an important distinction as the market data offered by exchanges is part of a much larger value chain, in a broader market data industry that is expanding. Exchange market data is distributed directly or indirectly, via data vendors, to brokers, asset managers, and other market participants, and is only one of the market data sources used by market participants, which also includes news, alternative data, research, ratings, valuation data, reference data and so on. The consulting firm Oxera estimates that market data provided by European exchanges represents less than 0.5% of buy-side and 10% of sell-side of the total European spending on market data and analysis.

It is crucial to recognise the scale and nature of the market data value chain when considering the price of market data to the end-user. The market structure in which market data is produced and consumed is complex, making it challenging to assess the role and impact of regulatory intervention.

In its specific responses below, FESE has focused on the questions for trading data providers due to its role as an association of European exchanges. While exchanges do source certain data externally (e.g. static reference data or KYC data) and are users in that respect, most FESE members are price-forming entities and as such are essentially data providers.

FESE would like to highlight upfront one key theme emerging out of the CFI questions on trading data. The CFI does not appear to fully appreciate the competitive constraints on trading data supply. Market data is an intrinsic part of the price formation process and is a joint product with trade execution, i.e. it is not possible to generate one without the other, most activities undertaken by an exchange deliver both trading and price formation. Exchanges face competitive constraints for trading/market data services which ensure that their trading/data fees must remain competitive.

Trading Data

Questions for users of trading data (Q3.1 – Q3.8)

Q3.1 - What type of trading data do you use/obtain directly from trading venues and APAs, and how do you use trading data?

N/A

Q3.2 - Are you content with the price, quality, provision, coverage, speed and depth of trading data (or other data sold by trading venues or APAs)? If you are not satisfied with any of these elements, please explain why not and the impact this has on your business.

N/A

Q3.3 - Do you consider any trading venues or APAs set of trading data a 'must have' for your business purposes? If so, please explain why. For example, is it linked to a liquidity threshold in the relevant financial instrument and/or to best execution requirements considerations?

N/A

Q3.4 - For each data set you use, how have the trading fees, trading data costs and quality evolved over the last 5 years? What impact has this had on your business and your clients?

N/A

Q3.5 - How easy are trading data pricing/licensing terms to understand and comply with? What, if any, do you find to be complex or restrictive and what impact does this have on your business?

N/A

Q3.6 - Are you aware of trading venues or APAs charging different amounts to different customers for similar services? Please give specific examples and explain how these practices affect your ability to compete in the markets you operate in.

N/A

Q3.7 - Please explain when you are charged for the use of delayed data.

N/A

Q3.8 - To what extent do you think ESMA's suggested improvements to the RCB requirement will adequately constrain trading data pricing (see 3.23)? Are there other ways to ensure trading data prices are competitive?

As a starting point, it is not correct to assume that trading data pricing is not competitive or adequately constrained today. Market data is an intrinsic part of the outcome of the price formation process and is a joint product with trade execution. Exchanges compete for trading/data services and the existing competitive pressure on exchange groups is sufficient to ensure trading data prices are competitive. Regulation is therefore not required to ensure trading data prices are competitive. The competitive constraints that exchanges face in their overall trading activities also drive the pricing of trading data. Competitors vary according to the evolution of markets as they move from "over-the-

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counter" trading through exchange-traded products. Exchanges face competition from other exchanges but also brokers, banks, and alternative venues.

FESE encourages anyone looking into the cost of market data to rely on all relevant empirical evidence, which is representative of the overall development of the cost of market data. This overall development cannot be conflated with market data fee changes on a single company or the changes of fees of a single fee type. Furthermore, considering the significant impact any further regulatory changes could have on the landscape of the capital markets and the role regulated markets play, we encourage independent verification of claims based on raw data and input from all parties involved. Market data pricing cannot be considered or analysed in a vacuum. Doing so would pose a real threat to the price formation function of exchanges. The production and dissemination of market data is an intrinsic part of the operation of fair and orderly markets.

Exchange trading data delivers important benefits to end-users and the real economy. Regulators and policymakers should consider the complete value chain and the overall evolution of capital markets. Trading data brings substantial value to intermediary users such as investment banks, index providers, data vendors, and alternative venues, such as broker venues. These intermediaries generate significant commercial value from the trading data provided by exchanges, for a comparably low price. Value-based pricing is the appropriate metric for trading data in order to provide reliable high-quality market data constantly.

In light of the above, pricing taking into account the value of the data to different user groups and use cases as reflected within MiFIR is efficient. It sharpens incentives to develop products and services that bring the most value to users. This is particularly important where firms have to invest fixed, sunk costs in developing new/products that may not bring a commercial return. In this respect, some proposals made in the context of ESMA's 2019 Review Report[1] are problematic. For example, FESE does not support the suggestion to remove Article 86(2) of CDR 2017/565 and Art. 8(2) of CDR 2017/567 which allows trading venues, APAs, CTPs, and SIs to charge for market data based on the value for users. Not allowing differentiation between customer groups would be disproportionate and distort competition between venues/business entities. The idea that a single price cannot be considered reasonable for all users due to the wide range in the value users derive from market data services is generally well established and the current degree of differentiation is aligned with a well-functioning and efficient market and competition.

That being said, FESE overall appreciates ESMA's recommendation to pursue the transparency plus model with some clarifications and harmonisations. FESE members have taken note of the concerns expressed regarding pricing schedules and are supportive of an initiative aimed at improving them and making them more comparable for customers. Indeed, to the extent that the ESMA proposals are aimed at increasing transparency, exchanges are willing to engage constructively with regard to making further information available for this purpose, while commercially-sensitive information should only be disclosed directly with supervisors.

[1] ESMA. "MiFID II/MiFIR Review Report No. 1 on the Development in Prices for Pre-and Post-Trade Data and on the Consolidated Tape for Equity Instruments." Paris, 2019.

Questions for providers of trading data (including TVs and APAs) (Q3.9 – Q3.13)

Q3.9 - Please explain the trading data you offer and how you ensure that the quality, speed, coverage and depth of trading data provided meets the needs of your users.

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While FESE Members can respond separately regarding their own trading venues, FESE has set out some relevant observations regarding trading data in general.

Exchanges work hard to develop and produce competitive, innovative, and diverse trading data offerings to its customers. High-quality market data enables market participants to make well informed commercial decisions. Multiple activities of an exchange ensure the reliable and efficient price formation process, those activities also increase the reliability and as such the commercial value of exchange market data.

In order to deliver reliable price formation and market data services in line with client demand, exchanges invest in hardware and networks, developing and implementing market models, market surveillance, setting trading rules, and monitoring and enforcing compliance with these rules in adherence to regulatory requirements. Most of these activities are undertaken to deliver both trading and price formation. Market data is an intrinsic part of the price formation process. The value of the price formation process, and consequently exchange market data, derives from the quality of the exchange ecosystem which includes liquidity pooling and liquidity incentivisation on the one hand, and from the speed at which it evolves and is distributed (latency of roundtrip), as well as its quality and reliability, on the other hand.

Exchange trading creates highly reliable exchange market data which is publicly disseminated to the benefit of all market participants, even those who are in direct and systematic competition with exchanges. The quality of exchange market data would be affected if exchanges are limited in their ability to benefit from their effort in providing a much-needed reference price to the market. In such a scenario, there would be fewer possibilities and incentives for exchanges to further invest in high-quality market data. This could result in a strong lack of transparency for the end investor as it would make it more difficult for the end investor to benchmark a price in a fragmented market.

Overall, competitive pressures drive exchanges to improve their offering, including data supply, and make significant investments in order to provide stable, transparent, and resilient markets at all times. In practice, exchanges work with and listen to their customers to offer and develop trading and data products that meet their needs.

Q3.10 - For each trading venue you operate, how have overall trading fees and trading data price levels, pricing policies and your service offering evolved over the last 5 years? Please explain reasons for changes in prices and other relevant dimensions.

Individual FESE Members can comment on their own trading venue fees. More broadly, FESE notes that when assessing overall pricing trends it is not appropriate to look at data pricing in isolation. In order to evaluate the changes in overall costs of market data (which remained relatively stable overall), it is important to look at the revenues obtained from the joint products of price formation and market data. Market data is intrinsic to a dynamic price formation process and a joint product with trade execution. Market data and trading cannot be meaningfully separated and when considering price levels and fees, it is vital to look at the overall trading costs of users, i.e. a combination of data costs, execution fees, and liquidity (the spread between the bid and offer being the principal cost of trading out of adjusting or rolling a position).

In relation to securities, Oxera[1] has conducted an analysis for FESE and data provided by FESE Member stock exchanges which shows a general trend of increasing data messages, which requires constant investments in capacity, alongside fairly stable market data revenues. Aggregate market data revenues amounted to approximately 245 € million in 2018 and increased in recent years by approximately 1% per year in real terms. Exchange data fees account for less than 10% of total sell-side market data spend and less than 0.5% of total buy-side market data spend. It is also useful to look at the total unit cost—i.e. the total cost (of the joint product) per euro of stock traded. This is the metric that matters

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above all for the end-investor. The question is how much it costs them to trade and how has this evolved over time. Since 2012 the unit costs (calculated as the total joint revenue from trade execution and market data as a proportion of the total value of trading in relevant securities) have remained stable overall.

Information about market data pricing in general has been presented in a misleading way by some respondents. This has fuelled suggestions that there is a need to constrain pricing, while evidence that would be able to justify such an approach is lacking. For example, according to a study on EU primary and secondary equity markets commissioned by the European Commission[2], competition at the trading venue level has increased.

In order to inform the debate, FESE would note that it is important to provide a number of observations in relation to inaccuracies in the figures provided in the past by market participants to characterise evolutions in market data prices (specifically stakeholder input to ESMA consultation on market data and referred to in ESMA's MiFID II/MiFIR Review Report No. 1. It is important to underline that before taking action based on the input received in this call for input, it should be assessed whether figures provided by market participants are a fair and accurate representation of the situation.

What individual market participants and trading venues spend on market data (from Exchanges) can vary over time due to changes in prices, the amount of data consumed, and usage patterns. When assessing expenditure on market data, these factors can be confused.

Exchanges have in the past taken issue with the way some variations of prices have been presented by certain stakeholders. For example, a single fee type or a single trading venue has been presented as being representative of the entire industry, which is misleading and a cause for concern. For instance, an extreme case of a 400% increase in non-display fees for one trading venue has become a benchmark repeatedly taken up by a lot of stakeholders in the broader debate to characterise the evolution of overall market data prices. Isolated changes of a single fee type are not representative of the overall development of market data fees and can be the result of re-balancing of fees as a result of structural changes in the industry to the way that market data is consumed, which do not necessarily lead to an overall increase of costs of market data to the industry as a whole. Furthermore, it should be considered that large percentage changes may reflect small absolute changes, especially taking into account that non-display information usage can apply on a company level. It is important to put price changes into context.

There are also instances in which the benchmark firm used by certain participants to characterise price increases does not take advantage of the most favourable or even suitable license available for the data need. Part of the documentation put forward to illustrate price increases sometimes fails to specify that the perimeter of data considered was subject to change over the reference period (i.e. including additional licenses over the years for data that was not used previously, or an upgrade to a more expensive product version). In short, in some cases, fluctuations do not exclusively reflect changes in data pricing but significant changes in data usage and consumption and therefore should not be taken out of context. It should also be noted that in some cases a change in the services that a user provides to its clients can also explain a given evolution in market data expenditure. In practice, there is ample evidence that user firms are changing their data consumption driven by structural changes. This needs to be acknowledged.

When assessing expenditure on market data it is important to bear in mind that individual market participant and trading venue spend on trading data can vary over time due to changes in prices, the amount of data consumed, and usage patterns. In practice, there is ample evidence that user firms are changing their data consumption driven by commercial decisions. It is important to understand whether changes in expenditure are driven by changes in prices, the amount of data consumed, or usage patterns:

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- Exchanges have made changes to their fee schedules over time. Oxera's analysis showed that, for most exchanges, market data fee increases have been small on average and market data revenues stable over several years. For example, in real terms, in the case of most exchanges, for Level 1 and Level 2 on average display data fees generally increased less than 1.5% per year, and for non-display by less than 4.5% per year.
- It is also well understood that there has been an upward trend in market data consumption. This has been driven by a rise in trading strategies that rely on more data (in particular due to the significant growth in electronic trading) and an increase in data used to inform commercial decisions and regulatory assessments.
- Changes in usage patterns refer to users changing the type of data package. For example, a move to more electronic trading has resulted in greater automation and technology. In particular, there has been a shift of market data consumption away from terminals and towards direct and low-latency (non-display) data products for automated applications, a structural change that is still ongoing in the industry. There is also more value placed on the added benefits generated by data providers as this increased focus on electronic trading means there has been a greater demand for faster, more accessible data products.

There is a need for more transparency in the methodologies used to report evolutions in market data costs by those who argue that data prices are increasing so that the findings can be thoroughly checked, confirmed, or challenged where appropriate. Increased transparency on methodologies would contribute to bridging the gap between user perceptions and the exchange viewpoint. In addition, more transparency on the total market data bill borne by end-users (including the share of vendor and technology fees, and the extent to which data usage has changed over the years) is sorely needed and key to making progress in this important and complex debate.

Lastly, it is important to consider commercial incentives for market data. Exchanges compete based on both price- and non-price based competition, with a range of competitors including OTC, banks, and alternative venues as well as other exchanges, and importantly exchanges compete for customers by investing and delivering high-quality liquidity provision and price formation.

A number of entities use data provided by exchanges on a non-discriminatory basis to run commercially rewarding business models. Instead of investing in their own price formation, they use exchange data to execute order flow on the basis of exchange prices while competing with the original data source for the same order flow at a much lower cost, due to the fact that they are using exchange data. In this context, regulators and policymakers should be wary of enabling free-riding which, if left unchecked, could ultimately threaten the quality of the price formation process and undermine the objective public capital markets and which could unintentionally contribute to creating an unlevel playing field in terms of competition.

[1]Oxera. "The Design of Equity Trading Markets in Europe." Brussels, 2019.

[2]Oxera. "Primary and Secondary Equity Markets in the EU." Brussels, 2020.

Q3.11 - Please describe your policy for charging for the use of delayed data, providing specific examples.

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Some FESE Members will also be providing individual responses to this call for input and can address their individual policies. On a general level, exchanges have made significant efforts to make data available free of charge 15 minutes after publication.
It is important to note that some professional users access the data for business use and charge their customers for such data. Consequently, trading venues should be able to make data available for a fee to professionals (for example data distributors, or internet providers) who provide services for a direct or indirect fee. Policymakers should also ensure the capability of exchanges to monitor users accessing exchange data in order to verify whether it is being redistributed and establish terms of use for such exchange data. This is essential to ensure the level playing field of such data users with exchanges. It is important to note that professional users accessing the data for uses that relate to their business activities will in some way or another charge customers for such data. Consequently, trading venues should be entitled to make data available for a fee to professionals who provide services for a fee.

Exchanges are concerned that the prices charged by vendors and intermediaries are misunderstood as prices imposed by exchanges.

Q3.12 - What factors do you take into account when setting your pricing policy? Do you face any constraints when doing so? Please provide reasons for changes in prices and detail how you ensure compliance with MiFID/MiFIR RCB requirements.

Crucially, the starting point for assessing pricing in this context is the fact that market data is a joint product with trade execution because it is intrinsic to a dynamic price formation process – i.e. it is not possible to generate one without the other. It is not possible to meaningfully separate market data from the price formation process and exchanges, therefore, compete for a suite of data and trading services together, which is reflected in the pricing policy of the exchange. How individual exchanges structure their charges across that suite of services can vary. In order to maintain a competitive position, exchanges must offer competitive prices (including transaction and market data fees) to highly sophisticated customers which include financial institutions, asset managers, pension funds, commodity producers and refiners, utilities and governments, as well as industrial and manufacturing businesses that are increasingly engaging in hedging, trading and risk management strategies. Furthermore, exchanges are mindful of setting prices appropriately for retail investors in order to enable their participation in capital markets and contribute to the general aim of developing retail market participation in Europe.

The competitive constraints that exchanges face in their overall trading activities therefore drive the pricing of trading data. Competitors vary according to the evolution of markets as they move from "over-the-counter" trading through to exchange-traded products. Exchanges face competition from other exchanges but also brokers, banks and other alternative venues. This analysis is complex and can vary across data products/markets. For example, a number of entities use market data provided by trading venues while competing with the trading venues for order flow at a much lower cost, due to the fact that they are using trading venues data. Hence it is important to look at the specific instruments being traded and their underlying characteristics. Generally, exchanges compete on the basis of a range of factors, including:

- transaction and market data fees;
- depth and liquidity of markets;
- price transparency;
- reliability and speed of trade execution and processing;
- technological capabilities and innovation;
- breadth of products and services;

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- rate and quality of new product developments;
- quality of service;
- stability of services;
- distribution and ease of connectivity;
- mid- and back-office service offerings, including differentiated and value-added services; and
- reputation.

In practice, exchanges listen to and work with users regarding how their data packages are constructed to meet customer needs.

With regard to MiFID/MiFIR RCB requirements, FESE believes that the quality of the RCB information disclosed by exchanges is good and has further improved since the introduction of MiFID II/MiFIR. Significant efforts have been made, and continue to be made, to put in place the necessary mechanisms to disclose relevant information and ensure compliance with the various requirements set out in the legislation. Caution is needed with regard to ESMA's proposals to increase transparency to compare pricing. Exchanges are willing to provide information on their cost bases or how prices were set to their national regulators where this is warranted and appropriate. However, it should be kept in mind that there is a risk that the proposals could result in the public disclosure of commercially sensitive information about costs and how prices have been determined to competitors, which could harm effective competition and potentially infringe competition law rules.

Q3.13 - Please explain how you categorise types of user and the reasons for any price differentiation based on the categorisation of the user.

Exchanges charge different prices to different categories of users where it is objectively reasonable to do so, for example based on customer group, such as retailer or professional user and use case where necessary. This is consistent with the MIFID Delegated Regulation[1]. Exchanges make market data available at the same price to all customers falling within the same category in accordance with published objective criteria and any differentials in prices charged to different categories of customers are proportionate to the value which the market data represents to those customers.

The idea that a single price cannot be considered reasonable for all users due to the wide range in the value users derive from market data services is generally well established and the current degree of differentiation is aligned with a well-functioning and efficient market and competition. In particular, value-based charging is fair and efficient, and leads to different charges across user groups and use types. This diversity and granularity is reflective of competitive commercial conditions. Competition law precedents also recognise that product differentiation is reflective of competition on the market[2] and that even dominant undertakings can apply different commercial conditions to their customers (and are even required to do so if there are different objective circumstances).[3]

For example, an important objective categorisation is the distinction between professional investors and retail investors:

- Setting prices appropriately for retail investors enables their participation in capital markets and contributes to the general aim of developing retail market participation in the EU.
- Where technological advances have facilitated the development of new high-frequency trading strategies, this has increased the value of very low-latency trading data for some categories of user. At the same time, retail investors are not able to take full advantage of low-latency direct feeds.

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- In a scenario where this objective categorisation is no longer made possible, there is a real concern that retail investors and small firms may, ultimately, indirectly find themselves financially bearing the market data needs of major international firms.

Fees charged by exchanges to competing venues are publicly available and have not hindered competition considering the number of competing venues (MTFs and SIs) that have emerged following high-quality data provided by exchanges on a non-discriminatory basis.

[1] Commission Delegated Regulation (EU) 2017/565

[2] See Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31, 5.2.2004, para. 45. ("It is also easier to coordinate on a price for a single, homogeneous product, than on hundreds of prices in a market with many differentiated products"). See also Communication of the Commission - Guidance on the Commission's enforcement priorities in applying Art. 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, OJ C 45 of 24.2.2009, para. 13 ("the Commission will interpret market shares in the light of the relevant market conditions, and in particular of the dynamics of the market and of the extent to which products are differentiated.")

[3] See for example Judgment in AKZO Chemie v Commission, Case C-62/86, ECLI:EU:C:1991:286, paras. 119-120 ("It should next be pointed out that there was no abusive policy of discrimination between the individual mills in the Allied group and the 'large independents', as these two categories of customers are not comparable"). See also Judgment in United Brands v Commission, Case C-27/76, ECLI:EU:C:1978:22, para. 228 ("differences in transport costs, taxation, customs duties, the wages of the labour force, the conditions of marketing, the differences in the parity of currencies, the density of competition may eventually culminate in different retail selling price levels according to the Member States") and Judgment in Clearstream v Commission, Case T-301/04, ECLI:EU:T:2009:317, paras. 172 and 179.

Benchmarks

Questions for users of benchmarks (Q3.14 - Q3.20)

Q3.14 - Which type of benchmarks do you use in your business? How many benchmarks do you use, and how many administrators have you had agreements with, over the last 5 years?

N/A

Q3.15 - Are you content with the price and quality of the benchmarks you use? If you are not satisfied with any of these elements, please explain why not and the impact this has on your business.

N/A

Q3.16 - Do you consider any benchmarks a 'must have' for your business purposes? What factors do you consider in this assessment?

N/A

Q3.17 - How have prices and quality evolved over the last 5 years across the types of benchmarks you use? What impact has this had on your use of benchmarks, on your business and your clients?

N/A

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Q3.18 - Are benchmark administrators' pricing/licensing terms established by benchmark administrators easy to understand and comply with? What terms, if any, do you find to be overly complex or restrictive and what impact does this have on your business?

N/A

Q3.19 - Are you aware of benchmark administrators charging different amounts or imposing different contract terms, to different customers for similar services? Please give specific examples and explain the impact on your ability to compete in the markets you operate in.

N/A

Q3.20 - How easy is it to compare and switch between benchmark providers? Please provide details on the benchmarks considered when choosing and possible hurdles affecting your ability to compare, choose and switch.

N/A

Questions for benchmarks administrators (Q3.21 – Q3.27)

Q3.21 - Please explain the benchmarks you offer and how you ensure that they meet the needs of your clients.

Benchmarks are often construed based on market demand, either responding to trends or specific client requests. FESE members typically offer indices based on regulated data. This data is publicly available. Indices based on this data are offered by many different administrators, by exchanges, larger index providers, or smaller niche players. There is a broad range of options available to the market.

Q3.22 - How have your prices and charging structures, volume and value of sales of services and innovation in your offerings evolved over the last 5 years? Please explain reasons for changes in prices and other relevant dimensions.

What individual market participants spend on benchmarks can vary over time due to changes in usage patterns (i.e. increased use of benchmarks by asset managers). The benchmarks market is a highly competitive market with thousands of benchmarks available in different price ranges and from a broad set of benchmark administrators. Usage is dependent on market trends, individual customer needs, preference in terms of branding, or the reputation of the benchmark administrator. Benchmarks are important mechanisms to respond to the changing needs of the investment community and to foster and support transformational challenges, e.g. the inclusion of ESG-related aspects into investment behaviours and portfolio composition, as well as the rise of passive investment strategies. As benchmarks increasingly work as an incentive tool to encourage companies at scale to improve their ESG performance, they are playing a significant role in reaching the goals of the Paris agreement. Investments in ETFs worldwide have grown exponentially. The index industry is a highly competitive market with thousands of benchmarks available at different price ranges. While many index providers offer indices across various asset classes, they also face competition from more specialist providers focusing on particular areas. Market entry is evidently possible and new providers are able to compete effectively in specific areas based on their expertise. Benchmark providers strive to produce high-quality, innovative products in this space that cater to market participants' preferences and needs. Established index providers operate in a competitive environment which includes new

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entrants, low-cost calculation agents, and custom index providers. As such, any regulatory intervention in this area would be unwarranted.

Q3.23 - For your main benchmarks/indices, who are your key competitors, and to what extent are their products reasonably good substitutes for yours? How have competitive pressures affecting your business evolved over the last 5 years, including entry/exit of competitors?

For regulated data benchmarks, reasonably good substitutes are available. As both methodologies and regulated market data are available to any interested party on non-discriminatory terms. Most regulated data benchmarks can be replicated or offered by competitors or users. Users have a wide range of options available.

Q3.24 - What are the main barriers to attracting users away from your competitors? Please provide specific examples in your response.

Regulated data benchmarks can be replicated easily. The underlying data is broadly available.

Q3.25 - Are you aware of input data providers charging different amounts or imposing different contract terms to different benchmark administrators for similar services? Please provide specific examples where possible.

FESE members would like to underline that data from regulated markets is made available on non-discriminatory terms. FESE cannot comment on any other data which might be of interest to benchmark administrators, as the data industry is large and comprehensive with stock exchanges only playing a marginal role in it.

Q3.26 - Are there markets downstream from benchmark administration where you compete with customers of the benchmark(s) you supply?

Users of benchmarks offered by exchanges often also produce benchmarks in-house. Different benchmarks serve different purposes and different customers and are created in accordance with that purpose or customer in mind to the benefit of the market.

Q3.27 - What, if any, barriers to accessing input data put you at a competitive disadvantage in the design and provision of benchmarks? Please provide specific examples where this happens or may happen.

N/A

Market Data Vendor Services

Questions for users of market data vendor services (Q3.28 – Q3.33)

Q3.28 - Which market data vendor services do you use in your business and how has this evolved over the last 5 years?

N/A

Q3.29 - Are you satisfied with the price, quality and level of innovation of market data vendors' offerings? If you are not satisfied with any of these elements, please explain why not and the impact this has on your business.

N/A

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Q3.30 - How have prices and quality evolved over the last 5 years across the types of market data vendor services you use? What impact has this had on your use of data, on your business and your clients?

N/A

Q3.31 - Are you aware of market data vendors charging different amounts or imposing different contract terms on different customers for similar services? As a user are you, or have you been, at a competitive disadvantage as a result?

N/A

Q3.32 - Are there any products and/or services that you needed/tried to purchase from market data vendors on a standalone basis, but were not able to? What impact does purchasing a bundle have on your business?

N/A

Q3.33 - How do you choose market data vendors? Do you use more than one, and if so why? How easy is it to compare the content and price of alternative packages before choosing which data package to use? How easy is it to switch providers?

N/A

Questions for market data vendors (Q3.34 - Q3.39)

Q3.34 - Please explain the market data services you offer and how you ensure that they meet the needs of your clients.

N/A

Q3.35 - How would you characterise the market data related market(s) in which you are active and what approximate share do you believe you hold in each market?

N/A

Q3.36 - How have your prices and service offering for data packages, trading data and other data/analytical services evolved over the last 5 years? Please explain reasons for changes in prices and other relevant dimensions.

N/A

Q3.37 - Who are your key competitors, and to what extent are their products reasonably good substitutes for yours? How have competitive pressures affecting your business evolved over the last 5 years, including entry/exit of competitors?

N/A

Q3.38 - What is your contractual relationship and ability to negotiate with trading venues in relation to the pricing and provision of trading data?

N/A

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Q3.39 - To what extent is your firm vertically integrated? How does vertical integration affect your pricing and sales practices? Are there instances in which you are at a competitive disadvantage when you compete with providers offering bundled products or that are operating in different parts of the value chain. For example, a market data vendor running also an MTF or administering a benchmark?

N/A

Wider Uses of Data and Advanced Analytics in Wholesale Markets

Business models and opportunities

Q4.1 - How are firms operating in wholesale markets using alternative data and advanced analytics, and for which particular activities or markets? How might this change in the future?

Whilst there has been much debate about whether market data fees have increased over time, the fact that exchanges' market data revenue is a small proportion of total spending on market data in the market data industry is often overlooked. As recognised in this call for input, exchange market data is only a small part of the information used by market participants, which also includes news, alternative data, research, ratings, valuation data, reference data, and so on. Some of the claims about significant increases in market data fees or expenditure refer to the rise in general spending on data as a whole, rather than expenditure on exchanges' market data fees. It is important to distinguish the types of data being discussed and acknowledge the need for different regulatory frameworks depending on the type of data. Not all data can be considered in the same way and it is fundamental to consider the incentives that the data originator needs to have in order to produce innovative and valuable data. Companies should be allowed to 'upgrade' raw data and develop products/services based on these sources. It is, therefore, important not to create disincentives towards data collection/standardisation and product developments, i.e. allowing for commercialisation of data.

Q4.2 - How much has your firm allocated to investments in data and advanced analytics over the next three years?

N/A

Q4.3 - What are the potential benefits for firms and investors of the development of data and advanced analytics, now and in the future, and for which particular activities or markets? Please provide examples and where possible explain how the benefits are passed on to investors. How do you assess these benefits against the potential risks associated with the use of data and advanced analytics?

N/A

Q4.4 - How have business models changed in light of developments in the use and value of data, and how might they change in the future? What effect might this in turn have on different financial markets?

Data has become an important factor in new business models. FESE agrees that access to data is an important topic. We are convinced, however, that the interests of data providers and data users have to be taken into account and to be fairly judged and treated. It is important that freedom of business is protected, clear incentives for data provisions are maintained.

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As regards non-discriminatory access to highly valuable trading data (which can be used by direct competitors of exchanges for competing for the same order flow) it must be acknowledged by the FCA that exchanges are the only data sources making such data available to their direct competitors.

Access to data and advanced analytics

Q4.5 - What barriers make it difficult for firms to access data or access the technology necessary for analysing data, and how might this change in the future?

N/A

Q4.6 - With reference to paragraph 4.25, do you agree there are situations where the use of data could lead to unfair advantages in wholesale markets which could:

- pose potential barriers to competition well; or
- harm market integrity.

N/A

Q4.7 - What factors do you consider are relevant in assessing whether the use of data may create unfair advantages in wholesale markets? For example, if the data are only available to one or a handful of firms or if some market participants are not able to secure sufficient financing to access data.

N/A

Impact of concentrated markets

Q4.8 - How concentrated is the supply of data, or technology required to analyse data, to wholesale market participants? Please explain how this differs by data type and technology type and the impact on your business.

N/A

Information sharing, collusion and biases

Q4.9 - Do you consider that the wider use of algorithmic solutions in wholesale markets could give risk to new types of market abuse or collusive behaviour? If you currently use these solutions, do you have any processes in place to manage these potential risks?

N/A

Data governance, controls and ethics

Q4.10 - Are there any potential control or governance issues associated with these data that you currently use or think will be used in the future? Please provide examples and explain your reasoning.

N/A

Q4.11 - For wholesale market participants that make use of advanced analytics, how does senior management ensure that it has sufficient understanding of how these algorithms, as an example of one tool, work in order to ensure that they are complying with their regulatory and competition law obligations?

N/A

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In relation to ethical considerations:

Q4.12a - Are there any potential ethical implications as a result of the use of new forms of data and advanced analytics in wholesale markets? Please give specific examples.

N/A

Q4.12b - What steps do you take to make sure that the data you use have been sourced legally and ethically?

N/A

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