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OPSG Opinion
on Big Data and Pensions

Executive Summary

One of the tasks of the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA), collectively known as the three European Supervisory Authorities (ESAs), is to monitor any emerging risks for consumers and financial institutions as well as new and existing financial activities and to adopt measures, where needed, with a view to promoting consumer protection and the safety and soundness of markets and convergence in regulatory practices. The coordination of the ESAs' actions in these areas is taking place within the Joint Committee.

In monitoring consumer protection developments and financial innovations, the ESAs have noted the continued increase in the use of Big Data across the banking, insurance and securities sectors, i.e. the collection, processing and use of high volumes of different types of data from various sources, using IT tools, in order to generate ideas, solutions or predict certain events or behaviours (for example to draw actionable insights from these diversified volumes of data in order to profile customers, identify patterns of consumption and make targeted offers). The increase in the use of Big Data has been observed, albeit to varying extents, across the banking, insurance and securities sectors and across different EU Member States.

The ESAs have assessed potential benefits and risks linked to the use of Big Data by financial institutions, with a view to determining at a later stage which, if any, regulatory and/or supervisory actions may be needed to mitigate the risks while at the same time harnessing the potential benefits.

Taking into consideration the above, the OPSG welcomes the opportunity to respond to the EBA, EIOPA, and ESMA (the ESAs) on this Discussion Paper on the Use of Big Data by Financial Institutions and in particular on the specific questions set out herein, as per below.

Answers

Question 1: Do you agree with the above description of the Big Data phenomenon? If not, please explain why. Please, also mention whether you consider that other characteristics are relevant to understand the use of Big Data.

The OPSG agrees with the definitions, scope and with the description of the Big Data phenomenon (although data as such can be distinguished from channels, such as internet/mobile etc.). Unlike with other sectors, Big Data is more an evolution than a revolution for financial institutions, including pension providers.

Question 2: Which financial products/activities are (likely to be) the most impacted by the use of Big Data and which type of entities (e.g. large, small, traditional financial institutions, fintechs etc.) are making more use of Big Data technologies? In light of ESAs objective to contribute to the stability and effectiveness of the financial system, to prevent regulatory arbitrage, do you consider that there is a level playing field between financial institutions using Big Data processes and those not using them (e.g. because they do not have access to data or the IT resources to implement Big Data processes) or between financial institutions or potential new entrants (e.g. Fintechs) using Big Data processes? Please, explain.

Although it is difficult to foresee how the market will evolve, the need for a level-playing field, as mentioned in the question, is paramount. It is however safe to say that larger undertakings with more research & development capabilities and closer ties with Fintech companies might have an advantage over smaller and more conservative entities on short term. Nevertheless, the agile IT industry has proven quite difficult to predict until now so its impact on the financial markets might follow the same approach.

Question 3: Do you offer/are you considering using Big Data tools as part of your business models? If so, please briefly describe: i) what type of entity you are, e.g. long established, start-up, a product provider, an intermediary, ii) the service you provide, iii) the nature of your clients; IV) your business model; V) whether the Big Data tools/strategy were developed by an external company or internally and whether you have related agreements with other entities (including non-financial entities); VI) what are the types of data used (personal, anonymised, used data, statistical data, etc. ; VII) the size of your Big Data related activity and/or forecast activity (e.g. to what extent are business decisions already taken on the basis of Big Data analysis; what other business actions could be based on Big Data in the future)?

In the pensions industry, there are plenty of information being produced, stored, analysed and processed, such as fund values, contribution rates, chosen pension options, salary, gender, age etc. Industry stakeholders within the OPSG consider that mortality and longevity data are key to pension funds and insurance companies alike. Therefore processing a larger amount of higher-quality data through analytics could

represent an advantage. Also, there are certain advantages of the online marketing & advertising becoming increasingly personalised through the usage of Big Data.

Question 4: If you are a consumer or consumer organization, do you witness any of the uses of Big Data? In what fields?

Comparison tools and pension calculators are currently employed in the field of private pensions. On the other hand, online marketing & advertising is becoming increasingly personalised, suggesting an increasing use of Big Data.

Question 5: Do you consider there are (non-regulatory) barriers preventing you (or which could prevent you in the future) from collecting and processing data? Are there barriers preventing you from offering/developing Big Data tools in the banking, insurance and securities sector? If so, which barriers?

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Question 6: Do you agree with the above short description, non-exhaustive, presentation of some of the main applicable requirements? If not, please explain why. Please also mention whether you consider that other legal requirements are essential and should be mentioned.

The OPSG agrees with the applicable requirements. The list highlights the fact that there is an interaction regarding Big Data between different Regulations and Directives such as the GDPR, IDD, MiFID II, PRIIPs, among others, and that this issue takes into account data protection, consumers, and sectoral financial requirements. It is positive that this list is non-exhaustive which allows an update regarding this evolving issue if and when needed.

Also, it is safe to say that existing EU legal framework gives enough safeguards to prevent major risks for members and beneficiaries, but is also flexible enough in order to allow for the development of Big Data in the EU.

Against this background, industry representatives within the OPSG suggest the ESAs to monitor developments without acting prematurely with further regulation that would hinder future developments.

Question 7: Do you consider any of these regulatory requirements as unjustified barriers preventing you from using Big Data technologies? If so, please explain why. Please, also explain whether you consider that further regulation (including soft law/guidance, etc, and insofar as it falls within the scope/remit of the ESAs) should be introduced to facilitate the use of Big Data technologies.

The OPSG is of the opinion the area of Big Data is under development hence it is difficult to predict today what might be a barrier in the future. We would however like to highlight the issue of the development of new products and services which are also offered to non-digital natives. Internet penetration differs hugely across the EU member states, and digital skills differ across population groups and cohorts. In other words, will

Big Data result in tailor-made products for internet users, while the non-users are offered "one-size-fits-all" products (or no products at all, because these consumers cannot provide their details on-line)?

Question 8: Do you consider the potential benefits for consumers and respectively financial institutions to be accurately described? Have you observed any of them in practice? If so, please, provide examples. If not, please, explain whether you are aware of any barriers that may prevent the above potential benefits from materializing?

Future developments based on new technologies (e.g. data mining or analytical tools) may have an impact on the entire value chair for financial institutions, including pension funds and insurance companies. We can identify certain benefits (prevention and tailor-made products) and address a few risks identified by the ESAs (risk segmentation, access to services and consumer awareness). However, at this stage, it seems rather difficult to try and assess what this will mean concretely. Therefore, it is too early to conduct such assessment.

However, the OPSG would like to highlight the fact that these benefits are potential and not automatic (regarding for instance the lowering of the price for consumers). In general, Big Data analytics should be designed to work in the interest of consumers, financial institutions, and supervisory authorities for it to benefit to society as a whole.

Question 9: Do you believe that Big Data processes may enable financial institutions to predict more accurately (and act accordingly) the behavior of consumers (e.g. predicting which consumers are more likely to shop around, or to lodge a complaint or to accept claims settlements offers) and do you agree with the description of the risks identified for consumers and respectively financial institutions? Have you observed any of these risks (including other risks that you are aware of) causing detriment to consumers and respectively financial institutions? If so, in what way? If not, please explain why. Please, also mention whether certain risks for consumers and financial institutions have not manifested yet but have the potential of developing in the future and hence need to be closely monitored by Supervisory Authorities

In general, the OPSG agrees with the risks identified in the document. A certain other risk we would like to emphasise on is the situation in which some market actors retain, through their market position, large quantities of data which eventually could be detrimental for consumers and against the principle of a level-playing field between stakeholders (e.g. auto manufacturers).

A certain risk that consumer representatives within the OPSG have pointed out is the one that has to do with the static character of profiling and segmentation - although people change. And the more a consumer is driven into a particular profile, the more difficulty it may be to escape it, and explore other options. This would call for a dynamic approach to segmentation.

However, industry representatives within the OPSG have also pointed out the positive outcomes of profiling and segmentation – which could be evolving as well, adapting to people's developments.

Question 10: Is the regulatory framework adequately addressing the risks mentioned above? Bearing in mind the constant evolution of technologies/IT developments and that some of the above mentioned regulatory requirements are not specific to the financial services sector (e.g. GDPR), do you think further regulation is needed to preserve the rights for consumers of financial services in a Big Data context? Please, explain why.

Although the GDPR is principle-based, and technologically neutral, thus giving flexibility to address issues stemming from future innovations, it does promote the creation of industry codes of conduct and sets out good ground rules. Such codes of conduct already exist in some Member States and may be developed in others.

Taking this into consideration, consumer representatives within the OPSG would also like to see the improvement of the duty of care also mentioned explicitly in the document.

Question 11: Do you agree that Big Data will have implications on the availability and affordability of financial products and services for some consumers? How could regulatory/supervisory authorities assist those consumers having difficulties to access financial services products?

See Q7.

Question 12: Do you believe that Big Data processes may enable financial companies to predict more accurately (and act accordingly) the behavior of consumers (e.g. predicting which consumers are more likely to shop around or to lodge a complaint or to accept claims settlements offers) and could therefore compromise the overarching obligations of financial institutions to treat their customers in a fair manner? Please explain your response.

Big Data analytics will provide the industry with more behavioural insights of consumers.

Question 13: Do you agree that Big Data increases the exposure of financial institutions to cyberisk? If yes, what type of measures has your institution adopted or is going to adopt to prevent such risks? What could supervisory/regulatory authorities do in this area?

The OPSG agrees to the fact that increasing usage of Big Data can lead to an increased exposure to cyber risks and would like to stress the fact that the industry bears an important responsibility towards its customers, especially since this is very sensitive information.

Insofar as cyber crime is state driven, the increasing globalisation of the financial industry may pose an additional cyber risk.

Question 14: Would you see merit in prohibiting the use of Big Data for certain types of financial products and/or services, or certain types of consumers, or any other circumstances?

National competent authorities should monitor the potential detriment of the use of Big Data but without hindering future developments that could help both consumers and industry.

Question 15: Do you agree that Big Data may reduce the capacity of consumers to compare between financial products/services? Please, explain your response.

There is indeed a risk that increasing personalisation of offers will decrease comparability as different providers could use different datasets and algorithms for similar offers. On a different level, the less options there are for the tooling for Big Data (e.g. software systems), the more their users are harmonized indirectly, which influences the heterogeneity in the financial market. In other words: the IT sector structure feeds forward to the financial sector structure. The same holds for consultants: if there are only very few really good consultants around, all financial firms will implement the same type of solutions. This indirect competition aspect should also be included in the document.

Question 16: How do you believe that Big Data could impact the provision of advice to consumers of financial products? Please, explain your response.

As mentioned previously, it is safe to say that Big Data tools could help giving consumer access to more tailored and personalised advice.

Question 17: How do you believe Big Data tools will impact the implementation of product governance requirements? Please explain your response.

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Question 18: How do you believe Big Data tools will impact know-your-customer processes? Please, explain your response

On the one hand, it may be easier to gauge information of customer (e.g. via social media). On the other hand, the three risks mentioned before, remain: (1) privacy; (2) non-digital natives; (3) changes in personalities and lifestyles (dynamic profiling).

Question 19: What are key success factors for a Big Data strategy (i.e. the adaptation of the business model/plan towards Big Data driven technologies and methods)?

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Question 20: What are the greatest future challenges in the development and implementation of Big Data strategies?

The challenges are not only technical in nature, but also legal. In example, the OPSG

would like to raise the issue of responsibility of the manufacturer / distributor of a financial product that is based on "data-driven" tools such as third-party data input devices and/or algorithms. Such tools or algorithms may contain errors. Therefore, when the potential regulation of a Big Data and/or user-driven financial products is considered, one needs to make clear who is responsible for the whole "black-box".

In practice, many financial service/product providers limits their responsibility only to the extent where they control the inputs. However, the whole sales process is driven by promoting the "limited responsibility" product/service even when this innovative feature is promoted by the financial service/product provider. The example could be found in many "analytical" platforms, where "pre-built" investment strategies are directly offered and/or promoted by the investment broker and there is limited responsibility of the broker for using it. This is very misleading for retail investors.

Question 21: This Discussion Paper refers to a number of measures and tools meant to ensure compliance with conduct and organizational regulatory requirements as well as data and consumer protection rules in the context of Big Data analytics. Are other measures and tools needed? If so, what are they and what they should cover?

The OPSG feels that this document should give more clarity about the issue of the liable person in case a certain Big Data processing algorithm does not serve the customer - either because it does not function properly, or because it has adverse side effects, or is hacked, etc.

Also, there is a need for a level-playing field between market actors, furthermore, an equal access to data. One possible solution is the usage of industry Codes of Conduct. There is also a need to ensure equal access to data when it comes to e-connected objects.

Question 22: How do you see the development of artificial intelligence or blockchain technology in connection with Big Data processes?

Used properly, blockchain technology can help to improve the security and quality of data used in the context of Big Data analytics.

Question 23: Are there any other comments you would like to convey on the topic of the use of Big Data by financial institutions? In particular, are there other relevant issues that are not covered by this Discussion Paper?

Managing cyber risks has to become a top priority for industry in order to be able to successfully protect customers' data, especially considering recent developments in the international arena.