Abstract of the Ph.D. thesis by mgr Iga Małobęcka-Szwast "Role of big data in assessing abuse of a dominant position by data-driven online platforms under EU competition law"

Big data has emerged as a key asset for online platform providers and an essential input for their services. Big data, understood as an information asset characterised by such a high volume, velocity and variety to require specific technology and analytical methods for its transformation into value, contributes to the market success of the prevailing online platforms, such as Google, Facebook or Amazon. The business models of these data-driven online platforms rely on processing and monetisation of data, and big data has become a driving force of their market behaviour. In view of these developments, the main purpose of the dissertation is to analyse whether and if so, how the EU legal framework for the assessment of abuse of a dominant position under Article 102 TFEU should be adjusted to address the competition concerns arising from the widespread use of big data by data-driven online platforms.

The research conducted in this dissertation leads to the conclusion that the current EU framework for the assessment of abuse of dominant position under Article 102 TFEU needs to be adjusted in order to capture specificity of data-driven online platforms, the role of big data in their businesses and their potentially abusive data-driven practices. The competition concepts that are currently relied upon within Article 102 TFEU assessments seem, however, sufficiently flexible to take due account of peculiarities of data-driven online platforms, as well as big data's influence on their market power and abusive practices.

In accordance with the two-step approach to the assessment of dominance under Article 102 TFEU, first, the question of market definition for data-driven online platforms is considered. In that regard it is proposed to define separate markets for each customer group of an online platform and account for interdependencies existing between them throughout the further competition analysis, in line with the so-called "multi-markets approach". Although online platforms' characteristics and big data raise challenges for competition enforcement in terms of market definition, it seems that there is no need to introduce any material changes to the current framework for its assessment. It is concluded that the role of big data in online platforms' businesses can be adequately and sufficiently addressed at the stage of market power assessment.

In the second step, in order to capture the role of big data in online platforms' market power, it is proposed to adapt the current framework for the assessment of dominance to the peculiarities of data-driven online platforms, including the reliance of their business models on big data. Thus, while assessing market power of online platforms, it is recommended to draw particular attention to the following factors: (1) direct and indirect network effects, (2) pattern

of use of services (i.e., multi-homing or single-homing) and degree of platform differentiation, (3) switching costs and customer lock-in, both on the user and advertiser side of the platform, (4) potential competition, and (5) the access to data relevant for competition and ability to monetise it. As evidenced in the dissertation, under certain circumstances, big data may confer a competitive advantage and influence the market power of data-driven online platforms. Given the fact that big data is perceived as only one of several factors indicating dominance, it should be analysed in conjunction with other relevant factors. In particular, the superior access to large datasets and ability to monetise them cannot be used as a sole basis for finding dominance.

It is demonstrated that the emergence of big data as a key asset in online platforms' businesses gives rise to a new type of abuse under Article 102 TFEU that is data-driven. Data-driven abuses are understood as abuses that are either motivated by the willingness to collect as much data as possible, aimed at preventing competitors from accessing valuable datasets or enabled by the control over certain data that would not be possible without it. Several examples of data-driven unilateral practices of online platforms that may be found abusive under Article 102 TFEU are identified in the dissertation. They include both exclusionary abuses (such as refusals to give access to data that is an essential input for a product or service or use of competitors' data to favour its own products) and exploitative abuses (such as excessive data collection, personalised pricing, or restrictions on data portability). Although some of these practices do not easily fit into any of the well-established theories of harm, and determining that they actually constitute an abuse under Article 102 TFEU may prove challenging, it is concluded that Article 102 TFEU is a sufficiently flexible tool to address potential data-driven abuses.