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Blockchain & FinTech Team
Blockchain and EU Competition Law

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There are a number of uses of blockchain technology which may give rise to competition concerns. As a distributed ledger where transactions are recorded in real time and are accessible to everyone within that network, blockchain makes at least some transaction information accessible to users within the network. The available information can provide insights on highly sensitive commercial business transactions and/or strategies. Blockchains can also be seen as a decentralized model of data storage including payment transactions, purchase history, corporate accounts, pricing history as well as future changes to pricing. These characteristics can expose users of blockchain technology to competition law concerns, the most obvious of which are detailed below.

1. Information exchange and collusion

The exchange of commercially sensitive information which reduces strategic uncertainty in the market can create the conditions for competitors to collude and may lead to competition law infringements as it decreases the incentives to compete. Sensitive strategic information can, amongst others, relate to prices, discounts, planned price increases, reductions or rebates, customer lists, production costs, quantities, turnovers, sales, capacities, qualities, marketing plans, risks, and investments. One of the key features of blockchain technology is to utilise transparency to increase efficiency. But transparency may facilitate and/or strengthen anticompetitive collusion. Competitors who are part of the same blockchain network may be able to exchange commercially sensitive information since they have access to identical records of all transactions within the distributed ledger. Whilst ledgers could have many advantages especially in relation to various different types of agreements, notably supply and distribution agreements for the exchange of agreements and contracts, tracking and payment due to every transaction being recorded on a block and across multiple copies of the ledger which is distributed over many computers, this can be highly problematic as there is a risk that sensitive information is shared amongst competitors either at the same level of the supply chain or at different levels. Thus, direct competitors using shared blockchains or collaborating in blockchain consortia are particularly likely to be susceptible to antitrust scrutiny.

Blockchain technology may also become 'competitively infamous' by playing a role in explicit collusion. If information distributed on blockchain enables the monitoring and punishing of deviations from collusive agreements, it could be treated as part of a cartel and hence restrictive of competition by object. A more sophisticated form of colluding could be by codifying anti-competitive terms and conditions into a self-executing smart contract running on top of blockchain in order to automatically punish deviators.

Companies using this technology therefore need to be aware of the types of information which will be made available through the blockchain and the risks associated with certain use of that information. No matter the gains in efficiency and transparency, there is always the risk that information that should not be shared amongst competitors is nonetheless shared. Thus, it may be necessary to include a layer of cryptography to protect particularly commercially sensitive data or even have that information off-chain.

2. Standardisation agreements

The primary objective of standardisation agreements is to define technical and/or quality requirements that have to be complied with. Achieving a consensus on common technical standards behind a given blockchain is likely to become more and more relevant as interoperability within a system will be key.

Such agreements may, however, reduce or limit competition on price, technical development and innovation and/or create entry barriers. Competition law may therefore apply and the blockchain will have to ensure a compliant functioning of the standardisation process. Such anti-competitive behaviour is to be distinguished from forms of genuine cooperation between companies aimed at improving product quality and innovation which generally do not raise competition law concerns.

3. Access to Blockchain

Blockchain access issues may give rise to competition concerns in particular where private blockchains are hosted by a defined set of nodes to which only permitted users have access. Unlike public blockchains, private distributed ledgers have an owner (or owners) who controls or delegates membership, mining rights and rewards (if applicable), and maintains the protocol.

From a competition law perspective, access requirements could be problematic where the blockchain would be indispensable for competing in the market, and where access could be refused to a competitor without any objective justification. These issues will become more prominent as access becomes increasingly required and should be carefully considered when setting up the governance of a blockchain network.

4. Merger control

Merger control can also bring competition law issues related to blockchain, especially when setting up a cooperation or joint venture in relation to a blockchain. Competition authorities will have to assess new potential markets with regard to blockchain which will be subject to careful scrutiny of their pro- and anticompetitive effects.

5. Conclusions

Competition authorities have extensive and intrusive powers to investigate suspected competition law breaches which may lead to high fines as well as damages claims. Companies using blockchain need to: (1) thoroughly assess whether a blockchain holds information about prices, quantities, costs and demand creating transparency and giving competitors access to sensitive commercial information that would otherwise be unavailable; (2) consider whether there are blockchain access issues and how they might to be dealt with when using permission-based blockchains; (3) consider the decisive role blockchain could play in merger control assessments. There are many facets of blockchain, far beyond those described above, which could raise competition concerns. Clients therefore need to tread carefully and seek advice when using blockchain technology so as to ensure compliance with competition law rules.

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