

HM Treasury: Digital Competition Expert Panel - Open consultation

Consultation response from the
Centre for Competition Policy

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This consultation response has been drafted by the named academic members of the Centre, who retain responsibility for its content.

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Overview

The members of CCP welcome the opportunity to contribute to this consultation. We limit our responses to some of the questions and issues raised by the consultation and which we have addressed in our research. Our responses focus in particular on the following issues and support the following recommendations:

- Impact of personal data collected through the 'free' online services on competition in associated markets with a specific regard to merger control (Question 5 and 7 A: Elias Deutscher)

Recommendation: *Competition analysis should focus in particular on the (i) variety, (ii) volume, (iii) velocity of collection and (iv) value of the merging parties' user databases to assess whether their combination confers the merged entity a 'data advantage' in associated markets.*

- Relevance of personal user data as economic counterpart of 'free' online services with a specific regard to merger control (Question 5 and 7: Elias Deutscher)

Recommendation: *Competition analysis should ascertain how mergers affect the non-monetary economic transactions in markets where consumers receive free services in exchange for disclosing their personal information. The tool of willingness-to-pay studies in the form of conjoint analysis would allow competition authorities to assess and quantify consumer harm resulting from such non-price effects (e.g. decrease in the level of privacy protection) of mergers in 'free' online services markets.*

- Tools of competition policy (Question 7 A and B: Bruce Lyons)

Recommendation: *In the context of digital markets, it would be wise to amend the standard 'more likely than not' merger test to allow greater harms, which are at least 'realistic prospects', to weigh more heavily in the merger decision.*

Recommendation: *The 'tool' necessary for antitrust action relating the abuse of dominance by digital giants is very strong international cooperation.*

- Policy changes beyond traditional competition tools that could facilitate entry and thus improve competition and economic outcomes (Question 8: Wynne Lam)

Recommendation: *Regulators should be mindful of changes in both the extensive (how many consumers) and intensive margins (how much data consumers have provided and analysed by firms) induced by policies that aim at reducing switching costs, especially in the digital economy.*

- How does data protection legislation affect innovation by digital firms? (Question 10: Bruce Lyons, Wynne Lam)

Recommendation: *It is good policy not to rely solely on fines for incentivising data protection because the GDPR opt-in requirement helps to achieve the same aim with less adverse impact on service quality.*

- What is the appropriate relationship between data protection legislation and competition law in digital markets? (Question 10: Elias Deutscher)

Recommendation: *Competition authorities should account for the fact that privacy protection may constitute an important parameter of competition in digital markets which can be negatively affected by a merger or other anticompetitive conduct, even though this conduct does not amount to a breach of data protection legislation.*

I. Impact of personal data collected through the ‘free’ online services on competition in associated markets with a specific regard to merger control (Q.5 & Q.7A: Elias Deutscher)

A recent paper by Elias Deutscher¹ on merger analysis in the digital economy assesses how competition authorities examine the role of personal data as source of market power and as economic counterpart for ‘free’ online services. In several mergers between firms collecting user data, the European Commission has ascertained the extent to which the combination of their previously distinct datasets will bestow a ‘data advantage’ on the merged entity allowing it to marginalise or even foreclose competitors in associated (online advertising) markets. The paper, however, critically points out that the European Commission’s past assessment of such conglomerate effects resulting from the combination of the merging parties’ datasets lacked analytical depth. In *Google/DoubleClick*, *Facebook/WhatsApp* and *Microsoft/LinkedIn*, the Commission broadly assumed that such a combination of the parties’ databases would not have any anticompetitive effect on the online advertising market. It however omitted to analyse the specific characteristics of the combined databases and the suitability of alternative sources to replicate the information or other advantages the merging parties derived from the combination of their datasets. Against this backdrop, the recent decision in *Apple/Shazam* reflects a major step towards a more granular analysis of such a ‘data advantage’. To determine whether this combination of user datasets would have a negative impact on competition in the market for digital music streaming apps, the Commission focused in particular on the (i) variety, (ii) volume, (iii) velocity of collection and (iv) value of Shazam’s user dataset, as compared to the data accessible to competitors.²

Focusing on these four dimensions, or so-called ‘Four Vs’ of Big Data, constitutes a promising analytical tool to assess how the access to or combination of user datasets as a consequence of a merger might confer market power and cement entry barriers in associated markets.

II. Relevance of personal user data as economic counterpart of ‘free’ online services with a specific regard to merger control (Q.5 & Q.7A: Elias Deutscher)

The fact that consumers receive ‘free’ services has for quite some time shifted the focus of competition analysis away from the user-side to the advertising-side of online platforms. While the European Commission assessed in *Google/DoubleClick*, *Microsoft/Yahoo!*, and *Facebook/WhatsApp* the transactions’ effect on the market for online advertising, it omitted to examine how these mergers may affect consumers on the ‘free’, user-side of the multi-sided platforms. *This approach, however, unduly overlooks that consumers, albeit receiving services for ‘free’, are engaged in a genuine economic transaction with online platforms, as they barter their personal information in exchange for free online services.* Although consumers are not charged a monetary price, they nonetheless pay a non-monetary price by disclosing their personal information which, in turn, is monetised by the platforms on their online advertising side.

¹ Elias Deutscher, ‘How to measure privacy-related consumer harm in merger analysis? : a critical reassessment of the EU Commission’s merger control in data-driven markets’ (2018). EUI Law Working Paper 2018/13. <http://cadmus.eui.eu/handle/1814/58064>

² Case COMP/M. 8788 *Apple/Shazam* [315]–[330].

The analysis of non-price effects of mergers on the ‘free’, user-side of online platforms constitutes an essential element of a more holistic approach and major challenge for merger control in digital markets. *Competition analysis should ascertain how mergers affect the non-monetary economic transactions in markets where consumers receive free services in exchange for disclosing their personal information.* As the terms and bargains of these non-monetary transactions are determined by the amount and type of information consumers have to reveal in exchange of free services, competition authorities should evaluate how mergers affect consumers’ level of privacy or data protection on the ‘free’ user side of multi-sided platforms. In this respect, competition analysis could approach a decrease in the level of data protection resulting from a merger as being tantamount to a (non-monetary) ‘privacy price’ increase.

The paper advocates the use of willingness-to-pay studies in the form of conjoint analysis as a methodological tool for competition authorities to ascertain these non-price effects. By identifying consumers’ willingness to pay for a certain level of privacy, competition authorities would be able to quantify the consumer harm likely to arise from the potential change in the merging parties’ privacy policy as a consequence of the merger and to translate it into monetary terms for the purpose of balancing it with potential welfare-enhancing efficiencies. Conjoint analysis is increasingly used by competition authorities³ to measure consumers’ willingness to pay for non-price characteristics of differentiated products. This suggests that conjoint analysis is a workable and administrable tool which can be used for merger analysis without creating the need of any change in the substantive merger tests and notwithstanding the tight timelines of merger control. As it does not rely on stated but revealed preferences to measure how much consumers value a certain level of data protection, conjoint analysis is less vulnerable to the ‘privacy paradox’ and other cognitive biases than ordinary surveys. The conjoint analysis methodology would also enable competition authorities to account for the multi-faceted nature of privacy. It would not only allow them to measure how users value privacy in relation to the amount of personal information they have to disclose in exchange of a specific service, but also to gauge consumers’ preferences with regard to other dimensions of privacy, such as the interdependent privacy (disclosure of data of friends or contacts), the type of data disclosed (sensitive or non-sensitive data), the purpose of the data collection, the use of the data (platform or third parties), the control over data and data security.

III. Tools of competition policy (Q.7A & Q.7B: Bruce Lyons)

Digital markets have many characteristics that are also found in more traditional market settings (e.g. network effects, cross-network externalities, continuous marginal innovation, drastic Schumpeterian innovation, high fixed/low marginal costs, global reach, big data accumulation, targeted advertising, potential for individualised pricing). The instruments of competition policy are sufficiently flexible to address each of these when they raise problems for competition, with the back-up of regulation for natural monopolies. However, there is a major qualitative difference in that so many of these characteristics are combined in digital settings. In particular, digital technology can be used globally without transport costs, marginal costs are often close to zero, and a very small number of platforms become both first-choice access points for time-constrained consumers and the core route-to-market for many suppliers. Consequently, network and other effects become hugely exaggerated, resulting in dominant

³ Marinus Imthorn, Ron Kemp and Ivo Nobel, ‘Using Conjoint Analysis in Merger Control: A competition practitioner’s perspective’ (ACM Working Paper 2/2016 2016).

firms, even at a global level. In this context, I highlight two suggestions in relation to the tools of competition policy.

7 A. Merger tools:

A standard piece of merger analysis is to develop a counterfactual of what would happen in the absence of a merger. This need not be the status quo; for example, failing firms can provide the counterfactual against which to appraise the merger. The difficulty in forming a counterfactual in digital markets is that they are so fast-moving and innovation is unpredictable. This raises the prospect of more extreme outcomes than are usually considered in traditional markets. Suppose that the CMA is able to identify two possible scenarios, A and B. A is a slightly more likely outcome and would not create any competitive problems or harm consumers. B is slightly less likely but would result in foreclosing the market, unbalancing future innovation and be highly detrimental to consumers. Outcome A is ‘more likely than not’ and so such a merger might be allowed on the standard legal test. Inasmuch as this is the case, then *it would be wise to amend the standard test to allow greater harms, which are at least ‘realistic prospects’, to weigh more heavily in the merger decision.* There could be symmetry in this proposed approach if outcome A would result in minor harm and the slightly less likely outcome B would result in huge gains (e.g. creating a powerful challenger to a dominant firm).⁴

7 B. Antitrust tools:

For reasons given above, a few digital firms have become global giants. Post-Brexit, if DG Competition is no longer acting on behalf of the UK, the CMA would not be in a good position to tackle global digital giants. While the CMA has a very good track record on mergers and is improving on Ch.1, it has a poor record on Ch.2/Art.102 enforcement of competition law (i.e. dominant firms). In any case, UK law would have only a limited impact on the global giants. For example, geographically local remedies might be attempted but there could be no feasible measures to influence technology or structure. *The ‘tool’ that would then be needed is strong international cooperation.* Realistically, this would have to be with the EU, not least because US interests may not be so well aligned with UK interests when so many digital giants are located in the US.

IV. Policy changes beyond traditional competition tools that could facilitate entry and thus improve competition and economic outcomes (Q.8: Wynne Lam)

In the “old” economy, one of the main sources of switching costs came from acquiring information about alternatives (e.g. searching for the cheapest provider). It is well-known in the economic literature that switching costs have two contrasting effects on competition. *Ex post*, once a consumer has bought from a firm, he/she is willing to pay more to continue buying from this firm (up to the switching costs). Demand is less elastic for “locked-in” consumers. Firms have market power over these consumers, which leads to higher prices. *Ex ante*, firms compete fiercely to get consumers locked-in in the first place, which leads to lower prices. Thus, one way to encourage entry is to reduce ex post switching costs.

⁴ This sort of flexibility appears possible in judicial review, which sets a higher standard when more is at stake.

In the digital economy, switching costs of acquiring information are much reduced, as price quotes and product specs are only one click away. However, now switching online services is more about the treatment of consumer data. In our recent research (Lam and Liu, 2018),⁵ we show that in a digital environment where big data analytics are prevalent, traditional policies (e.g. data portability) that intend to *reduce* ex post switching costs may have an unintended consequence of *increasing* ex post switching costs. Why? Because in a non-digital environment without any big data analytics, data portability rules can indeed facilitate switching (the extensive margin) and entry, holding the level of consumer data provision fixed. However, with big data analytics, the prospect of easier switching may actually entice consumers to provide even more data to the incumbent (the intensive margin), which creates entry barriers. We also demonstrate that where big data is very valuable, data portability rules may reduce consumer welfare by deterring entry of a more efficient firm.

Therefore, the regulators should be mindful of changes in both the extensive (how many consumers) and intensive margins (how much data consumers have provided and analysed by firms) induced by policies that aim at reducing switching costs, especially in the digital economy.

V. How does data protection legislation affect innovation by digital firms? (Q.10 – other issues: Wynne Lam, Bruce Lyons)

Rapid technological change and digital markets have created new opportunities for the use of personal data to develop services offered to consumers. Part of the benefit is generic in attracting consumers to a platform to use a core service. Additionally, consumers typically enjoy a benefit from providing their personal data in the form of individualised value added services (e.g. individualised search results, information on products of personal interest, access to relevant social networks). These add value to the core activity of a website (e.g. general internet search, convenient shopping, communication with friends). High profile examples include Google, Amazon and Facebook, but there are numerous other lower profile examples (e.g. games, travel websites, weather apps). At the same time, many consumers are concerned about the security of their personal data and its potential misuse (ranging from identity theft, hacking of credit card details, misuse of personal data for political purposes, misuse for commercial ends that do not benefit consumer, to spam). Consequently, internet firms invest both in the quality of value added services to attract consumers and in data security to create the confidence for them to provide their data.

The revenue model for such firms has evolved away from classic payment for services to a price subsidised by other revenue streams. The logic is now familiar from the theory of two-sided markets. Advertising revenues and product sales are highly valuable to internet firms, particularly if suppliers can target individuals, so a prime objective is to maximise the number of users on their site and to use the personal data they collect to target adverts and product offers. Internet firms attract consumers in three ways. First, they provide a core activity to consumers, often supplemented by individualised services, at a highly subsidised price and very often free of direct charge. Second, they invest in improving the quality of their core

⁵ Lam, W. M. W. and Liu, X. (2018) 'How does Data Portability affect Entry?', Working Paper. Available at: https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=EARIE45&paper_id=253. A non-technical summary of the paper can be found at: <https://bit.ly/2zzLiZ8> (CCP Research Bulletin, Spring 2018, pp. 8-9).

product and value added services (i.e. innovation). Third, they invest in internal and external data security in order to give consumers confidence to share personal data.

In contrast to other jurisdictions, the European GDPR uses publicity, fines and a new consumer opt-in requirement to incentivise firms to protect personal data. Lam and Lyons (2018)⁶ consider the distinctive GDPR role of opt-in by drawing on empirical and experimental evidence which suggests the status quo shifting significance of the opt-in requirement may be best understood by consumer loss aversion. They develop a simple theoretical model to show that, while fines incentivise investments in data security, higher fines also reduce the incentive of firms to innovate (i.e. there is an investment substitution effect). However, the opt-in requirement of the GDPR increases investment in data security, without necessarily reducing the incentive for service quality/innovation. In fact, this incentive may be improved because, unlike with fines, the opt-in hurdle can be directly addressed by improving service quality (i.e. there can be complementarity between data security and product quality investments).

Thus, we find that it is better policy not to rely solely on fines for incentivising data protection because the opt-in requirement helps to achieve the same aim with less adverse impact on service quality.

VI. What is the appropriate relationship between data protection legislation and competition law in digital markets? (Q.10 – other issues: Elias Deutscher)

One fundamental issue the review should consider is the appropriate relationship between and respective scope of competition law and privacy/data-protection regulation. The predominant view shared by competition authorities and academics on both sides of the Atlantic claims that privacy/data protection does not constitute an antitrust concern, but should be properly addressed by consumer protection or privacy legislation.⁷ Accounting for privacy under competition analysis, the argument goes, would unduly ‘instrumentalise’ competition law in order to fix regulatory failures resulting from insufficient or dysfunctional data protection legislation.

This argument, however, misconceives the respective roles of competition law and data protection regulation, which are complementary, but remain distinct, even if competition law was to address privacy-related consumer harm caused by mergers or anticompetitive conduct. Leaving aside the fact that data protection is considered a fundamental right, the way how data protection legislation operates does not differ much from other consumer protection regulation. In simple terms, data protection regulation establishes a minimum level of protection that has to be guaranteed in order for economic transactions whereby users disclose information in exchange for free services to lawfully take place.

⁶ Wynne Lam and Bruce Lyons (2018) ‘Data Protection Legislation and Investment Incentives when Consumers are Loss Averse’

⁷ Case C-238/05 *Asnef-Equifax* ECLI:EU:C:2006:734 [63]. Case COMP/M.4731 Google/DoubleClick [368]. Statement of Federal Trade Commission Concerning Google/DoubleClick 2007, Statement of Federal Trade Commission Concerning Google/DoubleClick. FTC File No. 071-0170 2. Case COMP/M.7217 Facebook/Whatsapp [164].

This insight has two important implications for the relationship between competition law and data protection regulation. ***First, although data protection legislation establishes a minimum level of protection, this does not prevent the level of privacy protection from being a competitive parameter.*** Indeed, online providers are free to offer users a level of privacy protection going beyond the minimum level of protection set out by the data protection legislation. ***Second, firms can lower the level of privacy protection, and, thus, raise the non-monetary ‘privacy price’ consumers have to pay for their services without necessarily violating data protection legislation. If such lowering of the level of privacy protection is the consequence of anticompetitive conduct or a merger, there is no (legal) reason why competition law should not intervene, unless one assumes that data protection regulation pre-empts the application of competition law.*** This pre-emption argument is not supported by the case law of the Court of Justice of the EU which has repeatedly held that – at least in the analogue world – EU competition law applies, even if an industry is subject to specific consumer or sector-specific regulation.⁸ This has been more recently recognised by the EU Commission in the *Microsoft/LinkedIn* merger. In this decision, the EU Commission stressed that even though the EU data protection legislation restricts the merged entity’s capacity to access and process data, competition law nonetheless applies to any anticompetitive effect that might arise from the merging firms’ lawful attempts to access or combine their datasets in compliance with data protection rules. The Commission here acknowledged for the first time that privacy protection constitutes an important parameter of competition in digital markets and can be negatively affected by a merger, even though the parties’ conduct does not amount to a breach of data protection legislation.

⁸ Case C-280/08 P *Deutsche Telekom v Commission* ECLI:EU:C:2010:603 [80] - [96]. Case T-398/07 *Spain v Commission* ECLI:EU:T:2012:173 [55]. Case C-32/11 *Allianz Hungária Biztosító and Others* ECLI:EU:C:2013:160 [46] - [47]. Case C-457/10P *AstraZeneca AB and AstraZeneca plc v European Commission* ECLI:EU:C:2012:770 [74] - [75], [93]. Case C-179/16 F. *Hoffmann-La Roche and Others* ECLI:EU:C:2018:25 [92] - [93].