



CMA Online Platforms Review: Arete Research's Response

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Below we have some general comments on the CMA Online Platforms and Digital Advertising Study, and then specific responses to questions posed in Section 8.

Development of a pro-competitive regulatory regime is clearly called for, and needs to have a clear mandate. Any future regulatory body needs to resolve potential turf battles between Ofcom, the ICO, and the CMA. The development of permanent expertise in considering all aspects of digital ad markets is crucial in a space where the policy changes of large players (e.g., Google’s recent move to block third-party cookies in the coming two years, replacing it with a nebulous Privacy Sandbox proposal) can throw the market into disarray. The CMA makes reference to this in para 6.22, where they discuss the highly complicated and technical nature of digital ad markets.

A crucial aspect of this is to compel the “opaque by design” business models of leading players to be more transparent, which is vital to assessing whether anti-competitive “bundling” has taken place. **In this respect, we fear that calling for a generic “code of conduct” will have little impact without mandating “unbundling”, i.e., some level of transparency in exposing contractual terms and links between various players in the digital ad supply chain.** Here we think there should be equal attention paid to the contractual terms and behaviour of leading agencies and DSPs/SSPs (like The Trade Desk and Index Exchange) as well as Facebook and Google. We routinely hear of, but cannot confirm, non-standard contractual terms while allow such firms tremendous leeway in assessing additional, non-transparent fees (e.g., via bid shading, unified ad campaigns, advertiser quality scores, Trade Desk’s Data Alliance, etc.), such as were the subject of High Court cases between the Guardian and Rubicon Project.

We think there are promising comparisons to the financial markets’ regulations (both well-established and well-understood), which should be explored in considering structural separations under such a new regulatory regime. We agree it would be highly desirable to consider regulation in an international context, given the number of other countries that are also collecting evidence and considering ways to redress the competitive balance between the large platforms and many smaller marketers, ad tech firms, and publishers. We would like to see the CMA pull together an international “congress” of regulators to agree global standards involving the US, EU and key Asian countries.

We agree with the conclusions that there are material conflicts of interest inherent in the bundled ad tech “stacks” of leading platforms. **We doubt whether Google can fairly represent publishers as an SSP when it is also one of the largest publishers in the market, as well as the leading conduit of ad spend towards third-party publishers.** There could also be a requirement that the exchange function (in the case of Google, its AdX business) is run in a way which is transparent to all parties, again, following financial markets examples. There is a compelling case for transparent reporting of fees along the entire ad tech chain, with advertisers given a clear view of what they bought (inventory, audience), what they paid (which ad-tech partner received which fees) and what was received by publishers whose inventory was sold. Transaction IDs would be a good start; these currently exist in multiple, non-comparable formats.

We think it is a mistake not to proceed to a market investigation (MIR) given the clear linkage that was made in the CMA investigation, and echoing our previous comments in July 2019, between the financial returns of Facebook and Google taken as evidence of their market power (as described in Appendix D). Crucial to this is unpacking the total fees paid across the supply chain, and whether Google might be suppressing certain combinations of advertiser and publisher, to favour clients which have higher spend, or advertisers with whom they have preferred supply deals. **Until distinct fees are made transparent, assessing the scope of anti-competitive behaviour – and crafting remedies for it – will be difficult.** There are some promising experiments with leading publishers and technology providers that may begin to shed light on these topics. The costs of interventions would surely be paid for by the reduction of the overall ad tech tax, not to mention the extensive problem of ad fraud (e.g., Apple’s ITP introduction, disallowing 3rd-party attribution companies’ to work through 3P cookies caused a rise in fraud), which was not sufficiently addressed in the CMA report, but is a function of “closed ecosystems” and has been well-documented in cases of “malvertising” (using a single page to generate multiple ad impressions) or “fleeceware” apps (designed to collect extensive user data through over-zealous permissioning).

The problem with giving consumers greater control over their data is that as the report shows, precious few of them are willing to exercise that control. Some of this is a function of privacy choices being offered relatively late in the process, having to click through many screens to get to a desired opt-out. The power of behavioural “nudges” here is also an issue. Many consumers do not see their data privacy as an issue to contend with (outside of abstract considerations), or likely often fail to understand what 3rd-party data providers/collectors are. It is similarly hard to unilaterally mandate that Google open up its search results to third-parties, without buy-in from U.S. authorities or confirmation that other firms would be able to technically assess these results and make use of them. (Google spent \$26bn in R&D in its FY19, Facebook spent \$14bn. Many smaller firms would not be able to make use of the “firehose” of data that Google search generates.) We also fear that providing consumers access to choice screens will not overcome the brand power of Google in search or Facebook properties in social, and would either lead to a sub-optimal outcome (being constantly presented with choices) or fail to reduce the power of defaults, which Google and Facebook use to great effect. It seems there would be a better chance of forcing Google to separate out its activity placing ads on third-party sites (its Network business, or DoubleClick) than it would be to “open up” search results to rivals, which could create some dis-incentives of those firms to innovate in search, which itself needs to evolve to cover new modes (audio, visual search). **We applaud the novel idea to force Google to license search results on FRAND terms, but how this would work with the “real time” nature of digital ads, or whether smaller firms would have the technical skills to compete with Google in search-based ads is unclear.**

The critical concern in any code of conduct should be to restrict the opportunities of large platforms to exercise arbitrage (whereby they have an information asymmetry between what platforms see about the overall demand for inventory, and their ability to decide where to satisfy that demand, either with their own inventory or with that of third parties, e.g., Google utilises exchange level data from AdX to run more efficient auctions). In this respect, we think Google may seek to mitigate concerns by spinning out or otherwise structurally separating its Network business. The CMA references this with

the notion of “Open Choices” and giving undue prominence to own products. This is another argument to separate the function of automated ad placement on third-party sites from being controlled by the largest publishers, which control buying of their own inventory (as do many publishers).

The discussion of preventing the use of “performance of contract” as a basis for collecting data under GDPR is worthy of codifying into law, as are more stringent definitions of informed consent and legitimate interest (the current draft of the ePrivacy legislation would allow for consent to cookies and trackers as a condition to gain access to a publisher’s content). We are less concerned with the notion of “opt-in” to personalised ads – which are more perniciously described as “targeted” – as most consumer would prefer something relevant to generic ads, but the trade-offs and extent of use of personal data should be made far more clear. For example, many apps now ask whether your location can be seen only when using the apps, or all the time, or never, which seems like a clearer set of choices. The same rules can be more strictly applied to different parts of the platform’s so-called ecosystems, to restrict the use of one feature, such as Maps, informing other features where the user may wish to keep their location private. In this respect there should be no doubt that platforms require opt-in to personalised ads and cannot compel users to trade data for use of services (though they may find those services work less well).

In short, our reply to the questions in Section 8:

We generally agree with the descriptions of search and social media services, digital advertising, and the operation of the display ads market, but see further work on fees and revenues in display ads as critical. **More light needs to be shed on the distinct contractual terms that allow multiple exceptions and lead to far higher “take rates” than headline deals suggest.** We see a significant gap in the research relating to transparency of fees across the digital ads market, and here the CMA could use its statutory powers to expose the multiple contract clauses that lead to far higher fees than headline rates imply. There are some recent promising efforts to see how certain combinations of ad tech players lead to higher fees or economic suppression by favouring some advertisers or publishers over others. Without better disclosure from Google as well as other parties like DSPs (e.g., The Trade Desk), SSPs (e.g., Index Exchange, Rubicon Project, PubMatic), or specific technically proficient publishers (e.g., The Guardian), the picture remains incomplete. This is a particularly important area to delve further since we believe it is the source of margin for ad tech players large and small. **Equally, the financial analysis of Google and Facebook has expressed in Appendix D needs further scrutiny, as we have no real disclosure about which services are most profitable or how Google allocates costs across its vast pool of digital ads revenues.**

We also think the role of data is well characterised, **but should focus more on the power of defaults, and the sharing of data from distinct services within Big tech groupings.** This is the source of sustained competitive advantage of Big Tech and is backed up by the \$26bn and \$14bn R&D budgets of Google and Facebook, respectively, in 2019. This leads directly into the ability of platforms to influence auction outcomes, since their aggregation of datasets allows them a massive information asymmetry with smaller buyers or publishers.

We do not agree with the CMA’s assessment of the merits of a code of conduct. **We feel there will be too much scope for “gaming the system” – hence, we refer again to the applications of financial markets regulation to digital ads markets, esp. in the areas of price and cost transparency.** It is also clear to us that the CMA acknowledges **the need for international co-operation in any potential interventions to address the sources of market power for Google and Facebook.** Many aspects of the CMA report were unique in being one of the few official reports to make allegations of market power and link it to financial returns. This work should be extended in more granular detail.

We fear that whatever the range of remedies to improve consumers’ control over their data, **getting consumers to activate (and understand) their rights will be difficult and efforts to include “privacy by design” have been subverted regularly by woefully inadequate application and subsequent enforcement of GDPR requirements.** Without more automatic and

sustained enforcement, we expect many publishers and advertisers will flaunt the regulations.

We wholeheartedly support the move to a market investigation reference (MIR). We think there are substantial unanswered questions around the commercial and contractual terms behind the digital ads market that could be exposed in a more sustained investigation. We also think this might help to inform ministers' policy choices in a more unambiguous way, given the political clout of Big Tech platforms.

We attach a recent report from Arete Research (*Big Tech Regulation: Nothing Doing*, Jan. '20) as additional evidence. We have also written recently on Google's move to block third-party cookies and speculated on the direction of its Privacy Sandbox initiative. We would be pleased to provide that to the CMA upon request, but we do not attach it since it contains specific investment recommendations that we cannot share without qualifying the recipients.



Regulating Big Tech: **Nothing Doing**

22 January 2020

KEY INSIGHTS

- Regulatory efforts remain fragmented and enforcement is nearly non-existent. **There is ample evidence that GDPR compliance is woefully inadequate.**
- The UK has made progress, **denying Facebook’s main legal argument for collecting consumer data**, though further action requires political will.
- **Competition law will be applied to Google’s opaque, bundled ad buying ecosystem**, but proving harm or market power is a lengthy process.
- Google’s policy on 3P cookies, moving towards a browser ID, is forcing disruptive changes across ad tech. **A wave of consolidation has begun, with more to come.**
- **We think Google could spin out its Network business**, removing its lowest-margin and lowest-growth unit, deflecting wider structural changes to its bundled ecosystem.

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As much as regulation of Big Tech appears inevitable, we think its prospects remain distant. It faces regulatory competence issues, lengthy litigation around competition law, and is open to Big Tech subverting what is ultimately a political process. We look below at 1) the state of regulatory efforts; 2) Google’s move to block 3P cookies; 3) the competition policy and privacy strands of regulation; and 4) comparisons to financial markets regulation.

Regulation Remains Distant

Regulators and legal staffs are struggling to unpack the complexities of ad tech and are torn between pursuing issues around user data privacy and competition law, where proving harm or market power will likely be a lengthy process. Regulation involves a series of fragmented efforts, with links only now being forged between the US (at Federal and state levels) and Europe (both EU and Member States). **The UK is leading efforts and denied Facebook’s main justification for data collection under GDPR (“performance of contract”).** We think financial markets regulations apply to digital ad markets and outline the prospects and likely limitations for this.

Garden Walls Get Higher

Google’s moves to limit/block 3P cookies in two years heralds an era of the “browser ID” (a path forged by Apple and Brave). This led to a scramble for survival among ad tech firms, as a key source of arbitrage or “upsell” (around data) gets closed off; 3P cookies may be shut off, but other 3P data will still be sold. **We see RAMP and TTD as vulnerable, while CRTO’s valuation already discounts a dire scenario, and publishers and brands re-focus on their valuable first-party data.**

Transparency: Enemy of the State

We see few ways for regulators to “crack open” the “black box” of Google and Facebook’s datasets and ad targeting. We do, however, see fresh moves by SSPs to manipulate bids for their own margin, as we believe DSPs are also doing. (Google retains this ability through Unified Ad Campaigns.) **We think Google is likely to spin out or hive off its Network business – its lowest-margin, lowest-growth business, and the one with the “surface area” exposure to noisily complaining publishers – as a way to mis-direct regulators from its bundled ecosystem with scope for pricing and data arbitrage.**

Everywhere and Nowhere

The first striking element of regulatory efforts is how fragmented they are: from the US FTC and DoJ, to State AGs, to the EU (under several DGs) and individual Member States, to other countries, everyone is seeking ways to rein in Big Tech. Yet the efforts to co-ordinate an approach are only slowly taking shape. We see a tension between efforts to improve privacy laws (with limited effect and even more limited enforcement) and address Big tech via competition law (requiring a lengthy process of “proving harm”). **Privacy and Competition law are joined at the hip, but which takes precedence is unclear.**

A major conference of competition lawyers in Brussels in Dec. agreed it was “too early to be talking about remedies”. Further meetings are planned throughout 2020 (including one in London in early Mar., where Arete will speak). There is an issue of basic competence: Nebraska’s AG office has just four lawyers with anti-trust/competition law backgrounds out of 67 staff. The DoJ is busily interviewing a range of ad tech managements, but regulators are struggling with the lack of visibility into these companies or an opaque “black box” ad tech stack. The UK ICO admitted it was difficult to find experts not working for Big Tech. Facebook is reported to engage some 400+ law firms around the world on matters as diverse as employment, contracts and policy, leaving many firms conflicted in litigation. **Even dedicated opponents of Big Tech concede changes will take time, with a near-term task to orchestrate co-operation between the UK, US, Germany, Australia and others, while in the US, states are divided as to which angles to pursue (Android, the ad tech stack, privacy or a wider breakup).** It will be hard for regulators to mandate opening of exclusive inventory like YouTube to other ad exchanges, akin to forcing one grocer to allow another to sell its private label goods. Google could ask for reciprocal access to other “walled gardens”, e.g., TV ad inventory sold by leading networks.

The CMA’s report into *Online Platforms and Digital Advertising* was notable as **the first official government report to lay out barriers to entry from Google and Facebook’s access to vast datasets and cite their high levels of profitability as evidence of exploiting market power.** The US government has not produced any comparable study. It makes clear the state of dominance Google and Facebook hold over UK ad markets, and raised the risk that “high market share can translate into market power, giving platform(s) the opportunity to increase prices, reduce quality or ... undermine competition.” The UK CMA concluded that rival social media platforms were not a material threat to Facebook.

Policy Changes: Google Enters the Browser ID Era

Google has been tightening ad tech policy for years: it switched to first price auctions, launched Exchange Bidding, limited use of DoubleClick IDs, and merged formats (mobile/keyword/display/video) for ad buying. Google removed contextual/category data from bid requests sent to partners (DV360 still gets all data), proposing to pass either IDs or contextual data, but not both. By now signalling the end of 3P cookies (over the next two years), we see Google moving towards a browser ID, following Apple and Brave. **This does not mean the “cookie is dead”, but the days of indiscriminately dropping dozens of cookies on each webpage are over; many holders of first-party data (retailers/brands or publishers) still want to supplement it with third-party data (not only from cookies),** e.g., demographics, public data, or location. Third-party data segments were historically opaque in composition, and how data was collected, when, from whom, using what mechanism, and so on. Apple’s move with Safari aimed to end cross-site tracking and fingerprinting, as do Chrome’s Lead Engineers. With same-site labelling, Google will know which cookies are used for cross-site tracking or for logins/personalisation. Its (nebulous) Privacy Sandbox proposals *could* be an alternative to the current ecosystem for targeting, frequency capping, conversion tracking, and fraud detection, giving Google another factor for its “quality score”, through which it matches advertisers with inventory. **Google is thus assembling a new ecosystem of Identity.** Google’s “Open Bidding” feature allows partners to match their 1P cookies with Google’s ID, or sync with other vendors, enabled by a loophole in Google’s Cookie Match Assist program, whereby Google doesn’t audit how partners build redirect URLs. Cybersecurity experts claim that Google is creating iframe pages – called “Push Pages” – that fire within a web browser invisibly to the user, allowing partners to sync cookies with consent data. Whatever “behind the curtain” tech might be deployed (e.g., fingerprinting), **Google is clearly tightening its grip over identity and data leakage from its browser traffic, and surely must**

consider doing the same with the inadequately regulated Play Store ecosystem (which has hosted thousands of widely distributed “fleeceware” apps, something repeatedly documented in the tech press).

Competition Law: Sledgehammer?

Regulators are looking at the many ways Google bundles services, almost too numerous to untangle. They include:

- 1) **Google's vast 1P Sites dataset** (search, Chrome, Android, Gmail, YouTube, Play Store), which is provided to DV360 users, incentivising advertisers to spend with it for its better targeting and higher ROI, accruing more budgets.
- 2) **Preferential Treatment for its own Ad-tech.** Google AdX has exclusive demand from AdSense, and Google's Display Network was only accessible through AdWords (now Google Ads). The exclusive ad tech supply source for YouTube, for example, is DV360 or Google Ads. **Google does not disclose "revenue share" service fees for audience targeting.**
- 3) **Auction Dynamics.** Google's new Unified Auction runs on its own servers, where Google gets data on rivals' bids to inform its own bidding. It also assumes publishers enable Exchange Bidding. Dynamic Allocation allows it to maintain "last look." **AdX still sees current winning bids (under Unified Pricing Rules), allowing Google to outbid competitors.**
- 4) **Bundling Orders.** A rising portion of spend is run by Google's AI/Machine Learning (UAC, Smart Campaigns), creating the possibility to favour its own higher-margin Sites. Google also has formats that mix both CPCs (Ads) and CPMs (AdX), and benefits from the conversion between them. **Unwinding this complex set of interconnected offerings would probably take years of expert witness testimony and sustained concentration by judges or lawmakers.**

There are also many "rules" Google imposes that reduce transparency, a key concern for publishers and advertisers, and one which may invoke competition law concerns. Advertisers lack visibility into AdSense fees, placements, auction mechanics, supply chain, or data quality. Publishers have to match Data Transfer files (which include data on rivals' bids) with buyer bidding data from AdX and impression-level bidding data from DV360. Google anoints measurement partners but limits their role to working with data Google provides; there is no independent verification of Google's own ad inventory. With Google tags on 90%+ of all Web pages (since these pages want to be discovered via search) and by open-sourcing products such as Google Analytics and Tag Manager, it reduces the space for competitors and boosts its own dominance, giving it an unparalleled view of the "open" web. After ceasing sharing of log-level IDs, advertisers or media agencies could only access data within Google's Ads Data Hub, which sits in Google Cloud. This gives a latency edge to those who are doing media buying via GCP, sitting closer to AdX. Finally, by obliging publishers to re-format content for AMP (for faster serving and discovery), Google replaces publisher URLs and blocks rival header bidding solutions.

Recently, a new category of complaints surfaced in academic papers and industry studies around how Google is using its market power across its DSP, ad server, and SSP in a mutually reinforcing way. We see legitimate concerns about conflicts of interests at multiple levels of the ad tech stack. Few ask, "where are my ads showing up?" There is very little channel-, or even network-level transparency. Some sophisticated publishers are starting to address this: One leading publisher blocked a particular advertiser using a combination of DSP-exchange-SSP and saw eCPM pricing rise dramatically from other bidders that were not offered the inventory, or became far more active when sufficient inventory was made available. It revealed incentives for a DSP to favour a particular buyer, and how the highest bid isn't always winning. **This suggests ad auctions are far from "fair".** Exchanges have opaque "advertiser quality scores," based on multiple factors (frequency of purchases, budget, sustainability of spend, willingness to give latitude over what inventory to buy, etc.) that determine what advertiser is put forward for a publisher, not always the one who bids highest or wants to buy the most. This leaves buyers who value inventory higher prohibited by the exchange from accessing it. In one instance, turning off Google AdX led to higher CPMs, revealing "economic suppression." **This suggests advertisers and publishers have to start cutting out middle-men and "go direct" to take more of the spend.** Some are trying to evolve their own aggregate pools of inventory, such as the Washington Post with its Zeus software, which it now must convince other publishers to adopt. Only Google has been able to get around the constant push to get more exposure and data for less money, doing so by being a publisher

and also an ad tech player at scale.

Ad Tech: Faking It to Make It?

Practical matters loom large in trying to rationalise the ad-tech space, notably how many players are changing their own policies or adding features that give them fresh scope for arbitrage. Some SSPs have resisted signing standard contracts that bind them to more transparency. Other SSPs are trying to consolidate bids into a wrapper in which they get to see everyone’s bid or otherwise bundle spending. The aim for SSPs is to drive down yield so they have more choice of which inventory gets sold at their own highest margin (the analog for the Google example above). There is now supply-side bid shading (!), which blurs lines of who SSPs are representing. Rubicon calls this Estimated Market Rate (or EMR), a feature “designed to help buyers avoid overpaying for impressions in a first-price header bidding world.” There is also a challenge with “taxonomy”, i.e., ad tech partners have vastly different systems for tagging inventory and reporting. Alongside SSPs, DSP are also lacking in transparency: we have written at length about the system of “tick-boxes” in The Trade Desk’s buying screens, where “additional data fees may apply.” Other advertisers report that TTD requires minimum quarterly guarantees from advertisers and agencies. Agencies are themselves conflicted by the requirement to sell volumes and take spend, rather than get the best outcomes. The common thread behind all these efforts by SSPs and DSPs is to create confusing, opaque systems with multiple “bells and whistles” that only the most sophisticated advertisers can reverse engineer. **Ultimately, there is a problem of incentives in digital ads, from the procurement-driven approach of advertisers to the desire of agencies and ad tech players to encourage the highest spending.**

Privacy Policy: Enforcement Lacking

The first thrust of regulation has been aimed at data privacy; this stretches back to GDPR and got extensive impetus after the Cambridge Analytica scandals, and multiple data hacks that raised public awareness around how much personal data was held by Big Tech firms, and how it could be put to use. The CMA wrote extensively about the power of “defaults” and the low engagement of consumers with privacy settings, with 85% of visits to privacy pages lasting <10 seconds. Few make changes (see Table 1). **Given Google’s UK privacy policy is over 6,000 words, this very short time indicates consumers are not engaging with privacy policy, which is hard to decipher (see Table 2).** Yet this blasé attitude on the part of consumers does not abrogate the responsibility of Big Tech firms to limit intrusive data collection. **We also believe multiple 3P data brokers are taking a “speeding” approach to the law, breaking it in the hopes that they are not the first ones targeted in the unlikely case of enforcement actions.**

Table 1: Settings Changed by Google's UK Consumers During Account Creation Process

Privacy Setting	Percentage of consumers who make this change during account creation
Enable location history	[0-5]%
Enable voice and audio activity	[0-5]%
Disable ads personalisation	[5-10]%

Source: Submitted to the CMA by Google in response to a request for information.

Table 2: Overview of Social Media Platforms' Terms of Service and Privacy/Data Policies

	Social Media				Search		
	Facebook	Snapchat	Twitter	Instagram	Google	Bing	Duck DuckGo
Terms/policies visible on front/main page?	Yes	Yes	Yes	Yes	Yes	Yes	No/Unclear
Approx. length in words	9,300 in 3 parts	13,300 in 2 parts	11,900 in 3 parts	9,100 in 3 parts	6,500	27,000 in 2 parts	2,100
Clickwrap	Yes	Yes	Yes	Yes	No	Yes	N/A

Source: CMA analysis.

One problem is a lack of enforcement by regulators, which have levied just €110m of fines since GDPR was introduced,

€50m in one case against Google in France. **The farcical state of compliance was laid out in a recent MIT/Imperial study (<https://arxiv.org/pdf/2001.02479.pdf>) finding Consent Management Platforms (CMPs) used by the top 10K sites in the UK were routinely flaunting the rules, with just 12% offering *minimum* GDPR protections.** Most CMPs had “pre-ticked boxes” and no ability to reject all cookies, both in clear contravention of GDPR rules. CMPs are dropping cookies on pages *before* consent is given, which is clearly illegal. As attention shifts from EU Member State privacy authorities to Competition arms, we explain this lack of enforcement by seeing the Irish Data Protection Authority – the group with jurisdiction over most Big Tech – having just a €12m budget. Amazon (registered in Luxembourg) is under the jurisdiction of Luxembourg’s CNDP, which appears to have c. 30 staff. **The EU is asking app developers to detail the amount of data leakage to Google shared through the Play Store, a clue about the next likely approach to data privacy.**

Of the three viable justifications for collecting data under GDPR – legitimate interest, informed consent, or performance of “contract” – Facebook relied on the latter, saying it needed to collect data to meet its contractual obligations to advertisers. **The CMA report made clear that “processing of personal data for personalised advertising based on the consumer’s observed preferences, is not necessary to provide the core contracted service, and so contract is not an appropriate legal basis for that additional processing.”** The ICO detailed guidance on “contract” explains: “the profiling of an individual’s interests and preferences based on items purchased is not necessary for the performance of the contract. Even if targeted advertising is [...] a necessary part of (the) business model, it is not *necessary* to perform the contract itself.” **This is a major challenge to Facebook’s legal justification for data collection.** The counterargument is that this data collection, which itself relies on loose definitions within privacy law, does allow superior data targeting, which in turn explains the market dominance of Facebook or Google’s ad businesses. **This is an argument for tighter definitions of, and enforcement of privacy law, which has as yet proven impractical (nor have threats of large fines changed behaviours).**

CCPA suffers from similar, serious flaws. First, it requires consumers to “opt-out” rather than frequently “opting in”. Second, it leaves enforcement solely with the California AGs office, rather than open to lawsuits by private individuals. The Calif. State AG’s office has a privacy team of 23 staff, and fines for violators would be just \$7,500, though there is a second ballot initiative (rather than legislation). CCPA is now entering a “2.0” phase with a ballot initiative replacing the contentious decision to write CCPA as legislation, which was subsequently watered down by lobbying and further amendments. **For now, CCPA is probably no threat to existing practices, but a 2H20 initiative could bring material change in a litigious state.**

Regulating Like Financial Markets: Puts and Takes

Google itself said in 2009: “the ad exchange is like a stock exchange.” **Our work in the regulatory debate has fleshed out analogies between the digital ad markets and financial markets, with the latter far more transparent.** This began with our first work on ad tech (see *Ad Tech: Brash Boys*, July ’14). Whatever estimates are made of the “ad tech tax” (ranging from 40-70%), it is orders of magnitude more than sub-1% total trading costs in more transparent financial markets, with far less scope for arbitrage, “hidden fees” or fraud. Ad buying platforms (DSPs) have 15-20% take rates (depending on “data fees”), with another ~20% taken by SSPs/ad networks. Differences and similarities are listed in the table below.

Table 3: Are Digital Ad Markets Like the Financial Markets?

Similarities	Differences
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- The **role of exchanges in facilitating** liquidity, as is the **“market making”** function of Google as SSP (via DFP) and DSP (via DBM).
 - Same **HFT (high-frequency trading) technology** applied to probing bid density, seeking alternative supply paths.
 - **Huge volumes of speculative bidding activity**, resulting in limited genuine trading.
 - NASDAQ + NYSE trade 8bn shares/day, vs 100B+ traded on RTB exchanges.
 - **Value of individual trades 100X+ on financial markets** (one GOOG share = \$1,430 vs. CPMs of \$0.10 or less).
 - **Shares have *persistent* and *distinct* value** (each share has a specific CUIISP #) whereas ad impressions have only ***temporal* and *non-comparable* value**.
 - **Leading brokers cannot also own the exchange.**
 - **No way to ensure “best execution”** or calculate VWAP.
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Source: Arete Research.

Financial markets prohibit one company from representing both buyer and seller, and act as the exclusive market maker in its own securities, while also controlling the settlement and reporting functions. The UK CMA linked this to the long-term supra-normal returns Google and Facebook make above their WACC. Google doesn't provide publishers or advertisers with data about their "clearing price" of inventory, or who it was sold to/bought by, or why. Google tells advertisers they "found" an audience, and handles payments to publisher, without providing "receipts". This is becoming increasingly complex when Google's AI (Universal Ad Campaigns / Smart Campaigns) decides where ads are placed across its own Sites, as well as Google's 3P network, making it harder for advertisers to measure ROI. Google can route spend to higher-margin own Sites. Smart Campaigns is the default option for SMEs, which make up 50-60% of advertisers. Facebook has a similar approach with Campaign Budget Optimisation.

Google: Self Dismemberment? If we think that financial markets regulation could be applied to separate the functions through which Google can realise arbitrage or bundling, what might be the company's pre-emptive response? **We think Google will move towards a structural separation of its Network business – its lowest-margin, lowest-growth business, and the one with the "surface area" exposure to noisily complaining publishers.** This could throw the publishing world into disarray, needing to find a new agent (and likely paying more for data). Google would still be able to collect data because publishers would still want it to "index the web" and help with discovery by dint of its dominant position in search. It could also run Federated Learning on its vast 1P dataset, mitigating the loss of "off-network" activity (which was not needed for Facebook's consistent growth). **This could also be a classic mis-direction play by Google, to forestall regulatory efforts aimed at forcing transparency or unbundling of its complex ecosystem.**

Nothing Doing, Not Yet

Regulating Big Tech is too "hot" a topic to remain unaddressed over the course of 2020, in our view, but its complexities and the woeful track record of enforcing existing regulations suggests there will be limited progress. We expect **Google** to make "blood sacrifices" (e.g., spinning out Network) that mis-direct regulators away from its most profitable business (which exercises the most market power), notably its core ad buying, data gathering and publishing ecosystem. Whether **Facebook** feels compelled to offer similar concessions remains to be seen, given its stock is near record highs despite the opprobrium it has attracted. **Apple** is clearly positioning itself as a privacy advocate, even if its own ecosystem policies are just as heavy handed and anti-competitive. **Amazon** (not covered) also has challenges with regulation and anti-competitive behaviour, but its digital ads business remains small vs. the larger Internet players. The text box below gives our five "real world" reasons why nothing happens, even if some of those arguments cannot be voiced in public (any more than European officials must concede they have little enforcement power to compel large US companies to change their behaviour or structure). **While there is extensive interest among competition and data privacy regulators in multiple markets, it will take years for these efforts to be co-ordinated and move up a busy agenda, in our view, and only the US authorities truly have the ability to force any sort of structural changes on the companies, which would entail years of litigation.**

Silent Supporters: Reasons Why Nothing Happens

- If the **NSA and CIA were clever, they would have invented Google and Facebook** – if Snowden wasn't a fantasist, Big Tech gives the U.S. a back-door surveillance platform for 3bn+ people every day.
- **Google and Facebook spend \$50bn and \$35bn, respectively, on R&D and Capex** – that's a huge investment going into data centres, creating IP, and **employing high-paid staff.**
- Google and Facebook pay **tax on business outside U.S. back to the U.S.** – a French ad placed on YouTube in France for French consumers (in French!) yields taxes on profits back to the U.S. (and not to France).
- Even if this argument is dismissed, the US needs Big Tech to **counter the Chinese in the R&D race to dominate AI and**

other – and both clearly work with the U.S. govt in many ways to distribute information.

- Most countries extensively support their **best export industries**, and those **industries have powerful lobbies** into gov't to shape “regulation” (see tobacco, energy, pharma, defence).

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Overall Industry Risks: The digital advertising and e-commerce sectors are increasingly characterised by a “winner take all” mentality among large, well-funded groups their disclosure tends to be minimal, and not entirely comparable across companies. Any number of these vendors are seeking to take share in “adjacent markets” while the wider digital advertising and content distribution industry is highly fragmented, lacking transparency, and spans a wide range of partners advertising agencies, Internet services, enterprise software and tech hardware vendors. The ability of any one player to establish a large market share of digital ad spend is limited by disparate audiences, fickle consumer tastes and the complexities of offering both global and locally relevant services. Every large scale player mentioned in this report has multiple internal early stage venture efforts to win initial market share in emerging fields such as VR, or finding practical applications for artificial intelligence, machine learning capabilities and cloud computing infrastructure. In contrast to other Internet segments (Google for search, Facebook with Messenger/WhatsApp, Criteo for retargeting, etc., online fashion retail is not a “winner take all” market, and with market shares of the leading firms Zalando, YOOX Net a Porter, Shop Direct, etc still being low, new entrants could quickly grab share and force existing players to make steep investments in value propositions (returns, service) or discounting.

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