



CMA Online Platforms Review: Arete Research's View

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Ample Evidence of Dominance from Financials...

In reading the premise of the CMA inquiry, we find ample evidence of their market dominance from their financials. As of recent 2Q19 results, Google had \$117bn of net cash and generated \$51bn of operating cash flow in the last 12 months, while Facebook had \$49bn of net cash and operating cash flow of \$33bn in the last 12 months, before it pays its \$5.1bn in fine to the FTC and SEC. A further facet of market power stems from the sheer scale of Google and Facebook operations. The two companies had global R&D budgets of \$25bn in '18. Even if only a fraction of that spend is directed towards digital ad technology, this gives them the ability to out-spend rivals or copy their features or innovations rapidly. Behind this is a legal machine which can intimidate smaller rivals and impose unequal business terms upon them. **Until the access to these near-unlimited financial resources is curtailed – and we believe they have already accepted *de facto* restraints on any large scale M&A for fear of regulatory scrutiny - it will be equally difficult to constrain the ability of these companies to dominate the market for digital ads.**

... Led By Dominating "Time Spent"

Digital advertising and content markets have seen a relentless consolidation of towards an ever-smaller number of ever larger firms. The leading digital platforms Google and Facebook provide the properties and utilities (search, YouTube, Maps, Gmail, Facebook, Instagram, WhatsApp, etc.) are garnering the majority of online time spent (something which can be seen in ample studies from Ofcom and others), along with their unique ability to "know" the identity of who is spending that time (i.e. targeting), and block any third parties from accessing that data. This gives them a dominant market position in the supply of digital ad inventory. Recent efforts by publisher consortia such as the Ozone Project to aggregate audiences and share data on them with advertisers, outside of the platform ecosystems. There is no doubt this has allowed Google and Facebook to grab the vast majority of *growth* in Internet ad spend; no other platforms are comparable to the reach and scale that Facebook and Google enjoy, with Amazon and Apple as its only "rising" competitors. The ability of ad agencies to direct this spend is diminishing, as the Internet giants "go direct" to address advertisers large marketing budgets and use self-serve platforms to aggregate ad spend from SMEs. There is no UK-specific equivalent business, and Google no longer breaks out its UK-only revenues. We regard the documents filed by both companies at Companies House for local UK operations as unreliable due to the range of transfer price arrangements which distort underlying business.

Directing the Flow of Traffic

Google is also **the main conduit through which the “long tail” of publishers get paid** (i.e. those smaller sites which cannot afford their own digital ad salesforce or can adequately track their “audience” and present it to advertisers). We refer to the \$27bn Google spent in 2018 traffic acquisition costs - \$14.2bn paid to Google “Network members” or third party sites, and another \$12.6bn paid to Distribution partners, including Apple - paid annually as “code of silence” money for publishers, who need their “representation.” Google aggregates advertiser spend and has the option to direct that spending to its *own* properties or to *third parties*. One solution would be to oblige Google to separate the third-party ad network it runs – by far the world’s largest – from selling ads on its own properties. **This may be beyond the scope of the UK to insist upon, but it could be proposed that in the UK, Google cannot “represent” third-party sites while also selling its own ad inventory.** This would open the market to others selling ads on third party sites and restrict Google’s access to data on users beyond its own Sites.

Similarly, Google **regularly directs search queries to its own properties**, either where it promotes its own apps (in its PlayStore) over rival alternatives, whether it favours its own travel or shopping advertisers over “organic” results, or whether, via its partnership with Twitter (whose Chairman is Google’s former Chief Business Officer) which displays its tweets in search results, an option not available to other social networks. The complaints of failing businesses like Yelp are well known, but more able rivals have also suffered from lack of exposure in Google search results, especially when Google owned Zagat, a leading restaurant review site. Google also aggregates results from crawling publisher sites, and may present these as its own, with limited reference to, or path for monetisation for the publishers who have “done the work.” **In many instances, Google sits “on top of” multiple other content creators, directing whether they get paid (or not), something Facebook has not matched by establishing its own third-party network.**

Limiting IDs to its Own Networks

Another issue is that Google (and Facebook) **restricts the passing along of log-level IDs**, so that **advertisers have no way to independently confirm that they reached an audience.** In this way, Google services are “opaque by design” – they stubbornly resist outside 3P measurement. This also prevents cyber-security researchers from testing the level of bot activity or other ad fraud schemes on Google platforms. There have been numerous instances where Android apps were found to be allowing extensive over-permissioning in terms of data collection. This is done by a range of utility apps, such as battery monitors, keyboards, which have been found to run click injection schemes or collect keystroke data to sell apps install ads. This is equally a clearly well-documented problem with Facebook, which has now, staggeringly, been indemnified by the US FTC for any mis-steps in applying its privacy policy prior to its recent settlement. Facebook has on multiple occasions quietly “updated” its policies on data collection, while reserving the right to “grade its own homework” when advertisers demand audits of its data via third-parties, releasing only limited data on the audience segments it presented.

Distribution of APIs via Chrome and Android

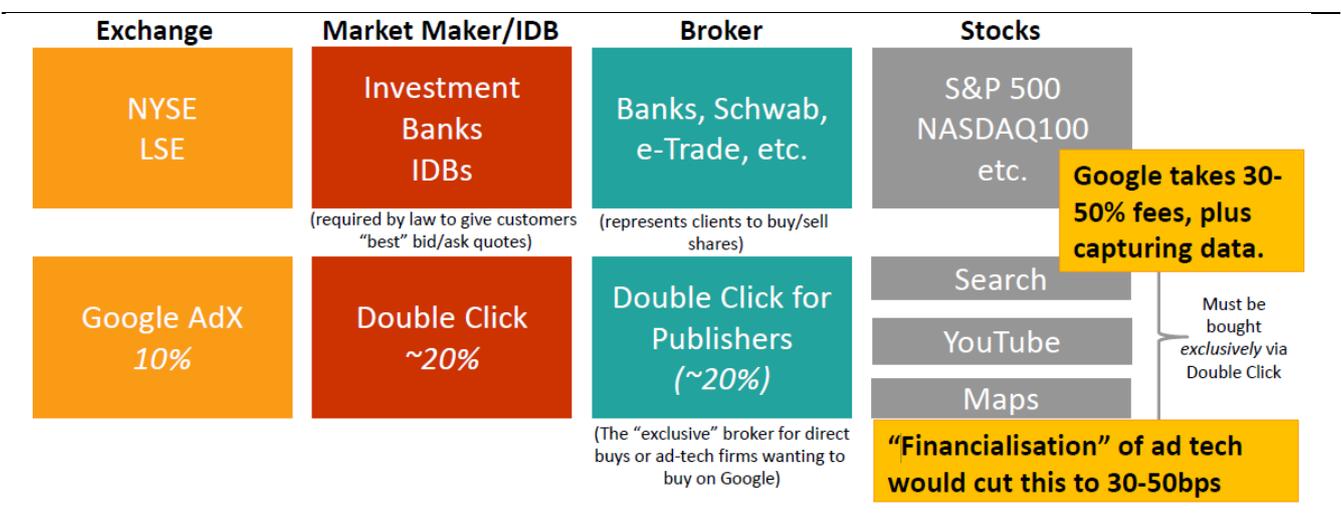
Many of these business arrangements which Google exploits to sustain its \$150bn sales business are built on the **distribution of its Chrome Browser and Android smartphone OS** and many of its specific features, embedding Google properties as default APIs (applications programming interfaces); for example, most Android compatible applications will call up Maps, YouTube or Google Search as a default option within the functions of the apps themselves. Any business with an application will be obliged to show its location using Google Maps, or embed video content which resolves to YouTube. Google dictates terms to developers and encourages them to use their systems at set-piece events like its Google I/O developers conference. These “front-ends” for consumer experiences allow Google to “nudge” consumers towards its own services and create barriers to building other services alongside Google’s. Facebook has a similar library of APIs, holds its own developer conference (F8) and tightly controls its own Partner Network of authorised advertising resellers.

Digital Ads – A Rigged Market

Google owns every component of the “ad tech” stack. **This creates a scenario that would be unimaginable in comparison with how financial markets operate, and leaves advertisers and publishers alike at a significant information asymmetry and commercial disadvantage relative to Google.** Fig. 1 shows that Google’s take rate is between 30-50% (although we estimate it is closer to 30% in most cases) in comparison to similar processes in financial markets where typical rates are 5-200bps. Beyond Google owning every part of the value chain, it also has dominant market shares: AdX, its exchange, has ~\$7bn of spend flowing through it and 50%+ market share, whilst Double Click Bid Manager has 30%+ and Google’s Ad Server has an 70%+ share. These figures are hard to measure with precision due to Google’s wholly insufficient disclosure (other leading Internet players are no better: Facebook does not disclose its Audience Network sales, nor does Amazon or Apple directly disclose their ad businesses).

The financial analogy would see a scenario where JP Morgan or Barclays *owned* the stock exchange (i.e. the NYSE or LSE), acted as the “market maker” – i.e. aggregating bid and offer quotes for stocks, while also acting as the *exclusive* broker for its *own* shares (i.e. advertising inventory on YouTube, Search, Maps, etc.). In this case, Google also acts as the “broker” for other shares (publisher inventory of display ads or video units on their pages, bought and placed via Google’s Network). Under this system, Google can see “both sides” of the trade – they know how deep “bid density” is for certain types of audiences or inventory, and how deep the pool of that inventory might be to satisfy market demand. This allows them to set price accordingly, to maximise profits. It also allows them to “toggle” or “steer” demand from advertisers towards the type of content which carries higher margins (i.e. YouTube creators that have a lower of revenue share than others). Since YouTube inventory can only be purchased through Google’s DoubleClick platforms, Google can effectively determine the clearing price of certain types of inventory. In this way, Google “runs” a rigged ad market. If such a market were established in the financial world, it would present clear conflicts of interest and ample opportunity for market manipulation (for example, acting as sole market maker in one’s own equity, while retaining the information advantage of knowledge about the underlying state of that equity). In the financial markets, there are floor limits on the cost of transactions, and many “indicative” bids from parties looking to determine the depth and liquidity of markets for any particular instrument. This cannot happen as easily from the outside of Google’s ecosystem (though we do see this behaviour in other parts of Ad tech, across Demand Side Platforms and Ad Networks). Generally, the costs for transacting in a stock that sells for £1 or £1,000 are broadly similar. Many brokers offer “per share” fees, not linked to the value of the share. In the case of Google or Facebook’s ad tech buying systems (embedded into the CPM) or the “take rate” of e-commerce vendors like Amazon, the costs for transacting in more highly valued shares are higher, even though the underlying transaction involves the same stages (of execution/fulfilment, reporting, and reconciliation).

Fig. 1: Comparing Google to the Financial Markets



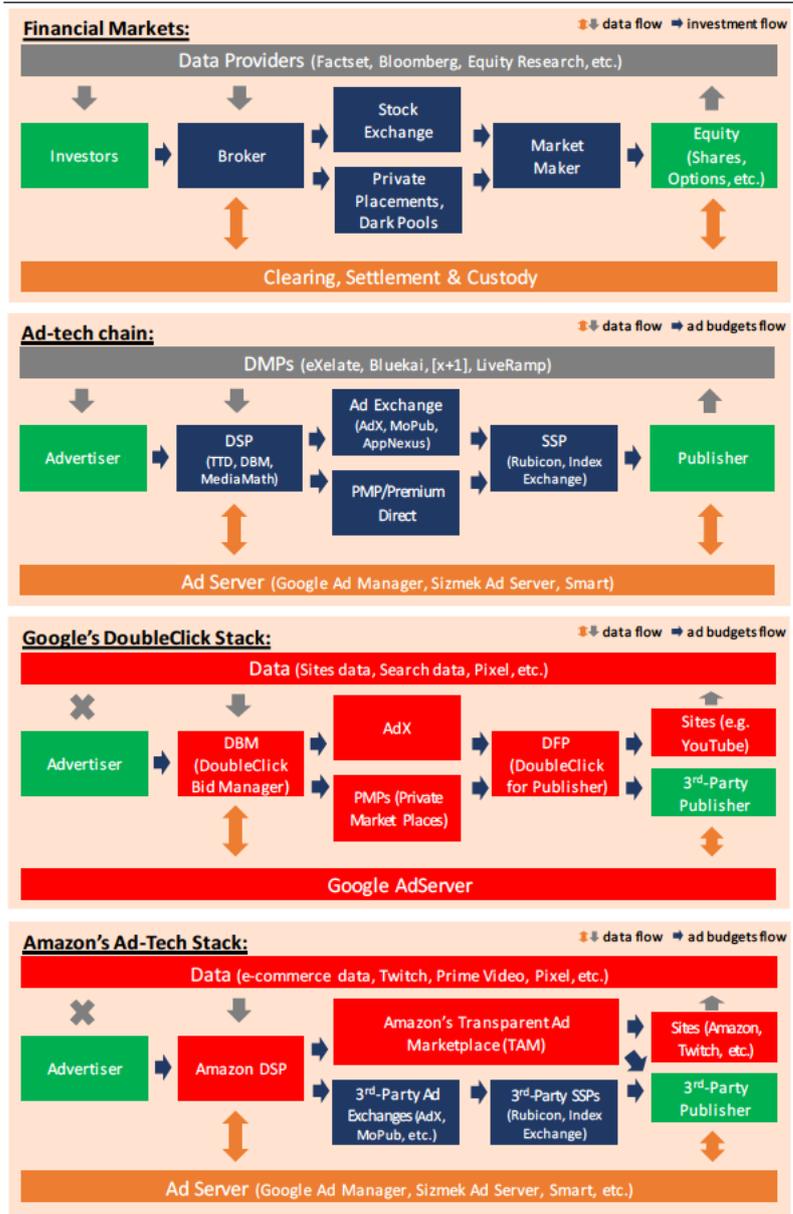
Source: Arete Research

Seeing this highly favourable set-up at Google, it is no surprise Amazon has sought to replicate it using data from its commerce business. We compare the Ad tech chain with Google and Amazon’s equivalent “full stack” offerings for aggregating user data and selling ads in Fig. 2. Their advantage is compounded by both companies providing attribution services, i.e., confirming that ads were seen by target audiences or converted into increased sales, only with carefully chosen partners which rely on the companies for data with which to confirm the effectiveness of marketing spend.

The same trading room analogy applies to e-commerce firms. Why does Amazon take the same 12% of a sale of two identical items, if one finds a buyer willing to pay 10x more for the same item to be delivered to them. (There is another issue of differential pricing on Amazon’s ecosystem based on attributions like location, device used to access the site or apps, past purchasing behaviour, etc which is well-documented, but discriminatory). Why does eBay take the same blended marketplace fee of 8% on items selling for £2, or over £2,000, even within the same category (in this instance, “Pens and Writing Instruments”). Is the value provided by aggregating demand in the form of giving sellers a platform for listings, and providing a place for buyers to go worth 16p, or £160? And in these cases, we also observe similar information

asymmetries – sellers have little way to gauge the depth of demand for products and are beholden to the “pricing guidance” which platforms provide. In the case of Amazon, it dictates strict terms to suppliers, esp. under its FBA (Fulfilled By Amazon) programmes, where sellers are charged to put items in Amazon’s warehouse, but penalised if those items do not sell. As with Google and publishers, since Amazon is a critical conduit of sales for merchants of all types, they dare not “bite the hand that (partially) feeds them” with a company who considers “your margin as my opportunity.” Platforms that aggregate that level of demand have tremendous leverage over a long tail of fragmented sellers, publishers and merchants, while there is little recourse under current competition law (and there have been few material changes in behaviour since the EU began its various investigations and subsequent rulings). This is especially relevant to digital advertising markets as the marketplace providers oblige their sellers to buy “Promoted” or Sponsored listings, a form of ads which it can coerce sellers into taking up as an addition to the take rate.

Fig. 2: Google’s DoubleClick Stack is Amazon’s Role Model



Source: Arete Research.

GDPR – Power Play by Platforms

In the run-up to the implementation of GDPR legislation in 2018, Google introduced its own consent framework at the 11th hour and insisted that agencies or advertisers that wanted to match their own 3P data with Google did so within Google's Ads Data Hub, which gave Google visibility of the data. Google also hosted its Ads Data Hub internally on its own Google Cloud Platform (GCP), giving a latency advantage to anyone performing media buying with the data. Under the pretext of GDPR, they removed the practice of passing on log level IDs, further limiting advertiser's visibility into what audience they were buying and brought together all of its attribution products (to determine whether the audience was reached as promised) into a single Unified Attribution offering. Marketers now receive an aggregate view rather than on an individual basis, making it more difficult to track who has been served ads and forcing marketers to commit more spend to a single platform (previously, marketers could see who they had targeted across platforms, whereas now they receive aggregate data and hence the same ad could have been served to the same person across many platforms). These changes require marketers to have "blind faith", that Google can serve ads which drive the best ROI vs. which ones might be the most profitable (for Google). There is no independent auditing of Google data (it works with a number of partners, but they are sharply curtailed by domain, e.g. viewability, mobile attribution, e-commerce, etc.), leaving Google in the enviable position of "grading its own homework." **Regulators have yet to show they understand the practice of programmatic i.e. algorithmic advertising technology, whether it has a dramatic impact on politics or the wider commercial world.**

Click to Donate Data...

Another aspect of online platforms is their **ability to coerce customers to accept what we call "data donation" policies**, without understanding the value of their data, if not at an individual level, then in aggregate, sold as part of consumer "segments" or audiences. Google and Facebook have precise data on how many users opt-out or try to limit data collection, how many take the time to read complex legal jargon that constitutes their privacy policies or EULAs. **At the very least the UK government should oblige digital platforms to expose their opt-out rates, and seek to value the data they collect on end users, but examining the price differential between ads bought "with data" and those bought on an "un-targeted" basis.** Our view is that relatively few consumers will take advantage of data mobility; the blanket permissions asked for by multiple applications (location, patterns of use, access to photos and contacts) are poorly understood by consumers, a loophole which is abused by many companies, not just the largest players.

...But Not to Pay Tax

Clearly there are also a dimension around **international tax avoidance and transfer price agreements** but we do not see this as an issue to be resolved solely by the UK, which bears responsibility in how its many Crown Protectorates are offshore tax havens, which are used to house intellectual property and other valuable assets. The notion that all of the ads sold by Google in the UK are actually sold by its Irish entity and based solely on intellectual property developed in the US but held in other low-tax jurisdictions, is simply indefensible by any common-sense test. At the EU level, a system of unitary taxation would end the system by which all Google ads sold to UK clients are executed by its low-tax Irish arm. The reason why this is important is that it gives digital platform companies greater control over their cash flows and larger profit pools on which to draw for investment, to further cement their market dominance.

Can Regulation Work?

In terms of regulation, there are many scholars and legal experts working on the problem of “re-setting” antitrust law away from the basis of “consumer harm” and instead considering monopoly or monopsony power. This is before considering the social implications of filtering news and broader consumer attention through a decreasing number of outlets, with the ability to practice predatory pricing (just ask the BBC, competing with Netflix for talent, but unable to run a deficit of \$16bn in unrecognised content liabilities or sustain losses of \$3bn of annualised free cash flow). There is also the problem of politicians and regulators lacking an understanding of a complicated ad tech market, which has evolved into a sprawling mess of 1P and 3P data applied to a vast array of content, and rife with issues of measurement and ad fraud. As to specific policies we have a few suggestions:

1. **Keep GDPR.** It would be the height of folly for the UK to abandon the GDPR requirements it has recently imposed and try to create a different regime. This also applied to forthcoming ePrivacy rules. The more globally or regionally harmonised these are, the better for all concerned. **These rules should soon to be clarified in case law defining key terms such as "legitimate interest" or "informed consent."**
2. **Give Everyone a Data Briefcase.** Consumers need to be made more aware of the value of their data, both individually and in aggregate, and allowed to “monetise” it in a market where they have the right to withhold it from the large players. **Making data “portable” is one step, but assigning a clear monetary value would create interest to overcome “switching costs” of shifting that data around or denying access to it.**
3. **Open Access to Platforms?** Aggregated pools of data from services like Search or social networks could be considered “public goods” whereby all firms would get equal access to the data at similar costs. There is no way for advertisers or sellers to effectively audit the activity on platforms. A structural separation of the “stock exchange functions” and the media assets of large Internet players would be a start, but this may be beyond the remit of any one country. At the very least, there should not be exclusive inventory (e.g. YouTube) which one is forced to buy through closed platforms. **This is at the heart of the current case before the US Supreme Court about the 30% take rate on Apple's AppStore.**
4. **Require Improved Disclosure.** Given that the UK is unlikely to be able to force any structural separation of elements of large US Internet players (forcing a breakup of Google and YouTube, for example, runs counter to their ad buying systems that find audiences and places ads on Maps, Search, Gmail and YouTube, as well as on 3P sites), **one could require greater disclosure of commercial terms, following similar rules as would govern capital markets; this should be an urgent priority for the US SEC, but it has dropped the ball numerous times on this issue.** Likewise, the basis of transfer price arrangements and taxation should be broadly disclosed, not shrouded in secret. It is nearly impossible for financial analysts to calculate the likely tax rate of Google operations outside the US.
5. **Open Access to Selling Inventory?** The problem with getting publishers or other small ad tech firms to complain about leading players is that they rely on those same players as the primary conduit for revenue and allow them to act as “sales agent.” **Breaking this link is critical – allowing anyone to access Google or Facebook inventory, the same way as anyone can use the LSE to buy any share, and removing the “opaque by design” nature of sales on this closed platform, outside of where HM Treasury can observe this large pool of economic activity current invisible to it.**

There is much more detail we could go into to document the market dominance from our position looking at these companies' financials and assessing them as investments. Please feel free to reach out to us if we may be of service.

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