

CMA Report On AI May Lead to Greater Competition Control

By **Omar Shah, Savas Manoussakis, Nina Jayne Carroll** (October 9, 2023, 9:33 AM BST)

The U.K. Competition and Markets Authority published its initial report on artificial intelligence foundation models on Sept. 18, which sets out the CMA's early views on how foundation models, or FMs, are developed and deployed as well as potential future regulatory interventions.[1]

FMs are systems that are trained on vast amounts of data and are then applied to generate an output such as text, images, video and audio, or even physical output through robotics. The FM report identifies the following potential concerns, among others:

- FM developers with market power dominating downstream markets and preventing downstream businesses without FMs from adequately integrating with and benefiting from FMs; and
- FM developers being denied key resources needed to compete, e.g., computational resources.

Increased U.K. merger control and antitrust enforcement in markets involving FMs is more likely, following the FM report.

This article sets out the key competition concerns of the CMA in markets involving FMs, the CMA's proposed principles intended to address these concerns, likely enforcement action and impact on businesses, as well as the next steps in the CMA's review of FMs.

Foundation Models

FMs are machine learning models, i.e., systems or combinations of systems that are trained on vast amounts of data and can be adapted to operate on a wide range of tasks and operations, including conversational and text processing, creating realistic images from natural language descriptions, summarizing information and answering complex questions, among other features.

FMs are deployed in user-facing applications across a variety of industries including social media, productivity software, search functions, legal, health care and robotics.

Approximately 160 FMs have been developed by firms ranging from established technology firms to new



Omar Shah



Savas Manoussakis



Nina Jayne Carroll

AI companies.

The FM report discusses the following key features of competition in FMs and the related concerns:

Entrenched Market Power and Downstream Availability of FMs

The CMA is concerned that FMs may be used to entrench market power in downstream or adjacent markets, potentially allowing firms to leverage that market power to unfairly disadvantage rivals and reduce competition in those markets or related markets, e.g., through anti-competitive tying or bundling of FM products and services.

Access to Proprietary Data

The increased use of proprietary data to develop FMs could disadvantage smaller firms seeking to launch or expand their FMs. Currently, developers have two options for sourcing data to develop FMs: utilize data that they already own or purchase data from third-party providers.

One potential future challenge for FM developers that do not already have access to relevant proprietary data is added costs, should proprietary data become a requirement for improving FM performance.

The FM report notes that ensuring reasonable access to such data is likely to be essential for preventing established tech companies from blocking new entrants from launching their FMs or expanding their FM capabilities and presence.

Access to Computing Power

Access to computing power is integral for FM development as there is a correlation between scale and performance of FMs. Smaller developers may be negatively affected should they not have sufficient resources or partnerships to increase FM model scale, while larger players stand to gain from this aspect of FMs.

The CMA has stated that ensuring access to computing power on fair commercial terms will likely be important to ensuring effective competition.

First- and Early-Mover Advantages

First-mover or early-mover advantages might negatively affect the development of certain FMs. For example, the FM report notes that competition may be restricted if established tech companies are the only ones that can access sufficient funding, technical expertise, resources, economics of scope and scale, and feedback data.

Furthermore, established tech companies are likely to benefit from existing customer bases, which could prevent new competitors from launching FMs.

Open-Source FMs

Open-source FMs are FMs that are freely shared and can be used at no cost, subject to their licenses, which may prohibit commercial use. The FM report takes the position that open-source models promote

innovation, enabling more developers to improve existing FMs and develop new ones.

The CMA cautioned that incentives to maintain open-source FMs are likely to be affected by monetization and increased costs associated with computing power. Restricted access to key inputs could therefore promote the more widespread use of closed-source FMs of larger technology companies, which may ultimately harm competition.

Economies of Scope

The FM report suggests that economies of scope related to costs could present a significant advantage to incumbents that may benefit from the ability to spread high development costs across a more expansive range of FM services. This could negatively affect new entrants that may only be active initially in providing a smaller number of FM services.

Barriers to Switching

The CMA highlights that switching between different FMs could prove difficult for consumers if individual preferences, e.g., an FM virtual assistant that can mimic a consumer's writing style, were lost should they switch.

The CMA may be particularly concerned if there were so-called artificial switching costs. These are costs that arise purely due to product design decisions, taken by providers primarily for the purpose of weakening competition, and which may focus enforcement on such artificial barriers to switching.

Proposed Principles

To ensure competition in the development and deployment of FMs, the CMA proposes several principles to assist FM development and deployment:

- **Accountability:** FM developers and deployers are accountable for outputs provided to consumers.
- **Access to key inputs:** Including data, computing power, expertise, and capital without undue restrictions to ensure that new entrants can challenge incumbents and that successful FM developers do not gain an entrenched and disproportionate advantage from their economies of scale.
- **Diversity of business models:** Both open- and closed-source models enable new capabilities, and open-source models help reduce barriers to entry and expansion.
- **Consumer choice:** Sufficient choice so that businesses can choose how to use FMs, e.g., via in-house FM development, partnerships, application programming interfaces or plug-ins.
- **User flexibility in switching:** Interoperability to support firms mixing and matching or using multiple FMs and customers being able to switch and/or use multiple services easily without being locked to one provider or ecosystem.

- Fair dealing: No anti-competitive conduct, including self-preferencing, tying or bundling.
- Transparency: Consumers and businesses are to be given information about the risks and limitations of FM-generated content in order to make informed choices.

The CMA notes that these principles are not exhaustive and will be updated as its consultation continues.

The FM report highlights several nonexhaustive factors that could undermine the proposed principles, such as anti-competitive behavior by large players, mergers and acquisitions activity triggering a substantial lessening of competition, switching restrictions on business users between FM providers, and consumer misinformation.

Future U.K. AI regulation and enforcement will likely seek to implement these principles.

Increased Merger Control Enforcement

The CMA states that there is likely to be increased M&A enforcement within the markets involving FMs as certain transactions could undermine the principles proposed by the CMA.

The FM report flagged that, while efficiencies can arise from certain transactions, the CMA is encouraging businesses in this space to notify transactions that may meet the CMA's jurisdictional thresholds.

The CMA has wide discretion to review transactions under the share of supply test. Pursuant to this, the CMA may review transactions wherein the merging parties overlap in the supply of a good or service of any reasonable description in the U.K., and where their combined share of supply exceeds 25%.

Importantly, the CMA can use a wide range of metrics in applying this test and has even reviewed transactions in which the target had no U.K. turnover.

Following the FM report, the risk of the CMA reviewing FM mergers, imposing remedies, and even blocking such transactions is heightened.

CMA merger control enforcement is distinct from and in addition to national security reviews by the U.K. government of transactions involving U.K. AI companies under the National Security and Investment Act 2021.

Increased Competition Law Enforcement

Following the FM report, increased competition enforcement in markets involving FMs is probable. FM developers with strong market positions should regularly review their business practices to ensure that they comply with the rules prohibiting abuses of market power.

Examples of potentially problematic conduct could include FM developers self-preferencing, e.g., generating responses that promote other products or services offered by the developer; large, vertically integrated technology companies that develop FMs denying key inputs to smaller developers, such as computing power or data, with a view to excluding them from the market; and any tying and bundling strategies.

The CMA may also focus on barriers to switching and questions of data portability and transparency in reviewing markets that involve FMs.

Key Takeaways

Increased U.K. merger control enforcement in markets involving FMs is likely in light of the FM report. Parties to M&A transactions involving FMs should also ensure that they appropriately address the potentially increased risk of a CMA review.

Competition enforcement regarding, for example, the tying and bundling of FMs with other products, denying FM competitors access to key inputs needed to compete, and preventing customer switching will likely be a CMA priority.

Companies active in this space should be mindful of the CMA's developing views regarding competition and consumer protection to ensure that their business models do not subsequently come under CMA investigation.

Companies currently have an opportunity to help influence FM regulation by engaging with the CMA.

In parallel to the evolving regulation of FMs, companies should also be aware of the proposed U.K. Digital Markets, Competition and Consumers Bill, which, once in force, will enhance the CMA's powers to require specific conduct from firms found to have strategic market status in respect of a digital activity.

Companies that do not take into account the developing U.K. regulation of FMs may risk being designated as having strategic market status, and may thereby be exposed to additional regulatory risk and burdens.

Next Steps

The CMA announced that it has commenced a significant program of engagement that will take place across the U.K., U.S. and elsewhere in the coming months.

The CMA will seek a range of views from consumer groups and civil society representatives, leading FM developers and major deployers of FMs, among other stakeholders. The CMA intends to publish an update on its thinking and proposed principles in early 2024.

This aligns with the current U.K. government's aim for an AI regulation roadmap, as recently cited in its white paper, "A pro-innovation approach to AI regulation," published in August.[2]

Under the paper, the government will remain engaged in ongoing AI market research. Regulators will be encouraged to publish guidance in this space, and an additional CMA report on FMs and the impact of AI is also anticipated.

The FM report indicates that the CMA will focus its merger control and antitrust enforcement on markets involving FMs. Businesses active in this space should be mindful of the CMA's developing views to ensure that their business models do not come under CMA investigation.

Businesses may also wish to take this opportunity to engage with the CMA in helping shape its related enforcement policies.

Omar Shah is a partner and Savas Manoussakis and Nina Jayne Carroll are associates at Morgan Lewis & Bockius LLP.

Morgan Lewis partner Leonidas Theodosiou contributed to this article.

The opinions expressed are those of the author(s) and do not necessarily reflect the views of their employer, its clients, or Portfolio Media Inc., or any of its or their respective affiliates. This article is for general information purposes and is not intended to be and should not be taken as legal advice.

[1] <https://www.gov.uk/government/publications/ai-foundation-models-initial-report>.

[2] <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper>.