Yardeni Research

MORNING BRIEFING
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FTC, Tech & Fusion

Executive Summary: The Federal Trade Commission has been taking aim at tech giants, with investigations targeting Amazon, Meta, and Microsoft. It's also out to prevent big tech companies generally from using AI to gain unfair advantages and from buying their way into market dominance by acquiring smaller companies. Jackie examines where FTC Chair Lina Khan is leading the agency. … And in our Disruptive Technologies segment, a look at scientists' nascent efforts to harness the power of fusion to generate energy in the hopes that it can someday replace the burning of fossil fuels.

Technology: FTC Keeps Trying. Tech industry giants Amazon, Meta, and Microsoft have been in the Federal Trade Commission's (FTC) crosshairs. Under Chair Lina Khan's leadership, the FTC has brought cases against each of them with mixed results. This year, the FTC failed to block both Microsoft's acquisition of video game designer Activision Blizard and Meta's acquisition of small VR content maker Within, drawing criticism by Republican legislators that Khan has reached beyond the FTC's authority.

Undeterred, Khan, whose term goes through 2024, is expected to forge ahead with new cases against Amazon and Meta. She's also rolling out new M&A guidelines and has started to consider how artificial intelligence (AI) will challenge the competitive landscape.

Here's where Khan may lead the FTC next:

(1) *Amazon's a potential target.* Amazon representatives were slated to have a "last-rights" meeting with FTC commissioners earlier this month, a move that often precedes either a lawsuit or a settlement. While the FTC has not disclosed details, the commission has examined "Amazon practices, including whether it favors its own products over competitors' on its platforms and how it treats outside sellers on Amazon.com, " an August 7 *WSJ* *article* reported.

Over the past year, Amazon has eliminated 27 of its 30 clothing private-label brands and dropped its private-label furniture brands, an August 10 *WSJ* *article* reported. The company routinely eliminates products that don't resonate with customers, management says, and works to boost profits by cutting unprofitable businesses. But there's speculation that the company's cuts were made to head off any FTC action.

Amazon is already facing an FTC lawsuit filed in June that contends that the company enrolled customers in Prime without their consent and made it difficult to cancel the service. Amazon has said the allegations are "false on the facts and the law."

The case may be tough to prove given that millions of consumers have shown that they like the value that Prime offers. About 72% of all US households have a paid Prime membership. JPMorgan analysts estimated last year that the $139 annual subscription would cost $1,100 a year if each of its benefits were sold separately, a June 21 *WSJ* *article* reported.

(2) *Meta targeted, too.* The FTC has moved to impose a "blanket prohibition" on the collection of young people's personal data by Meta. If the agency succeeds, Meta would be prohibited from profiting from data it collects from users under the age of 18 on its Facebook, Instagram, and Horizon Worlds platforms.

Regulators claim Meta "misled parents about their ability to control whom their children communicated with on its Messenger Kids app and misrepresented the access it gave some app developers to users' private data," a May 3 *NYT* *article* reported. The FTC would like to expand the $5 billion consent order Meta agreed to in 2020 that said the company failed to meet its commitments to overhaul its privacy practices. Meta has asked a federal court to block the FTC's actions, arguing that it has not violated the consent order and that the agency cannot change it.

(3) *Is AI next?* In a May 3 *NYT* *essay*, Chair Khan makes no bones about it: The FTC will ensure that competition is preserved and consumers are protected in the new era of AI. Only a handful of companies have the computing power, cloud services, and vast data needed to develop AI. Regulators should prohibit large companies from excluding or discriminating against smaller companies to further entrench their dominance, she notes. And AI shouldn't be used by companies to collude to inflate prices or discriminate.

Agencies will have to guard against fraud from AI-created spear-phishing emails, fake websites, and fake consumer reviews. "Scammers … can draft highly targeted spear-phishing emails based on individual users' social media posts. Alongside tools that create deep fake videos and voice clones, these technologies can be used to facilitate fraud and extortion on a massive scale," warns Khan.

The FTC will target not just the fraudsters but also the larger "upstream" firms that enable the fraud, she adds. And finally, laws prohibiting discrimination and the exploitive collection

of personal data will be enforced if AI programs use error-filled information to lock people out of jobs, housing, or key services.

(4) *Tougher new guidelines proposed.* The FTC and the Department of Justice published a draft update of their Merger Guidelines, which describes how the agencies will review mergers' and acquisitions' compliance with antitrust laws. The proposed guidelines would make it easier to prove industry concentration: A "market consisting of 10 companies each with a 10% market share is 'concentrated,' where previously it would have been considered 'unconcentrated'; and a market consisting of five companies each with a 20% market share is 'highly concentrated,' where previously it would be only 'moderately concentrated,'" a July 20 *note* from the law firm WilmerHale explains.

The rules highlight different instances in which vertical mergers can be anticompetitive. They also discuss the harm caused by deals that eliminate potential competition. For example, when a large company acquires a smaller one in another industry, regulators must consider how capable it is of dominating the newly entered industry. And acquiring companies could be in violation of the rules if their mergers entrench or extend an existing dominant position or if they make a series of acquisitions in the same or related industries.

If adopted, the proposed guidelines would guide the agency's investigations, but they'd have less of an impact on the courts, which rely on precedent and legislation when ruling. A newly elected Republican president presumably would replace Khan as FTC chair; the new chair would likely revise these guidelines.

Meanwhile, the new proposed guidelines may further slow the already depressed pace of tech M&A deals. Tech deals reached a high of $173 billion in Q1-2022 but dropped to $7.5 billion in Q2-2023, a June 28 InformationWeek *article* reported.

Disruptive Technologies: Fusion Advances. For a second time, the Lawrence Livermore National Laboratory has proved naysayers wrong by generating more energy from a fusion reaction than used to set off that reaction. That was just the latest baby step that scientists at private and public institutions have taken toward the goal of harnessing fusion to generate energy instead of burning fossil fuels, which produce the undesirable byproduct carbon dioxide. Let's take a look:

(1) *Fusion in the lab.* The Lawrence Livermore National Laboratory didn't disclose the amount of energy its second successful fusion experiment netted; but the first experiment produced 3.15 megajoules of energy after consuming 2.05 megajoules to generate the

reaction. The research institute uses an inertial confinement reactor, which shoots 192 lasers at a capsule that contains a deuterium-tritium pellet. The lasers cause the pellet to collapse and a fusion reaction to occur, reported an August 9 *article* in *Popular Mechanics*.

Skeptics note that the net energy calculation fails to include the energy needed to start up the lasers and that the split-second reaction requires hours of laser-cool-down time before the next one. So it's hard to imagine how this method of fusion can generate enough steady electricity for everyday use. But scientists are working on it.

(2) *Private companies dreaming too.* Many small, private companies are working to make fusion a reality, including General Fusion, Marvel Fusion, Helion Energy, Zap Energy, Avalanche Energy, ExoFusion, and Kyoto Fusioneering.

Earlier this month, General Fusion raised $25 million of new funding to build a new demonstration machine in British Columbia. Over its lifetime, it has raised $330 million, including funds from Jeff Bezos. General Fusion hopes to generate net energy by 2025 and commercialize the technology in the early 2030s, an August 9 GeekWire *article* reported.

(3) *Helion strikes a deal.* Washington-based Helion has contracted to sell Microsoft 50 megawatts of power generated by a Helion fusion plant by 2028, a May 10 Reuters *article* reported. While exact terms of the deal weren't revealed, there reportedly are financial penalties if the power isn't delivered. Helion's fusion directly produces electricity, which is stored in capacitors. OpenAI CEO Sam Altman invested $375 million in Helion in 2021 and takes an active interest in the company, visiting it once a month.

Separately, Avalanche Energy raised $40 million in venture funding in April, including funds from Peter Thiel's Founders Fund, an April 27 *article* in Canary Media reported.

(4) *Lots of lasers.* Colorado State University and Germany based Marvel Fusion are constructing a $150 million high-power laser and fusion research facility in Colorado. "Targeted for completion in 2026, the project plans to feature at least three laser systems, each with a multi-petawatt peak power and an ultra-fast repetition rate of ten flashes per second," the university's August 7 *press release* stated.

(5) *Zap & CFS plugging away.* Zap Energy hopes to get fusion-generated electricity onto the grid by 2030. Zap's fusion occurs in the Fuze-O, which is the size of an office desk and has housed thousands of fusion reactions; hopefully in time it will generate net energy. The Fuze-O plus some heat exchangers and metal turbines theoretically could power up to

30,000 homes.

Commonwealth Fusion Systems, which counts Marc Benioff and Bill Gates as investors, is also developing a compact fusion reactor. Eventually, its tokamak will have a molten salt blanket that absorbs radiated neutrons; the molten salt will be pumped outside of the tokamak to heat water into steam; that steam will power a turbine to make electricity, an August 3 *article* in *IEEE Spectrum* explained. The company was spun out of MIT.

For additional information on fusion, check out the Disruptive Technology sections in the *Morning Briefings* of *December 15, 2022*, *March 31, 2022*, *December 2, 2021*, *August 1, 2019*.

Calendars

US: Thurs: Durable Goods Orders, Total, and Core Nondefense Orders ex Aircraft -4.0% & 0.1%; Initial & Continuous Jobless Claims 240k/1.70m; Kansas City Manufacturing Index; Chicago Fed National Activity Index; Jackson Hole Symposium. **Fri:** University of Michigan Consumer Sentiment, Current Conditions, and Expectations 71.1/77.4/67.2; University of Michigan One- and Five-Year Expectations 3.3%/2.9%; Baker-Hughes Rig Count; Powell Speech, Jackson Hole Symposium. (Bloomberg estimates)

Global: Thurs: France Business Survey 99; UK CBI Distributive Trades Survey -14; UK Gfk Consumer Confidence -29. **Fri:** Germany GDP 0.0%q/q/-0.2%y/y; Germany Ifo Business Climate Index, Current Assessment, and Business Expectations 86.6/89.8/83.8; Lagarde. (Bloomberg estimates)

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