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Legal Sidebar

The DOJ's Monopolization Case Against Apple

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On March 21, 2024, the Department of Justice (DOJ), together with 15 states and the District of Columbia, filed a complaint in federal district court accusing Apple of monopolizing smartphone markets in violation of Section 2 of the Sherman Act. This Legal Sidebar provides an overview of the allegations in the lawsuit, analyzes some of the legal issues they may raise, and discusses related considerations for Congress.

The DOJ's Complaint

The DOJ's complaint alleges that Apple has monopolized markets for "performance smartphones" and smartphones generally by impeding the development of technologies that threaten to undermine the iPhone platform. Some of the DOJ's allegations involve Apple's control of iPhone app distribution. Specifically, the complaint asserts that Apple wields its power over app approval to block or marginalize technologies that may reduce consumers' dependence on the iPhone. The DOJ also contends that Apple maintains its monopoly by denying application programming interfaces (APIs) and other access points to third-party services that would reduce the costs of switching from an iPhone to another smartphone.

The complaint highlights five technologies that Apple has allegedly suppressed using the tactics described above. These allegations are summarized below.

- **Super Apps**. The DOJ argues that Apple has thwarted the development of "super apps"—programs that can serve as platforms for other apps. Super apps are popular in Asian markets, offering users a suite of services like payments, messaging, and e-commerce within a single app. The DOJ claims that, by offering a range of services that can be accessed on different types of devices, super apps threaten to disintermediate the iPhone and commoditize device hardware. The DOJ alleges that Apple strategically changed its App Store Guidelines to suppress this threat, effectively preventing apps from hosting the types of "mini programs" offered by super apps. In particular, the complaint asserts that Apple imposes restrictions that make it difficult for users to find mini programs. The DOJ also contends that Apple prevents mini programs from accessing APIs needed to implement Apple's in-app payment system, functionally precluding developers from monetizing such programs.

- **Cloud Streaming Apps**. The complaint claims that Apple has also suppressed the development of cloud streaming apps, which allow users to run computationally intensive programs without storing the programs on their smartphones. By leveraging the computing power of remote servers, cloud streaming apps facilitate complex programs like gaming and artificial intelligence services, even if consumers purchase smartphones with less sophisticated hardware than an iPhone. The DOJ says that Apple is highly attuned to this threat, quoting an executive's concern that consumers might buy an Android device "for 25 bux at a garage sale and . . . have a solid cloud computing device" that "works fine."

  Apple has allegedly taken several steps to avert this outcome. The complaint contends that Apple requires developers to submit any cloud streaming game or update as a standalone app for approval by Apple. Because advanced games often require daily or hourly updates, the DOJ claims that this requirement presents developers with the untenable choice of delaying software updates for non-iOS versions of their games or making the iOS versions incompatible with non-iOS versions. The lawsuit also alleges that Apple undermines cloud gaming apps in other ways—for example, by requiring "game overhauls and payment redesigns" that effectively force developers to create iOS-specific versions of their games instead of a single cross-platform version. As a result of Apple's conduct, the DOJ says, no developer has designed a cloud streaming app for the iPhone.

- **Messaging**. The complaint alleges that Apple degrades cross-platform messaging in several ways, which discourages the use of other smartphones. For example, the DOJ claims that Apple prevents third-party messaging apps from accessing APIs that allow for the combination of "text to anyone" functionality and the advanced features of "over the top" (OTT) messaging protocols (e.g., encryption, typing indicators, read receipts, and the ability to share rich media). As a result, use of a third-party messaging app requires both the sender and recipient of a message to download the same third-party app. Apple Messages, by contrast, incorporates "text to anyone" functionality and advanced OTT features, allowing users to send messages with such features by typing a phone number in the messaging app's "To:" field.

  The DOJ also alleges that Apple undermines the messaging quality of rival smartphones: if an iPhone user messages a non-iPhone user via Apple Messages, the text appears in a green bubble and offers limited functionality. Specifically, these conversations are not encrypted, videos are lower quality, and users cannot edit messages or see typing indicators. The complaint claims that Apple takes steps to preserve these disadvantages for competing smartphones—for example, by refusing to make Apple Messages available to other smartphones and blocking developers from providing end-to-end encryption for texts from Apple Messages to Android users.

- **Smartwatches**. The DOJ also alleges that Apple has suppressed the development of cross-platform smartwatches, steering consumers to Apple's smartwatch and thereby locking them into the iPhone ecosystem. The complaint contends that Apple degrades the functionality of third-party smartwatches by preventing them from responding to iPhone notifications, inhibiting them from maintaining reliable connections with iPhones, and undermining the performance of third-party smartwatches that connect directly with a cellular network. In doing so, the DOJ says, Apple bolsters its own smartwatch—Apple Watch—which does not face these disadvantages. Because Apple Watch is not compatible with other smartphones, purchases of Apple Watch raise the costs of switching from an iPhone to another smartphone. Thus, by favoring Apple Watch and degrading rival smartwatches, the DOJ claims, Apple helps solidify its smartphone monopoly.

- **Digital Wallets**. The DOJ argues that Apple has implemented a similar strategy vis-á-vis digital wallets, which allow for the storage and use of passes and credentials such as credit cards, movie tickets, and car keys. The complaint alleges that Apple's digital wallet—Apple Wallet—is the only iPhone app that is allowed to access the technology needed for tap-to-pay functionality, which the DOJ characterizes as the "most important function for attracting users to a digital wallet." The DOJ also claims that Apple prevents rival digital wallets from authenticating digital payment options on online checkout pages and from serving as alternatives to Apple's in-app payment tool, further reducing the attractiveness of rival wallets to consumers. By stifling the emergence of cross-platform wallets, the lawsuit contends, Apple has suppressed the development of technology that could reduce the costs of switching from an iPhone to another smartphone.

The complaint asserts that Apple's conduct amounts to monopolization or, in the alternative, attempted monopolization of two markets: the U.S. market for "performance smartphones" and a broader U.S. market for all smartphones. The DOJ argues that "performance smartphones" represent a distinct market because "entry-level smartphones" made with lower-quality materials and performance components are not reasonable substitutes for "higher-end" smartphones like the iPhone.

In support of its allegations of monopoly power, the DOJ contends that Apple occupies more than 70% of the market for "performance smartphones" and more than 65% of the market for smartphones generally, benefits from substantial barriers to entry and expansion, foregoes innovation without fear of losing customers, and achieves profit margins that significantly exceed those of rivals.

In alleging anticompetitive effects, the DOJ claims that the conduct described above results in less choice for smartphone users, harms the quality of the iPhone and rival smartphones, and allows Apple to extract higher profits from iPhone users and app developers. The complaint rejects the notion that these harms can be justified on the basis of privacy, security, or other procompetitive benefits. Here, the DOJ argues that many of the technologies Apple suppresses—for example, apps that would allow Apple Messages to send encrypted texts to Android devices—would themselves enhance privacy and security. The lawsuit contends that Apple's selective invocation of privacy and security underscores the pretextual nature of those defenses.

Analysis

The DOJ's lawsuit makes Apple the fourth major platform operator to face monopolization charges from a federal antitrust enforcer in the past several years; Google is currently litigating two DOJ lawsuits, while Amazon and Meta are contesting claims filed by the Federal Trade Commission (FTC). The firms' competitive practices were the subject of a 2020 report from a House subcommittee, which highlighted some of the conduct targeted by the DOJ's complaint against Apple.

Monopoly Power

Whether Apple possesses monopoly power—the first element of a monopolization claim—will be a threshold issue in the case. As discussed, the DOJ alleges that the U.S. market for "performance smartphones" and the U.S. market for all smartphones both constitute relevant markets in which Apple has monopoly power. (The scope of the relevant market—which is defined by the range of reasonable substitutes for the product in question—is often key to assessing a defendant's monopoly power.)

Apple reportedly denies the DOJ's allegations of monopoly power, arguing that "performance smartphones" are not a relevant product market; that the relevant geographic market is global; and that the DOJ errs by basing its market share calculations on revenue rather than units (using the latter, Apple says, would put its share of the U.S. market at less than 50%).

There is support for Apple's preferred methodology for calculating market shares. In a 1993 decision, the Eleventh Circuit concluded that, while revenues are often used as a surrogate for quantity in computing market shares, unit sales "must be used whenever a price spread between various products would make the revenue figure an inaccurate estimator of unit sales." Likewise, in *Brown Shoe Co. v. United States*—a merger case involving shoe companies—the Supreme Court determined that differences in shoe prices made "sales measured by pairage" a more accurate measure of market share than sales measured by revenues.

The most cited antitrust treatise adopts a similar position. The treatise argues that "in most cases . . . physical units are presumptively the better measure [than revenue] if they provide a satisfactory common denominator." This is so, the treatise reasons, because most substitutions occur one-to-one (i.e., in most cases, if a product costs twice as much as a substitute, consumers choose between purchasing one unit of the product or one unit of the substitute, not between one unit of the product or two units of the substitute). The treatise's reasoning appears to apply to smartphones. It seems likely that most consumers choose between one iPhone and one alternative smartphone, not between one iPhone and multiple units of another smartphone. Apple may attempt to adduce empirical evidence in support of a similar argument.

If Apple's share of the relevant market is below 50%, the DOJ's monopolization claims are unlikely to be viable. Although some courts have acknowledged the theoretical possibility of monopoly power in such circumstances, a 2008 DOJ report was unable to identify any case in which a firm with a market share below 50% was deemed a monopolist. Some courts have also indicated that a share below 50% precludes monopolization liability.

A finding that Apple lacks monopoly power would not dispose of the DOJ's claims alleging *attempted* monopolization; courts have recognized the possibility of attempted monopolization by firms that occupy less than half of a relevant market. The attempted monopolization offense instead requires proof that the defendant's conduct produces a "dangerous probability" of monopoly.

Anticompetitive Conduct

To prevail on either a monopolization or attempted monopolization claim, the DOJ will need to show that Apple's conduct is anticompetitive. Here, the requirements facing the DOJ may turn on the proper characterization of the lawsuit's theory of harm—in particular, whether the complaint is deemed to allege refusals to deal or "technological tying."

A refusal-to-deal framing appears plausible: many of the DOJ's allegations contend that Apple has refused to open the iPhone platform to technologies that Apple deems threatening.

Refusal-to-deal claims are difficult for plaintiffs to win. The key modern precedents from the Supreme Court are *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.* and *Verizon Communications Inc. v. Trinko*. In *Aspen Skiing*, the Court affirmed monopolization liability for a firm that terminated a ski ticket package it offered with the plaintiff. In *Trinko*, the Court cabined the scope of *Aspen Skiing*, explaining that the latter case lies "at or near the outer boundary" of monopolization law. *Trinko* involved Verizon's refusal to provide interconnection services to a rival local telephone provider. The Court rejected antitrust liability for that conduct, distinguishing *Aspen Skiing* on the ground that the monopolist there sacrificed short-term profits by terminating a voluntary course of dealing with its competitor, meaning the firm's conduct was irrational but for its tendency to exclude. Because Verizon had not terminated a voluntary course of dealing with its rival, the Court reasoned, the facts in *Trinko* did not justify a similar inference.

While *Trinko* did not explicitly identify necessary conditions for refusal-to-deal liability, several lower courts have construed the case to require evidence of profit sacrifice. A 2013 opinion by then-Judge Neil Gorsuch goes further, concluding that refusal-to-deal plaintiffs must establish profit sacrifice by showing that the defendant terminated a voluntary course of dealing. A 2020 decision from the Seventh Circuit appears to adopt a less expansive reading of *Trinko*, holding that refusals to deal trigger antitrust liability only if they are irrational but for their anticompetitive effect. Although profit sacrifice is relevant to this inquiry, the court indicated that the absence of profit sacrifice is "not always . . . dispositive." (The Seventh Circuit's opinion seems to adopt what is called the "no economic sense" test in the academic literature, which is theoretically broader than a profit-sacrifice requirement.)

The DOJ reportedly denies that its Apple lawsuit is a refusal-to-deal case. The complaint, however, appears to reflect awareness of the risk that its allegations will be categorized in that manner. The DOJ repeatedly claims that Apple's conduct sacrifices short-term profits or revenue to preserve the company's monopoly. At one point, the DOJ also appears to allege the termination of a prior course of dealing, contending that Apple allowed third-party smartwatches to access certain APIs and began limiting that access after introducing Apple Watch.

Another part of the complaint seems to target the theoretical underpinnings of permissive refusal-to-deal doctrine, which is typically justified on the ground that forced sharing reduces incentives to innovate. Specifically, the complaint argues that much of the value of the iPhone platform is derived from the efforts of third-party developers. This fact, the DOJ claims, distinguishes smartphones from "other platforms, like landline telephone networks, whose value-adding features were built primarily by the platform operator and which were only opened to third parties when the platform operator was required to do so by regulation." The implication appears to be that compulsory dealing is less likely to diminish innovation incentives when third-party access was necessary to generate a significant portion of a platform's value. The distinction also seems intended to underscore the DOJ's argument that Apple's limitations on third-party access would be irrational but for their anticompetitive effect.

The DOJ may face fewer hurdles if its complaint is deemed to allege "technological tying" instead of a refusal to deal. The argument here would be that Apple's restrictions on various third-party technologies (e.g., smartwatches, digital wallets) functionally tie the iPhone platform to Apple's versions of those technologies (e.g., Apple Watch, Apple Wallet).

Courts have taken different approaches to such claims. The Ninth Circuit has held that product design choices that entail genuine improvements are immune from antitrust liability, regardless of any associated anticompetitive effects. The D.C. Circuit adopted a different position in its 2001 *Microsoft* decision, which employed a burden-shifting framework under which plaintiffs can prevail by proving that the anticompetitive effects of a design choice outweigh the procompetitive benefits. (The DOJ frames its lawsuit as an heir to *Microsoft*'s legacy, arguing that the consent decree in that case enabled Apple's success and that Apple has reprised Microsoft's strategy of stifling cross-platform technologies that threaten its dominance.)

Regardless of whether Apple's conduct is evaluated as a refusal to deal or technological tying, Apple will have the opportunity to defend that conduct on the ground that it produces procompetitive benefits. In other cases, Apple has argued that its closed ecosystem enhances device performance, privacy, and security. A company statement responding to the DOJ's lawsuit echoes those rationales.

In a recent antitrust lawsuit filed by game developer Epic Games, a district court found that privacy and security constituted legitimate, non-pretextual rationales for Apple's restrictions on app distribution. The court also found that Epic Games failed to establish that those benefits could be achieved through less restrictive means, precluding liability for the restrictions. The Ninth Circuit affirmed the district court on appeal.

As discussed, the DOJ has argued that Apple's invocations of privacy and security are pretextual in light of the company's suppression of several technologies that would offer those benefits. It remains to be seen whether the court will accept such justifications for the conduct alleged by the government's complaint.

Issues for Congress

The DOJ's lawsuit implicates issues that have attracted congressional attention. As discussed, a 2020 report on digital competition by a House subcommittee documented some of the practices targeted by the DOJ's case. Legislative proposals followed on the heels of that report. In the 117th Congress, the Open App Markets Act and the American Innovation and Choice Online Act (AICOA) would have mandated that covered platform operators provide business users with access to hardware and software features that are available to the operators' own products and services. The AICOA has been reintroduced in the 118th Congress.

The 117th Congress also considered a general antitrust bill that would have modified refusal-to-deal law, among other things. S. 225, the Competition and Antitrust Law Enforcement Reform Act, would have adopted new standards for exclusionary conduct claims and provided that plaintiffs bringing such claims need not establish that a defendant terminated a prior course of dealing.

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