

Do Claims of App Store Monopoly Power Have Merit?

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The Open App Markets Act,¹ sponsored by Senators Blumenthal (D-CT), Klobuchar (D-MN), and Blackburn (R-TN), was one of many antitrust tech bills to garner bipartisan support in the 117th Congress. The proposed law seeks to set new rules for the operation of app stores, including requiring app stores to allow more payment options inside apps and requiring Apple devices to afford users more permissive downloading options. Promoting the legislation, Sen. Blumenthal's website declared, "Two companies, Google and Apple, have gatekeeper control of the two dominant mobile operating systems and their app stores that allow them to exclusively dictate the terms of the app market, inhibiting competition and restricting consumer choice."²

In some sense, it stands to reason that the owners of these app stores have gatekeeper control over them—much as McDonald's has gatekeeper power over Big Macs and Disney over the Matterhorn ride. But misguided charges of harmful antitrust market power are largely a result of defining the app store market too narrowly by looking only at mobile devices while ignoring the multiple hardware devices consumers often use, and thus arriving at the mistaken conclusion that there are only two app stores of consequence.

The implied accusation of market interventionists is that the two biggest app stores, Apple's App Store and the Google Play Store, possess monopoly power. As monopolies, they are supposedly able to charge inflated fees and make unreasonable demands of app developers that use their platforms. Proponents of government intervention claim that Apple and Google are unfairly advantaged in negotiating fee rates and other conditions because there are insufficient substitutes available to app developers. In other words, in an optimal competitive market, terms would be better for developers because the app stores would fear losing too many developer products to other app stores with more appealing fees and conditions.

This theory employs an inappropriately narrow definition of the market—one that focuses on mobile devices and market shares

only while ignoring modern economic analysis.³ Instead, what is needed is a much wider policy lens that recognizes users' multiple hardware devices and these devices' corresponding app stores and developers' ability to offer products through these alternative distribution channels. A wide lens provides the full picture of what can (and could yet) be used as a substitute for an iPhone or a phone running the Android operating system. The full picture gives lie to the assertion that the Apple App Store or the Google Play Store have monopoly power that is pushing fees higher than they would otherwise be.

As of 2022, American homes have an average of 22 connected devices.⁴ These include desktop computers, laptops, tablets, smartphones, gaming consoles, smart displays, smart speakers, digital media players, vehicles, smart TVs, smart watches, appliances, and home voice assistants, among other devices. These devices come with their own app stores that stretch far beyond the Apple App Store and the Google Play Store, but proposed legislation focuses on those two biggest app stores and the agreements they have in place with app developers.⁵ Considering that the majority of app revenue comes from gaming and subscription-based video and music streaming services,⁶ it would be a mistake to disregard these competing devices and platforms when evaluating the current app market.

Comparing the Big Two App Stores to Other App Stores

Apple's App Store provides apps compatible with devices running on Apple's iOS. These include iPhone, iPad, Mac, Apple TV, and Apple Watch. Apple currently has a 30 percent baseline fee, but exceptions are plentiful, and in many cases the fee falls to 15 percent.⁷ For example, a commission for subscription-based purchases that automatically renew declines to 15 percent after one year. Similarly, Apple's Small Business Program, announced in November 2020, reduces Apple's commission to 15 percent if the developer earned less than \$1 million during the previous calendar year.⁸ And Apple's News Partner Program, announced

on August 26, 2021,⁹ allows developers that create content for Apple News to qualify for a 15 percent commission rate.¹⁰

Apple devices do not allow users to download apps from other app stores, from websites, or from other devices.¹¹ However, consumers still manage to “sideload” using third-party app stores developed to bypass Apple’s “walled garden.” Apple’s closed-system approach may limit total choices for users, but it likely has the benefit of keeping its devices more secure and less vulnerable to malware.¹² Apple now claims more than half of the smartphone market in the US, but it claims only 25 percent of the global phone market.¹³

If some consumers don’t like the walled-garden trade-off of more security for less openness, they can opt for hardware running Google’s open-source Android operating system. This ecosystem allows users to sideload apps and download them from websites. As a consequence, Android devices are arguably less protected from malware and other security threats than Apple devices are. But some consumers clearly prefer the freedom to tinker with the operating system and value the greater number of available apps. Globally, Android phones account for just over 70 percent of the mobile operating system market.¹⁴

Google Play’s standard “service fee” for developers is 30 percent. For automatically renewing subscriptions, the service fee is 15 percent.¹⁵ Unlike Apple’s App Store, this 15 percent rate for subscriptions does not appear to be predicated on a subscription during the previous calendar year. Google announced a “15% service fee tier” in March 2021.¹⁶ Enrolled developers incur a 15 percent service fee for their first \$1 million of earnings during each year. All earnings over \$1 million incur the standard 30 percent service fee.

Both Samsung and Amazon operate app stores that distribute applications for Android devices and their own respective app-enabled devices. The Samsung Galaxy Store has a standard commission rate of 30 percent. The Galaxy Store’s terms and conditions stipulate that “an alternative revenue share rate may be established upon mutual written agreement during the certification process for an Application.”¹⁷

Amazon charges 30 percent as a standard commission for purchases made in its app store, but the company provides a lower commission rate of 20 percent for small businesses through its Small Business Accelerator Program.¹⁸ Certain small developers making under \$1 million a year can also utilize Amazon Web Services credits amounting to 10 percent of revenue, which brings total revenue paid to developers to 90 percent.¹⁹ In-app subscription payments for movies and TV subscriptions incur a 20 percent commission.²⁰

The Microsoft Store assesses a 30 percent store fee for Xbox console apps purchased on a nonsubscription basis. The fee applies to Xbox console games, in-app purchases on Xbox

consoles, and apps and in-app purchases on Windows 8 devices, including phones.²¹ A 15 percent store fee is applied to apps and in-app purchases from the Microsoft Store that are not included in the above criteria. A 12 percent store fee is applied to any game purchases or in-game purchases, after August 1, 2021, that are not included in the aforementioned criteria.²² This has been understood to include PC games.²³

Additionally, while Sony will not publicly confirm the number, it is widely believed to take a 30 percent commission. YouTube allows creators to get paid directly by viewers, but creators make most of their money through ad revenue, and the platform takes 45 percent of that.²⁴ Valve’s platform, Steam, which provides streaming services for its gaming storefront, also charges a 30 percent commission.²⁵

In short, the app store commissions charged by Apple and Google are substantially in line with commissions charged by other app stores.

Policymakers Exhibit a Fundamental Misunderstanding of the App Market

To legislate with the notion that there are just two app stores—as if handheld mobile devices composed the market for all digital applications—is to ignore the more than 300 app stores worldwide²⁶ that go along with the average of 22 connected devices in Americans’ homes. Using a wider and more accurate market lens shows the inaccuracy of the notion that Apple or Google can or do “exclusively dictate the terms of the app market.”

The fees Apple and Google charge are not significantly higher than fees in other areas of the app ecosystem.²⁷ This rough consistency across the industry at least suggests a lack of monopoly power and profits by Apple’s and Google’s app stores.

Indeed, far from being exploited by the scope and size of the two largest app stores, developers derive significant advantages from the economies of scale inherent in the massive distribution systems of the Apple App Store and Google Play.

As of January 2022, Apple has paid out \$260 billion to iOS developers. In 2021 the company paid developers \$60 billion, up from the \$45 billion that it paid in 2020.²⁸ As of July 2021, Google has paid out \$120 billion to Android app developers.²⁹ The size and scope of Google’s and Apple’s app stores enable developers to achieve distribution and profitability that would otherwise be unlikely or perhaps even impossible. These two roads to success at scale exist alongside all the other options for developer success in the marketplace.

The Apple App Store provides an additional benefit to developers by enabling them to piggyback on Apple’s valuable reputation for security. Developers whose apps meet Apple’s high stan

dards for inclusion in its app store can skip starting from scratch to earn that trust with consumers. This increases their efficiency in catering to consumers who place a premium on heightened security and quality in apps. Again, this path sits alongside Google’s more open and permissive model and all the other options for app developers to distribute their products.

Economic analysis may be helpful in evaluating whether government antitrust intervention is justifiable (see, for example, the federal antitrust enforcers’ “horizontal merger guidelines”),³⁰ but regulators and legislators cannot know with certainty what the “correct” number of firms in any given market is or what market shares are “inappropriately high.” In an economic sector as varied, fast-changing, and fluid as that of digital apps, it is almost certain that regulatory interventions will have harmful unintended consequences.

Legislation like the Open App Markets Act, with its focus on just two app stores out of approximately 300, fails to accurately define the market. To proceed to regulate with poor initial analysis increases the risk of unintended and harmful consequences. These types of regulatory schemes should be abandoned in order to preserve innovation in the marketplace and benefits to consumers.

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Appendix: Sample of 100 Commonly Used App Stores

This non-exhaustive list includes 100 of the most commonly used app stores.

	App store	iOS	Android	Additional platforms
1	Apple App Store	X		
2	Google Play Store		X	
3	Microsoft/Windows Store			X
4	Xbox Gaming Store			X
5	Samsung Galaxy Store		X	X
6	LG Content Store			X
7	BlackBerry World			X
8	Amazon Appstore		X	X
9	Huawei AppGallery (China)		X	X
10	Oculus/Meta Quest Store			X
11	Steam Gaming Apps			X
12	Epic Game Store		X	X
13	BuildStore (builds.io)	X		
14	AltStore	X		
15	EonHub	X	X	X
16	CokerNutX	X	X	X
17	Cydia	X		
18	Xabsi	X		
19	Tweakbox	X	X	
20	App Valley	X		
21	Getjar	X	X	X

	App store	iOS	Android	Additional platforms
22	iOS Heaven	X		
23	TutuApp	X	X	
24	AppLand	X	X	X
25	TopStore	X		
26	TuTuBox	X	X	
27	APKPure	X	X	
28	APKTom (9Apps)		X	
29	Aptoide		X	
30	F-Droid		X	
31	Aurora Store		X	
32	GetApps (Xiaomi) (China)		X	
33	APKMirror		X	
34	SlideME		X	
35	Uptodown		X	
36	Mobile9		X	
37	Mobango		X	
38	Itch.io		X	X
39	Bemobi/Opera Mobile Store		X	
40	My Nintendo Store			X
41	PlayStation Store			X
42	1Mobile		X	X
43	Ubunto		X	X
44	Origin (EA Games)			X
45	GOG Galaxy			X
46	GamersGate			X
47	Green Man Gaming			X
48	Game Jolt			X
49	MiKandi (adult)		X	
50	GeForce Now			X
51	Yalp Store		X	
52	Humble Bundle		X	X
53	ACMarket AppStore	X	X	
54	Mobilism Market		X	
55	Appvn		X	
56	CNET.com		X	X
57	NeXva		X	
58	AppBrain		X	
59	Appszoom		X	
60	AppCake	X		
61	AppEven	X		
62	HipStore	X	X	
63	iNoJB	X		
64	QooApp (Japan)		X	
65	TapTap (Japan)	X	X	
66	Panda Helper		X	

	App store	iOS	Android	Additional platforms
67	Oppo App Market (China)		X	
68	VIVO App Store (China)		X	
69	Tencent My App Store (China)		X	
70	Yandex.Store (Russia)		X	
71	Baidu Mobile Assistant (China)		X	
72	360 Market (China)		X	X
73	Wandoujia (China)		X	
74	PP Assistant (China)	X	X	
75	Lenovo LeStore (China)		X	X
76	Anzhi Market (China)		X	
77	CoolPad (China)			X
78	ZTE App Store (China)		X	
79	China Telecom 189 Store (China)		X	
80	Sogou Mobile Assistant (China)		X	
81	AppChina (China)		X	
82	LeTV Store (China)			X
83	Meizu Flyme (China)		X	
84	China Mobile MM Store (China)		X	
85	Coolapk (China)		X	
86	HiMarket (China)		X	
87	Gionee (China)		X	
88	Zhuoyi (China)		X	
89	HiAPK (China)		X	
90	D.cn (China)		X	
91	MaoPao (China)	X	X	
92	GFan (China)		X	
93	Liqucn.com (China)		X	
94	Eoemarket (China)		X	
95	Malavida App Store		X	
96	T-Store (South Korea)		X	
97	Airtel App Store (Sri Lanka)		X	
98	Turkcell T-Market (Turkey)		X	
99	TIM Store (Italy)			X
100	MTNPlay (South Africa)		X	

Endnotes

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