TECH WARS AND THE CONFLICT OF PUBLIC INTERESTS

Haochen Sun*
Peter Wat*

CITE AS: 5 GEO. L. TECH. REV. 62 (2021)

ABSTRACT

The U.S. government has waged “tech wars” against companies under the banner of national security. But is consumer welfare being sacrificed to win these wars? This Article offers an in-depth study of the emerging conflict between two public interests—consumer welfare and national security—in the context of antitrust law. It considers the ramifications of the patent abuse case, FTC v. Qualcomm, which sheds light on the nature and scope of these two public interests as they are implicated in tech wars. This Article also proposes application of a strict scrutiny standard to address the conflict between national security and consumer welfare in the Qualcomm case and in tech wars more broadly.

TABLE OF CONTENTS

I. Introduction .................................................................62

II. The Shifting Nature of National Security and Consumer Welfare......68
   A. National Security ........................................................68
      1. National Security as a General Legal and Policy Concept....68
      2. National Security’s Overriding Power in Antitrust Law ......71
   B. Consumer Welfare .........................................................74

III. Lessons from FTC v. Qualcomm ..................................78
   A. FTC v. Qualcomm .........................................................78
   B. The District Court’s Ruling in Relation to Consumer Welfare .79
      1. The “No License, No Chips” Policy ...............................79

---

* Associate Professor of Law, University of Hong Kong Faculty of Law. We are grateful to Anupam Chander and Anna Wu for their helpful conversations and comments.
** Trainee solicitor at MinterEllison LLP, Hong Kong. All opinions expressed belong to the author alone and should not be taken as legal advice.
In early July 2020, President Trump and other key U.S. government officials began asserting that the incredibly popular video-sharing app TikTok was a digital Trojan horse, secretly collecting and sharing American users’ data with the Chinese government and posing a potentially grave threat to U.S. national security. Following these accusations, President Trump announced his intention to ban the operation of TikTok in the U.S.

In contrast, TikTok fans and content creators in the U.S. argued that such a ban would overlook the app’s contribution to consumer welfare.

---


TikTok has exploded in popularity amid the COVID-19 pandemic and has acquired, as of August 2020, around 100 million active U.S. users. The app has promoted digital culture by allowing users to generate viral videos, giving rise to its own celebrity ecosystem. TikTok has also established itself as an information-sharing and organizing hub that galvanizes politically-minded young people to share their views on climate change, racism, and politics. Meanwhile, media scrutiny has led to accusations of political manipulation by the Trump administration in its treatment of TikTok.

The TikTok saga ended up in the District Court for the District of Columbia, where the litigation centered around President Trump’s statutory authority to impose such a ban. The district court ultimately enjoined the portion of President Trump’s executive order that had restricted distribution of the TikTok application on grounds of national security.

The proposed ban of TikTok highlights a conflict between two fundamental public interests: national security and consumer welfare. In 2017, the U.S. Supreme Court elevated national security to the status of a public interest of “the highest order.” Does this mean that national security should override consumer welfare when the two conflict?

---


* Abram Brown, Is This The Real Reason Why Trump Wants To Ban TikTok?, FORBES (Aug. 1, 2020, 2:03 PM), https://www.forbes.com/sites/abrambrown/2020/08/01/is-this-the-real-reason-why-trump-wants-to-ban-tiktok/#2e4cf1364aed (“But what if there’s another reason why Trump wants to turn off TikTok, something driven not by high-minded policy but by something as simple as hurt feelings.”) [https://perma.cc/3SW3-PJ6F]; Shelly Banjo & Misyrelena Egkolfopoulou, TikTok Teens Try to Trick Trump Campaign, Again, BLOOMBERG (July 9, 2020, 10:53 PM), https://www.bloomberg.com/news/articles/2020-07-09/tiktok-teens-try-to-trick-trump-campaign-again (reporting that TikTok users “don’t believe Trump is trying to take TikTok away because of national security, but more to retaliate against activism on the app and all the videos about him that drag him through the mud . . .”) [https://perma.cc/Q9B5-QP3E].


Conflicts between national security and consumer welfare erupt on various legal fronts when the tech wars target many of the world’s leading technology companies. Such conflicts have triggered questions concerning the validity and merits of national security claims. Other thorny legal issues have also emerged: What legal principle or standard can courts apply to weigh the conflict between national security and consumer welfare? To what extent can courts safeguard consumer welfare even if national security prevails? And how can courts deal with lawsuits that trigger a conflict between national security and global consumer welfare? The resolution of these disputes will shape the future of technology companies as well as profoundly inform the development of legal and policy principles and standards that regulate the technology sector and drive national and global economic and innovative capabilities.

On another front and in the antitrust setting, FTC v. Qualcomm is a tech war in which the tensions between national security and consumer welfare play out. The antitrust suit brought by Federal Trade Commission (FTC) concerned Qualcomm’s practices such as alleged bundling, refusals to deal, exclusivity agreements and monopolistic pricing, all of which were made possible by Qualcomm’s monopoly in the market for modem chips, a critical component of smartphones. In May 2019, the District Court for the Northern District of California handed down a ruling against Qualcomm on the grounds that the company had harmed consumer welfare through its anticompetitive exercise of patent rights over the smartphone chips it manufactures. After Qualcomm appealed this ruling, the Department of Justice (DOJ) requested that the Court of Appeals for the Ninth Circuit overturn the ruling on national security grounds, arguing that the ruling would undermine U.S. leadership in 5G technology and standard setting.

We suggest in this Article that FTC v. Qualcomm contains crucial clues for tackling legal issues central to the conflict between national security and consumer welfare. As many analysts have noted, this case stands to profoundly

---

15 See infra Part III.
16 See infra Part III.
17 See infra Part III.
affect innovation in 5G technology as well as the outcomes of ongoing Big Tech antitrust investigations. The conflict between national security and consumer welfare has also arisen in other tech wars, including the U.S. government’s other bans on TikTok and WeChat.

Through an in-depth analysis of FTC v. Qualcomm, we develop an up-to-date, nuanced understanding of the nature and scope of national security and consumer welfare, both public interests frequently implicated in conjunction with U.S. antitrust law. We then propose a strict scrutiny approach to deal with the conflict between these two public interests, drawing on the Supreme Court’s handling of cases involving fundamental rights protected by the U.S. Constitution. In these cases, the Supreme Court has applied the strict scrutiny standard to review whether the government’s encroachment upon a fundamental right is legally valid.

This Article offers the first comprehensive study of conflicts between national security and consumer welfare in situations where law and technology intersect. This Article addresses three main legal and policy issues. First, we examine the nature and scope of national security, a public interest that has gained traction in the technology sector following FTC v. Qualcomm. Amid rising populism and de-globalization trends, national security is at the forefront of interactions between law and technology. Major technology law

---


20 See infra Part IV.B.

21 See infra Part III.

22 See infra Part IV.A.

23 Professor Feintuck’s seminal book ‘The Public Interest’ in Regulation, for instance, does not deal with the conflict between national security and consumer welfare. See MIKE FEINTUCK, ‘THE PUBLIC INTEREST’ IN REGULATION 4 (2004).
issues, including theft of intellectual property,\(^a\) maintenance of cybersecurity,\(^b\) review of corporate mergers,\(^c\) and regulation of cross-border data flows,\(^d\) have triggered widespread national security concerns. Beyond technology law, national security often collides with freedom of expression and freedom of the press. In June 2020, for instance, DOJ requested that a federal judge issue an injunction to halt the publication of former U.S. National Security Advisor John Bolton’s memoir.\(^e\) During the same month, Chinese legislators passed what is widely referred to as the Hong Kong National Security Law,\(^f\) which prompted Facebook, Google, and Twitter to suspend processing of Hong Kong government data requests due to potential human rights concerns.\(^g\)

Second, we offer a dynamic interpretation of the nature and scope of consumer welfare in technology law. The antitrust review of the world’s largest technology companies—namely, Amazon, Apple, Google, and


\(^d\) See Andrew Keane Woods, Litigating Data Sovereignty, 128 YALE L.J. 328, 403 (2018).

\(^e\) Charlie Savage, Justice Dept. Escalates Legal Fight With Bolton Over Book, N.Y. TIMES (June 17, 2020), https://www.nytimes.com/2020/06/17/us/politics/john-bolton-lawsuit.html (“Disclosure of the manuscript will damage the national security of the United States,” the government filing said. “The United States asks this court to hold defendant to the legal obligations he freely assumed as a condition of receiving access to classified information and prevent the harm to national security that will result if his manuscript is published to the world.”) [https://perma.cc/HZ9K-QMPT].


Facebook (or collectively, “Big Tech”)—raises concerns about the conflict between consumer welfare and national security. When debating the U.S. government’s potential break up of Big Tech, some scholars have boldly suggested that consumer welfare be terminated as the guiding principle of antitrust law. Other scholars are calling for a renewed understanding of the consumer welfare standard to help guide the Big Tech antitrust investigations. Consumer welfare is also contested in disputes involving licensing standard essential patents (SEPs) on fair, reasonable, and non-discriminatory (FRAND) terms. Here, a major issue is whether FRAND terms protect global consumer welfare, or merely the welfare of consumers in a specific country.

Third, the strict scrutiny approach we propose in this article provides a well-reasoned legal basis for courts to address the conflict between national security and consumer welfare. In the future, courts will increasingly be called upon to deal with technology law disputes involving this conflict. For instance, Reddit, a website famous for sharing social activism-related news, may face a national security investigation, given that one of its major shareholders is Chinese technology giant Tencent. The video conferencing app Zoom may

---


34 See infra Part IV.A. See also Jorge Padilla et al., Antitrust Analysis Involving Intellectual Property and Standards: Implications from Economics, 33 HARV. J. L. & TECH. 1, 40 (2019).


36 Louise Matsakis, Does TikTok Really Pose a Risk to US National Security?, WIRED (July 17, 2020, 3:10 PM), https://www.wired.com/story/tiktok-ban-us-national-security-risk (“The problem is that TikTok is far from the only tech firm in the US with ties to China. Tencent,
also face a national security investigation over its use of Chinese servers \(^\text{37}\) and its CEO’s relationship to China. \(^\text{38}\) Similarly, the Chinese social media app WeChat was the subject of an executive order prohibiting transactions with WeChat and subsequent litigation challenging the constitutionality of that order. \(^\text{39}\) Interestingly the examples of tech wars listed out so far have implicated Chinese entities or threats in one way or another, a trend which can be expected to continue, at least in the near future.

This Article proceeds as follows. In Part II, we focus on antitrust law and explore the nature and scope of the national security and consumer welfare public interests. In Part III, we examine in detail the ways in which FTC v. Qualcomm exemplifies this conflict. Based on this analysis, we propose in Part IV a strict scrutiny approach to address the conflict, use the FTC v. Qualcomm case to illustrate how courts can apply this approach in practice, and examine the relevance of a strict scrutiny standard to the ongoing tech wars against TikTok and WeChat.

II. THE SHIFTING NATURE OF NATIONAL SECURITY AND CONSUMER WELFARE

A. National Security

1. National Security as a General Legal and Policy Concept

---

\(^{37}\) Shoshana Wodinsky, Zoom’s New Update Sure Seems Like an Attempt to Not Be Labeled a National Security Threat, Gizmodo (Apr. 14, 2020, 6:28 PM), https://gizmodo.com/zooms-latest-update-is-an-attempt-to-prove-its-not-a-th-1842861614 (“It’s a small tweak with massive implications for national security. Earlier this month, a report from the Citizen Lab at the University of Toronto found that the keys Zoom uses to encrypt its calls were generated by servers in China, regardless of whether the meeting’s participants were based in the country.”) [https://perma.cc/ZJ65-8PDK].

\(^{38}\) Richi Jennings, Is Zoom the Next Huawei? ‘Puppet of Chinese,’ Say Critics, Security Boulevard (June 11, 2020), https://securityboulevard.com/2020/06/is-zoom-the-next-huawei-puppet-of-chinese-say-critics (“Activists remind Zoom users and investors that the NASDAQ-listed company doesn’t really look like a U.S. firm: At least 30% of Zoom’s engineers are in China, and the company’s CEO was born in China—with family still living there, subject to the whims of the CCP.”) [https://perma.cc/QN43-PM7G].

In the past few decades, national security has risen to a public interest of “the highest order” in U.S. policy, with a subsequent expansion in scope. Conventional wisdom characterizes national security as the protection of a state against internal subversion and external military attack. It focuses narrowly on the role of the military and survival of the nation state through the protection of “political independence, territorial integrity, and external sovereignty.” It has been suggested that security in itself (as opposed to national security) cannot be achieved unless national sovereignty is protected.

Over time however, the notion of national security has expanded, both in terms of the definition of security and the threats to it. Scholars and policymakers have reconceptualized national security to include non-military threats and to encompass concerns such as political security, economic security, human security, social security, environmental security, energy security, and cybersecurity. It has also been asserted that national security should encompass the protection of political and economic interests that have been prioritized through the political process or apparatus of a state.

---

*a* Trump v. Int’l Refugee Assistance Project, 137 S. Ct. 2080, 2088 (2017) (citation omitted); Holder v. Humanitarian Law Project, 561 U.S. 1, 28 (2010); Brief for the United States as Amicus Curiae Supporting Appellant at 21, FTC v. Qualcomm Inc., 935 F.3d 752 (9th Cir. 2019) (No. 19-16122) [hereinafter Brief for the United States].


*d* Makinda, supra note 42, at 286.

*e* Reveron, supra note 41, at 1; see Wallace, supra note 42, at 647–48.

*f* Waltraud Q. Morales, *The War on Drugs: A New US National Security Doctrine?*, 11 THIRD WORLD QUARTERLY 147, 149 (1989) (“‘National security’, as defined by defence specialists, first entails defence in its narrowest concept —the protection of a nation’s people and territories from physical attack; and second, the more extensive concept of the protection of political and economic interests considered essential by those who exercise political power to the fundamental values and the vitality of the state.”); Wallace, supra note 42, at 649-50 (“[C]ontemporary national security now encompasses the safety and security of nation-states as managed through the exercise of economic and political power, hence the
Although national security is not well defined in U.S. legislation or by the courts, the U.S. government’s approach to national security has gone beyond military defense of its states and territories to also encompass protection of American “norms, rules, institutions, and values,” and has highlighted a number of political and economic interests as being instrumental or integral to national security. The Bush administration conceived of national security as “including the defense of the [U.S.], protection of [the U.S.] constitutional system of government, and the advancement of [U.S.] interests around the globe.” The Obama administration made extensive efforts to work on “economy, education, immigration, infrastructure, science and innovation, alternative forms of energy, health care, and reductions in the federal deficit” as key national security considerations. Most recently, the Trump administration applied a protectionist approach to national security by placing greater emphasis on the interest of preserving national identity. The Trump administration’s strategy was to advance national security by “protecting the American people and preserving [their] way of life, promoting [their] prosperity, preserving peace through strength, and advancing American influence in the world.”

In recent decades, the U.S. government has increasingly emphasized advancement of national security in areas of innovation and technology. The Defense Production Act, for instance, sets out a number of factors for consideration in the national security review process for potentially important of a state’s economic and political interests in the context of its national security.”


* Makinda, supra note 42, at 282.


* Donohue, supra note 46, at 1574 (pointing out that Obama’s national security strategy tied “the economy, education, immigration, infrastructure, science and innovation, alternative forms of energy, health care, and reductions in the federal deficit to U.S. national security”).


problematic transactions. Interestingly, this list includes the effects of a transaction on U.S. international technological leadership, critical infrastructure, and critical technologies as matters for consideration. The Trump administration elevated a technology-oriented national security strategy to a new high, prioritizing advancement of U.S. global leadership in “Research, Technology, Invention, and Innovation.” It leveraged “private capital and expertise to build and innovate,” and stated that the “Department of Defense and other agencies will establish strategic partnerships with U.S. companies to help align private sector R&D resources to priority national security applications.”

The Trump administration also devised strategies to protect American companies’ intellectual property from “hostile foreign competitors” like China. As evidenced in the 2018 trade war with China and the Trump administration’s responses to China’s rapid growth in technological power, one of the administration’s key objectives was to prevent theft of U.S. intellectual property by Chinese companies. Unsurprisingly, the conception of national security advanced by DOJ in Qualcomm aligns with that of the Trump administration, encompassing protection of federal agencies’ supply chains, cybersecurity, access by competitors to U.S. intellectual property, and global U.S. leadership in the telecommunications technology industry.

2. National Security’s Overriding Power in Antitrust Law

National security has also arisen as a primary doctrinal and policy consideration in antitrust cases, which overrides conventional antitrust values. First, within the U.S., national security concerns tend to prevail over antitrust law. This inclination towards national security concerns has long been reflected in U.S. foreign and economic policy, the political climate of the Cold War, and internal politics, specifically with regards to the relationship between DOJ and the State Department. During the Cold War, the National Security Council Planning Board’s investigation into the communist threat to national security delayed antitrust proceedings against United Fruit, and economic

---

\[\text{\textsuperscript{52}}\] Trump National Security Strategy, supra note 50, at 20.
\[\text{\textsuperscript{53}}\] Id. at 21.
\[\text{\textsuperscript{54}}\] Id. at 22.
\[\text{\textsuperscript{55}}\] Id. at 21-22.
\[\text{\textsuperscript{56}}\] United States’ Statement of Interest Concerning Qualcomm’s Motion for Partial Stay of Injunction Pending Appeal at 1–2 and 12, FTC v. Qualcomm, Inc., 935 F.3d 752 (9th Cir. 2019), (No. 19-16122) [hereinafter United States’ Statement of Interest].
development concerns in Central America informed and shaped subsequent antitrust enforcement and remedies.\textsuperscript{58} The development of an antitrust suit against Microsoft\textsuperscript{59} also illustrates the politicized nature of high-profile antitrust enforcement. The antitrust remedy against Microsoft was toned down in the aftermath of the September 11 attacks, which marked the transition in attitudes towards market concentrations between the Clinton and Bush administrations.\textsuperscript{60} The political nature of national security concerns and the high-profile nature of antitrust enforcement both have a tangible impact on enforcement decision-making, demonstrating the political process by which national security concerns end up shaping antitrust law and policy.

Second, national security plays an increasingly important role in the merger review process, most notably in the national security review of transnational mergers conducted by the Committee on Foreign Investment in the United States (CFIUS).\textsuperscript{61} An interagency committee, CFIUS comprises departments including the Department of the Treasury, DOJ, Department of Defense (DOD), and Department of Energy (DOE), and it has the authority to review transactions involving foreign entities that implicate U.S. national security. CFIUS is empowered to refer a transaction to the President, who may block the transaction where it threatens U.S. national security or direct the enforcement of appropriate relief.\textsuperscript{62} For example, in 2018, acting on the CFIUS recommendation that Broadcom’s proposed takeover of Qualcomm posed a risk to U.S. national security,\textsuperscript{63} President Trump issued an executive order prohibiting the proposed takeover.\textsuperscript{64} The national security risks identified by

\textsuperscript{60} Khula, supra note 57, at 674–75.
\textsuperscript{62} Defense Production Act, 50 U.S.C. §§ 721(d)(1), (3).
\textsuperscript{63} Letter from the Committee on Foreign Investment to Qualcomm Incorporated and Broadcom Incorporated (Mar. 5, 2018), https://www.sec.gov/Archives/edgar/data/804328/000110465918015036/a18-7296_7ex99d1.htm [hereinafter Letter from CFIUS to Qualcomm and Broadcom] [https://perma.cc/VS2H-RBDR].
\textsuperscript{64} Presidential Order Regarding the Proposed Takeover of Qualcomm Incorporated by Broadcom Limited, 83 Fed. Reg. 11631 (Mar. 15, 2018),
CFIUS included weakening of Qualcomm’s technological leadership and disruption of the U.S. supply chain.

National security concerns are also playing an increasingly important role in the merger review process conducted by FTC and DOJ. According to a joint statement issued in 2016, the Horizontal Merger Guidelines issued in 2010 are “sufficiently flexible to address the Department of Defense concerns that reductions in current or future competitors can adversely affect competition in the defense industry and thus, national security.” The joint statement places an emphasis on ensuring that mergers and acquisitions do not affect the competitive process and that there are sufficient competitors to ensure competition is robust in order to safeguard national security. In other words, it places importance on both market structure and the competitive process as crucial means of protecting national security. This stands in contrast to DOJ’s position in Qualcomm, where national security concerns are framed as an exception to antitrust principles.

Third, national security acts as an overriding consideration in the remedy stage of antitrust enforcement proceedings. The Supreme Court’s rulings in United States v. E.I. du Pont de Nemours & Co. and United States v. American Tobacco Co. opened the door for courts to take into account the “interest of the general public” when choosing between multiple effective remedies. Moreover, its ruling in Winter v. NRDC allowed future courts to weigh national security considerations as an aspect of the public interest in evaluating the propriety of the injunctive relief issued by the lower court. By analogy,
antitrust relief may be equally subject to public interest considerations in the
form of national security concerns.

B. Consumer Welfare

U.S. antitrust law has long embraced as its primary principle the
maximization of consumer welfare, achieved “when economic resources are
allocated to their best use, and when consumers are assured competitive price
and quality.”\(^7^2\) Competition is vital because it promotes consumer welfare by
driving prices down and quality up, and because it spurs innovation in
industrial sectors. The initial flourishing of antitrust law targeted large firms
that had acquired considerable market power and directly responded to public
fears of market concentration.\(^7^3\) In 1890, Congress enacted the Sherman Act to
“establish a regime of competition as the fundamental principle governing
commerce in [the U.S.].”\(^7^4\) While legislators were concerned with “competition
and economic efficiency”\(^7^5\) (referring to costs of production, competition,
capital, and corporate structuring), there are early references to notions of
consumer welfare and a distributive concern with the profits of producers vis-
à-vis costs to consumers and consumer prices.\(^7^6\) In a ruling from the 1960s, the

\(^7^2\) Rebel Oil Co. v. Atl. Richfield Co., 51 F.3d 1421, 1433 (9th Cir. 1995) (citation omitted);
see also Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 308 (3d Cir. 2007).
\(^7^3\) 21 CONG. REC. 2457 (1980) (Senator Sherman stating in a speech that “associated
enterprise and capital are not satisfied with partnerships and corporations competing with
each other, and have invented a new form of combination commonly called trusts, that seeks
to avoid competition by combining the controlling corporations, partnerships, and
individuals engaged in the same business, and placing the power and property of the
combination under the government of a few individuals and often under the control of a
single man called a trustee, a chairman, or a president. The sole object of such a combination
is to make competition impossible. It can control the market, raise or lower prices, as will
best promote its selfish interests, reduce prices in a particular locality and break down
competition and advance prices at will where competition does not exist.”).
The Supreme Court also stated that “[i]n enacting the Sherman Act … Congress mandated
competition as the polestar by which all must be guided in ordering their business affairs.”
Id. at 406.
\(^7^5\) Christine S. Wilson, Commissioner, Fed. Trade Comm’n, Welfare Standards Underlying
the George Mason University Law Review 22nd Annual Antitrust Symposium: Antitrust at
the Crossroads? (Feb. 15, 2019),
peech_-_cmr-wilson.pdf [https://perma.cc/66NL-W82F].
\(^7^6\) 21 CONG. REC., supra note 73, at 2457 (“This bill does not seek to cripple combinations of
capital and labor, the formation of partnerships or of corporations, but only to prevent and
control combinations made with a view to prevent competition, or for the restraint of trade,
Supreme Court emphasized that “competition is [the U.S.’s] fundamental national economic policy, offering as it does the only alternative to the cartelization or governmental regimentation of large portions of the economy.”

Academics and policymakers have reached a general consensus that the goal of antitrust law is the protection of consumer welfare,⁷⁷ and U.S. antitrust jurisprudence echoes this view.⁷⁸ Antitrust law pursues this goal by seeking immediate objectives such as protecting certain market structures or promoting the competitive process. Antitrust law also strives to protect and promote economic efficiency, which can be understood in terms of productive efficiency, allocative efficiency, and dynamic efficiency.⁷⁹ Anticompetitive practices “harm the competitive process and thereby harm consumers.”⁸¹ A practice may be considered anticompetitive by law when it “harms both allocative efficiency and raises the prices of goods above competitive levels or diminishes their quality.”⁸² Consumers can also be harmed by anticompetitive conduct that reduces output, limits consumer choice, or impedes innovation.⁸³

---

⁷⁹ Roger Blair & D. Daniel Sokol, The Rule of Reason and the Goals of Antitrust: An Economic Approach, 78 Antitrust L.J. 471, 480 (2012) (“[I]n surveying the Supreme Court’s modern opinions, a crystal clear identification of antitrust’s goal is as elusive as ever. In the most recent cases, the Court has shied away from some of its earlier misadventures, such as protecting small locally owned businesses. Instead, the remaining confusion is choosing between total welfare and consumer welfare as the central goal of antitrust. The Supreme Court seems to shift between consumer welfare and total welfare in determining reasonableness. Most of the Court’s opinions arguably favor consumer welfare. Even some opinions that explicitly cite Bork’s ‘consumer welfare’ principle, which actually means total welfare, focus on the impact on consumers, suggesting a perspective more consistent with consumer welfare than total welfare.”).
⁸⁰ Productive efficiency concerns the optimization of production such that goods are produced at the lowest cost. Allocative efficiency deals with the optimal allocation of goods and services in response to demand. Dynamic efficiency refers to the productive efficiency of an undertaking over time, i.e. whether an undertakinginnovates and thereby improves its efficiency.
⁸² Rebel Oil Co. v. Atl. Richfield Co., 51 F.3d 1421, 1433 (9th Cir. 1995).
Beyond consensus on consumer welfare as the bedrock principle of antitrust law, scholars and policymakers have been exploring the contestable nature and scope of this principle. Whereas Bork and Chicago School scholars initially understood consumer welfare to mean “Pareto efficiency,” or total welfare (e.g., the aggregate welfare of producers and consumers), scholars such as Hovenkamp suggest that consumer welfare, as commonly understood, involves high productive output, sustainable competition, and low prices. This necessarily includes the redistribution or reallocation of wealth from producers to consumers. The central difference between these two approaches to consumer welfare appears to be whether or not efficiency gains are passed onto consumers. While the approach of Bork and the Chicago School would involve trading off anticompetitive harms to consumers against efficiency gains of producers, Hovenkamp’s approach requires that efficiency gains are passed onto consumers. There are further disagreements as to whether consumer welfare should protect intermediate customers within a supply chain and whether and how the welfare of different groups of consumers could be traded off against one another. To date, there has been no clear or consistent judicial treatment of the concept of consumer welfare on either side of the Atlantic. Nonetheless, the concept is administered with ease, providing terminology and rhetoric with which anticompetitive conduct and theories of harm can be framed and evaluated by the courts.

The standard setting process exemplifies how antitrust law primarily functions to promote consumer welfare. In this process, competitors come

---


Hovenkamp, supra note 84, at 67 (“[T]he overall goal is clear ... to encourage markets in which output, measured by quantity, quality, or innovation, is as large as possible with sustainable competition.”).

Id. at 67.

Id. at 92 (“One significant advantage the consumer welfare principle [as defined by Hovenkamp] has over alternative approaches focused on general welfare is that it does not require a tradeoff between higher consumer prices and efficiency gains. Rather, if consumer prices are higher, or output lower, we condemn the practice, largely without regard for productive efficiency gains.”).


Id. at 142.

Wilson, supra note 75, at 5 (“The simplest version of the consumer welfare test is not a balancing test in the sense that one must attempt to measure and net out productive efficiency gains and allocative efficiency losses. If consumers are harmed by reduced output, decreased product quality, or higher prices resulting from the exercise of market power, then this result trumps any amount of offsetting gains to producers or others. In this sense, the consumer welfare test is easy to administer on a case-by-case basis.”).
together to agree on a common technological standard to the exclusion of other standards. On the one hand, this poses certain antitrust risks such as collusion, anticompetitive foreclosure, exclusion, limited innovation of alternative standards, and industry lock-in. On the other hand, standard setting is particularly crucial in markets with significant network effects, as it enables interoperability between different devices and technologies, provides a platform for follow-on innovation and development, reduces transaction costs, prevents consumer lock-in to a particular technology, and improves consumer choice. Given that standard setting normally implicates patented technologies, the process confers significant market power upon standard essential patents (SEP) holders. In order to avoid and safeguard against the patent hold-up problem whereby SEP holders leverage the standard essential nature of their patents to extract higher licensing fees with threat of injunction (or not disclosing the patent altogether during the standard setting process in a “patent ambush”), standard setting organizations (SSOs) often require commitments from patent holders to license their would-be SEPs on FRAND terms before their patents are incorporated into a standard. In this sense, FRAND terms and commitments offer an important safeguard against the risk of SEP holders abusing the additional market power conferred upon them by the standard setting process. Excess costs imposed upon standard implementors in the form of supra-FRAND royalties can be and are passed onto consumers, thereby neutralising the consumer welfare benefits brought about by the standard setting process.

For example the Blue-ray Disc storage format was developed by the Blue-ray Disc Association, an industry consortium including the likes of Panasonic, LG, Sony, Samsung, Dolby, Universal Studios Home Entertainment, and Walt Disney Company. Most of them are competitors of one another.


Kesana & Hayes, supra note 93, at 238.

Id. at 238.

FTC v. Qualcomm Inc., 411 F. Supp. 3d 658, 790 (N.D. Cal. 2019) (“These unreasonably high royalty rates raise costs to OEMs, and harm consumers because OEMs pass those costs along to consumers. Qualcomm’s unreasonably high royalty rates also prevent OEMs from investing in new handset features, which further harms consumers.”).
III. LESSONS FROM FTC v. QUALCOMM

Can national security and consumer welfare co-exist, or will they always come into conflict with one another? Does national security necessarily override consumer welfare when a conflict arises? We argue that a closer look at the ongoing FTC v. Qualcomm lawsuit is necessary to tackle such conflict of public interests. In this Part, we will first discuss how and why the district court’s ruling protects consumer welfare, then examine DOJ’s reliance on national security arguments in its request that the Ninth Circuit vacate the district court’s ruling.

A. FTC v. Qualcomm

Qualcomm is a leading chip manufacturer that invests in wireless technology innovation. It supplies, among other things, modem chips (baseband processors) to Original Equipment Manufacturers (OEMs) such as Samsung, Huawei, Blackberry, and Apple. In January 2017, the Federal Trade Commission (FTC) filed a complaint against Qualcomm with the District Court for the Northern District of California, alleging that Qualcomm’s patent licensing practices were anticompetitive and in violation of the Sherman Antitrust Act. This lawsuit by the U.S. government followed antitrust scrutiny of similar practices by Qualcomm in the European Union (EU), China, South Korea, and Taiwan.

---

* Id. at 669–70.
* Id. at 670.
* Id. at 669.
In May 2019, the district court ruled that Qualcomm had unlawfully secured, exploited, and consolidated its monopoly position in the global market for modem chips.\textsuperscript{101} The court found that Qualcomm had engaged in anticompetitive conduct by bundling supply of modem chips with patent licenses, refusing to deal, entering exclusive agreements, and setting monopolistic prices.\textsuperscript{102} Based on Qualcomm’s ongoing anticompetitive conduct and the likelihood of recurrence,\textsuperscript{103} the district court granted a permanent injunction requiring Qualcomm to remedy the committed antitrust violations and preventing the company from committing future antitrust violations.\textsuperscript{104} Specifically, the injunction enjoined Qualcomm from conditioning the supply of modem chips on patent licenses, required the bona fide negotiation and renegotiation of license terms with its customers, required Qualcomm to enter into exhaustive standard essential patent licenses on FRAND terms, and enjoined Qualcomm from entering into exclusive dealing agreements.\textsuperscript{105} The injunction thereby sought to protect consumer interests in the competitive process. Qualcomm subsequently appealed the decision to the Ninth Circuit.

B. The District Court’s Ruling in Relation to Consumer Welfare

1. The “No License, No Chips” Policy

The District Court for the Northern District of California found that Qualcomm engaged in anticompetitive behavior by implementing a “no license, no chips” policy under which it would only sell its modem chips to OEMs on the condition that the OEMs enter into separate patent license agreements with Qualcomm.\textsuperscript{106} The court found that Qualcomm implemented this policy in order to sidestep the patent exhaustion doctrine\textsuperscript{107} and sustain unreasonably high royalty rates over Qualcomm’s patents.\textsuperscript{108} On its own, Qualcomm’s monopoly in the modem chip market would not have been

\textsuperscript{101} FTC v. Qualcomm, 411 F. Supp. 3d at 658-659 and 812.
\textsuperscript{102} Id. at 681.
\textsuperscript{103} Id. at 816.
\textsuperscript{104} Id. at 820-24.
\textsuperscript{105} Id. at 820-22.
\textsuperscript{107} The patent exhaustion doctrine (also referred to as the first sale doctrine) limits the exclusive rights of a patent holder to exert control over individual items of a patented product by "exhausting" such rights after the sale of an individual item of a patented product. For example, a patent holder having sold a patented product to a user cannot subsequently bar that the user from selling it to another party.
\textsuperscript{108} Id.
problematic, as such monopoly rewards innovation that benefits consumers.\textsuperscript{109} However, the bundling of Qualcomm’s licenses with its monopoly in the modem chip market allowed Qualcomm to extract higher royalties for its SEPs.\textsuperscript{110} This, in turn, further excluded Qualcomm’s rival chip suppliers and consolidated its monopoly.\textsuperscript{111} Exercising its monopoly, Qualcomm coerced OEMs to enter into patent license agreements in various ways, including threatening to cut off supply or actually cutting off supply, refusing to provide samples of modem chips, and withholding technical support.\textsuperscript{112} Qualcomm also used rebates in the form of chip incentive funds to induce OEMs to enter into patent license agreements, thereby excluding competition from Qualcomm’s rivals.\textsuperscript{113} These license agreements included provisions requiring OEMs to cross-license patents to Qualcomm.\textsuperscript{114}

The district court ruled that the “no license, no chips” policy ultimately harmed consumer welfare.\textsuperscript{115} When Qualcomm enforced the policy against OEMs, it was effectively able to extract a reward for its patents twice—in claiming the sale price of chips and license fees of patents, and also in preventing sales of chips to unlicensed customers (thereby defeating the purpose of patent exhaustion).\textsuperscript{116} Furthermore, Qualcomm’s licensing policy had the effect of transferring the consideration for Qualcomm’s chips to the royalty payments for Qualcomm’s SEPs.\textsuperscript{117} This meant that the royalty rate reflected Qualcomm’s monopoly in the modem chip market, rather than the

\textsuperscript{110} Brief of Economics Scholars, supra note 109, at 6.
\textsuperscript{111} Id.; Brief of Intel Corporation as Amicus Curiae in Support of Appellee and Affirmance at 16, FTC v. Qualcomm, 935 F.3d 752 (2019) (“Linking modem chips and licenses is brazen coercion: Qualcomm uses its power over chips to manipulate chip and license prices to lock in monopoly profits in ways that competition ordinarily would contest. In particular, Qualcomm shifts part of its chip revenues into its royalty rates.”) [hereinafter Brief of Intel Corporation].
\textsuperscript{112} FTC v. Qualcomm, 411 F. Supp. 3d at 698.
\textsuperscript{113} Id.
\textsuperscript{114} Id.
\textsuperscript{115} Id. at 812.
\textsuperscript{116} Id. at 673, 777–78.
\textsuperscript{117} Brief of Intel Corporation, supra note 111, at 9, 17 (“Qualcomm distorts the competitive process in the chip market by manipulating the division of its price between these components. Qualcomm conditions its chip sales on paying royalties to Qualcomm on every handset, regardless of who supplies the chip inside... By moving its chip profits out of its chip price and into its royalty rate, Qualcomm [1] decreases the hardware price for its own chips and [2] increases the license price for all chips.”).
value of the licensed patents. Consequently, even where OEMs utilized rival chips, a portion of the royalties paid to Qualcomm under the SEP licenses incorporated the market value of Qualcomm’s chips, since the royalties reflected not only the value of the SEP license, but also Qualcomm's monopoly in the modem chip market. In other words, this surcharge meant that OEMs paid for Qualcomm’s chips even when utilizing rival chips. Additionally, in turning to rival chip suppliers, OEMs would risk losing the benefits of Qualcomm's rebates. In turn, OEMs, bearing unnecessarily high costs for purchasing chips, were forced to raise the prices of their products. Ultimately, consumers had to foot the bill for Qualcomm’s anticompetitive policy. But for such a policy, OEMs would have been able to purchase modem chips from Qualcomm’s competitors and freely use, sell, or otherwise dispose of the chips without the need to pay Qualcomm royalties. Therefore, the “no licence, no chips” policy harmed consumer welfare by hindering the ability of rival chip suppliers to compete against Qualcomm or to exert downward pressure on prices of Qualcomm chips.

2. Refusal to License

The district court found that Qualcomm stopped licensing its SEPs to rival modem chip suppliers because it was more lucrative to only license to OEMs and in doing so Qualcomm breached its FRAND commitments to two cellular SSOs. In addition, the district court found that Qualcomm breached its antitrust duty to deal by refusing to license rival chip suppliers. The court specifically highlighted that Qualcomm had previously supplied its rivals but subsequently refused to license with anticompetitive motivations, and that there existed market demand for licensing Qualcomm’s SEPs. Qualcomm’s conduct was exclusionary insofar as it prevented its rivals from manufacturing and selling their chips, within which Qualcomm’s SEPs were implemented, to OEMs. Qualcomm’s refusal to license SEPs exacerbated the effects of its “no license, no chips” policy, led to unreasonably high royalty rates and rebates, increased the cost of OEMs considering Qualcomm’s rivals, and acted as a barrier to entry against rival chip suppliers. Qualcomm’s exclusionary

---

118 FTC v. Qualcomm, 411 F. Supp. 3d at 773.
119 Brief of Economics Scholars, supra note 109, at 9, 12–13.
120 FTC v. Qualcomm, 411 F. Supp. 3d at 763–64.
121 Id. at 751–58.
122 Id. at 758–62.
123 Id. at 759–62.
124 Brief of Economics Scholars, supra note 109, at 21–22; Qualcomm, 411 F. Supp. 3d at
conduct “promoted rivals’ exit from the market, prevented rivals’ entry, and
delayed or hampered the entry and success of other rivals.”\(^\text{125}\) Accordingly, the
court held that Qualcomm breached both its FRAND commitments and its
antitrust duty to deal with rivals.\(^\text{126}\) Although the district court’s findings as to
the antitrust duty to deal was conceded by FTC and reversed on appeal, the
fact remains that Qualcomm’s breach of its FRAND commitments compounded the negative effects of its “no license, no chips” policy and
unreasonably high royalty rates.

FRAND commitments reflect and address the market power endowed
upon SEP holders and the lock-in effect on standard implementers when an
SEP is incorporated into a standard.\(^\text{127}\) As DOJ noted in 2015, “[t]he threat of exclusion from a market is a powerful weapon that can enable a patent holder to hold up implementers of a standard.”\(^\text{128}\) Similarly, in its initial complaint against Qualcomm, FTC pointed out that “[b]y making a FRAND commitment, a patent holder accepts the benefits of participating in standards development and of seeking incorporation of its patented technologies into a standard, but agrees in exchange not to exercise any market power resulting from its patents’ incorporation into that standard.”\(^\text{129}\) Qualcomm’s FRAND commitments were key to the inclusion of its patents into the standard and as a result, they induced industry reliance upon and investment in the development of two cellular standards.\(^\text{130}\) It is worth noting the district court’s finding that Qualcomm’s efforts to eliminate competing cellular standards through conditional rebates offered to Apple contributed to the eventual adoption of standards that were favorable to Qualcomm and which would eliminate competition.\(^\text{131}\) Accordingly, Qualcomm’s refusal to license SEPs exploited the market power conferred upon it by the standard setting process—

751–58.
\(^\text{125}\) Qualcomm, 411 F. Supp. 3d at 744, 803.
\(^\text{126}\) Microsoft Corp. v. Motorola Inc., 696 F.3d 872, 876 (9th Cir. 2012); Microsoft Corp. v.
Motorola Inc., 795 F.3d 1024, 1031 (9th Cir. 2015) (“SEP holder[s] cannot refuse a license
to a manufacturer who commits to paying the RAND rate.”).
\(^\text{127}\) Microsoft Corp., 696 F.3d at 876.
\(^\text{128}\) Response Letter from Renata B. Hesse, Acting Assistant Attorney General, DOJ Antitrust
Division, to Michael A Lindsay, on behalf of the Institute of Electrical and Electronics
electrical-and-electronics-engineers-incorporated [https://perma.cc/Y25X-B5LA].
\(^\text{129}\) FTC’s Complaint for Equitable Relief, FTC v. Qualcomm Inc., 411 F. Supp. 3d 658 (N.D.
Cal. 2019) (No. 17-CV-00220-LHK),
\(^\text{130}\) Brief of Economics Scholars, supra note 109, at 26–27; Herbert Hovenkamp, FRAND and
\(^\text{131}\) Qualcomm, 411 F. Supp. 3d at 798.
a market power that Qualcomm would not have obtained but for its FRAND commitments.

Qualcomm’s refusal to license SEPs reinforced its “no license, no chips” policy, blocking potentially strong rivals from ever entering the modem chip market and hampering those rivals already in the market. Qualcomm thereby stifled the competitive process and ultimately harmed consumers by limiting their choices. Qualcomm’s refusal to license its upstream rivals at the chip level meant that OEMs could not purchase rival chips but instead could only use Qualcomm’s SEPs. If OEMs were able to purchase chips sold by Qualcomm’s rivals, the sale would exhaust patent rights attached to the chip, and OEMs would be able to use Qualcomm’s SEPs without obtaining a license. Instead, OEMs had no option but to purchase an SEP license from Qualcomm. Qualcomm’s refusal to deal meant that OEMs had no countermeasures or workarounds for the “no license, no chips” policy, such as approaching a rival chip supplier. In this sense, refusing to deal allowed Qualcomm to leverage its SEPs (which are, by definition, essential to the telecommunication standard) to the market for modem chips, supporting its already dominant position in the chip market while raising the costs of rivals and OEMs. This anticompetitive foreclosure of potentially strong rivals further bolstered Qualcomm’s ability to charge unreasonably high royalty rates. Consumers paid more for mobile phones because OEMs passed on the increased costs to consumers. Consumers were also deprived of advanced mobile phones because competition to develop new technologies was stifled. Through unreasonably high royalty rates, Qualcomm extracted money from OEMs that OEMSs could have spent on research and development for consumers’ eventual benefit.

3. Unreasonably High Royalty Rates

The district court also held that Qualcomm maintained and leveraged its monopoly power by coercing OEMs to pay for its chips and patent licenses in a bundle and refusing to license its SEPs to rival chip suppliers.

---

132 Id. at 804.
133 Br. of Economics Scholars, supra note 109, at 23.
134 Id.
135 See e.g., Brief of Intel Corporation, supra note 111, at 28.
136 Qualcomm, 411 F. Supp. 3d at 751.
137 Id. at 790.
138 Id. at 798–801.
139 Id. at 751, 790.
140 Id. at 751.
Consequently, Qualcomm was able to charge unreasonably high royalty rates on any handset sale, even when that handset contained a rival chip supplier’s modem chip. According to the district court, Qualcomm’s royalty rate remained higher than other cellular SEP holders’ rates despite a decline in Qualcomm’s share of SEPs. The district court further found that royalty rates charged by Qualcomm for its SEPs to rival chip suppliers were sustained by Qualcomm’s chip market monopoly, not by the value of its patent portfolio. Contrary to other patent holders’ practices, Qualcomm refused to provide patent lists and patent claim charts during license negotiations. This practice imposed an artificial and anticompetitive surcharge on rivals’ modem chips, increasing their effective price and reducing rivals’ sales volumes and profit margins. Even when OEMs turned to rival chip suppliers, they still had to pay for Qualcomm’s SEP licenses, which were priced to reflect Qualcomm’s monopoly power, not the patent’s value per se. In some such cases, OEMs might have paid more for rivals’ chips than those supplied by Qualcomm. This price discrepancy forced OEMs to purchase chips from Qualcomm, which reduced the demand for rivals’ chips and even drove some rivals out of the market.

The anticompetitive surcharge combined with Qualcomm’s licensing practices severely limited both the ability of OEMs to purchase rivals’ chips and consumer access to new technologies. Moreover, rivals had little incentive and less revenue to develop new features for their chips. Even if OEMs or rival chip suppliers did develop new features, since Qualcomm’s royalties were calculated against the price of the handset, Qualcomm charged additional royalties on the value added by the new features where they contributed to the handset’s price (i.e. introducing new, value-enhancing features to handsets resulted in increased royalties payable to Qualcomm). The district court found that this method of royalty calculation was contrary to the patent rule of apportionment and that it acted as a further disincentive for OEMs to invest in R&D.

141 Id. at 744–51, 790–92.
142 Id. at 773.
143 Qualcomm, 411 F. Supp. 3d at 773–76.
144 Id. at 773.
145 Id. at 790–92.
146 Id. at 797.
147 Id. at 800.
148 Id. at 790.
149 Qualcomm, 411 F. Supp. 3d at 783.
150 Id.
151 Id. at 790.
Additionally, the suppression of rivals’ sales had the compounding effect of limiting rivals’ ability to engage in business development with OEMs, which would have given chip suppliers feedback to use to develop relevant new features and to generate sales.\textsuperscript{152} End consumers would also be less likely to consider products containing rivals’ chips which carried less advanced features or higher price.\textsuperscript{153} While Qualcomm relied upon its monopoly in the chip market to sustain the royalty rates of its SEPs which were bundled with its modem chips, the district court found that Qualcomm was aware that its modem chips did not contribute to the actual value of the devices sold to consumers downstream.\textsuperscript{154} The suppression of Qualcomm’s rivals’ sales meant that OEMs and end consumers lost the benefits of superior chips developed through product innovation and competition.\textsuperscript{155}

C. DOJ’s View on National Security

The district court’s ruling against Qualcomm triggered DOJ’s intervention on behalf of the U.S. government. DOJ requested that the Ninth Circuit vacate the district court’s injunction on the grounds that it was overly broad and excluded due consideration of public policy, including national security concerns.\textsuperscript{156} In support, DOJ cited public interest considerations including, \textit{inter alia}, national security.\textsuperscript{157} Relying on evidence from DOE and DOD, DOJ asserted that U.S. national security, leadership in 5G technology, and standard setting capabilities were threatened by the district court’s overly broad injunction.\textsuperscript{158} According to DOJ, the district court erred by refusing to

\textsuperscript{152} Id. at 801.
\textsuperscript{153} Id. at 792.
\textsuperscript{154} Id. at 780–83.
\textsuperscript{155} Qualcomm, 411 F. Supp. 3d at 800. ("Qualcomm’s suppression of rivals’ sales deprives rivals of revenue to invest in research and development and acquisitions to develop new technology, which prevents the emergence of new rivals, hampers rivals already in the market, and hinders the development of new technologies available to consumers.").
\textsuperscript{156} Brief of the U.S. as Amicus Curiae Supporting in Support of Appellant and Vacatur at 28-36, FTC v. Qualcomm, Inc., 935 F.3d 752 (9th Cir. 2020), (No. 19-16122) [hereinafter Brief of the United States].
\textsuperscript{157} Winter, 555 U.S. at 32–33; United States’ Statement of Interest at 12, FTC v. Qualcomm, Inc. 935 F.3d 752 (9th Cir. 2019), (No. 19-16122); Brief of the United States, \textit{supra} note 156, at 32.
\textsuperscript{158} Brief of the United States, \textit{supra} note 157, at 1, 31-33 ("[T]he [district court] should have considered whether the remedy would impair unduly Qualcomm’s ability to invest in R&D, to engage in standard-setting activities, or to supply the military and other national security actors."); United States’ Statement of Interest at 1, FTC v. Qualcomm, Inc. 935 F.3d 752 (9th Cir. 2019), (No. 19-16122), ("Immediate implementation of the remedy could put our nation’s security at risk, potentially undermining U.S. leadership in 5G technology and
hold an evidentiary hearing given that the injunction ran the risk of reducing competition and innovation in 5G and, as a consequence, harming U.S. national security. These arguments were subsequently endorsed and adopted by Qualcomm in its opening brief before the Ninth Circuit.

On the point of national security specifically, DOJ asserted that the district court rocked the foundation of Qualcomm’s longstanding licensing practices and, as a consequence, risked reducing substantial licensing revenue which could otherwise be invested for R&D to support national security. Simultaneously, the injunction could impair Qualcomm’s “ability to perform functions critical to national security,” disrupt the supply chain of federal government agencies, and damage U.S. 5G leadership. Qualcomm’s technological leadership and market competitiveness in 5G would be limited, which would also weaken U.S. national security.

DOJ vehemently opposed the district court’s pro-consumer welfare ruling, asserting that “U.S. leadership in 5G technology and standard setting is critical to national security.” The security of communications networks underpin the critical infrastructure of a country, including the operation of military bases and nuclear facilities. In other words, U.S. dominance over 5G technologies and standard setting are tied to U.S. national security and prosperity insofar as they are integral to U.S. wireless communications infrastructure. Furthermore, 5G infrastructure is expected to form the

standard-setting, which is vital to military readiness and other critical national interests.”

---

159 Brief of the United States, supra note 157, at 34–35.
160 Opening Brief for Appellant Qualcomm Incorporated at 121-25, FTC v. Qualcomm, Inc. 935 F.3d 752 (9th Cir. 2019) (No. 19-16122) [hereinafter Opening Brief for Qualcomm].
161 United States’ Statement of Interest at 12, FTC v. Qualcomm, Inc. 935 F.3d 752 (9th Cir. 2019), (No. 19-16122) (“The court’s remedy is intended to deprive, and risks depriving, Qualcomm of substantial licensing revenue that could otherwise fund time-sensitive R&D and that Qualcomm cannot recover later if it prevails.”); Opening Brief for Qualcomm, supra note 160, at 123–35 (“The United States understands that, aside from chips, Qualcomm is leading in the development of fundamental technologies underlying 5G standards and that development is dependent on Qualcomm’s licensing business.”).
162 United States’ Statement of Interest at 12-13, FTC v. Qualcomm, Inc. 935 F.3d 752 (9th Cir. 2019), (No. 19-16122).
163 Id.
164 Id. at 1–2.
165 Critical infrastructure is defined under Section 2(a)(6) of the Foreign Investment and National Security Act of 2007 to mean “systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems or assets would have a debilitating impact on national security.” 50 U.S.C. § 4565(a)(5).
backbone of the U.S. and global economy. It will provide the technological infrastructure for the digital economy and the foundation for new military applications, for which the U.S. will require an independent supplier uncontrolled by foreign governments. The operation of critical infrastructure, such as energy and nuclear infrastructure, rely on the secure, stable, and advanced transmission of a large volume of data, which 5G can support.

As 5G becomes increasingly important to U.S. communications networks and critical infrastructure, 5G infrastructure will also become increasingly susceptible to potentially malicious attacks by criminals, terrorists, and foreign adversaries who may seek to steal information for monetary gain, conduct cyberattacks in the form of military or industrial espionage, or disrupt public and private services. To the extent that communications networks are crucial to U.S. national security and industry leadership, it is in the highest national interest to have secure, reliable, and advanced 5G infrastructure deployed by a trustworthy source. Doing so would allow the U.S. to lead in global economic, political, and military competition.

DOJ has asserted the importance to U.S. national security of Qualcomm’s leadership in 5G technology and standard-setting. The U.S. and China have
been competing for leadership in 5G innovation.\textsuperscript{173} Qualcomm is the foremost 5G developer in the U.S. and is claimed by DOD to be “a global leader in the development and commercialization of foundational technologies and products used in mobile devices.”\textsuperscript{174} Being a trusted supplier not controlled by foreign governments, Qualcomm provides “mission-critical” telecommunication products and services to DOD and DOE.\textsuperscript{175} The latter noted in evidence that 5G technology is part of its plan “to provide an IT infrastructure now and in the future that is secure, innovative and sufficiently advanced to support all [its] needs,” and that Qualcomm’s chipsets are used in a variety of DOE’s wireless communications systems and infrastructure.\textsuperscript{176} Also noted was DOE’s concern that jeopardizing Qualcomm’s leadership in global 5G would risk foreign adversaries of the U.S. obtaining a controlling and influential position in the 5G standard-setting process and infrastructure.\textsuperscript{177}

The resulting interference with DOE’s main supplier would affect DOE’s other wireless products, including network equipment, broadband gateway equipment and consumer electronic devices. Qualcomm led the mobile revolution in digital communications technologies that underlie 2G Code Division Multiple Access (“CDMA”), Wideband CDMA for 3G, and Orthogonal Frequency Division Multiple Access 4GE LTE mobile networks. Qualcomm’s technological success and innovation is driven by its unmatched expertise and research and development (“R&D”) expenditure. Among semiconductor companies, Qualcomm typically ranks second (after Intel) in R&D expenditure. This expertise and R&D expenditure, in turn, drive U.S. leadership in key-standard setting bodies, and Qualcomm has been a leading participant in standards setting for 3G and 4G. These qualities have positioned Qualcomm as the current leading company in 5G technology development and standard setting.


\textsuperscript{174} Brief of the United States, \textit{supra} note 157, at 1; Declaration of Under Secretary of Defense for Acquisition and Sustainment Ellen M. Lord, \textit{FTC v. Qualcomm, Inc.}, 2, 935 F.3d 752 (9th Cir. 2019), No. 19-16122 [hereinafter Declaration of Department of Defense] (“Qualcomm is a global leader in the development and commercialization of foundational technologies and products used in mobile devices and other wireless products, including network equipment, broadband gateway equipment, and consumer electronic devices. Qualcomm has been a leading participant in standard setting for 3G and 4G. These qualities have positioned Qualcomm as the current leading company in 5G technology development and standard setting.”).

\textsuperscript{175} United States’ Statement of Interest at 12, \textit{FTC v. Qualcomm, Inc.}, 935 F.3d 752 (9th Cir. 2019), (No. 19-16122); Declaration of Department of Energy, \textit{supra} note 167; Declaration of Department of Defense, \textit{supra} note 174.

\textsuperscript{176} Declaration of Department of Energy, \textit{supra} note 167, at 4.

\textsuperscript{177} \textit{Id.} at 5 (“If Qualcomm is not able to compete and provide chipsets for those handsets, or fully engage in the standards process, foreign entities that may not support supply chain secure solutions may make irreversible gains in the chipset market and 5G standards”).
capabilities in relation to U.S. nuclear security and the protection of U.S. energy infrastructure. In addition to economic and industrial development, DOJ’s formulation of national security involves technological races and potential threats that might arise once a perceived rival attains control over critical infrastructure.

Similarly, national security risks highlighted by DOD included disruption to its supply chain and weakened U.S. leadership in 5G technology. DOD asserted that Qualcomm’s success is driven by its expertise and R&D spending, and its corresponding capabilities as a “supplier of mission-critical telecommunications products” benefits US national security. Much like DOE, DOD outlined its contractual relationship with Qualcomm on a number of projects, including 5G cybersecurity. Qualcomm’s role in DOD’s supply chain means that any impairment of Qualcomm’s ability to extract revenue and engage in R&D (such as the injunction ordered by the district court) in any way would threaten U.S. national security and DOD’s critical telecommunications systems. The envisioned risk to national security is further compounded by the foundational importance of 5G technology across various military applications, including “robotics, artificial intelligence, quantum computing, and a number of advanced sensing devices.” Overall, DOJ’s arguments appeared to be limited to a discussion of 5G. Crucially, the department named Huawei and China specifically when citing U.S. national security concerns regarding Chinese entities and cyber espionage.

DOJ’s arguments echo findings of CFIUS regarding the proposed takeover of Qualcomm by Broadcom in 2018. CFIUS concluded that the takeover would weaken Qualcomm’s leadership and influence in the 5G standard-setting process, thereby allowing foreign companies such as Huawei

\[\text{Id. at 5–6.}\]
\[\text{Id. at 3.}\]
\[\text{Id.}\]
\[\text{Id. at 7.}\]
\[\text{Id. at 4.}\]
\[\text{Declaration of Department of Defense, supra note 175, at 6 (“Given well-known U.S. national security concerns about Huawei and other Chinese telecommunications companies, a shift to Chinese dominance in 5G would have substantial negative national security consequences for the United States. Our main concerns include the possibility of cyber espionage, as Chinese laws require companies to support the national security goals of China’s intelligence community.”).}\]
to increase their dominance and influence.\footnote{Letter from CFIUS to Qualcomm and Broadcom, \textit{supra} note 63, at 2–3.} CFIUS determined that a shift toward Chinese leadership in 5G would have a negative impact on U.S. national security.\footnote{\textit{Id.} at 2 (“Reduction in Qualcomm’s long-term technological competitiveness and influence in standard setting would significantly impact U.S. national security. This is in large part because a weakening of Qualcomm’s position would leave an opening for China to expand its influence on the 5G standard-setting process. . . . Given well-known U.S. national security concerns about Huawei and other Chinese telecommunications companies, a shift to Chinese dominance in 5G would have substantial negative national security consequences for the United States.”).} Overall, DOJ, DOE, and DOD appear to equate U.S. 5G leadership with Qualcomm’s 5G leadership and are wary of being at the mercy of a non-U.S. supplier of 5G technology. There are national security concerns related to U.S. reliance on a foreign supplier, and DOJ views U.S. leadership as the alternative to such reliance. That being said, Qualcomm’s importance to U.S. 5G leadership and to DOE and DOD supply chains could be a consequence of Qualcomm’s own anticompetitive practices.\footnote{Brief of Amicus Curiae Professor Jorge L. Contreras in Support of Appellee and Affirmance at 25, FTC v. Qualcomm, Inc. 935 F.3d 752 (9th Cir. 2019), No. 19-16122 [hereinafter Brief of Professor Contreras] (“If Qualcomm’s role in the U.S. telecommunications supply chain today is ‘unique’, perhaps this is because. As found by the district court, Qualcomm has refused to license to rival modem chip suppliers”).} Insofar as national security involves technological, economic, and industrial development, the greater the potential of new technology, such as 5G, to bring about economic benefits to consumers, the greater the potential of that new technology implicating national security concerns.

D. The Ninth Circuit’s Ruling

In August 2019, the Ninth Circuit granted an order partially staying the provisions of the district court’s injunction outlined above.\footnote{FTC v. Qualcomm, 935 F.3d at 757.} The Ninth Circuit heard oral submissions in February 2020 and reversed the district court’s judgement in August 2020.\footnote{Brief of Professor Contreras at 996–1003.} The Ninth Circuit did not address the national security arguments raised by DOJ and instead focused much of its discussion on the antitrust analysis. In its ruling against FTC, the Ninth Circuit disagreed with the district court on a number of key points, including the antitrust legality of Qualcomm’s “no license, no chips” policy, refusal to license rival chipmakers, and unreasonably high royalty rates.\footnote{\textit{Id.} at 996–1003.} Further, the Ninth Circuit commented adversely on the district court’s partial summary judgment on
Qualcomm’s breach of its FRAND commitments as well as rejecting FTC’s alternative refusal to deal argument.\(^{192}\) It is our view that the Ninth Circuit’s ruling largely fails to account for consumer welfare considerations or even address the national security concerns raised by DOJ.

By focusing its analysis on the individual antitrust allegations, the Ninth Circuit failed to consider the holistic manner in which Qualcomm’s conduct caused anticompetitive harm to competitors and consumers alike. As a consequence, the discussion failed to consider the substantive impact of Qualcomm’s conduct on consumer welfare. The Ninth Circuit noted that Qualcomm’s practices were “chip supplier neutral” since OEMs paid the per-unit licensing royalty to Qualcomm, irrespective of whether the OEM sourced its chips from Qualcomm or Qualcomm’s competitors.\(^{193}\) This observation, however, is flawed. First, it disregards the fact that the licensing royalty for the SEP not only reflected Qualcomm’s SEP but also included the value of Qualcomm’s chips.\(^{194}\) Second, it is precisely the supplier-neutral nature of Qualcomm’s licensing royalty practice that resulted in OEMs paying for both the value of Qualcomm’s chips and the chips of Qualcomm’s rival chip suppliers whenever OEMs opted to source chips from rival suppliers. This is because OEMs had to pay for Qualcomm’s license (which incorporates the value of Qualcomm’s chips) no matter the actual chip supplier.\(^{195}\) Third, Qualcomm leveraged its monopoly in the market for modem chipsets to charge supra-FRAND royalties, which, when combined with the supplier-neutral nature of its practice, resulted in OEMs paying supra-FRAND rates even when opting to utilise rival chips. This practice hindered the ability of Qualcomm’s rivals to exert competitive pressure on Qualcomm by engaging in price competition. Qualcomm’s royalties were hence an anticompetitive surcharge on its rivals. Taken together, Qualcomm’s supposedly supplier-neutral practices are distortive of competition and the competitive process.\(^{196}\)

On the issue of the anticompetitive surcharge, the Ninth Circuit held that OEMs did not pay twice for Qualcomm’s licenses when rival chips were utilised.\(^{197}\) However, because the consideration for Qualcomm’s chips was transferred to Qualcomm’s licensing royalties for its SEPs, which were charged even where rival chips were utilised, OEMs paid twice for the value of the chips (both Qualcomm’s and the rival’s) and not for the value of the

\(^{192}\) Id. at 997.
\(^{193}\) Id. at 985.
\(^{194}\) Id. at 1000-1; see also Qualcomm Inc., 411 F. Supp. 3d at 773–76, 790–92.
\(^{195}\) Qualcomm Inc., 411 F. Supp. 3d at 698.
\(^{196}\) Id. at 797.
\(^{197}\) Qualcomm, 969 F.3d at 1000 ("OEMs do not pay twice for SEP licenses when they use non-Qualcomm modem chips.").
license. Plainly put, OEMs would feel the pain of Qualcomm’s royalties even if they utilised rival chips, which, as discussed above, significantly diminished the competitiveness of rival chip suppliers.

In the same vein, the Ninth Circuit failed to adequately address the knock-on effects of Qualcomm’s harm to OEMs on both consumer welfare and the ability of Qualcomm’s rivals to compete. Interestingly, at no point did FTC or the district court suggest that OEMs competed with Qualcomm, and as discussed above, the Ninth Circuit’s itemized approach overlooked the combined impact that Qualcomm’s policies had on its rivals. The Ninth Circuit stated, for example, that the antitrust injury caused by Qualcomm’s royalty rates was to OEMs and that since OEMs were Qualcomm’s customers, the harm fell outside the “area of effective competition.” At the same time, Qualcomm’s “no license, no chips” policy and breach of its FRAND commitments to license rivals meant that the harms to OEMs were eventually passed on to Qualcomm’s rivals.

The Ninth Circuit took the view that “even if Qualcomm’s practices are interrelated, actual or alleged harms to customers and consumers outside the relevant markets are beyond the scope of antitrust law.” While it may be true that the market definition process involves defining an undertaking’s competitors, that process also requires consideration of the actions that customers or consumers take in response to hypothetical price increases. Furthermore, if OEMs and end consumers of modem chips were outside the relevant market because neither was found to be a competitor, it is not clear how customers and consumers could ever fall within the relevant market and therefore be part of the antitrust calculus. It is also the nature of tying and bundling practices to leverage the dominance of an undertaking in one market to exert anticompetitive pressure in another market. Based on the Ninth Circuit’s assertion, one might conclude that customers and consumers are rarely, if ever, part of the antitrust calculus. The Ninth Circuit goes so far as to

198 Id. at 992 (finding that the district court’s ’analysis of Qualcomm’s business practices and their anticompetitive impact looked beyond [the market for CDMA modem chips and the market for premium LTE modem chips] to the much larger market of cellular services generally.”).
199 Id. at 985.
200 Id. at 999 (“[T]he primary harms the district court identified here were to the OEMs who agreed to pay Qualcomm’s royalty rates—that is, Qualcomm’s customers, not its competitors. These harms were thus located outside the ‘areas of effective competition’”).
201 Id. at 993.
critique the district court’s consideration of consumer welfare, finding that “a substantial portion of the district court’s ruling considered alleged economic harms to OEMs—who are Qualcomm’s customers, not its competitors—resulting in higher prices to consumers.” It did so when “[t]hese harms, even if real, are not ‘anticompetitive’ in the antitrust sense—at least not directly—because they do not involve restraints on trade or exclusionary conduct in the ‘area of effective competition.’” This is starkly at odds with the consumer welfare underpinnings of antitrust law as outlined in the preceding Sections.

Even if the antitrust analysis were to focus on the competitive process in isolation, that alone would not preclude consideration of Qualcomm’s conduct towards its customers insofar as that conduct had a knock-on impact on Qualcomm’s competitors. For example, the Ninth Circuit notes that “while Qualcomm’s policy toward OEMs is ‘no license, no chips’, its policy towards rival chipmakers could be characterized as ‘no license, no problem.’” However, as explained above, even though the “no license, no chips” policy was directed towards OEMs, that policy—in combination with Qualcomm’s refusal to supply rivals in breach of its FRAND commitments, and Qualcomm’s supra-FRAND rates reflecting the value of its chips and applied in a supplier neutral way—resulted in anticompetitive injury to Qualcomm’s rivals. The Ninth Circuit’s observations as to Qualcomm’s “no license, no problem” policy and supplier neutrality are somewhat misdirected. If anything, Qualcomm’s promises “not to assert its patents in exchange for [rivals] promising not to sell its chips to unlicensed OEMs” only served to reinforce its “no license, no chips” policy by foreclosing an alternative avenue for OEMs to obtain chips if they elected not to obtain a license from Qualcomm. This is because such an OEM would become an “unlicensed OEM” with whom Qualcomm’s rivals could not contract, lest they lose the benefit of Qualcomm’s “no license, no problem” policy. Likewise, market definition is but one part of the antitrust inquiry and should not preclude discussions of consumer welfare or theories of harm that involve injury to intermediate customers, especially when that injury has a knock-on effect on competitors and end consumers.

---

203 Qualcomm, 969 F.3d at 992.
204 Perhaps one way to reconcile the differing approaches of the district court and the Ninth Circuit is to view the Ninth Circuit’s conception of the “relevant market” as referring to the exercise of market definition and the district court’s conception to encompass the upstream and downstream market participants of a particular supply chain.
205 Qualcomm, 969 F.3d at 995.
206 Id. at 984.
207 Id. at 985.
For these reasons, the Ninth Circuit’s approach prevents proper consideration of consumer welfare, the competitive process, and the way in which both were harmed by the combination of Qualcomm's conduct. In its holding, the Ninth Circuit quoted the earlier Microsoft decision, a landmark antitrust case, relying on the passage that anticompetitive conduct “must harm the competitive process and thereby harm consumers.” Yet the approach ultimately taken by the Ninth Circuit was myopic at best, avoiding discussion of harm to consumers. In light of the above, it is difficult to comprehend the Ninth Circuit’s criticisms of the district court’s “consideration of anticompetitive impacts outside of the relevant markets” and why the Ninth Circuit’s approach bars discussion of antitrust injury to consumers and intermediate customers. To be sure, whether or not FTC met the evidentiary burden (direct or indirect) of showing anticompetitive harm is beyond the scope of this Article. Rather, the key observation is that the Ninth Circuit’s analysis precludes due consideration of consumer welfare alongside consideration of the competitive process.

Finally, the Ninth Circuit’s reversal of the district court’s partial summary judgment is at odds with the fact that FRAND commitments and standard setting are antitrust exceptions in the first place, laden with consumer welfare and innovation implications—as demonstrated by the Ninth Circuit’s somewhat inconsistent findings with the Third Circuit’s decision in Broadcom v. Qualcomm. Whereas the Ninth Circuit was swayed by a number of amicus curiae briefs and agreed that antitrust analysis is ill-suited to adjudicating FRAND-related disputes or issues preferring the remedies under contract or patent law, the Third Circuit adopted the view that breach of a FRAND commitment (albeit with intentional deception) constituted “actionable anticompetitive conduct.” The Third Circuit’s approach is arguably more reflective of the antitrust principles in the standard-setting context and the manner in which FRAND commitments can serve, or be exploited, to harm consumer welfare, competition, and innovation, as discussed elsewhere in this Article.

Similarly, European Union antitrust jurisprudence has been more...
willing to apply antitrust principles against SEP holders who refuse to license willing licensees on FRAND terms.  

At worst, Qualcomm appears to have acted in a deceptive manner by making and then violating its FRAND commitments, given that such commitments are by their very nature a pre-standard representation to an SSO to license an SEP on FRAND terms. At the very least, the district court’s findings indicate that Qualcomm engaged in a cynical and opportunistic breach of its FRAND commitments. Whether antitrust liability should extend beyond deceptive conduct in standard setting to opportunistic conduct taking place after standardisation is a matter for further debate. Nonetheless, if consumer welfare were the lodestar of antitrust law, it seems somewhat arbitrary to draw a line between intentionally deceptive conduct during standard setting and opportunistic breaches of FRAND commitments subsequent to standard setting, providing an antitrust remedy for one stakeholder but not the other.

As can be seen, the approach taken by the Ninth Circuit failed to adequately address the consumer welfare concerns raised. Further, in declining to address the national security arguments raised by DOJ, the Ninth Circuit did not engage in the competing consumer welfare and public interest considerations embedded within DOJ’s national security arguments.

In September 2020, FTC filed a petition for a rehearing en banc of the Ninth Circuit’s decision. In October 2020, the Ninth Circuit denied FTC’s petition. In March 2021, FTC announced that it would not pursue a further review of the Qualcomm case.

promoting competition among firms. . . . Private standard setting advances this goal on several levels. In the end-consumer market, standards that ensure the interoperability of products facilitate the sharing of information among purchasers of products from competing manufacturers, thereby enhancing the utility of all products and enlarging the overall consumer market.”

See, e.g., Case C-170/13 Huawei Technologies v ZTE, EU:C:2015:477.

Qualcomm, 411 F. Supp. 3d at 753 (“Qualcomm stopped licensing rival modem chip suppliers not because Qualcomm’s view of FRAND changed, but rather because Qualcomm determined that it was far more lucrative to license only OEMs.”).


FTC, Statement by Acting Chairwoman Rebecca Kelly Slaughter on Agency’s Decision not to Petition Supreme Court for Review of Qualcomm Case (Mar. 29, 2021),
E. Summary

There are a number of key lessons that can be gleaned from the Qualcomm case regardless of the final outcome and notwithstanding the Ninth Circuit’s failure to address the conflict between consumer welfare and national security that were reflected in oral and written arguments before it. First, harm to consumer welfare can be complex, involving knock-on effects from anticompetitive harm elsewhere along the supply chain. Second, harm to consumer welfare can arise out of a combination of conduct that is innocuous in isolation but harmful in combination. Third, consumer welfare involves consideration of price, choice, and access to technological advances that would have arisen but for anticompetitive injury. Fourth, national security involves technological, economic, and industrial development. Fifth, formulations of national security can involve competition for technological leadership and supply chain independence. Sixth, national security can be defined as consisting of hypothesized threats that may or may not arise once certain conditions are met (for example, a company of a rival nation state achieving perceived dominance in a new technology). Finally, the greater the potential of a new technology to bring about economic benefits to consumers and contribute to critical and enabling infrastructure (e.g. 5G and telecommunications), the greater the potential for that new technology to be implicated in national security narratives.

IV. Addressing the Conflict of Public Interests

The district court and DOJ presented substantive arguments defending consumer welfare and national security, respectively. How should courts weigh the conflict between these two public interests? Can national security concerns necessarily override consumer welfare interests in cases like FTC v. Qualcomm? Or, conversely, can consumer welfare interests fend off a focus on national security concerns?

Here, we explore the extent to which FTC v. Qualcomm sheds light on how courts should settle the conflict between these two public interests. We argue that because FRAND commitments and the standard setting process are intended to protect global consumer welfare, courts should apply a stringent standard when reviewing whether public interest in national security can prevail over public interest in global consumer welfare. To this end, we propose that courts should apply the strict scrutiny standard to conduct judicial

review when they are addressing the conflict between consumer welfare and national security.

A. Using Strict Scrutiny to Address the Conflict

1. Courts’ Approach to Strict Scrutiny

Under the U.S. Constitution, some rights and liberties such as the freedom of expression are so important that they are considered fundamental rights. Courts apply the strict scrutiny standard to guard against encroachments on a fundamental right by the government. When responding to judicial review, the government must demonstrate that it has a compelling interest to restrict that right, and that the restriction is narrowly tailored. Additionally, courts have also applied the strict scrutiny standard to safeguard citizens’ fundamental interests in equal protection and substantive due process mandated by the Fourteenth Amendment of the Constitution. Compared with rational basis review and intermediate scrutiny, strict scrutiny is the most stringent standard for judicial review.

Substantively, strict scrutiny is a two-prong standard. The first prong requires demonstration of a compelling governmental interest. Although the Supreme Court has not proffered a coherent definition of compelling interest.


See United States v. Virginia, 518 U.S. 515, 568 (1996) (Scalia, J., dissenting) (asserting that strict scrutiny should be applied to the deprivation of whatever sort of fundamental rights); Troxel v. Granville, 530 U.S. 57, 80 (2000) (Thomas, J., concurring) (pointing out that strict scrutiny is the “appropriate standard” for “infringements of fundamental rights”).

See Regents of the Univ. of Cal. v. Bakke, 438 U.S. 265, 357 (1978) (Brennan, J., concurring in the judgment and dissenting in part) (“[A] government practice or statute which restricts ‘fundamental rights’ . . . is to be subjected to ‘strict scrutiny’ and can be justified only if it furthers a compelling government purpose and, even then, only if no less restrictive alternative is available.”). Cf. Adam Winkler, Fundamentally Wrong About Fundamental Rights, 23 CONST. COMMENT. 227, 227 (2006) (“Fundamental rights do not trigger strict scrutiny, at least not all of the time.”).

Bakke, 438 U.S. at 357 (Brennan, J., concurring in the judgment and dissenting in part) (arguing that “a government practice or statute which restricts 'fundamental rights' or which contains 'suspect classifications' is to be subjected to 'strict scrutiny' and can be justified only if it furthers a compelling government purpose and, even then, only if no less restrictive alternative is available.”)

Bakke, 438 U.S. at 299 (Powell, J., plurality opinion) (“When [classifications] touch upon an individual’s race or ethnic background, he is entitled to a judicial determination that the burden he is asked to bear on that basis is precisely tailored to serve a compelling governmental interest.”).

this requirement only permits fundamental rights or interests to be sacrificed by the government if its interest is significant enough. A governmental interest is compelling, according to the Supreme Court, if it is “both constitutionally permissible and substantial” or the government “is pursuing a goal important enough to warrant use of a highly suspect tool.” Examples of compelling interests upheld by the Court include the protection of children from purported injury, the preservation of the lives of viable foetuses and the health of pregnant women, and the promotion of the diversity of a university student body.

The second prong of the strict scrutiny standard requires that a governmental action be narrowly tailed when promoting the governmental interest concerned. This prong substantively analyses the tension between the fundamental right triggered and the compelling governmental interest identified by triggering the “least restrictive alternative” requirement. A governmental action will be deemed as the least restrictive alternative if the government’s elected path caused the least harm to the citizen’s interest in the concerned fundamental rights.

Procedurally, the strict scrutiny standard places the burden of proving compelling interest and narrow tailoring on the government. This burden of proof is aimed at balancing the conflict between a societal interest that the government is advancing and a fundamental right or interest that affected citizens enjoy. Accordingly, the government must demonstrate that the societal interest is compelling enough to override an individual fundamental right or interest and that this interest has been overridden in the least restrictive manner.

See Roy G. Spece, Jr. & David Yokum, Scrutinizing Strict Scrutiny, 40 VT. L. REV. 285, 304 (2015) (arguing that “fundamental rights at least initially focus on individuals, and compelling interests generally speak to the good of society”).
The Supreme Court has given implied support to applying the strict scrutiny standard to review cases involving the conflict between national security and citizens’ fundamental interests such as freedom of expression. In *New York Times Co. v. United States*, the government sought to enjoin publication of documents critical of the “Viet Nam policy” on national security grounds. According to the Supreme Court, the government should “carry[y] a heavy burden of showing justification for” restraining freedom of expression. The government had failed to justify imposing restraints on publishing the study’s contents. Hence, the Court ruled that “[national] security’ is a broad, vague generality whose contours should not be invoked to abrogate the fundamental law embodied in the First Amendment. The guarding of military and diplomatic secrets at the expense of informed representative government provides no real security for our Republic.” This ruling demonstrates that the government cannot rely simply on national security as a sweeping legal principle to override freedom of expression. When disputes arise, courts should require the government to prove why national interest carries the overruling effect and the extent to which the government has taken least restrictive measures.

Could courts apply the strict scrutiny standard to address the conflict between national security and consumer welfare? The fundamental rights protected by a strict scrutiny standard reflect underlying individual interests that ought to be protected and valued. By extension, the strict scrutiny standard may be triggered by threats to consumer welfare that affect proprietary and privacy interests protected by those rights. For instance, antitrust law protects consumer welfare associated with proprietary interests in lower product prices and enhanced consumer choices. Antitrust law also would trench less deeply on constitutional rights but also be less effective in promoting their goals.”

---

236 *Id.* at 714.
237 *Id.* at 719 (Black, J., concurring).
238 FALLON, supra note 231, at 72 (“The Supreme Court developed the strict scrutiny test through a process of partly instrumental reasoning as a means of protecting fundamental rights or interests. In addition, application of the test requires courts to assess what is acceptable and unacceptable not only in light of the rights-generating interests that underwrite abstract rights, but also in light of competing governmental interests and contingently available alternative mechanisms for protecting those governmental interests.”).
239 Maureen K. Ohlhausen & Alexander P. Okuliar, *Competition, Consumer Protection, and the Right [Approach] to Privacy*, 80 ANTITRUST L.J. 121, 151 (arguing that “privacy issues may have some role in an antitrust analysis but that role must be consistent with the goal of antitrust, which is to promote economic efficiency that enhances consumer welfare”).
240 NCAA v. Bd. of Regents of the Univ. of Okla., 468 U.S. 85, 107 (1984) (acknowledging consumer welfare as the fundamental goal of antitrust and viewing restrictions on price and
promotes consumer welfare by maintaining a free and functioning market economy that is critical to the constitutional order in the U.S. For this purpose, antitrust law seeks to protect the constitutional right of market actors to operate free from private regulation that may be imposed by companies with dominant market positions.\textsuperscript{241} Given these considerations, consumer welfare should trigger judicial application of the strict scrutiny standard in national security cases.

2. Strict Scrutiny and \textit{FTC v. Qualcomm}

In this section, we consider how courts can apply the strict scrutiny standard to address the conflict between consumer welfare and national security. Protecting national security is a compelling governmental interest that can override consumer interest, as has been argued in submissions leading up to the Ninth Circuit hearing in \textit{Qualcomm}.\textsuperscript{242} The Supreme Court already regards national security as a public interest of “the highest order.”\textsuperscript{243} Given its supreme importance, the government has expanded the nature and scope of national security.\textsuperscript{244} Antitrust law has also embraced national security as a cardinal principle for reviewing merger deals and implementing antitrust decisions.\textsuperscript{245} To deal with cases like \textit{Qualcomm}, courts may rule that as long as the government can provide evidence to prove the immediate or imminent harm to national security as a compelling interest justifying its action, it would satisfy the first prong of the strict scrutiny standard.

However, judicial application of the second prong of the strict scrutiny standard—whether the government’s decision is narrowly tailored—is weighed most heavily. Courts should apply the “least restrictive alternative” test to the governmental action in question. Under this test, a governmental action is invalid if the government could have accomplished the same result through means inflicting lesser harm to protected rights.\textsuperscript{246}

With respect to \textit{FTC v. Qualcomm}, it can be argued that the U.S. government could have adopted narrower means of protecting national

\textsuperscript{241} See generally Thomas B. Nachbar, \textit{The Antitrust Constitution}, 99 IOWA L. REV. 57 (2013). The emphasis here, however, is not on consumer welfare.
\textsuperscript{242} \textit{FTC v. Qualcomm Inc.}, 969 F.3d 974 (9th Cir. 2020).
\textsuperscript{243} Trump v. Int’l Refugee Assistance Project, 137 S. Ct. 2080, 2088 (2017) (citation omitted); Holder v. Humanitarian L. Project, 561 U.S. 1, 28 (2010); Brief of the United States, \textit{supra} note 157, at 32.
\textsuperscript{244} See \textit{supra}, Part II.A.
\textsuperscript{245} See \textit{supra}, Part II.B.
\textsuperscript{246} See \textit{supra} notes 255–259 and accompanying text.
security, rather than broadly shielding Qualcomm’s anticompetitive exercise of its patent rights. The manner in which DOJ sought to protect national security by intervening in antitrust proceedings was questioned by FTC, which noted that the government and Congress had other alternative means of protecting the national interest. Specifically, FTC observed that the U.S. government had more legitimate means of pursuing an industrial policy of supporting national champions, such as by subsidizing Qualcomm. Certainly, the Trump administration has demonstrated that it has other means of addressing such national security concerns. These include revocation by FTC of a foreign entity’s license to operate within the U.S. or rejecting an application to do so; utilization of an export blacklist under the Export Administration Regulations; issuance of an executive order prohibiting U.S. companies from using or buying technology from foreign entities deemed to pose a national security risk; and actual designation of foreign entities as national security threats, thereby blocking U.S. firms from using those entities’

---

247 Brief of the Federal Trade Commission at 32–33, 106 n.34, FTC v. Qualcomm, Inc. 935 F.3d 752 (9th Cir. 2019) (No. 19–16122) (“The Sherman Act reflects Congress’s determination that competition serves the public interest, and it precludes inquiry into whether competition is good or bad in particular contexts. If preserving Qualcomm’s profits serves the national interest, Congress and the Executive Branch have ample means to pursue that policy – but that does not mean that Qualcomm should be given a license to continue violating the Sherman Act.”). FTC also noted at n. 34 that DOJ failed to notify the district court of its concerns at an appropriate time.

248 Id. at 107–08 (“[T]he antitrust laws are not an appropriate vehicle for “supporting national champions” or “enhancing national security.” Those may be laudable policy goals, but they should be pursued through other means. Here, for example, if legitimate national security objectives require subsidizing Qualcomm, Congress is free to do that – or even to exempt it from the antitrust laws. But an argument that free competition mandated by the Sherman Act would undermine other policy interests has no place in an antitrust enforcement proceeding.”)


products. Given the already concerted efforts to exclude Huawei from U.S. 5G networks, it is unclear why further intervention through the Qualcomm litigation would have been necessary or yielded any additional benefit. It is evident that there was an abundance of means of protecting national security that would have been less restrictive of consumer welfare and the competitive process within the United States. For this reason, however, DOJ’s intervention in this case was certainly not underinclusive or a narrow means of protecting national security.

Further, DOJ’s position seems to reflect the Trump administration’s broader industrial policy of protecting Qualcomm as a national champion at the expense of the competitive process and consumer welfare. A broad interpretation of national security may include industry leadership as a component, as was the case during the Cold War. However, this conception suggests that Qualcomm would lead the 5G space even with DOJ’s intervention. Nonetheless, it is not clear how DOJ’s intervention could be considered narrowly tailored given its failure to identify the specific elements of the injunction that threatened national security as well as Qualcomm’s role in 5G standard setting. DOJ thus failed to draw a connection between the two, or even to propose specific terms of a tailored injunction in oral argument before the Ninth Circuit. The speculative nature of DOJ’s arguments renders it overinclusive and disproportionate as it trades off actual harm to the competitive process and to consumer welfare against a speculative and remote national security risk. At the present stage, it is unclear whether the Biden administration will adopt this approach. On the one hand, the Trump administration’s protectionist approach was partly a function of the tensions between the United States and China, which remains fundamentally unchanged. On the other hand, there is an expectation that there would be tougher antitrust enforcement, particularly against Big Tech, under the Biden administration. How tougher antitrust enforcement might be reconciled with protectionist policies in the face of perceived threats to national security under the Biden administration remains to be seen, whether at the policy-making, prosecutorial or judicial levels.

---


253 Brief of Professor Contreras, supra note 188, at 30–33.

B. Applying Strict Scrutiny to Other Tech Wars

In this section, we examine how courts could apply the strict scrutiny standard to address other tech wars that have targeted companies such as TikTok and WeChat.

1. TikTok v. Trump

In September 2020, the U.S. Secretary of Commerce published a list of five prohibited transactions concerning ByteDance, TikTok’s parent company headquartered in Beijing, and its U.S. operations. The Secretary of Commerce alleged that the Chinese National Intelligence Law allows China’s intelligence institutions to control ByteDance’s facilities and equipment, thereby compelling ByteDance to cooperate with the relevant Chinese authorities irrespective of the location of its subsidiaries. Based on this allegation, the Secretary of Commerce determined that user information collected by TikTok would be susceptible to inquiries and requests by Chinese authorities. It then issued prohibitions, one of which bans “provision of services… to distribute or maintain the TikTok mobile application, constituent code, or application updates through an online mobile application store.” This prohibition would prevent TikTok from being downloaded or updated in the U.S.

In response, TikTok applied to the District Court for the District of Columbia for preliminary injunctive relief, arguing that the aforementioned prohibition violated the First Amendment to the U.S. Constitution and exceeded the President and the Secretary of Commerce’s authority under the International Emergency Economic Powers Act (IEEPA). In granting

---

257 U.S. Dep’t of Com., Memorandum for the Secretary, Proposed Prohibited Transactions Related to TikTok Pursuant to Executive Order 13942, ECF No. 22-1, 6–10, 19 (September 17, 2020).
258 Id. at 8–9.
259 Dep’t. Com. Identification of Prohibited Transactions, supra note 256, at 60062.
260 TikTok I, supra note 255, at 3.
261 International Emergency Economic Powers Act, 50 U.S.C. §§ 1701–08. Relying on power granted under the IEEPA, President Trump declared a national emergency relating to the
preliminary injunctive relief, the court applied the standard and structure of
analysis proffered by Winter v. National Resources Defence Council, Inc.\textsuperscript{262} The Winter ruling requires that, in order to prevail in a preliminary injunctive
relief application, the applicant must show (i) a likelihood of succeeding on
the merits; (ii) irreparable harm if an injunction is not issued; (iii) that the
balance of equities favours injunctive relief; (iv) and that injunctive relief is in
the public interest.\textsuperscript{263} Where the injunction is sought against the government,
the assessments of harm to the opposing party and public interest are
considered together.\textsuperscript{264}

The court ruled that the prohibition would inflict irreparable economic
and reputational harm on TikTok.\textsuperscript{265} The prohibition, according to the court,
exceeded the governmental powers granted by IEEPA, which placed two
limitations on the President’s authority in regulating or prohibiting the transfer
of information or personal communications.\textsuperscript{266} With respect to the first
limitation, the court found that TikTok users exchanged information or
informational materials, and accepted TikTok’s submissions that the content
exchanged was largely “publications, films,... photographs,... artworks,...
and news wire feeds.”\textsuperscript{267} Consequently, the prohibition would have limited the
ability of users to comment on posts and share their data through TikTok.

Although the court acknowledged the merits of the government’s national
security arguments that related to the dominance of a foreign government over
US data services, the court found no support for prohibition in the relevant

---

\textsuperscript{262} Winter, 555 U.S. at 20.

\textsuperscript{263} Id. at 20.


\textsuperscript{265} TikTok I, supra note 256, at 15.

\textsuperscript{266} Supra note 260, § 1702(b)(1), (3).

\textsuperscript{267} TikTok I, supra note 255, at 14 (citation omitted).

\textsuperscript{268} Id. at 16.
2021 GEORGETOWN LAW TECHNOLOGY REVIEW 105

statutes. On the second limitation, given that the prohibitions would affect the sharing of personal communications on TikTok, the court rejected the government’s arguments that content shared on TikTok could involve transfer of economic value.

As to the balance of equities and the public interest, the court ruled that the injunction would merely have ended an unlawful practice or rendered a proper interpretation of the IEEPA. In other words, neither an unlawful reading of the IEEPA nor an exceeding of relevant laws by government agencies could be deemed to serve the public interest. While acknowledging the national security threat posed by China, the court was not convinced that the government had provided sufficient evidence of the threat posed by TikTok specifically or the necessity and effectiveness of the prohibition. Therefore, the court granted a preliminary injunction against the prohibition in September 2020. Subsequently, the court made the same ruling against the government’s other prohibitions on TikTok in December 2020.

We recommend that the appellate court apply the strict scrutiny standard in conducting a full-scale review of the TikTok case if the government appeals. The strict scrutiny standard would provide a stronger legal basis for courts to better protect TikTok users’ interests. Similar to FTC v. Qualcomm, the TikTok case involves extensive consumer welfare, given that there are already more than 100 million TikTok users in the U.S. The appellate court may rely on consumer welfare to apply the strict scrutiny standard when reviewing the validity of the prohibitions in question. Given that the standard is intended to provide an enhanced protection of consumers’ interests, the court should vigilantly examine the extent to which consumer welfare may have been affected by the prohibitions. In the injunctive relief rulings, the district court recognized speech-related consumer welfare, as TikTok serves as a popular communications channel. However, TikTok actually implicates other aspects of consumer welfare. Through its gifting program, TikTok maintains property-related consumer welfare. It allows adult users to buy Coins and Gifts with monetary value, and then send Gifts to others or receive Gifts from others.

269 Id. at 18.
270 Id. at 20.
271 Id. at 25.
272 Id. at 24.
273 Id. at 26.
275 Id. at 5.
276 Deepak Kumar, All you need to know about TikTok Gifts, TikTok (Dec. 14, 2020), https://tiktoktip.com/tiktok-gifts/ [https://perma.cc/JZM7-PXSW].
Therefore, users have proprietary interests in those virtual assets. This gifting function is particularly important for TikTok influencers as they use the platform to make money.\textsuperscript{277} TikTok also implicates reputation-related consumer welfare. Users who are mostly social media influencers can create their reputation by disseminating different kinds of content to other users. Such reputation will gain them not only followers but also provide them with a social media vehicle for earning gifts and marketing products for themselves or companies.\textsuperscript{278}

The second prong of the strict scrutiny standard would allow the appellate court to invalidate the prohibitions if they are not narrowly tailored. As shown earlier, national security can pass the scrutiny of the first prong of the standard as a compelling reason for overriding consumer welfare. Under the second prong of the standard, the government also needs to prove that the prohibitions are narrowly tailored in a manner that there is no other viable alternative to the prohibitions. As the district court found in its injunctive relief ruling, the government “did not consider any alternatives before effectively banning TikTok from the United States, nor did [it] articulate any justifications (rational or otherwise) for failing to consider any such alternatives.”\textsuperscript{279} An obvious alternative, as the court pointed out, is to have a company that acquires TikTok’s business to host all user data with adequate security measures in the U.S.\textsuperscript{280}

While the second prong of the strict scrutiny standard would result in the same finding of alternatives, it would further require the government to choose an alternative causing the least harm to consumers. Therefore, the second prong empowers the appellate court to not only order the government to seek alternatives, but also set the bar higher for the finding of an alternative that can minimize its harm to consumer welfare. For example, the appellate court could inquire into whether it is necessary to force TikTok to sell its business to another U.S. company in order to have that company to maintain the safety of user data. If TikTok could develop a viable alternative that does not trigger the transfer of business ownership, yet adequately secures user data, that would cause the least harm to their users’ interests, given that such transfer might

\textsuperscript{277} Dougal Shaw, Does being 'TikTok famous' actually make you money?, BBC (Mar. 12, 2020), https://www.bbc.com/news/business-50987803 (“On established platforms like YouTube and Instagram, influencers have made millions through advertising revenue and paid promotions.”) [https://perma.cc/B4SC-JB4Y].


\textsuperscript{279} TikTok II, supra note 274, at 41.

\textsuperscript{280} Id. at 43.
undesirably alter the platform atmosphere. For instance, TikTok should be permitted to develop such a viable alternative by hosting all user data in the European Union or California and subjecting their data collection and usage to the regulation by the General Data Protection Regulation or the California Consumer Privacy Act, both of which are regarded as very stringent data protection law. Meanwhile, TikTok can further shield this new data storage scheme by allowing the relevant U.S. authorities to review how it collects and utilizes user data.

2. **WeChat v. Trump**

WeChat is a messaging and social media application developed by Tencent Holdings Ltd., which allows its over 1.2 billion users to “send messages, make video and audio calls, and send and receive money.” In the U.S., WeChat is particularly popular amongst the Chinese diaspora and Chinese speaking communities for *inter alia*, personal, commercial, religious, and political communications. Akin to the TikTok prohibitions, the U.S. government identified a series of prohibited transactions in September 2020, which would effectively ban WeChat’s operation in the U.S. Further, the government outlined “the threat to national security posed by China’s activities in the information-and-communications technology and services sectors” and in particular, by companies with potential ties to the Chinese government. The government further expressed concerns regarding Chinese companies supplying sensitive and critical infrastructure equipment and the ability of the Chinese government to perpetuate cyber-attacks, exercise control over critical communications infrastructure, or access sensitive information.

In response, U.S. WeChat users sought injunctive relief in the District Court for the Northern District of California, alleging that the WeChat prohibitions had violated, *inter alia*, the First and Fifth Amendment to the U.S. Constitution, and the Religious Freedom Restoration Act. The district court

---


283 *Id.* at 5.

284 *Id.* at 17; Dep’t of Com., *Identification of Prohibited Transactions*, supra note 261, at 60062.


286 *Id.*
applied the same standard and structure set out in the Winter ruling, but further highlighted that “a preliminary injunction may be appropriate when a movant raises ‘serious questions going to the merits’ of the case [a lower barrier than likelihood of success] and the ‘balance of hardships tips sharply in the plaintiff’s favor, provided that the other elements for relief are satisfied.’”

The district court granted a preliminary injunction, finding that the Plaintiffs had raised serious questions going to the merits of their claims and that the balance of equities fell in the Plaintiff’s favor. The court was sympathetic to the Plaintiff’s contention that the prohibited transactions would foreclose WeChat, a public square of sorts for the Chinese community in the U.S., which could not be substituted. This, therefore, amounted to censorship. The court was not satisfied that the prohibited transactions would survive the less rigorous immediate scrutiny standard, either. It ruled that that even if the WeChat prohibitions were content-neutral and did not reflect the government’s preferences or aversions, they would only survive immediate scrutiny if were narrowly tailored, served a significant governmental interest, and left open other communication channels. On that note, the district court concluded that the WeChat prohibitions were not narrowly tailored, “burden[ing] substantially more speech than is necessary to serve the government’s significant interest in national security.”

The court further found that the elimination of a platform for communication would result in irreparable harm and that both the balance of equities and the public interest (which are treated together where injunction is sought against the Government) favors the protection of the Plaintiffs’ First Amendment rights. While the district court acknowledged the considerable evidence demonstrating the national security threat posed by China generally, the court also noted the lack of sufficient evidence specific to WeChat. The court’s earlier conclusions as to the lack of narrow tailoring bore on its assessment of the public interest, which led it to rule that the WeChat prohibitions “burden[ed] substantially more speech than is necessary to further the government’s significant interest….”

---

287 Id. at 23.
288 Id. at 24 (citing All. for Wild Rockies v. Cottrell, 632 F.3d 1127, 1134–35 (9th Cir. 2011).
289 Id. at 216 (Censorship is a “prior restraint on their speech that does not survive strict scrutiny.’). See id. at 25.
290 Id. at 27.
291 Id. at 29.
292 Id. at 31 (“Without a stay… a ban of WeChat eliminates all meaningful access to communication in the plaintiffs’ community. The public interest favors the protection of the plaintiffs’ constitutional rights.”).
293 Id. at 32.
In our opinion, an appellate court should apply the strict scrutiny standard to examine the legality of the WeChat prohibitions if the government would appeal against the preliminary injunction. Akin to its application in the TikTok case, the standard would empower the appellate court to adequately protect consumer welfare related to WeChat usage.

First, the standard would enable the appellate court to protect aspects of consumer welfare beyond the free speech interest identified by the district court. Apart from its communications function, WeChat is also a digital platform that promotes users’ proprietary and reputational interests. For example, it offers digital payment function similar to PayPal and permits transfer of a limited amount of money between two users. It is also a social media platform where users can create special accounts to publicize their content and businesses. Therefore, the variegated aspects of consumer welfare that WeChat promotes would trigger the judicial application of strict scrutiny standard for the review of the prohibitions concerned.

Second, based on the narrow tailoring prong of the standard, the appellate court would examine the probability of finding alternatives to banning WeChat’s entire operation in the U.S. and choosing an alternative that would cause least harm to U.S. WeChat users. Similar to the TikTok case, alternatives to that overarching ban include requiring WeChat to store user data in the U.S. or elsewhere with stringent data protection law in exchange for WeChat’s retainment of business operation in the U.S. The court may further add the least harm requirement by ruling that a valid alternative must minimize its harm to consumer welfare that WeChat promotes in the U.S.

V. CONCLUSION

It is commonly said that technology is a double-edged sword. It can be used to promote consumer welfare and also pose unprecedented threats to national security. Conflicts between these two public interests will only occur more often as technology continues to drive economic growth.

Drawing on FTC v. Qualcomm, we have considered in this article the major legal and policy issues implicated in the conflict between these two public interests. We have offered a nuanced understanding of the shifting natures of both national security and consumer welfare. This nuanced understanding will help courts to better determine the nature and scope of national security and consumer welfare as disputes similar to FTC v. Qualcomm arise, as they are increasingly likely to do.

The strict scrutiny approach, as this article demonstrates, provides a solid legal basis for courts to deal with lawsuits involving conflicts of national security and consumer welfare. It would trigger both procedural and substantive reviews of the government’s claims over these two public
interests. With this approach, courts can join policymakers and legislators in fending off abuse of governmental power, thereby safeguarding the technology sector’s healthy competition and vibrant development.