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The Antitrust Problem of Zero-Rating

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If you live in the United States, you probably have never been faced with alarming messages regarding how much available data you have left in your mobile phone plan. A recent survey showed that 43% of Americans who own a smartphone have unlimited data plans with their mobile network operators (“MNOs”).¹ Users can send messages via iMessage or WhatsApp and post pictures on Instagram or Facebook without worrying about overriding their monthly data allowance.

The large number of American mobile phone subscribers with unlimited data plans is particularly interesting because the United States is at the top in terms of price per gigabyte. Whereas one gigabyte costs \$0.09 in India, the most affordable country, the same amount of data costs \$8.00 in the United States.² Even though the world has seen a drastic reduction in the cost of mobile data, consumers in the United States pay four times more for a gigabyte than the rest of the world.³ However, the United States is ranked 7th in GDP per capita (\$63,416.00), according to the World Bank, while India is ranked 128th (\$6,461.00). Generally, data in wealthy countries tend to be more expensive because the cost of operating a good quality network is higher.

In countries where the price per gigabyte is lower but the average income is also lower, a cellular data plan represents a more significant burden to an individual’s budget. It is also uncommon for users to be able to pay for unlimited data plans, which are typically the most expensive plans offered by a carrier. This is particularly true in developing countries. For example, Brazil is ranked among the top ten economies of the world, with a GDP per capita of around \$14,000, and a gigabyte costing around \$1.01. Nonetheless, only six percent of Brazilian cell phone users have an unlimited data plan. Most Brazilian customers have limited data plans: 40% have contracts that allow for up to 5GB of data and 10% use a prepaid service.⁴ In countries such as India and Brazil, in which the data unit is less expensive, but consumers are also less wealthy, schemes such as zero-rating play a crucial role.

Zero-rated web services are those that end users can access without having data withdrawn from their mobile plan allowances or data caps imposed by their telecom carriers.⁵ Telecom carriers know that consumers spend more data surfing specific web services than others. To attract more consumers, the carriers will offer such services at no charge for the consumers — that is, no data would be withdrawn from the consumers’ plan.⁶ This is particularly important —

¹ Alexander Kunst, *How Large Is Your Monthly Data Volume According to Your Main Smartphone Contract?*, STATISTA (Jan. 10, 2022).

² Carmen Ang, *What Does 1GB of Mobile Data Cost in Every Country?*, VISUAL CAPITALIST (July 3, 2020).

³ Philip Dampier, *Mobile Data Costs Plummet 88% in Five Years, U.S. Consumers Pay 4x More than Rest of the World*, STOP THE CAP! (May 4, 2021).

⁴ Alexander Kunst, *Mobile Data Plan in Brazil 2021*, STATISTA (May 18, 2022).

⁵ WIRELESS TELECOMM. BUREAU, FED. COMM. COMMISSION, *POLICY REVIEW OF MOBILE BROADBAND OPERATORS’ SPONSORED DATA OFFERINGS FOR ZERO-RATED CONTENT AND SERVICES 2* (2016).

⁶ Rebecca Curwin, *Unlimited Data, but a Limited Net: How Zero-Rated Partnerships Between Mobile Service Providers and Music-Streaming Apps Violate Net Neutrality*, 17 COLUM. SCI. TECH. L. REV., 222 (2015). (“Zero-rating presents a complex tradeoff for MNOs. On the one hand, zero-rating is advantageous for MNOs. MNOs hope that the zero-rated content will come with marketing benefits — the promotion of prominent companies such as Spotify — and

and attractive — to consumers who have a limited data plan. According to the FCC, “[a] zero-rated edge service therefore becomes more attractive to the consumer as compared to a non-zero-rated service, other factors held constant, because it costs less.”⁷ This paper explains why underserved countries and communities are more vulnerable to the adverse effects caused by zero-rating policies.

On October 4, 2021, Facebook, WhatsApp, and Instagram suffered a six-hour outage due to configuration changes in their routers,⁸ frustrating millions of users.⁹ I noticed during the blackout that my colleagues originally from developing countries — e.g., Colombia, India, the Philippines, and Brazil — were more affected than my peers from developed countries. It seemed that the latter could more quickly switch to a different messaging service (Signal, Telegram, iMessage) to reach their contacts, whereas the former were locked into WhatsApp. It was intriguing to see how global socioeconomic disparities could impact dependency on technological solutions offered by a single company.¹⁰

It is no coincidence that the population of poorer countries suffered greater adverse effects from the outage last October. For many people in those countries, Facebook is a synonym for the internet. This has to do with how people surf the internet and the cost of mobile data in developing countries. For example, a wide census conducted in Brazil in 2019 found that 83% of households have internet access.¹¹ More critically, 99.5% of those households used mobile phones as their primary form of internet access. Additionally, 95% of those polled stated that text messaging was their principal reason for accessing the internet. In a country where almost the entirety of the population is connected on mobile devices with the primary purpose of communicating with friends and family, it would be natural for mobile web services to play a crucial role in everyday lives.

Digital platforms know that developing countries — also known as the “Global South” — represent an immense business opportunity, with a massive potential user base. Because users access the internet with a mobile device, MNOs represent a gateway that controls prices and user behavior. The expansion of Big Tech to such markets without accountability has been dubbed “Digital Colonialism.”¹²

thereby induce users to initiate more profitable plans. Additionally, MNOs can use zero-rating to provide free content, which makes their networks more attractive to consumers.”).

⁷ WIRELESS TELECOMMUNICATIONS BUREAU, *supra* note 5, at 2.

⁸ Kim Lyons, *Facebook Has Finally Given a Reason for the Six-Hour Outage Monday*, VERGE (Oct. 4, 2021).

⁹ Josh Taylor, *Facebook Outage: What Went Wrong and Why Did It Take So Long to Fix After Social Media Platform Went Down?*, GUARDIAN (Oct. 5, 2021).

¹⁰ Nicole Froio, *When WhatsApp Went Down, Brazilian Workers’ Jobs Went With It*, VERGE (Oct. 19, 2021).

¹¹ INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE), *ACESSO À INTERNET E À TELEVISÃO E POSSE DE TELEFONE MÓVEL CELULAR PARA USO PESSOAL EM 2019*, (2019).

¹² Michael Kwet, *Digital Colonialism: US Empire and the New Imperialism in the Global South*, 60 RACE CLASS 3 (2019); Travis Waldron, *Facebook’s “Digital Colonialism” Made Monday’s Outage A Crisis For The World*, HUFFPOST (Oct. 6, 2021).

To reap benefits from such a large chunk of consumers, platforms offer “zero-rated web services.” Under a zero-rated contract between web services and broadband carriers, the carrier gets to offer their customers “free” access to the web service. The consumer does not spend any of their data while surfing the web service benefited from the contract. At a first glance, the zero-rating scheme may seem to only increase consumer welfare, because the consumer is receiving a “free” service. However, a closer investigation into the economics of zero-rating proves the contrary.

The total real cost of providing telecommunications services, holding usage constant, is of course no different under zero-rating. Therefore, if telecom carriers are competing on price and driving those prices down to costs, the total cost per user under a zero-rating agreement will not change (again, holding usage constant). Even while using zero-rated web services, users are still consuming data – and the cost of that data must be borne by someone. The costs for building infrastructure to deliver that same amount of data does not differ when the financial contract with the consumer changes.¹³ Without any changes, zero-rating is just a change from a small fixed fee and marginal price to a larger fixed fee and a zero marginal price. Why then are zero-rating contracts attractive to carriers, consumers, and digital platforms?

Both the user and the carrier are attracted to zero-rating because the digital business or platform provides a subsidy. The carrier is compensated directly by the web service out of its profits. The costs and benefits show up in the user’s phone bill as a lower monetary charge, but secondly through higher prices or lower quality for the web service. Why would the monopolist have to compensate the carrier? Because zero-rating raises the costs of the web service’s rivals, and the carrier is serving as an instrument to exclude competitors of the monopolist. This benefits the web service, and thus the carrier will be able to bargain for a share of the resulting monopoly profits. Likewise, some of those profits flow to the consumer in the form of lower cost data, so the consumer benefits in the telecom market. But the consumer may be harmed in the market now monopolized by the web service. This will manifest itself in lack of innovation and quality that would otherwise be present in a competitive market. Due to zero-rating contracts, the higher cost of the monopolized service is spread across all users of the service, including those that do not “benefit” from a zero-rating agreement between their carriers and the web service. Moreover, it can be said that those consumers who “benefit” from zero-rating agreements still pay for the service, but not necessarily in a monetary way: users are faced with lower quality, less innovation or can even pay in labor by watching ads shown by the zero-rated web service.

Under this scheme, the contract is profitable for the carrier and for the monopolist. The carrier gets compensated by the monopolist, and the monopolist gets help from the carrier in excluding rivals and raising their costs. Later, after the web service is dominant, it may not pay as large an amount to the carriers under the contract; yet the arrangement may still be appealing to the carrier because now the web service is an entrenched monopolist.

Note that this scheme can also help the carrier to exclude rivals. If the zero-rating contract is exclusive to a carrier and the web service has market power or is popular, then the contract will

¹³ Considering the comparing sites and web services are the same in terms of data intensity.

drive users to the carrier with the dominant platforms signed up with zero-rating. Rival carriers are effectively more expensive because accessing the platform through them does not come with a subsidy and will find it difficult to compete. Both the carrier and web service are in a position to gain, while the consumer is in a position to lose from the agreement between them.

The consumer usually contracts a mobile plan with the carrier in two different ways: either a limited or unlimited plan. Under a limited plan, the consumer is harmed by zero-rating because the carrier can charge more for the data used to access web services because it now has additional market power gained through the zero-rating contract. Under the unlimited plan, marginal costs to the consumer are lower but consumers also suffer from less competition in web services.

Only a few days before the outage, the Wall Street Journal published *The Facebook Files*. This series of articles exposed a pattern of conduct by Facebook under which it failed to avoid harm to its users, despite foreknowledge that its users would be negatively affected. The investigative series was based on information released by Frances Haugen, a former Facebook employer who blew the whistle on the company's misdeeds.¹⁴ Haugen has become an outspoken advocate for greater accountability and transparency in social media, particularly on Facebook. Coincidence or not, Haugen testified before Congress on October 5, 2021, a day after the widespread Facebook outage.¹⁵

More recently, Haugen touched upon the subject of zero-rating and its harms to users across the globe, particularly in poorer countries. In an event organized by the Competition and Markets Authority ("CMA") of the United Kingdom, Haugen stressed that Global South users are the most impacted by Facebook's misconduct. According to her, zero-rating is one of the main reasons for this harm: "Right now, the users who live in African countries, Southeast Asia, and South America often [] have no alternative to Facebook, even for basic internet. Facebook went into these countries and did something called zero-rating."¹⁶

In the countries mentioned above, the cell phone is the main gateway to the internet. Moreover, there is a lack of internet infrastructure – namely, wireless connection – and the cost of additional data represents a significant financial burden for the user. These conditions create an environment that is especially vulnerable to the anticompetitive effects of zero-rating. The web services that benefit from a zero-rating contract under such conditions effectively become a synonym for the internet. Facebook contracts with carriers so that its site is zero rated and others are not. The contracting web service is the internet. Add to that the fact that the two most common applications to benefit from zero-rating arrangements are exactly WhatsApp and

¹⁴ Jeff Horwitz, *The Facebook Whistleblower, Frances Haugen, Says She Wants to Fix the Company, Not Harm It*, WALL ST. J. (Oct. 3, 2021).

¹⁵ Frances Haugen, Opening Statement to Senate Committee on Commerce, Science & Transportation Subcommittee on Consumer Protection, Product Safety, and Data Security (Oct. 5, 2021), <https://www.franceshaugen.com/blog/b9xlswihkike7639nn4ie23odz9eqy>.

¹⁶ Competition Mkts. Authority, *Day 2: CMA Data, Technology and Analytics Conference 2022*, (June 16, 2022), https://www.youtube.com/watch?v=Iovsp5aHcuU&list=PLJREEEp2I-xckXW15O-_BELnqA0tf1bu-&index=2&t=22870s.

Facebook, and you understand why Meta is such a powerful player in less developed countries.¹⁷

In summary, zero-rating can have anticompetitive effects and contribute to the concentration in two markets, telecom and web services, reducing competition and reinforcing market positions. There are non-economic harms implicated as well when citizens do not have access to diverse sources of information.

A ban on zero-rating policies is the most suitable solution to promote a more competitive environment. Like "net neutrality," such a policy prevents the carrier from discriminating among different sources of content. Promoting a more competitive environment would also have ancillary benefits, such as reducing the spread of misinformation on a single platform.

I. Zero-Rating as an Antitrust Issue

It is also necessary to discuss how to address zero-rating from an antitrust policy perspective.

Zero-rating can be considered exclusionary conduct because it has the potential to foreclose the market for competitors by raising rivals' cost (RRC). Contrary to the paradigm of predatory pricing, "RCC produces profits to the strategizer immediately, and nothing so catastrophic as a firm's forced exit from the market need to happen."¹⁸ RRC is an umbrella term that provides a framework of analysis for several kinds of anticompetitive conduct, including tying arrangements, concerted refusals to deal, exclusive dealing and discriminatory pricing.¹⁹ The basic claim under the RRC framework of analysis is that a monopolist or dominant firm engaged in action that deprived competitors from accessing critical inputs or customers, "causing them to raise their prices or reduce their output, thereby allowing the excluding firm to profit by setting a supracompetitive price, with the effect of harming consumers."²⁰

Monopolist providers of web services have the incentive to raise rivals' costs. A dominant social media company or streaming service would rationally want to keep as much of the market as possible. Zero-rating is an appealing strategy to achieve such goal. A web service that is zero-rated by carriers will give that service a significant competitive advantage over services that are not part of zero-rated contracts. For example, zero-rated web services are usually the "default" services offered by carriers and may come pre-loaded in mobile phones. The user does not have to incur the costs of downloading an app to their new phone. As behavioral economics show, consumers are intensively drawn towards default options and are not prone to switch services

¹⁷ THOMAS LOHNINGER ET AL., *THE NET NEUTRALITY IN THE EU: EVALUATION OF THE FIRST TWO YEARS OF ENFORCEMENT* (2019).

¹⁸ HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* 350 (4th ed. 2011).

¹⁹ *Id.* at 351.

²⁰ Steven C. Salop, *The Raising Rivals' Cost Foreclosure Paradigm, Conditional Pricing Practices, and the Flawed Incremental Price-Cost Test*, 81 *ANTITRUST L. J.*, 376 (2017).

once they incur sunk costs.²¹ Most importantly, any rival web service comes with a marginal cost of consumption for the carrier's consumers while the zero-rated service is "free". Additionally, risk-averse consumers may prefer the certainty of "unlimited" access to a given web service.

In the context of zero-rating agreements, the analysis is harder to follow because customers will likely initially experience lower prices from the incumbent wireless carrier while the harm appears in a different market, the web service.²² A zero-rating strategy raises the investment necessary for a competing web service to effectively enter the market or gain consumers and grow. If the incumbent web service of a certain relevant market has a significant audience under zero-rating agreements with MNOs, the entrant will be forced to also seek similar agreements to effectively compete with the incumbent and expand its user base. A new web service provider will have to spend more resources to enter the market. However, if the incumbent contracts exclusively with the carrier, the entrant would have to compete to also contract exclusively with a competing MNO, which would certainly take more time and drain money from the entrant, possibly making entry unfeasible.

The previous point is also related to another harm arising from zero-rating: the higher usage costs imposed on users. Zero-rating reduces the incentives for a user to switch from the incumbent web service platform to an entrant that has a higher marginal price. This is because the user is not charged for the data necessary to navigate in the web services' platform due to the presence of zero-rating agreements, while they are charged to use the entrant.

Moreover, multihoming does not offer a suitable solution for the problem.²³ Users typically carry only one mobile device: they single-home. Their carrier, therefore, has a great deal of market power. Multihoming across web services is not viable because the web services are not competing on the same economic terms.²⁴

²¹ Maurice E. Stucke, *Behavioral Antitrust and Monopolization*, 8 J. COMPETITION L. ECONOMICS 545, 567 (2012). ("To lock-in consumers, monopolists, besides reducing interoperability, can remind consumers of their sunk costs, even though the consumer going forward would be better off opting out. The sunk cost fallacy magnifies the switching costs, thereby increasing the 'locked-in' effect and the level of price increases (or reduced quality of services) consumers will tolerate before switching to alternatives.").

²² Of course, the total amount collected from users must cover the incumbent's operating costs.

²³ An end user that connects to one or two sides of several platforms is said to "multihome." For example, an end user that has both a Facebook and Twitter profile is multihoming between different social media platforms. Rochet and Tirole explain the competitive impacts of multihoming using the example of credit cards: "Competitive prices on one market then depend on the extent of multihoming on the other side of the market. For example, when Visa reduces the (transaction proportional) charge paid by the merchants, merchants become more tempted to turn down the more costly Amex card as long as a large fraction of Amex customers also owns a Visa card. More generally, multihoming on one side intensifies price competition on the other side as platforms use low prices in an attempt to 'steer' end users on the latter side toward an exclusive relationship." Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-sided Markets*, 1 J. EUR. ECON. ASSOC. 990, 993 (2003). See also David S. Evans, *The Antitrust Economics of Multi-Sided Platforms Markets*, 20 YALE J. REG. 325 (2003).

²⁴ Consider a hypothetical. Facebook has a zero-rating agreement with AT&T, according to which the carriers' subscribers' access to Facebook is not charged from their data plans. Suppose that a new entrant attempts to enter the market for social media applications. The entrant also offers a zero-price platform, such as Facebook. However, the entrant does not have a zero-rating agreement in place. In the absence of unlimited data plans, users would have

A third possible harm associated with zero-rating is the resulting concentration of data and information on a single web service. It has been argued that companies like Google have the incentives and ability to “deny scale to its smaller competitors or potential competitors, not just gain scale for itself.”²⁵ The same can be said of the leaders in the markets for social media or music streaming. They wish to gather as much data as possible from as many users as possible. By employing zero-rating agreements, such web services engage in strategies capable of denying competitors access to a significant user base. As explained above, zero-rating forecloses the market and raise the switching costs to users. Thus, incumbents benefitting from zero-rating agreements can collect a larger amount of data, reinforcing feedback loops that makes the platform more attractive to customers and advertisers.²⁶

Zero-rating arrangements can also potentially be understood as a combination in restraint of trade. In these arrangements, broadband carriers and a web service contract to limit competition for the web service by leveraging the market power of the carrier. The main argument in favor of zero-rating is that it provides consumers with lower prices for telecom services in the short run. But the simplicity of this argument is misleading. We need to investigate what the price of data would have been in the absence of zero-rating practices under vibrant competition in telecommunications markets as well as quality and innovation in web services. A study conducted by Epicenter.works, a digital rights activist organization, conducted such an investigation and found that data prices decreased more in countries that did not have zero-rating offers between 2015 and 2016 than in countries that had such offers.²⁷

This should not be surprising. Zero-rating agreements have the effects of raising the prices for everybody – final users and competitors, in at least three ways. First, inefficient use of the limited mobile data available by the broadband provider. The “free” data under zero-rating could be better allocated by the user if not tied to a specific web service. Second, even under zero-rating, users ultimately pay higher prices because broadband providers must cover their costs and can pass those costs on to consumers. Third, zero-rating lowers entry and competition so prices are higher. In the absence of zero-rating (and preferred applications), all web services would be available on equal terms, and consumers would choose service based on price and quality. Providers would then need to lower prices per data or increase quality to compete for customers.

Therefore, antitrust enforcement against zero-rating should not be hidden behind the argument that zero-rating provides consumers with lower prices. A closer look at the dynamics of the market is sufficient to demonstrate that such argumentation is flawed, and consumers are

their data allowances charged when switching to a new platform. This would reduce the incentives for a user to multihome.

²⁵ Fiona M. Scott Morton & David C. Dinielli, Roadmap for a Monopolization Case Against Google Regarding the Search Market 46 (2020).

²⁶ *Id.* at 2. (“In economic terms, the increase in scale leads to an increase in quality, and the increase in quality leads to further increases in scale. And while this ‘feedback loop’ is playing itself out, of course, the engine becomes increasingly more attractive to advertisers and can charge increasingly high prices for advertisers.”).

²⁷ LOHNINGER ET AL., *supra* note 17, at 31. (“These markets [*in which zero-rating was introduced between 2015 and 2016*] showed a 1% price increase between 2016 and 2017, whereas markets without zero-rating in both cases showed a 10% price decrease.”).

paying higher costs as a result. The lack of competition in the markets for specific applications — such as social media — makes zero-rating pricing practices more appealing to dominant firms seeking to entrench their positions and foreclose the market for new rivals.

II. Net Neutrality and Zero-Rating

It is useful to think of zero-rating in the same framework as net neutrality. Net neutrality intends to address non-discriminatory access to content or services. Zero-rating goes directly against it. It effectively discriminates against social platforms that are not part of any arrangement with broadband providers. There is no space for zero-rating in a net neutrality context.

The *2015 Open Internet Order* (later revoked by the Federal Communications Commission in 2017), modified the 2010 Open Internet Order and classified internet service providers (ISP) as common carrier services under Title II of the Communications Act of 1934. As common carriers, ISPs would be subject to net neutrality principles: all data must be treated the same way, without any discrimination in favor of or against any specific content.

Zero-rating does exactly the opposite. Under zero-rating schemes, data flows are not neutral. By definition, the carrier has to know what a user is doing in order to exempt the data flows from the contract. Zero-rating means broadband providers or MNOs have the ability to exclude some web services from the end users' data allowances or caps. This enables broadband providers and telecom carriers to effectively discriminate against web services that do not have a zero-rating agreement with them. Here, the strategy is slightly different: instead of subjecting content to blocking, throttling, or paid prioritization, the necessary data for accessing a given application is simply not subtracted from a users' allowance.

Following the 2015 Order, a report released by Wireless Telecommunications Bureau (“WTB”) of the Federal Communications Commission (“FCC”) in 2017 reviewed sponsored data and zero-rating practices in the mobile broadband market.²⁸ In a letter penned to members of the United States Congress in January 2017, Tom Wheeler, chairman of the Federal Communications Commission (“FCC”) at the time, explained that the report “puts forward a draft framework for evaluating zero-rating offerings generally. It reaffirms that the core principles of consumer welfare and competition must be considered when determining whether an offering violates the general conduct standard.”

The *Policy Review of Mobile Broadband Operators' Sponsored Data Offerings for Zero-Rated Content and Services* (hereinafter “Policy Report”), conducted by the WTB, analyzed four different sponsored data plans in 2016: (1) T-Mobile Binge On, (2) AT&T Data Perks, (3) AT&T Sponsored Data and (4) Verizon FreeBee Data 360. The review was managed under the General Conduct Rule provided by the 2015 Open Internet Order.²⁹ The WTB evaluation

²⁸ WIRELESS TELECOMMUNICATIONS BUREAU, *supra* note 5.

²⁹ *Id.* at 10. (“The General Conduct Rule prohibits practices that unreasonably interfere with or unreasonably disadvantage end users' ability to select, access, and use broadband Internet access service or the lawful Internet

focused on potential harmful effects on consumers and competition in “downstream industry sectors that could result from upstream network operators’ unreasonably discriminating in favor of select downstream providers that are affiliates.”³⁰

The analysis of the four data programs found that T-Mobile’s Binge On and AT&T’s Data Perks did not discriminate against, unreasonably interfere with, or disadvantage any web service. Thus, no competitive concerns were raised in relation to those two programs. However, the analysis and conclusions for AT&T’s Sponsored Data and for Verizon’s FreeBee data plans were different because the carriers owned their own content.

The Sponsored Data program was designed by AT&T to allow third-party web services to deliver streaming content on a zero-rating basis to subscribers of AT&T’s mobile broadband plans. The Policy Report raised concerns related to AT&T’s possible discriminatory behavior towards third-parties in comparison to the conditions offered to its affiliate streaming service, DirecTV. The information gathered by the WTB supported the conclusion that AT&T’s arrangement would likely “obstruct competition for video programming services delivered over mobile Internet platforms and harm consumers by inhibiting unaffiliated edge providers’ ability to provide such service to AT&T’s wireless subscribers.”³¹

The WTB was principally concerned that unaffiliated third parties must pay to offer zero-rated streaming video programming to AT&T’s subscribers. On the other hand, AT&T would not incur any extra costs under this policy, because DirecTV is part of the company. The Policy Report then argued that AT&T’s treatment of third party providers imposed unreasonable disadvantages on competitors.³² Additionally, AT&T’s gatekeeper status, its ability to restrict web services from distributing their services by alternative means, and its incentive to disadvantage web services that compete head-to-head with affiliates in the downstream market gave rise to vertical competition concerns in this case.

The FCC’s concerns with Verizon’s program were similar. It stated, “[w]e are aware of no safeguards that would prevent Verizon from offering substantially more costly or restrictive terms to enable unaffiliated edge providers to offer services comparable to Verizon’s go90 on a zero-rated basis.”³³ The only caveat in Verizon’s case was that go90 was, at the time, a nascent service, offering a limited library of content to the subscribers, whereas AT&T’s DirecTV Now was a more established streaming service, potentially viewed by the demand side as a substitute to services such as Netflix and Hulu. Nonetheless, Verizon’s FreeBee data plan left room open for

content, applications, services, or devices of their choice, or that unreasonably interfere with or unreasonably disadvantage edge providers’ ability to make lawful content, applications, services, or devices available to end users.”).

³⁰ *Id.*

³¹ *Id.* at 13.

³² *Id.* at 16. (“All indications are that AT&T’s charges far exceed the costs AT&T incurs in providing the sponsored data service. Thus, it would appear the AT&T’s practices inflict significant unreasonable disadvantages on edge providers and unreasonably interfere with their ability to compete against AT&T’s affiliate, in violation of the General Conduct Rule.”).

³³ *Id.*

discriminatory conduct in favor of affiliated services in the downstream market.

As explained above, the Policy Report focused on zero-rating and data-sponsoring arrangements in which the broadband provider was affiliated in some level with the web service benefited from the agreement. That is, there was a vertical integration between the broadband and web service provider: they were not two separate and independent bodies. This paper, on the other hand, explores the zero-rating agreements in which the broadband and web service are not affiliated at all. Their cooperation under a zero-rating agreement is reached on the basis of a business transaction in which both sides seek to increase their benefits. Telecom carriers that provide zero-rated access to messaging apps, social media platforms, or specific streaming services are examples of this type of arrangement.

III. Non-Economic Harms from Zero-Rating

Zero-rating is also capable of causing non-economic harms to consumers. As previously shown, the populations of poorer countries are more often subject to the undesirable effects of zero-rating policies. It is important to mention that the internet in such countries is accessed mostly via mobile devices.

Social media platforms have become the primary source of news for many users. Facebook and WhatsApp are the most widely adopted, and are a fertile ground for the dissemination of fake news.³⁴ If a user cannot afford the mobile data necessary to access verified news sources, the user will only have access to news shared on platforms that do not charge for mobile data.³⁵ Platforms that do not invest in real news, but instead use algorithms to disseminate information, will have lower costs that allow them to outbid news-providing rivals for the zero-rated position. The issue of misinformation is not exclusive to poorer countries. The United States has also suffered from the dissemination of fake news through social media platforms, particularly during elections cycles. Zero-rating arrangements have the potential to amplify this problem.

The simplest scenario is when a specific carrier could create a specific basket of web services and offer them to their users on a zero-rated basis. The first solution a regulator might consider is to demand that such baskets must include entrant platforms and not only the incumbents. For instance, if the carrier wants to zero rate WhatsApp, it should also include another alternative, such as Signal. This would potentially reduce the barriers to entry in each market, severing the feedback loop that helps incumbent platforms to entrench their dominant positions. The task of identifying entrants up front and protecting them is quite challenging, however.

³⁴ Luca Belli, *WhatsApp Skewed Brazilian Election, Showing Social Media's Danger to Democracy*, CONVERSATION (Dec. 5, 2018).

³⁵ Laila Lorenzon, *The High Cost of "Free" Data: Zero-Rating and Its Impacts on Disinformation in Brazil*, DATA-POP ALLIANCE (Dec. 9, 2021).

During her presentation at the CMA, Frances Haugen offered two possible solutions to combat the anticompetitive effects of zero-rating: mandating that it be offered in a consortium structure, or eliminating it completely. Both propositions deserve a closer look.

First, a consortium is an agreement between several players in the market to achieve a common objective. Broadband providers and telecom carriers could come to an agreement over zero-rated applications across the market. All providers would carry the most popular platforms (WhatsApp, Facebook, Spotify); in a sense, this package of applications would become the standard for the industry. The carriers would then compete on providing additional zero-rated platforms. For example, Verizon could offer the standard package plus an additional messaging app, whereas T-Mobile would offer an additional streaming service. The competition would shift to the additional service, fostering the entrance of new web service providers in the market.

The fundamental idea of the consortium is to level the playing field between telecom services as well as among web services. But a contract leveling the playing field is also a contract lessening competition, so a competition issue can arise when the players involved in the consortium are competitors. In such instances, it is also possible that the consortium will lead to collusion that violates the antitrust laws.

Telecom companies pursuing this approach may want to seek preclearance from the relevant antitrust authority to avoid the risk of incurring antitrust liability. In the United States, firms can submit a request for a Business Review Letter from the Antitrust Division of the Department of Justice. Pursuant to 28 C.F.R. §50.6, the procedure provides a means for businesses to determine how the Antitrust Division may respond to a given course of business conduct. The process provides the interested companies with more certain information on how the Antitrust Division would react to the business practices, potentially avoiding lawsuits or other legal actions.

Second, a total ban of zero-rating is a simple and feasible remedy to promptly address the antitrust problems arising from the practice of zero-rating. The ability of web service incumbents to raise rivals' cost would be considerably diminished. A total ban on zero-rating would restore competition on the merits for services such as social media, music streaming, or other platforms that take advantage of the current zero-rating arrangements. Telecom carriers could not seek advantage against their own rivals by sharing in the profits of web services. The behavior of users would also be affected. The default behavior of the users would change because they would not feel compelled to use zero-rated applications. Additionally, there would be collateral non-economic benefits, as discussed above. In the absence of zero-rating, consumers would not feel the need to access news from a single and unreliable source.

This paper argues that given the competition risks of a consortium and the difficulty of regulating exactly which services should have permission to be zero-rated, the best policy is to ban zero-rating as an industry practice. As explained above, zero-rating produces undesirable

anticompetitive and non-economic harms. The resulting concentrated markets with high barriers to entry represent a significant harm to a population that uses mobile communications apps as its primary (if not only) mean of internet access. Banning zero-rating is the appropriate remedy to tackle such issues.

IV. Conclusion

Zero-rating is an effective tool for dominant platforms to impose anticompetitive effects in the market, hurting competition and reducing users' choices. Zero-rating contributes to the concentration of data, reducing competition and reinforcing dominant market positions. Banning zero-rating would promote a more competitive environment and would also have ancillary and non-economic benefits, such as reducing misinformation spread on a single social media platform.

A level playing field is essential to promote a competitive environment. Right now, there is no level playing field in social media. The field has been tilted towards dominant web services, and zero-rating contributes to this problem. Eliminating zero-rating or considering such a policy should be on the agenda of antitrust enforcers to promote a more competitive environment for firms in the market and provide a more inviting setting for new entrants.