Economy versus Equality: The Fight over Network Neutrality

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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The idea of network neutrality was proposed by Tim Wu (2003). It means that internet service providers should treat all internet traffics equally, without blocking or throttling data based on its type or information. In the context of U.S. politics, this idea is mostly represented in reclassifying broadband under Title II (Staff, 2015) as "common carrier services," giving the Federal Communications Commission (FCC) power to regulate Internet service providers (ISP). Companies, public figures, and social activists have fought for and against this rule over the last few years. Both proponents and opponents of network neutrality had gained some success. How both sides advanced their respective agendas could offer useful lessons in analogous struggles, for example in the service economy (Iversen and Wren 1997). Both sides used appealing claims and academic studies to sway public opinions, and involved in the legislative process to solidify their preferred rules.

Review of Research

Plenty of research has focused on the methodologies and effects of social groups and corporates pushing for agenda in U.S. politics. In a democratic environment, the methods generally revolve around gathering support from the public and establishing good relationships with policymakers.

Working with policymakers involves lobbying and supporting them with campaigns. Hill et al (2013) found that firms "utilize both lobbying and campaign contribution channels to influence the political climate affecting the firm." Each campaign is an attempt in building a good public image of a preferred politician. The effects of lobbying are not clear. Besley and Coate (2001) concluded that lobbying has "little effect on policy outcomes," in part because voters can exert counteracting pressure. In a review of 38 case studies, however, Yackee (2015) found that lobbying is “associated with greater regulatory policy change.”

Backed by public opinions is also important. Kimmelman claimed that “a diversity of stakeholders” is critical in sustained victory (Holt, 2016). Pickard (2015) mirrored this discovery in a study on the failure of the American Reform Movement in the 1940s. He concluded that “media reformers must continuously cultivate a strong inside/outside coordination between progressive policymakers and grassroots social movements.” As part of establishing public image, Dunbar-Hester (2014) found “the FCC has a long history of embedding affairs that are in its purview within the seemingly neutral expert and technocratic framings.” This is because experts and technical terms are less susceptible to attacks and more convincing.

Kimmelman made a similar comment that activists’ groups “need legitimacy to be listened to … it comes from having the facts right.” (Holt, 2016) One would associate legitimacy and trustworthy facts with academic research from prestigious schools or professors. Frieden found disappointingly that “both tenured and tenure track professors eschew policy advocacy, largely because such efforts have little influence … (and) limited recognition as academic contributions.” (2008)

Taking a Stance

Social groups used public statements, letters, or videos to broadcast their core values. This simple step in publicity shows support for an ideology, makes it easier to understand the guiding principle behind each decision, or even attracts the public to act in some cases.

As proponents of network neutrality, internet application companies, led by Amazon, collectively wrote a letter to FCC asking for rules against “blocking, discrimination, and paid prioritization, and make the market … more transparent.” (Amazon et al., 2014) No blocking or discrimination is the epitome of the open Internet these companies are built upon. Later when FCC repealed net neutrality regulations in 2017, representatives of many internet application companies made public statements condemning the decision (Wattles, 2017).

Seemingly irrelevant advocacy groups also expressed their position on the issue. Taxpayers Protection Alliance made a public statement condemning Title II as “a solution in search of a problem” and “nothing more than this generation’s Y2K faux hysteria.” (Morgan, 2020) Civil rights groups led by Multicultural Media, Telecom, and Internet Council (MMTC) wrote a joint letter expressing their support for an open internet and asking for legislative measures (Keenan, 2017). These groups expressing their values may not have a substantial impact, but it shows the government officials that there is public support for a certain policy.

The main opponents of net neutrality, ISP members of Broadband for America also released their commitment to “an open internet” in the same year (AT&T et al. 2017). They specified their interpretation of open internet as “no blocking of legal content, no throttling, no unfair discrimination, transparency in our customer practices.” It mirrors the demand outlined by the internet application companies, but with slightly different utterances that permits offering different internet speeds based on price. The free and open internet is an idea sought after by consumers. By suggesting they support the same idea, while implicitly adhering to their pursuit of discriminated lanes, ISPs established that their goals do not contradict the essential public demand, yet strive to make the internet better.

Public figures also make comments on the issue, usually gaining media attention and public responses. The late-night comedian John Oliver (2014; 2017) made two videos expressing his support for net neutrality and invited his viewers to make comments on FCC’s website to support the bill. After the second video, FCC's comment system was shut down because of the "spike in traffic." FCC claimed the system was subject to an "orchestrated denial-of-service attack." (Lecher, 2017) The public exhibited passionate advocacy for net neutrality, and want their voice to be heard. Some have deployed bots to spam the same messages. By the end of 2017, FCC received about 23 million comments about net neutrality, albeit with only 6 percent being unique comments (Lapowsky, 2017).

President Obama (2014) posted a video on YouTube urging FCC "to do everything they can to protect net neutrality." In that video, he quoted the same demands by the internet application companies: "no blocking, no throttling, increased transparency, no paid prioritization." More significant figures taking a strong stance could push policy-making. The new FCC chairman in 2014, Tom Wheeler, made the comment that "net neutrality can't be made subject to the 'marketplace.'" (Hiltzik, 2014) In the next year, he passed the Title II regulations. Ajit Pai (2018), the current FCC chairman, also made a public statement, after repealing the net neutrality regulations in 2017. The first sentence in his statement is "I support a free and open internet." As an opponent of net neutrality, Pai's claim mirrored ISPs' with a similar intention. Later, he also condemned that Title II is based on "hypothetical harms and hysterical prophecies of doom" (Pai, 2017) and "a big government solution in search of a problem." (Reardon, 2019)

Substantiating Benefits

To convince the public that their policy is the better option, opponents of net neutrality presented deficiency in Title II regulation and specific benefits of their plan, basing evidence from social and economic research.

As the primary opponent of net neutrality and the chairman of FCC who repealed the Title II Order, Ajit Pai (2017) has made many remarks about the flaws of Title II. He stated that during the two years after Title II, "broadband capital expenditures decreased by 5.6%...is extremely unusual." He explained this decrease with a simple logic – "The more heavily you regulate something, the less of it you're likely to get." He also claimed that Title II would hurt smaller companies, quoting testimonies from 22 small ISPs financially suffering from the Order, who are "critical to…a more competitive broadband marketplace." He explained that heavy regulations such as Title II impose a higher barrier of entry because of an imposed need for lawyers. This leads to his conclusion that repealing Title II will incentivize more investment in the industry, therefore "bring high-speed Internet access to more Americans," "create jobs," and "boost competition" within the industry.

Researchers later have presented numbers to verify Pai's claims on economics. Free State Foundation ("Broadband Investment", 2017) found a deficiency of $5.6 billion dollars between estimated and actual broadband investment in the first year Title II was in effect. Cooper (2020) recorded the growth in wireless industry investment from $25.6 billion to $29.1 billion in two years, crediting it to "(FCC) wisely voting to stay the course on its free market and light-touch policy." Brake (2017) compared two studies from pro and anti-Title II groups, controlling for "external factors that have nothing to do with Title II," and arrived at a conclusion that broadband investment decreased by 2-3 percent after Title II. This piece of analysis is particularly interesting. The selected studies from the two groups are conducted on the same dataset, yet they reach completely opposite conclusions. Brake shows that by altering the assumptions and control variables, one could reach the desired result. There are many factors contributing to a change in investment, and the reported data cannot show what they are or how much they change the numbers. Careful studies will present their results based on a set of assumptions, yet how well those assumptions are met is usually debatable. Therefore, it is hard to reach a definitive conclusion on how regulation could impact investment by studying the reported data.

Economists have argued that net neutrality is not well supported by economic analysis and principles. Based on the principle that price regulation would "contribute to large inefficiencies," Hahn (2009) argued that "mandating net neutrality would…reduce economic welfare." Faulhaber (2012) analyzed the Internet service market in a competitive context. He found that "most of the openness policies (Tim Wu) recommended have…been adopted by the competitive wireless industry," therefore there is no need to enforce the net neutrality regulations. After Title II was in effect, Faulhaber et al. (2017) critiqued FCC for ignoring the cost-benefit analysis and "embracing populism as its guiding principle." Litan and Singer (2014) compared Title II regulations with the "mandatory unbundling of local exchange carriers' telephone networks" from 1996. Controlling for other factors that might contribute to change in investment, the study shows the elimination of this regulation "likely bolstered the investment incentives." Then, appealing to the lack of evidence for a boost in "edge" investment, the investment by content providers, the researchers concluded Title II "could risk substantial core investment without generating any offsetting (investment)," result in a net loss.

After the 2015 reclassification, many researchers have expressed concern for a decline in the wireless industry. Speaking from ISPs' point of view, Sinha (2016) presented that companies will not spend more money on building better infrastructure if they see no return on that investment. In the long run, it will result in "little or no investment in the underlying infrastructure." Powell (2017) echoed this concern about Internet growth. He compared reclassifying broadband as a public utility with “crumbling roads, bridges and electric grid,” stating this regulation will result in “chronic underinvestment.” Downes (2016) specified the reasons for underinvestment in current public utilities. He pointed out that public utilities do not compete, innovate, nor serve consumers, because “the cozy relationship between regulated industries and their regulators… leads to competitive inertia, corruption and deteriorating facilities.”

Discrediting the Opponent

Proponents of net neutrality conducted research of their own obtained opposing evidence and pointed out flaws in the research by opponents to discredit their claims.

About legitimacy and neutrality of the opponents’ research. Winseck and Pooley (2017) wrote a paper in response to Faulhaber et al (2017), pointing out that the paper was commissioned by CALinnovates, a small coalition with AT&T as a major member corporation, and questioning its academic neutrality. They condemned this activity of publishing industry-funded research and being “cited by top policy maker to justify his industry-friendly regulatory rollback” as “information laundering.” Fang (2017) pointed out that many organizations who signed a joint letter (Keenan, 2017) asking for the repeal of net neutrality received millions from telecom companies such as Verizon, AT&T, and Comcast.

On the level of economic analysis and principles, Choi and Kim (2010) analyzed the effects of net neutrality regulation on the investment incentives of ISP and content providers (CP) using a model based on queuing theory. They found the investment incentives under regulation depend on “potential tradeoff between…network access fee from end-users and the revenue from content providers.” Therefore, they concluded that net neutrality regulations might not impede the development of the wireless industry, while discriminatory regimes could "weaken CPs' investment incentives."

There's a flurry of literature rebutting opponents' claim that Title II jeopardized the economy of the telecom industry. Hooton (2019) employed data from SEC's "Financial Statement Data Sets" on over 8,000 companies from 2010 to 2019 and found "no impact on telecommunication industry investment levels." Turner (2019) called the statistics from ISPs' representatives "cherry-picked and flatly wrong." He substantiated his claims by studying the financial data provided by ISP companies to their investors and the Securities and Exchange Commission. His report (Turner, 2017) discovers a "huge increase in cable ISPs' core network spending," higher "capital investment," higher "physical-network investment," "revenue growth…outpace broader economic growth," and continued growth in online content companies like Amazon, Netflix, Hulu. Tom Wheeler called Pai's study about chilling ISP spending "balderdash." (Sullivan, 2017) In response to Pai's claim about smaller companies suffering from Title II, he stated that "a thousand companies who are the early stage innovators…(will be) threatened by the elimination of Title II."

Opponents of net neutrality created this narrative that companies will respect net neutrality because the nature of a competitive market meets consumers' needs, as proposed by Faulhaber (2012) and Pai (Reardon, 2019). Wheeler bashed the idea of promoting competition within the industry, claiming that 50% to 75% of households "have one or fewer choices for high-speed broadband." (Sullivan, 2017) Journalists have also recorded multiple reports of ISPs violating it. Schoen (2007) reported that Comcast interfered with file-sharing applications over its network by "forging TCP RST packet which cause connections to drop." The company denied committing such deeds but repeated controlled experiments show that they are responsible for this phenomenon. MetroPCS, the fifth-largest U.S. wireless carrier at the time, announced plans to block all video streaming except YouTube over its 4G network (Singel, 2011). AT&T monitors unauthorized tethering and orders its users to stop tethering or subscribe to its official tethering plan. It would even "lock down its Android devices to keep users from installing (unofficial) apps." (Raphael, 2011) Anderson (2012) also reported AT&T blocking FaceTime over cellular in certain data plans as it "tried to reassert its control over the communications ecosystem." Verizon asked Google not to include Google Wallet in their partner product phone with Samsung (Goldman, 2011). Goldman speculates that Verizon is "hoping to favor its own mobile payments option over Google's."

Legislative Intervention

Lobbying is crucial for making changes in policy by presenting relevant facts and claims to the policymakers. Both proponents and opponents of net neutrality have deployed lobbying.

RepresentUs ("Is Lobbying," n.d.), a grassroots anti-corruption campaign, explained that, for a politician, it takes "upwards of $1.6 million to win a seat in the House." Lobbyists could raise money for candidates who favor their preferred policies, essentially buying seats in the congress. ISPs have spent millions of dollars on lobbying and providing "campaign contributions to certain Senators and Congressmen who they considered to be supporters." Hart (2011) reported that cable, telephone, and Internet companies have spent $51.3 million on lobbying in the first half of 2006. In 2014, ISPs spent $44.2 million on lobbying (Romm, 2015). Shaw (2018) reported that from "lobbying disclosures filed with the U.S. Senate," after Title II was put into effect in 2015, ISPs have spent "$190.3 million on lobbying… much of it to reverse net neutrality." He speculates the reported amount could be "just a portion" of all they spent against

Title II. Baskaran and Menzies (2018) found telecom industry spending $110 million on lobbying in 2017, compared to proponents' $39 million. These for-profit companies willing to spend this amount of money should be a clear indicator that the policies they are pursuing will generate even more revenue.

When facing orders that do not seem well supported by legislation, large companies resort to lawsuits. When FCC issued an order in 2008 trying to enforce net neutrality over Comcast, Comcast appealed that FCC does not have the authority for such regulations and won the jurisdiction (Comcast, 2010). After FCC issued its Open Internet Order 2010 in response to the Comcast decision, Verizon brought FCC to the court, arguing again that they do not have the authority for such regulations (Verizon, 2014). The court ruled in favor of Verizon and vacated two orders in the FCC Open Internet Order 2010. On the proponents' side, after FCC voted to roll back Title II in 2017, they joined Mozilla Corporation in suing FCC, arguing the rule was not appropriate (Mozilla, 2019). The court ruled that FCC has the authority to reclassify Internet services, but not restrict state or local level laws. There are plenty more lawsuits concerning net neutrality, but these three are arguably the important ones that change the trajectory of net neutrality debate.

Conclusion

The battle between proponents and opponents of net neutrality in the U.S. is an excellent example of social groups pushing for what they value. The measurements taken, from swaying public opinions with analysis and statistics to consolidating advantages into rules, are all necessary steps to make a successful policy change. Yet the parties cannot celebrate for too long, as no policy is permanent and the opposite side is usually resilient. As the public, we could learn from this process to remain skeptical of the claims by social groups, even some academic research. U.S. policymaking involves many aspects of social science. Publicly available sources have limited coverage on the methodologies and effects of lobbying and campaign contribution, which is arguably the major influencing factor in policymaking. Digging deeper on lobbying could present a more holistic review of social groups' techniques. Further studies could also approach from a specific subject field, such as psychology, and dissect how social groups use it to their advantage.

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