

Anti-competitive Behavior in Providing Internet Service in Multi-Tenant Environments in the Philippines

Estavillo, Javea Maria

British School Manila

16 May 2022

Online at https://mpra.ub.uni-muenchen.de/113107/ MPRA Paper No. 113107, posted 24 May 2022 14:15 UTC

Anti-competitive Behavior in Providing Internet Service in Multi-Tenant Environments in the Philippines

By

Javea Maria F. Estavillo*

May 2022

* Javea is a Year 11 student at the British School Manila, Philippines. This is her first economic paper written under the tutelage of Dr. Arsenio M. Balisacan, Chairman of the Philippine Competition Commission and former Dean and Professor of the University of the Philippines School of Economics, from April 2021 to May 2022.

Abstract

Access to the internet has become a basic necessity. The Philippines already labors under low rates of access and slow connectivity, while two dominant internet service providers control nearly 80% of the market, rendering the market potentially vulnerable to anti-competitive conduct. An additional challenge is faced by consumers living in multi-tenant environments (MTEs), which accounts for more than 57% of households in Metro Manila. where developers can create a monopoly within the MTE through exclusive arrangements and other legal means. Recent decisions by the Philippine Competition Commission have struck down these arrangements as being uncompetitive and an abuse of market power. Low-income neighborhoods are most impacted by this lack of choice, where homeowners and tenants who are forced to engage with the monopolistic provider are unable to access the cheaper and more efficient fixed broadband internet services. Regulators should look into market concentration of internet service providers throughout various areas in the Philippines, and actively intervene when concentration leaves consumers little choice.

Key words: competition, anti-competitive behavior, competition policy, internet services, exclusive arrangements, Philippines **JEL classification:** L41, L86, O53

1. Introduction

Without a doubt, the internet is now a fundamental part of daily life. The connectivity it provides underpins both social and economic interactions in the modern era. Thus, the internet is considered a critical element for inclusive economic development. Broadband – high speed internet – has been identified as a fundamental infrastructure in the 21st century, an equivalent of electricity (McChesney & Podesta, 2006). By lowering the cost of acquiring and using information, transaction and production costs have dramatically decreased (World Bank, 2016).

According to the World Bank (2018), the internet promotes inclusion, efficiency and innovation, affecting economic development in three ways. Firstly, it helps overcome information problems, allowing for mutually beneficial transactions to take place. Secondly, the internet has made transactions faster, cheaper or more convenient, increasing the productivity of existing factors of production. Lastly, the internet allows for the automation of more processes, allowing for services to be tailored to individual needs and preferences. As of 2017, 49% of the global population had access to the internet (UNCTAD, 2020). Unfortunately, the ongoing COVID-19 pandemic is "exposing the digital gap between countries and societies," especially between high income and low income countries, with high income countries having internet penetration of 87%, middle income countries with 45% internet penetration, and 16% internet penetration for low income countries (UNCTAD, 2020).

The importance of internet connectivity has been highlighted with the recent lockdowns and changes in work and study caused by the ongoing COVID-19 pandemic, substantially disrupting the domestic economy, with work, school, and human interaction now done online. Former Acting Secretary of the Department of Information and Communications Technology (DICT), Eliseo M. Rio Jr, said the pandemic has revealed to all of us the importance of telecommunications in all our activities—from ordering food to studying at home and working from home (Marasigan, 2020). "As we are now living with the new normal, the use of digital technology and digital transformation has become important for Filipinos in coping with the present crisis, moving towards economic recovery, and getting us back on track towards our long-term aspirations", said National Economic Development Authority Undersecretary Rosemarie G. Edillon (World Bank, 2020). Thus, this study carries significance since the internet proves to be a driving force in economic development, particularly when the economy is struggling to get on its feet during the ongoing pandemic and increased importance of remote working.

Nonetheless, the Philippines is plagued with issues regarding this, including having relatively low rates of access and among the slowest connectivity indices in the world. These issues, particularly the inequalities in regards to access to internet connectivity, have been compounded by the COVID-19 pandemic as well. The health crisis has exposed the digital divide like never before, with 44% of the world population without access to the internet being left behind in the shift to online work (Sarpong, 2020).

Already, the internet industry in the Philippines is highly concentrated with limited players, rendering the market potentially vulnerable to anti-competitive conduct and unresponsive to the needs of users. The government must seek to promote consumer welfare through facilitating access to services geared towards the needs of both individuals and businesses, and protect consumers against abusive market behavior of dominant players. A key policy question is: to what extent does the government regulate the marketplace for internet services to achieve a more inclusive and better-quality access to these services while enhancing the investment environment for internet service providers (ISPs)?

Of particular interest is the access to various ISPs in multiple tenant environments (MTEs) such as condominiums and residential villages or subdivisions. With 57.4% of the households in Manila occupying MTEs as of 2015 (Philippine Statistical Authority, 2015), this is a critical market potentially subject to abuse by MTE owners, who can limit ISP choices of its residents to one, creating a monopoly within that MTE. Given the mounting importance of internet and technology as well as the pivotal role that the industry plays in economic growth, it is critical for the government to regulate any form of market abuse which impacts consumers' ability to access any ISP of their choosing.

This paper will delve into the internet industry, and the impact of exclusive contracting on prices, profits, and market efficiency or competition. Attention will be given to exclusive contracting between MTEs and ISPs affiliated to or chosen by the real estate developer, which presents additional opportunities for abuse to the real estate developer and ISP. This paper supports the finding that a firm can achieve dominance in the relevant market not necessarily through business acumen or innovation, but through mechanisms erecting barriers to entry, such as exclusive arrangements.

The rest of the paper is organized as follows: Section 2 reviews the relevant literature and then discusses competition and market failure; specifically, the benefits of an efficient market, and the methods and consequences of exclusivity arrangements as a special case of market failure. Section 3 analyzes the Philippine internet industry. Section 4 looks at exclusive agreements between MTEs and ISPs, with Philippine case studies of Urban Deca and Greenfield, and identifies potential policy implications to prevent any abuse that would reduce consumer welfare. Section 5 concludes with policy implications and suggestions for regulatory actions.

2. Competition and Market Failure

2.1. Importance of competition: features, benefits and disadvantages

In order to delve into the importance of competition, we must follow a set theoretical construct for perfect competition. According to economic theory, in a perfectly competitive market, it is assumed that a large number of firms produce identical, homogenous goods consumed by a large base of buyers. Furthermore, it is based on the assumption that companies are easily able to exit or enter without any barriers, and that buyers and sellers have perfect information about market competitions. Taken together, this implies that individual buyers and sellers in a perfectly competitive market must accept the market price as given, or are 'price takers'; market share exerts no impact on prices. In perfect competition, any profit-maximizing producer faces a market price equal to its marginal cost; thus, the firm earns an economic profit of zero.

Since all goods in a perfectly competitive market are considered exact substitutes, the price elasticity of demand for each firm is perfectly elastic: any change in price will influence a complete change in demand among consumers. Therefore, perfect competition firms will exhibit a horizontal line in its individual demand curve, because exact substitutes are available in the market. With consumers completely sensitive to increases in prices, firms have both incentive and threat to lower production costs in order to decrease prices of the product, making their product more attractive to consumers. If firms are productively inefficient, they make a loss; therefore, perfect competition incentivizes the production of higher quality goods, lower prices, and larger margins, all through innovation. "An increase in competition leads to a significant increase in R&D investments by neck-and-neck firms" (Aghion, Bechtold, Cassar & Herz, 2014). In large part, this is due to the fact that it ultimately rewards dynamic and productive efficiency among firms. This is all highly beneficial for consumers, as it allows them to reap the benefits of more choices, higher quality of goods and services, and more affordable prices. Consequently, lower prices of goods and services will mean more purchasing power for consumers, which would, in turn, boost the economy and improve quality of life. Simply put, in a market with healthy competition, consumers will ultimately win.

In a typical economy, however, it is key to note that few firms are truly price takers facing perfectly elastic demand. In fact, all products in a market are slightly differentiated from one another - whether it be through consumer tastes, brand reputation, or producer location - and exercise upon their sellers some degree of market power. Any extent of market power among firms is common, but remains trivial enough not to warrant antitrust intervention. Every market runs the risk of having too low a level of competition or even an abuse of dominance. This puts consumer welfare at threat, which typically warrants government interference and regulation of competition. It is commonplace knowledge that antitrust laws encourage competition. They are also enacted into place in order to punish and contain any abuses of dominance and avoid market failure. Ultimately, competition law is conducted in order to promote productivity and innovation, the drivers of economic growth (Philippine Competition Commission).

2.2. Abuse of Dominance and Market Failure¹

There are instances when market forces do not work well, or fail, resulting in a failure to ensure maximum benefits to society. This occurs when market forces are inefficient, since the products produced may not be what the consumers want, may not be the quantity demanded, and may not be produced at the lowest possible cost. These pertain to three types of efficiency that firms must obtain in order to avoid market failure: allocative efficiency, productive efficiency, and dynamic efficiency respectively. If firms are not able to achieve these, they run the risk of inefficiency, and, ultimately, failure to conform and keep up with consumer demands.

Other forms of market failure include the overproduction of demerit goods - goods whose negative externalities are not fully understood and thus overconsumed - and the underproduction of merit goods (a good which when consumed provides external benefits, although these may not be fully recognised, hence causing underconsumption). These are examples of information failure or asymmetrical information, wherein the government fails to educate people on the impacts of these goods. As well as this, consumers may fail to take into account negative externalities that arise as a result of their economic activities, potentially causing grave issues such as congestion and environmental harm. Finally, public goods - goods which are non-rival and non-excludable - run the risk of market failure as problems pertaining to them are often closely related to the 'free-rider' problem, wherein people not paying for the goods may continue to access it. Thus, the public good, which is produced for the benefit of society, may be under-produced, overused or degraded.

Market power is a seller's ability to exercise a degree of control over the price it charges (U.S. Department of Justice, 2015). A firm's ability to raise prices is usually constrained by competitors and the possibility that its customers can switch to alternative sources of supply due to elastic demand and a high number of substitutes. When these constraints are weak, a firm is said to have market power and if the market power is great enough, to be in a position of dominance or monopoly. When a market is dominated by one or a few firms with considerable market power, there is often an abuse of dominance by these firms. With one or few firms dominating the market, there is no competitive pressure or incentive to keep costs low, improve products, and provide what the consumers demand. This leads to little or no choice for consumers who have no alternative than to purchase products which may have a higher price and poorer quality.

While firms may obtain monopolies naturally through efficiency (i.e. superior production methods, distribution, or innovation), it still remains imperative for the government to regulate firms in dominant positions as they can easily exploit their market power. Conduct engendering the abuse of dominance can be designated into two categories: exploitative abuse and exclusionary abuse.

¹ This section draws heavily from OECD, Abuse of Dominance and Monopolisation (2017). Retrieved from https://www.oecd.org/competition/abuse/

Exploitative abuse entails the conduct wherein firms take advantage of their market power and the subsequent inelastic demand for their product by charging excessively high prices; producing poor-quality goods; discriminating among consumers through price discrimination; paying low prices to suppliers; tying, and so forth. This also includes collusion, such as price-fixing, which involves a group of firms cooperating with one another to restrict their own output. Note that tying only raises concerns when it allows firms to earn supranormal profits in a properly defined market through raising barriers to entry, or by evading price regulation on its tying goods. In these cases of exploitative abuse, the harm directly befalls the consumers.

Exclusionary abuses comprise all practices that a dominant undertaking may use to obstruct others, restrict their options, establish entry barriers and therefore remove or suppress the potential competition in the industry. This includes predatory pricing; raising rivals' costs; vertical restraints, wherein upstream firms vertically integrated with downstream firms impose restrictions; refusal to supply for other firms, and several exclusive dealings. This form of conduct directly harms other competitors in an industry, yet ultimately harms consumers, by promoting inefficiency in the forms of higher prices, lower quality, limited choices and lack of innovation.

Firms may become dominant due to a plethora of reasons. The first and most common is through the implementation of cost-effective and superior strategies. The typical traits that facilitate the development of dominance in this case include: the first mover advantage; cost advantages and large margins through economies of scale; new technology; strong leadership; effective product marketing and therefore high demand; and general dominance through sheer size. For example, Ford pioneered cost efficient assembly line manufacture, ratcheting its market share in the car industry (Rosenbaum, 1999). Secondly, through focusing on a niche market, firms may be able to establish a position of dominance in the relevant, narrowly-defined market. Firms may also accomplish market dominance by legal mechanism. That is, to say - firms may employ the strategic use of patents to gain a large consumer base and ultimately oust competition.

3. The Philippine Internet Service Provider Industry

The internet service in the Philippines has not been efficient; according to the annual Inclusive Internet Index Report for 2021, the Philippines ranks 68th out of 120 countries in terms of competition (up from 97th out of 100 in 2019). It is considered among "Asia's weaker countries in advancing internet inclusion", as it is 18th out of 27 nations in Asia, constrained by a "weak wireless operators' market and outdated broadband buildout initiatives" (EIU Inclusive Internet Index, 2021).

The concentration of firms, barriers to entry and exit, and the level at which firms are integrated are key structure characteristics that incline an industry to lower levels of competition. If the ISP industry is highly concentrated - with a lower number of firms providing the service, the market power of each firm increases. In order to calculate this, the study shall measure the 4-Firm Concentration Ratio (the total market share of the top four firms in the industry). The Herfindahl-Hirschman Index (HHI), which considers the market share of all the firms in the industry, will show the high level of concentration among a few dominant players, with small firms virtually inconsequential. Impediments to entry of new firms to the market could impact competition and consumer welfare; thus, the barriers to entry in this industry shall be assessed using firm entry-exit data.

Conduct refers to the actions taken by the largest firms in the internet industry, including exclusionary and exploitative abuses such as monopolistic behavior, exclusivity deals, collusion, and product differentiation. In this paper, it is analyzed chiefly through official and legal reports on said conduct.

Finally, the performance of the firms in the industry is particularly paramount, as outlined previously. The study focuses on the performance of firms through studying prices, product quality, profitability, and accessibility. Prices will be measured by examining price trends and comparing them with those of other countries. Product quality will mainly be judged through the wi-fi connectivity index. Profitability is assessed using data on income and cost, and accessibility through the Department of Information Communication Technology (DICT) reports.

3.1. Structure of the ISP Industry

Bandwidth is transported to telecommunications companies (telcos), where it gets picked up by ISPs over a domestic backbone, called the national backbone. There are three backbone operators, namely PLDT, Globe and National Grid Corporation of the Philippines. Using their respective backbone network, the telcos distribute bandwidth to their regional points of presence. From here, bandwidth moves through the middle mile to distribution networks, which

connect the national backbone to the core networks of the telco or ISP. The middle mile is the bridge that connects individual communities to the greater national networks. From the middle mile, connectivity is brought to the last mile, which is the segment responsible for distributing bandwidth to end-users. The most common last mile technology is cellular, which is controlled by telcos. WiFi is also a common technology, which wirely distributes a connection over shorter distances. A small proportion of the population has fixed wired connections connecting the premises to a local point of presence. Last mile wired technologies include fiber, the newest and fastest technology, and copper, which uses legacy landline telephone networks.

From this, we can see that there are three distinct stages to bring internet services to the final consumers: the first mile is where the internet enters the country, or from the cable landing stations to the national backbone, which stage is controlled by PLDT, Globe and NGCP; the second stage or middle mile is from the national backbone to distribution networks connected through core networks of the telcos or ISPs; and the last mile is from the core networks to the retailer, using cellular, WiFi or wired technology. The first two miles are controlled by the telcos, which are also ISPs. The last mile is controlled by the larger ISPs, namely PLDT and Globe (the two largest telcos), Converge and Sky (a continually shrinking company). Smaller ISPs can only connect to distribution networks controlled by telcos in the last mile, and for limited areas of coverage.

There are a total of 334 registered ISPs as of 2019 throughout the Philippines (Philippine National Telecommunications Commission, 2019). Of these, there are 4 major internet service providers in the Philippines as of June 2021. PLDT is the most established, with 3.5 million subscribers. Globe has however taken over, with over 4.2 million subscribers. A rising third player is Converge ICT, with 1.4 million subscribers. Sky is the fourth major player, although its subscriber base is shrinking and currently unavailable to the public. Converge is a fast-growing player in the ISP industry: it had 29% market share of fixed broadband internet in June 2021, up from 21% in June 2020, and was recently listed in the Philippine Stock Exchange.

This study focuses on fixed internet services provided by ISPs.

3.1.1. Herfindahl–Hirschman Index

As of June 2021, the three major fixed broadband providers had 7.3 million subscribers:

Fixed Broadband		
Firms	Number of subscribers June 2021	

Fixed Broadband		
Globe	3,400,000²	
PLDT	$2,539,000^3$	
Converge	1,355,079 ⁴	

Latest data on market share of fixed and mobile broadband in the Philippines is as of October 2020, by service providers showing PLDT and Globe with 48% and 32%, respectively, of fixed broadband market share, while Converge and Sky trail at 13% and 7%, respectively. This data is shown in the next table (Diop, Warwick, Zaman, Fock & Niang, 2020):



The HHI measures the market concentration of a given industry. It takes into account the relative size distribution of the firms in a market. The closer it approaches zero, the more competition in the market as it indicates that it is occupied by a large number of firms of relatively equal size. Conversely, it reaches a maximum of 10,000 points when the market is a

² Globe Announces Full Year 2021 Results (2022)

³ PLDT Financial and Operational Highlights (2021)

⁴ Converge Continues to deliver industry-leading results (2021).

monopoly, i.e. controlled by a single firm. Thus, the HHI increases as the number of firms in the market decreases and as the disparity in size between firms increases.

The HHI is calculated by squaring the market share of each incumbent firm in the market and summing the product.

$$HHI = s_1^2 + s_2^2 + s_3^2 + \dots s_n^2$$

where:

 $s_n = ext{the market share percentage of firm } n$

expressed as a whole number, not a decimal

Using the data on market share, we computed the Herfindahl-Hirschman Index:

$$HHI = 48^2 + 32^2 + 13^2 + 7^2$$

= 3546

It is generally considered that markets in which the HHI is between 1,500 and 2,500 points are moderately concentrated, with markets in which the HHI exceeds 2,500 as highly concentrated. Thus, the HHI result for the fixed broadband market in the Philippines at 3,546 indicates a very highly concentrated market, displaying a severe lack of competition and a dearth of choices for consumers. Small players are considered inconsequential in providing viable choices to the market.

3.1.2. Barriers to entry

The major challenge in the sector is its high barrier to industry.

While the investment of new ISPs in areas with considerable access to the networks of the major telco providers is less than the investment needed in remote areas, buying transit from internet access providers - in the Philippines' case Globe and PLDT - remains costly. There are only two players in the country connected to international backbones. The entire infrastructure used by ISPs is owned by incumbent operators which are privately-owned companies, and which compete with smaller ISPs. Since the incumbents own the process from end to end, it would be easy for the incumbents to exert anti-competitive pricing that would restrict competition among ISPs (Salac & Kim, 2016).

Efforts to enhance digital infrastructure in the Philippines are hindered by a lack of digital infrastructure and regulatory bottlenecks, hampering broadband development. In the *Measuring the Information Society 2018 Report* of the International Telecommunications Union, the Philippines was found to have a high level of mobile coverage but relatively

underdeveloped wired services, especially fiber to premises. The Philippines is, in fact, so much further behind than countries like Vietnam, which has 170% more fiber connection than what PLDT and Globe have of all types of fixed broadband subscribers (International Telecommunications Union, 2018). In terms of technical barriers to entry, the key barriers in the residential broadband market include: lack of access to the last mile, particularly with xDSL and cable modems, and economic barriers such as economies of scale and scope and high capital requirements. Finally, with new entrants utilizing xDSL and cable modems, predatory pricing is the most important strategic barrier.

3.1.3. The Conflict Between Distribution and Redistribution

As mentioned in the previous section, conflicts and interconnection issues normally arise when telcos, who are the major ISPs, and smaller ISPs cover the same areas. Regulators need to ensure that access, interconnection and reasonable rates at arms-length prevail among all players (major and localized ISPs) in the industry, ensuring that the telcos provide fair, reasonable and non-discriminatory treatment to retailers and redistributors who are their competitors. While regulators require the telcos to allow ISPs to connect to their network, there is minimal regulation on pricing for such connections.

The conflict between distributor and redistributor of internet services became apparent in the 2005 case by the U.S. Supreme Court entitled National Cable & Telecommunications Association, et al., v. Brand X Internet Services, et al.⁵ Cable and telephone operators petitioned the FCC to have their businesses exempted from the requirement to sell access to their networks to the public, as provided under the Telecommunications Act of 1996. The FCC ruled that internet access was an "information service", allowing telephone companies to give themselves in-house pricing advantages over outside competitors. The FCC ruling was affirmed by the U.S. Supreme Court. Cable companies are therefore free to refuse to share their networks with competing ISPs.

3.2. Conduct

The growth of Converge has proven to be a threat to Globe and PLDT as ISPs. Converge is considered the fastest-growing high-speed fixed broadband operator in the Philippines, growing from 530,000 residential subscribers at the start of 2020 to 1.58 million as of September 30, 2021 and outpacing PLDT and Globe. Converge is exclusively focused on pure-play high-speed fixed broadband provision, owning and operating 90,000 kilometers of end-to-end fiber as of September 30, 2021. It has also completed its nationwide subsea cable backbone project (Converge continues to deliver industry-leading results, 2021).

⁵ 545 US 967, 125 S. Ct. 2688 (2005)

PLDT and Globe have priced their packages similarly, although Globe has more lower-tiered packages. Converge offers more expensive packages but with flexibility such as "time of day" rates. Lastly, Sky offers the cheapest packages. Meanwhile, smaller ISPs offer more expensive packages, owing to more expensive connections. While PLDT, Globe, Converge and Sky have a nationwide presence, smaller ISPs have a smaller geographical presence. Oftentimes, they are market leaders in provinces or areas not serviced by the bigger ISPs. However, some ISPs enter into exclusive arrangements with MTEs such as condominiums, offices, and residential subdivisions even in geographical areas serviced by the bigger ISPs.

3.3. Performance

3.3.1. Accessibility

In 2018, about 40% of the Philippines' total population and 57% of the country's households did not have internet access (World Bank, 2018). Latest data from Hootsuite and We Are Social's Digital 2021 report (Hootsuite, 2021) indicate improved access with 73.91 million internet users in the Philippines as of January 2021. The country has a population of 103 million, of which 49% live in urban areas. Those majority living in remote areas have minimal or no access to the Internet. Only 26% of public schools have internet access. 70% of barangays do not have access to fiber-optic cables, while 64% lack access to a cellular tower. It is much worse in the Bangsamoro Autonomous Region in Muslim Mindanao, and in the regions of Bicol, Eastern Visayas, Cagayan Valley, Mimaropa, Northern Luzon, Palawan and Central Visayas, which are all either unserved or underserved, according to the National Telecommunications Commission. "Not all areas in the Philippines have connections to the Internet. Telcos don't build their infrastructure in far-flung areas because it's very expensive to extend lines and there are no commercial returns," said National Telecommunications Commission (NTC) Deputy Commissioner Edgardo V. Cabarios (Marasigan, 2021).

3.3.2. Prices

Major ISPs have similar pricing for their services, while smaller ISPs are less cost efficient and hence have more expensive bundles for lower speed or capacity:

	Speed	Monthly Subscription Price (Php) (December 2021)
PLDT ⁶	100mbps 200mbps	2,999.00 6,099.00

⁶ https://pldthome.com

Globe ⁷	35mbps 100mbps 1gbps	1,499.00 2,899.00 9,499.00
Converge ICT ⁸	300mbps 800mbps	2,500.00 7,000.00
Sky Fiber ⁹	200mbps	3,499.00
Eastern Communications ¹⁰	5mbps 10mbps 25mbps 50mbps	999.00 1,299.00 1,699.00 2,500.00
FTDH (Fiber to Deca Homes) ¹¹	6mbps 5mbps 4mbps 3mbps 2mbps	3,979.00 3,629.00 3,229.00 2,779.00 2,279.00
Streamtech ¹²	25mbps 50mbps 150mbps	1,999.00 2,499.00 3,999.00

3.3.3. Product Quality

Although access to ISPs has been steadily rising, internet speeds provided to Philippine consumers are among the worst in the world while prices for such services remain high. Although the majority of urban centers are wired to the internet, access in remote communities, particularly that of far-flung mountainous or islets, remains undeveloped. Furthermore, most of the public schools in the Philippines are not online, and vulnerable groups (indigenous tribes, individuals with disabilities and the rural poor) continue to be plagued with affordability and accessibility issues.

With a lack of competition in the telecommunications sector, PLDT and Globe were criticized for underinvestment, resulting in the Philippines ranking among the worst in the region in terms of mobile network coverage and internet speeds (Oxford Business Group, 2019). Speedtest Global Index documents Philippine mobile internet at 14.24 Mbps (global average 30 Mbps) and fixed broadband speed at 23.80 Mbps (global average 74.64 Mbps) (International Trade

⁷ https://shop.globe.com.ph

⁸ https://www.convergeict.com

⁹ https://www.mysky.com.ph

¹⁰ https://www.eastern.com.ph

¹¹ https://www.facebook.com/8990FTDH/

¹² https://www.streamtech.com.ph

Administration, 2020). Recently however, significant improvements in average mobile internet speed have been seen, with 31.98 mbps in May 2021. The average cost to connect to fixed wired broadband sits in the high range in the ASEAN region (Baclig, 2021).

Thus, it is clear that already, the internet quality in the Philippines lags behind many other countries.

4. Exclusive Agreements between MTEs and ISPs

4.1. Exclusive Arrangements

Firms may acquire control of a market by controlling the relevant decision-maker in the market. For example, suppliers may enter into exclusive arrangements with the party controlling the relevant market.

"Exclusive dealing arrangements are essentially contracts in which a seller agrees to sell all or a substantial portion of its products or services to a particular buyer, or when a buyer similarly agrees to purchase all or a portion of its requirements of a product or service from a particular seller" (Cornell Law School Legal Information Institute). Permutations of exclusivity agreements could pertain to complementary goods, such as with video games and consoles. Taking into consideration the increasing necessity of the internet, housing providers and ISPs are becoming complementary goods and services.

While there are both pro-competitive and anti-competitive effects arising from it, exclusive dealing can be a way a firm acquires or maintains monopoly power over a relevant market, by impairing the ability of rivals to grow into effective competitors that erode the firm's position (U.S. Department of Justice, 2015). Exclusive dealing is lawful when it puts the incentives of contracting companies in the right place, while allowing business to be "contestable" — meaning that competition is not harmed because rivals still have the ability, at reasonable intervals or for a reasonable share of business, to compete. In fact, the US Department of Justice has opined that exclusive dealing should only be illegal when actual or probable harm to competition is shown, and any benefits are substantially disproportionate to the harm.

Exclusive arrangements arise when there is an agreement between two parties. However, it is much easier to reach such agreements when there is common ownership or control between two companies. This facilitates exclusive arrangements which benefit one affiliated company despite it being inefficient. Common control or ownership is not a necessary requisite of exclusive dealing, however. More frequently, exclusive deals are agreed upon between unrelated parties, because of a promise of economic benefit, whether to the market - such as by bulk discounts - or to decision-makers agreeing to exclusivity (i.e. the board of directors).

4.1.1. Forms of Exclusive Dealing

There are many forms of exclusive dealing:

- 1. Revenue Sharing Arrangements, or agreements between ISPs and MTE owners where the ISP compensates the building owners for the exclusive right to provide service to residents. This could include the payment by the ISP of a "door fee", or a one-time payment for access, or ongoing sharing of revenues. The consideration can take many forms, ranging from a pro rata share of the revenue generated from tenants' subscription service fees, to a one-time payment, to provider contributions to building infrastructure (U.S. Federal Communications Commission, 2019).
- 2. Rooftop access, which are required for servicing occupants of the building, may be given exclusive of to a specific ISP, effectively foreclosing competing ISPs.
- 3. Exclusive access to building wiring is an agreement where an ISP is given exclusive access to in-building wiring. This is usually achieved through sale-and-leaseback arrangements where the MTE owner owns the inside wiring but leases the wiring to the ISP.
- 4. Exclusive marketing agreements grant one ISP the exclusive right to market its services to building residents, including direct solicitations or service demonstrations.
- 5. Bulk service agreements, where a homeowners' association, for example, buys a combination of telephone, video and internet services at a discounted rate, then "resells" the service to residents (Brodkin, 2021).
- 6. Outright exclusive service or access agreement between ISPs and MTEs.
- 7. Graduated Revenue Sharing Agreements, sometimes known as "tiered" or "success-based" agreements, where an ISP pays an MTE owner a greater percentage of revenue as its penetration in the building increases.¹³

Exclusive arrangements are facilitated in the Philippines when MTEs are controlled by the real estate developer which constructed the condominium building or residential subdivision which enters into the exclusive arrangement. This could potentially be harmful to consumers who would be left with no choices outside the selected ISP.

4.1.2. Exclusive arrangements and abuse by Philippine real estate developers

Residential MTEs, whether vertical developments (i.e. high-rise buildings such as condominiums) or horizontal developments (i.e. residential subdivisions and townships) are usually controlled by a condominium corporation or homeowners' association.

Under Republic Act No. 4726, or The Condominium Act of the Philippines, a condominium corporation, an association of condominium owners, a board of directors or management agent elected by condominium owners is considered the management body of the condominium, and provides for maintenance, utility, gardening and other services benefiting the common areas. While the members of the condominium corporation are the owners and/or residents of the

¹³ U.S. Federal Communications Commission, *In the Matter of Improving Competitive Broadband Access to Multiple Tenant Environments* (2022).

condominium, the condominium developer retains control over the condominium corporation until the majority of units are sold and fully paid for.

Similarly, under Republic Act No. 9904, or the Magna Carta for Homeowners and Homeowners' Association, homeowners' associations, organized by owners or purchasers of lots in a subdivision or village, manage the subdivision or village to ensure the full functioning and operation of the association. As in condominium developments, the subdivision developer retains control over the association until the majority of lots are sold and fully paid for.

Given the control of the real estate developer in the condominium corporation or homeowners' association, they are able to impose certain rules and restrictions under the guise of managing the condominium corporation or association. These include accreditation of suppliers and service providers, restrictions to entry by service providers, or outright exclusive access given to one service provider to the exclusion of all others. The level of control that real estate developers are able to secure in their developments provides unique opportunities for these developers to enter into such exclusive arrangements with an ISP the developer either owns or controls, or ISPs of its own choosing, presumably for some advantage to the real estate developer. This exclusivity imposes an artificial barrier to entry resulting in a monopoly on the internet service, with residents not having any viable choice, preventing market efficiency from taking place. Without freedom of choice, consumers are rendered vulnerable to the ISP exploiting its dominant position, whether it be through poor wi-fi connection, high prices or otherwise.



Diagram 4.1: Real Estate Exclusion Impacts

The diagram above provides a visual indication as to how real estate developers can exclude other players from entering the market.

It is interesting to note that ISPs that entered into exclusive arrangements with MTEs provided the poorest service and were the most expensive. While PLDT or Globe offered 100mbps package for Php2,999.00 and Php2,899.00 respectively, and Converge a superior package of 300mbps at Php2,500.00, FTDH, an ISP affiliated with a real estate developer and which entered into exclusive arrangements with the MTE, offered poor services at 5mbps (a speed not offered by any major ISP) for Php3,629.00, respectively. This shows the proclivity to abuse in markets where the ISP is a monopoly due to exclusive arrangements.

4.1.3. The Cost of Connectivity in Light of Exclusive Dealings

In July 2021, U.S. President Joseph Biden issued an Executive Order Promoting Competition in the American Economy. The Biden Order provides that "the American information technology sector has long been an engine of innovation and growth, but today a small number of dominant Internet platforms use their power to exclude market entrants, to extract monopoly profits, and to gather intimate personal information that they can exploit for their own advantage." Biden encouraged the Federal Competition Commission (FCC) to "prevent ISPs from making deals with landlords that limit tenants' choices." Biden said that more than 200 million US residents live in an area "with only one or two reliable high-speed internet providers, leading to prices as much as five times higher in these markets than in markets with more options. A related problem is landlords and internet service providers entering exclusivity deals or collusive agreements that leave tenants with only one option. This impacts low-income and marginalized neighborhoods, because landlord-ISP arrangements can effectively block out broadband infrastructure expansion by new providers", said Biden's fact-sheet (White House, 2021).

In the report *The Cost of Connectivity* (Chao & Park, 2020) cited in the Biden Fact Sheet, "ISPs often broker special deals with landlords of apartment complexes and other... MTEs that ensure only one ISP can serve the building's tenants—even if multiple ISPs are equipped to serve the building... this practice contributes to a longstanding inequity that harms many apartment dwellers and needlessly limits their options for internet service. These deals effectively give an ISP a monopoly on a building's tenants, allowing the provider to raise prices or degrade service without fear of losing customers. The FCC tried to ban these exclusivity deals in the past, but ISPs found ways to circumvent the rules with new revenue-sharing schemes, bulk billing arrangements, and exclusive wiring deals. Congress should direct the FCC to close these loopholes once and for all" (New America, 2020)

In September 2021, the FCC sought public comment on how to promote competition in MTEs, following the Biden Order. Various cable providers, namely Comcast, Charter, Cox and NCTA-The Internet & Television Association, claimed that the exclusive arrangements between ISPs and landlords are "pro-competitive", claiming that these agreements do not deny new entrants access to MTEs, even though they make it harder for new ISPs to provide service in MTEs. This matter remains pending in the FCC.

4.1.4. U.S. Case Analysis

In February 2022, the FCC issued a ruling *In the Matter of Improving Competitive Broadband Access to Multiple Tenant Environments*, where it specifically ruled that "exclusive access contracts harm competition and discourage the deployment of broadband facilities to American consumers by impeding entry of competitive providers... (as) "[b]by far the greatest harm that exclusivity clauses cause residents of [residential MTEs] is that they deny those residents another choice... service and thus deny them the benefits of increased competition." The FCC further took steps to promote competitive choice in MTEs and targeted three specific practices that "frustrate competition, impede deployment by competitive providers, and reduce choice for Americans living and working in MTEs", namely prohibiting exclusive and gradated revenue sharing agreements, sale-and-leaseback arrangements, and required disclosure to tenants of exclusive marketing arrangements. The FCC stressed that the "COVID-19 pandemic has underscored the critical role that broadband plays in MTE tenants' lives".¹⁴

The recent developments should not be surprising however. In 2008, the FCC banned exclusive contracts for telecommunications services in residential apartment buildings, and prohibited enforcement of existing contracts that contain exclusivity provisions. The FCC found these exclusive agreements "hurt consumers and harm competition, with little evidence of countervailing benefits." In a news release, the FCC said that "opening the door to competitive telecommunications services will help provide consumers with increased access to and choice of such providers" (U.S. Federal Communications Commission, 2008)

4.2. Philippine Case Analysis

A number of complaints has reached the PCC from residents of MTEs, complaining of onerous exclusivity deals entered into by their condominium corporations or village associations with ISPs affiliated with the real estate developer. The PCC has recently imposed penalties on a real estate developer for its anti-competitive acts in exclusive dealing with ISPs.

4.2.1. Urban Deca Case

On 30 September 2019, the PCC decided its first case involving exclusivity arrangements between an MTE and an ISP (Competition Enforcement Office of the Philippine Competition Commission vs. Urban Deca Homes Manila Condominium Corporation and 8990 Holdings, Inc., 2019).

A case was filed against Urban Deca Homes (UDH) Manila Condominium Corporation and the parent company of its developer, 8990 Holdings, Inc., for entering into an exclusive agreement

¹⁴ U.S. Federal Communications Commission, In the Matter of Improving Competitive Broadband Access to Multiple Tenant Environments (2022). FC-22-12, p. 6

with iTech-RAR Solutions, Inc., to provide fixed line internet services exclusively for UDH Manila and 8 other Urban Deca developments in urban areas in Metro Manila. iTech-RAR then created an exclusive brand, Fiber to Deca Homes (FTDH), devoted to servicing these Urban Deca developments, creating a website and offering fixed packages. iTech-RAR is a company owned and run independently from UDH. It is not registered as an ISP, but merely provides fiber optics installation.

While the holding company entered into the agreement with iTech-RAR, the exclusivity was imposed by UDH Manila Condominium Corporation, which enforces the Master Deed, handles the property management services of the MTE, and sets and promulgates House Rules for the residents of UDH Manila. The incorporators and trustees of UDH Manila Condominium Corporation are current or former employees of the developer of Urban Deca, 8990 Holdings or its subsidiaries - showing how the real estate developer controlled the MTE.

Without any competition from other ISPs, FTDH offered slower services ranging from 2mbps to 6mbps, with prices ranging from Php2,279.00 to Php3,979.00. The pricing is onerous considering the slowest speed of a rival ISP, Globe, at 35mbps - which is almost 6 times as fast as the fastest speed of FTDH, was packaged at a much cheaper Php1,499.00. It is crucial to highlight that Urban Deca developments are located within Metro Manila, in areas where major ISPs operate. In other words, without any exclusivity arrangements, the residents would be able to engage other ISPs for better service and cheaper rates.

The PCC found that UDH Manila Condominium Corporation prevented internet service providers other than FTDH from providing fixed-line services to the residents of UDH Manila, depriving residents and tenants of choices or alternatives and resulting in complaints against FTDH's quality and prices.

The respondents conceded their abuse of their dominant position in all nine of their condominium projects and agreed to (1) send notice to residents and tenants that they were free to avail of the services of any ISP, (2) invite other ISPs and telecommunication companies to offer or market their services and use the existing internet service facilities therein, or install new facilities, under fair, reasonable and non-discriminatory terms, (3) allowing resident-subscribers of FTDH to opt-out of their subscription contracts at no cost and without penalty, (4) adopt and distribute House Rules to buyers of condominium units that "8990 Holdings shall not... cause the limitation of internet service to any single provider in this Project" and "shall not cause the limitation of internet service to any single provider." The PCC also imposed a penalty on the respondents. It then ruled:

"It should be emphasized that an entity's dominance in a market is not per se anti-competitive. However, Section 15 of the PCA prohibits abuse of such dominance that would substantially prevent, restrict, or lessen competition. An entity is in a dominant position in the market if it is in a position of economic strength which makes it capable of controlling the relevant market independently from any or a combination of the following: competitors, customers, suppliers or consumers."

The PCC cited a long line of cases by the European Commission, that "[a] company in a dominant position may not discriminate in favor of its own activities in a related market... [using] its power in one market in order to strengthen its position in another related market, in particular, by granting its competitor access to that related market on less favorable terms than those of its own services... without objective justification,"¹⁵ and "an abuse of dominant position is committed "where, without any objective necessity, an undertaking holding a dominant position on a particular market reserves to itself or to an undertaking belonging to the same group an ancillary activity which might be carried out by another undertaking as part of its activities on a neighboring but separate market, with the possibility of eliminating all competition from such undertaking."¹⁶

4.3. Economic Underpinnings

In terms of companies that are wholly owned and/or controlled subsidiaries of the same company, there is a larger incentive for exclusivity deals as the benefits of common control/ownership can allow the parent company to abuse their position of power and corral the profits of both companies, or of one company for the undue benefit of the other. The exclusivity deal is highly beneficial for the real estate developer as it allows the company to siphon revenue from residents who would otherwise be free to choose other ISPs for their wifi connections, at cheaper rates and higher quality. This effectively removes the opportunity for residents to choose what they consume, putting consumer welfare at jeopardy; the theory of consumer choice states that consumers analyze the optimal way in which to leverage their purchasing power in order to maximize their purchase's (ISP, in this case) utility and minimize opportunity costs through weighing trade-offs. However, without the ability to choose ISPs at the cheapest possible rates and highest possible quality, residents are stuck with an ISP that has very low incentive to lower costs and raise connectivity. This effect is compounded by the ever-growing importance of the internet; with work and school moving online due to the pandemic, the negative impact on consumers through poor quality connectivity may risk consumers' livelihood as they could be unable to make the shift online.

When a real estate developer and ISP are controlled by the same parent company, the developer can subsidize the ISP even if it is not efficient, which is far more dangerous for consumer welfare as this allows the ISP to evade competition's unforgiving punishment against a lack of efficiency and stay afloat in spite of it.

¹⁵ Sealink/B&I – Holyhead (5 CMLR 255)

¹⁶ Case 311/84 CBEM v CLT and IPB [1985] ECR 3261

In the case of Urban Deca, the exclusive arrangement did not benefit the residents since it removed their ability to choose the most efficient and cheapest alternative. However, there is no clear-cut benefit to UDH Manila Condominium Corporation, as they are not under common control with iTech-RAR. However, we cannot discount that since iTech-RAR is not an ISP, it could have merely provided connectivity for Urban Deca developments at a flat fee, with the real estate developer, 8990 Holdings, receiving the lion share of the profits. While there is no outright reference to any revenue-sharing scheme between iTech-RAR and 8990 Holdings or UDH Manila Condominium Corporation, there is often revenue-sharing or some benefit given to those who enter into exclusive arrangements.

Consequently, the exclusive arrangement between 8990 Holdings and iTech-RAR facilitated the continuation of operations by an inefficient ISP. FDTH did not need to be the cheapest or fastest service in the relevant market in order to attract customers. Instead, all they needed was an exclusive arrangement that benefited UDH in some way, whether by bulk discount (which was not the case), revenue sharing, or otherwise.

On top of this, smaller ISPs such as FTDH depend on the dominant telcos or larger ISPs whose networks they will be leasing. This is inefficient as these firms do not own the connections from the local point of presence to the users, and are thus subject to pricing decisions made by the telcos and large ISPs that control the points of presence they use. They are therefore vulnerable to increases in the charges imposed on them by the telcos and ISPs who have obtained control of the point of presence they use, thus potentially passing on the burden to consumers in the form of higher prices. This would not be a problem if the consumers have choices - they are far more likely to choose the most cost-efficient and speedy form of connectivity, which would likely be larger ISPs if they operated in the areas of residence. Essentially, this is the root of the problem, since consumers are left without choice due to the exclusivity deals, threatening their welfare as they must pay more for poorer service. Exclusivity deals perpetuate inefficiency, allowing the incumbent ISPs to charge high prices for slow service without the fear of competition's punishment against inefficiency.

The issue at hand is that Urban Deca has developments that are located in places wherein there are many choices for ISPs, all with the necessary infrastructure to ensure internet service in the MTEs. There are other places which it would be inaccessible or unprofitable - particularly in remote, small regions - for the telco or larger ISPs to build connectivity; in that case, smaller players may be the only choice as they would likely be more willing to invest in the wiring to provide access for the relevant market, thus forming a natural monopoly over the area. This does not infringe upon consumer welfare or the rights of choice, since there are no other viable choices - it is already a natural monopoly in the relevant market. However, with Urban Deca, there were existing and viable choices for ISPs for the residents. That is why there was a need for the condominium corporations to enter into an exclusivity agreement was also owned or controlled by the real estate developer who developed the MTE and still controlled the condominium corporations.

The recent case of exclusive dealings between MTEs and ISPs result in the creation of a monopoly using an artificial barrier to entry. Already, the barriers to entry for the internet industry are high, with consumers left with few choices. Exclusive arrangements in this context result in an eradication of the other choices, and the creation of a monopoly in the relevant market.

5. Conclusions and Implications

The recent decision of the PCC highlights the need for regulators to scrutinize any form of arrangement that may restrict access to ISPs in an MTE, creating a monopoly in the relevant market. These arrangements take various forms and may not be straightforward. Regulators must assess these agreements on the basis of their impact on competition within the MTE.

The balance that regulators need to find is how to ensure that no exclusive dealings foreclose competition in MTEs, especially in light of the fact that the ISP industry is dominated by a few ISPs, although there are many other small and less efficient ISPs. This may result in an empty victory, since forbidding exclusivity deals may not result in an efficient market with a large number of ISPs, especially considering that 4 ISPs dominate the internet industry in the Philippines In this light, it would be interesting to see the impact of the decision on the residents of Urban Deca developments today. How many ISPs are currently serving them, and at what prices?

It would also be good for the PCC to conduct a study of the services provided by the ISPs on a national scale, in terms of pricing, speed and ready availability. This will allow it to ensure that adequate competition exists throughout the Philippines.

An ounce of regulatory prevention today would be worth more than a pound of regulatory cure in the future. By preventing incumbent ISPs from becoming too concentrated in a relevant market, regulators can encourage competition by allowing independent ISPs to compete effectively for the market. In not acting swiftly, monopolies could spring up in relevant markets nationwide which, compounded with the duopolistic telecommunications backbone, leaves consumers with very little choice. The network that is the internet is unique in its importance to the daily lives of more and more people, so regulators would be prudent in actively intervening when concentration in the relevant market is "too much."

References

- Aghion, Philippe; Bechtold, Stefan; Cassar, Lea; Herz, Holger (2018). *The Causal Effects of Competition on Innovation: Experimental Evidence*, The Journal of Law, Economics, and Organization, vol 34(2), pages 162-195.
- Baclig, Cristina Eloisa (2021, June 29). *Mobile internet cheapest in PH in Asean, says Globe Telecom*. Philippine Daily Inquirer. Retrieved from https://technology.inquirer.net/110561/mobile-internet-cheapest-in-ph-in-asean-says-g lobe-telecom
- Brodkin, Jon, (2021, September 14). *Big ISP's fight to save exclusive wiring deals that limit choice in apartments*. Retrieved from https://arstechnica.com/tech-policy/2021/09/big-isps-fight-to-save-exclusive-wiring-de als-that-limit-choice-in-apartments/
- Chao, Becky and Park, Claire (2020), *The Cost of Connectivity*. Retrieved from www.newamerica.org/oti/reports/cost-connectivity-2020/us-policy-recommendations
- *Converge Continues to deliver industry-leading results.* Retrieved from <u>https://corporate.convergeict.com/news/converge-continues-to-deliver-industry-leading-results-for-1h2021-posting-81-5-y-o-y-revenue-growth-record-profitability-with-p6-5b_n-ebitda-55-1-ebitda-margin-and-p3-3bn-net-income-27-6-net-inc/</u>
- Cornell Law School Legal Information Institute. *Exclusive Dealing Arrangement*. Retrieved from https://www.law.cornell.edu/wex/exclusive_dealing_arrangement
- Diop,Ndiame; Warwick,Mara K.; Zaman,Hassan; Fock,Achim; Niang,Cecile Thioro; Coulibaly,Souleymane; Hansl,Birgit. *Philippines Digital Economy Report 2020 : A Better Normal Under COVID-19 - Digitalizing the Philippine Economy Now (English)*. Washington, D.C. : World Bank Group. Retrieved from https://www.statista.com/statistics/1194825/philippines-market-share-fixed-mobile-br oadband-by-service-providers/
- The Economist Intelligence Unit (2021). *EIU Inclusive Internet Index*. Retrieved from <u>https://theinclusiveinternet.eiu.com</u>
- European Commission (1992). *Sealink/B&I Holyhead*. 5 CMLR 255. Retrieved from https://ec.europa.eu/competition/antitrust/cases/dec_docs/34174/34174_2_2.pdf
- *Globe Announces Full Year 2021 Results* (2022). Retrieved from https://www.pds.com.ph/wp-content/uploads/2022/02/Disclosure-No.-585-2022-Ame nded-Press-Release-Globe-Announces-Full-Year-2021-Results.pdf
- International Telecommunications Union (2018). *Measuring the Information Society Report*. Retrieved from https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2018/MISR-201

https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2018/MISR-201 8-Vol-1-E.pdf

- International Trade Administration, (2022). *Philippines Telecommunications Market*. Retrieved from https://www.trade.gov/market-intelligence/philippine-telecommunications-market
- Leyco, Chino (2020, October 6). *Filipinos pay more for slow internet services World Bank*. Manila Bulletin. Retrieved from https://mb.com.ph/2020/10/06/filipinos-pay-more-for-slow-internet-services-world-b ank/
- Marasigan, Lorenz (2020, October 8). *Life goes online for Filipinos as pandemic pushes PHL to fast-track internet connectivity*. Business Mirror. Retrieved from <u>https://businessmirror.com.ph/2020/10/08/life-goes-online-for-filipinos-as-pandemic-pushes-phl-to-fast-track-internet-connectivity/</u>
- Marasigan, Lorenz (2021, October 7). *The New Oxygen in a Pandemic World. Business Mirror*. Retrieved from https://businessmirror.com.ph/2021/10/07/the-new-oxygen-in-a-pandemic-world/
- McChesney, Robert and Podesta, John (2006). *Let there be Wi-Fi: Broadband is the electricity of the 21st century - and much of America is being left in the dark. Washington Monthly.* Retrieved from https://community-wealth.org/sites/clone.community-wealth.org/files/downloads/artic le-mcchesney-podesta.pdf
- NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION, et al., Petitioners, v. BRAND X INTERNET SERVICES et al. Federal Communications Commission and United States, Petitioners, v. Brand X Internet Services et al. (2005), 545 U.S. 967, 125 S.Ct. 2688, 162 L.Ed.2d 820 (2005)
- New America (2020). *Cost-connectivity 2020: US policy recommendations*. Retrieved from www.newamerica.org/oti/reports/cost-connectivity-2020/us-policy-recommendations
- OECD, *Abuse of Dominance and Monopolisation* (2017). Retrieved from <u>https://www.oecd.org/competition/abuse/</u>
- Oxford Business Group, 2019. *The entrance of a third major telecoms provider set to break the duopoly in the Philippines*. Retrieved from <u>https://oxfordbusinessgroup.com/analysis/make-way-government-steps-break-duopoly</u><u>-and-secure-another-major-telecoms-provider-country</u>
- Philippine Competition Commission. *An Introduction to Competition Law*. Retrieved from https://www.phcc.gov.ph/wp-content/uploads/2017/04/PCC-MODULE-1-1.pdf
- Philippine Competition Commission (2019). Decision No. 01-E-001/2019: Competition Enforcement Office of the Philippine Competition Commission vs. Urban Deca Homes Manila Condominium Corporation and 8990 Holdings, Inc.. Retrieved from <u>https://www.phcc.gov.ph/commdecisionno-01e0012019-enforcement-vs-urbandecaho</u> <u>mes-8990holdings-30sept2019/</u>

Philippine Competition Commission (2021). PCC charges condo developer for abuse of dominance in exclusive internet deal. Retrieved from https://www.phcc.gov.ph/press-releases/aod-greenfield-leopard/

Philippine National Telecommunications Commission (2019). Retrieved from foi.gov.ph

PLDT Financial and Operational Highlights (2021). Retrieved from <u>https://cms.pldt.com/drupal/sites/default/files/irpresentations/1H2021%20Presentatio</u> <u>n%20-%20with%20Appendix.pdf</u>

Philippine Congress, The Condominium Act of the Philippines (Republic Act No. 4726). 1966.

- Philippine Congress, Magna Carta for Homeowners and Homeowners' Association (Republic Act No. 9904). 2010.
- Rosenbaum, Paul, 1999. Choice as an Alternative to Control in Observational Studies, Statistical Science, Vol. 14, No. 3, pages 259-278
- Salac, Romeo and Kim, Yun Seon, 2016. *A Study on the Internet Connectivity of the Philippines,* Asia Pacific Journal of Business Review. Kyung Hee University Management Research Institute. doi:10.20522/apjbr.2016.1.1.67.
- Sarpong, Eleanor (2020, April 15). *Covid 19 shows why internet access is a basic right: We must get everyone connected*. World Wide Web Foundation. Retrieved from https://webfoundation.org/2020/04/covid-19-shows-why-internet-access-is-a-basic-rig ht-we-must-get-everyone-connected/
- Tribunal de Commerce de Bruxelles, Belgium. *Centre belge d'études de marché Télémarketing (CBEM) v SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB)* Case 311/84 (1985). Retrieved from https://curia.europa.eu/juris/showPdf.jsf;jsessionid=FF3DB49D8F06719E6FDFB75BE 1831978?text=&docid=93633&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&p art=1&cid=2917165
- United Nations Conference on Trade and Development (UNCTAD) (2020). *The Covid-19 Crisis: Accentuating the need to bridge digital divides*. Retrieved from https://unctad.org/system/files/official-document/dtlinf2020d1_en.pdf
- U.S. Department of Justice, *Competition and Monopoly: Single-Firm Conduct Under Section 2* of the Sherman Act (2008). <u>www.usdoj.gov/atr/public/reports/236681.htm</u>
- U.S. Federal Communications Commission, *FCC Bans Exclusive Contracts for Telecommunications Services in Apartment Buildings,* 2008. Retrieved from https://www.fcc.gov/document/fcc-bans-exclusive-contracts-telecommunications-servic es-apartment.
- U.S. Federal Communications Commission, *In the Matter of Improving Competitive Broadband Access to Multiple Tenant Environments* (2022). FC-22-12
- U.S. White House (2021, July 9). *Fact Sheet Executive Order on Promoting Competition in the American Economy*. Retrieved from

https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/09/fact-shee t-executive-order-on-promoting-competition-in-the-american-economy/

- World Bank (2016). World Development Report 2016: Digital Dividends. Washington, DC: World Bank. doi:10.1596/978-1-4648-0671-1. License: Creative Commons Attribution CC BY 3.0 IGO. Retrieved from <u>https://documents1.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB</u> <u>-Replacement-PUBLIC.pdf</u>
- World Bank (2018). *Philippines Digital Economic Report 2020*. Retrieved from <u>https://documents1.worldbank.org/curated/en/796871601650398190/pdf/Philippines-Digital-Economy-Report-2020-A-Better-Normal-Under-COVID-19-Digitalizing-the-Philippine-Economy-Now.pdf</u>
- World Bank (2020). *Harnessing Digital Technologies Can Help Philippines Overcome Impact of Pandemic, Hasten Recovery*. Retrieved from https://www.worldbank.org/en/news/press-release/2020/10/05/harnessing-digital-tec hnologies-can-help-philippines-overcome-impact-of-pandemic-hasten-recovery