Contemporary Comparative Antitrust Analysis and Solutions: A Behavioral Approach

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Abstract

This paper examines the current status of antitrust with a global perspective and provides a collection of viable policies against the bigness based on behavioral economics. With the rapid development of the Internet, the first few Internet companies that entered the market earlier occupied most of the market shares and gained much power. As a result, they gradually formed monopolies. First, the paper analyzes some of the cases against them, like Facebook, Google, Alibaba, and so on, and points out the disadvantages of currently conventional antitrust policies. Then, it provides solutions based on behavioral economics, including progressive tax, innovation funds, shared platforms, and social trust. These policies may not be perfect, but they would guarantee national security, increase consumer welfare and the social responsibility of the bigness.

Keywords: antitrust, behavioral economics, bigness, current status, solutions

1. Introduction

On April 10 in 2021, one of the dominant Internet companies in China, Alibaba, was fined 18.228 billion CNY, which is equivalent to 4% of the company's domestic annual sales, for abusing its dominant position over rivals and merchants on its e-commerce platforms. It was the dominant number of fine China's State Administration for Market Regulation ever had on the monopolies in China. The company was punished mainly because of its "er xuan yi" practice during a shopping day in China.[1] Choosing one out of two platforms, which merchants should choose only one platform for their sales on the shopping day, is meant by "er yuan yi". It is clear that this practice by Alibaba violates rules for market competition.

But here comes a question: why did the government charge a particular percentage of 4 for sales in a year rather than other percentages given that the range is 1%-10%? This reveals the opaqueness of nowadays antitrust policies.

Not only in China but also Internet companies like Facebook in the United States are crossing lines over and over again. In order to keep the competitiveness of the market, we need to figure out some ways to hold these companies within bounds. In modern times, common policies against monopolies are penalty and division, which is based on Classical

economics and what China's State Administration for Market Regulation followed. Classical economics assumes that people are always rational, which means that firms in the market are always pursuing the maximized profits. From where they stand, monopoly is a market structure that would never achieve allocative efficiency. For now, there are two primary ways to deal with monopolies, which are the penalty and breakup. They are based on classical economics which assumes that people are always rational(for firms it's pursuing maximized profits). The penalty is easy to understand. If a monopoly harms the market competition, the government would implement a fine on it, which is usually a large amount. The second one is breakup which means to break up a large company that monopolizes the market into several small companies.

However, this mindset is gradually out of favor because it does not count on the fact that human beings are more complicated than they thought. People are not always rational. Those who have limited willpower are constantly changing. And then, here comes behavioral economics. As its name, it does account for the partial rationality of human beings. It is an economic field that is based on the behaviors of people and would predict how people will act. Obviously, what China's State Administration for Market Regulation did is based on classical views of economics. They thought a huge amount of penalty would stop them from monopolizing. But their policies are actually not effective as Alibaba could always use their dominance in the market to make up for the penalty. As a result, this paper is going to propose some other possible solutions that are based on behavioral economics. Before that, the current status of antitrust will be introduced.

2. Current Status of Antitrust

2.1. Why Antitrust?

Monopoly itself is not always bad in some situations. The ways they harm the free competition of the market and gains too much power with user information are what we denounce. "Market dominance is, as such, not illegal under EU antitrust rules. However, dominant companies have a special responsibility not to abuse their powerful market position by restricting competition, either in the market where they are dominant or in separate markets."[2] On the one hand, the absence of competition harms innovation. On the other hand, according to Brandeis, "the concentration of economic power would aid the concentration of political power, and that such private power can itself undermine and overwhelm the public government. Dominant corporations wield outsized influence over political processes and outcomes, be it through lobbying, financing elections, staffing government, funding research, or establishing systemic importance that they can leverage. They use these strategies to win favorable policies, further entrenching their dominance."[3] Take Facebook as an example.

2.1.1. Suppressed Innovation

What encourages innovation is competition. Arrow effect(also called replacement effect), proposed by Kenneth Arrow, states that a monopolist might innovate less than competitive firms because a monopolist has more to lose. The monopolies would replace themselves rather than developing new businesses. Also, competition among rivals producing an existing product encourages those firms to find ways to lower costs, improve quality, or develop better products to gain customers. [4]

Nevertheless, to keep its dominance in the market, Facebook prevents the competitiveness of its market which also chills innovation. It actively monitors the growth of other apps that may threaten its dominance and purchase them before they get bigger. Two well-known examples are WhatsApp and Instagram. Brian Acton and Jan Koum, the founders of Whatsapp, used to be employees of Yahoo!. From 2009 to 2013, it developed really fast. By 2011, it became one of the top 20 apps in Apple's US App Store. And it gained 400 million active users each month. As substitutes and competing goods with Facebook, Mark Zuckerberg, the founder of Facebook, felt the threats for its dominance from WhatsApp. On February 19, 2004, Facebook purchased WhatsApp with $19 billion US Dollars, the largest amount at that time. [5] Instagram has a similar situation as WhatsApp except that Instagram lays more weight on pictures and photos instead of chats. With an already huge amount of users in the platform of Facebook, the merge of platforms of WhatsApp and Instagram almost occupy all Americans who use social media to communicate. Facebook kept the two running after purchasing so that they would not be replaced by other apps. [6] Other companies who would like to step into this field have actually zero chance of surviving facing this enormous user base. The reason why it is difficult for others to enter after the purchase by Facebook is that WhatsApp and Instagram have already had almost all of the users or consumers in the market. The entrants have no users if the platform is not shared. And more importantly, the main feature of communication software is that people always go to software with more acquaintances.

The fact that hardly could other companies enter the field suppresses innovation and leaves the consumers no other choices. Consumer welfare is harmed, which means that the consumers have to accept it if the quality of products of Facebook declines. This is not what a market should be.

2.1.2. Overwhelming Power

Facebook's seemingly free service is exchanged for users' time, attention, and personal data. [6] With a great number of users, Facebook has the access to users' private information, which means that it can improve its algorithm in this age of data. The improved data makes Facebook more accurately put ads into an individual account, which is the main approach for Facebook to make money. The dominant place which Facebook is possessing harms both consumers and advertisers. For consumers, they would be bothered if Facebook puts too many ads on the user interface given that the consumers have to accept this. Plus, the ads

Facebook puts into each user are different and in favor of his or her tastes, which is the invasion of user privacy. There is a case in 2019 that more than 419 million Facebook IDs and phone numbers were stored in an online server that was not password protected. [7] The privacy of consumers is not compromised. For advertisers, Facebook, the dominant company in the field of social media, instead of the advertisers accounts for the ad-rate and the prices of its products because there is not a standard in the market for Facebook to follow.

In addition, as a popular app among Americans, Facebook's speech of people has non-negligible influences on citizens. It even reaches its hand to politics. There is a saying that the American 2016 election was intervened by the Russian and that Donald Trump deliberately "supported the release of the hacked documents and emails, even inviting the Russians to steal Clington's email".[8] Undoubtedly, this harms America's democracy and badly influences the election. According to Dipayan Ghosh, a contributor to American national security, it is "the internet that propelled Trump to victory—and without the silent internet economy that had enabled the coordinated spread of outright lies against his opponent, the nation would not have been wrenched from its tracks with such force." What "internet" mentioned by Ghosh clearly includes Facebook where Donald Trump used to be active. The public greatly hoped Mark Zuckerberg, CEO of Facebook, to specifically reveal why the foreign political forces were able to infiltrate into the national political process during the 2016 election. However, Facebook answered this with already public facts, obvious deduction, and essentially meaningless promises. The problem even continued until the 2020 election. Facebook adopted a policy that they would not check the validity and correctness of politicians' ads at all, which provided a safe harbor for any politicians to "lie with impunity".[8] It is obvious that Facebook now has acquired great power with more and more people using it, including politicians. The above facts are simply the consequences of Facebook's overwhelming power brought by its domination in the market. The users of Facebook are easily affected by this domination. Facebook possesses great social power, but it does not take responsibility. Instead, it monopolizes this social power and makes use of it. Social power, which is not the legal authority, determines legal authority. It is democracy that decides where legal authority belongs to. Facebook, which acts to harm democracy, twists the process of social power determining legal authority.

Aside from Facebook, other companies that hold a large amount of user data are gaining more power. Too much information owned by the firm makes them have the power against the government. The firm would exploit their laborers as much as possible to maximize their profits. In order to maximize their profit, they try to lower the cost of labor, which means they are making the best use of laborers' time. This can be achieved with an improved algorithm. A case in point is a Food Delivery Company called MeiTuan in China. The food is delivered by workers paid by MeiTuan. The food delivers ride motorcycles to work. They may be punished if they are late delivering food. In order to deliver the food on time, the workers even cross the street ignoring the traffic light. There are so many cases that happened in China that workers from MeiTuan have accidents with cars and some of them even die.

The improved algorithm is also an accomplice. It plans the route for workers without considering the danger. Meituan also has a reward mechanism that the more food workers deliver a day, the more wages they can get. This mechanism makes delivers work harder. But Meituan does not take responsibility if its workers die in an accident. The companies now are having control over us.

2.2. Current Policies against Monopolies

Nowadays, there are two primary antitrust policies, which are fine and breakup. These two are both direct and effective in making the monopolies more attentive to their acts. However, they do not increase consumer welfare well.

2.2.1. Fine

A fine refers to a penalty of money. It is a common antitrust policy against monopolies.

A case in point is a 4.34 billion euros fine for Google by European Commission on July 18, 2018. Noticing that there was a “shift from desktop PCs to mobile internet”[2], Google took a series of actions, including purchasing Android mobile operating system, to keep its users in desktop PCs continuing to use its service also on mobile devices. Google continued to develop Android after purchasing it and made it one of the most popular mobile operating systems in the world. In 2018, there were approximately 80% of smart mobile devices running on Android.

Margrethe Vestager, a commissioner who is in charge of competition policy, said: “Today, mobile internet makes up more than half of global internet traffic. It has changed the lives of millions of Europeans. Our case is about three types of restrictions that Google has imposed on Android device manufacturers and network operators to ensure that traffic on Android devices goes to the Google search engine. In this way, Google has used Android as a vehicle to cement the dominance of its search engine. These practices have denied rivals the chance to innovate and compete on the merits. They have denied European consumers the benefits of effective competition in the important mobile sphere. This is illegal under EU antitrust rules.” To be specific, the three illegal actions Google took were: 1. binding of Google’s search and browsers apps; 2. payments for exclusively pre-install Google Search; 3. preventing the development of the competitors of the Android mobile operating system. Google has posted its Android source code online for others to develop their “own” operating system based on Android. However, they cannot manufacture their mobile devices because they do not have the patents of Android. Any version of Android that is not approved by Google is called the “Android fork”. To keep its dominance, Google would ask the device manufacturers to pre-install Google’s apps and “commit not to develop or sell even a single device running on an Android fork” so that users are more likely to use its services when they receive the phones if the manufacturers want the patents. The opportunities were greatly reduced regarding the selling of devices based on Android forks. What’s more, Google paid some of the largest device manufacturers to exclusively pre-install Google Search on their “entire portfolio of

Android devices". Competing search apps have little chance to also be pre-installed because the device manufacturers would ask them to compensate for their loss of revenue by pre-installing Google Search, which most of them cannot afford. Google's practices largely restricted the development of competing searching engines and mobile operating systems. They harmed competition and further innovation in the European market. [2]

After investigating Google in the European market, European Commission decided to fine Google with 4,342,865,000 euros which "has been calculated based on the value of Google's revenue from search advertising services on Android devices in the EEA." (EEA: European Economic Area) Google was required to stop its illegal conducts in an effective manner within 90 days. It was restricted from continuing the three practices listed above. "If Google fails to ensure compliance with the Commission decision, it would be liable for non-compliance payments of up to 5% of the average daily worldwide turnover of Alphabet, Google's parent company."[2]

Google accepted the fine with reluctance. It appealed the ruling by the European Commission while revamping "how it distributes its mobile apps in the European Union, introducing a licensing fee for device makers to access its app marketplace in a response to regulators' findings that it had broken antitrust law". Companies should pay Google an undisclosed amount of money to access Google Play Service in exchange for accessing Google Search and Google Browser for free if they want to. [9] After the implementation of licensing scheme, some mobile industry executives even thought that the phones could be sold without Google's services. Even though things turned out that they were wrong, we can see how influential Google's past acts in Europe were: Most Europeans had already relied on Google's apps. The fine from European Commission seems to be effective. [9] However, Google is not satisfied and intends to appeal to European Commission. Before that, Google was fined 2.4 billion euros for shopping charges on June 27, 2017. After that, it was again fined 1.49 billion euros for AdSense charges on March 20, 2019. In total, it has been fined 8 billion euros by European Commission. The fine does not solve the problem completely though it does make Google change. Google is still violating the European Commission's antitrust rules.

The situations are in favor of Google. As the most famous product from Google, Google Search is a really convenient and effective tool for Google to monopolize its services. Google can manipulate the search results to favor their own services, like Google Shopping, which Google has done before. This largely reduces the sensitometry of its competing services and consolidates its dominant position. Besides, hardly can I be convinced that the purchase of Android by Google is not for its own benefit. The android operating system is undoubtedly the most popular mobile operating system in the world. Google may be partly prevented from being dominant with Android in Europe, it cannot be prevented from being dominant in other regions of the world. The fine may let the search result be fairer, but it cannot change the fact that a great percentage of people in the world are using Android.

Most recently, China's State Administration for Market Regulation imposed a huge fine of 18.228 billion CNY, which accounts for 4% of its 2019 sales, on Alibaba for abusing its market dominance position. As dominant fine China ever had on monopolies, it caused quite a stir among the public.

China's State Administration for Market Regulation states that what Alibaba monopolizes is China's online retail market. It has over 50% market shares in China's online retail market. Alibaba already has a mature system of online retail system, include big platforms like Taobao, Tianmao, popular payments like Alipay, and strong cloud computing that provides huge databases. It is undeniable that Alibaba has a dominant position in China's online retail market. With this kind of dominant power, Alibaba implemented a strategy called "er xuan yi". As one of the dominant online retail platforms in China, Alibaba provides a place for many online retail stores. However, Alibaba implemented an agreement along with the policy of reward and penalty for the stores to follow that they cannot open the stores on the competing platform of Alibaba like Jingdong. The policy badly harmed the fair competition in China's online retail market. The welfare of consumers and operators was also affected. Alibaba was ordered to stop its illegal conducts and fined 18.228 CNY. [10]

Obviously, 18.228 billion CNY is actually not a big deal for Alibaba compared with its total revenue of 509.7 billion CNY in 2020. With that many active users, the fine can be easily made up by exploiting the consumers, 846 million monthly active users(MAUs). [11]

The fine for Alibaba was more like a warning than an effective policy that would change Alibaba's dominant position. Just on April 11, 2021, the day Alibaba was fined, Alibaba proposed its announcement and accepted the penalty. "We accept the penalty with sincerity and will ensure our compliance with determination. To serve our responsibility to society, we will operate in accordance with the law with the utmost diligence, continue to strengthen our compliance systems and build on growth through innovation."[12] In this quote, Alibaba emphasizes that they will grow through "innovation". This is a clear reason why Alibaba was fined as well.

The administration office also provides an instructor for Alibaba. It lists some instructions for Alibaba to follow. It also advises Alibaba to actively open its audits of compliance to the society and accept the supervision from the society. From my point of view, this kind of publicization is necessary. [13] Increasing transparency guarantees consumer welfare as the consumers would know what's going on. Further discussion is in the below section.

2.2.2. Breakup

Breakup, as its name it refers to segmenting a large company into several smaller companies to achieve the goal of weakening the dominant power of a monopoly in a market. It is a common way of dealing with huge monopolies. However, some problems still exist after breaking up monopolies.

A really well-known case of the breakup is US vs AT&T. AT&T, the abbreviation of American Telephone and Telegraph Company, provides telephone services, long-distance calling, and internet services in the field of telecommunications. With Alexander Graham Bell, one of its founders, as the inventor of the telephone, AT&T logically monopolized the American market of telecommunications after it was founded. In 1908, contemporary president Theodore Vail introduced AT&T's slogan of advertisement as "One System, One Policy, Universal Service", which was pursued by AT&T for the next 70 years. [14] The diction of words like "one" and "universal" directly shows AT&T's ambitions of monopolizing the telecommunications market.

The US Department of Justice sued AT&T in 1974. It suspected that the costs of its network were compensated by the monopoly profits from Western Electric, which was a violation of Antitrust laws in the US. In 1982, the case was settled. The US Department of Justice and AT&T reached an agreement that AT&T would "keep its long-distance operations, its Western Electric manufacturing arm and its Bell Laboratories research arm and" would "be allowed to expand beyond telecommunications into new markets, such as computers."[15] And the remaining local companies, which used to belong to AT&T to carry out local services, "grouped into seven regional holding companies," and would "provide local telephone service and can sell, but not manufacture, telephone equipment." The seven companies were Ameritech, Bell Atlantic, BellSouth, NYNEX, Pacific Telesis, Southwestern Bell (SBC), and US West. They were known as the "Baby Bells". Except for that, AT&T made two changes. One was that AT&T "give the divested companies the right to sublicense Bell system patents to companies that would make equipment for them." The other was if the divested companies failed to recover the costs, AT&T was responsible for making up for them. [15]

So was everything just fine? Judge Harold Greene stated that there was still a link between AT&T and the divested companies. And things turned out that he was right: among the seven divested companies, SBC Communications purchased and merged with Pacific Telesis, Ameritech, BellSouth, and the original AT&T Corp. SBC Communications continued to use the brand name "AT&T" for its fame. SBC Communications itself merged four divested companies after the breakup and founded AT&T Inc. Bell Atlantic and NYNEX merged and formed the Verizon Communications. And the last one, US West, merged with other companies and formed the Lumen Technologies. In the end, the former seven divested companies from AT&T eventually merged and formed three companies that rule over the American market of telecommunications. At the time AT&T was segmented, it still kept the ownership of Western Electric and Bell Laboratories, which respectively possessed the production of telecommunications equipment and technologies. While the seven divested companies could only "sell", but not "manufacture" the telephone equipment. With the core technology, AT&T might monopolize the market of producing and selling the telephone equipment even though it was banned from monopolizing the whole market of telephone services. Also, the final settlement said that AT&T was "allowed to expand beyond

telecommunications into new markets, such as computers."[15] By giving up the dominant position in the market of telecommunications, AT&T gained the potential of dominating the market of computers, with innate tech advantages of a centuries' experience in telecommunications that were closely related to computers. It had the time advantage as well in 1982 since the computer industry was about to develop at that age. AT&T was not prevented from being dominant in a new market.

Michael Moritz, a Welsh billionaire venture capitalist, complained about his experience of using service from AT&T after it was segmented in his conversation with Joe Grundfest, a Professor of Law and Business at Stanford Law School. He said "I would love to see an analysis of the communication that, the quality of the communications infrastructure of America had AT&T stayed intact. And also, given that this is much in the news, how well, the US potentially might have been positioned... And I think the consequences of both of those things go back to what I think, in retrospect, was a very ill-advised breakup of a company that was already operating under a government-sanctioned monopoly and services agreement overseen by the FCC."[16] It's clear that as a consumer of AT&T, his welfare does not increase after the breakup of AT&T. Admittedly, the breakup of a large firm is to some degree effective in reducing anticompetitive conduct, but it does not guarantee that consumer welfare would increase. "To argue for the breakup as a remedy, one must show, at a minimum, that the market structure contributed to the harmful conduct, that the breakup is very likely to enhance competition and benefit consumers by eliminating the bad conduct, and that behavioral alternatives do not offer equal or greater expected benefits at equal or lower costs."[17]

3. Viable Policies

Given that fine and breakup cannot solve the problem totally, we should seek other ways. The purpose of antitrust is to protect national security, make the market competitive, and improve consumer welfare. Followed by the purpose, antitrust policies should focus on two things. On the one hand, monopolies should be less excludable and the government should provide a series of incentives to encourage the competitors to enter. On the other hand, the monopolies should take social responsibility and increase their transparency. They should accept supervision from the public. In this way, the consumers' welfare is guaranteed with more choices.

3.1. Progressive Corporate Tax

Here the progressive tax does not refer to the tax rates which increase with the taxable amount, instead, it is progressive tax specifically posted on the firms. You can also call this progressive corporate tax. The progressive tax aims at reducing the income inequality among individuals by taxing more with rich people and less with people having lower incomes. Similarly, "inequality" also occurs among firms. For an industry, firms that enter early have an edge over the others from the aspects of technology, experience, and so on. They often

tend to monopolize the market of that industry and exclude their competitors in order to make more profits. In this way, there is a high barrier for other firms to enter. Through progressive corporate tax that origins from progressive tax, the "inequality" among the firms is reduced. Firms that monopolized the market should pay a tax much higher than the firms that intend to enter the same market. The smaller firms that are encouraged to compete would experience less pressure facing such a huge "monster" in the market.

Progressive corporate tax is not a new idea. It has already existed in the 1930s, "a period in which there was great attention paid to the abuses of large corporations."[18] At that time, it was called "graduated corporate tax". In 1935, President Franklin Roosevelt explained about this kind of tax imposed on "bigness" that "the smaller corporations should not carry burdens beyond their powers; the vast concentrations of capital should be ready to carry burdens commensurate with their powers and their advantages." It was intended to be a tool for "anti-bigness" which includes antitrust. More recently(2013), there were some flaws in the graduated corporate tax system. The percentage it distributed to each level seemed to be progressive. However, it increased sharply at first and soon slowed down, which was characterized as "a graduated rate tax at the lower brackets, but a flat tax for most large corporations."[18] Things got even worse with its surtax rates which almost made it a regressive corporate tax. Besides, due to the fact that the tax amount is based on the net income of corporations, progressive corporate tax is usually blamed since there are ways for large corporations to nominally decrease their net income, such as transferring their capitals to foreign countries, which in return decreases the taxable amount. This is a general reason why progressive corporate tax is not so effective.

Given that the progressive corporate tax is seen as ineffective because it taxes on net income, it could be made effective if taxation changes. The progressive corporate tax should base primarily on the market share of the corporations and partly on the net income. Tax rates increase as the market share of corporations and net income increase. A corporation definitely does not have the ability to conceal its percentage of market share. In this way, a progressive corporate tax would no longer be only a "showpiece" but an effective antitrust device. [18]

3.2. Innovation Funds

The government can provide innovation funds for firms that want to enter a monopolized market. Firms can acquire initial capital from innovation funds provided by the government.

Clearly in a market with few monopolies, startup firms often face a greater cost of capital than the monopolies. [19] There are three main sources of financing for startup firms: founders' personal capital, private equity, and bank debt. [20] Usually, founders' personal capital is the most important source of financing for startup firms. According to Massimo G. Colombo and Luca Grilli, it is said that in order for startup firms to be exempted from the financial constraints in the market, the government should increase access to bank loans and venture capital, which could effectively reduce the financing constraints for the startup firms. But this method has a limitation: "Introducing a VC sector into an economy where it is not

already present is nontrivial as it requires the presence of at least three interacting institutions: investors, experienced venture fund managers, and a market for IPOs."[19] There exist another constraint that would strongly affect the startup firms, which is high information costs. "The implications of such constraints for their financing and investment behaviors are likely to differ according to the nature of firms' investment opportunities and the amount of personal financial resources founders may be able to collect."[20] The startup firms would consider both the investment opportunities and their available capital. Entering a market with monopolies is so risky for startup firms that they are more likely to give up than having a try. In this case, they are less motivated to spend their personal capital on the industries, not to mention bank loans.

As a result, the significance of innovation funds is shown. Those firms can apply for the funds and the government should measure and verify whether the firms' quality of products and ambitions are capable of challenging the dominant position of monopolies. Also, the government can create an agreement when it is giving away the funds to the firms that they should promise they would not accept the acquisition from the monopolies and the government would make up some of the loss if the firms fail. In this way, monopolies' strong competitors are introduced to the market to weaken the monopoly power of the leading firms. With innovation funds, the firms are encouraged to innovate and provide services that are better than the monopolies'.

3.3. Shared Platforms

In this day and age, our daily life is filled with all kinds of platforms like Google, WeChat, and Amazon. We do searching, online sales, and communications on these platforms. Usually, to exclude their competitors, monopolies would construct their own platforms that contain their users.

There are several drawbacks for a firm to own platforms. "Without effective checks and balances, however, platform owners can sometimes direct digital platforms to pursue activities that benefit themselves at the expense of other stakeholders." (30) Here stakeholders can also refer to consumers in a market. This implies that consumer welfare cannot be ensured if it is the monopolies that own the platforms. Besides, it is undeniable that we already rely on these platforms. Hardly can a competitor enter the market because users are stick to the platform that monopolies provide. The costs for consumers to transfer into a new platform are kind of high that a competitor cannot get enough users. Also due to this, a company is more likely to be reluctant to enter the market with monopolies.

There are three points to achieve shared platforms. First of all, "as digital platforms become increasingly integrated into economic transactions and social activities, it is also essential to examine platform governance not just from the perspective of platform owners but also from the perspectives of other stakeholders."[21] The platforms could be decentralized and governed through societal effort. In this way, the monopolies no longer have absolute power on the platforms and consumer welfare is guaranteed. Second, if the

platforms that monopolies constructed are shared and public, the barrier for competitors to enter would be largely decreased and the competitiveness of the market would be increased. The government can require the monopolies to publicize their platforms for other firms to use. This also decreases the information cost mentioned in the above section. With the access to same platforms, consumers can have a choice to determine which service they would like to use. Third, an alternative approach is to let a third-party agency manage the platforms. A good example is the China Tower Company. There are three telecommunication companies in China: China Mobile, China Unicom, and China Telecom. To provide services, a telecommunication company needs to build signal towers. China Tower Company is in charge of building signal towers for all three companies. Even though the three telecommunication companies are separate, their signal towers are shared and contracted to a third party agent-China Tower Company.

3.4. Social Trust

In business, trust refers to a kind of financial service that the trustee provides to the trustor. There are three parts concerning trust. They are trustor, trustee, and beneficiary. Trustor gives trust estate to the trustee which serves as the agent to provide profits to the beneficiary. Here trustee should strictly follow the will of the trustor. This process is protected by the Trust Law varied with different countries. The business pattern of trust could also be used in that of monopolies.

In a company, the shareholders invest in it, and the company works to gain profits and give them back to the shareholders. The reason for monopolies to provide services is to make profits for themselves and their shareholders, in which the process does not involve consumers. In other words, consumer welfare is initially not a consideration for them. Social trust, enforced by the government, is a pattern for monopolies to provide benefits to society, the beneficiary. In this system, trustor, trustee, and beneficiary are shareholders, monopolies, and society respectively. In this way, monopolies are obligated to consider the whole society, including consumers. As thus, consumer welfare is guaranteed and national security is protected since it's the society that is supervising them. "Big Finance and Big Tech have created bright new opportunities to support positive social change as we have seen in previous chapters. But we have also seen there is a dark side to the impact of technology and finance and the role they are playing regarding rising inequality, fractured social and political institutions, and accelerating climate change."

To implement this, monopolies should "listen to, and engage with, community". They should listen to people's advice and aim for increasing consumer welfare. Also, for society's sake, they should always place national security in the first place. Then, there is no need to worry about the overwhelming power owned by the monopolies. The monopolies and the government should also increase transparency to let people in the society know what's going on. They should publicize the process of their negotiation and how they do to protect user privacy, national security, and so on.

To sum up, progressive corporate tax weakens the monopolies and eases the burden of startup firms. Innovation funds encourage and provide capital to startup firms. Shared platforms ensure fair competition between monopolies and startup firms. Social trust makes the monopolies take their social responsibilities. Now that strong competitors are introduced into the market, which ensures competitiveness, monopolies are more likely to improve their quality of products to retain their consumers. The new firms provide consumers more choices. These both increase consumer welfare. With social responsibilities, monopolies are supervised by people that they cannot offend national security. These policies combined may effectively deal with problems about monopolies.

4. Conclusion

This paper has discussed the current status of antitrust and proposes some viable policies against the bigness or monopolies. First, it explains the reasons for antitrust, which are suppressed innovation and overwhelming power. Then two common strategies against the bigness are introduced, which are the fine and the breakup. The paper also analyzes the disadvantages of the two strategies with several classical antitrust cases, including the breakup of AT&T, the dominant telecommunication company in America at that time. Finally, it proposes four viable policies based on behavioral economics: progressive tax, innovation funds, shared platforms, and social trust. These policies aim at safeguarding national security, increasing consumer welfare, and lay responsibility upon the bigness.

However, these solutions still have their limits. How these policies fit in the current legal system, how the government should make changes to adapt the new policies, and how to prove that the policies do have some effects are all the concerns we should consider. The core of issues about the bigness is never the problems of monopoly, which also has some benefits, but a need for an innovative market system, like the behavioral approaches proposed in this paper.

Just recently, to strengthen the supervision on the platform of food-delivery service, Zhejiang Province of China published its food-delivery app, the “Zhejiang Food-delivery Online.” It achieves that it links up from the platform, food-deliverer, and restaurants to some division of the government. Thus, the whole process of the food-delivery service is supervised. The app lays responsibility on the platforms, ensures food safety, safeguards the safety of food-deliverer, and increases consumer welfare. This undoubtedly reveals the feasibility of the behavioral approaches.

All in all, the development of new systems is unavoidable. The behavioral approach is just one of them. Soon, there may even be a completely new system of the market. However, we should not be stubborn and take things as they are. Instead, keeping innovating is precisely how human history is shaped.

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