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The economic and political instability provoked by fake news on mass and social media. Japan and the US under perspective.

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0. Acknowlededgments

1. Introduction

Is fake news a threat to the global economy? Can this one be partially held responsible for political instability? By analyzing their birth and their close links with media and more recently social media, I will try to show why and how, in my opinion, such a phenomenon is indeed dangerous for the economy. This thesis starting from a look at the general role of media and the mechanisms responsible for the spread of fake news will also show the problems related in trying to define under the label of "fake news" many different phenomena. In particular, the focus of this work will be analyzing some of the most relevant (in my opinion) ways in which fake news can and have worked as political and economic destabilizing factors in the US and Japan.

The ways, in which fake news can occur, have been selected according to their purposes and the tangible effects that these purposes have created on both global and national economy and politics. Among these phenomena we have; fake online reviews with the purpose to damage the image of a certain brand or product, fake posts on social media with the purpose to lower engagement level and consequently the profits for that specific platform. Other aspects that will be dealt with are: fake comments spread on newspapers and media with the purpose to create social instability, in particular during critical or an emergency situation, and lastly, we have false statements at the expense of an opposing candidate of a political party as political destabilizing factors. To do so I will take as main examples the case of Japan, a nation until some years ago deemed to be one with the highest rates in public trusts in its media and at the highest positions until 2010 in the Global Press Freedom Index. While to Japan, I will oppose the case of America that is one of the most hit nations by the fake news issue.

In conclusion, this paper will outline the concrete consequences on the economy, in terms of costs, provoked by fake news in all their shades. The situation is serious, according to the analysis on fake news' impact made by the Cybersecurity CHEQ report, which estimates annual losses around 78 billion of Us dollars, as a direct consequence of fake news on the global economy. Governments and media are beginning to respond in these last year. However, more work still has to be done to stem this phenomenon, and it is my mind that strategically coordinated and comprehensive actions are required on a global level by the International Community, to limit further damages on the economic level.

2. Literature Review

Among the authors of literary work that definitely support a correlation between fake news, economic losses and political instability there are undoubtedly Xinyi Zhou and Reza Zafarani, who defined fake news as an "erosion to democracy, justice, and public trust". Talking about fake news and spread through Social Media, my thesis will also mention the importance of prevention measures on online platforms. Such issue has already been tackled for example by Khai Shu, Amy Silva, Suhang Wang, Jiliang Tang, Huan Liu, in their research article *Fake News Detection on Social Media: A Data Mining Perspective*.

Another important topic that I will address in this thesis will be exploring, among the various types of economic damages, brand damage. On brand protection from fake news, some researches have already been conducted, such as those by Jason Ratciff, in his article *Protecting your brand in today's 'fake news' economy*. Among the issues that will be tackled, there will also be the damages to journalism provoked by fake news. Such a theme is in opposition with the work of other scholars such as Beckett Charlie who claimed in his work *'Fake news': the best thing that's happened to journalism*, that the spread of false information might actually have been beneficial for newspapers.

In particular, there some authors who sum up the critical points of my inquiry and whose researches also gave a consistent contribution to the building-up process of my thesis. Among these authors, there are, for what concerns the issue of political instability caused by fake news on social media, Bertin Martens, Luis Aguiar, Estrella Gomez-Herrera, and Frank Mueller-Langer. In their report *The digital transformation of news media and the rise of disinformation and fake news*, these scholars showed how such a broad spreading of false news, we experience nowadays, is strongly related and correlated to the emerging of media in the digital market. Instead, concerning the topic of economic damages, in terms of monetary losses, one of the most referential authors for my research is Laurie Sullivan. In her article *Study Finds' Fake News' Has Real Cost: $78 Billion,* where, as we can also assume from the title, she manages to prove that there is actual damage to the economy that can be calculated in monetary terms.

3. Methodology

As Methodology, my thesis relies mainly on qualitative analysis with the collection of information taken from both primary sources like youtube videos and secondary sources like journal articles and web sites articles. Although a major part of my dissertation is based on other scholars, writers and journalist accounts, I made also use in some sections, such as in *The real cost of fake news* chapter, of quantitative analysis. I reported the numbers of what it is supposed to cost fake news to the economy. Another chapter where I will make a little use of this approach is *The structure, role and evolution of media in Japan*, where I show the cyphers of the increasing investments on social media advertising sector as a further reason to stem fake news propagation and avoid brand damage.

Still, for quantitative analysis, I made reference to two surveys to support my claims. The first one I quoted is in my Fake news as fabrication of feedback section where I show the results in percentages to support the idea that bad reviews consistently affect customers' decisions. False statements can bring customers in most of the cases, not to buy that specific item which received terrible reviews, thus creating economic damage for the firm that is advertising the latter. The second survey I discussed is again in the section The real cost of fake news, and it deals with a downward trend in people's claims about their trust in mass media (in this case newspapers) as means to provide safe, truthful and reliable information.

4 Analysis chapters (Part I)

In this first section of analysis chapters, I will go deep in social Media structure and functioning and how the latter can contribute to spreading widely fake news. Starting from the Us perspective of how social media function I will then pass to analyze in the following chapter, the case of Japan and how media developed inside this different context.

4.1 The role of media and social media in the US

This chapter will focus on analyzing the functions of social media and the mechanism linked to fake news spreading. Social media, before born as a way to build people relationships online, nowadays, is getting more and more momentum even in the economic and political environment. Social media and the news they spread now have effects on corporate reputation, in particular, the kind of activities employees engage with on these platforms can determine significant impacts on a firm in terms of image. Furthermore, social media can be a means to promote advertising. The company which wants to advertise its product and publicizing its brand pays some quotas to the enterprise running a specific social media. This way, such a company can have the chance to reach a broader audience and hence more customers. Besides, a platform may provide the enterprise with data of the accounts elaborated according to their preferences. So both the sides can benefit from this exchange and enrich themselves.

To do so, social media needs to pay a strong focus on what are the needs of its users, and it does so by collecting pieces of information. These pieces of information allow both the platform and the enterprises affiliated to have a higher awareness of customer needs. A better knowledge brings to an improvement of what it is publicized and the way it is advertised enhancing the desire to purchase a particular item from the customers and at the same time an enterprise can ensure itself, new customers. Of course, if a product is made more attractive and the number of potential customers rises as well, the result will be an improvement in sales and consequently more profits." Social media are effective for business activities and the information acquisition process such as in the awareness of consumer needs which affects the marketing process by including customers to purchase commodities" ((Martens, Aguiar, Gomez-Herrera, Mueller-Langer 2018).

Consumers nowadays can access much information and news online. They can also choose which news access to, and their demand for news is currently rising at an exponential level, facilitating as well the access to a wider variety of news sources in comparison to information-searching by non-digital means. Indeed it is estimated that around 2/3 of news come from search engines, news aggregators and social media. Nonetheless, the vast accessibility of these sources and the fact that not all the information uploaded online are

subjected to peer-review makes them most of the times superficial, or even untruthful, and that is one of the cases when the phenomenon we call "fake news" occurs.

The danger is remarkable, also considering that reliable news attracts less audience than fake news even though it is estimated that the audience averagely engages its attention less time in fake news than in real ones (Martens, Aguiar, Gomez-Herrera, Mueller-Langer 2018). For this reason, it is more likely that fake news spread faster and more broadly than authentic ones. A factor typical of fake news, especially in social media, and which contributes to its propagation is undoubtedly the moral emotions evoked in fake posts. Especially, news describing adverse facts, and therefore provoking negative emotions, have the most chance to be widely propagated, indeed while the propagation keeps going the rate of negative comments increases as well.

Besides, with the increasing scope of this phenomenon, the reliability of other means of information like newspapers is getting affected. Journalists and their sources are becoming more and more subjected to miscredit and targeting so that in some cases, false information about them get spread. "Journalists might be targeted to trick them into sharing inaccurate information which feeds a false interpretation of the facts or, when it is revealed as fake, diminishes the credibility of the journalist (and the news organization with which they are affiliated)" (Posetti 2018). Since scandals increase audience and because fake news is not meant to have quality, but to draw the largest audience as possible, false miscrediting news are becoming more and more common. An example, where we can notice this phenomenon occurring, is politics.

4.2 The structure, role and evolution of media in Japan

In this chapter I will be talking more in detail about which media operate in Japan, their functions and uses and how such media contribute to spread news, also fake ones. To do so I will put in comparison both the positive and negative outcomes linked tot he use of these tools. In Japan, online sites are used as a means to receive feedback, share advice, forming and strengthening public opinion and hence social consensus. Japanese media have an intricate mediatic network which influences and build up public opinion. Indeed while public opinion was secondary and considered just like a passive subject which receives information by various media, nowadays is an active element which contributes to spread and shape the news. If someone wants to create a public opinion online, some steps are required. First of all, mass media like journals, magazines, television and radio provide the public with information, and then this information is spread by the people through commentaries. Rhetoric figures like repetitions, exaggerations, amplifications and decline can give a good contribute, allowing news to spread faster.

Of course, it is necessary a medium, to distribute information and the fastest way to do so on the Internet is through social media. Whatever platforms have the purpose of making people express their opinions and share them can be used to form and affect public opinion about a specific subject. In the list, there are not of course only social media, although they are one of the viable and fastest ways to share information and related opinions. Still, we can also find Forums, blogs, message exchanges, news aggregators, social bookmarking, video sharing sites and lastly question and answers sites. Whatever platform focuses on the opinions of the Web surfers can serve the purpose. Furthermore, social media are useful in promoting business and in particular promotion of sales.

 Sales through social media are increasing in Japan as well, and 42% of Japanese firms plan to make use of social media to promote their business online in the future. Such change in the way Japan is approaching to its digital market is just one example of how social media are gaining more and more momentum in the economic scenario of this country. Along with this increasing digitalization of market, we can have a better grasp of the importance to stem as much as possible fake news propagations in Japanese Social Media, particularly in these years of transition, when the market is readjusting itself to this new reality. Considering that advertisements on social media are effective and already helped Japanese firms to make their sales grow and thus to increase profits. Such a statement can be proved by the fact that investments, for social media advertisements, are growing at the current rate of +6.1%, with the deployment of US\$2,421m or JP¥271,537m for the year 2020, and they are expected to reach a growth up to 6.8% by the year 2024 with US\$3,151m or JP¥353,485m (Statista 2020).

Hiroki Hidota, Teruyuki Bunno, and Masatsugu Tsuji three professors from Kindai University and Kobe University in 2017 expressed themselves about this topic. They stated that firms to open to this new market and increase sales they need to "mobilize all managerial resources and networks to correspond to consumer needs and the market to achieve

innovation." (Hidota, Bunno, Tsugi 2017) Furthermore, they also claim that there is a strong relationship between firms and information, and this information can help to transform and renew a firm's assets. Indeed according to their vision "firms perceive outside information and assimilate this knowledge and resources inside the firm and transform new information. In addition, firms can (have) contact with opinion leaders by identifying such leaders from the information which is exchanged in social media." (Hidota, Bunno, Tsugi 2017)

On the one hand, social media can be a valid asset for firms, not just because you can advertise products there, but also because you can have a better grasp of consumer needs. If a firm wants to find out which are the needs of customers, it has to look at the products people demand more. Based on how many customers have bought or would be willing to buy a certain item, analysts can establish the reputation of a product. Once they managed to find out its reputation, they can estimate a symbolic value which will be later translated into a price and, if the demand is high, in an improvement of sales.

Social media to facilitate this operation, allow firms to collect and share information about consumers, in particular, their preferences. In particular, two relevant figures in this field like Rodriguez and Nguyen claim that social media can create beneficial relationships, in terms of sells increasing, with firms who want to sell online or advertise their products. It is their mind that the reason behind these beneficial effects might be because Social media continuously collect information on users preferences. So they can help a firm to understand better, which indeed are customers needs when they are looking for something to buy, and consequently to ensure specific companies better sales performance and hence better revenue.

On the other hand, because of this close link between media and advertising, I think it is even more imperative to stem fake news as a potential destabilizing factor for selling on these platforms. To better explain such a statement, I will make an example, which can be applied for the Japanese case, but it also universal. Let's assume that one big brand like Nike, it's advertising a new pair of shoes on Facebook. Still, suddenly many people start to share news which claims there are some (inexistent) manufacturing faults with this product, perhaps accompanied also by some negative reviews of alleged customers. The more people will share it, more people will read it, and potentially fewer customers would buy this item, with less income for the firm which had invested in advertising its product on this platform.

In fact, social media in Japan can also be a means to spread the news; in this case, fake ones and the effects that such information has on people. Idota, Terujuki and Bunno defined social media as "a group of Internet-based application that build on the ideological and technological foundation of Web 2.0 and that allow the creation and exchange of user-generated content. Particularly Social Networking sites (SNS) are web sites that allow users to create personal profiles and establish networks with other users within the platform." Media is estimated to be an excellent means to convey information and particularly information which provoke strong and most of the time, negative feelings on people, for example, crisis. Indeed, during critical situations dependency on media increases because it is perceived as a reliable way to get information and at the same time to get in touch with friends and relatives that might be involved in this kind of situations.

Not only individuals, but also the most famous tv channels and newspaper contribute to spreading the news on social media through their official pages on these platforms, an example of this is embodied by one of the most influential newspapers in Japan, Nihon

Shinbun Kyoka 2011). In this sense as Joo-Young Jung, an Associate Professor in the Department of Media, Communication and Culture at International Christian University in Tokyo, Japan, said social media are a "dissemination channel for mass media" (Jung 2012).

Indeed nowadays all the most influential tv channels and newspapers, like Asahi Shimbun and Japan Times, have also an account on social media to publish their news online. Such a fact is another evidence about how social media can be a means to "produce, consume ed exchange information" (Jung 2012). Still, at the same time, can also be deceiving if we consider the fact that anyone on Facebook, for example, is free to post and share whatever he or she feels like. Indeed this comes with the risk that so-called "information" made up or structured to appeal the emotions of the audience rather than being objectively analytical, can be preferred and shared by an entirely consistent amount of people. The more it is shared, the more it will be likely that it will appear when we scroll the posts of our personal Facebook account page. In some cases with chances even higher to appear between the first posts, we encounter when we log in, surpassing with their rates of incidence even those pieces of information shared by official national channels.

Also, MSD (Media System Dependency) states that mass media cover relative importance in people's lives which changes on the base of the social environment where they live in and their models, goals and lifestyles, what they want and who they want to become. Still, the issue is that people are not aware of what happens in the social context in which they live. So they can be quite inclined to believe in the news by external sources even without verifying their authenticity. People not always come to realize the magnitude of certain events immediately. In these situations, social media allows people to receive news about the events by posts of journals and tv channels which have an account there and at the same time contact their relatives and friends involved in dangerous areas to ensure themselves about their wellbeing.

4.3 The reason behind the damages to the economy and social media engagement levels caused by fake news.

In this chapter, I will analyze the relationship between users' engagement level and social media incomes, in particular how fake news can potentially disrupt or weaken this relationship by undermining users trust, hence engagement level. As mentioned before, social media like Facebook and Twitter receive a consistent part of the money from advertising and despite some advertising might make use of false or distorted information to draw potential customers, at the same time this represents damage for reliable advertising's business and to the platform as well. Hence it is my mind that it becomes necessary to fight or at least try to limit this phenomenon in social media platforms; otherwise, users might start not to trust information. Indeed according to the studies of two scholars Cardogan and Drakopoulos, fake news can pose a severe threat to a social media platform (Jacobs 2018).

The reason is that by affecting users trusts fake news lower their engagement in social media, causing the loss of revenue for both the platform and advertising inside of it. The fall of engagement levels, according to the two scholars occurs in particular when users do not receive any warning about the potentially fraudulent content of an advertisement. Cardogan and Drakopoulos pointed out quite clearly this point in the following statement: "If the platform does not show any effort to help agents discern accurate content from inaccurate, i.e., uses a no-intervention mechanism, significant reduction in engagement can be expected" (Jacobs 2018). Such an occurrence is quite likely to happen as the researchers assume, also because social media operators would not be able to detect fake news and differentiate them from real information.

Therefore ensuring the integrity of a post becomes fundamental if a social media wants to keep ensuring itself a healthy engagement level by its users and hence a sufficient revenue. The two researchers pointed out in their analysis that despite users in the previous models they seemed they did not care much when the latter dealt with misinformation, users actually tended to engage themselves less when they encountered fake news, and the system did not report it. Indeed if a social media platform manages to provide a warning about suspicious information, the latter can experience positive effects on the engagement levels of its users or at least limit the negative ones.

To better explain this concept, I will make an example. Let's assume that an Instagram or Facebook page is spreading untruthful news about an item advertised or about a specific event. In case the platform manages to spot and shut down the page responsible for this, its users and investors that promote there their products will feel they that the platform is reliable and their activities/business on there is safe, so they will keep engaging with that specific platform.

Cardogan and Drakopoulos also explained that one of the reasons why it is so easy to encounter fake news while navigating on social media is because there is an erroneous

assumption. This assumption made people believe that algorithms and systems meant to filter news, can distinguish false information by factual information more than human operators when the evidence shows that in most of the cases it is the other way round. Therefore, I think, such a fact highlighted by these two scholars, can be ascribed as one of the reasons why some fake news manage to navigate their way from an account to another by staying unreported for a long time.

The events concerning the plunge of Facebook stock markets in 2017 are an example of how the unreported or untreated presence of fake news on social media can be detrimental for the revenues of the platform itself, and in some cases also for other organisms whether these are related to a social platform or not. Just in one day, Monday, September 25, Facebook shares dropped by 4,5%. It was one of the most consistent drops anticipated by two statements made by Mark Zuckerberg on Friday after Facebook stock markets closed. As Brian Deagon explains, the two announcements are the followings: "Zuckerberg, in a Facebook blog post, said he would abandon plans to create a new class of company stock with no voting power. Connected to that was a filing with the Securities and Exchange Commission, also late Friday, that said Zuckerberg anticipates selling 35 million to 75 million shares of Facebook stock over 18 months in order to fund his philanthropic initiatives." (Deagon 2017)

However, the breaking point, which led to such a fall in Facebook stock markets, occurred after President Obama warned Facebook's chief of the dangers caused by fake news about 2016 presidential elections circulating on his social media. Such concerns led to the massive selling of Facebook shares. Seirafy tells us that Zuckerberg, in the beginning, did not take in consideration that Facebook could have fake news that had affected the outcomes of the last elections considerably. Nonetheless, later he confessed that Facebook had experienced some manipulations and that he was willing to provide 3000 advertisements with political themes to support the investigation of a potential Russian intervention as a manipulating factor for the outcomes of American elections.

5. Analysis chapters (Part II)

While the first section of Analysis chapters engaeges with social Media and their role as fake news spreaders. This second part will be mostly focused on fake news itself and the tangible effects they have on economy. In each chapter I will take into account specific cases related to fake news issue by making distinction among the different types of fake news that will be addressed and I will also draw some examples where fake news caused reported economic downturns in Japan and in US.

5.1 Problems of the definition of "fake news" and intervention

In this chapter I will deal with fake news and I will show how in my opinion is still difficult to stem fake news propagation as we still have difficulties nowadays to define what can we put under the definition of "fake news" and what we cannot. Indeed, even though fake news is not a new phenomenon, but it exists since when printing has been invented, there are still some issues in establishing which information can go under the definition of "fake news" and which does not. One of the issues, when we are facing such a phenomenon, is that it is difficult to define and to address appropriately because it presents multiple shades.

Fake news can be invented or altered stories spread on the Internet or other media, also "jokes" spread on the media can be considered as fake news. According to Reuters, we can divide fake news into three categories. The first one deals with news invented to make money or to damage the public image of a journalist or a politician. The second one is about the news with a concrete and truthful base that underwent an alteration by someone following a specific agenda. Lastly, the third kind of fake news refers to false news about topics of great importance for people, which are spread to fuel fear, or other feelings the latter do not feel comfortable with (Ireton, Posetti 2018).

In 2017 two scholars Wardle and Derakshan portrayed three different dimensions of falseness and harm which we can relate to fake news, and they are the following: "misinformation", "malinformation", and "disinformation." The first kind describes false information spread either unintentionally or with no harmful intent. On the other hand, under the label of malinformation, we can see all those news whose information is genuine, but someone spread them with the sole purpose of causing harm to someone else. In disinformation instead, we have the combination of both the two previous types. We can put in this category all those information that are both false in their content and harmful for a particular person or group of people. Such a distinction is essential to give us a broader understanding of fake news issue and to have better responses to address the negative consequences of this phenomenon according to the different cases put under scrutiny.

About fake news classification, Gelfert in 2018 stated that this news "should be reserved for cases of deliberate presentation of typically false or misleading claims as news, where these are misleading by design" (Gellfert 2018). The European Commission of Communication as

well gave a clear definition of disinformation. According to this body, disinformation is a "verifiable false or misleading information, created, presented and disseminated for economic gain or to intentionally deceive the public and cause public harm" (Gellfert 2018).

The scope of fake news phenomenon is so vast that as 4 Italian scholars Del Vicario, Quattrociocchi, Scala and Zollo pointed out, it influenced the way we perceive news and reality to the point that they claim we entered in a new era. To define this new era of information, they lend the definition of "post-truth" created in 2016 by the Oxford Dictionary referring to fake news. Such a term is used for "relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief" (Del Vicario, Quattrociocchi, Scala, Zollo 2018). According to these scholars, a viable solution for trying to limit fake news issue might be: ensuring that all the news and their sources are subject to fact-checking and strengthening the media literacy. This way, we could have better assessments of the quality of the news.

Del Vicario&Co think that nowadays we live in a new age, a period where every news can be altered and made looked like as real. This is an era where people no longer know what is true or not, what to believe in or not. This is an era where anyone with a computer or a smartphone, and a wi-fi connection can create its own truth influencing countless other people with tangible, mostly adverse, effects in the physical world, in our everyday life, in politics, in the economy and institutions. There are two other scholars as well, John W. Cheng and Hitoshi Mitomo, who thinks that we are in an era where truth has been left behind, that we are in a "post-truth era" as emerges in some of their observations about this phenomenon. "Fake news had more or less altered the outcomes of these events, and we have entered the post-truth era." The base on which fake news develops is an "information problem" which affects all modern societies, where the interactions between humans and computers have become an integrated part of our everyday life (Cheng, Mitomo, 2018).

Furthermore, it is difficult to tackle this issue properly because it is so vast and with many shades that we still do not have a specific definition that can comprehend all of these aspects. Indeed fake news can both be misinformation and disinformation. Under the sense of fake news, we refer to all of those pieces of information that have been subjected to manipulation, fabrication or that they are just not complete. Also, the purpose is a factor to keep in consideration. In fact, we do not make distinctions, when we usually use the term "fake news", between pieces of information fabricated or modified for "parody, partisanship, profit-making, propaganda or just poor journalism." (Cheng, Mitomo, 2018).

In an attempt to sort out or at least limit the scope of this issue, Del Vicario in 2018 created an algorithm to prevent fake news, about social media the result was that more the time we spend there, more there is the chance to incur in a post containing fake news. One result of this research pointed out that social media are successful in conveying messages whether these are true or not because they act as of form of confirmation and reinforcement of people's beliefs. Consequently, a new perspective is born where news get shaped on the base of the preferences, beliefs and emotions of the audience. On the other hand, reliable and object information does not always match these criteria, and so it gets discarded. In fact, in the modern world where information seems it has become a commodity to be sold and shaped

on the base of customers' demand, fake news is just more salable because it reflects the audience demand.

Vosolghi, as well, believes that the reason for such a wide spreading of fake news is related to human subjective factors (Del Vicario, Quattrociocchi, Scala, Zollo 2018). He states that the algorithm spread in the same way both factual and false news online. The reason why fake news is so widespread is that humans are more likely to spread it and to select it in according to their cognitive biases. Indeed he states that fake news can be defined as novel information, and if this novel information manages to reach a large audience, it can contribute to increasing the social standing of the person who propagated. Another scholar, Macanu, shares the same view about cognitive biases as a criterion for selecting information. In 2018 after analyzing false information created by a troll page, he established that people who have biases towards mainstream media and prefered information sources more alternative also had more chances to engage with false information (Del Vicario, Quattrociocchi, Scala, Zollo 2018).

Conversely, there are other scholars like Fletcher who stated that fake news sites do not reach as many readers as real news sites which reach between 20 and 50% of all online readers, against only a 3,5 % of readers of fake news sites. The issue for Fletcher lays in the fact that even people who made use of reliable sources at the same time they were also readers of fake news so that many cases, people knowledge presents an overlapping of both fake and actual news. For example, it is estimated that around 75% of people who read false health news in France also make use of newspapers like Le Figaro to get information, and 34% reads Le Monde. Hence according to these data, it is difficult to properly intervene to stem fake news propagation as the majority of online readers when they inquire into news, they acquire both false and true information together in their wealth of knowledge.

5.2 Fake news as fabrication of feedbacks

The purpose of this chapter is to analyze the characteristics and consequences of fake news as false reviews, given the growing importance reviews cover to determine the quality of a product, in case they are positive, they can draw more customers and increase sellings. Indeed, customers love to share their opinions, and they are getting more and more influent in the Internet retail market. The Internet has become popular also because it is a means with which people can easily sell and review products. Reviews and posts nowadays have become a source of income, and consequently, bad reviews and posts are damage or a hindrance for that source, especially if these are bad just because they have been purposely made so. On the other hand, it is also tricky to determine whether a useful review is genuine or someone just made it look like so by making it him/herself or if hired someone else to do so.

Such a phenomenon is called "undercover promotion", and we can notice it for example when a writer or an artist positively reviews his works under a pseudonym or buys some reviews by paying someone else to do it. According to Gartner considerations in 2014, up to 15% of all social media reviews are the result of undercover promotion. The issue is that it is hard to know with a satisfying degree of certainty whether a review is reliable and authentic or not. Perhaps given this premise, it could be argued whether it makes sense at all to do reviews whose authenticity cannot be fact-checked.

The spreading of fake reviews saw its origins in 1995 when Amazon developed a section dedicated to customer review of its product which could be instantaneous and on a large scale (Dohse 2013). From the analysis on many reviews online, it has emerged that genuine reviews, whether positive or negative, had the purpose of describing the experience the customer had in using a product. Conversely, false reports just limited themselves to describe the product and potential flaws or strong points it had. Also, despite fake reviews might have harmful effects on the person, company or organization they address to.

Genuine reviews encourage people to buy more than negative reviews discourage them. The reason behind of it lays in the fact that people in assessing the quality of a product they value more the experience other people had with this rather than just a mere description. To make an example customers who are interested in buying a camera would feel more willing to purchase a model whose other customers reviews state how they enjoyed more their experiences, like holidays and parties thanks to this device. Besides even if the same item presents negative reviews describing flaws in its manufacture, clients would probably feel more encouraged by the description of the positive experiences rater than discouraged by criticisms on the object manufacture and design (Dohse 2013).

"Online algorithmic distribution blurs the branding efforts of newspaper editors and weakens their trusted intermediary relationship with readers. False news producers may deliberately game the network features of social media and ranking algorithms to reach unsuspecting consumers. Online distribution brings new entrants on the supply and demand side into the market, some of them with lower quality news products and more extreme views" (Bertin Martens Luis Aguiar Estrella Gomez-Herrera Frank Mueller-Langer 2018). Another demonstration is given by a survey performed on a sample of customers. The results proved that around 80% of consumers refuse to buy a product after a negative review. Still, in case the review is positive, the percentage of customers willing to buy a specific item is higher, standing around 87%.

Ratings, therefore, cover a crucial role in determining a consistent afflux of customers and hence a sufficient revenue for a firm. Talking about restaurants, an increase of ratings of just half a star in a five-star evaluation system brings an increase of 19% of customers. Furthermore, further analyses have brought researchers to the conclusion that if customers make good reviews on specific dishes, other customers will be more incline to demand those dishes in particular. Not only restaurants but also other enterprises are tightly linked to customers' reviews, and their survival in part depends upon how good these reviews are. Stores engaging with book sales are an example of this kind of enterprise. If we look at the ratings of most of book sales' stores, we can notice that they score at least four out of a maximum of five stars and that implausibly high positive reviews brought researches to analyze the reason behind it.

Thus, it is not unfrequent that some of these stores alter their ratings. They do that either by hiring someone who writes excellent reviews about the quality of their books or bookshops owners create fake accounts with pseudonyms to write themselves the reviews they need for making their activity prosper. The link between positive revenues and profits, of course, represents an incentive the manufacturers and sellers of a product to promote it either with advertisements or with undercover self-written reviews. Some sites have been created to meet the demands of positive reviews by the owners of some activities. In these sites for a few euros, it is possible to buy a review. The expedient that writers of books use to lure potential reviewers, consists of ensuring the quality and most of all, the authenticity of their writings.

5.3 Fake news during emergency situations.

In this section, which makes part of Analysis chapters (part II), I will display the effects that fake news and media have during emergency situations and how they alter people perception of the danger by creating in certain situation consistent damages to the economy of a country. In this case, I will address the Japan and Us case of fake news impact on their economies caused by fake news in the last months at the beginning of the Coronavirus pandemic.

5.3.1 Coronavirus In Japan

In this chapter, I will put under analysis the consequences triggered by fake news spread in Japan about the current Coronavirus pandemic. I will also outline how major Social Media participation, despite on the one hand it triggers major profits, on the other, it has to be partially held responsible for the increase of fake news issue. In fact, as I will point out the rate of fake news spread nowadays, in this case about the current pandemics, can also be ascribed to a major and evergrowing number of social media users. Especially, if compared to the number of some years ago during another pandemic, the H1N1 epidemic in 2009, when the rate of fake news circulating about that topic and the social media engagement were both lower.

 A recent example of the consequences of fake news in Japan is related to false information regarding the current pandemic of Coronavirus. About this issue, a professor of Media Theory at J.F Oberlin University Kazuhiro Tara proposes his view and the best way to address the problem of spreading misinformation. In an interview, he answered the questions asked by the Mainichi Shinbun about the reasons behind the spread of disinformation. He also gave some insights about which steps undertake to prevent, or at least to stem, the scope of this phenomenon.

Among the fake news that circulated in Japan on Coronavirus, there is one which states that hot water can be deployed as a tool against the Covid-19. Indeed when the pandemics began, social media like twitter started to spread news saying that the virus could not stand temperatures above 26-27 degrees celsius and therefore encouraged to drink as much hot water as possible (Mainichi 2020). Of course, such a statement is far from being true. Unfortunately, the rate of incidence of messages like this keeps fueling popular beliefs and self-made or home-made remedies, is likely to increase as long as the government do not find before some concrete answers. Indeed during crises when the governments fail to reassure and provide answers and solutions to population, this one starts to lose little by little its confidence in its government and panic rise with severe consequences for the economy.

In Japan, the case of toilet paper panic buying is quite remarkable. Customers bought a ridiculous amount of toilet paper until the point that many shops and stores selling toilet paper in no time found their shelves empty. Such behaviours are also triggered by media and social media mirroring and amplifying as a sounding board the fear of people. Self- fulfilling prophecy, this is the name of what occurs to people which behaviours are conditioned by what they ear and see on television. For example, in the case of toilet paper, people see on

social media pictures taken from some stores with shelves where before it was supposed to be the toilet paper, empty. So the fear of lacking toilet paper as for any other primary commodity brings people to buy as much toilet paper they can find contributing to empty even further the shelves of stores.

This way, especially if such acts are protracted in a long-term scenario, they can cause inflation of prices of the products subjected to excessive buying. In fact, some the consequences of panic buying in Japan were the following: "The year-on-year rate of sales growth increased quickly and reached a peak of 20 percent two weeks after the outbreak of COVID-19 in Japan, (and) the year-on-year rate of consumer price inflation for goods rose by 0.6 percentage points in response to the coronavirus shock" (Watanabe, Tsutomu 2020).

Fake news on social media has an excellent probability of being retweeted than authentic ones. According to professor Tara, the reason for this occurrence has to be ascribed to the fact that these platforms withhold massive amounts of information. Tara considers two phenomena as the main responsible for such a wide-spreading of fake news nowadays. The first one is what he calls "the basic law of rumours" (Mainichi 2020) which states that more a topic is perceived as relevant or essential for the collectivity more the rumours about ambiguous evidence are likely to surface. The case of the beginning of Coronavirus pandemic is a case in point. Indeed being a new phenomenon, there is not much information about it, and that makes it ambiguous, provoking imaginative theories and massive disinformation. All these pieces of information can come, from anyone, as in the beginning, social media were thought to share ideas and opinions.

Still, of course, not all the users are knowledgeable at the same level regarding a specific topic, in this case, the current epidemic. So as everyone can potentially create and spread information, platforms cannot ensure to their accounts that the information they find there is accurate. Actually, in most of the cases, it is not. The second point which professor Tara highlights is the global-wide use of social media. Indeed, there are around 2.5 billion active users on Facebook every month. Such huge numbers, in terms of users, played a crucial role in spreading disinformation about Coronavirus. Much more than in the past! For example, if we compared the spread of fake news during the current pandemic with the situation in 2009 when flu pandemic broke out the monthly active users at that time were no more than 100 million. Nowadays, there are more users and so more chances that false information can travel faster, reaching more places and affecting more people who might live even on the other side of the globe.

 Furthermore lies conveyed by malicious statements and posts on social media have caused the interruption of public service in a JR East line train and the cancellation of many events. Indeed it seems that a drunken man in a train wagon if JR East had claimed to have Coronavirus while he was harassing a woman. The reaction of JR East staff was timely. They blocked the train, made all the passengers go out, and they did not allow any other passenger to board until they had ensured complete sterilization of the train. This operation resulted in an hour of delay for the service provided by Jr East Line and also the suspension of three trains of the same company, and of course consistent monetary losses at the expense of the company. In the end, he just confessed he was joking, and the police arrested him with the accusation of fraudulent obstruction of business, due to the interference of the service carried

on by the company that he had caused. The outcomes for this kind of arrest are either detention up to three years or a fine to pay up to 500,000 yen (4664 euro).

Anyway, social media are not the only media affected by the explosive incidence rate of fake news, even the most reliable sources, or at least which we consider being the most reliable sources, can be affected by this phenomenon. The case of the Asashi Shimbun in Japan is the perfect example that not even the most influential newspapers of a country can be totally immune to this occurrence. Indeed Asashi Shimbun in 2014 after reporting a piece of false news, had to make an amendment and it had to apologize for the mistake. Also, another leading national newspaper in Japan like Mainichi is estimated to have reported multiple fake news in the years between 2001 and 2008 and which had as sources Japanese tabloids.

5.3.2 Coronavirus in the Us

In the last months, the US has been the scene of huge fake news spreading about the current epidemics. In this section, I will refer to "fake news" as misinformation, in particular as contradictory statements made by prominent figures in the government, first among these, President Donald Trump himself. An example of this situation can be traced back on April of this year (2020), when the governor of Georgia, Brian Kemp, attempted to reopen industries and firms to boost the economy of his state. About this decision, Trump replied in discordant ways.

In the beginning, he had shown his consensus about this decision by stating "He's a very capable man[...]He knows what he's doing." Nonetheless, just the following day, he expressed a completely different opinion. By referring to federal guidelines to reopen the economies of each state, which it seems he had not taken into account the previous day, he made a counter-statement about governor Kemp decision "I disagree strongly with his decision to open up facilities which are in violation of the Phase I guidelines" highlighting that such an initiative might have been taken "too soon".

Also about the virus itself he made discordant statements during these last months, in particular about the seriousness of the issue and its potential dangers. On February 26 he addressed the issue with the following words: "This is a flu. This is like a flu." "Now, you treat this like a flu." "It's a little like the regular flu that we have flu shots for." Just the following months, in March he provided an entirely different version "I've always known this … is a pandemic. I've felt it was a pandemic long before it was called a pandemic."

About how his government is managing the situation he said in a twit dated back February 24; "The Coronavirus is very much under control in the USA. We are in contact with everyone and all the relevant countries. CDC & World Health have been working hard and very smart. Stock Market starting to look very good to me!". Until March 15 he kept saying that the situation was "under control". In fact, the same day about Coronavirus spreading he stated "It's something that we have tremendous control over," just to disprove himself the following day. In fact, on March 16 he claimed what it follows: "If you're talking about the virus, no, that's not under control for any place in the world. … I was talking about what we're doing is under control, but I'm not talking about the virus."

Such statements provoked "the dissemination of false information, (and) even if not deliberate or malicious, (they were) based on unsubstantiated conjecture and in light of various considerations" (Schulmann, Siman-Tov 2020). "Trump also has returned to the populist idea that the pandemic was the product of travellers, particularly foreign ones, rather than that once present within the country it is tracing and isolating people (as in "community spread") who test positive that should take center stage rather than simply restricting international travel. Returning to his obsession with immigrants, he obscured his mismanagement of the pandemic by announcing a total ban on immigration as if immigrants

were the continuing source of infection rather than Americans' own co-nationals and a threat to "jobs" once the pandemic was over" (Agnew 2020)

Such claims contributed in part to confusion and feeling of anxiety by the population who did not know how to deal with this issue and who to ask for to have reliable information concerning their health and safety. As a result of these conditions, two opposite behaviours and currents of thoughts have surfaced. Negationism, is the first response and it deals with people who are in denial, that's a typical phase experienced during traumatic events. Cospirationism, or general negative, mistrust feelings provoked by the idea that the government is operating at the expense of the population. The response I will address in this case is the same for the Japanese case: panic buying. In Us as well many supermarket shelves were emptied, in particular, the products of major interest for customers were food and toilet paper.

Although we might expect a surge of inflation as overconsumption of certain commodities due to panic buying, the consequence is actually the opposite." Inflation has slowed even when some products are in short supply due to industrial stoppages and panic buying. Past experience has made many retailers reluctant to raise prices in case it looks like profiteering. Shoppers who ventured online (or into lay-bys) in search of missing essentials reported re-sellers charging huge premiums, which the official inflation index does not capture. [...]However, there are dangers in further reducing the already low rate of consumer price inflation. In many countries, it is already below the level targeted by their central banks – 2% in the US" (Khan 2020). Such a prospect might have quite unpleasant implications in terms of sales and wages. "Slack demand pressures firms to cut prices and then pare their costs by reducing jobs and wages, compounding the deflationary problem. Many were already struggling to grow their sales even before the pandemic, and won't be able to cut their prices much further without sacrificing profits." (Khan 2020).

5.4 Fake news as a tool to create political instability

In this chapter, I will take in consideration fake news as lies told by opposing parties or omissions, made by newspapers or Tv shows to discredit or alter the image of a specific political character or party. In this case, to better analyze this section of fake news, a brief excursus will be done on the laws regulating the broadcasting of new in Japan.

The abrupt rise of fake news rate happened in the same year as the Hokkaido earthquake occurred. In this occasion gubernatorial election in Okinawa took place. This political period was characterized by an enormous amount of manipulated or made-up news spread on social media. Such events brought many calls for effective countermeasures by outlets and experts. An attempt to stem this restless flow of false rumours came from two journals Ryukyu Shimpo and Okinawa Times, which put under a careful fact-checking analysis the suspected news and then made the results of their analysis public. Among these, Ryuku Shimpo found out that there was a news spread on the Internet allegedly enacted by the national daily Asashi Shimbun. This story told that Asashi Shimbun, despite the election would have started just September 13, had done a poll to understand who was the most favourite candidate on date 1-2 September. The alleged results showed that the candidate Tamaki was leading the competition with 52% of supporters, against the 26% of his opponent Sakima. To prevent this false rumour from further spreading, an official of Asashi communicated to the Mainichi Shimbun that Asashi had never done a poll like that.

This news, of course, was not the only one that had been debunked. The scope of such a phenomenon had become unimaginably extensive to the point that even the leader of the gubernatorial election, Takumi Takimoto, had expressed his concerns about it. Indeed being aware of the power of social media, he had encouraged for more effective and comprehensive actions to stem such a phenomenon such as putting fake news under fact-checking. In fact, in his opinion, mere debunking by newspapers, even the most influential was not enough, considering that a consistent group of people read the news on social media. "False rumors that have been debunked can still spread once they're on social media," He said. "I realized that we immediately have to say, 'That's wrong,' which is why we decided to do fact-check reports" (Mainichi 2018).

Among the initiatives to counter fake news, there is a regulation law in Japan with a broadcasting act. The broadcasting act commands that broadcaster cannot broadcast programs which both intentionally or unintentionally distort facts. So, during the phase of program editing, the host must ensure that the reporter does not change anything. In case that during broadcasting some false or partial news has been conveyed, the broadcaster has a range of time of two days to rectify the inexactitudes, which starts from the moment of broadcasting. On the contrary, in case of hosts share fake news and do not make any rectification in this window of time of two days, they might incur in severe sanctions.

Usually, they could risk being fined for an amount of money up to 500.000 yen (around 4,500 euro). Also, people who make use of their name of status to encourage to discourage the election of a specific candidate might risk being fined up to 300.000 yen or 2700 euro. Even worse sanctions would hit whoever tries to share fake news to make purposedly lose a candidate. If the perpetrator gets busted, it might suffer a fine up to 1 million yen or 9.000 euros. False news control became so imperative in the very recent years in Japan that even The MIC (Ministery of Internal Affairs and Communication) during a press release on October 19, 2018, highlighted the intention to put, among the crucial points in its agenda, the development of strategies to control this phenomenon. One possible measure that such organization proposed is issuing better cooperation between platforms.

Fake news circulates in a good part on social media, and as a growing number of politicians is making use of social media for their campaigns, both in Japan and abroad, it is not unfrequent nowadays that some of them might make use of these tools to spread false pieces of information and destabilize their opponents. Even some terms or descriptions that some politicians judge as unfavourable to them can be considered as fake news. Such a phenomenon is related to what we call "biased news" and is a branch of fake news. Among the politicians who complain about having received biased news, there is also the Prime Minister Shinzo Abe who in more than one occasion claimed he had come in contact with information about him that he had defined as "unfair" and "biased."

Nonetheless, despite the growing role of social media in sharing news and also in supporting or undermining political campaigns, newspapers in Japan remain one of the most prefered ways by the population to get pieces of information. Indeed, Japan, in comparison to other countries, is still one of the greatest producers and circulators of daily newspapers in the entire world. To give an idea of the extent of daily newspapers circulation in Japan, an analysis showed that in the second half of 2017, the number of newspapers circulating on a daily base was 47 million. This number corresponds to 82% of all the households in Japan.

Spreading fake news has now become a severe issue in Japan. A problem that no one seems to know yet how to sort out. According to the author, the worsening of the situation about fake news trafficking in the very last year can be partially attributed to Abe's Secrets Act promulgated in 2013. Many argue that such a move had been a hard hit for Japan's freedom, especially for freedom of information. In fact, such an Act allows the government or the institutions to prevent the disclosure of information to the public, which might have detrimental effects for the government and institutions themselves. "The new law gives bureaucrats enormous powers to withhold information produced in the course of their public duties that they deem a secret — entirely at their own discretion — and with no effective oversight mechanism to question or overturn such designations.

 The law also grants the government powers to imprison whistle-blowers, and prohibits disclosure of classified material even if its intention is to protect the public interest. This Draconian law also gives the government power to imprison journalists merely for soliciting information that is classified a secret." (Jeff Kingston 2014). Another cause pointed out by

William Pesek, is that even before this Act, Japanese media filtered the access to some pieces of information, especially those which might endanger institution loyalty and social harmony. Two principles to which Japanese institutions always had stayed faithful.

An example of this mechanism, we can see it in the Fukushima disaster. After the damages suffered by the nuclear powerplant, due to the earthquake and consequent tsunami of March 11 2011, there was a discrepancy in news portrayals. News reporters who lived or were operative in that area told a story that did not resemble completely the reports made by other journalists coming outside that area, and it was also different by the version told by mainstream Japanese media. Furthermore, the intervention of police imposed that the news to follow a particular path, a specific direction. Indeed after that episode, the Japanese media system which was already adopting censorship when it was telling specific episodes, became even more sired to the institutions and the government commands. In 2013 some reports admitted that Abe had created an agenda whose partial purpose was to eliminate investigative journalism.

The reason behind this is that this kind of journalism might expose sensitive information to the public, contravening the "principles of confidentiality of sources and public interest." The government did not want reporters to deepen their investigation on the radioactive risks coming from the damages on the powerplant of Fukushima. The reason for this initiative of censorship is quite simple, and it is based on the fear from high spheres to be exposed and lose credibility. Such as the government also discouraged investigations on the spendings for Olimpic games that a few years later would have occurred in Tokyo. It actually prefers to distort the attention on fabricated scandals and scapegoats, such as the vicissitudes regarding the operators of Moritomo Gakuen and Kake Gakuen.

The issue coming with the adoption of this behaviour is that the increasing censorship media have experienced, especially investigative journalism, has had a negative impact on Abenomics as well. The reason behind this is because; if a government is nor supported by a reliable and effective investigative journalism, it strives much more to identify and neutralize those activities responsible for corruption and for draining out money from the state coffers. This way is also more difficult to implement reforms, especially reforms whose purpose is to boost the economy and employment such as Abenomics. Furthermore, evidence for this theory lays in the past scandals uncovered by investigative journalism, saving further money losses. Some examples are the malfunctioning airbags of Tataka and the manipulations made by Mitsui Motors about the quality and properties of its fuel. Without the support of investigative journalism, all the goals Abe proposed might become even more challenging to realize.

To have a grasp of the extent of the censorship enacted on journalists and newspapers, the reporter William Peseks concludes his article titled "Why Japans poor media grade matters", with a provocative and critical statement about Abe political actions. "If Abe's team had put one-tenth as much energy into modernizing taxes, encouraging entrepreneurship and empowering women as muzzling the press, the economy would be making global headlines. Sadly, Japan's global edge is eroding on both scores. Bad news, indeed."

Disinformation, as we pointed out before, is gaining more and more momentum in the economic and political scenario. Not even editors of journal and newspapers are immune to this phenomenon, but in some cases, they do make use of it consciously. Indeed it is estimated that disinformation is even more powerful when it is used by these figures in their articles or headlines because they are regarded as authoritative sources. Therefore it is quite unlikely that people question the reliability of news read on newspaper rather than those read online. The primary response of the readers to fake or biased news when they come in contact with it, without knowing that it is actually not real or biased, is caused by that news which destabilizes the position, the image or the credibility of a particular leader or politician to favour the image or status of some other leader or politician.

It is not unfrequent that interviewers edit the words of an interview to make it look like as they want. We can see an example by referring to a meeting which took place on television, on a program which was affiliated to a liberal newspaper. In this meeting to discuss Abe and his economic reforms called Abenomics, the interviewed spoke about all of Abe's achievements, mentioning some points that needed improvement. The result was that, among all the things he had said in an hour and a half of interview, just two minutes were taken into consideration. During which he was talking about all the challenges that the Abe administration had to face. The other part had been purposely and strategically cut to edit a piece of news influenced by the biases of the political thinking to which that tv programme was associated. By doing so, panellists not only had denied the positive changes that Abenomics had brought with itself. But also, they used that two minutes piece of the interview, to state that monetary policies adopted by Abenomics had been unfruitful in their purpose to boost the economy and they would have also caused hyperinflation.

The extrapolation of a discourse, or even just a part of it, from its context, can be considered in every respect a piece of biased news. This is the case of another episode that I am going to address. During an Abe speech in Akihabara on Akihabara on July 1 2017, the crowd gathered there started booing and heckling him. As a response, Abe scolded the crowd shouting "I am not addressing a crowd shouting like you he said." The following days, the news of the Prime Minister shouting at the gathering was widespread on all the media. But it was omitted the part referring to the behaviour of the group which had caused such a reaction. Therefore media purposely let spread the belief that their Prime Minister was shouting to a manifesting crowd, came there to hear his speech, for no reason at all.

Another example concerning the figure of Abe is related to an episode that happened in 2020 following the accusations by former Vice Minister of Education and Science. According to these accusations, he would have been responsible for interfering with "the decision-making process behind the opening of a new veterinary department at a university run by a close friend of his." (Times reporters 2017) Of course, Abe always denied the accusations. Indeed some exponential figures like Tetsuo Hata which before was a relevant figure of Hosaka University and then Moriyuki Kato, the former Governor of Ehime Prefecture testified in favour of Abe by claiming that "the process had been conducted fairly and lawfully." (Times 2017)

Nonetheless, media, especially newspapers like Asashi and Mainichi, kept reporting the scandal, by just highlighting Maekawa's accusations without taking into consideration the testimony of Kawa and Kato. Such a move had only one purpose, to turn voters against a leader. Despite all the opposition he encountered he managed anyway to win the coming elections on October 22 of the same year. An outcome quite different if compared to that in America during the last US presidential elections where it was proved that biased stories had a strong effect in polarizing voters, for example, President Trump attacked media because of the way they covered his administration. It is reported that the frequency of fake news appearance skyrocketed in 2016 when the election for the new president of the US took place (Martens, Aguiar, Gomez-Herrera, Mueller-Langer 2018).

 Such false news spread the suspicion that the republican candidate Donald. J Trump had manipulated the data of elections thanks to the help of Russian agents. Another episode happened after that political campaign is when Trump accused Google to have manipulated the results of votes for Clinton, changing them from 2.6 million votes to 16 million. In a twit, he made the following statement: "Wow, Report Just Out! Google manipulated from 2.6 million to 16 million votes for Hillary Clinton in (the) 2016 Election! This was put out by a Clinton supporter, not a Trump Supporter! Google should be sued. My victory was even bigger than thought! @JudicialWatch," (Dale, 2019).

 Furthermore, due to their diffusion, algorithms for distribution of news online are not able to prevent them from appearing, sometimes even in the first results of our search. According to the psychologist Robert Epsen, who has analyzed this case, there is no concrete proof that Google had falsified data about Clinton's votes (Dale 2019). Furthermore, there is indeed a research bias on the search engine regarding the name of Trump. But as other critics like Panagiotis Metaxas, a computer science professor at Wellesley College, pointed out that there is no evidence either that the results in a search engine online could consistently affect the number of votes during presidential elections. Indeed dr. Metaxas about this issue expressed what it follows "I and other researchers who have been auditing search results for years know that this did not happen[…] I think that, in his congressional hearing, Dr. Epstein is misrepresenting the situation" (Qiu 2019).

During and after the US presidential elections in 2016 that fake news rate reached new and unprecedented numbers. Not only in America and Japan, through the Internet and globalization any piece of news can virtually reach anyone, and it will do more efficiently and faster in the future. In the very recent years, this problem caught the attention of many national leaders, social media and news media tycoons. Regardless whether the accuses of Trump were true or not, one thing is sure, that never before as in those elections, politicians made such extensive use of social media to discredit their opponents. Also, after the election of Trump as a president during the years until now, he covered this institutional role. The spreading of social media use as a weapon of defamation of opponents is the reason why nowadays there is a growing need to make for voters platforms and places online that are

"safe" from these influences. Some areas which allow them to access object news so that they can make conscious and informed choices.

5.5 The real cost of fake news

According to the studies of Cybersecurity company CHEQ the annual impact of fake sìnews on global economy stands around 78 billions of dollar annually. The sector which seems to be the most hit by fake news is the stock market, scoring just itself losses of 39 billion dollars per year. Misinformation on financial matters provokes failures around 17 billion. Following we find reputation management and public health scoring, respectively - 9,54 billion and -9 billion. Lastly, we have online platform safety with - 3 billion, -400 million on political spending and - 250 million on brand safety.

The economic damages on the global level, as shown by the cyphers above, are so extensive that the World Economic Forum in 2018 declared that misinformation and fake news were among the top global risks. According to the analysis of Jonathan Marciano, Director of Communications at CHEQ, ten are the main sectors most hardly hit by the effects of fake news. The first and most crucial sector suffering these effects is the stock market. Indeed according to some analysis, the stock market because of fraudulent information risks to lose 0,05% of its total annual revenue, which stands around 39 billion US dollars of annual loss.

The other sector which has suffered the most the consequences of fake news is the health sector. Some journals such as Science Journal and Nature Journal enacted some analysis to target fake accounts and news by putting under study 4 million tweeter posts. From this study, they found the bogus accounts responsible for "disproportionate role in spreading article from low-credibility sources." According to the opinion of Simons Stevens (head of National Health Service "NHS" in the UK), fake news spread by anti-vaxxers on social media "has fueled a tripling in meases cases in the country". The outcome in terms of monetary losses is disastrous. Only in Us, It is estimated that 9 billion dollars are lost because of fake news about the health system.

The third sector which suffered the most was politics. It is estimated that in the US alone this year will be spent at least 200 million dollars for fake news. According to a Princeton study led during the 2016 Us campaign "2.6 per cent of all hard-news articles" were fake news or contained fake news (Jonathan Marciano). It is possible that in the next presidential election, assuming a slight decrease in the level of fake news will be around this cypher.

Advertising as well is experiencing hard challenges due to fake news content. According to global disinformation index, around $235 million or revenue are lost each year as a result of the activity of fraudulent websites. Private accounts are not the only one to be held responsible for the propagation of this kind of false information, but also some major companies and multinationals on a global scale. In some cases, for example, prominent brands advertising share fake cancer cure news. On Youtube have been spotted more than eighty videos, which contained inexactitudes or utterly false information about the health system. Mostly cancer remedies with advertisements.

These results have been found by searching in ten different languages, and ten of the videos found had more than one million views. Some brands whose advertisements anticipated those videos are actually quite influent, in the list, we can discover Samsung, Heinz and Clinique. About the content of these videos in 2019 Flora Carmichael and Juliana Gragnani said that "The unproven "cures" often involved consuming specific substances, such as turmeric or baking soda. Juice diets or extreme fasting were also common themes. Some YouTubers advocated drinking donkey's milk or boiling water. None of the so-called cures offered are clinically proven to treat cancer[...] YouTube's advertising system means that both the Google-owned company and the video makers are making money from the misleading clips." (Carmichael, Gragnani 2019)

Also denying false information is a costly action. Indeed, BuzzFeed stated that one of the leading brands of shoes like Nike suffered the effects of the spreading of this kind of information. Some pieces of news had claimed that Michael Jordan had quit his board, while others had stated that Samsung was experiencing a summon for a process. The result of just these two fake news was 2.2 million engagements on Facebook, which in terms of costs, it is translated as vast amounts of money lost. Money spent on "costs of engagement, reputation management and executive time." (Marciano 2020) To have a grasp of the management costs, social media management market, "it's estimated to grow to $9.54 billion by 2022." (Marciano 2020). Other money is 'lost' in government spending to tackle fake news, according to what says many reports. Justice Department concluded that Mueller report (the report meant to investigate the Russian interference in 2016 Us presidential elections) for example, seems it has cost to taxpayers in the US some 32 million dollars.

Talking about reviews online, if someone writes malicious fake reviews with the sole purpose to damage the credibility of a platform, of a company, such as TripAdvisor or Amazon it may risk incurring in a fine up to 9.300 $. Amazon has gone even beyond by undertaking legal actions towards those websites, which allowed people to post "fake verified results" (Johnathan Marciano 2020). The last and ultimate damage brought by fake news it comes as an indirect effect. Such indirect effect deals with the decisions of the population who start to trust less and less news media. With the rise of fake reviews, peer reviews online are more difficult to be found and lose relevance among online readers.

The global phenomenon of fake news encompasses many different events and aspects causing substantial economic damages, whose numbers are definitely high, but in their totality are also ultimately unknown. But the drops of the public trust because of this kind of information can be are becoming more prominent year by year, almost everywhere. It is estimated that because of the widespread of fake news and the ineffective measures to counter them, are among the reasons why over the last ten years there has been a drop in public trust towards media in Japan.

Indeed as pointed out; "In a 2017 Japanese Press research institute study, 70.0 per cent of the public answered they trust the National Broadcaster NHK, and 68.7 per cent indicated that they trust newspapers" (Daisuke Nakai 2019). Instead, the results came out from a poll of the previous year in 2016 were a little bit different. In this previous poll, The Ministry of Internal Affairs and Communications (MIAC), the percentage of people claiming to trust these journals was about 70.1 per cent, almost 1,5 per cent more, if compared to the survey of

the following year. In comparison, 65,5 per cent claimed that they trusted the television more, 33.8 per cent the Internet and 20.5 per cent magazines.

Talking about media trust, according to the Japanese Press Research Institute, 28.9 per cent of people in the poll answered newspapers which "served as a watchdog against the government" (Nakai 2018), while 42.4 % of people interviewed believed that newspapers were not totally honest about politicians and their actions. Indeed for many critics, the 'press clubs' (Kisha) are not to be trusted, because they are the symbol of the censorship of the press and at the same time Kisha represent the relationships between journalists and the people they cover as well. During a media context which included foreign journalists as well, concerns were expressed "about the viability of watchdog reporting and the freedom of the press in Japan" (Nakai 2018). Following these concerns, Japan experienced a downgrading in the World Press Freedom Index. The Arcipelago dropped from the 11th position in 2010 to the 72nd position in the period between 2016 and 2017 (Nakai 2018).

Such an indicator is quite useful to make us understand how badly the government managed fake news issue and how it is more incline to protect staus quo in its power structures even by censorial measures rather than taking care of spreading truthful and reliable information, at the expense of its own economy. Indeed, censorship does affect the economy. "Economic growth depends on (the) ability to access relevant information. Although censorship prevents access to certain information, the direct consequences of censorship are well-known and somewhat predictable. For example, blocking access to Falun Gong literature is unlikely to harm a country's consumer electronics industry" (Calandrino 2008).

One of the reasons for these concerns is the initiative that Japanese press and other media take on to address the critical situation at the time when after the March 11, 2011, the earthquake had damaged Fukushima's nuclear power plant. Indeed, free-lance and journalists outside the area, also foreign journalists were not allowed to carry on their investigations. In brief, they were not allowed to let people know about what was truly happening around there. Another case comes from Asashi Shimbun, which is one of the major daily newspapers in Japan became a particular object of criticism. In 2014 the journal had retracted some parts of its reporting about "the comfort women" issue. Asashi also withdrew another article about the accident of Fukushima. The scandal arose from these initiatives brought to "the resignation of the president of the company" (Nakai 2018). Furthermore, such an event had severe consequences like "large drops in circulation and trust" (Nakai 2018).

Besides, fake news detrimental effects in some cases not only are limited to a particular episode and to a certain time, but their effects can be protracted. The protraction of the effects is the case when, for example, authentic past news resurfaces but it gets confusing for a new one. A specific example is related to actual news in 2002 regarding the bankruptcy of United airlines company, but that resurfaced six years later in 2008 and people mistook it for a piece of current news. The results for the company were indeed disastrous. Its stock prices drop to 76% in just a few minutes and despite not a long time after it was discovered that the news was not right and stock prices rose back again they still stayed 11% lower than they were before the false information was spread. This way, negative effects on the economy not

always can be immediate or follow the propagation of fake news shortly after that. Fake news can be used to alter facts happened years before, having effects delayed in time.

6. Conclusion

Even nowadays it is not always easy for experts as well to investigate and solve the phenomenon which goes under the label of 'fake news'. As I showed in my thesis, fake news can refer to many things, from pure rumours to voluntary or involuntary manipulation, editing or complete making up of some of the news on social media or newspapers. Such a phenomenon involves everyone in almost every part of the world. And because it is so widespread and vast and intricated is also tricky to defeat it. It is my mind that such a phenomenon to be adequately addressed it should be better targeted in all of its facets. Fake news is real and can affect the decisions and the minds of readers, uneducated to this topic. Hence other fields of human life and human society are hit in most of their sectors like economy and politics. Some of the effects on these sectors can be mathematically calculated as economic damages.

An example is the amount of revenue a firm, a company or even an entire nation loose because of a particular problem. Nonetheless, it is quite likely that the real costs of the damages caused by fake news are way higher than what statistics say both in Japan and other parts of the world (IT Professional 2017). The reason for this is simple; we still lack data, and we still lack the mechanisms to comprehend this phenomenon in all its shades and variants fully. As the issue of fake news is still 'shady', so they are the legal measures meant to prevent it. After better framing the problem it would be necessary that the leaders of as many countries as a possible seat on the table and start strategic and cooperative discussions and negotiations to draw guidelines of action that can be valid for most of the countries on the international level.

 In my opinion, such a move could be required in the future as many more, and more people will have access to the Internet and other media. Besides, technologies will make more accessible and the manipulation of photos, videos, texts, images and even recorded voices, so basically all the prime sources to build up news. Lastly, it is my mind that based on the data already in our possess about fake news impact on the economy and those will be acquired in the future; we could have a more precise idea of the scope of this impact. And probably the costs, in monetary terms, of fake news on the economy, are expected to rise as technology keeps evolving. Furthermore, as the increasing digitalization of global market (Wasterlund 2020) is changing the business world, I think that more research should be done in the next years on the issue of fake news impact on the digital market. This way, we could better address the challenges to the economy provoked by a "post-truth" digital world.

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