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Impact on Competition and on Free Market of the Google Tax or AEDE fee

Report for the Spanish Association of Publishers of
Periodical Publications (AEEPP)

**Translation from the Original Spanish: "Impacto sobre la
Competencia y el Libre Mercado de la Tasa Google o Canon AEDE"**

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Executive Summary

The Spanish Association of Publishers of Periodical Publications (*Asociación Española de Editoriales de Publicaciones Periódicas*) has commissioned NERA Economic Consulting to conduct an analysis to assess the impact of the introduction of the so-called Google Tax or AEDE fee (article 32.2 of the Spanish Copyright Act). This article establishes a copyright fee to be paid by online news aggregators to publishers for linking their content within their aggregation services (the so-called snippets). Publishers cannot opt out of receiving this fee, and payments are to be made through CEDRO copyright collecting society.

NERA's analysis focuses on the article's effects on competition, primarily for the news aggregator and publication sectors, as well as for consumers (i.e., readers of digital media) and advertisers.

The implementation of this fee was promoted by a small group of publishers affiliated with the Association of Publishers of Spanish Newspapers (*Asociación de Editores de Diarios Españoles*), despite opposition from many industry players. The article's main (theoretical) motivation is that aggregators are benefiting from the publishers' efforts without compensating them properly. This would be even more relevant since news aggregators represent competition for publishers, as they would be reducing the number of visits from those readers satisfied with the limited information in the links, thus reducing the publishers' audience and, consequently, their advertising revenues.

The publishers' inability to refuse the payment was justified to prevent what occurred in countries such as Germany, where a similar fee was implemented. News aggregators chose to exclude publishers from their services in order to avoid the fee. Once publishers noticed that they were losing traffic, however, they asked to be linked back without demanding any payment in return.

This suggests that, rather than damaging publishers, **news aggregators are beneficial in that they drive web traffic to the publishers' sites that otherwise would not have consulted those sources of information**. This is clearly a justification against instituting the fee, particularly since it would be very easy for a publisher to prevent an aggregator from linking to its content. If this has not been the case, it is because aggregation services really represent a benefit for publishers. In fact, in recent years, many publishers have invested substantial technical and human resources to improve the positioning of their content within the aggregation services.

Regarding the size of the fee, in July 2016, CEDRO announced its value which amounts to approximately € 0.05 per user, per day. In this regard, for instance, the website Menéame has reported that paying the fee would take it almost 20 times more than its annual income, which would force to close its business.

On the other hand, there seem to be also some efforts at the European Union level to support such a fee. For example, in September 2016, the European Commission proposed to grant copyright and neighboring rights ("related rights") to publishers, which would make it possible to charge news aggregators for using the contents of the publications and to set a fee in the whole Union.

In this regard, it is also worth highlighting the complains made by various Internet associations (and subscribed by others) before the competition authorities of the European Union, since the fee and the way this has been introduced would be contrary to European law, Competition law, the Berne Convention and the Copyright Directive, among others.

In general, our main conclusions are:

- **There is no justification -neither theoretical nor empirical- for the existence of the fee since aggregators bring to online publishers a benefit rather than a harm;**
- **With this fee, a specific model against the press freedom of the newspapers is being imposed;**
- **As a result of the fee, online publishers, especially small ones, stop attracting significant advertising revenues (which can be estimated in the short term at around € 9-18 million annually), in addition to the creation of barriers to entry and expansion, with the consequent negative impact on concentration and competition;**
- **This has led to the closure in Spain of several news aggregation services, such as Google News, also erecting entry and expansion barriers in this sector;**
- **The fee also has a negative impact for consumers, due to the reduction in the consumption of news and the increase in search time;**
- **This has also a negative impact for advertisers, due to greater concentration in the advertising market, for example, for the loss of specialized channels; and**
- **Finally, it has a negative impact on innovation in all the sectors involved (news aggregation, online press, advertising, etc.).**

The impact of the Internet and aggregators on the consumption of online news

The Internet has had a far-reaching impact on many aspects of our lives, such as education and labor; in the provision of many services; and on leisure and entertainment activities. There is vast empirical evidence that supports this claim.

Nowadays, it is difficult to find an economic activity that has yet not benefited from the advantages of the digital network. The news publishing industry and related activities are not one of these exceptions: the Internet not only is becoming the most popular channel for news distribution, surpassing traditional print outlets, but it is also an essential tool in producing and editing content. This has reduced operating costs for publishers, removed barriers to entry, and encouraged new and more efficient digital business models.

In addition to the online versions of major newspapers, the so-called “native digital newspapers” have emerged in recent years, some very recently. These digital newspapers are based on innovative business models, more efficient, with low operating costs and reduced

investment requirements, which foster employment. Unlike traditional publications, most native digital newspapers are distributed free of charge, relying on advertising as the only (or primary) source of revenue.

The lack of a well-known, consolidated brand, and a large reader base built during the traditional printed format era has motivated these companies to pursue and implement new ways of content editing, production, and distribution, in order to position themselves within this competitive market.

At the same time that news information has gone digital, content aggregators have developed significantly, playing a key role in reducing search times and allowing editorial information available on the Internet to be processed.

In addition to established aggregators (such as Google News), there are a variety of aggregators in Spain, including those offering national and local content, that use highly innovative services.











The impact of aggregators on the online press: theoretical and empirical evidence

There are two primary (though opposing) arguments regarding the impact of aggregators on online news consumption:

- The **“Market Expansion Effect”**. Aggregation services reduce search times, which allows readers to consume more news. This not only increases the total number of site visits, but increases the audience of less popular news outlets that otherwise would not have received attention.
- The **“Substitution Effect”**. This argument states that news aggregators negatively impact newspapers in that some users are satisfied with the limited information available on the aggregator’s site and do not click through to the original source.

Which of these two effects holds the most sway is an empirical question, the answer to which may well depend on the specific characteristics of the aggregators and publishers in question. **The available evidence (summarized in the table below) does suggest, however, that the substitution effect is very small while the expansion effect is significant. Thus aggregators are complementary vs. competing services and convey more benefit to publishers than harm.** This is especially true for small, relatively unknown publications, such as some native digital newspapers.

Empirical analysis of the short term impact of aggregators on the number of visits to online publications

	Description	Impact of aggregators on online news consumption	Net effect of aggregators on news website traffic
Athey & Mobius (2012)	Impact of Google News on the consumption of local news in France	As a result of Google News geo-location service, 16% increase in news consumption	
Chiou & Tucker (2015)	Impact of Google News on the news websites traffic, due to the suspension of their service to an agency in the USA	Due to suspension for 7 weeks, relative decrease in traffic from Google News	
Calzada & Gil (2016)	Impact of Google News' exit on the news outlets in Spain	11% reduction in visits to online editors and 8% in the number of pages viewed by consumers	
Athey et al. (2017)	Impact of Google News' exit on the consumption of news in Spain	20% reduction in news consumption on the evaluated group and 10% in visits to news editors	
Yang & Chyi (2011)	Study on the use of aggregators and local news consumption in the USA	96% of websites have a complementary relationship with aggregators	
Huang et al. (2013)	Assessment of the relationship between aggregators and news websites in Taiwan	Aggregators do not compete with news websites, with one exception	
Lee & Chyi (2015)	Study on the demand for aggregators and other media outlets in the USA	Google News, Yahoo! News and Huffington Post do not compete with other media outlets	
Menéame Boycott (2014)	One-week boycott in February 2014 to AEDE publications by Menéame users	Boycott resulted in loss of approx. 500,000 visits to AEDE publications	
Gigaom Analysis (2014)	Analysis of Internet traffic following Google News closure in Spain	Decrease of 10-15% in traffic immediately after Google News closure	
Nera Analysis (2017)	Analysis of the traffic during the first few months of 2015 after the introduction of the new law using ComScore data	Decrease in traffic of more than 5% on average; 13% for small publications	



“Expansion Effect” dominates: aggregators complement publications



“Substitution Effect” dominates: aggregators compete with publications

Lack of economic justification for the fee

According to economic theory, introducing legislation or a regulation that enforces certain behavioral patterns (e.g., the obligation to buy or sell a product or service at a given price) on firms is only justified under certain circumstances, such as situations where there are “market failures” such as negative externalities.

When these failures are not observed, implementing an artificial measure that runs contrary to the wishes and actions of the agents and dictated by the free market runs the **risk of severely distorting competition and negatively impacting not only the firms operating in the industry but also consumers, thus reducing social welfare**. This well-known result is part of the “First Fundamental Theorem” of welfare economics.

Moreover, even in markets exhibiting clear signs of market failure, particularly negative externalities, the Coase Theorem establishes that, in order to achieve the maximum social welfare, **a legal framework or State intervention is not necessary when transaction costs are low, since the parties can reach a private agreement that is socially beneficial**. Basically, the negotiating parties can solve the problem of negative externalities on their own.

Thus, the argument that aggregators create a negative externality for publishers (i.e., taking away traffic) and that this justifies the existence of a fee is incorrect for two main reasons:

- a) While there may be a negative externality, there is also a larger **positive effect in the opposite direction (the “Market Expansion” effect) so the net impact is positive**. The fact that publishers have not imposed restrictions (even though they could have easily done so) on aggregators for linking their content, nor have publishers required any payment in return to compensate for the alleged damages, illustrates that the benefits obtained outweigh the potential harm.
- b) Even if the net effect on publications was negative, in line with the Coase Theorem, the best approach would be to **let the parties negotiate freely and agree on the terms of the fee**. It could be that the fee should be paid by the publishers to the aggregators, or could differ depending on the circumstances (e.g., if they are small or local publications, whether the impact on traffic is significant, etc.).

This argument is further supported by the fact that the transaction costs of possible negotiations would not be significant. This also calls into questions the need for a copyright collecting society in charge of administering the fee.

In addition, the other possible market failure that would justify the existence of a copyright fee managed by a collecting society — the product is an information good, which it would be very difficult to protect from consumption by third parties— is not observed in this case, especially given how easy it would be for publishers to block their content usage from aggregators (it is enough just not to index it or ask for its exclusion).

This proves that an external intervention is not necessary and that solutions do exist for this alleged problem through bilateral negotiations between the parties. Indeed, this has occurred in countries including France and Belgium, and at European level, where there have been attempts to implement a similar fee and where aggregators (particularly Google News) and publishers have reached “cooperation agreements”.

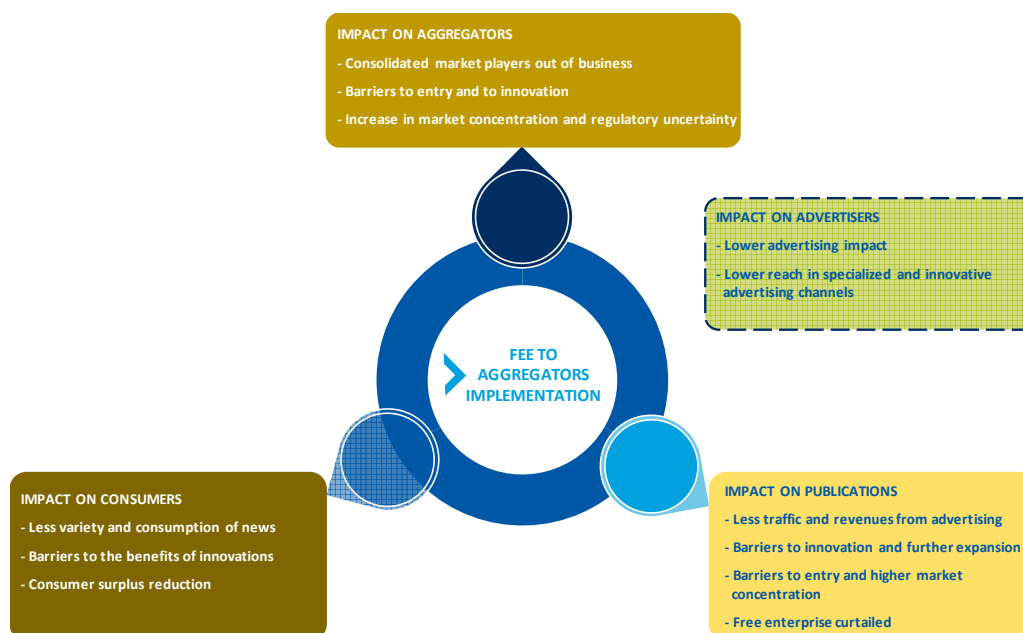
Impact on competition

Article 32.2 of the Copyright Act has several potential implications that affect not just news aggregators but also the entire Internet ecosystem related to the provision of content. Moreover, the consequences of the reform would be unevenly distributed, affecting primarily small or lesser-known publications such as native digital newspapers.

The approval of this reform would be a barrier to new business models that have emerged alongside the growth of the Internet, and would limit the aggregators' future development. This could cause many of these firms to exit the market, and could seriously jeopardize the creation of new and innovative services and products in the short and longer term.

Decreasing the sources of information also implies reduced access to information and opinion, as well as a barrier to entry for new digital initiatives.

Impact of new article 32.2



Implications for the news aggregator sector

- **Closure of aggregators.** The obligation of a fee implies additional costs for aggregators that threaten the financial viability of these services. This has already been observed with the exit of Google News Spain, followed by a number of other aggregators that were founded by Spanish entrepreneurs, who have also had to close down their businesses or make significant changes to their business models, or that could close as soon as they would be charged with the fee (as Menéame aggregator has already declared once the amount of the fee has been known).
- **Barriers to entry and expansion, and greater market concentration.** A fee would impose barriers to entry for new operators, which will have to deal with a payment that their competitors did not face when entering the market for the first time. A fee could also harm other business lines that may benefit from news aggregation services, such as blogs or industry association websites.
- **Barriers to innovation.** There are a variety of innovative news aggregators that compile customized services related to the users' activity on platforms such as social networks, or that have focused on content aggregation projects for mobile phones, whose development is being hindered. Other innovative projects, such as Menéame (which allows users to participate and interact and where dissent and debate are

promoted), will no longer be able to succeed in Spain. Potential developments, such as automatic source readers or algorithmic aggregators designed to deliver dynamic content, will also be negatively impacted.

- **Regulatory uncertainty and right to quote.** The modification of the law has generated regulatory uncertainty that has already affected the plans of many firms in the sector. Though the Act has already come into force, some basic tenets such as who exactly will be subject to the fee and in which conditions the compensation will be implemented have not been defined. Similarly, the new legislation infringes on the right to use Creative Commons-licensed content, as well as the right to quote.

Implications for news consumers

- **Reduction of the consumption level of news, less variety of content and innovation penetration.** The new legislation is detrimental to consumers, mainly because it takes them more time to look for the news, reduces content variety and impedes the ability of innovation to penetrate the market. Consumers also have less access to information, to new products and services from aggregators, and to content from media outlets.
- **Loss in the customer surplus.** Certainly, the most significant short-term impact for consumers is the increased search time for news, which is one consequence of aggregator services closing shop. Based on the premise that the cost of these “free” products and services is related to time spent on searching for and consuming information, and that this can be quantified through the monetary value of its opportunity costs, we have applied a new analytical framework to compute the loss in consumer surplus. For the total number of Internet users in Spain, the short-term estimate is approximately **€ 2.8 billion per year**.

Implications for the online news market

- **Smaller audience and reduced advertising revenue.** The negative impact on the newspaper sector is straightforward: the fee will result in the removal of an important method of attracting readers, which will result in decreased advertising revenues. The evidence available shows that the impact on traffic in the short term has been negative, and that small publications have been most affected: **traffic reduction attributed to the new law is nearly 13%, on average**. In the longer term, the impact will be even greater. The reduction in traffic threatens the viability of some online newspapers, particularly small ones.
- **Reduction in producer surplus.** The **short-term impact on producer surplus is estimated at approx. € 9 million per year (or around € 9-19 million of advertising revenue)**, which will affect the sector unevenly, presumably more so the smaller publishers, jeopardizing their financial viability.
- **Barriers to entry and expansion, and higher market concentration.** The new fee represents a barrier to the expansion of small publications that have lesser-known brands, and to market entry for new competitors. Moreover, in a scenario without news aggregators, users will turn to the largest and most popular newspapers that have

well-established brands, therefore restricting the plurality of information. This will also negatively impact advertisers, whose product range will be reduced, and whose negotiating power will be impacted, since advertisers will have to negotiate with a more concentrated and less competitive sector.

In the longer run, the lack of innovation and the deterioration of the sector may be more harmful, as the attractiveness of this advertising channel will be reduced, eventually forcing advertisers to seek other options.

- **Impact on innovation.** The amendment of the law is an obstacle to the development of new business models, and will lead to the closure of innovative companies and local startup generators of Internet content. This jeopardizes development projects for multi-platform content (particularly for mobile devices); multi-product firms with varied content; suppliers with differentiated audiences and content; new models of advertising and financing, and updating of content; and services that encourage user interaction.
- **Freedom of Enterprise.** One of the most controversial points of the Act is the inability of the content creators to give up the payments. From an economic standpoint, this is an attack on the freedom of enterprise as it is an unfair and unjustified requirement that imposes a behavior against the interests of the publishers themselves. It also heavily restricts the publishers' ability to make content freely available to third parties and is against the spirit of the Creative Commons licenses.

Impact for advertisers

- **Less advertising impact and increased market concentration.** The negative impact on traffic, especially for small and little known publications, has an effect on the reach of online advertising, leading to greater concentration in the advertising market and, consequently, higher prices for advertisers.
- **Loss of specialized and innovative channels.** Advertisers will also be affected by the slowdown in innovation, both from news aggregators and online newspapers (e.g., innovations related to developing new advertising formats to increase effectiveness, or for mobile devices). A lower uptake of these services reduces the reach of advertising, resulting in lower advertising spending and lower profits for advertisers. This will be particularly relevant for advertisers that rely on small or local publications.

In this scenario, the position of large advertisers will be strengthened by the elimination of some of their competitors, leading to higher prices and lower quality. In addition, the closure of certain aggregators or publications that target very specific consumer profiles results in the loss of these highly targeted groups as potential customers for advertisers.

Concluding remarks

This analysis concludes that there is neither theoretical nor empirical justification for the introduction of a fee to be paid by news aggregators to publishers for linking their content as part of their aggregation services. Likewise, the arbitrary nature of the fee, which prevents publishers from opting out of receiving the payments, inflicts harm on a large number of outlets, particularly small publications.

Moreover, the introduction of such a fee has a negative impact on competition, not just for the aggregator segment, but also for online publications and, ultimately, for consumers, including readers and advertisers.

These effects have been already noted in just a couple of years and even in the absence of a specific guideline and without the fee being charged yet. On the more distant horizon, the negative impact will be more significant, discouraging the development of innovative content and platforms in the ecosystem of online news consumption in Spain.

In light of these findings, it is clear that the reform followed the interests of a particular group of publishers which, given the decline of their business, sought to obtain an additional source of income from one of the Internet giants, even to the detriment of other publishers, to the development of the online news production and aggregation sectors in Spain and, ultimately, to consumers (including advertisers) and to social welfare.

1. Introduction

This report was written by NERA Economic Consulting on request from the Spanish Association of Publishers of Periodicals (AEEPP) **to assess the economic impact on competition caused by the introduction of the so-called Google Tax or AEDE Fee** (article 32.2 of the Spanish Intellectual Property Act - LPI in Spanish), approved on October 2014 by the Congress of Deputies and in force since the first of January 2015.

The changes introduced by this article force online news aggregators to pay a fee to editors for linking their content as part of their aggregation services (the so-called snippets). This affects the development of digital media in Spain, both with respect to network users and to editors and news aggregators, two sectors characterized by their high added value and their relevance regarding innovation.

An economic analysis is carried out in the main part of the report to assess the effects of the aforementioned article. The study mainly focuses on the **effects on competition**, primarily because the distortion it generates, such as the creation of entry and expansion barriers, the concentration and price level increase, the decrease of availability in products and services and in innovation processes, the negative impact on information pluralism and on freedom of enterprise, etc.

Although the main focus of this assessment is the periodicals, the report also examines the impact on the news aggregators market (in fact, the negative effects on the periodicals sector arises from the impact on aggregator companies) and, ultimately, on advertisers and consumers, that is, the users of Internet, mainly online news readers.

The rest of the report is structured as follows. Section 2 analyses the details of Article 32.2 on the LPI reform, as well as some reactions from different actors. Section 3 analyzes the significant role played by the Internet in the development of online press, as well as the role by the news aggregators. Section 4 assesses the theoretical justification (or rather the absence of it) for the existence of such a fee, based on economic theory. Finally, Section 5 assesses the impact on competition of news aggregators, editors, advertisers and consumers. At the end of the document, the bibliography and references employed in this report are shown.

2. Article 32.2 of the LPI Reform: Some Reactions

On the first day of January 2015 most of the LPI reform came into force, including the introduction of the new Article 32.2. This article obliges online **news aggregators (such as Google News or Menéame) to pay an "equitable remuneration" to editors (newspapers, periodicals, news agencies, etc.)** for making editors' content (or fragments of it) available, while making reference to them within their aggregation services.

According to the act reform, it is an **inalienable right** of the editors, that is, they have to charge the fee even if they do not want to. The payment will be managed through a copyright collecting society, CEDRO (Spanish Reproduction Rights Centre).¹

In the absence of a guideline, which had to be published before September 2015, the new regulation has risen many questions, for example, on such basic issues as what will the amount of the fee be and who will be affected exactly, i.e., only traditional news media or private web sites as well.

Although Ministerial Order ECD / 2574/2015,² which approved the methodology for the determination of the tariffs to be imposed on aggregators, was published in December 2015, by the date of this study basic issues over the justification for the amount of the fee established by CEDRO remain unknown. However, it seems clear that Internet search engines (such as Google) will not be subject to this fee and the government has also made clear that social networks, such as Facebook and Twitter, will not be affected either.³

More specifically, the new Article 32.2 of the LPI reform states the following:

"For content aggregation electronic service providers to make non-significant fragments of content available to the public, when such content is made public in periodicals or in regularly updated Web sites and it has the purpose of informing, creating a public opinion or entertain, there will not require authorisation, without prejudice to the right of the editor or, where appropriate, of other rights holders, to receive fair compensation. This right cannot be waived and will be made effective through the copyright collecting societies..."

The introduction of this fee as part of the act reform, was promoted by a certain segment of the publishing companies group, mainly by several members of the Spanish Association of Daily Newspaper Editors (AEDE),⁴ who had been demanding it to the government for some

¹ In May 2015 the Ministry of Education and Culture acknowledged that CEDRO would be in charge of collecting the fee, according to eldiario.es. Source: http://www.eldiario.es/turing/propiedad_intelecto/CEDRO-cobrara-Tasa-Google_0_390561469.html

² Source: <https://www.boe.es/boe/dias/2015/12/04/pdfs/BOE-A-2015-13139.pdf>

³ The legislation also states that web sites or blogs with a non-content aggregation purpose, may use content provided that its availability does not have a commercial purpose; but an informative one.

⁴ The AEDE is a private organization that brings together the leading editors of Spanish newspapers. Media Groups such as Godó, Vocento, Grupo Prisa, Grupo Zeta or Unidad Editorial, among others, are some of its major partners.

time, despite the opposition from other editors' associations, such as the AEEPP and several publications, including some affiliated to the AEDE itself,⁵ such as PRISA.

The main theoretical motivation used by legislators and the fee promoters is that news aggregators benefit from the creative efforts of editors without rewarding them appropriately. Consequently, this results in a reduction of the incentive to create content and, therefore, a lower overall amount of what would be socially desirable, thereby harming the public interest. In other words, news aggregators would be taking advantage of the content generated by editors, which has an associated production cost, so they should be compensated for the damages this would cause them in order not to reduce the incentives for creating editorial content.

This would be even clearer, as argued by some editors, because news aggregators would represent some competition for periodicals, as they take away the visits of those readers who just read the headlines and the little information available about the news next to the aggregators' links, rather than visiting the website of the original source. The publications audience and therefore their advertising income would consequently drop.

The justification of the inalienable nature of the fee for the editors apparently seems to be preventing what happened in some countries such as Germany, where news aggregators, at the prospect of having to pay for linking to certain media, preferred to exclude them from their services.⁶ However, when these editors noticed the amount of traffic they were losing for not being linked by aggregators, they requested being indexed again without demanding any retribution in return.

Both news aggregators and several publishing companies, for example, those grouped in the AEEPP, precisely have pointed out this effect as the main argument against the inalienable nature of the fee. That is, **the fact that news aggregators, rather than (or in addition to) a possible damage for editors, implies a benefit for them** since by only providing very limited information on the link, they encourage readers to visit the web page of the original

⁵ Even in July 2015, the president of PISA Group (affiliated to AEDE) declared that none of his group's media would charge the fee, according to Vozpopuli. Source: http://www.vozpopuli.com/medios/AEDE-Tasa_Google-Canon_AEDE-Juan_Luis_Cebrian-canon_AEDE_0_879512103.html

In fact, very recently (March 2017) newspapers like El País (an AEDE affiliate) have voiced their opposition to the fee. Source: http://elpais.com/elpais/2017/03/23/opinion/1490295040_130405.html

⁶ In Germany, after a legislative battle that granted the German media rights to charge Google for the dissemination of content, the company decided to get rid of the summary and photos of the reviews. In the end, however, the media themselves asked Google News to index them again after giving up the rights payment. Thus, in Germany Google simply converted Google News into a voluntary service that required editors waiving their rights to compensation, which allows avoiding the payment.

Furthermore, when some editors in Belgium came together to protest against Google News because having their contents indexed was allegedly harming them, Google also decided to leave them out of its services. Similarly, the Belgian editors realised the damages caused by being outside Google News and asked the aggregator to include them back into the news portal.

publication to access the full content,⁷ increasing the number of visits of these publications and, thus, their advertising income by having a larger audience base.

In this regard, it has also been repeatedly argued that it would be very simple for a publication to prevent its linking in a news aggregator, for example, by selectively blocking the aggregator's *bot*⁸ with a simple HTML tag or completely with the robots.txt file.⁹ A measure, however, that has not been taken by any editor, contradicting any statement indicating that aggregators cause them harm.

Quite the opposite, many media have invested technical and human resources in recent years to streamline their web pages, in order to get a better positioning within the aggregators.¹⁰ In fact, last decade, large Spanish communication groups made technical changes and contacted Google to get support in order to register their web sites in search engines and news aggregators.¹¹ Particularly, since 2011, several AEDE members, among other Spanish media, signed a special agreement with Google so that the most original and engaging content of each of their publications came up in an important place in Google News, thereby obtaining greater visibility and traffic.¹² Moreover, the AEEPP, which has over one thousand web pages of digital media, reached an agreement with Google to create a working group to analyse new advertising solutions and give more visibility to their online publications.¹³

So it seems quite clear that many editors pay special attention to how the code of their web page is configured, through SEO and SEM activities,¹⁴ to attract more visitors to the media

⁷ For example, Google News only publishes ten words of the headline of the news, and part of the first paragraph or the opening paragraph of the news consisting of the first 39 words. Each headline has a direct link to the media or blog for its full reading so that, at least in some cases, it is very clear that Google News sends traffic to the media thanks to this service.

⁸ The *bot* is a piece of software that performs tracking tasks in the Internet automatically.

⁹ This text file is in the root of each web page, the first page of a web site, and instructs the *bots* on which sections can be indexed and which cannot.

¹⁰ For example, some media include buttons in their news for users to send their contents directly to these aggregators. In particular, the robots.txt of the Spanish media "ABC.es", not only did it not block the Google News bot, but had lines to allow the entrance from other Google bots, including the one responsible of showing advertising related to the news through the AdSense program. A program of which these same media are also customers of. Source: <http://www.antonio-delgado.com/2014/02/desmontando-fee-aede>

Other local media, such as Ideal of Granada, owned by Vocento and partner of AEDE, publishes news that contain the headline, the opening paragraph and a text apparently finished but that only makes sense if it is read by a bot like Google's. In fact, many of these news have little informative value but are intended to appear on the Google News results web pages in order to get a better position for the media in the search results. Source: http://www.eldiario.es/turing/propiedad_intelectual/Desmontando-Fee-AEDE_0_229927794.html

¹¹ Particularly, many media changed the way of constructing the *Uniform Resource Locators* (URLs) with the aim of becoming optimized for the search engine. Source: http://www.eldiario.es/turing/propiedad_intelectual/Desmontando-Fee-AEDE_0_229927794.html

¹² Source: <http://googleespana.blogspot.com.es/2011/12/destacado-por-los-medios-una-nueva.html>

¹³ Source: <http://www.europapress.es/nacional/noticia-editores-agrupados-aepp-llegan-acuerdo-google-formar-grupo-trabajo-conjunto-20140109172427.html>

¹⁴ "Search Engine Optimization" and "Search Engine Marketing" are digital marketing strategies aimed at attracting quality traffic through visibility in search engines such as Google, Yahoo! or Bing.

coming from search engines, aggregators and social networks (as indicated by García-Santamaría and Gómez-Borrero (2014)).

Thus, it is highly questionable that some editors consider news aggregators as direct competitors, who, **rather than reducing the number of visits to their web sites, seem to be increasing them.**¹⁵

In this regard, aggregators would be rather like a complementary service for online publications that generate additional benefits for them, as pointed out by the CNMC (National Commission for Markets and Competency):

"In this regard, besides not using the robots.txt file, the substantial investments of several content editors to improve the positioning in search engines would be another indication that, at least for some editors, the aggregator is a complement and not a competitor of its product or service.

*...the Competition Authority is aware of the existence of editors who unambiguously consider the aggregation beneficial to their interests or their distribution licences provide for the absence of financial compensation..."*¹⁶

Regarding the value of the fee, in July 2016, CEDRO published the corresponding tariffs indicating that the amount would be approximately €0.05 per active user and per day for providers of electronic content aggregation services. The fee applied from July 15th of that year.¹⁷ Nevertheless, the tariff was not effectively enforced, which resulted in CEDRO engaging in talks with news aggregators since February for actual collection.¹⁸

In this respect, the site Menéame has informed that under the current tariff scheme it would have to pay €2.56 million, an amount which is about 20 times the size of its yearly revenue, which would force it to suspend operations.¹⁹

In this regard, it should also be noted that the CEDRO tariff has not been accompanied by the Economic Report of Justification required by Ministerial Order ECD/2574/2015, from December 2, which approved the methodology for the determination of the general tariffs in

¹⁵ In fact, some editors have recognized that content aggregation is beneficial and their distribution licenses provide for the absence of financial compensation (as it happens in some open licenses such as *Creative Commons*), stating that fair compensation should never be seen with an inalienable nature. Source: <http://www.elmundo.es/tecnologia/2014/05/28/53858b3eca4741ff748b456e.html>

¹⁶ "Proposal regarding the amendment of Article 32.2 of the bill amending the revised text of the Intellectual Property Act". CNMC. 16th May 2014.

¹⁷ Source: <http://www.cedro.org/docs/default-source/0tarifas/tarifas.pdf?sfvrsn=16>

¹⁸ Source: http://www.elconfidencial.com/tecnologia/2017-02-07/canon-aede-meneame-internet-facebook-agregadores_1327333/

¹⁹ Source: http://www.elconfidencial.com/tecnologia/2017-02-07/canon-aede-meneame-internet-facebook-agregadores_1327333/

relation to the remuneration payable by the use of the repertoire of intellectual property rights collecting societies.

In fact, according to Menéame's information, **the rates set by CEDRO would not respect even the most basic equity criteria established by article 157.1 b) of the LPI** (Law 21/2014, of November 4), and in particular, the fact that the amount of the tariff is to be established following reasonable conditions, taking into account the economic value of the rights utilisation in the user activity, seeking the right balance between both parties. It is clear that a fee that requires a user to pay more than 20 times the value generated by his entire business is totally disproportionate and inequitable.

Following the announcement of CEDRO, the Association of Internet Users (UAI) and the Association of Internauts (AI) **denounced the fee before the competition authorities of the European Union**.

According to AUI and AI, *"the 'fees' permanently act in a way contrary to European law."* In the document presented to the European Commission, the associations denounce that the Spanish rule *"is imposing on all publishers in Spain the execution of a horizontal agreement"* that has as its objective *"the assignment of an ancillary right"* to a particular management entity (CEDRO), which will receive the fee. They also point out that the measure seeks to *"align the conduct of all publishers with respect to the fee"* and, ultimately, restricts competition. According to these associations, the fee *"aims to prevent each publisher from deciding its own commercial policy in this regard, thus ensuring the acquisition of supracompetitive level incomes, on the one hand, and limiting competition from smaller publishers in size or popularity, on the other"*.²⁰

The associations also point out in their claim that the fee had not been included in the original draft sent to Brussels (last minute introduction) and therefore its approval would constitute an infringement of Article 8 of Directive 98/34 and Article 4.3 of TUE.

These complaints have been endorsed by other associations, such as AEEPP itself, the Internet Society Spain (ISOC-ES) and the Association of Computer Technicians (ATI), requesting that the corresponding procedure be initiated as a result of infringement of EU law by the Kingdom of Spain.

Other elements highlighted in these demands are infringement of the Copyright Directive, the fact that there is no harm to publishers (and therefore no equitable compensation applies) as well as the harm caused to small publishers.

²⁰ Source : http://www.elconfidencial.com/ultima-hora-en-vivo/2017-02-23/asociaciones-de-internautas-denuncian-ante-la-ce-la-tasa-google_1147626/

In the absence of a document that justifies the tariff, there is still uncertainty as to how the payment will be made and which aggregators should pay, a situation that has affected the market, hampering the generation of income and innovation by new aggregators.

However, very recently, it is also true that the German giant Axel Springer, owner of Bild (Europe's biggest newspaper) and the US site Business Insider, has announced that it is finalizing the landing of Upday in Spain, a new content aggregator accessible only from mobile phones, and that is in the process of negotiating tariff rates with CEDRO, although it has made it very clear that in no way the fee will be the excessive five cents per active daily user.²¹

Moreover, in March 2016, the European Commission opened a public consultation on the possible granting of copyright-related rights (“related rights”) to editors.²² Subsequently, in September 2016, the Commission made a proposal to grant these rights to publishers of news content,²³ which opens the possibility of charging news aggregators for the use of the content of press publications, and even the establishment of a European Union-wide fee, in spite of the associated adverse effects.

²¹ Source: http://www.elconfidencial.com/tecnologia/2017-02-16/axel-springer-canon-aede-meneame_1331768/

²² Source: <https://ec.europa.eu/digital-single-market/en/news/public-consultation-role-publishers-copyright-value-chain-and-panorama-exception>

²³ Source: <https://ec.europa.eu/digital-single-market/en/news/proposal-directive-european-parliament-and-council-copyright-digital-single-market>

3. Impact of Internet and Aggregators on the Online News Consumption

It is largely unnecessary to repeat what has been said many times before about the growing use of the Internet and its effect on our modern life, as well as to provide any evidence that confirms it.²⁴

Undoubtedly the digital network is widely and increasingly utilised and has had a profound impact on various aspects of our life, such as the academic and the professional spheres, the provision of services and leisure and entertainment. It has significantly contributed to the exchange of information and to the expansion of our knowledge. Thanks to the web, millions of people have easy and immediate access to a vast and diverse amount of information, breaking many of the physical barriers that existed in communication up to a few years ago.

The “*Estudio General de Medios 2016*” indicates (see graph below) that the only media whose audience has grown significantly in Spain²⁵ is the Internet, augmenting its penetration in 42 percentage points during the last 8 years, from 30% in 2008 (with a daily consumption 41.7 minutes)²⁶ up to 72% in 2016 (with a daily consumption of 107.7 minutes).²⁷ Other media such as radio, cinema and television have remained largely stable, while newspapers, magazines and supplements have seen their penetration drop by 18, 16, and 12 percentage points over the same period. The Internet ranks third in terms of media audience, only behind the television and exterior publicity.²⁸

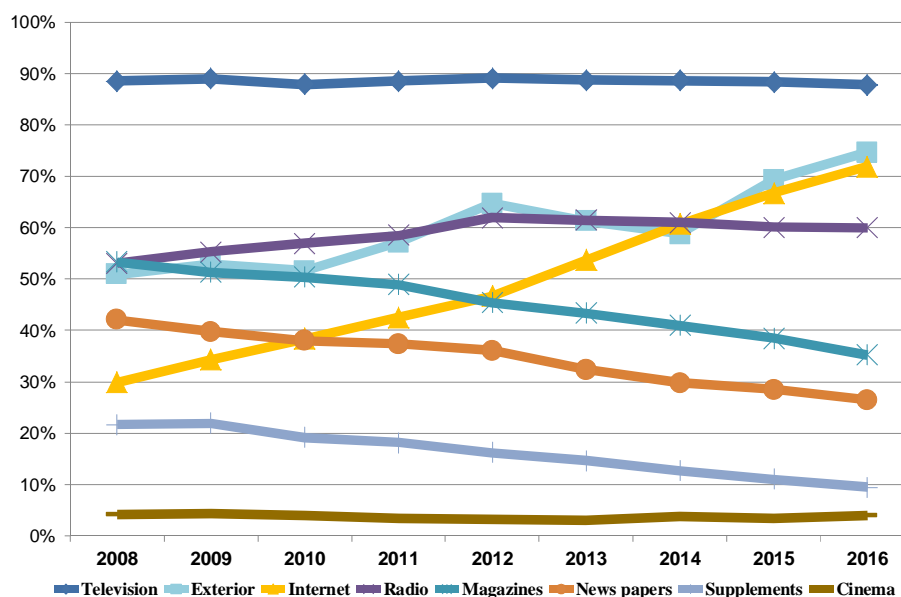
²⁴ By way of illustration, for example, it can be noted that the information available in the digital network has grown exponentially since the first web page was designed back in 1991. In 2001 the number of web sites stood at around 30 million, while in 2014 it exceeded for the first time the figure of 1,000 million. Source: <http://www.Internetlivestats.com>

²⁵ It is important to note that despite the fact that external formats showed an increase of 24 percentage points in their penetration rate during the last 8 years, this can be mainly attributed to a change in methodology from 2015, when views during the last week began to be considered instead of the last day, according to “*Estudio General de Medios 2016*”.

²⁶ According to the “*Marco General de los Medios en España 2017*”.

²⁷ According to the “*Marco General de los Medios en España 2017*”.

²⁸ Exterior formats, such as posters, banners, signs, and billboards are, among others, the channels used for exterior publicity.

Graph 1. General Audience of Media in Spain. Penetration (%)

Source: “Estudio General de Medios 2016”

According to this same source, the percentage of Spaniards who used the Internet “the day before” in 2016 reached 73.6%, while in 2008 it would have been only 30%. Furthermore, according to the “Encuesta sobre Equipamiento y Uso de Tecnologías de Información y Comunicación en los Hogares 2016”, published by the INE (National Statistics Institute), 81.9% of Spanish households had Internet access; this is three percentage points higher than in 2015 and 32 points above the figure recorded in 2008.²⁹ Moreover, according to the “Estudio de Medios de Comunicación On-line 2016”, over 96% of Internet users surf the Internet 6 or 7 days a week; 88.2% of them do it (at least sometimes) through the mobile telephone.³⁰

One area where the Internet has had a particularly significant impact is in commercial relations. The digital network has become one of the main channels for suppliers (producers or distributors) and demanders (users and consumers) of a wide range of products and services to contact each other. This change has certainly had positive effects for sellers and buyers, as well as for the competition process in general.

For consumers, the Internet has significantly reduced the time spent on searching information about different products and services available in the market, enabling a much deeper knowledge of their features and, therefore, making the choice easier. In fact, in a large

²⁹ The “Marco General de los Medios En España 2017” indicates that this figure reached 77.0% in 2016; 69.5% in 2015; and 42.0% in 2008.

³⁰ According to the “Encuesta sobre Equipamiento y Uso de Tecnologías de Información y Comunicación en los Hogares 2016”.

number of cases, the Internet has enabled searches which would otherwise have been impossible.³¹

Likewise, increasing the number of choices available to consumers has led to a greater competitive pressure amongst the now larger number of suppliers, which in the medium and long term boosts the supply of goods and services of higher quality at lower prices, as well as the diversity and innovation.

In that sense, it is also obvious that there is a marked tendency to obtain news via the Internet, in detriment of traditional print media. According to the recent survey "Standard Eurobarometer 84", the number of Europeans who used Internet as a source of information on national politics increased by 9 percentage points during the 2011-2015 period, while the written press decreased 9 points during that same period.

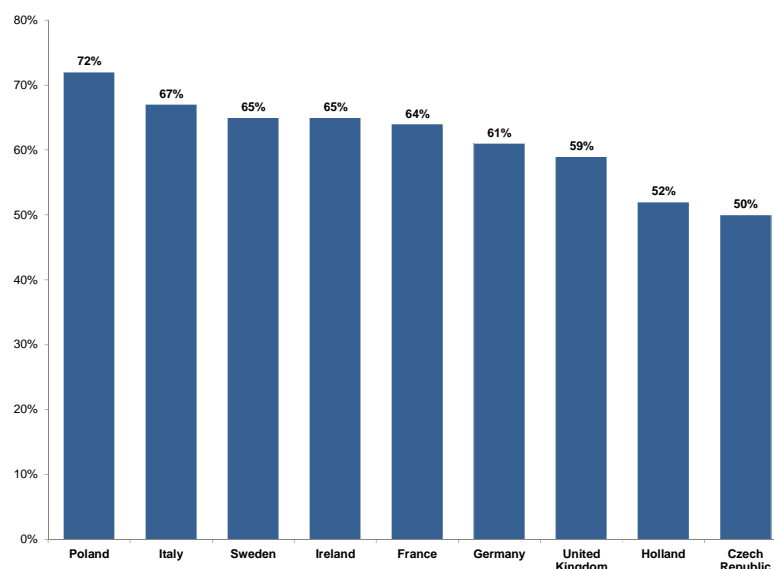
Within this context of changes and advancement of the demand of information via the Internet, there is wide empirical evidence on the effect that this has had on the consumers. For example, according to the survey "European Media Consumer Survey 2013",³² over 60% of consumers in nine countries of the European Union uses the Internet to get information that is not available anywhere else. The surplus that online media consumption has generated for these users (benefits over costs)³³ stood at an average of € 1,077 per year, above the off-line consumption surplus. Out of this amount, approximately one third came from the consumption of newspapers and digital magazines. The two graphs below show these results, broken down by country.

³¹ With respect to that, we can consider, for example, Chen *et al.* (2013) who analyze how much time online search engines save researchers who employ them for their information needs and the degree in which online searches affect experiences and results. Taking into account information on searches available in the "Internet Public Library" (IPL) they conclude, among other things, that answers are much likelier to be found on the Internet than in offline sources and that search time is significantly lower.

³² The Boston Consulting Group. "European Media Consumer Survey", in "Follow the Surplus: European Consumers Embrace On-line Media".

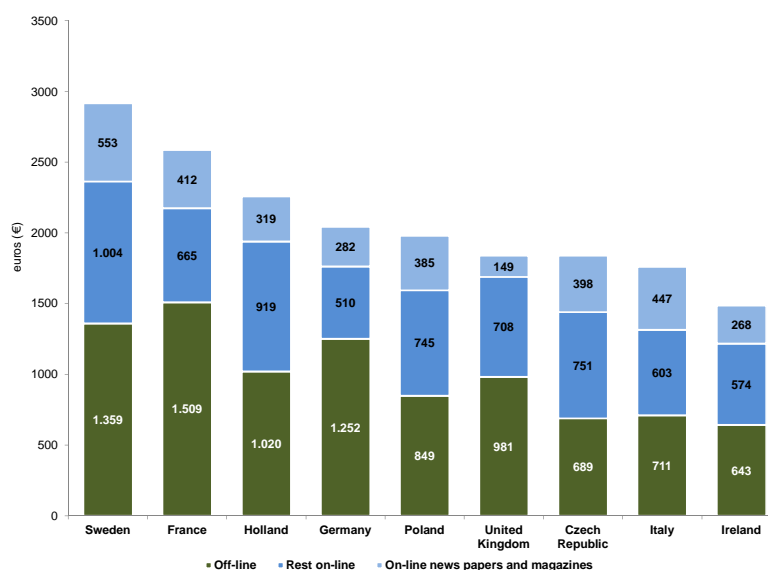
³³ That is, the value that that information has for the consumer (the maximum price he/she is willing to pay) minus what the cost of the information has been. Consumer surplus is a measure widely used in economics that measures the net benefit (of costs) of enjoying a good or service.

Graph 2. Consumers accessing online services to get information that cannot be obtained by other means (% over total). 2012



Source: “Follow the Surplus: European Consumers Embrace On-line Media”

Graph 3. Offline and online media average consumption surplus, specifically, of online newspapers and magazines (euros). 2012

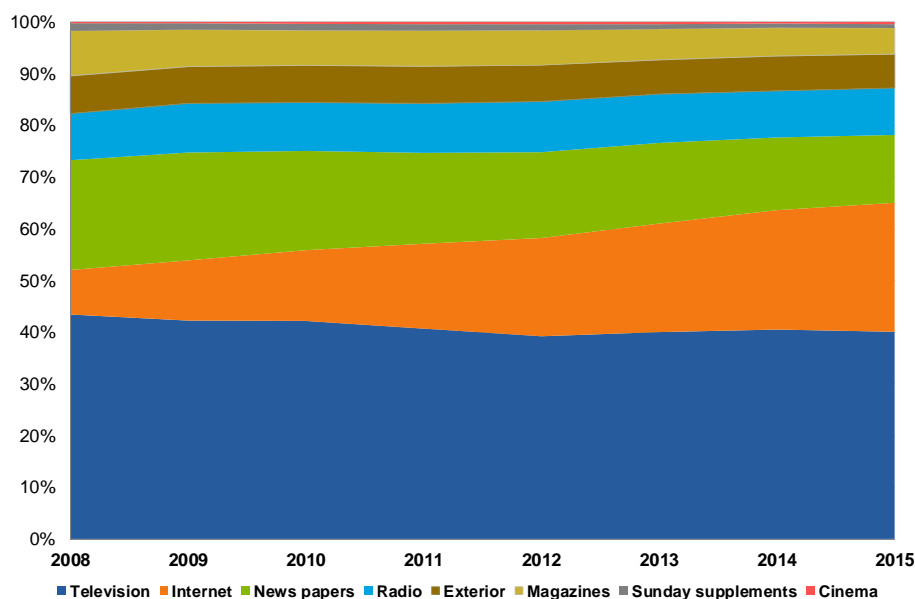


Source: “Follow the Surplus: European Consumers Embrace On-line Media”

In the case of suppliers (producer and distribution companies), there is no doubt that the Internet has also had a very positive effect for them, which has allowed them, for example, to increase their customer base, as well as to facilitate communication, reducing transaction costs. Moreover, the Internet has emerged as a key advertising channel for many companies within their business strategies, allowing them a greater promotion and visibility of their products through a wide variety of advertising formats, including not only text and images but also sound, video, animation, links, etc.

The following graph shows that the Internet in Spain has the second highest share on the overall advertising investment in conventional media, only behind television, but surpassing newspapers since 2012 and, for a number of years, radio and magazines. In fact, the Internet is the only media for which advertising investment has grown steadily in recent years (105% between 2008 and 2015), sharply contrasting with a 42% drop in advertising investment for the rest of the conventional media in the same period.³⁴

Graph 4. Advertising investment participation in Spain for conventional media according to channel (%)

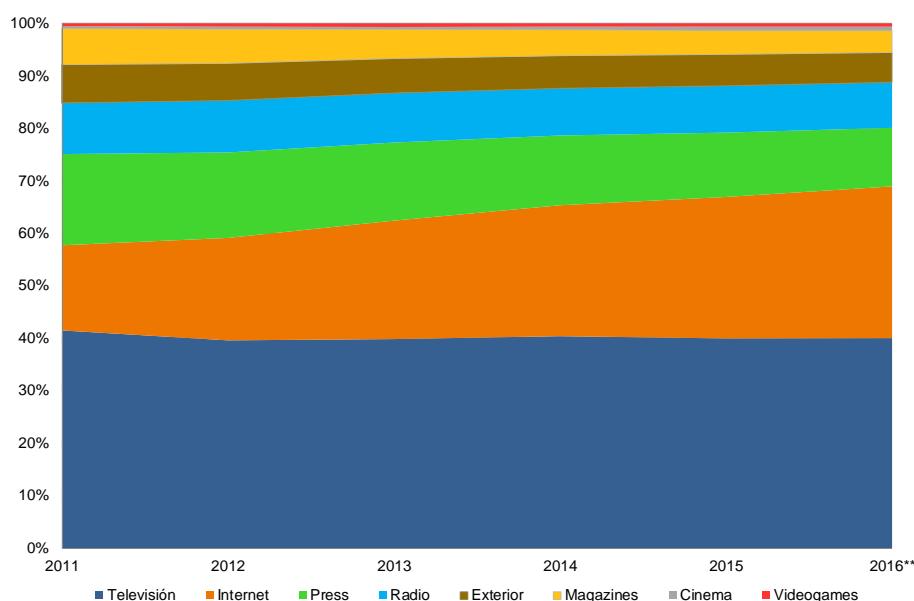


Source: “Estudio de la Inversión Publicitaria en España (2014-2016)”

On the other hand, the report titled “Entertainment and Media Outlook 2016-2020. Spain.” confirms that advertising investment on the Internet has been growing over the last years (77.7% between 2011 and 2016), having the second highest share on advertising investment within the entertainment and media sector, representing 28.9% of it.

³⁴ We must take notice that the report “Advertising Investment in Digital Media: 2015 Results” presents equivalent numbers on advertising investment for conventional media in 2015, with the exception of the Internet, for which this report shows a number that is 3% higher.

Graph 5. Advertising investment participation in Spain for entertainment and media sector, according to channel* (%)



**Data from Business-to-Business not included*

***Revenues for 2016 are estimated*

Source: "Entertainment and Media Outlook 2016. Spain."

In this context of huge online information demand and supply, search engine services for information and web pages,³⁵ including price comparators and content aggregators, have played a key role. This not just because they significantly reduce the searching times for consumers, but because they allow them to perform much more extensive information searches, besides representing a unique tool to process (categorise) and prioritise (sort and filter) the massive amount of information available in the Internet.

In the case of suppliers, search engines and content aggregators also represent very useful platforms to give greater visibility to their products and services over those of their competitors, while being an additional advertising channel.

In absence of instruments such as these, it would be simply impossible to take advantage of the enormous amount of information available in the Internet, leading to the loss of much of its value as a mean of communication between suppliers and buyer and therefore, as a promoter of competition, efficiency gains, innovation and, ultimately, social welfare.

Nowadays, it is very difficult to find a single exception of an economic activity that has not benefited from the advantages offered by the Internet. The news publishing industry and its related activities are certainly not one of these exceptions.

³⁵ A search engine is a computer system that indexes files stored on web servers when information on a topic is requested. An exploration is performed using keywords and the search engine displays a list of addresses with the related topics. There are different ways of classifying search engines according to the probing they perform. The most common classification groups them into thematic indices or directories; search engines and meta-search engines.

Internet not only is on the way to establish itself as the most popular news distribution media, surpassing the traditional paper format, but currently it has become an indispensable tool in producing and editing content, helping to reduce operation costs in publishing companies and removing entry barriers. This has encouraged the incursion of new business models that are more efficient and oriented towards the digital system.

In the same vein, for example, the “*Marco General de los Medios en España 2017*” indicates that 53.8% of Internet users in Spain have used the Internet to read “information on current affairs” in the previous month, only behind “instant messaging” (93.5%), “search of information” (83.2%), “e-mail” (71.8%), “social networks” (63.0%), and “video watching” (59.5%); but above “use of applications”, “music consumption”, “banking operations”, “viewing of series and movies”, and “purchase of goods and services”, etc.

Likewise, according to the “*I Estudio de Medios de Comunicación On-line 2014*” 44.8% of Internet users in Spain surf online newspapers daily, while 21.8% do so at least once a week. Of those who surf daily, 57.4% do it for an hour or more.

Thus, it is not at all strange that almost all periodicals, including large groups that traditionally distributed their products in paper format (printed), as well as new publishing companies, –many of them focused only on the Internet– have made very significant efforts to adapt to this new digital age, developing online versions of their products.

In this context, news aggregators have helped to correct the negative effects of information overload of this type of content, providing a distinctive and differentiated added value compared to traditional search engines. These services are not limited solely to provide references on news as a result of a user search, but they actively offer information categorisation, selection and filtering services for online news readers.

As stated by Lee and Chy (2015):

“The Internet has brought about revolutionary changes to the contemporary media landscape, disrupting existing supply-and-demand dynamics, leading to new ways of consuming news that threaten most traditional media’s market share. One major change is the rise of content aggregators—instead of turning to specific news media outlets for news of the day, news audiences are increasingly turning to aggregators as a one stop shop for news from a wide array of sources.”

3.1. The development of online press in Spain

The percentage of digital press (only) readers in Spain has increased in the last twelve years, from 1.1% in 2001 up to 32.0% in 2015, reaching nearly 5.3 million readers.³⁶ In contrast, in 2001, 96.8% of the press readers did it on printed paper; while in 2015 this percentage had fallen down to 49.9%. In addition, the percentage of readers who combine both options has

³⁶ According to the “*Libro Blanco de la Prensa 2016*”.

increased 16 percentage points compared to 2001, reaching 18.1% in 2015.³⁷ Currently, Spaniards spend on average 83 minutes a day reading general information newspapers on the digital network, compared with the nearly 40 minutes spent in 2012.

In this new era of the Internet, almost all publishing companies (both Spanish and foreign) have been forced to make significant investments in their editions not to be outdone in this technology race. This has affected not only the way to distribute and present contents (for example, from the traditional text and image to formats with video, sound, animation, links, interaction with the reader, etc.), but also the content production and edition processes.

The need to maintain online traffic is important even for traditional publishers with a consolidated readership. According to the report "The impact of web traffic on traditional newspaper publishers", revenues from the online editions traffic of traditional Spanish newspapers accounted for more than 10% of their total revenues.³⁸

The effects of digitalisation have allowed the emergence of new business models with renewed professional profiles and innovative and efficient techniques of production and distribution of information, granting great importance to the Internet as a broadcasting medium.

Thus, in addition to the online editions of major reference newspapers in Spain (El País, El Mundo, ABC, La Razón, La Vanguardia, etc.), in recent years the so-called "digital native newspapers" have risen (for example, 20minutos, Libertad Digital, Periodista Digital, El Imparcial, El Confidencial, El Independiente, El Español y lainformación.com) and they have attracted a significant base of readers. Other recently created digital native general newspapers have been added to these, such as eldiario.es, InfoLibre, ZoomNews, La Marea, teinteresa.es and vozpópuli, in addition to web sites of companies that do not properly belong to the publishing industry but add informational content, such as television and radio stations.

The emergence of these new journalistic projects is largely based on a new business model with low operating costs -both related to personnel and production technology- and with modest investment requirements.³⁹ Several of these are led by journalists who have had to reinvent themselves after the human capital cuts suffered by the publishing industry in these years of crisis.⁴⁰

³⁷ According to the "Reuters Institute Digital News Report 2016", 86% of Spaniards with Internet access would use online platforms to obtain news, while 56% uses printed platforms, not excluding the possibility of using both types of platforms.

³⁸ For the sample considered in the report, it was calculated that out of the total revenue of traditional newspapers, 160 million euros can be attributed to online traffic.

³⁹ It is estimated that less than half a million euros are needed for the development of a new publishing project on the Internet, as well as an available capital of approximately 700-800 thousand euros to consolidate it during the first year of operation. Source: "El Negocio de la Prensa Digital 2014".

⁴⁰ "Since 2008 the Press Association of Madrid (known in Spanish as APM) has recorded a total of 300 new journalistic projects until the end of 2013, some with original proposals and intended to be an alternative capable of stopping the loss of jobs that affects a sector that, in the abovementioned period of time, has seen the destruction of almost 9,500 jobs. Among the layoffs carried out, the ones performed in the following newspapers stand out ABC, El Mundo, El País and Público, as well as the disappearance of a handful of digital and print publications, some as relevant as Soitu. A

The lower operating costs are not only the result of the development of new information technologies, but of new organisational formulas with flatter business structures (“less bosses and more teams”), with teams comprising a minimum critical mass of editors, with polyvalent journalists that adapt to different functions and external collaborators.

Unlike the major newspapers of reference, whose income comes both from advertising and subscriptions and the sales of printed newspapers, most digital native newspapers are free and rely on advertising as the only (or main) source of financing, except for a few isolated efforts trying to include mixed models of advertising and “crowdfunding”⁴¹ or advertising and subscriptions.⁴² Thus, since the emergence of “El Confidencial” -one of the digital native newspapers with the largest audience- publishers of these journalistic projects opted for a free distribution to achieve a critical mass of readers that enable them to enter the plans of the big advertising agencies.

In this regard, the management of advertising and marketing of advertising spaces have become a cornerstone for the strategic development of these companies. To achieve this, the development of their own brand and good reputation is crucial, especially taking into account that most of these new publishers started from scratch, forced to create a strong branding from the beginning.

Certainly, this is a barrier that traditional reference newspapers have not had to face, or at least not to the same extent, which is a competitive disadvantage for these new market “players”. More for their benefit, in their transition to the digital world, traditional media have inherited the reputation of an established brand that often gives them greater credibility, so they do not need to invest great efforts to ensure certain audience levels.⁴³ This is in addition to the preconceptions that “second class” journalists operate in the Internet and that free newspapers are of lower quality.

To some extent and because of these disadvantages, some free or online newspapers failed to survive this race. Newspapers such as ADN.es and Soitu faced many difficulties to achieve

number of these professionals have participated in new projects or are even running new online newspapers (infoLibre, eldiario.es, lamarea, ZoomNews, teinteresa.es), leading to an explosion of new digital media.”

Source: “El Negocio de la Prensa Digital 2014”.

“These digital native successes may be driven by the ongoing loss of human capital at all levels of many traditional newsrooms and the users’ desire for a broader spectrum of views and news.”

Source: “Reuters Institute Digital News Report 2016”.

⁴¹ For example, the new digital newspaper “El Español”, still under development, has raised over € 3.6million from almost 5,600 people in a crowdfunding campaign. It is a world record for the newspaper industry. Source: <http://www.elespanol.com/proyecto/ultimas-horas-para-hacerse-accionista-de-el-espanol/>

⁴² For example, eldiario.es and infolibre and the Catalan newspaper Vilaweb have readers who voluntarily pay a membership fee, which gives them certain benefits (such as “previews”). Source: “Reuters Institute Digital News Report 2014”.

⁴³ For example, developing SEO activities or the use of a “Community Manager” (a person in charge of editing, streamlining and enhancing content or brands among users and potential consumers, for example, through social networks).

an important reader base and advertising income,⁴⁴ thus being particularly affected by the economic crisis that Spain suffered in recent years, which has had a negative impact on advertising investment volumes in this country.

However, the emergence of new publishing models in recent years, along with that of other digital projects already established, has led to the creation of new spaces and has helped a handful of online newspapers to reach certain audience levels, removing part of the concentration around the major newspapers of reference (basically, El País and El Mundo). However, it is also true that a good part of the readers and the online advertising of digital media continues concentrated on just a few media.⁴⁵

In this regard, small publishing groups who have heavily bet on the Internet and on a free distribution model, are considering some additional sources of income (for example, payment for content or subscriptions/donations) as a mean for survival.⁴⁶ However, their main objective has been focused on the technologic race leadership, searching and implementing new innovative forms of production, edition and distribution of content that allow them a better position within this competitive market. Thus, competition and market situation, as well as being a risk, have offered them additional incentives to innovate and to operate their business efficiently, unlike large publishers, which have been slow in responding to these new circumstances.

3.1.1. Innovations in the online press

According to “*El Negocio de la Prensa Digital 2014*” recent developments and/or the innovation needs in this sector point in the following directions:

- **Multi-platform media**, compatible with computers, tablets and mainly smartphones.⁴⁷ There is a need for the web pages design to adapt to various screen sizes, either using a unique responsive design (“Responsive Web Design” or RWD) or adaptive designs intended for different devices (“Adaptive Web Design” or AWD). The latter design has encouraged the creation of applications for specific mobile phones for Apple and Android, and although several publishing groups have focused on developing their own,⁴⁸ this does not seem to be a solution in the long run.

⁴⁴ It is estimated that a number of unique monthly users below two million can prevent or seriously hinder the survival of journalistic projects, since their inclusion in the advertising plans of large advertising agencies is difficult. Source: “*El Negocio de la Prensa Digital 2014*”.

⁴⁵ Source: “*El Negocio de la Prensa Digital 2014*” and ComScore.

⁴⁶ It is expected that the payment for online content becomes an increasingly present option in the media and its different formulas will adapt to readers’ willingness to pay for information. Source: “*Estrategias de Pago en Diarios Digitales en el Mundo 2014*”.

⁴⁷ As highlighted by Carvajal *et al.* (2013), the unstoppable evolution of telephony is a new challenge for the digital media: the multiplatform convergence. The media need to adapt themselves to the demand of readers who wish to access information through multiple distribution platforms, including mobile devices.

⁴⁸ The heads of Eldiario.es were the first to announce that they are going to implement the RWD on their web page. Source: “*El Diseño se Adapta al Tamaño de la Pantalla 2014*”.

The need for this technological adaptation is particularly relevant taking into consideration the results of several studies, such as the one from the “*Asociación para la Investigación de Medios de Comunicación*” (Media Research Association), which confirms that Internet browsing from mobiles clearly exceeds that from desktop computers and laptops.⁴⁹ Moreover, a high percentage of online news readers use two or more platforms to access the news.⁵⁰

More specifically for the online press, “*El Negocio de la Prensa Digital 2014*” states that 55% of users use mobile phones to be informed, while tablets continue to grow, although not at the initially expected pace (currently 7.5 million). This source also states that 57% of the readers of the top 10 digital media read the news through the mobile phone and 47.25% of “pure players” readers prevalently consulted them through the mobile phone.

Additionally, the “*I Estudio de Medios de Comunicación Online 2014*” points out that 16.5% of Internet users who consult the online press use a tablet (6.4%) or a smartphone (10.1%).

These results are consistent with those from the report “Reuters Institute Digital News Report 2014,” which states that: “*This year we find more compelling evidence about the pace of the multi-platform revolution and the increasing use of smartphones and tablets for news*”. According to this study, 22% of online news readers in Spain use the mobile phone as a primary access platform, while 9% use tablets.⁵¹

On the other hand, the “Reuters Institute Digital News Report” of 2016, ratifies itself by stating that: “*We continue to see rapid adoption of smartphones for news in all the main countries we have been monitoring since 2013. By contrast, computer usage is falling and growth in tablet usage has slowed - falling back in countries like the UK and Japan.*”⁵²

- **Multi-product media** offering additional products to news or at least a wider variety of content. Some examples of these initiatives could be the British newspaper *The Guardian*, which also offers a dating web page, *Soulmates*, or the debate web page “*Espacio Público*”, launched by this same newspaper.
- **Media with sharply differentiated content and audiences** as consumers are moving further away from cloned services and products that extremely homogeneous. In this sense, the development of proprietary and responsible technologies and media with more computer skills will be very relevant. That is, although the technology has

⁴⁹ The “*Marco General de los Medios en España 2017*”, points out that 93.6% of Internet users used a smartphone to access the Internet (at least once) during the month preceding the study, while 53.3% used a laptop/notebook, 36.2% a desktop computer and 29.1% a tablet.

⁵⁰ According to “Reuters Institute Digital News Report 2014”, 43% of readers access online news through two different digital platforms and 14% through three or more.

⁵¹ These percentages increase to 44% and 21% if the use of mobile phones or tablets to access online news is considered, although not as primary access platforms.

⁵² The same report states that 58% of Spanish online newsreaders use their mobile phones to access this content.

turned into a “commodity” with the consequent cost reduction, those media that intended to lead the online media industry must have their own technologies allowing them to qualitatively differentiate their products from those of their immediate competitors, in addition to conducting more detailed analysis of audiences. The distinction through quality (as highlighted by Jeon and Nasr (2016)) or through different approaches (for example, eldiario.es emphasises the “effect of the news content on the people”)⁵³ could be other relevant alternatives.⁵⁴

- **Renewed commercial strategy for advertising and financing sources** that counteracts the overwhelming dominance of the big Internet “players”, such as Google and Facebook that include capillarity and audience segmentation. A relevant example in this sense is the Finnish newspaper *Helsingin Sanomat*, which modified the design of its edition for tablets, so that advertising was less intrusive while capturing the attention of readers even more. They doubled the number of advertising campaigns between 2012 and 2013.⁵⁵

As for new financing models, for example, some newspapers have resorted to new formulas, like crowdfunding in “*El Español*” and *De Correspondent*; or through its own workers, like eldiario.es.⁵⁶

- **Message dissemination and readers participation on a real time basis**, for example, as moderators or content generators. A successful example of immediacy is the *Financial Times* and its *fastFT* service, which sends headlines often customised, to mobile devices throughout the whole day. With regards to the participation of users, it is worth mentioning the case of eldiario.es which, even though it has a system of “metamoderation”, in practice the readers themselves act as moderators, assigning negative votes and hiding comments deemed offensive. The Spanish version of *The Huffington Post* has also opted for user participation in the moderation, establishing a series of social rewards (“medals”) to recognise and reward these roles.

In fact, the interaction with users is one of the distinguishing features of the online media, as highlighted by Steensen (2009 a and b), who also notes that these media are more likely to use multimedia and interactive technology in journalistic production. Therefore, innovations in this area are very important.

Innovation in this market has been and will continue to be central and has been led mainly by digital native newspapers, as highlighted in the “Reuters Institute Digital News Report 2014”:

“Across the world we are seeing the rising impact of pure players that are bringing a new tone of voice and innovations in format and business models. Some are now international players creating new disruption in many of our surveyed countries. The

⁵³ Source: http://www.eldiario.es/que_es/

⁵⁴ In this context, to maintain and to further develop quality journalism, it is necessary to have journalists, newsrooms, etc., which necessarily involves a significant investment in training and development.

⁵⁵ Source: <http://www.inma.org/blogs/ideas/post.cfm/helsingin-sanomat-revolutionalises-tablet-advertising>

⁵⁶ Source: http://www.eldiario.es/que_es/

Huffington Post operates 11 international editions, many of which are joint enterprises with traditional news groups such as Le Monde in France and L'Espresso group in Italy. BuzzFeed runs sites in the UK and Germany and has recently launched versions in French, Spanish, and Portuguese.

These sites attract younger audiences and generate much of their traffic from mobile and social media. They have also been experimenting with new 'native' advertising formats where sponsored messages appear as part of the content itself."

In that sense, as reaffirmed in the "Reuters Institute Digital News Report 2016" for the specific case of Spain, digital native newspapers constitute a strong competition in the online press market:

"(...) newspapers increasingly find audiences online, where they face strong competition from a mix of new and long-running digital natives."

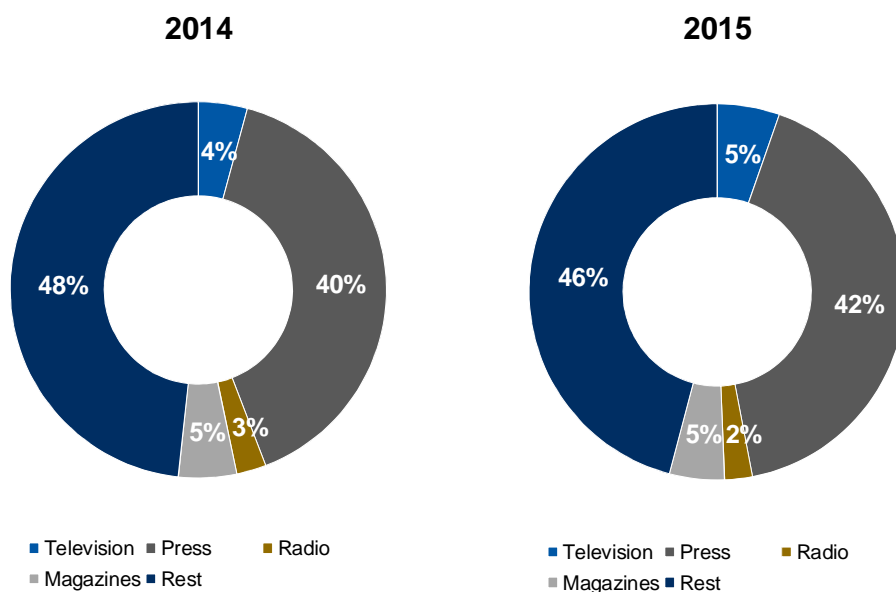
3.1.2. Advertising in the online press

Just as publications have seen an opportunity to increase their reader base in the Internet, advertisers have found a new channel to publicise their products and services in the online press. In 2015, the digital media achieved 8 million advertising inserts, representing 9 times more inserts than the ones obtained in 2012; digital channels now account for 21% of advertising investment in newspapers.⁵⁷

According to the report "*Índice de Inversión Publicitaria 2015*" advertising investment in digital media increased between 2014 and 2015, rising from € 154.6 million (20.1% of total newspaper expenditure in digital and non-digital media) to € 180.9 million (22.7%).⁵⁸ As shown in the figure below, this implies that the online press advertising investment came to represent 41.6% of all Internet advertising in 2015, almost two percentage points more than in 2014.

⁵⁷ According to the "*Libro Blanco de la Prensa 2016*".

⁵⁸ The report "Entertainment and Media Outlook 2016-2010. España" presents a figure of €187 million for 2015.

Graph 6. Advertising investment in online press vs. total spending in the Internet (%)

Source: "Índice de Inversión Publicitaria 2015"

Likewise, according to the report "Entertainment and Media Outlook 2016-2020. Spain" there are positive growth prospects for online advertising investment, forecasting an average annual growth rate of 7.8% during the 2015-2020 period, with which the advertising investment in this segment would amount to € 272 million. In contrast, advertising investment in the printed media would decline by an average of 2.3% per year during the same period, so that advertising spending in the online press would represent 33.1% of total spending on digital and non-digital media.

Tariff structures for online press advertisers offer multiple formats. Among the main ones are:

- **Cost per Mille (CPM).** It consists in paying a fee for each viewing of a banner regardless of whether the user activates the ad with a "click" or not. The contract conditions and the fee of the CPM formula depend on variables such as the ad format, the advertiser prestige and its volume capacity, amongst others;
- **Cost per Click (CPC).** A payment is provided for each ad where the user clicks. The rates of this model increase with respect to the CPM and depend on several factors, including the amount of clicks, the advertisement size and features, the platform, the reputation of the seller, etc.;
- **Cost per Lead (CPL).** In this case, the advertiser pays for each user that, from an ad, fills out a form with his/her personal details. This model increases the value because it involves the user, so the rates are usually higher. The amount of information introduced in the form determines the pricing, as well as the sector to which the company requesting the information belongs, the exclusivity of the platform, the contracting volume, the value of the advertising brand, etc.;

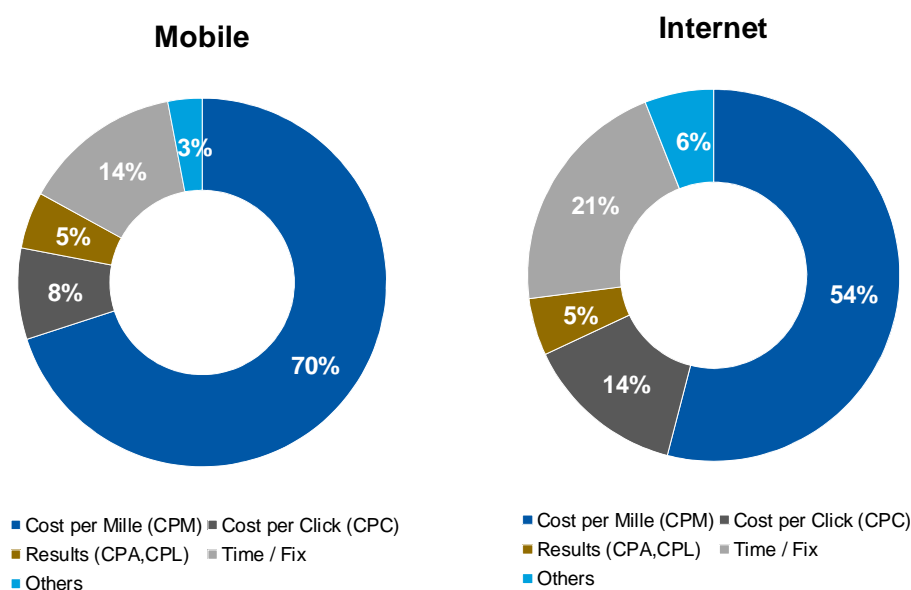
- **Pay per sale (PPS).** In this case the aid receives a commission for each sale the advertiser makes. The pricing for this contract model also depends on several factors; it is recommended, amongst others, when the platform used is focused on sales, the advertising company is widely known and the ability of the platform public to accept a campaign of this type; and
- The **Cost per Acquisition (CPA)** is a combination of the CPL and the PPS.

Other pricing formats include: **Pay per Download** (where the rate is set depending on the downloads made by the users); **Pay per View** (which depends on whether the viewing of a video occurs); and the **Effective Cost per Mille** and **Effective Cost per Click** (where prices are set depending on the effectiveness or profitability achieved by the advertiser).

Despite the efforts to change the pricing model, both in display and search investment, the main type of marketing is the CPM.⁵⁹ For display investment some sources set it at 55%.⁶⁰

According to the “*Inversión Publicitaria en Medios Digitales: Resultados 2015*”, the main pricing method in digital media (not just online press) is also the CPM, followed by the CPC, as shown in the following graph.

Graph 7. Pricing method in digital media (%)



Source: “*Inversión Publicitaria en Medios Digitales: Resultados 2015*”

⁵⁹ In “search” advertising the user performs an active search (for example, in a search engine such as Google), so that when the ad is shown there are greater chances that the user will be interested. On the other hand, in “display” advertising, the intention is to call the attention of the user via generic ads when visiting web pages, for example, news media.

⁶⁰ “*El Negocio de la Prensa Digital 2014*”.

3.2. Content aggregators

In parallel with the Internet growth and the increasing availability of a greater amount of online material, particularly by news editors who, as noted earlier, are especially prone to use multimedia technology, content aggregators have also developed very significantly, playing a key role within this process.

These aggregators have mainly developed due to the abundance of information available in the Internet, often overwhelming for the news consumer (Dellarocas *et al.* (2016); Holton and Chyi (2012)). As explained earlier, the news aggregators are information services that do not generate original content⁶¹ but add and display part of the editors news, providing links to their web pages with full original news. Generally, they only include the title of the news (or part thereof) and a fragment of the text, or a brief description of the news or content, so in order to get more information the readers have to go to the editors' web sites.

Aggregators are of great practical use and added value since they combine a huge diversity of sources of information, in some cases with the possibility of interaction on the part of the users (such as comments and discussions) and even as a mean to select news (for example, allowing users to insert the links and/or vote for those links they deem more relevant).

The news aggregator role emerged almost 20 years ago. *Slate* was one of the pioneers with the web *Today's Papers*, which analysed the stories in the front page of the five most important newspapers in the United States. In the words of David Plotz, one of its founders:

*"Today's Papers showed what Web news aggregation was supposed to be: It captured the media zeitgeist, it condensed everything you needed to know into a few paragraphs, and it was fast".*⁶²

One of the first major aggregators as we know it today was Google News. It is an aggregator with an automated news search system that constantly tracks information from the main online media. It was released in April 2002 and currently has over 40 regional editions in different languages (each one customized to suit each country's readers), in addition to local versions for over 40 countries. It is mainly characterised by:

- Being an automated aggregation system using an algorithm that creates a ranking of importance as to how many times and in what web sites a story comes up on the Internet, amongst other criteria. Consequently, the news is chosen regardless of the ideology;
- Providing links and excerpts from various articles regarding the same piece of news so that a user can quickly access the article from a variety of media on the same issue. This is extremely useful if the user wants to compare different points of view;

⁶¹ Although there are some aggregators that, even though they link external content, they also produce their own content as the *Huffington Post*.

⁶² Source:
http://www.slate.com/articles/news_and_politics/slate_fare/2009/08/introducing_the_slatest_a_better_news_aggregator.html

- Showing news on topics previously chosen by the user so that if a reader only wants to see news related, for example, with the environmental, he/she simply has to check the option in his/her personal section;
- Incorporating, since 2006, the extension Google News Archive, which allows the user to search in news archives, previously scanned, dating back up to more than 200 years.

Google News has grown by leaps and bounds, so much that to this day it brings together headlines from over 4,500 sources of information media worldwide and has almost 80 localised versions. It is a service that does not generate direct revenues since it does not display advertising on the web site. It sends over 10,000 million visits to newspaper editors every month.

3.2.1. Innovations in content aggregators

Beyond the more firmly based aggregators, there is also a variety of aggregators that include highly innovative services, bringing together more personalised content or that build on the activity of users on other platforms, such as social networks. This content shows the importance of innovation in line with the changes in information consumption.

Currently and amongst others, some of the options offered by some of these most innovative aggregators are:

- **Aggregation of content based on more personalised preferences.** Innovations focus on active management of consumer preferences, such as in Newsvine, where the information is based on selected users (based on a list of favourites) and is built on content that they publish or read. There are also algorithmic aggregators specially designed to provide dynamic content, so the content shown to each user is refined based on the type of articles the user reads, improving as the user uses its product; such as the case of Zite, later acquired by Flipboard;⁶³
- **Aggregation based on activities in social networks.** Social networks have become an important platform to access content and aggregators are not alien to them. There are aggregators, such as News360, that offer personalised content according to the user activity on social networks such as Facebook or Twitter. Another category is services build on social networks to gather content and information using the most relevant tweets on specific news, such as Prismatic;
- **Aggregation of content specially designed for portable devices (such as tablets or smartphones).** With the changes in content consumption and access to the Internet, aggregators specially designed for mobile environments have emerged. There are news aggregators like Flipboard, which presents the content tailored to consumer preferences designed as if it was a magazine, or news aggregators such as NetNewsWire, offering a very simplistic design and whose application needs very few resources (less than 1 MB), suitable for the vast majority of smartphones.

⁶³ Zite was closed in December 2015, after having been acquired by Flipboard in 2014.

Another recent example is Uday, a mobile news aggregator that emerged in late 2015 as an alliance between Samsung and Axel Springer. At the moment, it only operates in the United Kingdom, France, Germany and Poland but will soon be launched in 12 other countries, such as Spain, Italy, Portugal, the Netherlands and Austria, among others.

3.2.2. Content aggregators in Spain

There is diversity of content aggregators formats in Spain, both on single and multiple subjects. Sometimes aggregation goes beyond press news; some aggregators also attach other type of content such as scientific articles or blog posts.

One of the most important Spanish aggregators at the moment is Menéame. It was created in 2007 by Ricardo Galli; and reached an average of 139 thousand unique daily users during 2016.⁶⁴

Menéame is an aggregator that does have advertising and generates revenues. Its main source of funding is the advertising income, although they have been considering the implementation of a micropayment system so that users donate small amounts and a 'premium' option that removes the ads from the page for a certain period of time.

Its main differentiating factor is the high degree of user interaction:

"It is a web site that allows sending a story that will be reviewed by everybody and will be ungraded, or not, to the home page. When a user submits a news, it remains in the waiting queue until it gathers enough votes to be promoted to the home page".⁶⁵

Menéame uses a format that already existed in other countries (particularly used by Digg and Reddit)⁶⁶ where the user community itself is responsible for the content appearing on the web site by sending links to news believed to be of general interest. When other readers think that this is the case, they vote favourably so that the piece of news climbs up to the first page of the website.

The other differentiating feature of this type of news aggregators, like Menéame, is the ability to interact with other users by posting comments under the news and allowing the exchange of ideas and the observation of different points of view, for example, from readers in different geographical areas.

Other news aggregation services in Spain have different features. For example, some just show articles as they appear in the original source, such as Yahoo! News, while others include their own content, whether in the form of news or columns such as The Huffington Post. Some aggregators focus on content on a specific topic like multifriki.com, which

⁶⁴ Source : http://www.elconfidencial.com/tecnologia/2017-02-07/canon-aede-meneame-internet-facebook-agregadores_1327333/

⁶⁵ Source: <https://www.meneame.net/faq-es>

⁶⁶ Two of the first news aggregators sustained on user interaction.

focuses on “alternative entertainment” activities or simply collect links to news of Spanish speaking countries, like *minutonoventa.com*.

In the Spanish case, other specific examples of important aggregators are Bitácoras and Divoblogger, aggregators of blogs and links to content for bloggers, as well as Divúlgame, an aggregator dedicated to the dissemination of scientific knowledge and research.

Within the contents of the so-called *social marketing*, the aggregators Mktfan and Marketer Top stand out, where content related to the area of social networks and Community Management are added.

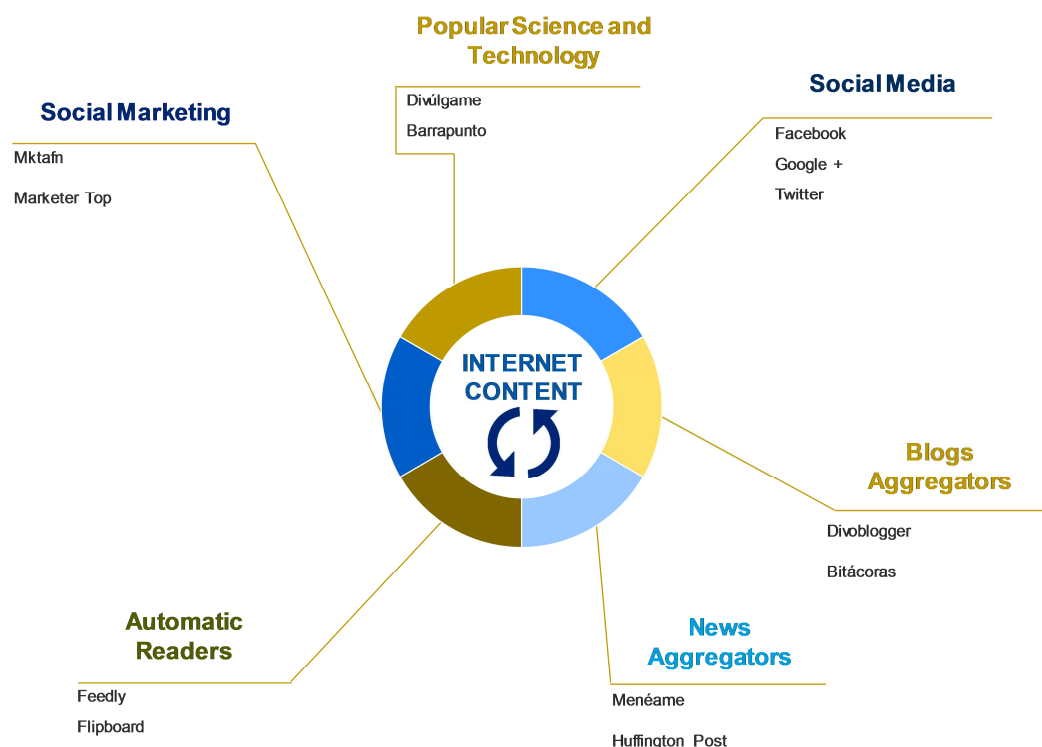
Some of these aggregators have led to important innovations in the Spanish market, often taking innovative models from other countries. For example, Menéame introduced successfully the active participation of users and the different weight in news voting depending on the degree of user participation.

Some other examples of innovative operating models have been Karmacracy, a tool designed to share content that combines elements of aggregators and social networks allowing users to be paid for their reputation by means of advertising campaigns;⁶⁷ or Barrapunto, one of the first monothematic aggregators of computer science and technology; or Niagarank which used the contents of social networks as source of aggregation.⁶⁸

The graph below summarises the mostly used types of content aggregation services in the Spanish market.

⁶⁷ The top rated users can be selected by marketing campaigns so that they publish a “sponsored” link. These users are paid for every click on that link.

⁶⁸ Closed down as a result of the reform of the act. Source: <http://niagarank.es/cierre/>

Graph 8. Content aggregators in Spain

Source: Personal compilation by the author

Finally, in addition to all these news aggregators there are foreign aggregators that can be accessed by any Internet user who lives in Spain. Their only limitation is that many of them are written in another language and they do not include links to content generated by Spanish publications.⁶⁹

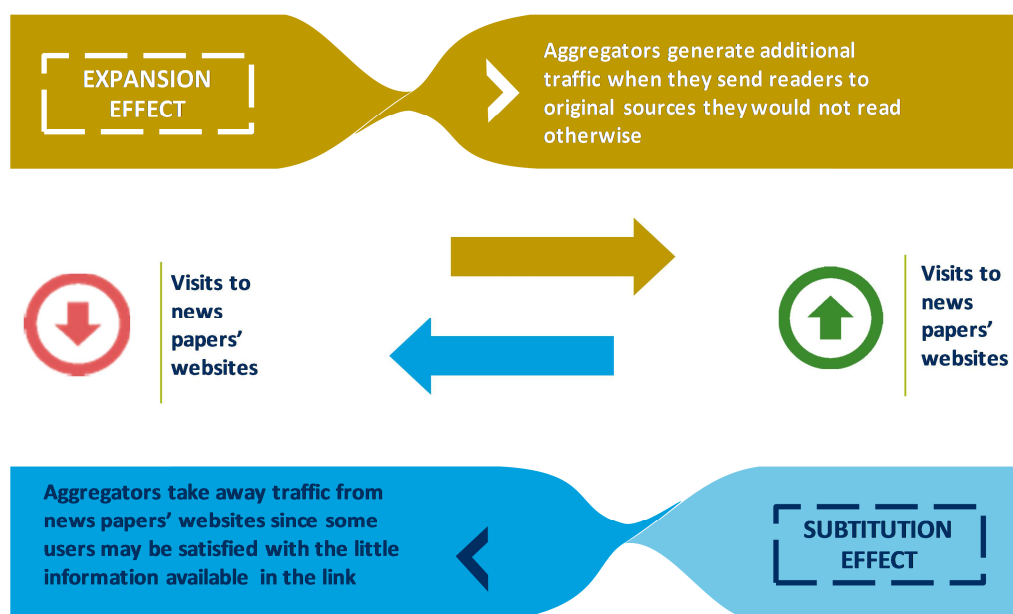
3.3. Impact of aggregators on the online press

3.3.1. Effect of aggregators on news consumption

The arguments concerning the effect of aggregators on the news consumption of online press is mainly focused on the impact of two opposing effects:

- The “**Market Expansion**” effect; and
- The “**Business Substitution**” effect.

⁶⁹ Such as Drudge Report, CityFALCON, Fark, Zero Hedge, Newsvine, etc.

Graph 9. The effect of aggregators on news consumption

Source: Personal compilation by the author

Market Expansion

Possibly, the greatest effect of aggregators is **the reduction of news searching time, which increases consumption**. That is to say, the reduction in searching time and effort allows readers to read more news or to seek more information, making it possible to discover news that without aggregators would not have been possible to find (Calzada and Gil (2016)), or to continue reading information related to the topic when the main piece of news is already indexed (Chowdhury and Landoni (2006)), thus increasing the number of visits to online newspapers.

In addition, when users are eager for variety of information, the costs imposed by the search may limit the number of media they visit (George and Hogendorn (2012)), being searching costs the main factor that improves consumer welfare.

However, some editors also argued that aggregators may reduce the news quality.⁷⁰ Having greater access to lower quality editor content, consumers' preferences would end up changing, they would appreciate less the high-quality content and would be less willing to pay for it, thus discouraging its creation and the investment in their generation.⁷¹

⁷⁰ For example, Rupert Murdoch, executive director and main shareholder of News Corporation, has stated that: "When this work is misappropriated without regard to the investment made, it destroys the economics of producing high-quality content". Source: speech before the US Federal Trade Commission in a workshop on the future of journalism in the Internet age, December 2009, available at: <http://www.dailyfinance.com/2009/12/01/murdoch-to-washington-stay-out-of-the-way-but-please-help/>

⁷¹ Discussion Article in the "Tiger Forum", available at: <http://www.tiger-forum.com/content/news-aggregators-drive-newspapers-provide-better-content-impact-profits-uncertain>

There is literature that points in the opposite direction though, suggesting that the appearance of news aggregators and, therefore, the greater competition amongst publications, would motivate editors to produce higher quality news (Dellarocas *et al.* (2013)). Moreover, irrespective of the publication quality or reputation before the appearance of the aggregator, newspapers have incentives to create ties with the aggregator and to increase the product quality with the intention to get as much traffic as possible from these (Jeon and Nasr (2016)). Similarly, other authors have also asserted that news readers using aggregators find it essential that they contain articles from highly reputed media (Chowdhury and Landoni (2006); Chiou and Tucker (2015)).

Regardless of the impact on quality, it seems quite clear that aggregators increase news consumption, largely due to the increase of time provided to the reader for news consumption by reducing searching times. Moreover, this does not only contribute to the increase in the number of news visited, or the number of visits made by Internet users to a specific newspaper, but it allows less known and consolidated newspapers to receive views that they would otherwise be less likely to receive. This benefit would not necessarily be exclusive of small or unknown publications, but also larger ones could attract additional readers who possibly would have not got to their web sites if they had not been redirected by an aggregator.

Furthermore, the effect of market expansion does not only benefit editors by allowing readers to spend more time reading news and redirect traffic to them through their links, but they could expand the base of potential audience by attracting users which without aggregators would not possibly read news, or at least, not through the Internet.⁷²

Business Substitution

In addition, through the Business Substitution effect, news aggregators could have an adverse effect on online publications, inasmuch as **some users may be content with the little information available next to the link provided by the aggregator and therefore they may not visit the original source**. In this sense, the aggregator could have a negative effect on traffic, reducing the number of visits that a publication could receive, compared to a situation where there were no aggregators and readers had to visit the original source.

This negative effect on editors could also be augmented by the direct competition from advertisers. In other words, aggregators could not only be capturing readers from editors, reducing the potential to generate advertising income, but advertisers could be using aggregators as alternative advertising channels to advertise their products. Thus, competition by advertisers would not only be indirect through the audience, but direct as a substitute of an advertising service. This effect has also been highlighted in the literature when it has been noted that, for example:

“Our work on brands (section 1) shows that audiences consume the majority of their on-line news from familiar and trusted brands, but we can also see that they are using increasingly varied ways to find that content. In the process, Google, Facebook, and

⁷² For example, readers of written newspapers or users that get information through other media such as radio or television.

Twitter have become – to a greater or lesser extent – intermediaries for a large proportion of news journeys on-line. As a result, some publishers complain that they have been able to take a significant share of the available advertising revenue around news, thereby making the funding of trusted content more uncertain.”⁷³

It is in this sense that some editors consider that aggregators imply an unfair competition because they use news generated by them to “take readers and advertisers away from them” and get direct (for example, advertising income) or indirect benefits, but without generating any added value to the news and without paying for it, thus taking advantage of their creation, as noted by Rupert Murdoch:

“Producing journalism is expensive. We invest tremendous resources in our project from technology to our salaries. To aggregate stories is not fair use. To be impolite, it is theft.”⁷⁴

In fact, this argument **is the main justification of the fee defenders introduced by the new Article 32.2 of the LPI reform.**

Thus, besides the positive externality resulting from the market expansion effect, there could be a negative externality of aggregators on online press editors.

The existence of these two effects has been highlighted in the economic literature. For example, Dellarocas *et al.* (2013) argue that the existence of aggregators has a positive impact on the overall online traffic flow (web pages of editors and aggregators) and part of that audience are readers of print publications or consumers of other media, such as traditional radio and television. However, these authors also indicate that aggregators are taking over part of the market advertising income, so the net effect on editors would only be positive if this traffic expansion offset the loss of income.

In the same vein, for example, Larson (2014) noted that:

“Traditional news organizations argue that aggregators deflect traffic from their web sites because users who read news on aggregator sites often fail to follow links to full articles after reading the headlines and summaries. Aggregators, in their defense, have insisted that they aid traditional news sites by increasing story exposure and driving users to the original web sites.

Although both arguments appear to have at least some merit, whether aggregators drive traffic to web sites or deflect users from them is a contested matter, and the answer likely varies based on a multitude of factors.”

These two opposing effects have also been highlighted by Calzada and Ordóñez (2014):

⁷³ “Reuters Institute Digital News Report 2014”.

⁷⁴ Rupert Murdoch, speech before the US Federal Trade Commission in a workshop on the future of journalism in the Internet age, December 2009, available at: <http://www.dailyfinance.com/2009/12/01/murdoch-to-washington-stay-out-of-the-way-but-please-help/>

“In recent years, blogs, search engines, and news aggregators have come to occupy the top positions in audience rankings of news sites. While traditional publishers accuse these entrants of stealing their contents and revenues, they argue that they expand the market by improving accessibility to newspapers and their contents. This claim might be justified given that aggregators reduce consumers search costs by offering links to many news sites and/or by editing the contents originated by others”

Which of these two effects dominates is really an empirical question that could have a different answer depending on the case, that is, the specific features of the aggregator and editor in question, as well as the specific market.

For example, for small, little known editors with a local presence, aggregators increase their visibility and help them generate traffic besides developing a loyal and stable readers' base, increasing their advertising income and subscriptions, as suggested by some researches.⁷⁵ On the other hand, in the absence of aggregators, readers may end up resorting more intensively to the web pages of the most popular and well-known media, increasing their traffic, due to the lack of easy access to the contents of smaller and less well-known newspapers.

The magnitude of the effects could depend as well on the amount of information that the aggregator displays. If the information shown by the aggregator on the content of the original source is very extensive, the probability that the user looks up the original source is low, as highlighted by Dellaorcas *et al.* (2016).

In this sense, Isbell (2010) stresses the need of taking into account the different features of each aggregator category before assessing the implications on the other agents.

3.3.2. Empirical evidence on aggregators net effect on online publications traffic

Although it is very difficult to estimate the magnitude of each effect separately,⁷⁶ there is some empirical evidence on the net effect of aggregators on the traffic of periodicals, apart from some isolated assertions.⁷⁷

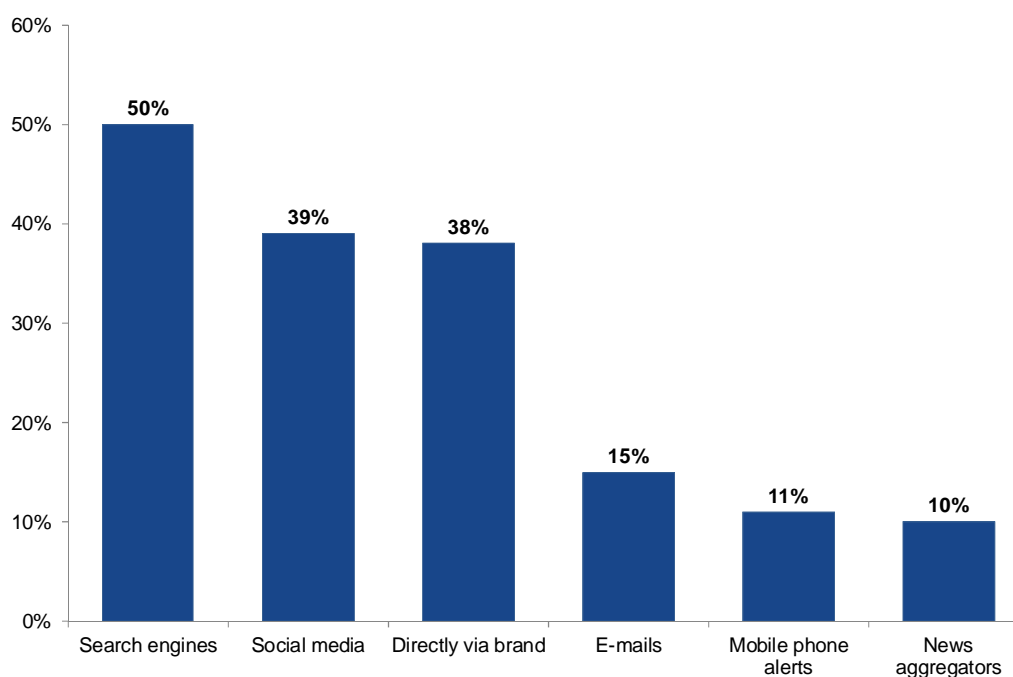
For example, “Reuters Institute Digital News Report 2016” indicates that the amount of online traffic received by editors from news aggregators is relatively low, compared with that received from other sources. The following graph shows the percentage of online readers that access a piece of news depending on the source in Spain.

⁷⁵ Athey, S. (2015).

⁷⁶ Largely due to the absence of statistical data that allow carrying out, for example, an econometric analysis, as well as the limited number of “market tests” (situations where aggregators ceased operations for a period of time in order to measure their impact).

⁷⁷ For example, according to sources from Google News, their service sends around 1,000 million clicks to editors' web sites each month through their aggregation service. Source: Cohen, Joshua (December 2, 2009), “Same Protocol, More Options for News Publishers”, Google News's Blog.

Graph 10. Percentage of online readers accessing online news according to the channel in Spain*



* Note that the percentages do not add to 100% since some readers access the news in more than one way.
Source: "Reuters Institute Digital News Report 2016"

Although this indicates that only 10% of Spanish online press readers access news through aggregators, it does not provide a direct measure of the effects of business substitution and market expansion, due to the following reasons:

- From this information it is not possible to estimate the number of readers that stopped visiting the original source being content with the limited information provided by the aggregator, that is, on a direct measure of the substitution effect.
- It does not offer information on a situation where no aggregators existed, not only in terms of newspapers visits, but in terms of advertising income or editors' profits, measures that would better capture the economic impact. That is, even though this information seems to suggest that the effect of aggregators on editors is small, since they generate little traffic, this is not necessarily true. No one questions that aggregators redirect a certain number of visits to online publications. However, the key question is whether these readers (or even more than these or less than these) would end up visiting newspapers web pages if no aggregators existed.
- It does not offer information on readers who directly access the publications, but who are doing so because they knew the publication in the past for the first time thanks to a link in an aggregator. This could be particularly relevant for local or small publications. That is, the market expansion effect should not only be measured through the traffic that accesses a publication coming from an aggregator, but also through the readers who have become faithful to a publication that they discovered thanks to an aggregator.

- Finally, nor should it be forgotten that aggregators are not only important for the direct traffic they generate to publications, as noted in the case of Google News, but they often affect the traffic generated from other platforms. For example, the importance that Google News has in the Google search engine results has been argued.⁷⁸ Similarly, new forms of content consumption, such as those made through links that are shared on social networks,⁷⁹ could have been originally detected through an aggregation service to be shared later.

All this highlights the symbiotic nature of aggregation services.⁸⁰

Besides this type of indirect evidence, some researchers have tried to measure the importance of aggregators in generating traffic for online publications, taking advantage of some specific events to carry out a “market test”. They also try to determine which of both effects of aggregators’ activity is dominant.

For example, Athey and Mobius (2012), by their way, analyzed the impact of aggregators, and in particular Google News, on the amount and composition of Internet news consumption in France, for users adopting a “location” application from the aggregator. These authors found that users visited more frequently and for a longer time the local media sites that they came to know thanks to the aggregator and that this had a lasting effect. The researchers found that, eight weeks after the change, the consumption of local news was 16% higher than at the beginning. However, the researchers also found that over time the consumption of local news was derived from an increased use of Google News.

Chiou and Tucker (2015) analysed a natural experiment using traffic data from Google News to other web sites. After a break-up of the negotiations between Google News and Associated

⁷⁸ “In terms of direct traffic the home page of Google News is irrelevant. Its traffic is not very high compared to what major media may have on the Internet. However, the importance of Google News sits in the related news module that appears on the Google search engine. Thus, when a user searches for words on a topic, in the first results he/she sees related news that come from media. This action, according to Article 32.2, is not subject to authorization or remuneration.” Source: http://www.eldiario.es/turing/propiedad_intelectual/Desmontando-Fee-AEDE_0_229927794.html

⁷⁹ Also by aggregators that draw on content published on social networks themselves such as News360 or Prismatic.

⁸⁰ In this regard, for example, it is possible to quote a ruling by the Berlin District Tribunal with respect to a claim by 41 news editors against the Google search engine. The ruling says:

“The search engine provides a combination of value and money flows as well as non-monetary benefits for all parties and this constitutes a win-win situation. This well-balanced system is disturbed by the neighboring rights, under which the press publishers now demand that the defendant, as the operator of the search engine, pays remuneration for something that is also in the economic interest of the website operator.”

Original text in German:

“Die Suchmaschine erweist sich insgesamt als Kombination von Leistungs- und Geldströmen sowie der Erbringung geldwerter Leistungen für alle Beteiligten und entspricht damit für diese einer Win-Win-Situation. Dieses ausballancierte System wird durch das Leistungsschutzrecht aus dem Gleichgewicht gebracht, in dem die Presseverleger nunmehr verlangen, dass die Beklagte als Betreiberin der Suchmaschine etwas vergütet, was diese im wirtschaftlichen Interesse auch der Webseitenbetreiber erbringt.”

Landgericht Berlin, Case 92 O 5/14 kart, 19 de Febrero 2016, opinión p. 19. Available in: <https://europeancopyrightsocietydotorg.files.wordpress.com/2016/06/ecs-answer-to-ec-consultation-publishers-role-june16.pdf>

Press (one of the more relevant news agencies), the former stopped publishing contents of the latter and this situation lasted for seven weeks. The authors compared the visits of users to web pages from Google News before and after the decision, compared to the traffic generated from Yahoo! News (a news aggregator that continued hosting AP content during the seven weeks). These authors found that, during the period when Google News did not provide the service to the agency, the traffic to news web sites from Google News dropped in relative terms to Yahoo! News. This negative impact on traffic would have affected local or national well-known and prestigious media. Similarly, the authors did not find any evidence on a possible substitution effect for online publications and, instead, they found evidence on a “traffic effect” or market expansion.

Calzada and Gil (2016) assess the impact of aggregators on news agencies by analysing two major events in Spain and Germany: the closure of Google News in Spain and the decision by more than 200 news editors of not allowing their contents to be listed by Google News in Germany, as indicated in Section 2 of this document. The authors rely on aggregate data on newspapers from Spain, Germany and France, using those from the latter country as a reference group (control). They also take into account the existence of the “market expansion” and “substitution” effects, while trying to determine which is predominant and how they modify consumer behavior. Their results, for the case of Spain, **show a reduction of 11% in the number of visits to online publishers, as well as an 8% decrease in the number of pages viewed by consumers**. In the case of Germany, they define a reduction of 7% in the number of daily visits to the publications of the Axel Springer publishing house. In both cases the predominance of the market expansion effect becomes evident, so the news aggregators will allow the expansion of the audiences of online publishers.

Very recently, Athey *et al.* (2017) evaluated **the effects of the Google News exit from Spain on the consumption of news**. The authors used a sample of navigation events out of more than 100 thousand Spanish users, constructing treatment and control groups depending on whether news consumers used Google News before or not, respectively, and they found that the consumption of news by the treatment group (Google News visitors before their departure) fell by 20% from October 2014 to March 2015. The authors found that, as a result of the closure, users were only able to replace a portion of the total news types they previously read, so that Google News's exit would also have negatively impacted on the variety of content. **Likewise, the number of visits to news publishers was reduced by around 10%. This drop in traffic was mainly concentrated in small publishers, while large ones did not show a significant reduction.**

Some other sources mention, for example, the results of an investigation by “Microsoft Research New England”, suggesting that news aggregators such as Google News increase visits to news pages provided they highlight local news.⁸¹

This evidence does not support the fact that there is a significant substitution effect showing that aggregators compete directly with the online press.

⁸¹ Source: <http://www.technologyreview.com/news/425836/Google-news-friend-or-foe-for-local-news-services/>

In the same vein, some other authors have tried to analyse possible competition between aggregators and online publications.

Yang and Chyi (2011) used a survey carried out with readers of different web sites of US local newspapers to establish the relationship between these web pages and the news aggregators. Their results show that 26 of the 27 web pages included in the survey **have a “complementary” rather than “substitutive” relationship** with news aggregators.

Similarly, Huang *et al.* (2013) developed a study to examine the competitive relationship between news aggregators and web sites of news editors (with or without printed edition) in the Taiwanese market. The authors found that analysed web pages did not compete against each other, with the exception of Yahoo News! (the web with news content with the highest market share), which showed a competitive relationship with Apple Daily web page.

Recently, Lee and Chyi (2015) analysed the relationship between the demand for news aggregators and the different types of media (newspapers, television, news web sites and social networks) in the US. The results obtained show that together, the three analysed aggregators (Google News, Yahoo! News and Huffington Post) are not competitors of the other media. Broken down, aggregators demand does not compete either with the rest of the media. In addition, Google News and Yahoo! News show no relationship with the demand of local newspapers (printed and digital edition together), concluding that they do not compete effectively.

In short, **the empirical evidence suggests that the “Market Expansion” effect is much more important than the “Business Substitution” effect so that, together, aggregators benefit publishers more than harm them. Moreover, the net positive effect seems to be higher for local, small and little-known publications.**

However, this does not imply that the payment of a fee by aggregators to consolidated publications (but not to small ones) is justified, since the net effect could well be positive in both cases. That is, while the Business Substitution Effect may be greater for large and known publications (compared to small ones) and the Market Expansion Effect lower, in both cases the first effect (Substitution) appears to be smaller than the second (Expansion).

4. (Lack of) Economic Justification for the Fee

The new Article 32.2 of the LPI reform has generated much controversy and debate on the justification, both theoretical and empirical.

According to the economic theory, the introduction of an external legislation or regulation that imposes a certain pattern of behaviour on market actors (such as the obligation to buy or sell a product or service at a certain price to other agent) is only justified in very specific circumstances, particularly when the so-called “**market failures**” exist.

If these are not observed, the implementation of an artificial measure that goes against the wishes and actions of economic actors and dictated by the behaviour of the free market, implies a serious **risk of introducing distortions to competition**, with a negative effect not only for companies but for consumers and the general welfare too.

4.1. Economic theory on market failures

In economics, a market failure is a term used to describe a situation that occurs when the supply made by a market under free competition is not efficient, that is, a situation where there is a possibility that social welfare could not be maximised, in particular, because a smaller amount of goods or service is provided compared to what would the general interest would be.

The most common situations that cause market failures are:

- **Imperfect competition (such as monopoly power).** It arises when a company holds significant market power. This can occur, for example, when there are economies of scale that in some cases, may even lead to the existence of a single supplier (natural monopoly). As a result of this failure, consumers end up paying a very high price and consume a low amount of the goods or service, in comparison with a situation with effective competition.
- **Markets with asymmetric information.** In this case, some of the economic actors have privileged information and may take advantage of the lack of information about certain facts by other actor in order to, for example, set very high prices or restrict the supply.
- **Negative (or positive) externalities.** These occur when an actor receives damages (or a profit) resulting from the economic activity of a producer or a consumer that is not directly related to him/her, reducing (or increasing) the individual or collective welfare.⁸²
- **Public goods.** Public goods are defined as a product or service that is a “non-rival”, that is to say, that the consumption by one person does not impair or prevent the

⁸² A classic example of a negative externality is the pollution produced by cars or factories. In these cases, competition and markets bring an overstated amount of goods with negative externalities because the producer or the user does not consider the cost or damage caused to other actors when performing his/her activities.

consumption by other individuals,⁸³ and “not exclusive”, that is, it cannot prevent that the person who does not pay for it consumes it.⁸⁴ When there are public goods, there is a risk that the market does not provide them or does it in insufficient quantities, mainly because some consumers or users, following a rational behaviour, will try not to pay for them, taking advantage of the fact that others have produced it. In economics this problem is called the “free rider” problem and is the reason why many private companies, under free market normal circumstances, would not be willing to produce these goods.

- **Information goods.** These are goods whose main market value is derived from the information they contain. Typical examples include a piece of news, a song or a film. Information assets contain very similar features to those of public goods so they are often subject to the same market failures. That is to say, they are usually also non-rival goods (the fact that a consumer reads a piece of news does not prevent another reader to do the same) and not exclusive (it is impossible or very difficult to prevent certain individuals from consuming them). Another very common feature of information assets is the uncertainty existing before their consumption with regards to the profitability they will provide, as well as their low reproduction and distribution costs, especially when they are contained in digital formats.

When a sector is suffering a market failure, the external intervention, for example as public or regulated companies or by competition policy or intellectual property acts, could be justified. In these cases the government can intervene to ensure the social interest, for example, by providing information or ensuring its flow among all market agents, fighting externalities with the introduction of laws, dealing with the provision of public goods, or regulating natural monopolies and penalising anticompetitive behaviours.

On the other hand, when an economic sector is not subject to market failures, an intervention can lead to creating distortions against the social interest. This is a well-known result within the economic literature that can be drawn from the **“First Fundamental Theorem” of Welfare Economics**. This theorem states that, under certain conditions (amongst them the absence of market failures), any competitive equilibrium will lead to an efficient allocation of economic resources. That is, private companies, seeking their own individual benefits, reach a market result that is efficient and can be optimal from a social point of view.

The First Theorem of Welfare was originally demonstrated by Abba Lerner by geometric arguments. More formal demonstrations come from the economists Harold Hotelling, Oskar Lange and Maurice Allais, but especially from Arrow and Debreu (1954) and McKenzie (1959).

Thus, **a government intervention in a market free of failures is not only unnecessary but inevitably leads to an inefficient outcome**. In fact, since the 60’s the renowned economist Ronald Coase coined the term “Government Failures” to refer to situations where a government creates inefficiencies in an efficient market through its intervention, or when,

⁸³ For example, a radio or television signal.

⁸⁴ One example is the lighting of a city; once installed, all citizens benefit from it.

although the market is not efficient, the government should have intervened in a different way to avoid creating distortions detrimental of economic efficiency and social welfare.

Even in markets where there are certain failures, particularly negative externalities, Coase (1960) also demonstrated that the **government intervention would be unnecessary or even harmful**. More specifically, in his famous “Coase Theorem” he established that when transaction costs are low and property rights are well defined, a legal framework or the state’s intervention is not necessary to achieve the maximum social welfare, even when there are negative externalities, since the parties can reach a private agreement that is socially beneficial, specifically when the voluntary exchange allows shifting the resources from less valued uses to the most valued uses, so that the final allocation is as good as possible or more efficient.

In other words, the Coase Theorem states that if the parties can negotiate without facing significant costs, the allocation of resources resulting from the negotiations, can solve the externalities problem by itself.

The justification of the Coase Theorem can be illustrated by a widely cited example in the economic literature: aircraft seats. When a traveller decides to recline his/her seat, his/her own welfare increases but can harm that of the traveller sitting behind him (he/she imposes a negative externality on the other traveller). The traditional solution would be the introduction of a legislation prohibiting airlines from installing reclining seats. The problem is that it would not be efficient if the pleasure resulting from reclining the seat for the traveller seating in front is greater than the harm it causes to the one sitting behind. To correct the externality it is sufficient to let the parties negotiate and reach an agreement. For example, if the pleasure of reclining the seat was € 100 while the suffering of the passenger sitting behind was € 80, the front passenger could offer, let’s say, € 90 to the one sitting behind to let him/her recline his/her seat. In that case, both passengers would be in a win-win situation as they would both achieve a net profit of € 10: a situation socially preferable as opposed to banning reclining the seat (which generates a profit of zero to each of the passengers). Therefore, both sides reach an agreement and with it, a social optimum.

The Coase Theorem has more important implications. It states that the socially optimal result will be achieved regardless of what the initial property rights are. That is, and using the same example, regardless of whether the passenger sitting behind has the right to prohibit the front passenger from reclining the seat or the front passenger has the right to recline it even against the wishes of the back passenger. Therefore, the social optimum is achieved in each case, regardless of how the property rights are distributed; this only changes who pays and who collects (for example, if the front passenger had the right to recline the seat, the passenger sitting behind could be the one offering money to the one sitting in front for not doing so), but it does not change the fact that the private agreement between the parties ends up achieving the socially desirable result.

Coase’s result, however, does depend on the parties finding it easy to reach an agreement or not. Using economic jargon, it says that transaction costs should be small. In this example it would not seem that the costs of agreeing were very high, but it could be the case in other situations, for example when a company that polluted a whole neighbourhood had to sign individual contracts with each of the residents. In this sense, it would seem more reasonable that the government or the laws should be rather devoted to remove the obstacles to the

negotiation, facilitating the exchange of property rights (that is, reducing the transaction costs) rather than directly intervening in the market.

Thus, for example, and as explained below, **the fact that the transaction costs are high is what justifies the existence of copyright collecting societies, although it does not justify setting a fee or a defined fee in advance or by an external actor, and let alone a different one from those that the parties would be willing to agree.**

4.2. Lack of economic justification for the fee

As pointed out above, the legislators and promoters of the new Article 32.2 have argued that the existing market failure, that would justify the introduction of a fee, is **the negative externality that news aggregators are generating on online publications since they are taking traffic away from them and, therefore, reducing their advertising income.**

However, and as it has already been highlighted above, this argument contains two fundamental errors:

- a) First, **while it is true that there may be a negative externality, there is also a positive effect in the opposite direction** (the “Market Expansion” effect discussed in the previous section), which entails more traffic for publications. So the net effect may well be zero or even positive, as noted by the evidence discussed above, in which case the editors would have to be the ones who had to pay aggregators for that “service”. If this has not been observed so far, the parties probably consider that, in general, the two effects balance each other so no fee should exist, in line with what has been observed empirically,

Thus, the market situation before the amendment of the law suggests that the benefits of content creators as a result of being “aggregated” are generally positive. The main evidence of this benefit is that periodicals have at no time prevented aggregators from using their news, even when there are technical solutions to do so. Thus, even if it was true that aggregators benefit from the use of a material that is not theirs, and even if it was true that they are important competitors of the publications, the latter have done nothing to prevent it, nor seem to have demanded a payment in exchange to compensate for that damage, which clearly demonstrates that the benefits obtained by publications are higher (or at least equal) than the potential damages. This is clear proof that the substitution effect is smaller than the expansion effect.

Additional evidence in this regard are the editors who have explicitly waived their intellectual property rights over their content through “Creative Commons” licences.⁸⁵

⁸⁵ The Creative Commons are licenses granted by authors of works protected by intellectual property rights in favour of users, allowing these users to use these works free of charges, provided certain conditions are met, such as, acknowledging and mentioning the author.

An example is the “*El Diario*” case, an online newspaper which has chosen to publish its work under a Creative Commons license. (<http://www.eldiario.es/licencia/>).

- b) Second, even accepting that the net effect on publications could be negative, in line with the Coase Theorem, **the best option is to let the parties freely negotiate and agree the fee that best suits them, which could be different depending on the circumstances, for example if they are small or local publications, if the effect on traffic is significant or not, etc.**

This is even clearer when one considers that **the transaction costs of possible negotiations would not be high**. Indeed, unlike other cases where the number of users and content creators are very significant and they are widely dispersed, the number of aggregators and periodicals is limited and easily identifiable. In fact, the most important aggregators in Spain (those with the higher number of users) are only a few, like publishing titles that concentrate most of the audience. As if this were not enough, the publishing groups are associated (for example, in AEDE or in AEEPP) so that negotiations could be carried out through a sector association.

The low transaction costs that exist in this case and that imply an easy negotiation and management of payments (in whichever sense that these were)⁸⁶ also **call into question the need of a copyright collective society to be in charge of managing the fee collection**. So, unlike other cases, such as the copyright for music, where the number of users (radio stations, concert organisers, background music companies, etc.) and the number of authors are significant and are very dispersed (so that the location, negotiation, control of the use and management of a collection in an individual way would be impossible), **this would not be the case here**.

The other possible market failure that is often used to justify the existence of a fee for intellectual property rights, possibly managed by a collective society, is that the product in question is an information good whose use or consumption by a user or consumer is very difficult to prevent. Indeed, as pointed out above, the production process of a piece of news involves relatively high sunk or fixed costs,⁸⁷ but with reproduction and distribution marginal costs practically null. In other words, once the news are drafted, the additional cost of producing and distributing a copy is very low. This has become especially true nowadays, where current models of reproduction and distribution of information over the Internet are based on the availability of information as a set of digital data that can be transmitted online between virtually any two points in the world. These models undoubtedly strengthen the non-exclusive nature of these goods, so that their creators or owners have become even more vulnerable to third parties accessing their creations without an authorisation or economic compensation. Thus, to the extent that the link between producing a piece of news and getting paid for its consumption could be broken, if an intellectual property system that protected the editors or owners of these rights is not established, there would be a risk that the lack of

⁸⁶ That is, from the aggregators to the editors or from the editors to the aggregators, depending on whether the net externality is negative or positive.

⁸⁷ For example, investment in human capital in the training of journalists; the time and resources allocated to research, the editorial process, etc.

compensation for the effort and creativity resulted in a reduction of the incentives for its creation in the long run.⁸⁸

However, **this problem does not exist in this case, as it would be very easy for an editor to prevent an aggregator from using a piece of news**, as already explained above, thus reducing to zero the risk of using this piece of news without compensation. In other cases, such as music, an author preventing a user (for example, a city council in a town that organises a concert) from using a musical piece would be virtually impossible, especially for little known authors and without physical or economic means to do so. This is not the case for online news editors.

In short, **while the costs of search, negotiation, management and control of the use of the goods (news) by users (news aggregators) are low, no intellectual property system is justified through a copyright collecting society that ensures remuneration for the use of such goods if rights holders choose to do so.**

In addition, the government introduction of an artificial fee, which has not been the result of a free market negotiation, is unjustified, either because the intended market failures do not exist (or if there are externalities, these work in different directions, so they are cancelled out), or because the market itself can correct them.

Thus, the introduction of a fee would necessarily entail distortions to the detriment of social welfare and economic efficiency.

Proof that this intervention is unnecessary and that there have been solutions to this alleged problem through bilateral negotiations between the parties is what happened in countries such as France and Belgium, where the implementation of a fee was tried.

In France, for example, the media and Google reached an agreement in 2013, worth € 100 million (Google contributed with € 60 million and the media with € 40 million), to create a relief fund for the French media with the aim of facilitating their transition to the digital environment and to encourage innovation and the development of web projects. In addition, Google would also give the media training to better use its tools.

On the other hand, in Belgium, when a court banned Google in 2011 from disseminating texts and photographs of some Belgian newspapers, the media and Google reached an agreement to return to Google News in exchange for signing cooperation agreements that, amongst other aspects, allowed the Belgian press to better use Google tools, as well as “a wide range of business initiatives” to promote their products together.

In Germany, with some of the most restrictive intellectual property laws in Europe, when the government passed a law forcing aggregators (particularly Google News) to pay a fee to editors, Google News became a volunteer service when editors had to waive the

⁸⁸ In economic terms it is said that a problem of dynamic efficiency is generated. So, to ensure a socially optimal level of production of information goods both at present and in the future, a system of intellectual property rights is required that grants the creators an economic compensation, enabling them to recover their investment/fixed costs and encouraging the creation and production of goods.

compensation in order to be included. A condition that almost all publications accepted without asking anything in return, just for the benefit aggregators were generating for them. Nowadays in Germany, aggregators like Uday have to pay 7.2% of their revenue as a fee (11.2% if they are also a search engine).

Finally, Google and eight major European news editors announced in 2015 a broad agreement to promote “high-quality journalism through technology and innovation” and consequently increase audience and profits in the sector. The initiative which included the creation by Google of a €150 million fund in three years “for projects that show new ways of thinking in the practice of digital journalism” implied the creation of an alliance called Digital News Initiative (DNI). The founding partners are EL PAÍS (Spain), Les Echos (France), FAZ (Germany), The Financial Times (UK), The Guardian (UK), NRC Media (Netherlands), La Stampa (Italy) and Die Zeit (Germany), together with organisations of the newspaper industry such as the European Journalism Centre (EJC), Global Editors Network (GEN) and International News Media Association (INMA), with the intention to include in their scope other European editors and other parties involved in the digital news industry in Europe.

The agreement has three main parts:

- a) **The development of products.** Google and news editors will establish a working group so that the editors can “increase their revenues, traffic and the participation of audience groups” focused on innovation in advertising (video, apps, knowledge and analysis of data, etc.) and paid journalism.
- b) **Support and stimulation of innovation** in digital news journalism for three years.
- c) **Investment of an undetermined amount in “new resources”** for training and development of journalists and newsrooms in Europe. This will include specialised personnel based in Paris, Hamburg and London to work with newsrooms on digital skills.

In addition, it was proposed to establish alliances with news organisations and financing studies on the changing environment of the media, initially including an expanded report of Reuters Institute Digital on consumer behaviour and the use of news in Europe, covering 20 countries. It will also extend the “*Google Journalism Fellowships*” to Europe.⁸⁹

To the present date, DNI has conducted two rounds of applications for financing, with a total of 252 projects obtaining funds in 27 European countries and a total sum of over €50 million, with a third round scheduled for April 2017.⁹⁰

⁸⁹ A training grant for students of all disciplines interested in the use of technology as a way of telling stories in innovative and dynamic ways. It includes training in data journalism, new applications, online free expression and reflection on the business of journalism, plus stays in Google and other innovative companies in content creation. Source: <http://www.google.com/get/journalismfellowship>

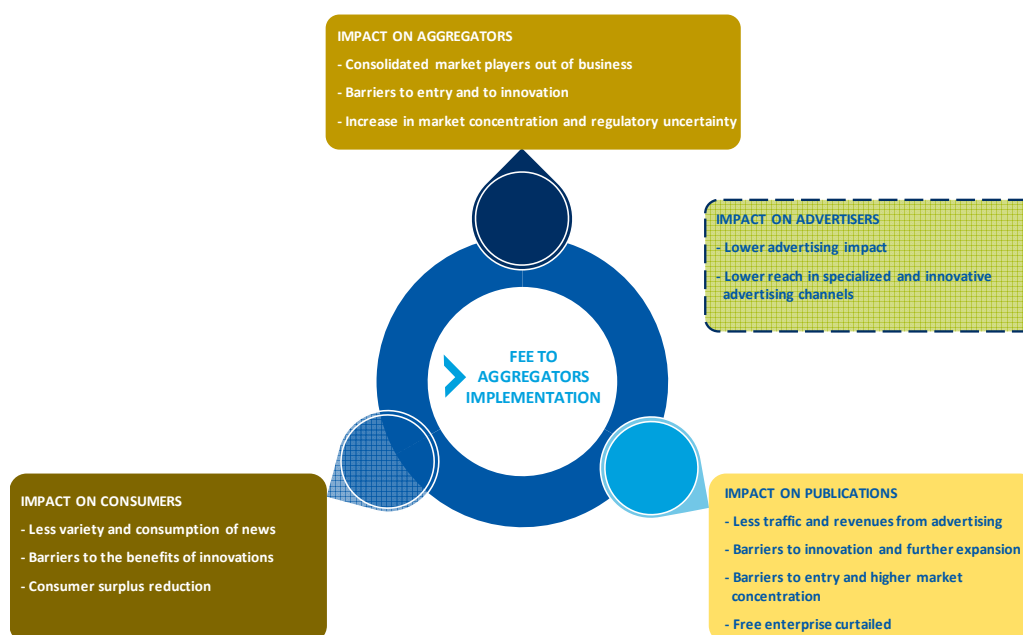
⁹⁰ Source: <https://www.digitalnewsinitiative.com/fund/>

5. Impact of the New Article 32.2 of the LPI on Competition

Putting into force the new Article 32.2 of the LPI has several implications which, together with the lack of regulation or an economic memory establishing the methodology and justification for determining the amount of the fee and defining who exactly will have to pay it, make it clear that it directly or indirectly affects not only news aggregators but the entire Internet ecosystem related to the provision of content.

The impacts mainly affect aggregators, news end consumers and the online publication market, including advertisers.

Graph 11. Impact of the new Article 32.2



Source: Personal compilation by the author

In general two types of effects can be differentiated:

- Static or short-term effects:** closing down of some aggregators with the consequent loss of visits to online newspapers, searching time increase, loss of income and reach of advertising.
- Dynamic or long term effects:** increased market concentration and higher prices, barriers to innovation, entry barriers for new future firms, regulatory uncertainty, etc.

The related economic literature, analysed in the previous section, suggests that the consequences of the reform would be distributed unevenly, **damaging more significantly the content generators or smaller or less established publications, such as digital native newspapers**, which are the ones who could most benefit from aggregators.

For example, in addition to the articles listed in Section 3, other researches, such as the one carried out by Susan Athey of the Stanford Graduate School of Business, show that **news aggregators generate a redistribution of news consumption towards smaller editors**.

These researches also make it clear that aggregators increase the overall consumption of news, so the cessation of their activity affects all Spanish creators of content and, ultimately, readers:

“In a series of studies, we explore the ways in which aggregators and intermediaries affect the consumption of news on the Internet. We analyze several natural experiments involving the Google News aggregator, showing that Google News redistributes news consumption away from large outlets and towards small outlets, and decreases user loyalty to their favorite outlets. We find evidence that Google News increases overall news consumption, consistent with the theory that it reduces search costs and helps users discover stories and outlets that interest them.”⁹¹

The approval of this part of the act reform is a setback to new business models that have emerged in line with the Internet boom and limit their future in terms of creating new services and products that allow enhancing their existing content. It is very clear that within a decade the media will be very different from today; the new act implies an obstacle to the development of new business models and severely affects innovative companies and local Internet start-ups.

Two years after the entry into force of the new law there is still uncertainty about who and how the fee will be paid, and it is, therefore, still premature to assess the full scope of the new legislation, to a certain extent because the actions of some agents (for example, some aggregators such as Menéame) is still pending definition, awaiting the establishment of key aspects such as the form and final amount of the fee.⁹² In that sense, the postponement in the collection of the fee limits the analysis of its impact on the relevant variables that since 2015 have been affected by the approval of the new law.

That is to say, **the data available points towards the closing down of aggregators and a particularly important effect on the latest digital media (small digital natives)** that managed to enter the market mainly thanks to the traffic obtained from aggregators. These data confirm the reduction in sources of information for citizens, with less diversity in access to information and opinion, and a barrier for new digital initiatives. Thus, the business development of innovative companies in the Internet, service and application developers, bloggers, content authors, media, educational institutions, organisations, and in general companies that disseminate content on the Internet, are at risk, which will necessarily have significant implications for all actors in these markets in the medium and long term.

The following sections detail more specifically the most important consequences for the affected groups, both in the short and long term, as well as their consequences for competition.

⁹¹ Athey (2015).

⁹² As was mentioned in Section 2, Menéame business continuity in Spain would be unviable in case the fee determined by CEDRO was effectively enforced

5.1. Consequences in the news aggregators market

The new Article 32.2 of the LPI has the following consequences for aggregators:

- **Closing down of aggregators;**
- **Barriers to the entry of new operators;**
- **Barriers to innovation; and**
- **Regulatory uncertainty and elimination of the right to quote.**

5.1.1. Closing down of aggregators

The imposition of a fee for aggregators implies, in the first place, additional costs that put the economic viability of some of these services at serious risk, leading to the closing down of most of them.

This has already been apparent with the closing down in Spain of one the main news aggregator in the world, Google News, in December 2014. Amongst other arguments, Google News stated that the service they offered did not generate advertising revenues, as they were not showing advertisements on their web site, so the new approach was unsustainable for them.⁹³ Google News also pointed out that all they did was collect the news from the most prestigious media and show a headline and a summary line with the minimum information to encourage the reader to visit the original web page that published the news, in addition, they did not force any media to be linked to their service.

With the closing down of Google News, the Spanish media are no longer present in any editions of the aggregator, not only in Spain but in other countries too.

A number of other content aggregators joined Google News, for example the ones on the following list, and they also had to close down or make significant changes to their business model due to the new regulation:

- **Planeta Lúdico** stated that they did not know whether they had to pay the fee and if so, what would be the resulting amounts. Given these doubts they preferred to close down.⁹⁴
- **Planet Ubuntu**, a news aggregator related to the distribution of Linux Ubuntu (and others), withdrew the content of Spanish media from their services.⁹⁵
- **NiagraRank** ignoring the extent, quantity and methods followed to determine whether they should pay the fee, they preferred to close down. This case is remarkable because

⁹³ Most of Google's revenues come from advertising on its search engine and other services.

⁹⁴ Source: <http://planetaludico.es/2014/12/23/hasta-pronto-y-gracias-por-el-pescado/>

⁹⁵ Source: <http://planetubuntu.es/post/planet-ubuntu-eliminar-contenido-de-sources-espanolas>

NiagraRank was not a “traditional” aggregator, but it analysed social networks to draw up lists with the most relevant news (“active listening”, as they used to call it). However, it is an example of the legal uncertainty that the lack of definition of key aspects of the act caused. While their web site has been closed down, they still offer some services privately to their customers.⁹⁶

- **Multifriki**, which defined itself as a “social platform for sharing freaky favourite links” closed almost two years ago until further notice.⁹⁷
- **InfoAliment**, a news aggregator related to the field of food, nutrition and food distribution with nearly fourteen years of existence, decided to turn around its free service model, and closed down its web site due to the LPI reform.⁹⁸
- **Astrofísica y Física**, a popular blog on these issues, stated that until it is clear what services will be subject to the payment of the fee, its articles will not include any link, headline or text from any Spanish web site.⁹⁹
- **Beegeefinfo**, a portal specialised in the music of the Bee Gees, was forced to close down because they “would find it impossible to pay any fee for displaying information that in the opinion of third parties could breach any right”. In their statement Beegeefinfo also clarified that their “web page has never contained any advertisements and has tried to show information of everything related to the Gibb Brothers and their world in the most current possible way” and that the only purpose of their web site had been to help and entertain.¹⁰⁰

There are other groups of aggregators and downloading web pages that, whilst waiting for the regulation, have not yet made any changes. For example, Menéame even announced that if the fee affects them, they will appeal the law and stated that the site is in a critical moment and if the legal text is finally adopted as proposed, they will be forced to leave Spain.¹⁰¹ Indeed, Menéame wrapped up its latest fiscal year with € 10,000 in losses. Furthermore, with the introduction of CEDRO’s tariffs, for which they would have to pay €2.56 million per year, against €125 thousand of annual revenue, the firm would simply have to close down.¹⁰²

With the development of the regulation setting the final amount of the fee, more closures or relocations of aggregators will occur, especially considering that the introduction of the fee has pushed some of the most consolidated services towards closure or suspension of the

⁹⁶ Source: <http://niagarank.es/cierre/>

⁹⁷ Source: <http://multifriki.blogspot.com.es/2014/12/multifrikicom-cierra.html>

⁹⁸ Source: <http://www.internautas.org/html/8714.html>

⁹⁹ Source: <http://www.astrofiscayfisica.com/2014/12/nota-informativa-sobre-la-entrada-en.html>

¹⁰⁰ Source: <http://beegeesinfo.besaba.com/indexSP.htm>

¹⁰¹ Source: http://www.elconfidencial.com/tecnologia/2014-07-01/galli-si-se-aprueba-la-tasa-google-tratare-de-que-caigan-twitter-y-facebook_154670/

¹⁰² Source : http://www.elconfidencial.com/tecnologia/2017-02-07/canon-aede-meneame-internet-facebook-agregadores_1327333/

aggregation service. Thus, the effect on more modest services will be even more damaging, particularly for some aggregators that have no commercial purposes and do not have any type of income.

5.1.2. Barriers to the entry and the expansion and increased concentration of the market

Indirectly, the amendment has dynamic implications in the operation of the aggregators market in Spain. On the one hand, it imposes entry barriers for new operators that will have to meet a payment that their competitors did not have to pay at the time in order to position themselves in the market originally, besides representing a barrier to the expansion of small aggregators. The evidence available to date certainly supports these statements: if the introduction of the fee has caused a significant number of aggregators to leave as a result of the damage it causes them, this is a clear sign that the entry in the market or the business expansion is no longer attractive, discouraging new business projects.

All this not only damages clearly the interests of the aggregators, for example, because it damages other business lines that could be benefiting from news aggregation services (a more pronounced effect in the case of small blogs or web pages of sector or business organisations that were offering links to news on their web sites as a complementary service, such as the aforementioned InfoAliment), but it also has a negative consequences on competition, especially because it increases the concentration in the market.

This not only has a direct impact on advertisers who used these aggregators as an advertising channel, inasmuch as they now face a more concentrated market, but in the longer term the incentives to innovate are reduced, especially for small businesses that could have been positioned in the market through technological innovations.

In this context, it is possible that only a few aggregation services, backed up by large business groups (such as Upday, which belongs to Axel Springer, owner of Bild, Europe's biggest newspaper, and the American web Business Insider), can face this fee, to the disadvantage of smaller ones, a development which poses a risk to the competition process in the sector.

5.1.3. Impact on innovation

The barriers to innovation will surely affect the entire Internet ecosystem in Spain, both the aggregators themselves as well as the rest of the companies in the digital system.

Section 3.2 already stressed that, beyond the consolidated aggregators, there is a variety of very innovative aggregators that, for example, bring together customised services or relate to the activity of users on other platforms, such as social networks. All these projects are being threatened.

For example, and as already pointed out, currently there are several services focused on the aggregation of content for mobile phones, such as the mobile application Flipboard. The amendment to the act will discourage the introduction of this sort of services in Spain, as well as the potential development of new models. A clear example of this situation is the portal

NiagaraRank,¹⁰³ an innovative aggregator based on the analysis of the content published on social networks (similar to News360 or Prismatic) which, as mentioned before, also closed down as a direct result of the law amendment.

Eventually, **projects like Menéame will not bear fruit in Spain**. Menéame succeeded because it became an aggregator in Spanish at a time where there were no consolidated references in this language. It disassociated itself from the prevailing models in the Anglo-Saxon market from which it had adapted its operation (using, for example, the dynamics of positive and negative votes of Reddit and the graphic aspect of Digg) to evolve towards a public place where the dissent and the debate are admitted. This has led Menéame to become one of the main sources of information in Spanish. Clearly, the fact of paying a fee discourages the emergence of similar innovations, especially taking into account that many of these companies have business models that use modest amounts of resources and that their financial viability has always been complicated.

The payment of a fee also discourages potential innovations in applications such as automatic source readers and any other innovative service of a similar nature.

The potential for other existing and future projects, such as content aggregation based on personal preferences (where the information is based on selected users that draw upon content that they publish or read, such as Newsvine) or other types of algorithmic aggregators designed to provide dynamic content, would also be compromised.

5.1.4. Regulatory uncertainty and elimination of the right to quote

Finally, it is worth highlighting the regulatory uncertainty generated by the law amendment, which came into force two years ago but without a regulation that specifies who shall be subject to the fee and the conditions under which the compensation will occur. In addition, in spite of the amount of the fee having already been set by CEDRO, the evidence suggests that this amount is excessive and also lacks an economic memory that justifies its value, as is required by the corresponding Ministerial Order.

Similarly, the wording of the amendment to the provision raises questions from a legal point of view, primarily on issues related to the scope of application.¹⁰⁴ There is a broad consensus in the economic literature on the impact that the regulatory stability generates on investment and innovation, in such a way that an uncertain framework is a disincentive for R&D&i activities.¹⁰⁵

In fact, this uncertainty has been the reason why many aggregators have decided to close down their services due to the fear of being subject to a payment of an amount that seems excessive, as is the case of Multifriki, Planeta Lúdico or NiagaraRank (aggregators of diverse themes), as well as Google News itself.

¹⁰³ Source: <http://niagarank.es/cierre/>

¹⁰⁴ Source: <http://www.gomezacebo-pombo.com/media/k2/attachments/puntos-clave-de-la-reforma-de-la-ley-de-propiedad-intelectual-por-medio-de-la-ley-21-2014.pdf>

¹⁰⁵ See Jalonen (2012) for a literature analysis.

Some media whose essence is the aggregation, such as the online newspaper *Huffington Post*, are also being damaged as a result of limiting their future growth potential in terms of creating new services and products that enable them to improve their current content offer associated with aggregation.

The compulsory and undeniable payment that aggregators would have to pay also violates the right to use content with *Creative Commons* licenses.¹⁰⁶ That is to say, aggregators with non-commercial purposes that used content from sources with these licenses will be forced to pay a fee for content, even though due to the nature of the licenses, they should not pay any remuneration. This not only goes against the license spirit and implies an important hindrance to the use of content under this scheme, but it also eliminates the right to quote, recognised as compulsory by Article 10 of the Berne Convention, which Spain has ratified, as well as the concept of link: the essence of the Internet.

With regard to the latter points, it should also be noted that recently there have also been other authors who have analysed the legal implications of the reform of article 32.2 of the new LPI, for example:

- Bercovitz (2015), who examines possible breaches of the Berne Convention, of the Directive 2001/29/EC, of the fundamental right to information and of the principle of proportionality recognized by the European Union. The author also argues that the aggregation of citations does not produce any damages that should be compensated, that collective management is not justified by a practical unfeasibility of individual management, that the irrevocable character is not justified either, and that this constitutes a discrimination regarding “ off line” press reviews, among others; and
- Xalabarder (2015), who carries out a valuation on the effect of the fee in the aggregation and search of online news for educational and research purposes, as well as on its mismatch with the European Union Law.

5.2. Consequences for news consumers

The new Article 32.2 of the LPI entails the following disadvantages to readers:

- **Reduction in news consumption, less variety of content and less enjoyment of technological innovations; and**
- **Loss of consumer surplus for a value of € 2,800 million.**

5.2.1. Reduction in news consumption, less variety of content and less enjoyment of innovations

The fee impact causes damage to consumers, mainly associated to higher search time for news, and also in the form of less variety of suppliers and technological innovations and less

¹⁰⁶ These licenses, with some variations depending on the different modalities, offer the possibility for third parties to use the contents without compensation, under certain conditions.

access to information and other products and services offered by aggregators (and by online press).

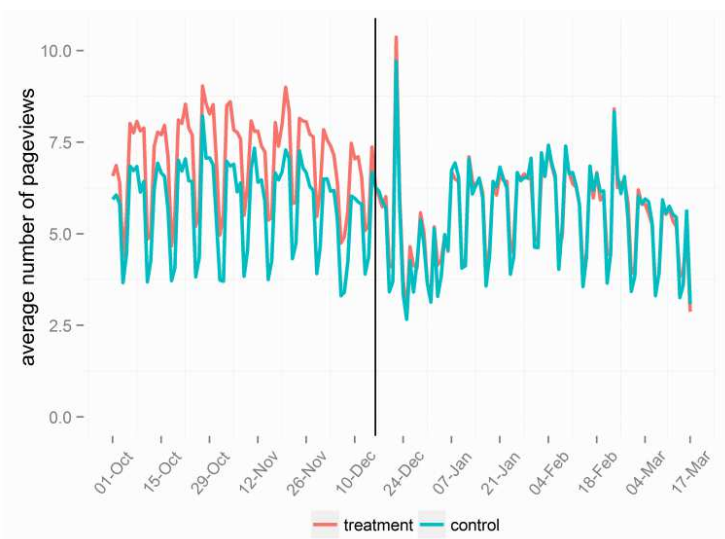
This is not only due to the disincentive to the emergence and implementation of innovations in Spain but also to a greater difficulty to access content produced in this country.

With regard to the reduction of news consumption, Calzada and Gil (2016) have evaluated the impact of the closing down of Google News on news agencies in Spain. The authors rely on aggregated data of Spanish and French newspapers, using those from the latter country as a reference group (control). **Their results point to an 8% reduction in the number of pages viewed by consumers.**

On the other hand, as has already been mentioned, Athey *et al.* (2017) evaluated **the effects of the Google News exit from Spain on the news consumption, as a result of the fee implementation.** The authors used a sample of web browsing events consisting of more than 100 thousand Spanish users, building treatment and control groups depending on whether consumers used Google News or not, respectively. They found that the consumption of news by the treatment group (Google News visitors before its exit) fell by 20% from October 2014 to March 2015. Likewise, these authors point that **visits to news publishers were in general reduced around 10%, with small publishers suffering the most.**

Indeed, Graph 12 shows that the treatment group (in red line) had a higher level of consumption of news than the control group (in blue line). That is, consumers using Google News had more page views for news sites than those who did not use Google News. Thus, after the aggregator's exit, the treatment group decreased its news consumption, matching the control group.

Graph 12. Impact of the closing of Google News on news consumption



Source: Athey *et al.* (2017)

The authors also found that because of the closure, users were only able to replace a portion of the total news types they previously read, reducing the number of recent news stories they consumed, so Google News's exit would also have negatively impacted on the variety of content.

This is reinforced by the case of *Astrofísica y Física* which, as already mentioned, is a blog with content related to the Astrophysics and Physics areas. As a result of the fee, the contents from Spanish sources have been removed, thus reducing the offer to their users.

This demonstrates, as already highlighted, that **a fee imposed to aggregators discourages the emergence of innovative services associated with content produced in Spain**. Naturally, consumers will be affected since they will not be able to enjoy the same innovations they would have had access to if this new law did not exist.

5.2.2. Loss of consumer surplus

Surely, the most important impact for the consumer in the short term is the increase in the time spent searching for news that will result after the closing down of aggregators.

Even though the quantification of this damage is not direct, the economic literature has recently developed some methodologies for its estimation. The proliferation of “free” digital products and services through the Internet, such as online press, led to considering new ways to estimate the value of these kind of innovations for consumers since, due to lack of a price or direct cost associated with the product or service, it is difficult to define a “demand function” and, therefore, the net surplus or profit consumers receive from their use.

The idea behind these new analytical frameworks is that the cost of these products and services is related to the time spent in its use or consumption. That is to say, inasmuch as these are “free” services, the main associated cost is the time spent in searching and consumption. A monetary amount can be easily assigned to this value, considering the opportunity cost of this time spent measured through the average wage of users for example.¹⁰⁷

Based on this idea, Brynjolfsson and Oh J. H. (2012) estimated that the increase in profits (or surplus) of consumers due to free online services was more than 100 billion dollars per year, in the US alone.

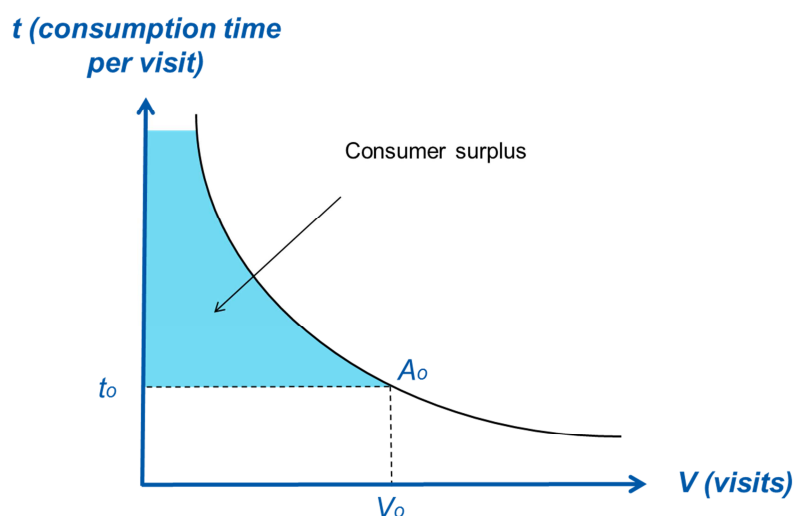
Additionally, Goolsbee and Klenow (2006) estimated a model to quantify the consumer surplus of online products that require spending a long time, taking into account their direct cost and the time required for their consumption, including the searching time. These authors estimate that the increase in consumer surplus thanks to the Internet would be approximately 2% of the average income of a user, that is, about a thousand dollars per year, for each user.

This analytical framework fits very well in this case, inasmuch as the searching and news reading time seems to be the main cost associated with “free” consumption of these assets. In this regard, news aggregators are playing a key role in consumer welfare by significantly reducing searching time and, consequently, increasing consumption.

Using this approach, the following graph shows the news “demand function” for a user. As it can be seen, the higher the price (longer searching and reading time), the lower the consumption of news, so fewer visits to online newspapers.

¹⁰⁷ Thus, Internet users with a job or high wages would in principle spend less time connected to the Internet (for non-work reasons), which seems to be quite intuitive.

Graph 13. News demand (visits) depending on “price” (consumption time, including searching and reading time)

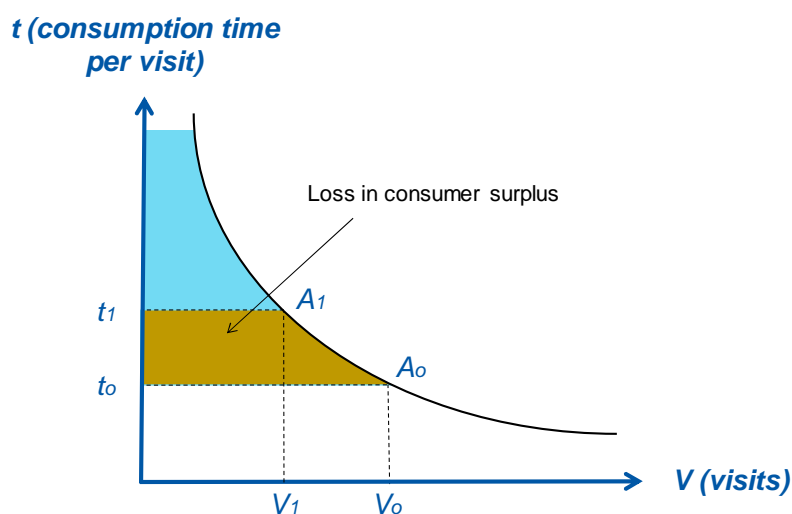


Source: Personal compilation by the author

Point $A_0 (V_0, t_0)$ represents a specific pair of a certain number of visits made to newspapers by a consumer, given the searching and reading time required for it. Consumer surplus, as in any demand function, is represented by the shaded triangular area (in light blue) between the demand function and the “price” (t_0). It is constructed as the sum of the differences between the maximum time that a consumer would be willing to spend to consume every piece of news (the value that that piece of news has) minus the time actually spent. The fact that the demand function is decreasing necessarily implies that the first piece of news (or visit) has a very high value (the consumer is willing to invest a lot of time to find it), whilst the value of the second piece of news would be lower; and so on.

As shown in the following graph, if the searching and consumption time is increased from t_0 to t_1 (for example, due to the closing down of aggregators as a result of the new Article 32.2 of the LPI), the number of visits (consumption) is reduced from V_0 to V_1 : the consumer moves from point A_0 to point A_1 . In this case, the consumer surplus is reduced by an amount equal to the dark brown shaded area ($t_0 \rightarrow A_0 \rightarrow A_1 \rightarrow t_1 \rightarrow t_0$) in Graph 14.

Graph 14. Change in consumer surplus in case of an increase of the “price” of visits (searching time increase)



Source: Personal compilation by the author

To estimate the fall in consumer surplus in case of an increase in searching time, it is necessary to define explicitly the demand function, as well as the increase in the consumption time (or the fall in the number of visits).

The demand function can be approximated by a stylised model where it is assumed that a user spends a fixed amount of time (per day) on news consumption (T), which includes the searching and reading time or visits to the newspapers web sites. This seems a quite reasonable assumption, to the extent that the availability of users' time is not unlimited. It also means that the more time is spent in searching and reading the less time will be spent in visits. In addition, this is an assumption supported in the economic literature, as previously highlighted (for example, by Calzada and Gil (2016)), who state that the reduction in searching time, thanks to aggregators, allows readers to read more news or to look for more information, as part of the market expansion effect, which is the dominant effect in Spain according to the evidence found by the same authors.

Thus, the demand function can be defined as:

$$t \times V = T,$$

where t is the searching and consumption time per visit (that is, the unit price per visit), and V is the total number of visits.¹⁰⁸

¹⁰⁸ This function can be expressed in logarithms, denoting a functional form of demand much more identified with models used in the economic literature:

$$\ln V = C - \ln t,$$

where \ln is the logarithm function and $C = \ln T$.

Using a basic integral calculation, the area that defines the change in consumer surplus when passing from a consumption time per visit from t_o to t_1 can be estimated directly:

$$\text{Change in consumer surplus} = \int_{t_o}^{t_1} V dt = \int_{t_o}^{t_1} \frac{T}{t} dt = T \times [\ln(t_1) - \ln(t_o)].$$

Taking into account that $t_1 = T/V_1$, and that $t_o = T/V_o$ and applying some of the properties of logarithms, it follows that:

$$\text{Change in consumer surplus} = T \times \ln\left(\frac{V_o}{V_1}\right).$$

If the number of visits is reduced by x percent (that is $V_1 = (1-x) \times V_o$), then:

$$\text{Change in consumer surplus} = T \times \ln\left(\frac{1}{1-x}\right).$$

So just by knowing two parameters, the total time spent consuming online press (including searching and reading time) and the percentage in consumption fall (visits), it is possible to estimate the drop in a consumer surplus.

Online press users spend an average of 77 minutes per day to read newspapers on the web, making approximately a total of 468.4 hours per year.¹⁰⁹ On the other hand, according to ComScore data (see section 5.3.1), the fall in the number of visits to online newspapers, due to the introduction of the new law (and the consequent exit of several aggregators), can be estimated in the short term as 5.3%.¹¹⁰

Excluding the hours of non-working days to reflect the fact that their opportunity cost is not equal to the salary but much lower, the total “effective” annual hours are reduced to 317.0.¹¹¹ Using this data, the change in consumer surplus in a year, for each user, would be valued (still in hours) at approximately

$$\text{Change in consumer surplus} = 317.0 \times \ln\left(\frac{1}{1-0.053}\right)$$

Given that there are about 21.2 million online newspaper readers¹¹² and the opportunity cost, expressed in terms of the average weighted salary in Spain is about € 7.65/hour,¹¹³ the change in consumer surplus monetary value for the total of Internet users in Spain reaches around **€2,800 million per year.**

¹⁰⁹ Average for the years 2014 and 2015. Source: “El Libro Blanco de la Prensa 2016”.

¹¹⁰ This value is very conservative when compared to, for example, the 10% found by Athey *et al.* (2017).

¹¹¹ Excluding weekends and holidays (assuming 14 per year). The number of hours utilized is lower but close to the one calculated in AFI (2014).

¹¹² Source: “Encuesta sobre Equipamiento y Uso de Tecnologías de Información y Comunicación en los Hogares 2015”.

¹¹³ Note that only an opportunity cost for employed users (about 12.6 million people), of approximately €12.82 per hour, is considered. Source: “Encuesta de Población Activa 2015”; “Instituto Nacional de Estadística”. For all other users (unemployed, inactive/students, doing housework, retirees, early retirees and others, about 8.5 million in total), we assume that their opportunity cost is zero, although in reality it will be a little higher.

5.3. Consequences for online news publications

The new Article 32.2 of the LPI entails the following disadvantages for editors in the short term:

- **Lower advertising income as a result of the lower traffic;**
- **Entry and expansion barriers, and higher concentration;**
- **Reduction in short-term producer surplus of approximately € 10 million per year and between € 9 and € 18 million in advertising revenue per year;**
- **Slowdown of innovation and entry and expansion of small publications; and**
- **Reducing entrepreneurial freedom.**

5.3.1. Lower audience, lower advertising income and higher entry and expansion barriers

The negative impact on the online press sector is also very clear, since a very important channel to attract readers disappears, resulting in lower revenues from advertising. In addition, the new fee is also a barrier to the expansion of small publications with little-known brands, and an entry barrier for new competitors, since they will be unable to count on these platforms to increase their readers' base.

The evidence available so far shows that **the impact on traffic has been negative (with a drop of around 10% according to data presented by Athey *et al.* (2017) and around 5.3% according to ComScore data; much more for the small newspapers segment) and that less consolidated publishing titles, such as digital native newspapers, have been the worst affected.** This is not only because the total number of publication readers has been reduced but, in the case of online readers that would be attracted anyway (that is, who would visit the publications web sites in some other way), they will surely end up visiting known publications with established brands, to the detriment of small and new publications, in line with the evidence in the literature analysed above.

For example, projects such as eldiario.es, which receives a very substantial part of their readers through Menéame¹¹⁴ and other newspapers, such as cuartopoder.es, are seriously affected.

Moreover, in a scenario without content aggregators where the user visits the traditional names of the largest and most consolidated publishing titles, the plurality of information is restricted, since the sources of information that are often more appropriate are limited (for example, when relevant news appear in a specific covered region, in the first instance, by local media), etc.

¹¹⁴ From Menéame, eldiario.es received over 3.6 million visits in 2013. Source: <http://blog.meneame.net/2013/12/31/algunos-numeros-del-2013-en-meneame/>

Besides the impact on readers as a result of the reduction in the sources of information and competition in the news consumer market (affecting relevant variables such as price, quality and innovation), there is a negative impact also for advertisers as the reach of their advertising is reduced and they need to deal with a more concentrated sector with limited competition.

The introduction of the fee also affects visibility and, ultimately, traffic of national publications outside Spain. For media in Spanish, with a potential audience of almost 500 million readers outside Spain,¹¹⁵ this implies a major barrier for both consolidated publishing titles and to potential new entrants, which may lead to relocations of content generators. In this sense it is worth highlighting the aforementioned cases of Planet Ubuntu and Astrofísica y Física.

Besides the quoted sources, other empirical evidence available so far confirms a drop in traffic in the short term for online publications following the introduction of the new Article 32.2 of the LPI.

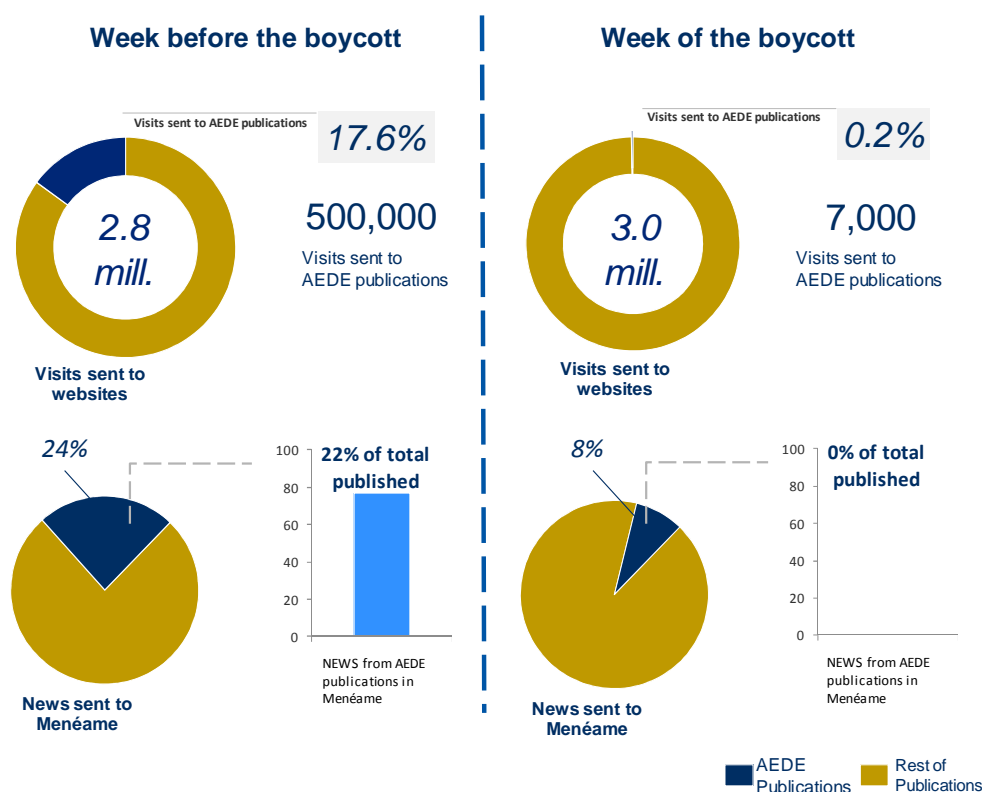
In a pioneering way, Menéame portal users promoted a boycott during February 2014 to media associated to the AEDE, as a protest against the announcement of the act amendment. Before the boycott, Menéame users visited the original pages of media associated to this organisation 17.6 times on average for every 100 visits to this aggregator.¹¹⁶ This boycott resulted in a decline of visits to original sources to levels of just 0.2 times. That is, as a result of the boycott, the traffic generated from Menéame to the web sites associated to AEDE media was reduced by 99%. By way of illustration, considering that Menéame had more than 113 million visits in 2013,¹¹⁷ this would imply, *ceteris paribus*,¹¹⁸ a loss of more than 20 million annual visits to AEDE publications.

¹¹⁵ According to the Cervantes Institute in 2014, there are 548 million people who speak Spanish, 470 million speak Spanish as their mother tongue. Source: El Español: Una Lengua Viva. Informe 2014. Instituto Cervantes.

¹¹⁶ Source: <http://blog.meneame.net/2014/02/27/efectos-del-boicot-de-usuarios-a-sitios-de-aede>

¹¹⁷ Source: <http://blog.meneame.net/2013/12/31/algunos-numeros-del-2013-en-meneame/>

¹¹⁸ Assuming that consumer habits would not change and the boycott continued.

Graph 15. Impact on traffic of the Menéame boycott to AEDE

Source: Personal compilation by the author using Menéame data¹¹⁹

Similarly, the web analytics service Chartbeat provided evidence published by the portal GigaOm,¹²⁰ on the impact on traffic immediately after the closing down of Google News in Spain. The study has some limitations as it is a sample restricted to 50 online Spanish newspapers (from small media points to large media companies) and for a short period of time. However, it leads to conclusions in line with what is suggested by the literature for events of a similar nature in other countries, as outlined in section 3.3.2. That is, **the external traffic of the Spanish information web sites fell between 10 and 15% in the first hours without Google News**, as shown in the following graph.

¹¹⁹ Source: <http://blog.meneame.net/2014/02/27/efectos-del-boicot-de-usuarios-a-sitios-de-aede>

¹²⁰ Source: <https://gigaom.com/2014/12/16/traffic-to-spanish-news-publishers-plummets-after-google-move/>

Graph 16. Impact of the closing down of Google News on digital daily traffic

Source: Gigaom2¹²¹

On the other hand, according to the Calzada and Gil (2016) study, previously discussed, **the closing down of Google News in Spain generated an 11% reduction in the number of visits to online news publishers**. Also, according to Athey *et al.* (2017), **the Google News' exit from Spain generated a drop in the number of visits to online publishers of around 10% in this country**. This drop in traffic was mainly concentrated in small publishers, while the large ones did not show a significant reduction in traffic.

A simple traffic analysis of Spanish digital newspapers¹²² in the first three months of 2015 based on data from ComScore also suggests results in line with the aforementioned. The impact of the closing down of Google News and some other aggregators has generated a decline of visitors to the 84 major Spanish online newspapers, with an average drop in three months, compared to the data of the previous year, of approximately 2.9%, reaching around 4.5% in January 2015.

In a context of increasing Internet access and online press reading, this decline in traffic suggests that the entry into force of the act amendment, and the subsequent closing down of some aggregators, has had a significant impact. That is, these data should be interpreted with caution since they underestimate the effect on traffic of the closing down of aggregators, due to the trend of growing consumption observed in online media news. If traffic is adjusted by

¹²¹ Source: <https://gigaom2.files.wordpress.com/2014/12/spain-links.png?w=804>

¹²² Single visitors.

removing the increase that has taken place as a result of the upward trend in online news consumption in Spain,¹²³ **the decline in visits would stand at around 5.3%, on average.**

A more detailed analysis, breaking down traffic depending on the newspaper size, also confirms that the effect has been uneven. Thus, for the sample of online newspapers in Spain, **it appears that smaller newspapers have been the worst affected ones.** So, taking the number of visits in 2015 as reference and dividing the sample into three groups of equal size, that is, 28 (= 84/3) newspapers, it is observed that for the group with the 28 most important publishing titles, the traffic drop was 2.5%, while the following 28 publishing titles in the sample show a 3.9% decrease. For the 28 least read publishing titles in the sample, the result is a decrease of 10.2%.

Once again, these results are underestimated for the same reasons discussed above. If we adjusted the traffic taking into account the increase in online news consumption, so that the effect of the closing downs can be isolated from the trend of growing Internet usage and consumption of digital news, **the results would show an approximate decrease of 4.9; 6.3; and 12.6% for the three groups (big, medium, and small newspapers), respectively.**

These results are summarised in the following table:

Table 1: Comparison of online press traffic in Spain before and after the reform

Var. % Total

January-March 2014 to 2015

	Top 28	Top 29-56	Top 57-84	Total
Single Visits	-2,5%	-3,9%	-10,2%	-2,9%
Single Visits - adjusted*	-4,9%	-6,3%	-12,6%	-5,3%

**Taking into account the growing use of the Internet and newspapers reading
Source: Personal compilation by the author using ComScore data*

It is reasonable to expect that the fall in traffic in the long run could be higher, particularly for small digital newspapers, once other aggregators, like Menéame, close down and readers begin to focus on much better-known big newspapers or even start to turn to other different information media, given the deterioration of the digital media with regards to innovations, variety of information, difficulty in locating content, etc.

The drop in traffic threatens the viability of some online newspapers, particularly those of lower implantation.¹²⁴

¹²³ In a conservative fashion, the adjustment is made by discounting 2.4% which corresponds to the average annual percentage increase value in the consumption of news during the years before the fee implementation (between 2001 and 2014). Source: “*El Libro Blanco de la Prensa 2016*”.

¹²⁴ In this line, for example, it is worth noting the sale of the newspaper 20 Minutos to Grupo Heraldo, a transaction that was accompanied by a reduction of the workforce. The main explanation given by Schibsted (the former owner) was that it wanted to get rid of this newspaper due to its inability to make it profitable. The newspaper has accumulated cumulative losses of almost € 20 million since 2011 as a result of the acute crisis affecting the free press, caused by the

5.3.2. Reduction in producer surplus and in advertising revenue

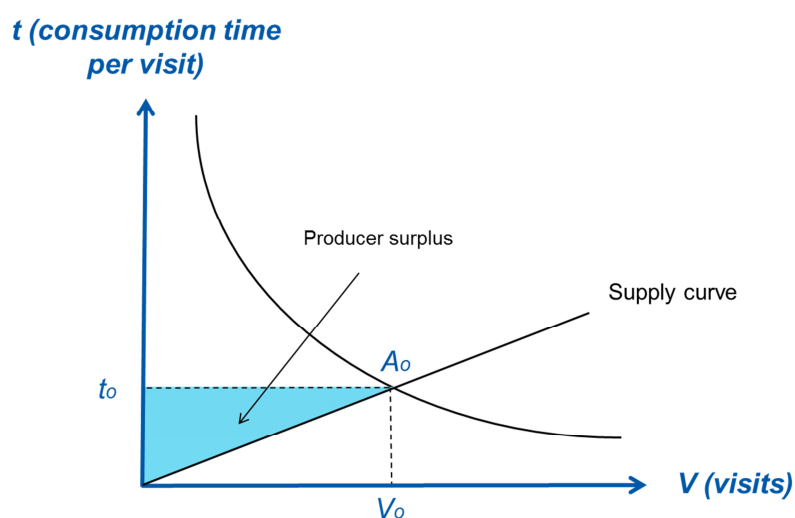
Using the analytical framework developed in Section 5.2.2, it is possible to estimate approximately the damage implied in the very short term for the digital media by the decline in traffic, and, consequently, the lower advertising income. So, in addition to considering the demand function to estimate the change in consumer surplus, the supply function can be added to estimate the producer surplus.

While this may be a too stylised model for this case, it allows making a rough estimate of this value.

A company supply curve indicates the amount of a good that a producer is willing to sell at a given price; usually it matches the marginal cost curve.¹²⁵ The reason is that a company is willing to sell a unit of its product provided that its production costs are covered. The difference between the sale price and the production cost of each unit is the surplus or unit benefit the producer receives from its sale.

This is illustrated in the following graph which, for ease of understanding, uses a linear supply curve originating from the source, that is, at zero price editors are not willing to produce news, a quite reasonable assumption.

Graph 17. Supply and demand functions of news (visits)



Source: Personal compilation by the author

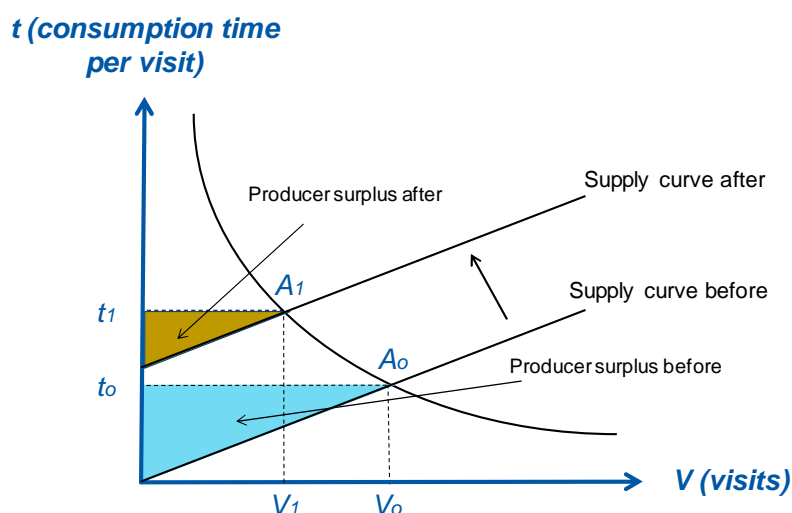
The “price” on the vertical axis, i.e., the consumption time of each unit, must be interpreted with caution in this case and differently than for consumers, since it does not correspond to the opportunity cost (wages) but with income (from advertisement) obtained by publications per unit time (one hour) that a reader dedicates to read news.

drastic drop in advertising revenues. Source: http://www.elconfidencial.com/comunicacion/2015-06-09/heraldo-de-aragon-compra-el-diario-20-minutos_876057/

¹²⁵ The cost associated with producing one additional unit of the product.

One way to interpret the fee introduction effect for producers (digital publications) is to consider that the closing down of aggregators will reduce the number of news or publications available, therefore restricting supply, so that the number of news (or visits) at a given price is reduced. That is, going from a V_o to a V_I consumption is the result of a contraction in the supply function, as illustrated by the following graph.

Graph 18. Supply and demand functions of news (visits)



Source: Personal compilation by the author

The producer surplus is reduced from the large area (shown in light blue) to the small area (dark brown).

The producer surplus at the baseline (that is, with a V_o consumption) is clearly equal to $(V_o \times t_o) / 2$. Taking into account that $t_o = T / V_o$, then:

$$\text{Producer surplus before} = T / 2.$$

There are several ways to estimate the producer surplus after a fall in the number of visits, that is, with a V_I consumption. Perhaps the easiest way is to observe that the two triangles representing the consumer surplus are similar, they are two triangles whose sides show the same proportion (in this case $V_I / V_o = (1-x)$). Any geometry student knows that the ratio between the areas of two geometric figures whose sides have a certain proportion, it is the square of this value. Thus, the area of the small triangle is:

$$\text{Producer surplus after} = (T / 2) \times (1-x)^2$$

Using basic algebra it turns out that:

$$\text{Change in the producer surplus} = T \times \left(x - \frac{x^2}{2}\right).$$

As noted above, in order to convert this expression into monetary terms it is necessary to estimate the advertising revenue generated by an hour of reading of a user. This can be easily estimated as the total annual revenue per advertising in online press (IP) divided by the

number of online newspaper readers (NL) divided, in turn, by the number of hours spent by each reader (T). Thus, the change in producer surplus in monetary terms for all readers is:

$$\text{Change in the producer surplus} = \frac{IP}{NL \times T} \times T \times \left(x - \frac{x^2}{2}\right) \times NL = IP \times \left(x - \frac{x^2}{2}\right).$$

Note that for small values of x , the second term of this expression is negligible, so the fall in advertising income when visits are reduced by $x\%$, can be approximated by estimating a similar decline (in percentage terms) in the total revenues per advertising. This makes perfect sense when considering that the advertising income depends directly on the number of visits to online newspapers, as it can be deduced from the fact that the most common tariff scheme is that of the CPM. However, in theory the above expression is a bit more accurate as it reflects the drop in profits from publications and not just the revenues.

Taking into account that the revenues from online press advertising are approximately € 180.9 million per year,¹²⁶ **the profit reduction for online press can be estimated at more than € 9.3 million** (considering a value of $x = 5.3\%$), and this affects the sector unevenly, that is, some companies more than others, **presumably the smaller ones more strongly**, according to the evidence analysed.

Although this may not seem much, there are digital publications with very small profits, as noted previously, so a small drop in advertising income can mean the difference between continuing the business operations or closing down.

In the long run, the lack of innovation and the further deterioration of the sector will do more harm since the attractiveness of this channel as an advertising medium for advertisers will diminish, and they will eventually seek other options, further strengthening the control of the big Internet operators.

As for the impact on online newspaper revenues, taking for granted a proportional relationship between advertising revenue and traffic, which seems quite reasonable considering the pricing structures of online newspaper advertisers (see section 3.1.2), a drop in traffic of around 5-10% (according to the sources analysed and the analysis performed) **implies a fall in advertising revenue for the sector of between € 9 and € 18 million per year.**

5.3.3. Impact on innovation

The media themselves will also be damaged as a result of the limitations that the fee represents for the creation of new products and services that would allow the improvement of its content offering.

Given the changing nature of the Internet ecosystem, media within a decade will be very different from today's. However, the act reform is an obstacle to the development of new

¹²⁶ According to “Índice de Inversión Publicitaria 2015”. Likewise, according to the “Entertainment Media Outlook (2016-2020). España” this number would have been 187 million for 2015.

business models and will necessarily lead to the closing down of innovative companies and local start-ups of content generation for the Internet.

The impact on innovation could also generate damages to the online press in a more indirect way. For example, there are projections suggesting that the growth in mobile devices advertising would be twice as large as total Internet advertising in 2020.¹²⁷ If online press is less present in new media through innovations in aggregators and in the digital media itself as a result of the fee, they will witness how a growing source of advertising income is reduced.

In general, the innovations mentioned in section 3.1.1 will also be severely affected, especially considering that many of them have been led by digital native newspapers, the media most affected by the drop in traffic. Thus, innovations to promote multi-platform media, amongst others, are being seriously compromised, as well as the development of multiproduct media with a wider variety of content, media with differentiated content and audiences, new advertising and funding models, and content updating, as well as media that promote user interaction.

5.3.4. Entrepreneurial Freedom

Finally, perhaps one of the most controversial points of the act is the inability of content creators to waive the collection of the fee (in contrast to the situation in, for example, Germany), demonstrating the arbitrary nature of the act modification. Thus, part of the sector has argued¹²⁸ that it is a decision that rallies against the entrepreneurial freedom as it has a binding nature that unfairly and unjustifiably, from an economic point of view (as outlined in Section 4), imposes a series of conditions: the payment of a fee which impairs the economic activity of many editors who benefit from the services of aggregators.

Additionally, for digital media that give away their content under Creative Commons licenses that authorise to use the information freely¹²⁹ provided the source is mentioned, the imposition of not being allowed to waive the collection for the content link completely clashes against their wishes, as creators, to make their content available to third parties.

5.4. Consequences for advertisers

Finally, in the case of advertisers, the new Article 32.3 of the LPI entails at least two significant effects:

- **Lower advertising impact; and**
- **Loss of specialised and innovative channels.**

¹²⁷ Source: “Entertainment Media Outlook (2016-2020). España.”

¹²⁸ Source: http://www.eldiario.es/escolar/tasa-Google_6_229987027.html

¹²⁹ For example, eldiario.es or 20 minutos amongst others.

5.4.1. Less impact of advertising and increased market concentration

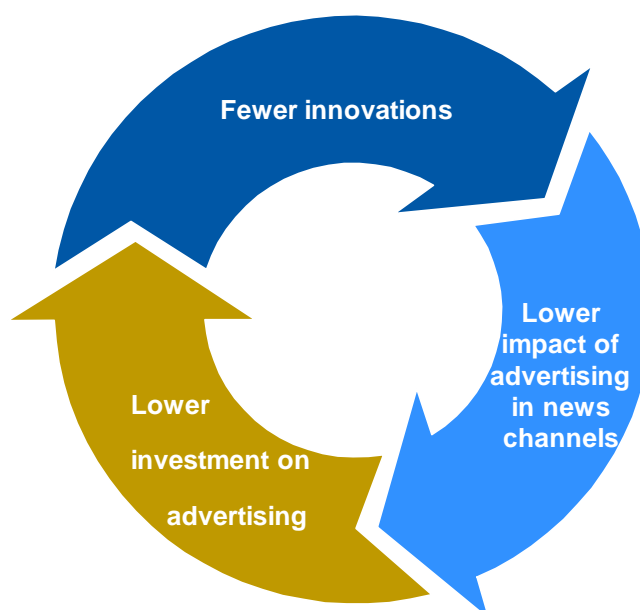
Obviously, the negative impact on traffic, especially for small and little known publishing titles, has an effect on the reach of online advertising, leading to greater concentration of the advertising market and, consequently, higher prices for advertisers.

This is particularly true considering that it will be very difficult to replace this advertising through other media, such as offline media, since the online advertising market is considered a distinct market.¹³⁰ Furthermore, some sources also suggest that within the online advertising market, a distinction should be made between “search” and “non-search” (or “display”) advertising, so not all companies that offer online advertising services would be alternatives for advertisers.¹³¹

5.4.2. Loss of reach in specialized and innovative channels

Similarly, these advertisers will also be affected by the curbs to innovation, both of aggregators and online press, for example those related to the development of new advertising formats that allows their ads to be more effective.

Graph 19: Innovation impact on online press advertising



Source: Personal compilation by the author

¹³⁰ This has been the conclusion in several investigations on competition. See, for example, the National Competition Commission, Report and Draft Resolution of File C/0432/12 ANTENA 3 - LA SEXTA, or Brockhoff *et al.* (2008).

¹³¹ See for example, “Case No COMP/M.5727 – Microsoft/ Yahoo! Search Business Notification of 15 January 2010 pursuant to Article 4 of Council Regulation No 139/2004”. 2010. European Commission.

Another clear example is advertising in mobile devices. As noted above, a substantial part of innovations in the aggregators and online press market have taken place on this platform, as a result of the generalised access to the Internet through these mobile devices. A lower implementation of these services would reduce the reach of advertising, resulting in lower advertising investment and lower profit for advertisers.

Both in the medium and long term, the deterioration or disappearance of these advertising channels for advertisers will necessarily affect their revenues, as they will be losing a channel through which their products and services are promoted and gain more visibility. This will be particularly relevant for those advertisers who often use small publications of local nature for their advertising, and who will have to turn to potential substitutes. In this situation, large companies who capture a significant share of the advertising market will be strengthened by the disappearance of those competitors, resulting in higher prices.

In addition, the closing down of certain aggregators or publications for specific audiences or market niches, implies the loss of that group of potential customers for advertisers; as they will not be a target of their advertising through any other channels, or at least not in the same way, as these consumers are very susceptible to changes in formats and ad types that do not easily accept other kind of advertising. For example, Menéame tries to keep advertising not very intrusive in order not to lose the users.¹³²

This is particularly relevant when taking into account that online advertising is mainly addressed to advertisers with very specific products targeting a specific audience, while other advertising is addressed to advertisers of widely consumed products who want to reach the greatest number of consumers in the shortest time.¹³³

¹³² In an interview with Ricardo Galli, founder of Menéame, it was also mentioned that *“We don’t do well in the advertising business because we cannot include the one that is commonly used: interstitial and the alike. If we start doing those things we will lose everyone. We are very careful in this regard.”*

(*Interstitial* is the least popular format among users. It consists of an ad that comes up before loading the web page).

¹³³ Source: National Competition Commission, Report and Draft Resolution in case C/0432/12 ANTENA 3 - LA SEXTA.

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